

Rook I Project

Environmental Impact Statement

Annex X: Socio-economic Baseline Report





SOCIO-ECONOMIC BASELINE REPORT FOR THE ROOK I PROJECT

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Executive Summary

Introduction

NexGen Energy Ltd. (NexGen) is proposing to develop a new uranium mining and milling operation in northwestern Saskatchewan, called the Rook I Project (Project). The Project would be located approximately 40 km east of the Saskatchewan-Alberta border, 130 km north of the town of La Loche, and 640 km northwest of the city of Saskatoon. The Project would reside within Treaty 8 territory and the Métis Homeland. At a regional scale, the Project would be situated within the southern Athabasca Basin adjacent to Patterson Lake, along the upper Clearwater River system. Patterson Lake is at the interface of the Boreal Shield and Boreal Plain ecozones. Access to the Project would be from an existing road off Highway 955, with on-site worker accommodation serviced by fly-in/fly-out access.

An Environmental Assessment (EA) is being conducted as a designated project under the *Canadian Environmental Assessment Act*, 2012 (CEAA 2012) and in accordance with requirements under *The Environmental Assessment Act* of Saskatchewan. This Technical Support Document provides a description of the existing socio-economic environment within the defined local study area (LSA) and regional study area (RSA). The LSA consists of the local communities closest to the Project that would experience direct and indirect socio-economic effects and which NexGen has prioritized for economic benefits from the Project. The RSA consists of the Northern Saskatchewan Administrative District. This report demonstrates an understanding of the socio-economic context for the Project and is used to support the assessment of the Project's potential socio-economic effects as reported in the Environmental Impact Statement.

Methodology And Approach

The approach to documenting the existing socio-economic environment was designed to confirm that sufficient information was collected to understand and assess potential effects of the Project. The characterization of the existing socio-economic environment included both quantitative (e.g., statistical) and qualitative (e.g., discussions) data collection and analysis in line with Canadian and international best practice for environmental impact studies. Both primary and secondary data sources were used throughout the baseline study.

Primary data collection sources included:

- Indigenous Group Study Agreements;
- Indigenous Knowledge and Traditional Land Use Studies (IKTLU);
- Joint Working Groups (JWGs);
- key person (KP) interviews; and
- community information sessions and workshops.



Secondary data sources included:

- census community profiles (Statistics Canada);
- custom Statistics Canada population projections for Keewatin Yatthé Regional Health Authority;
- Crown-Indigenous Relations and Northern Affairs Canada profiles;
- Saskatchewan Health Authority data;
- community and municipal internet sites;
- statistical reports and secondary documentation from local governments;
- regional and local growth strategy documents, including Official Community Plans and Comprehensive Community Plans;
- Community Vitality Monitoring Partnership Process reports;
- Economic, Sector, and Demographic Analysis for the La Loche Region and Clearwater First Nation (DMCA 2018); and
- local media articles.

Summary of Existing Socio-Economic Environment Population and Demographics

The RSA is predominantly Indigenous, with 87.4% identifying as such. The RSA population steadily increased between 2006 and 2016, driven largely by growth in the late 2000s. Between 2011 and 2016, the population increased by 1.4% compared to 7.8% growth in the five-year period prior (i.e., 2006 to 2011). Except for the period between 2006 and 2011, the provincial population growth rate has typically exceeded that of the RSA. The RSA has a large youth population, with a considerably higher proportion of the population aged 0 to 19 (youth; 40.2%) than the provincial average (25.8%), and a median age of 25.7, far below the provincial median of 38.7. With a larger youth population, the RSA has a lower proportion of the population who are working age (aged 20 to 64 years) as compared to Saskatchewan as a whole (53.0% and 58.7%, respectively).

Within the LSA 95.2% of residents are Indigenous. Median age within the LSA Indigenous population is 26.4 years which is slightly higher than the Indigenous population of the RSA (23.6) and the province (24.3). The Indigenous population of the LSA is notably younger than the non-Indigenous population (40.1 median).

Clearwater River Dene Nation (CRDN) is the youngest LSA community, with a median age of 23.8. Between 2006 and 2016, the median age of CRDN increased slightly (21.2 to 23.8) but remained lower than the median age of the provincial Indigenous population (24.3) and the RSA (25.7).

Despite a recent population decline, La Loche remains the largest LSA community, with a 2016 population of 2,365.

Buffalo Narrows has the oldest population among the LSA communities. Between 2006 and 2016 the median age of the Buffalo Narrows population increased from 27.3 to 30.8, compared to the 2016 provincial Indigenous median of 24.3 and RSA (25.7).



When looking at migration patterns it was found that a smaller proportion of the LSA population are migrants within the last year (i.e., 2016) and five years (i.e., 2011 through 2016) compared to the RSA and Saskatchewan as a whole. Among the LSA communities, La Loche had the lowest migration rate within 1 year (1.1%) and within 5 years (3.8%). Population projections for the LSA suggests annual population changes ranging from a decrease of 0.34% to an increase of 0.22%.

Economic Profile

The economy of the RSA is notably different than the province overall. Mining, quarrying, and oil and gas extraction, educational services, public administration, and health care and social assistance accounted for a larger proportion of employment in the RSA in 2016 compared to the province.

The LSA is economically supressed by a lack of economic opportunity due to no suitably sized primary industry since the decline of the fur industry in the 1960s. Labour force participation and unemployment rates in communities are low, with employment concentrated primarily in government-funded service sectors and Crown corporations. There are lower employment rates in common rural sectors including agriculture, forestry, fishing and hunting, manufacturing, and retail trade than in the province overall.

There is limited tourism industry or infrastructure in the LSA, and limited manufacturing. Fishing and commercial forestry activities contribute to the LSA economy, though to a limited scale. Mineral exploration and investment activity in the LSA is growing. From 2008 to 2017 there was 328.3 million pounds of measured and indicated uranium resources found in the west side of the province, with more than 70% of the resources located north of La Loche (DMCA 2018). La Loche is the closest urban settlement on Highway 955 to the uranium opportunities in northwestern Saskatchewan; however, the only mineral related activity occurring in this area at present is exploration.

The low population density and remoteness of the communities in the RSA are a challenge to economic development. The RSA has a less diversified economy, a more limited access to services and educational opportunities, and higher transportation costs. In many of the RSA communities, transportation costs are very high and can be logistically challenging (e.g., remote fly-in communities that may only be accessible by winter road).

Community Features and Infrastructure

Within the LSA, homelessness is an issue as well as limited funding and high demand for housing. Housing can be slow to build resulting in out-migration of residents to neighbouring communities. There are long waitlists for band housing in some communities. Many homes require regular maintenance and repairs. Overcrowding is also an issue in on-reserve housing in the LSA.

Recreational facilities are similar among the LSA communities with each having some indoor and outdoor facilities. Each community has some form of organized recreational services that is volunteer or community-run. Information on levels of use, capacity, and program/infrastructure gaps was not available for each LSA community.



Educational facilities within the LSA are generally sufficient for the population; however, post-secondary education required many community members to travel to La Loche, Buffalo Narrows, or to a larger southern population centre.

Healthcare facilities within LSA communities are somewhat limited, with some specialized services requiring residents to travel (e.g., mental health and addiction services). Residents will generally travel to La Loche, Turnor Lake, or Meadow Lake for health care services unavailable at local health care centres.

Labour Force Characteristics

A 2013 review of the socio-economic effects of uranium mining in Northern Saskatchewan noted that the total number of RSA residents participating in the workforce increased from 5,924 in 1976 to 11,272 in 2006. Despite this increase, employment and unemployment rates in the RSA remained relatively stable from 1976 to 2006 due to concurrent population growth (CVMPP 2013). The RSA unemployment rate and percentage of people not in the labour force have also been consistently higher compared to the province during this same period. The RSA participation rate was higher among males (51.9%) than females (45.9%), a trend that is also reflected in the average provincial rates (73.3% and 63.4%, respectively).

In 2016, unemployment was higher in the RSA than the provincial average (23.8% compared to 7.1%), with males having a higher rate than females (28.7% compared to 18.2%, respectively). Unemployment in the overall RSA labour force has risen substantially from 17.9% in 2011 to 23.8% in 2016.

The mining, forestry, and oil and gas industries were once the dominant employers in the LSA communities. Employment in the mining, quarrying, oil and gas extraction peaked in 2011 in the LSA communities (11.2% of total employment) followed by a decline by 2016 (6.9% of total employment); however, it remained higher than the provincial average. Employment in other primary industries such as agriculture, forestry, fishing, and hunting was lower in the LSA and RSA than in all of Saskatchewan. Provincially, construction, retail trade, agriculture, forestry, fishing, and hunting accounted for a larger share of employment than educational services or public administration.

Income

Income within the LSA and RSA come from both the wage or market economy and the traditional economy. Participation in the traditional economy is not captured by Statistics Canada data but forms an important part of the LSA and RSA economies.

Within LSA communities the median income is highest in Buffalo Narrows and lowest in CRDN. All LSA communities have a median income lower than the median for the provincial Indigenous population. With the exception of CRDN, all LSA communities had a lower percentage of their population receiving employment income when compared to the Indigenous provincial population. The number of households receiving government transfer payments within the LSA, and RSA is higher than the rest of Saskatchewan and is also higher amongst the Indigenous population compared to the non-Indigenous population.

The importance of both the traditional and wage economies has been a regular topic of discussion with Indigenous Groups through engagement activities. Feedback from JWGs and LSA community members suggests that jobs such as fishing, logging, gathering wild rice, and trapping are the primary source of income for many individuals, but that they are not captured in census data because these are not part of the wage



economy. Sources of income among community members come from many different avenues, with an estimated 80% of community members participating in the traditional economy in some form.

Education and Training

Among LSA communities, the highest proportion of the population aged 15 years old or older with no certificate, diploma, or degree in 2016 was in La Loche (67.2%) and the lowest was in Buffalo Narrows (32.2%). Buffalo Narrows has the highest share of population aged 15 years old or older with a post-secondary non-university certificate or diploma (17.1%), a university certificate or diploma below the bachelor's level (3.9%), and a university degree at bachelor level or above (11.2%) among communities in the LSA. Buffalo Narrows has higher levels of educational attainment than the other LSA communities, possibly influenced by the Northlands College campus location within the community, economic opportunities (as evidenced by its higher participation rates and lower unemployment rates), and more robust business environment. The proportion of the population aged 15 and over with an apprenticeship or trades certificate or diploma in the LSA in 2016 is similar to the proportion for Saskatchewan as a whole. Barriers to educational attainment include lack of childcare, financial challenges and few others within the family achieving educational success.

Community Health

In the RSA, total crude mortality rates are approximately 1.5 to 2 times as high as the province (NSPHU 2017a). Between 2006 to 2016, total mortality in the RSA has decreased slightly, but remains at rates greater than the province overall. Issues such as mental health challenges are common in LSA communities, including suicide and addiction. Support for mental health and addiction is an area many community members felt could be improved.

Across LSA communities, similar health concerns were heard including mental health and addiction (drugs and alcohol), respiratory and cardiac illness, sexually transmitted infections, cancers, and diabetes.

Public Safety

Criminal code violations in the Buffalo Narrows Royal Canadian Mounted Police (RCMP) Detachment area are low compared to the La Loche RCMP Detachment area. However, violations in Buffalo Narrows are increasing each year, with a 55.1% increase in total criminal code violations from 2015 to 2020. The La Loche RCMP Detachment area trends lower, with total criminal code violations decreasing 9.8% from 2015 to 2020. Saskatchewan criminal code violations increased by 2.2% in the same period. Despite the decrease in criminal code violations in the La Loche RCMP Detachment area, interviews indicated that there is a perception that the community is not safe.

Community Well-Being

Community well-being index scores were lowest in CRDN and highest in Buffalo Narrows. Areas for improvement to community well-being in CRDN included income and housing which had low component scores. Social issues such as drug and alcohol abuse were highlighted by many residents as affecting the well-being of the community.



Participants in the KP interviews had similar answers regarding what contributed to their quality of life in their communities. These included:

- Health, societal and cultural, economic, educational, and neighbourhood and physical environment elements.
- A sense of community in their respective communities and liked that their smaller communities were quieter and had slower paces of life.
- The land, clean air, freedom, and the ability to do land-based activities (e.g., camping, snowshoeing, quad rides, hunting, fishing, swimming, berry picking, picnics) and live off the land.
- People and respective communities contribute to the quality of life and the lower cost of living is an advantage.
- Employment also improves quality of life.

Aspirations

Aspirations of Indigenous and non-Indigenous communities within the LSA and RSA range from the expansion of employment, training, and labour markets to increase the development of social, cultural, and tourism programs. Communities within the LSA and RSA expressed an interest in continued engagement and participation opportunities regarding the Project and Project-related activities and noted the need for further relationship-building with NexGen. The preservation of the ecological environment, the health of local people and the integration of community and Indigenous Knowledge into the assessment process for the Project was also noted by Indigenous communities as highly important. Project engagement with LSA communities in the form of KP interviews, JWG meetings, and IKTLU Studies identified the following Project-specific community aspirations:

- active community participation and engagement;
- commitments related to additional community infrastructure;
- health, safety, and community well-being;
- preservation of historical and cultural heritage;
- protection and conservation of the natural environment; and
- training, education, employment, business and contracting opportunities.

NexGen is committed to ensuring that the Project does not result in disadvantages for community members and helps them to achieve their goals and aspirations. NexGen has already and plans to continue to make investments in LSA communities through various initiatives. Engagement with communities will continue throughout the life of the Project.



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APPENDICES

Appendix A Socio-Economic Statistical Data



Abbreviations and Units of Measure

Abbreviation	Definition
BNDN	Birch Narrows Dene Nation
BRDN	Buffalo River Dene Nation
COPD	chronic obstructive pulmonary disease
CRDN	Clearwater River Dene Nation
EA	Environmental Assessment
ENV	Saskatchewan Ministry of Environment
FFMC	Freshwater Fish Marketing Corporation
GDI	Gabriel Dumont Institute
GDP	gross domestic product
HIV	human immunodeficiency virus
IKTLU	Indigenous Knowledge and Traditional Land Use
Joint Panel	Joint Federal-Provincial Panel on Uranium Mining Developments in Northern Saskatchewan
JWG	Joint Working Group
KP	key person
KYHR	Keewatin Yatthé Health Region
KYHRA	Keewatin Yatthé Health Region Authority
LPA	local priority area
LSA	local study area
MLTC	Meadow Lake Tribal Council
MN-S	Métis Nation – Saskatchewan
MPTP	Multi-Party Training Plan
MSLA	Mineral Surface Lease Agreement
NCQ	Northern Career Quest Inc.
NDF	Northern Development Fund
NexGen	NexGen Energy Ltd.
NLSD	Northern Lights School Division
NR2	Northern Region 2
NSAD	Northern Saskatchewan Administrative District
PLAWR	Primrose Lake Air Weapons Range
Project	Rook I Project
RCMP	Royal Canadian Mounted Police
RSA	regional study area
SHA	Saskatchewan Health Authority
TSD	Technical Support Document
VC	valued component



Unit	Definition
%	percent
\$	Canadian dollars unless otherwise stated
kg	kilogram
km	kilometre
km/h	kilometres per hour
km ²	square kilometre
m	metre
MVkm	million-vehicle-kilometre



1.0 INTRODUCTION

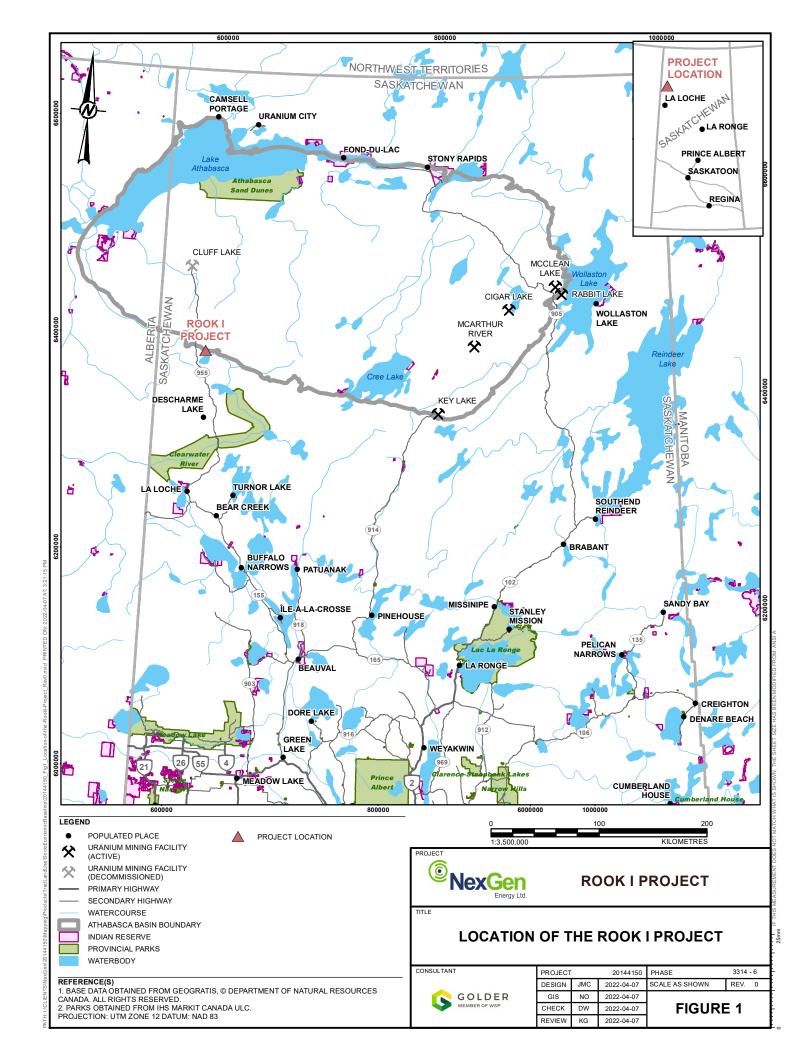
The Rook I Project (Project) is a proposed new uranium mining and milling operation that is 100% owned by NexGen Energy Ltd. (NexGen). The Project would be located in northwestern Saskatchewan, approximately 40 km east of the Saskatchewan-Alberta border, 130 km north of the town of La Loche, and 640 km northwest of the city of Saskatoon (Figure 1). The Project would reside within Treaty 8 territory and within the Métis Homeland, specifically the area referred to as Clearwater Clear Lake (i.e., name for Métis Nation – Saskatchewan [MN-S] Northern Region 2 [NR2]; Figure 2). At a regional scale, the Project would be situated within the southern Athabasca Basin adjacent to Patterson Lake, and along the upper Clearwater River system (Figure 3). Access to the Project would be from an existing road off Highway 955. The Project would include underground and surface facilities to support the extraction and processing of uranium ore from the Arrow deposit, a land-based, basement-hosted, high-grade uranium deposit (Figure 3).

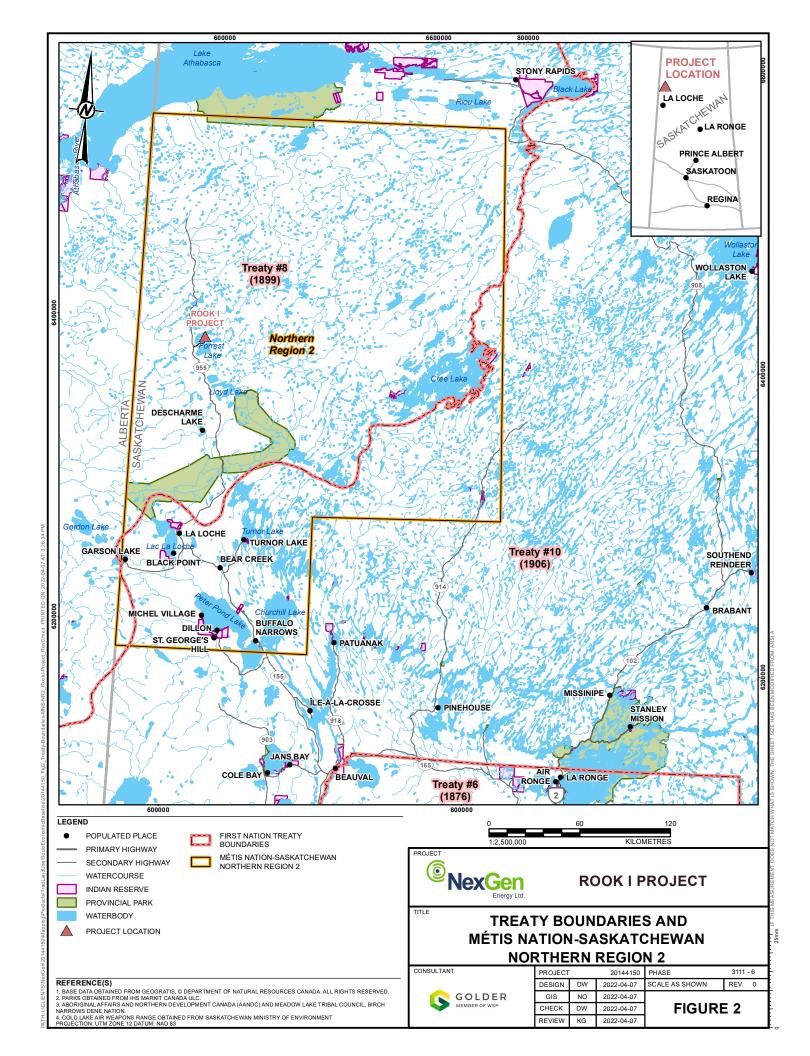
Since exploration at the Project commenced in 2013, NexGen has engaged regularly and established relationships with local First Nation and Métis Groups (collectively referred to as Indigenous Groups), specifically those closest and with greatest access to the Project. NexGen respects the rights of Indigenous Peoples, the unique relationship Indigenous Peoples have with the environment, and recognizes the importance of full and open discussion with interested or potentially affected Indigenous Groups regarding the development, operation, and decommissioning of the proposed Project. Engagement activities to date, as well as future planned engagement activities, reflect the value NexGen places on meaningful engagement with Indigenous Groups who could be potentially affected by the proposed Project. NexGen mechanisms have included, but are not limited to: meetings with leadership, workshops and community information sessions, Project site tours, establishing Joint Working Groups (JWGs; Section 4.3.3) to support the gathering and incorporation of Indigenous Knowledge throughout the Environmental Assessment (EA) process, and providing funding for Indigenous Knowledge and Traditional Land Use (IKTLU) Studies¹ to understand how the Project may interact with the Indigenous Groups' traditional use of the anticipated area of the Project.

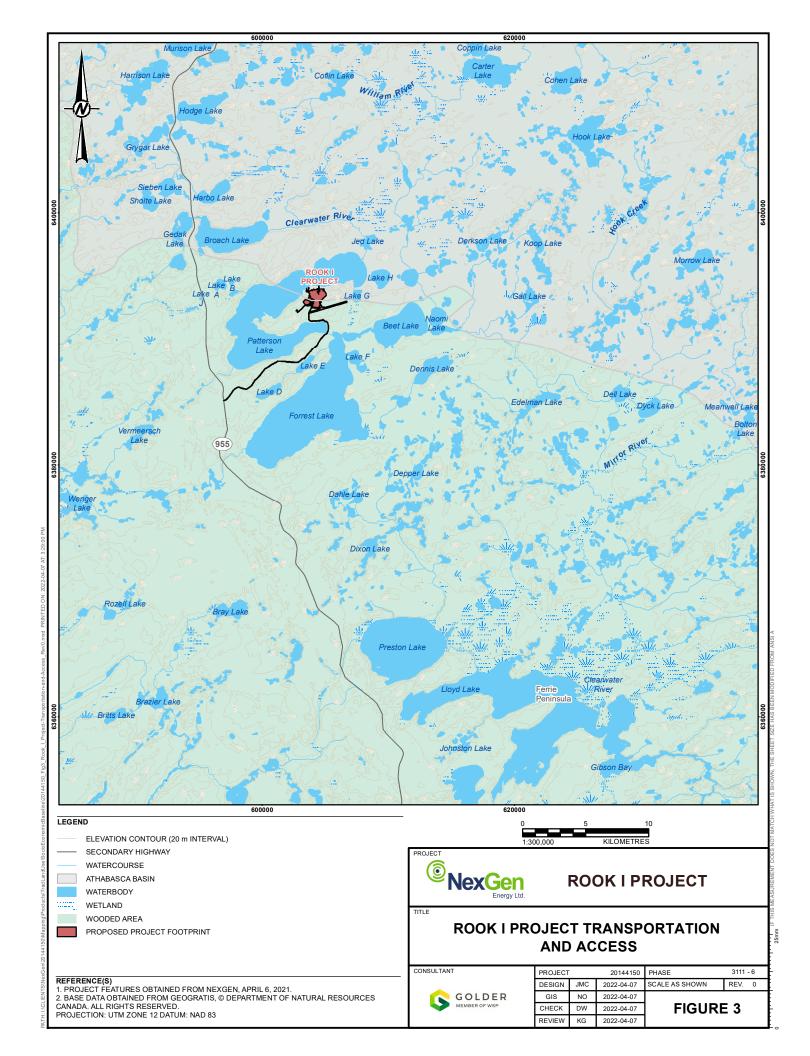
Feedback received during engagement activities was documented for contribution to the EIS for the Project; examples of feedback received include discussion of concerns, interests, potential adverse effects, mitigation, and design alternatives. Many baseline studies were initiated in advance of formal engagement on the EA for the Project; however, engagement during the execution of baseline studies has helped inform the understanding of baseline conditions and confirmed components of the natural and socio-economic environments that required study.

This report describes and characterizes the existing socio-economic environment to provide context and a basis for evaluating potential Project-related effects and cumulative effects on economy, community well-being, Indigenous land and resource use, and other land and resource use. This report presents a detailed account of the socio-economic environment present in the potentially affected Denesyliné (Dene) First Nations and Métis Groups (collectively referred to as Indigenous Groups) and communities.

¹ Indigenous Knowledge and Traditional Land Use (IKTLU) Studies include all land use studies developed by the Project's potentially affected Indigenous Groups, including Traditional Land Use and Occupancy studies, Traditional Knowledge and Use studies, and Indigenous Rights and Knowledge studies, henceforth referred collectively as IKTLU Studies.









2.0 STUDY OBJECTIVE

2.1 Purpose and Objectives

The purpose of this baseline report is to describe socio-economic conditions in the region (Section 3.0, Study Areas) and provide a more detailed description of socio-economic conditions in communities potentially affected by the Project. This information will be used to:

- establish an understanding of current conditions against which potential Project effects can be evaluated;
- identify appropriate measurement indicators and endpoints for consideration in analysis of potential Project effects;
- identify potential effects of Project construction, operations, and eventual closure relative to existing socioeconomic conditions;
- determine suitable mitigation and benefit enhancement measures;
- identify residual effects after mitigation;
- evaluate the significance of residual effects once mitigations have been taken into account;
- assist with development of adaptive management to further avoid and minimize adverse Project effects and enhance Project benefits; and
- provide baseline information for subsequent compliance and voluntary environmental, social, and governance monitoring and reporting.

2.2 Scope

The socio-economic baseline describes the current population and demographic, economic, education and training, social, and health and well-being conditions and trends at regional and local levels. This baseline integrates information collected during the socio-economic primary and secondary data gathering processes, and is organized as follows:

- Section 3.0 describes the study areas selected for the baseline;
- Section 4.0 describes the methods used in the baseline study;
- Section 5.0 describes the context of the Project with reference to the regional study area (RSA) and local study area (LSA);
- Section 6.0 describes the existing social baseline conditions in the RSA and LSA; and
- Section 7.0 provides a summary of the RSA and LSA socio-economic baseline.



3.0 STUDY AREAS

The study area boundaries for the socio-economic baseline study are shown in Figure 4, RSA, and Figure 5, LSA. The RSA and LSA were determined using:

- the description of the Project's works and activities potentially interacting with the socio-economic environment²;
- an understanding of the local area surrounding the Project;
- a preliminary screening of the extent of potential Project effects (direct and indirect);
- key issues or concerns raised by Indigenous Groups;
- Indigenous and Local Knowledge³;
- information collected during the engagement process, including key issues or concerns raised by local government, provincial and federal government agencies, stakeholders, and the public; and
- provincial, regional, and local government administrative boundaries.

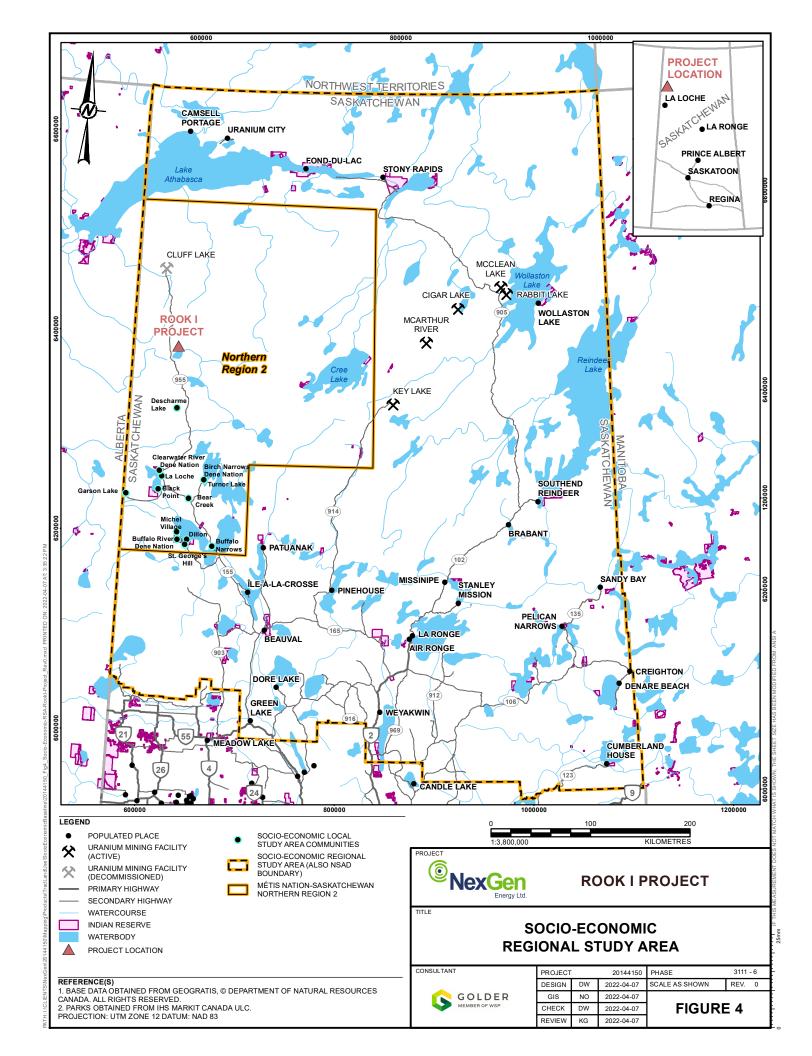
3.1 Regional Study Area

The RSA, which includes the Project and LSA (Section 3.2), was identified to provide the relevant contextual data and characterization of the regional socio-economic conditions for potential Project-specific socio-economic effects and cumulative effects. The RSA for the socio-economic baseline is aligned with the boundary of the Northern Saskatchewan Administrative District (NSAD; Figure 4). The NSAD as defined in *The Northern Municipalities Act, 2010*, is the regional statistical reporting unit used by Statistics Canada and the Government of Saskatchewan and has the same boundaries as Statistics Canada Census Division No. 18.

The Project is located on Crown Land in the NSAD and requires a Mineral Surface Lease Agreement (MSLA) to operate (Government of Saskatchewan 2021a). Based on other uranium MSLAs issued by the province (Government of Saskatchewan 2018a), it is anticipated that the Project lease would include a range of provisions regarding land tenure, environmental protection measures, occupational health and safety, and reporting on employment, purchases and other socio-economic benefits for all residents of the NSAD, not solely to the communities in the LSA. A portion of the Project's direct and indirect socio-economic effects, including employment, income, supplier revenues, and government revenues (i.e., Project benefits), would extend beyond the LSA to a broader spatial scale within the NSAD and Saskatchewan. Therefore, communities and Indigenous Groups in the RSA are also expected to experience some level of direct and indirect employment, income, and training benefits from the proposed Project, though at a lesser extent than LSA communities.

² The socio-economic environment includes aspects of people's way of life, their culture, community, relationships, political systems, environment, health and well-being, personal and property rights, fears, and aspirations.

³ Local Knowledge is a more general term than Indigenous Knowledge and, for the purposes of the EA, represents information from an LPA citizen or representative, but without Indigenous Group/Elder sanction (i.e., it is not an official position, statement, or document).





3.2 Local Study Area

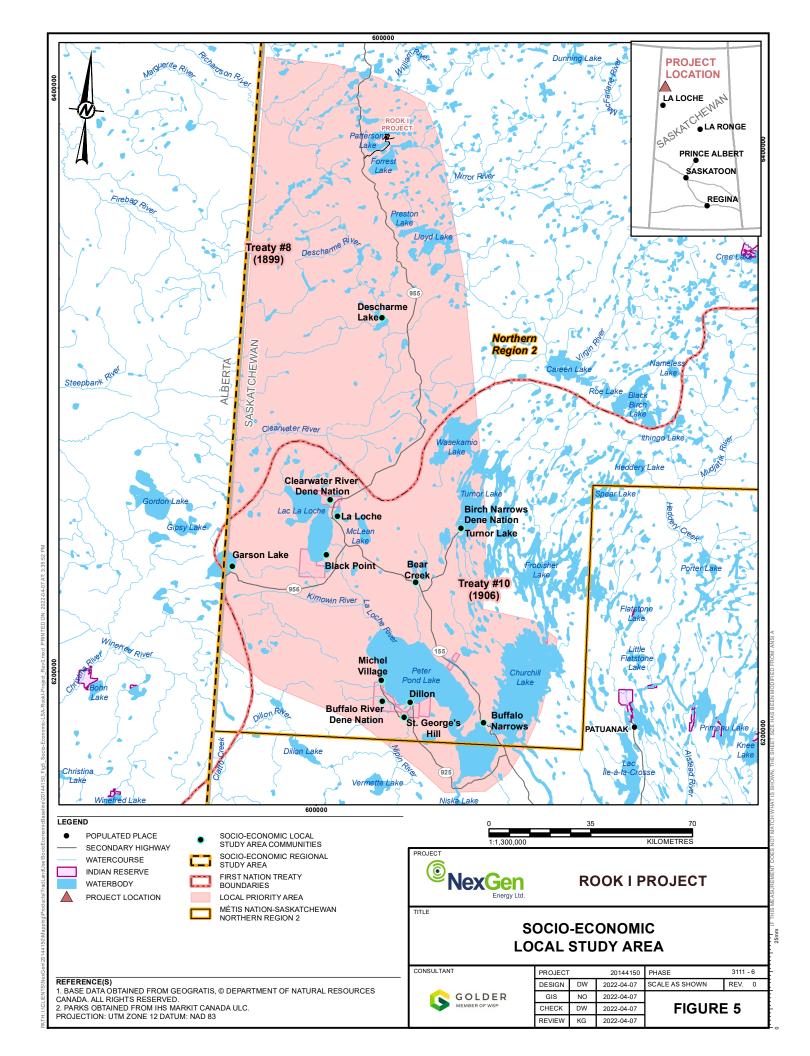
The LSA is the area where the potential direct and indirect effects of the Project on socio-economic conditions are likely to be greatest. The LSA corresponds with NexGen's local priority area (LPA), which consists of the local communities closest to the Project that would experience most of the Project effects and which NexGen has prioritized for economic benefits from the Project. These communities are located along, or accessed via, Highways 155 and 955 north of the intersection of Highways 155 and 925 (Figure 5). The LSA includes communities that:

- could experience changes in employment, income, business opportunities, and government revenues;
- could experience changes in population and demography through changes in migration;
- may provide services and infrastructure to the Project and/or experience demand/supply effects on services, infrastructure, housing, recreation, and/or transportation; or
- could potentially experience changes to community well-being.

In establishing the LSA for the Project, consideration was given to the location of community-specific and regional services, and their respective geographic service areas; services that are anticipated to be provided on site for the Project; and services required from municipal and/or regional sources. Consideration was also given to the location of recreational infrastructure and recreational areas. The LSA also considered key Indigenous and community concerns. The following communities and applicable Métis Locals, and Indigenous Groups are included in the LSA:

- Descharme Lake;
- Clearwater River Dene Nation (CRDN);
- Northern Village of La Loche (Métis Local 39);
- Black Point (Métis Local 162);
- Garson Lake:
- Bear Creek (Métis Local 156);
- Birch Narrows Dene Nation (BNDN);
- Turnor Lake (Métis Local 40);
- Northern Village of Buffalo Narrows (Métis Local 62);
- St. George's Hill (Métis Local 70).
- Buffalo River Dene Nation (BRDN; Dillon); and
- Michel Village (Métis Local 65).

All Indigenous Groups within the LSA are reflected in the above list, including MN-S NR2, which is represented through the communities within the region.





4.0 METHODS

The approach to documenting the existing socio-economic environment was designed to confirm that appropriate information was collected to understand and assess potential effects of the Project. The characterization of the existing socio-economic environment included both quantitative (e.g., statistical) and qualitative (e.g., discussions) data collection and analysis in line with Canadian and international best practice for environmental impact studies. Both primary and secondary data sources were used throughout the baseline study.

Data collection began with a review of existing literature and databases from a variety of public sources (e.g., statistical sources, government reports, academic reports), as guided by experience with similar projects in Saskatchewan and throughout Canada. Data was collected for both the RSA and LSA with a focus on current information as well as longitudinal data. Primary data collection was undertaken in the form of key person (KP) interviews⁴, a standard practice for socio-economic baselines and effects assessments. Joint Working Group discussions, IKTLU Studies, and workshops also assisted in identifying existing socio-economic conditions and related community interests and concerns. Joint Working Groups, specifically, provided an opportunity for Indigenous Groups to discuss topics of their choice related to the Project, and information shared from these meetings pertinent to potential socio-economic valued components⁵ (VCs) were incorporated into this baseline, where appropriate. Existing conditions within the RSA (e.g., population, demography, migration, and educational attainment) were used for certain topics as a point of comparison with the LSA during the data analysis process. Following the collection of primary and secondary data, baseline profiles were developed.

4.1 Standards and Guidelines

Best practices in socio-economic baseline data collection were applied in the development of this report, including development of interview guides and data treatment. Secondary data collection adheres to presentation of publicly available information and does not include confidential sources. Primary data collection was undertaken with informed consent of participants, and permission to use information collected through interviews was obtained.

This report satisfies the requirements of an EA of a designated project under the *Canadian Environmental Assessment Act*, 2012 (CEAA 2012) and requirements under *The Environmental Assessment Act* of Saskatchewan. In addition, this report meets the Terms of Reference for the Project submitted to the Saskatchewan Ministry of Environment (ENV) and Canadian Nuclear Safety Commission.

⁴ Note the CRDN asked to conduct their own KP interviews. NexGen provided the KP interview guide for this purpose; however, these interviews were not yet complete at the drafting of this baseline. The CRDN and NexGen will continue to work together to identify ways to incorporate their information into the Project.

⁵ Valued components are aspects of the biophysical, cultural, and socio-economic environments that are considered to have scientific, social, cultural, economic, historical, archaeological, or aesthetic importance (Beanlands and Duinker 1983; CNSC 2021).



4.2 Secondary Data Collection

Baseline information for the RSA and LSA was collected from the following secondary sources:

- census community profiles (Statistics Canada);
- custom⁶ Statistics Canada population projections for Keewatin Yatthé Regional Health Authority (KYRHA);
- Crown-Indigenous Relations and Northern Affairs Canada profiles;
- Government of Saskatchewan;
- Saskatchewan Bureau of Statistics;
- Saskatchewan Health Authority (SHA);
- community and municipal internet sites;
- statistical reports and secondary documentation from local governments;
- regional and local growth strategy documents, including Official Community Plans (i.e., La Loche, Buffalo Narrows, Bear Creek) and Comprehensive Community Plans (i.e., BNDN);
- Community Vitality Monitoring Partnership Process reports;
- Economic, Sector, and Demographic Analysis for the La Loche Region and Clearwater First Nation (DMCA 2018); and
- local media articles.

Data from the last three censuses (i.e., 2006, 2011, and 2016), and the 2011 National Household Survey conducted by Statistics Canada were analyzed to illustrate regional and local economic and social trends. For the RSA, some data are presented in different analytical packages based on data availability and boundaries. Data from these sources were used to characterize the existing environment, based on the most recently available data.

For the purposes of this report, information for the smaller LSA communities (i.e., Bear Creek, Descharme Lake, Garson Lake, Black Point, Michel Village, and St. George's Hill), for which community-level information is extremely limited, are presented together as 'Other LSA communities'. For some socio-economic conditions, there is no data available for these communities, in which case, the 'other LSA communities' sub-section was omitted. Where information was made available for these communities it was captured in this baseline. Otherwise, the data from the larger communities in the LSA was considered analogous to the neighbouring smaller communities as they tend to provide social infrastructure and services for these smaller communities as well.

Quantitative information for communities and Indigenous Groups in the LSA is sometimes presented collectively for comparison purposes with regional and provincial indicators, where relevant and comparative information is available. However, it is recognized that these communities and Indigenous Groups each have their own unique characteristics. These differences are described quantitatively and qualitatively throughout this subsection.

⁶ Custom means a dataset was made by Statistics Canada at the specific request of NexGen or NexGen's consultants that otherwise did not exist or was not publicly available.



4.3 Primary Data Collection

After compiling publicly available secondary data, opportunities were identified for further investigation to characterise socio-economic baseline conditions in LSA communities and validate secondary information. Primary data collection in the form of Indigenous and Local Knowledge was compiled from IKTLU Studies, JWG meetings, KP interviews and information from several other sources. Other sources included community information sessions and workshops with youth and trappers to provide additional information and confirm the accuracy of secondary data (i.e., verification and triangulation).

The following subsections describe the Indigenous Group Study Agreements and the key sources of Indigenous and Local Knowledge used through the primary data collection process.

4.3.1 Indigenous Group Study Agreements

In 2019, NexGen negotiated and signed individual Study Agreements with the four primary Indigenous Groups within the Project LPA (i.e., CRDN, MN-S [representing NR2], BNDN, and BRDN). Each Study Agreement formalized an engagement process between NexGen and the individual Indigenous Group to, among other things:

- identify and characterize potential impacts (both positive and negative) to Indigenous and Treaty Rights and socio-economic interests resulting from the Project; and
- collaboratively identify potential avoidance, mitigation, and accommodation measures related to identified negative impacts to those Indigenous and Treaty Rights and measures to enhance the positive impacts.

The Study Agreements also acknowledged that, notwithstanding the activities contemplated under the Study Agreement, the responsibility for fulfilling the *Duty to Consult*⁷ remains with the Crown.

Each of the Study Agreements also:

- Established individual JWGs composed of representatives chosen by each Indigenous Group to facilitate regular, ongoing engagement during the Project EA, including the sharing of Indigenous and Local Knowledge. The JWGs are fully funded by NexGen.
- Committed NexGen to providing the funds necessary to allow each community to undertake, or cause to be undertaken, a self-directed IKTLU Study.
- Committed NexGen to provide capacity funding to allow for participation by Indigenous Groups in the JWGs, including the retention of technical support.
- Committed NexGen and the Indigenous Group to negotiating in good faith to formalize a Benefit Agreement with each Indigenous Group and to provide funding to assist each in negotiating such an agreement.

A Study Funding Agreement was also signed in 2019 with the Ya'thi Néné Lands and Resources (on behalf of the Black Lake Denesųłiné First Nation and Fond du Lac Denesųłiné First Nation) as the Ya'thi Néné Lands and Resources identified an interest in sharing Indigenous Knowledge through a study. The Study Funding Agreement

⁷ The Government of Canada has a duty to consult, and where appropriate, accommodate Indigenous groups when it considers conduct that might adversely impact potential or established Aboriginal or treaty rights (Government of Canada 2019a).



between NexGen and Ya'thi Néné Lands and Resources was strictly for the purposes of funding a study and did not include the establishment of a JWG.

4.3.2 Indigenous Knowledge and Traditional Land Use Studies

Indigenous and Local Knowledge was included in the socio-economic baseline consistent with principles set out in relevant federal and provincial government, including working with the communities and accessing knowledge with community support (Government of Canada 2016a).

A key source of Indigenous and Local Knowledge is the Project-specific studies completed by Indigenous Groups, including Traditional Land Use and Occupancy studies, Traditional Knowledge and Use studies, and Indigenous Rights and Knowledge studies (henceforth referred collectively as Indigenous Knowledge and Traditional Land Use [IKTLU] Studies). The IKTLU Studies that were reviewed in developing the socio-economic baseline are included below:

- TSD II (BNDN), Birch Narrows Dene Nation Traditional Knowledge and Use Study Specific to NexGen Energy Limited's Proposed Rook I Project;
- TSD III (BRDN), Buffalo River Dene Nation Traditional Knowledge and Use Study Specific to NexGen Energy Limited's Proposed Rook I Project;
- TSD IV (MN-S), Métis Nation Saskatchewan Northern Region 2 Traditional Land Use & Diet Study for the NexGen Rook I Project;
- TSD V.1 (CRDN), Preliminary Identification of Issues and Concerns Related to the Proposed NexGen Energy Ltd. Rook I Project in the Patterson Lake Area; A Review; Clearwater River Dene Nation; Traditional Land Use and Occupancy Mapping Interviews; 2010 2016;
- TSD V.2 (CRDN), Clearwater River Dene Nation Indigenous Rights and Knowledge Survey Related to the Proposed NexGen Energy Ltd. Rook 1 Project in the Patterson Lake Area; and
- TSD VI (YNLR), Provision of Athabasca Denesųłiné Traditional Knowledge, Land Use and Occupancy Information for the NexGen Rook I Project Environmental Assessment.

4.3.3 Joint Working Groups

Another key source of Indigenous and Local Knowledge is information shared by Indigenous Group representatives during JWG meetings. The JWGs represent an agreed-upon primary engagement mechanism as outlined in the Study Agreements signed by each Indigenous Group and NexGen. There are four JWGs with the Project's primary Indigenous Groups (as identified by the Canadian Nuclear Safety Commission, the ENV, and NexGen):

- CRDN JWG;
- MN-S JWG representing MN-S NR2;
- BNDN JWG; and
- BRDN JWG.



The leadership of each primary Indigenous Group selected their JWG participants with consideration of group diversity; where possible, members included Elders, youth, different genders, a range of ages, and land users around Patterson Lake.

The JWG meetings were intended to be held monthly with communities where scheduling allowed. Monthly meetings with community members were held with the BNDN and BRDN from October 2019 to July 2021, excluding April to July 2020 and September to November 2020 due to considerations for COVID-19. The CRDN and MN-S participated in JWG meetings from October 2019 to August 2020, excluding April to November 2020. Effective December 2020, meetings with the CRDN and MN-S were suspended at the request of those groups, with a few periodic meetings being held since then. Joint Working Group meetings covered a broad range of Environmental Impact Statement topics, including VCs. For the purposes of this baseline, most JWG meetings also included discussions on socio-economic aspects of the Project, or the interconnectivity of the bio-physical environment and the human environment.

Three JWG sessions in February 2020 were specifically conducted with BNDN, BRDN, and MN-S to discuss community definitions of well-being, including the factors that both contribute to and detract from well-being, and how participants felt the Project might interact with these factors. The CRDN JWG was unable to meet prior to the completion of the socioeconomic baseline.

Key topics discussed at the February 2020 JWGs included:

- Gender-Based Analysis Plus;
- IKTLU Studies;
- job, training, and business opportunities; and
- socio-economics.

To better understand the complex relationship between the traditional, wage, and government transfer economies influencing how community members interacted with and used the environment, a specific JWG session was developed in August 2021. The BNDN and the BRDN participated in this JWG session; however, the CRDN, and the MN-S were unable to meet prior to completion of the socio-economic baseline.

Key topics discussed at the August 2021 JWGs included:

- key aspects of the traditional and wage economies;
- changes in community participation in the traditional and wage economies;
- gender differences in participation in the traditional and the wage economies;
- the effects of government transfers and subsidies on participation in the traditional and wage economies; and
- discussions on the challenges and opportunities for future participation in the traditional and wage economies.



This is an example of how multiple JWG discussions with various JWGs over time resulted in the development of a specialized JWG topic. From this JWG special topic session, further sessions were conducted on the BRDN culture and history. Inclusion of cultural/history shares at the start of all JWG sessions was also discussed with JWGs as an opportunity to provide information to NexGen on items important to primary Indigenous Groups.

4.3.4 Key Person Interviews

The KP interviews were undertaken to confirm trends observed in quantitative data, address gaps that could not be readily filled by secondary sources, and provide context and perspectives on community interests and concerns. Key Person interviews were conducted with key information holders within the LSA communities including representatives of organizations with mandates related to socio-economic conditions in both Indigenous and non-Indigenous communities. These discussions also provided the opportunity to identify potential issues of concern for the LSA communities and to obtain greater contextual information regarding variation in conditions within individual communities, including between different subgroups of the community. An objective of the socio-economic baseline was to capture such variation for the purpose of assessing how the proposed Project may affect specific subgroups of the LSA population differently.

A KP interview program is an industry-accepted approach to qualitative data collection and analysis for understanding communities taking part in impact assessment in Saskatchewan, Canada, and globally (IAAC 2020a; IAIA 2015). It is an effective means for obtaining relevant community profile information from service providers, community leaders, and informed members of the community. Information gathered through a KP interview program can help strengthen the understanding of the existing environment when used in combination with other primary and secondary data sources, and can be used in data triangulation to confirm accuracy and applicability. A KP interview program was undertaken between 2019 and 2021 as part of the characterization of the existing economic environment to confirm trends observed in quantitative data, provide information that could not be readily filled by secondary sources, and to provide context and perspectives on community interests and concerns.

The KP interview process was approached collaboratively with communities through the Community Coordinators provided for (i.e., funded by NexGen) through each of the Study Agreements. Community Coordinators were trained to assist in identifying participants in the KP interview program and were primarily responsible for initial outreach and scheduling of interviews. Interview guides were developed to seek additional information and provide local context. Interviews were conducted with community members, including business owners, principals and staff of schools, housing clerks, healthcare directors, band councillors, women with knowledge experience with the worker rotation system, and the Royal Canadian Mounted Police (RCMP). Topics covered during KP interviews included health, education, economic development, social services, and community well-being. Information collected from interviews was categorized based on the topics included in the existing conditions and incorporated where possible to either provide additional detail or validate secondary data. A total of 73 KP interviews were conducted with community members primarily through telephone unless another method was requested.

Interviews were conducted with the consent of individual interview participants and community leadership including La Loche (20 interviews), BNDN / Turnor Lake (9 interviews), BRDN (16 interviews), Buffalo Narrows (24 interviews), and other hamlets and villages (3 interviews) in the LSA, as well as the Meadow Lake Tribal Council (MLTC; 1 interview). The CRDN indicated a desire to undertake interviews independently and NexGen provided the KP interview guide and directions for interviewers. Those interview results had not been provided to NexGen at the time of drafting this report.



4.3.5 Community Information Sessions and Workshops

Community information sessions were held in four locations (i.e., La Loche, Buffalo Narrows, BNDN, and BRDN) in June 2019 and a total of 226 participants attended (NexGen 2019). The objectives of the community information sessions were to inform local communities of the Project and the EA process, answer questions, and receive initial feedback specific to the Project for consideration during the EA (e.g., VCs). The community information sessions were a drop-in format with a series of poster presentations. Each display was attended to by a representative of NexGen (including NexGen consultants) who was able to address and record attendees' questions and comments. Participants were encouraged to ask questions and provide feedback, fill out a general survey about key interests and concerns, and complete a VC survey. The results of the surveys were compiled and used to inform the socio-economic baseline report.

Workshops with specific groups were held in 2020 and 2021. A youth workshop was held in March 2020, which included 44 students and 10 staff from high schools in Buffalo Narrows, Dillon, La Loche, and Turnor Lake. The youth workshop covered a variety of different topics which included Project background information, employment and educational opportunities, mentorship programs and scholarship opportunities. Attendees were given the opportunity to ask questions as well as provide feedback on the effectiveness of the workshops which allowed for open-ended comments and conversation about topics covered within each event.

An N-19 Trappers Association workshop was held in July 2021 with associated members in La Loche. Six trappers who actively harvest within the N-19 block attended the workshop and discussed topics related to land use and participation in trapping, furbearer health, and habitat as well as commercial harvesting.

A workshop with women from the LSA planned for April 2020 was postponed due to the COVID-19 pandemic. The workshop was reorganized into a series of five individual interviews with women identified by each Indigenous Group who had direct or indirect experience with mining employment. These KP interviews were completed as part of the KP interview program which took place between October 2019 and July 2021.

4.3.6 Data Limitations and Challenges

Challenges were faced pertaining to the information collection process; the COVID-19 pandemic and forest fires in the summer of 2021 represented the two most notable challenges. However, care was taken to verify that the socio-economic baseline was robust and presents a sound foundation for the consideration of Project effects (positive and negative) on Indigenous and non-Indigenous communities. This was achieved through the implementation of digital platforms (e.g., Microsoft Teams / Zoom meetings) and telephone interviews. It is important to note that the majority of the KP interviews were completed prior to COVID-19, and access to quantitative data sources were not affected. The following data limitations pertaining to the socio-economic baseline are acknowledged:

Statistics Canada Census and National Household Survey data are limited for smaller communities due to confidentiality concerns and suppression of data. Population data are suppressed in communities with less than 40 persons, while income data are suppressed in communities with less than 250 persons or 40 households (Statistics Canada 2019). Consequently, census data for several indicators are not available for small communities in the LSA such as Bear Creek, Black Point, Descharme Lake, and Garson Lake. Further, due to data rounding conventions for smaller population centres, some totals do not add up to 100%. Data presented for some indicators (e.g., housing) has been subjected to a confidentiality procedure



known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals in tables therefore may not add-up due to rounding. A data note is included with each data table affected by the rounding convention. Data may also be suppressed when enumeration was incomplete, or data quality was poor.

- Statistics Canada data can contribute to developing an understanding of the local and regional economies and how they have changed over time. Data should be interpreted with caution due to comparability issues across years, confidentiality, and data quality. Information was reviewed for a number of indicators from the Census of Canada over time. In 2011, there was a change in how the census was administered, with a National Household Survey replacing the previous long-form census. One of the key differences was a change from a mandatory to an optional response requirement. In JWG discussions, some individuals noted that Statistics Canada data were not always representative of their communities, due in part to low participation in census surveys; however, they acknowledged the Statistics Canada economic data did seem to accurately represent the community (BRDN-JWG 2021a). It is also noted that Statistics Canada has processes to address low participation rates and would limit the data if they believed it was not an accurate representation, either by not releasing the data or releasing it with strong disclaimers noting the lack of confidence in the accuracy of the information or the limitations in use of the data. No such disclaimers were attached to the data from the LSA communities.
- The most recent census data available are from the 2016 Statistics Canada Census. Where more up to-date data are not available, this report endeavours to qualitatively capture current conditions using historical data as a framing tool to identify trends.
- Information drawn from the 2016 Statistics Canada Census Aboriginal Community Profiles⁸ is understood to potentially be dated and not reflective of current community social and economic conditions. Changes in the local, regional, and national economy arising from the COVID-19 pandemic are not captured in the 2016 census data.
- Where NSAD data are not available for an indicator in the RSA, provincial level data are provided.
- The most recent data available for the former KYRHA are for 2011 to 2015. Some health and well-being data are only available from the broader health region and may not be entirely representative of the LSA (Figure 4).
- The data collected from KP interviews may not be representative of the perspectives of all community members. Key persons were selected by the communities based on their knowledge and experience that could be relevant to characterizing the socio-economic baseline of the community, and is consistent with industry good practice. Data presented from the KP interviews are based on the interviewed community members' knowledge and experience, and their willingness to participate and share data openly. Collaboration was sought with Indigenous Groups to assist in identifying KP interviewees. As a result, some participants in the KP interview program were identified with the assistance of Community Coordinators who live in the communities.

⁸Note that Statistics Canada uses the term "Aboriginal" in previous censuses. The term Indigenous has been used throughout this report unless referencing a specific, named document (e.g., Aboriginal population profile, Aboriginal Treaty Rights) for consistency with current nomenclature



- Due to the COVID-19 pandemic and resulting provincial and local government restrictions on travel of non-residents within communities, in-person engagement was not possible for much of 2020 and 2021. Typically, primary data collection involves engagement regarding the overall scope and methods of the socio-economic baseline and impact assessment in support of identification/coverage of key issues/concerns in the study. Digital engagement endeavoured to capture the concerns of primary data collection participants during this time. There is some concern that, without direct, targeted engagement, this process may be less accessible and may have achieved fewer comprehensive results than an in-person engagement.
- The demographic data used in this report relies upon publicly available data, primarily from government sources. It is acknowledged that some Indigenous Groups caution against the validity and utility of official census data, which do not accurately or wholistically portray economic, social, cultural, and health characteristics of their communities.
- The socio-economic baseline makes best efforts to describe economic, services and infrastructure, and health and well-being conditions as they currently exist in the RSA and LSA, based on available information, and presents some conclusions about historical and future trends to support the assessment of potential effects. The difficulty in projecting economic and social conditions into the future for the LSA communities is a limitation on the presented baseline. To address these limitations, key trends or findings were confirmed where possible through KP interviews or other published reports and data.

4.4 Quality Assurance / Quality Control

Quality assurance and quality control measures were employed throughout the data collection, analysis, and reporting process. The study design was developed to meet standards and best practices used in provincial, Canadian, and international socio-economic assessment practice, including those for the EA of mining projects. During the primary and secondary data collection programs, quality assurance and quality control measures included:

- Informed consent forms were read prior to the commencement of interviews to inform interviewees of the interview process and how interview results would be used in the EA and reported in the Environmental Impact Statement; consent and any conditions imposed by the interviewee to participating in the interview were confirmed. Consent forms were saved for reference.
- Triangulation was used to confirm interview responses received by asking similar questions to more than one respondent to verify information. Interviewees were informed that interviewers may follow up with questions and clarifications should they be needed during data analysis.
- Where there were two interviewers, notes were taken by each interviewer and cross-checked prior to finalization of interview notes.
- Similarly, secondary data was triangulated where applicable to confirm alignment of the information provided on the same topic area from multiple sources, including KP interviews. Where differences were found and could not be reconciled, these differences are noted in the report.
- General limitations of secondary data were considered in the application and interpretation of the information, and key limitations are noted in the report.



5.0 CONTEXT

This section provides high level context to the consideration of baseline conditions in the RSA and LSA. It describes the regional and local setting with reference to geographic location, settlement history and hierarchy, connectivity, governance, and planning. This section highlights key policies and governance arrangements that have shaped the development of the RSA and LSA communities and the provision of services and facilities and influenced land and resource use and resident participation in the traditional and wage economies.

5.1 Regional Study Area Context

5.1.1 Regional Setting

The RSA covers approximately half of Saskatchewan's land area yet is sparsely populated. An estimated 3.4% (36,850 people) of the province's population resides in more than 40 communities in the RSA (Planning for Growth n.d.a). Most of the area within the RSA is Crown Land (Planning for Growth n.d.a). In present day, over 80% of the approximately 40,000 inhabitants of northern Saskatchewan are Indigenous (Statistics Canada 2017e).

5.1.1.1 Regional Communities

The RSA consists of 25 incorporated municipalities and 94 First Nation reserves. The 25 incorporated municipalities consist of two towns, 11 northern villages, 11 northern hamlets, and the district⁹ (Figure 4). In 2016, the majority of the RSA population lived in the northern First Nation reserves or the incorporated municipalities (96.5%) (Government of Saskatchewan 2021a; Statistics Canada 2016). The largest population centres in the RSA are the town of La Ronge (i.e., population of 2,688) in the southern part of the RSA and the Northern Village of La Loche (i.e., population of 2,365) in the northeastern part of the RSA (Figure 4). Of the 11 northern villages in the RSA, the largest population centres are La Ronge (i.e., population of 2,688), La Loche, (i.e., population of 2,444) and Île-à-la Crosse (i.e., population of 1,296). The northern hamlets, northern settlements and subdivisions of the RSA have smaller populations than the northern villages.

5.1.1.2 Regional Connectivity

The majority of RSA communities are dispersed on separate trunk roads originating from Prince Albert, Saskatoon, and Battleford. However, a number of more remote northern communities ¹⁰ lack road access (University of Saskatchewan 2020) and rely heavily on ice roads in the winter months and barges or air freight in the summer months for personal transportation and for the transport of freight into communities. As such, transportation costs in these communities are much more expensive than for communities with year-round, direct road access.

5.1.1.3 History and Settlement Patterns

Prior to European contact, the northern boreal forest area of Saskatchewan was occupied by Dene peoples (University of Saskatchewan n.d.a) in the north, and by the Atsina, (also known as Gros Ventres), Nakota and Hidatsa and the Shoshone (also known as Snake) in the south. The advent of the fur trade in northern

⁹ The district is a single municipality that covers the unorganized area of the NSAD and includes all areas outside of incorporated municipalities and designated park land. The unorganized communities of the district include 11 northern settlements, 14 resort subdivisions and nine cluster subdivisions

¹⁰ E.g., Hatchet Lake First Nation and Wollaston Lake, Fond du Lac First Nation, Black Lake First Nation (Saskatoon StarPhoenix 2016).



Saskatchewan in the late 1700s brought about substantial change in territorial distributions of First Nation groups who then entered into competition and conflict over fur resources. Based on information from the JWG meetings, the Dene lived in different areas around Patterson Lake. Stories indicate that they were once one tribe that split into three tribes, with one going south (Navajo), one staying central (Dene), and one going north (Dogrib, and Beaver; BRDN-JWG 2021b). The nêhiyawak (Cree) moved onto the prairies with the fur trade in 1740 and were the middlemen in the fur trade, trading with the English, French and other Indigenous groups (University of Saskatchewan n.d.b). The Cree now occupy a large area of Saskatchewan, from the northern woodlands areas to the southern plains and are now the most numerous Indigenous group in Saskatchewan.

In 1871, the Canadian government began negotiating treaties with Indigenous Peoples in northwest Canada to establish title to the land and create reserves for Indigenous settlement (Canadian Encyclopedia 2021a). Indigenous leaders signed treaties to maintain as much of their traditional way of life as possible while also adapting to the challenges of European settler encroachment. Mining spurred the treaty signing process in the north, including the signing of Treaty 8 (University of Saskatchewan n.d.c). Treaty 8 was signed in 1899 and was negotiated with the Cree, Denesųłıné, Beaver, and other inhabitants of the territory (Canadian Encyclopedia 2021a).

Treaty 10 was signed in 1906/1907 after the Dene and Cree in northern Saskatchewan requested a treaty in the late 1800s as they became concerned with the influx of non-Indigenous people and wanted protection for their way of life (Dodson et al. 2006). Treaty 10 was based on the other numbered treaties, including the right of signatories to continue their traditional ways of life of hunting, trapping, and fishing throughout their ceded territory (Canadian Encyclopedia 2021b). The RSA includes a portion of both Treaty 8 and Treaty 10.

The northern part of Saskatchewan is also the traditional homeland of the MN-S (Figure 2). The Métis people are people of mixed European and Indigenous ancestry, who emerged as a distinct people with a unique identity (TSD IV: MN-S). Métis settlement in Saskatchewan predated the development of an agrarian society by over 100 years (University of Saskatchewan n.d.d). After 1821 and the consolidation of the Canadian fur trade, and until the age of the railway, Métis traders travelled to what is now Saskatchewan in large caravans of Red River carts. The spatial distribution of Saskatchewan's Métis peoples is diverse, with Métis living throughout Saskatchewan and particularly in the four urban centres of Regina, Saskatoon, Prince Albert, and North Battleford (University of Saskatchewan n.d.d). Métis also reside in the following northwest towns and villages: Beauval, Buffalo Narrows, Cole Bay, Green Lake, Ile-à-la-Crosse, Jan's Bay, and Turnor Lake. In the northeast, Métis are found within Cumberland House and La Ronge (University of Saskatchewan n.d.d)

5.1.1.4 Key Government Policies

In the early 20th century, Indigenous Peoples continued to practice land-based activities throughout their traditional territories. In northern Saskatchewan, Dene, Cree, and Métis subsistence depended on their ability to access the boreal forest and its resources such as plants, caribou, moose, deer, beaver, snowshoe hare, waterfowl, grouse, and fish (Mackenzie 2004). However, the implementation of numerous federal and provincial government policies over the next several decades would have large implications on how Indigenous Peoples in northern Saskatchewan would be able to access and use the land and resources. While policies were established to meet the Government of Canada's and Government of Saskatchewan's conservation and economic development goals, they slowly eroded the hunting, fishing, and trapping rights of the northern Cree, Dene, and Métis people (Dodson et al. 2006).



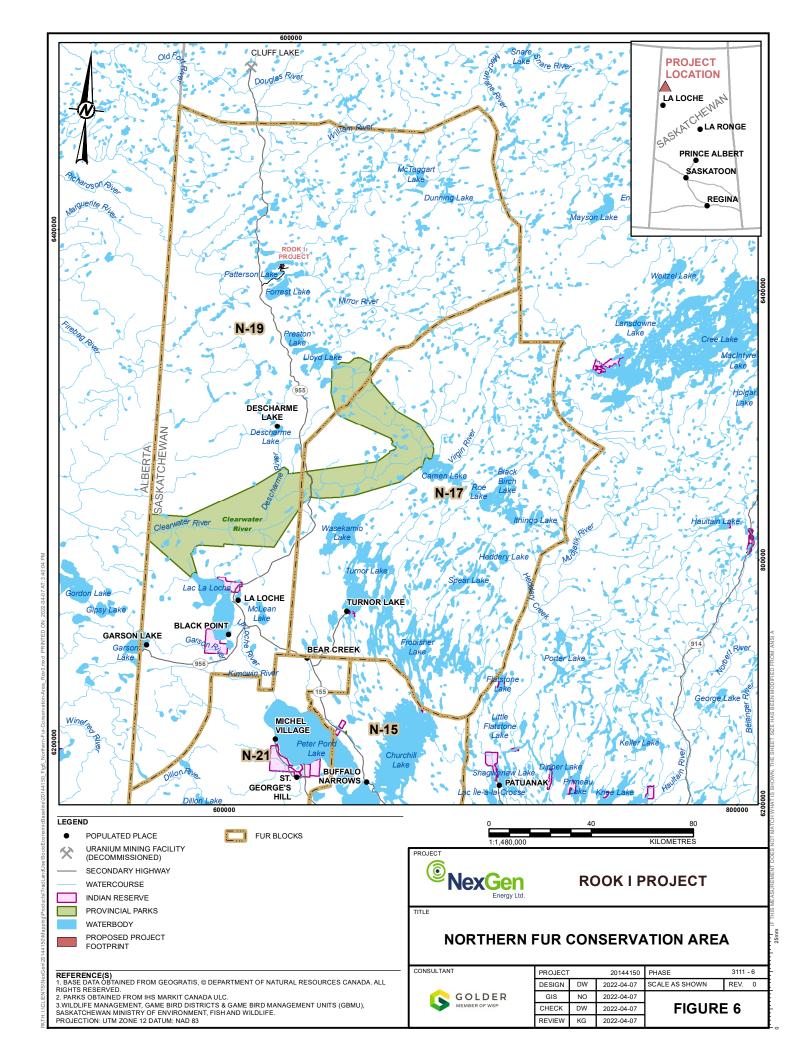
5.1.1.4.1 The Northern Fur Conservation Area and Fur Conservation Block System

By the 20th century, trapping had become an important part of Indigenous livelihoods, and the fur trade provided tools such as steel traps and better access to European goods (Mackenzie 2004). Trapping was practised over large territories based on the annual cycle of resource availability. Trapping areas were rotated to prevent resource depletion, which was self-regulated by local families and bands, and family trapping areas were passed down through the generations (Gulig 1995).

The economic depression during the 1930s resulted in the migration of non-Indigenous trappers to northern Saskatchewan who competed with the Métis and First Nations people for fur (Raymond 2013). In response to declining fur resources, the Government of Saskatchewan introduced a "lease system" during the 1930s that allowed individuals to trap on a piece of land for a 10-year period; as a result, Indigenous trappers lost many of the more productive fur areas in northern Saskatchewan (Gulig 1995). Other trapping regulations imposed by the Government of Saskatchewan, including the banning of beaver trapping and the opening and closing of the trapping season, also affected the traditional trapping practices of Indigenous Peoples (Raymond 2013).

In 1944, the Government of Saskatchewan established a Fur Conservation Block system on all lands in northern Saskatchewan, with the intention that Indigenous communities could sustain themselves through hunting, trapping, and commercial fishing (ENV 2012; Tough and McGregor 2007). In 1946, the Northern Fur Conservation Area in northern Saskatchewan was divided into 88 trapping blocks, and further subdivided into zones or family-allocated traplines, which was managed by restricting the number of trappers and fur harvest in each area (ENV 2012; Figure 6).

This legislation and the introduction of the Fur Conservation Block system had a large effect on northern Indigenous Peoples, including the creation of trapping boundaries that prevented members from using important areas for trapping and other subsistence harvesting activities (TSD II: BNDN; TSD III: BRDN). The Government of Saskatchewan's views of the modern economy and conservation policies, which was based on a highly regulated trapping system, conflicted with how trapping was traditionally managed by Indigenous Peoples that rotated trapping areas based on resource availability and the cultural practice of familial reciprocity (Gulig 1995; Raymond 2013).





5.1.1.4.2 The Natural Resource Transfer Agreements

The control of fur-bearing and game animals was transferred to the Government of Saskatchewan from the Government of Canada in 1905. Over the next several decades, the Government of Saskatchewan began to limit Indigenous Peoples access to game as it aimed to capitalize on the fur market and conserve game stocks (i.e., populations) for sports hunting (Gulig 1997; Gulig 2003 *in* Dodson et al. 2006).

The Natural Resource Transfer Agreements of 1930 were passed to formally transfer control and management of natural resources from the Government of Canada to provincial governments in Manitoba, Alberta, and Saskatchewan (Raymond 2013). The Saskatchewan agreement was enacted by the *Saskatchewan Natural Resources Act.* While the Natural Resource Transfer Agreements and treaty agreements protected First Nations' subsistence rights, the Métis were not similarly protected and the agreements facilitated the introduction of new conservation policies that allowed the Province of Saskatchewan to enforce regulations regarding natural resources that would eventually affect the northern subsistence economy (Raymond 2013). The legislation enabled the Government of Saskatchewan to allow the Dene and Cree to hunt, trap, and fish for subsistence purposes only in areas where they had "a right of access" to protect the value of natural resources for commercial and other interests (Gulig 1997; Dodson et al. 2006). The Métis were excluded under this legislation (Raymond 2013).

5.1.1.4.3 Commercial Fisheries Regulations

Interest in the commercial fishery by 1905 had became increasingly focused on northern lakes, where regulation emphasized enhancing commercial access rather than maintaining a sustainable yield, which was incompatible with Indigenous subsistence patterns (Gulig 1997). Hoping to create a commercial fishery during the 1920s and 1930s, the Government of Canada attempted to limit Indigenous fishing in northern Saskatchewan by placing regulations on which lakes Indigenous Peoples were allowed to fish (Gulig 2003 *in* Dodson et al. 2006). Other laws were passed to limit Indigenous access to fish, including restrictions on net and mesh sizes, and fishing for subsistence purposes regardless of what had been established through the treaties (Gulig 1997; Dodson et al. 2006). By the 1930s, commercial and sports fishing had reduced the fish stocks in many northern lakes, including Peter Pond Lake and Churchill Lake, to the detriment of the local Indigenous Peoples (Gulig 2003 in Dodson et al. 2006). Saskatchewan's fishery was regulated and managed by federal interests until the *Saskatchewan Natural Resources Act* was established in 1930.

Between the late 1960s and the mid-1970s, commercial fishers in northern Saskatchewan landed about 11 million pounds (approximately 5 million kg) of fish annually, valued at nearly \$2 million, from roughly 170 lakes (Environment Canada 1975). Up to the early 1990s, commercial fishing was an important industry for communities in the RSA. There is anecdotal evidence to suggest that fish harvesters made sufficient income to live off; catches contributed to subsistence diets, and dried fish was sold in southern communities for extra cash income. Commercial fishing is conducted primarily through fishing co-operatives which are established within communities, including local towns and hamlets and Indigenous communities, and their residents can obtain membership. It was reported by the Saskatchewan Commercial Fisherman's Co-operative Federation Ltd that over 700 fish harvesters belonged to local fishing co-operatives (The Encyclopedia of Saskatchewan 2006a).

The ENV is responsible for issuing fishing licences and setting lake quotas, fishing seasons, and allowable fishing gear. Market conditions also influence the commercial fishery (e.g., type and number of fish targeted due to market prices) and, more recently, the COVID-19 pandemic has also affected the fisheries because the Freshwater Fish Marketing Corporation (FFMC) was no longer in a position to purchase product due to over supply and a decrease in orders from restaurants and other purchasers (Gillis 2020). Established in 1969, the



FFMC acted as a single-desk marketer of Canada's inland fish catch under the *Freshwater Fish Marketing Act*. The FFMC's mandate was to purchase all legally caught fish, create an orderly fish market, and increase returns to fish harvesters (Government of Canada 2021a). In 2012, the Government of Saskatchewan no longer subscribed to the *Freshwater Fish Marketing Act*. Commercial fisheries were no longer required to sell to the FFMC and, likewise, the FFMC was no longer obligated to purchase from them as there was now a free market approach (Government of Canada 2021a). Given choice, some fish harvesters continue to sell to the FFMC and others market their catch to small processors and for local consumption.

5.1.1.4.4 The Primrose Lake Air Weapons Range

The Primrose Lake Air Weapons Range (PLAWR), also known as the Cold Lake Air Weapons Range, was established in 1951 on traditional Aboriginal and Treaty lands and has primarily been used for military air weapons testing and operations training (Figure 7). The PLAWR lies approximately 60 km south of the BRDN's IR 193 (Figure 8), straddling the Saskatchewan-Alberta border, and covers an area of 11,754 km² (Lackenbauer 2006). In 1953, the federal government signed agreements with the governments of Saskatchewan and Alberta to perpetually lease the range; the agreements have been renewed continuously since 1954. Non-military use of the PLAWR has increased since 2006 and is expected to continue to grow in and around the range for the accommodation of the natural gas, commercial fishing, and logging sectors (Lackenbauer 2006).

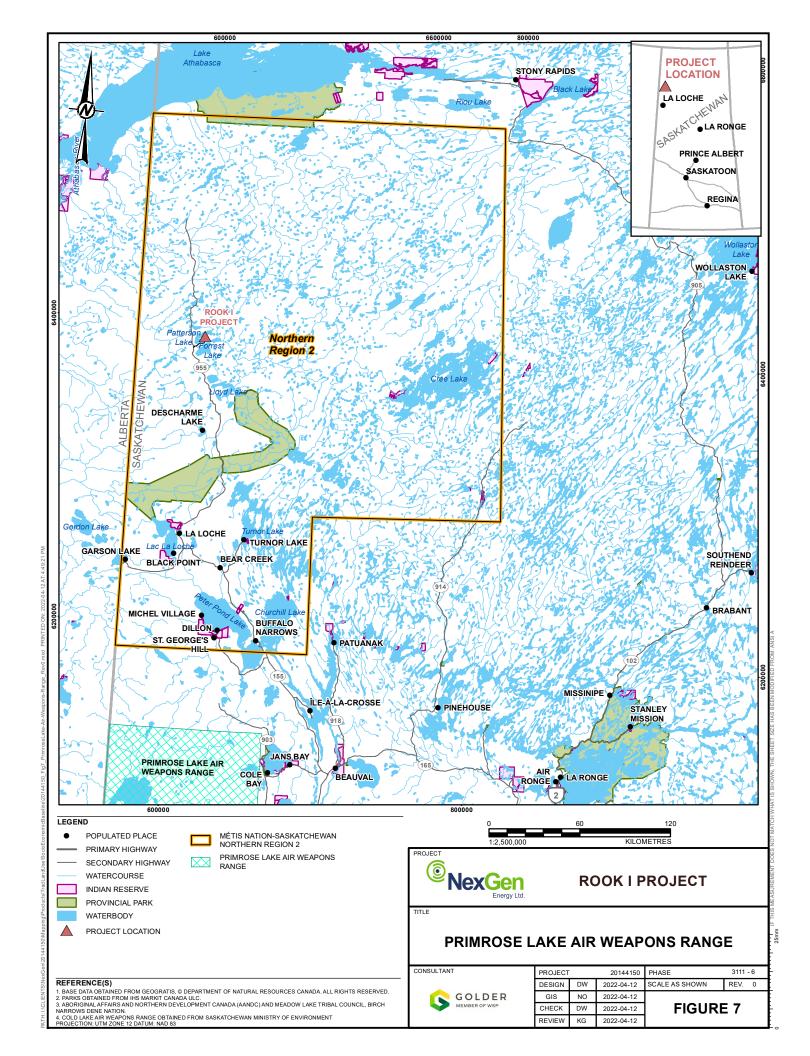
When the PLAWR was established, several First Nation and Métis communities lost access to lands that were part of their traditional hunting and trapping territories. Approximately \$700,000 in compensation to the Métis in Northern Saskatchewan was paid out by the Government of Canada between 1954 and 1961 for the loss of ability to access and partake in traditional activities (CBC News 2007). In 2005, the Government of Canada and the Province of Saskatchewan announced a joint investment of \$19.5 million to be spread out over a five-year period for the purpose of regional economic development initiatives. The funding was aimed at assisting with compensating communities affected by the establishment of the PLAWR (Government of Canada 2005).

The BNDN noted that they conducted a community vote regarding the distribution of funds from the Cold Lake Air Weapons Range Settlement. The vote demonstrated overwhelmingly support for a division of the funds from the Cold Lake Air Weapons Range Settlement, with a proportion going to current members, and a portion allocated to a BNDN fund designed to enhance their communities. This was based on a recognition that the Cold Lake Air Weapons Range had affected a previous generation, and the settlement should not only benefit the current generation, but future generations as well (BNDN-JWG 2021a).

5.1.1.4.5 Wildfire Management Policies

Wildfires are unplanned fires that burn organic soil, grasses, shrubs, trees, and associated vegetative fuels (Provincial Auditor of Saskatchewan 2017). Wildfires can play a natural and beneficial role on the boreal landscape. When they do occur, wildfires can affect land use patterns for hunting, fishing, and trapping, and burn cabins. The ENV is responsible for detecting wildfires in Saskatchewan (Provincial Auditor of Saskatchewan 2017). In the event of a wildfire, the ENV assesses how to best manage the situation using a hierarchy of priority for "values-at-risk" including (Dallyn 2012):

- human life;
- communities and major public industry and infrastructure;
- commercial forest; and
- other values.





Given that there are valuable assets in areas where wildfire may occur, wildfire must be effectively managed to protect life and property. The decision to suppress (i.e., fight) a fire is made by assessing each wildfire and making decisions about how to manage it (Tymstra et al. 2020).

When there are structural values-at-risk that require wildfire protection, several strategies are used. For larger facilities, such as mine sites and similar facilities, facility workers are trained to respond to immediate wildfire threats, and equipment to fight wildfires is be kept on site. Effective March 2016, *The Wildfire Act* (s.20) requires industrial and commercial operators operating during the wildfire season to submit wildfire prevention and preparedness plans.

Based on wildfire prevention and preparedness plans submitted, the ENV stores information about values-at-risk in its Wildfire Management Database. Temporary values-at-risk include forestry, tree planting, and mining exploration work camps. Permanent values-at-risk include the name and location of communities, major public and industrial infrastructure, commercial timber, structures, natural resources, commercial industrial operations, cottages, and cabins (Provincial Auditor of Saskatchewan 2017).

The Saskatchewan Public Safety Agency incorporated the ENV's Wildfire Management Branch and the Ministry of Government Relations' Emergency Management and Fire Safety in January 2019. The Saskatchewan Public Safety Agency has fire bases located in La Loche and Buffalo Narrows, with a Response Centre in Buffalo Narrows that oversees the Buffalo Narrows Protection Area where the proposed Project is located. Emergency Services Officers and Protection Officers are responsible for communicating risk information concerning communities and commercial operators (SPSA n.d.). Wildfire response depends on the values-at-risk and whether an area might benefit ecologically from a fire. In these areas, consideration is given to fighting fires based on a careful assessment of the values present (Dallyn 2012; Rusek and Marshall 2000).

Indigenous Groups have observed that forest fires in northern Saskatchewan have increased in magnitude and frequency over the last decade and are concerned about future effects from wildfires to their traditional lands and cabins (TSD V: CRDN; TSD III: BRDN; TSD IV: MN-S). Indigenous communities in Saskatchewan and in other provinces are calling on their provincial governments to collaborate with them in finding solutions to mitigate, prevent, and fight wildfires, so they can apply their Indigenous Knowledge, traditional laws, and practices of fire management, including the use of controlled burns to manage forests and prevent wildfires (Pearce 2021; ICT 2019; GVS n.d.).

5.1.1.4.6 Agricultural Benefits Agreement (Cows and Plows)

Treaty 8 was signed between the Crown and First Nations in the Athabasca Lake region in 1899. The treaty included an Agricultural Benefits Agreement, better known as 'cows and plows', that promised farming equipment to First Nations that wanted to farm the land. These terms were unfulfilled. Over the last several decades, the Government of Canada has been negotiating settlements with Treaty 8 First Nations to resolve their agricultural benefits claims, which include financial compensation for past damages relating to broken treaty promises. In 2018, the Government of Canada and eighteen First Nations in Treaty 8 (of which none were LSA communities), successfully concluded negotiated settlements to resolve their agricultural benefits claims, and negotiations have been ongoing with several other First Nations (ANA 2018).



5.1.1.4.7 Residential Schools

Residential schools were government-sponsored, church-run schools that were established to assimilate Indigenous children into Euro-Canadian culture. Through the residential school system, the Government of Canada removed Indigenous children from their homes and communities, as an attempt to both educate and convert Indigenous youth and to assimilate them into Canadian society (Canadian Geographic n.d.; Marshall and Gallant 2012). However, the schools disrupted the lives of individuals and communities, causing long term problems among Indigenous Peoples (Marshall and Gallant 2012).

The federally funded, church-run schools operated in Canada for more than 160 years (Canadian Geographic n.d.). In total, there were an estimated 130 residential schools in operation throughout Canada from 1831 to 1996 (Marshall and Gallant 2012). In Saskatchewan, there were 20 residential schools operated by the churches. The most northern of these schools were Lac La Ronge (1907 to 1947), Ile-a-la-cross (1821 to 1976), and Beauval (Lac La Plonge; 1860 to 1995; Niessen 2017).

In the 1950s and 1960s, the Government of Canada began to pursue a policy of integration in southern Canada to facilitate the attendance of First Nation children in the provincial school system, which many Métis students were already attending (Parks Canada 2021). In northern Saskatchewan, federal Indian day schools were located at Peter Pond Lake IR No. 193, Dillon (1955 to 1989), Wapachewunak IR No. 192D, the north end of Ile-a-la-cross, Patuanuk (1972 to 1989), Fond du Lac (1949 to 1968), Chicken IR No. 224, Black Lake (1955 to 1968), and Stony Rapids (1952 to 1961) (IndianDaySchools.Org. n.d.).

The process of integrating students into provincial school systems and closing residential schools took decades, with the last schools in Saskatchewan closing in the late 1990s. Many former students have sought acknowledgement and restitution, resulting in the Indian Residential Schools Settlement Agreement in 2007, followed by a formal public apology by Prime Minister Stephen Harper in 2008 (Government of Canada 2021b). In total, an estimated 150,000 First Nation, Inuit, and Métis children attended residential schools across Canada (Marshall and Gallant 2012). The ramifications of the negative experiences of many residential school survivors, including the intergenerational effects on individuals, families, and communities, is important context for understanding many of the underlying challenges faced by Indigenous communities today, including those in the LSA and RSA

5.1.1.4.8 Northern Development Fund

The Northern Development Fund (NDF), established in 1995, provided financial and business incentives to northern businesses, co-operatives, economic organizations, and entrepreneurs, and supports the Government of Saskatchewan's Northern Strategy goal of creating more jobs and business opportunities for residents in northern Saskatchewan (Government of Saskatchewan 1995). The NDF provides loans to assist northern businesses in several sectors, including construction, mining, forestry, transportation, hospitality, tourism, retail, and other services. The loans help to create new jobs and maintain existing jobs, and have assisted trappers, commercial fishermen, and wild rice growers. The NDF also provides cost-shared funding and professional assistance and training to Community-based Regional Economic Development Organizations, which plan and implement economic development at the regional level (Government of Saskatchewan 1998). Section 6.2.4.1.2, Northern Development Fund, describes additional details pertaining to funds allocated for the purposes of community and business development.



5.1.1.4.9 Planning for Growth North

Northern Saskatchewan's Planning for Growth North program is run by the Northern Planning and Sustainability Unit. The Northern Planning and Sustainability Unit provides professional planning services and support within the NSAD (Planning for Growth North SK. n.d.a). Participating municipalities within the region include La Ronge, Buffalo Narrows, La Loche, Descharme Lake, and Michel Village (Planning for Growth North SK. n.d.b).

Northern Saskatchewan's Planning for Growth North is funded through the Northern Municipal Trust Account, along with additional monetary contributions from participating municipalities (Planning for Growth North SK. n.d.b). The Northern Municipal Trust Account employs Community Planners to assist northern municipalities to create and implement Official Community Plans and Zoning Bylaws, train Development Officers to apply bylaws, and create and improve regional relationships to support long term regional planning activities (Planning for Growth North SK. n.d.b). Official Community Plans are created by incorporating Saskatchewan's 14 Statements of Provincial Interest and outline future aspects of physical development within an outlined geographic area. The Zoning Bylaw provides the regulations and restrictions necessary for the implementation of building and development within the municipal area (Planning for Growth North SK. n.d.b).

In 2004, a committee was formed to develop a land use plan that would guide permitted development in the RSA north of La Loche. Representatives from the CRDN, La Loche, the ENV, and the Ministry of Government Relations formed a committee to develop the land use plan; however, the land use plan was never completed (Happ 2021). A regional planning forum was facilitated by the provincial government in 2018 that was intended for capacity building and to build networks to support land use planning processes (Government of Saskatchewan 2019).

5.1.1.4.10 Joint Federal-Provincial Panel on Uranium Mining Developments in Northern Saskatchewan

The Joint Federal-Provincial Panel on Uranium Mining Developments in Northern Saskatchewan (Joint Panel) was appointed through the governments of Canada and Saskatchewan in August 1991. The purpose of the Joint Panel was to review the impact of proposed uranium mining developments in northern Saskatchewan, as well as review the cumulative impacts of existing operations (Joint Panel 1997). Careful consideration was given to the impact of uranium mining on the people who reside in northern Saskatchewan. Typically, project-specific recommendations were made to limit environmental damage and enhance benefits for northern residents (Joint Panel 1997) There were several general issues reported that impact the potential benefits from uranium mining projects. The Joint Panel approved all five northern Saskatchewan uranium mining projects in the 1990s and no further action or reporting from the panel has been undertaken since 1997 (Frost n.d.; MiningWatch Canada 2006; NWMO 2003).

Another issue identified was ensuring that the protection of northern communities and residents is considered as important as protecting the biological environment; professionals should be monitoring and mitigating any impacts of uranium mines and mining on the quality of life for northern communities. To ensure that all steps are being taken to enhance living in northern Saskatchewan, research on approaches to uranium mining were applied by industry and governments to improve the profitability of the industry and provide greater environmental protection (IAAC 1997). Adequate funding and comprehensive studies were organized by the provincial government to ensure northern roads were prepared for the demands of the industry and maintained at an acceptable standard. Finally, the Joint Panel noted it was essential that legislation and regulations for mine workers adequately protect contract and non-contract workers and ensure safe work practices (IAAC 1997).



5.1.1.5 Uranium Mining Industry

Uranium is the primary commodity in the RSA, and capital investment in the RSA is strongly tied to the activity levels in uranium mining (KCDC 2016). The RSA has the largest high-grade uranium deposits in the world and is the source of almost a quarter of the world's uranium supply for electrical generation (Government of Saskatchewan n.d.a). The uranium industry has been active in the RSA for more than 70 years, and the evolution of industry practices provide important context for understanding the existing economic environment in both the LSA and RSA. Uranium mining and milling in the RSA began in the 1950s with the Gunnar, Lorado, and Beaverlodge mines/mills located near Lake Athabasca and serviced through Uranium City, the majority of which delivered ore to the Beaverlodge mill for processing. Several smaller mine sites also operated in the vicinity of Uranium City. The Gunnar and Lorado mines/mills ceased operations in the 1960s while the Beaverlodge mine continued operating until the 1980s (Clement and Stenson 2002). Since the 1970s, several uranium mining operations have been developed in the RSA, including Cluff Lake, Cigar Lake, Key Lake, McClean Lake, McArthur River, and Rabbit Lake (Figure 1). Apart from Cluff Lake, these uranium projects have been developed in the Athabasca Basin, located in the central and northern portions of the RSA (Figure 1; Table 1).

Cluff Lake was operated by Orano Canada (previously called AREVA Resources Canada and COGEMA Resources Inc.) from 1980 until 2002. The Cluff Lake site is located approximately 235 km north of the town of La Loche on Highway 955 (Figure 1). Decommissioning of the site began in 2004 with most of decommissioning work completed by the end of 2006. The site has been available for public access since 2013. Since decommissioning, the mine has been subject to a comprehensive environmental monitoring program (Orano 2020).

The McClean Lake and Mill project is located approximately 26 km west of the Rabbit Lake mine and is currently in operation (Denison Mines 2022). The mill processes ore from Cigar Lake mine. Rabbit Lake transitioned to care and maintenance in 2016, and McArthur River mine and Key Lake mill transitioned to care and maintenance in 2018 (Cameco 2021b,c). Cigar Lake mine is still in operation as of December 2021 (Cameco 2021a).

Despite uranium development commencing in the 1950s, it is only since the discovery of new uranium deposits in the RSA in the 1990s that the primary economic focus has been building human resource and business capacity to meet the needs of the mining sector. Since the 1990s, northern Saskatchewan workers have been increasingly successful in securing positions at northern sites and northern-owned businesses provide a measurably larger portion of goods and services to the operations. For example, in terms of north business development, the uranium mining industry contributed substantially to the business capacity of northern Saskatchewan (e.g., growth in contracts from northern suppliers from \$23 million in 1989 to \$624 million in 2012). However, this success has been to the detriment of development efforts and supports for other sectors such as wild rice and forestry (KCDC 2016). The total value of northern contracts has declined somewhat since 2012, likely resulting from a decline in total uranium production from the various operations, and several transitioning to care and maintenance (Table 1).



rable i. Grainum Operations in the Regional Study Area	Table 1:	Uranium Operations in the Regional Stud	y Area
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Project	Current Status	Date First in Operation	Total Amount Mined				
Cigar Lake (mine only)	In operation	2014	93 million pounds				
McClean Lake (mine and mill)	In operation	1999 for mill 1996 for mine	n/a				
Rabbit Lake (mine and Mill)	Care and maintenance since 2016	1975	Approximately 203 million pounds				
McArthur River (mine only)	Care and maintenance since 2018	1999	FOE maillian manuada				
Key Lake (mill only now)	Care and maintenance since 2018	1983	535 million pounds				

Source: Cameco 2021a,b,c. n/a = not available.

5.1.2 Local Study Area Context

5.1.2.1 Local Communities and Connectivity

The LSA is characterized by a dispersed settlement pattern of primarily small and highly remote Indigenous communities (i.e., less than 1,000 people; Table 2; Figure 5). The Northern Villages of Buffalo Narrows (estimated population 1,045 people) and La Loche (estimated population 2,365) are the largest population centres in the LSA. Buffalo Narrows is located on Highway 155, approximately 200 km north of Green Lake and 100 km south of La Loche. La Loche is located at the northern terminus of Highway 155 and the southern terminus of Highway 955, 300 km north of Green Lake (Figure 4).

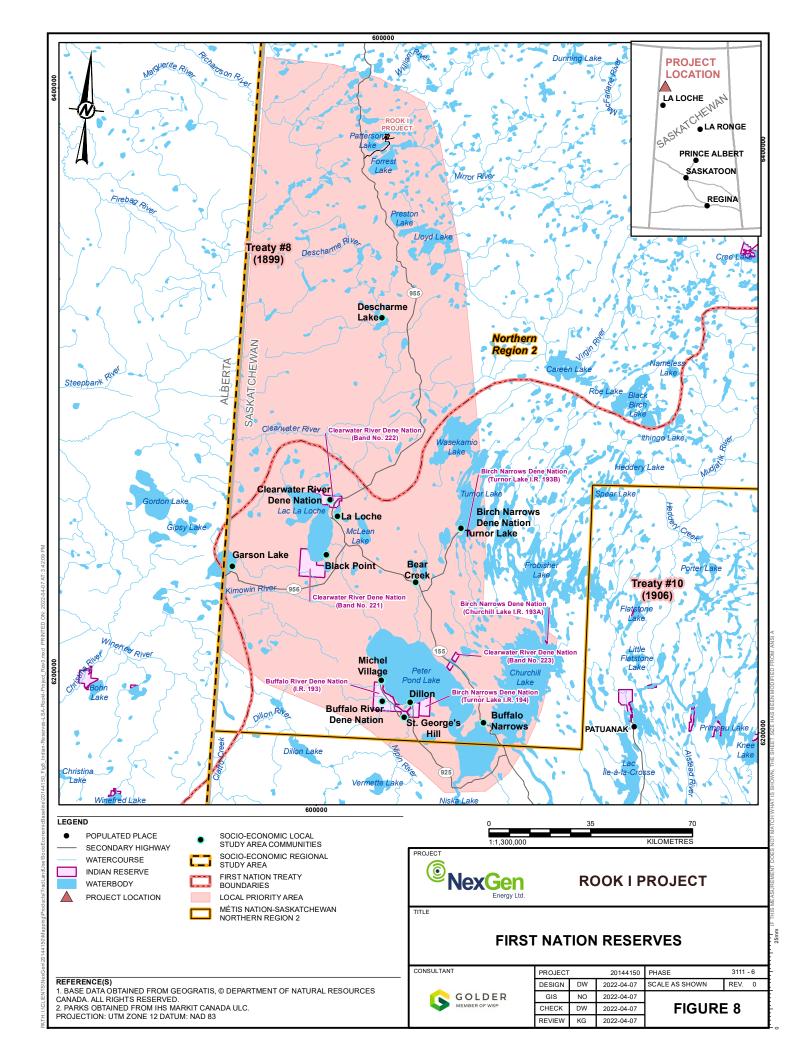
The LSA is remote with limited regional connectivity. Highway 155 is the only surface transport route that connects the LSA communities to the regional centres in southern Saskatchewan, and is the primary means of transport for LSA residents. Highway 955 has been identified by numerous sources as in need of major repair in multiple locations. Highway 955 was built for the Cluff Lake mine and provides access to the northwestern area of the province. It is the only access to the potential uranium developments recently identified in the northwest. Regional commercial airport facilities are located in both Buffalo Narrows and La Loche, with North Country Air operating charter flights out of La Loche and Voyage Air operating charter flights out of Buffalo Narrows.

5.1.2.2 History and Settlement Patterns

5.1.2.2.1 Clearwater River Dene Nation

Clearwater River Dene Nation occupies three reserves (221, 222, 223) and the La Loche Indian Settlement, and controls 9,511 ha of land (INAC 2019a; Figure 8). The most populous reserve is the La Loche Landing reserve (located between La Loche and Buffalo Narrows [Figure 5]), but most of the band members reside in the town of La Loche (University of Saskatchewan n.d.e).

Clearwater River Dene Nation have occupied and used the Clearwater River watershed and Patterson Lake area since beyond living memory (TSD V.1: CRDN). Clearwater River Dene Nation ancestors gathered in Fort McMurray in 1899 for the signing of Treaty 8. The ancestors of the CRDN signed adhesions to Treaty 8 at Fort McMurray in 1899 and 1900. They were included in the Cree-Chipewyan Band of Fort McMurray and the Fort McMurray Stragglers (TSD V.1: CRDN). These ancestors were known as the Portage La Loche Band until they changed their name to the CRDN. The reserve parcels of the CRDN were established in 1970, with many members deciding to remain in La Loche (CRDN 2019).





5.1.2.2.2 La Loche

The Northern Village of La Loche was incorporated in 1983, but its history extends back to the fur trade in the late 1770s. At that time, the existing location of La Loche had a post from the North West Company and Hudson's Bay Company and furs and goods were exchanged with the Athabasca and Mackenzie River brigades. Today, La Loche is still largely Métis and Dene, and trapping remains as a local industry (Canadian Encyclopedia 2021b). La Loche is the closest major community on the only access corridor to the recently discovered uranium reserves in the western RSA (DMCA 2018; Figure 5), and has a regional commercial airport facility with North Country Air operating charter flights (North Country Air Service n.d.).

5.1.2.2.3 Birch Narrows Dene Nation

Before settling at Buffalo River, the BNDN was thought to have lived at Buffalo Narrows for a period of time in the 1890s (University of Saskatchewan n.d.f). The predecessor to BNDN was the Clear Lake Band (also known as the Peter Pond Band), which formally joined Treaty 10 on 28 August 1906 (The Encyclopedia of Saskatchewan 2006b).

In the 1910s and 1920s, the Clear Lake Band began to petition the Government of Canada for reserves to be surveyed for them within the Treaty 10 area. The surveying of the reserves lands was completed in 1923, with the southern shore of Peter Pond Lake (193), a parcel of land at Churchill Lake (193A), and Turnor Lake (193B) becoming the reserve lands. The Clear Lake Band had also requested Ball Island, which was not included in the survey (Dodson et al. 2006). In 1965, members of the Clear Lake Band were relocated to the Turnor Lake area from Clear Lake (at the northern end of Churchill Lake) while others relocated to Buffalo River and English River (History of La Loche 2012; BNDN 2018). In 1972, the Clear Lake Band would become the BNDN and BRDN (The Encyclopedia of Saskatchewan 2006b). Members moved to the current settlement from Churchill Lake largely due to the presence of Churchill Road access (Figure 5). The BNDN's current reserve parcels are Churchill Lake 193A, Turnor Lake 193B, and Turnor Lake 194 (INAC 2019b; Figure 8).

5.1.2.2.4 Buffalo River Dene Nation

Buffalo River Dene Nation has a reserve approximately 84 km northwest of Ile-à-la-Crosse (Figure 4, Figure 8) and the largest community is in Dillon (University of Saskatchewan n.d.f). The BRDN hunted and trapped around Watapi Lake and became one of the many First Nation bands filing claims for land and economic development losses arising through the creation of the PLAWR in 1954 (University of Saskatchewan n.d.f). In addition to the value of the loss of land for food harvesting, the prohibition of the use of rangelands hindered their ability to travel to meet their relatives at Cold Lake.

Buffalo River Dene Nation joined Treaty 10 on behalf of the Clear Lake Band. The BRDN was part of the Clear Lake Band (also called the Peter Pond Band) until 1972, when it was divided into the BNDN and BRDN (Thompson 2021). The BRDN's current reserve parcel is BRDN 193 (INAC 2019c; Figure 8).

5.1.2.2.5 Buffalo Narrows

Buffalo Narrows (Figure 5) is a village situated on an ancient hunting site that provided a bottleneck into which Indigenous hunters could drive wood bison (University of Saskatchewan n.d.g). Indigenous Peoples came to the narrows to catch and dry fish during the summer months, and the first trading posts were established in the area in the 1790s. Permanent settlement began in 1895.



The economy was previously based on natural resources such as fishing, trapping, logging operations, and mink ranging, which peaked in the 1950s and 1970s. Due to its relation to other communities in the LSA, the infrastructure put into place in the village was intended to position the community to be a regional centre providing government and commercial services to the northwest of Saskatchewan. The village was incorporated as a northern village in 1983. Despite its smaller population, Buffalo Narrows has developed as a regional service centre for Saskatchewan, with services encompassing the LSA communities, and subsequently supporting a considerably stronger economy (measured through income, labour market dynamics, and economic vitality) than La Loche. Buffalo Narrows also supports a regional commercial airport facility, with Voyage Air operating charter flights out of Buffalo Narrows (Voyage Air 2002).

5.1.2.2.6 Other Local Study Area Communities

Bear Creek was established in the 1960s (Figure 5). The highway between Buffalo Narrows and La Loche was completed when families from La Loche began to permanently settle at the site (Figure 3). The construction of Highway 155 provided a convenient way for residents to travel for services in either centre, and divides Bear Creek into north and south areas (Bear Creek 2020). People settled in Bear Creek so they could continue to live off the land while still being close to services in La Loche.

Descharme Lake is a hamlet accessed by road via Highway 955 from La Loche (Figure 5). Until the 1950s, the hamlet of Descharme Lake was accessed via dog team, horses, and walking. The hamlet was originally called Swan Lake and was one of the mission villages of La Loche (Portage La Loche n.d.a).

Garson Lake (Figure 5), once called Whitefish Lake, is a Dene village with roots in the 1880s (Portage La Loche n.d.b).

Michel Village is on the western shores of Peter Pond Lake (Figure 5) and most residents are Dene (Kayas n.d.).

Historical information on St. George's Hill and Black Point are not available.

5.2 Governance and Planning

5.2.1 Northern Saskatchewan Administration District

The NSAD was created in 1948 by The *Northern Administration Act*, which provided for the administration and development of northern Saskatchewan (Government of Saskatchewan n.d.a) and is currently defined in the province's *Northern Municipalities Act*, *2010*. The Ministry of Government Relations is responsible for the NSAD and, in consultation with elected mayors or chairperson and councillors (depending on total population), acts as its council with funding from the Northern Municipal Trust Account. The Northern Municipal Trust Account Management Board is appointed to make recommendations to the Minister. In the RSA, the political administration is from outside of the RSA in Regina, and for First Nation reserves, in Ottawa.

The Ministry's Northern Municipal Services branch, in consultation with elected mayors or chairpersons and councillors (depending on total population) acts as the NSAD's local government authority (Government of Saskatchewan 2021a). The Northern Municipal Services provides the following services to support the financial and municipal well-being of northern Saskatchewan communities (Planning for Growth n.d.b):

- municipal administration of NSAD communities;
- municipal advisory services for northern municipalities in the NSAD;



- financial administration of the NSAD communities;
- administration of the Northern Municipal Trust Account; and
- management of Northern Grant Programs and other Programs.

The NSAD boundaries are also used by the provincial government and SHA for the delivery of government services that are intended to manage aspects of the socio-economic conditions within communities. The NSAD is the focus of the Community Vitality Monitoring Partnership, the entity initiated based on a recommendation of the Joint Panel As a result of that recommendation, Saskatchewan amended the uranium MSLAs to require uranium operations to participate in Community Vitality Monitoring (CVMPP 2013).

5.2.2 First Nations

On-Reserve First Nation governance is provided within the RSA by individual Chiefs and Councillors elected for two- or three-year terms. Further information on First Nations governance is provided in Section 5.2.4, Local Governance and Planning.

The MLTC is the tribal council for nine First Nations, including the CRDN, BNDN, and BRDN (MLTC 2020a). The nine MLTC Chiefs-In-Assembly provide strategic direction and leadership to their Tribal Council and meet four or more times per year. Through the MLTC Leadership Office of the Chiefs, the priorities of the MLTC and its member First Nations are lobbied and advocated with other levels of government, industry, and external stakeholders (MLTC 2020b). The MLTC has three elected positions who serve a four-year term; the Tribal Chief, and two Vice Chiefs (one Cree and one Dene). The organization advocates for the nine First Nations to reach their full potential by delivering programs and services relating to business (including economic development), family services (i.e., child and family services, youth development, Elder services, and education), and community (i.e., health and social development, justice, and information technology and tech services; MLTC 2020c).

5.2.3 Métis Nation – Saskatchewan

Métis make up a large proportion of the population in the LSA (Section 6.1.1.2, Local Study Area), with the greatest number living in Buffalo Narrows and La Loche. The MN-S is the government representing Métis citizens in the province, including their rights under Section 35 of the *Constitution Act*, 1982. The MN-S was incorporated in 2000 and operates through an elected representative system at local, regional, and provincial levels (University of Saskatchewan n.d.h). Métis Locals provide representation at the community level. The Métis Nation Legislative Assembly is the governing authority of MN-S, and consists of the presidents of Métis Locals and Provincial Métis Council. The Assembly has the authority to enact legislation, rules, and regulations (MN-S 2008).

The fundamental principles that guide the governance of the MN-S are based on the Constitution of the Métis Nation – Saskatchewan (MN-S 2008), The Métis Act, The Métis Nation – Saskatchewan Citizenship Act, The Regional Boundaries Act, 1997, The Métis Nation of Saskatchewan Senate Act, 1999, The Métis Nation Legislative Assembly Act, 1999, and The Métis Wildlife and Conservation Act, 1994.

At the provincial level, the MN-S governance structure includes the Provincial Métis Council, which is a four-member executive; Cabinet; and the Métis Nation Legislative Assembly, which is composed of the Local Presidents, the Provincial Métis Council, four representatives of the Métis Women of Saskatchewan, and four



representatives from the Provincial Métis Youth Council. The Métis Nation Legislative Assembly has the authority to enact legislation, rules, and regulations (MN-S 2008).

In 2019, the MN-S concluded the Métis Government Recognition and Self-Government Agreement with the Government of Canada that affirmed the right to self-government, recognized the MN-S's mandate, and established a process to formally recognize the MN-S government as an Indigenous government in Canadian law (CIRNAC 2019a). The agreement requires the MN-S to undertake constitutional reform consultations in 2020 to provide Métis citizens with an update on proposed amendments to the MN-S Constitution and new legislation to meet the Métis Government Recognition and Self-Government Agreement with Canada (MN-S 2021). The agreement also establishes processes for negotiation agreements regarding additional areas of jurisdiction beyond core areas of governance in the future (CIRNAC 2019a). In August 2021, the Government of Canada sent a letter to MN-S, reaffirming their commitment to meaningly advancing Métis self-determination and self-government in Saskatchewan (MN-S 2021).

Northern Region 2

The MN-S is divided into 12 regions. The LSA communities are in NR2 (Figure 2).

The MN-S NR2 represents the following Métis Locals within the LSA for the Project:

- Local 39, La Loche;
- Local 40, Turnor Lake;
- Local 62, Buffalo Narrows;
- Local 65, Michel Village;
- Local 70, St. George's Hill;
- Local 156, Bear Creek; and
- Local 162, Black Point.

Leadership for Locals is elected and defined by the constitution of each Local. Terms for leaders can be between one and three years (MN-S 2008).

At the time of writing of this report, the regional director of MN-S NR2 is Leonard Montgrand. Regional directors are elected officials that are responsible for the day-to-day socioeconomic, cultural, and educational interests within their jurisdiction.

5.2.4 Local Governance and Planning

Community decisions in the LSA communities are made by elected officials (2019 to 2021 KP interview program). Table 2 presents the governing members of each LSA community as of 31 January 2022. Data on how Elder leadership roles and responsibilities are delineated are not publicly available.



Table 2: Governance in the Local Study Area Communities, January 2022

Community	Chief	Mayor/Chairman	Councillors/Aldermen	Term	Next Election		
BNDN	Chief Jonathan Sylvester	n/a	Kim Sylvester, Jonathon Sylvester, Anna Sylvester, Dorothy Sylvester	Four years	February 2022		
BRDN	Chief Elmer Campbell	n/a	Louis Chanalquay, Debbie Billette, Sylvia Bekkatla, LaPlante, Grayson Janvier	Three years	March 2022		
Buffalo Narrows	n/a	Mayor Sandra Ericson	Gary Ericson, Tracy Tinker, Shaylee Gardiner, Darrell Robson, Janelle Pedersen, Martin Morin, Patricia Young	Four years	Fall 2024		
CRDN	Chief Teddy Clarke	n/a	Peggy Piche, Sandy Herman, Brenda Janvier, Jim Lemaigre, Alvin Piche	Four years	July 2025		
Bear Creek	n/a	Chairman Dean Herman	(Members) Sandra Woodward, Holly Janvier, Neil Herman, Jamie Lee Janvier	Four years	Fall 2024		
Black Point	n/a	Mayor Fabian Park	Archie Toulejour, George Moise	Four years	Fall 2024		
Descharme Lake	n/a	Chairman John Frank Sylvestre	Jonathan Janvier, Donny Piche	Four years	Fall 2024		
Garson Lake	n/a	Chairman Dora Laprise	(Members) Casey James Laprise, Donald Laprise	Four years	Fall 2024		
La Loche	n/a	Mayor Georgina Jolibois	(Alderman) Kevin Janvier, Leanne Gailey, Melinda Lemaigre, Ida Lemaigre, Justina Lemaigre, Georgina Park-Janvier	Four years	Fall 2024		
MN-S NR2	MN-S NR2 n/a		n/a	One to three years	n/a		
St. George's Hill n/a		Mayor Donna Janvier	(Alderman) Doris Janvier, Kimberley Cummings, Delphine Banks, Norman Bekkattla	Four years	Fall 2024		

Source: MLTC 2020d,e,f; Government of Saskatchewan 2021b,c; INAC 2021a,b,c.

n/a = not applicable; BNDN = Birch Narrows Dene Nation; BRDN = Buffalo River Dene Nation; CRDN = Clearwater River Dene Nation; MN-S = Métis Nation – Saskatchewan; NR2 = Northern Region 2.

Jim Lemaigre, a member of the CRDN, is the Member of Legislative Assembly for Athabasca (provincial electoral district) and was elected in a by-election on February 15, 2022. The Member of Parliament for the Desnethé Missinippi Churchill River is Gary Vidal, the Critic for Indigenous Services for the Conservative Party of Canada.



6.0 EXISTING SOCIO-ECONOMIC CONDITIONS

The existing socio-economic environment is described in the following subsections. Existing conditions for each community asset are generally described according to the RSA and the LSA, and for comparative purposes, LSA communities are compared to the RSA and the Indigenous population of the province of Saskatchewan (where applicable).

6.1 Population and Demographics

The population of a community is one of the most important human assets and a foundation of overall community well-being and growth. Any project that involves a change in workforce has the potential to result in changes in population and the demographic characteristics of communities.

The following subsections provide a detailed description of the population and demographic profile of LSA communities and the RSA. This includes splitting out the population and demographic profile by Indigenous status, age, and sex to note differences by group. Supporting statistical information is presented in Appendix A.

6.1.1 Population By Indigenous Identity, Age, and Sex

6.1.1.1 Regional Study Area

6.1.1.1.1 Indigenous Identity

The RSA is predominantly Indigenous, with approximately 87.4% identifying as such (Table 4). Much of the Indigenous population within the RSA identify as having First Nations ancestry (i.e., 80.0%), with a minority identifying as Métis (i.e., 20.1%; Table 5). Between 2006 to 2016, the proportion of people identifying as having First Nations ancestry in the RSA has increased by 21.2% while the proportion claiming Métis ancestry has decreased by 13.7% (Table 4). A very small proportion of the RSA claim multiple Indigenous ancestries (i.e., 0.4%) and even fewer (i.e., less than 0.1%) claimed Inuit ancestry.

6.1.1.1.2 Population Change

The RSA population steadily increased between 2006 and 2016, driven largely by growth in the late 2000s. Between 2011 and 2016, the population increased by 1.4% compared to 7.8% growth in the five-year period prior (2006 to 2011; Table 5). Except for the period between 2006 and 2011, the provincial population growth rate has typically exceeded that of the RSA.

Figure 9 shows the average annual population change for the LSA, the RSA, and Saskatchewan from 1982 to 2016 (Appendix A, Table A-1a). Both the LSA and RSA experienced higher average annual population growth than the province from 1987 to 2011. The higher growth rates in the LSA and RSA may be attributed in part to a younger age structure and higher birth rates, though other factors including in-migration and out-migration can also affect population growth rates and these factors may affect individual communities differently. The LSA and RSA population growth is consistent with a nationally observed trend in higher population growth rates for Indigenous Peoples in Canada due to factors including a younger age structure and higher birth rates (Statistics Canada 2015a).



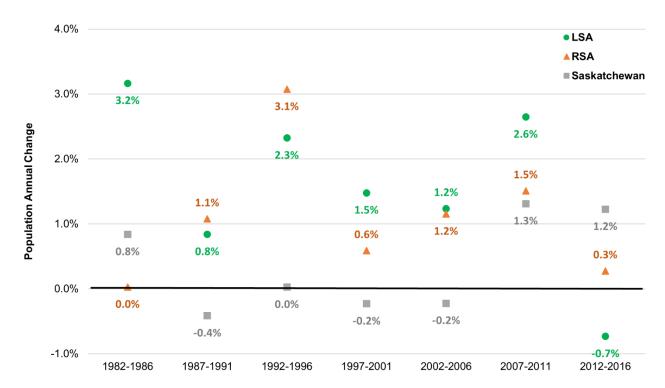


Figure 9: Average Annual Population Change for Local Study Area, Regional Study Area, and Saskatchewan, 1982 to 2016

Source: Statistics Canada 1987, 1992, 1997, 2002, 2007a, 2012a, 2017a.

Average annual percentage population changes calculated by InterGroup Consultants Ltd.

Note: Population numbers for 2011 and 2016 include four northern settlements (i.e., Bear Creek, Black Point, Descharme Lake, and Garson Lake) for which data were not available in previous Census Profiles.

LSA = local study area; RSA = regional study area.

Figure 10 and Table 5 show the distribution of the population by age category for the LSA, the RSA, and Saskatchewan for 2016 (Appendix A, Table A-2a). The pattern of population distribution by age cohort in the RSA shows some deviation from the provincial population distribution pattern. The RSA has a large youth population, with a considerably higher proportion of the population aged 0 to 19 (i.e., youth; 40.2%) than the provincial average (i.e., 25.8%), and a median age of 25.7, far below the provincial median of 37.8 (Table 5). With a larger youth population, the RSA has a lower proportion of the population who are working age (i.e., aged 20 to 64 years) as compared to Saskatchewan as a whole (i.e., 53.0% and 58.7%, respectively). The retirement age population (i.e., aged 65 and older) also makes up a smaller proportion of the overall population in the RSA (i.e., 6.8%) compared to the province (i.e., 15.5%). Overall, this suggests a younger regional population with a greater proportion having yet to reach working age relative to that of the province.



Saskatchewan

Saskatchewan

15%

10%

5%

Figure 10: Population Distribution by Age Group for the Local Study Area, Regional Study Area, and Saskatchewan, 2016

Source: Statistics Canada 2017a.

0%

Note: Data were not available for Bear Creek, Descharme Lake, and Garson Lake.

15 to 24

years

25 to 34

years

LSA = local study area; RSA = regional study area.

0 to 14

years

Between 2006 and 2016, the gender ratio in the RSA has become more even, although there is still, overall, more males than females in the RSA (Table 5). During this same period, the opposite is true at the provincial level, where the female population has been higher than the male population. The median age of males is slightly lower than females in the RSA (i.e., 25.1 years compared to 26.2 years, respectively), a trend that is also seen at the provincial level (i.e., 36.9 years compared to 38.7 years, respectively).

35 to 44

years

45 to 54

years

55 to 64

years

65 to 74

years

75 years

and over



Table 3: Demographic Characteristics of Local Study Area Communities, Regional Study Area, Saskatchewan

Matria bu Vaan		CRDN			BNDN			BRDN		Buf	falo Narr	ows		La Loch	е	LS	A Subto	tal	Other LSA	Communities	(a)	Cens	us Division	No.18 (RSA)	S	askatchev	van
Metric by Year	I	NI	T	ı	NI	Т	I	NI	Т	ı	NI	Т	I	NI	Т	I	NI	Т	1	NI	Т	I	NI	Т	I	NI	Т
Population																											
0016	810	10	825	460	15	480	765	15	785	910	130	1,045	2,275	85	2,365	5,595	265	5,880	375	10	380	32,200	4,650	36,850	175,020	895535	1 070 55
2016	98.2%	1.2%	023	95.8%	3.1%	460	97.5%	1.9%	765	87.1%	12.4%	1,045	96.2%	3.6%	2,303	95.2%	4.5%	5,000	98.7%	2.6%	300	87.4%	12.6%	30,000	16.3%	83.7%	1,070,55
0044	770	20	790	С	С	_	750	15	765	1000	155	4 455	2,535	90	0.005	С	С		С	С		31,960	4,820	20.705	157,740	847,515	4 000 70
2011	97.5%	2.5%	790	0.0%	0.0%	С	98.0%	2.0%	765	86.6%	13.4%	1,155	96.6%	3.4%	2,625	С	С	T C	С	С	С	86.9%	13.1%	36,785	15.6%	84.0%	1,008,76
2000	645	15	050	395	15	440	735	10	711	955	125	4 004	2,225	115	0.040	4,955	280	5.044	С	С		29,085	4,815	00.040	141,890	811,955	000.45
2006	98.0%	2.3%	658	95.6%	3.6%	413	99.2%	1.3%	741	88.3%	11.6%	1,081	94.8%	4.9%	2,348	94.5%	5.3%	5,241	С	С	С	85.7%	14.2%	33,919	14.7%	83.9%	968,157
Population change (%)	•	•			•		•			•		•		•	•	•				-		•	•	1	'	•	
2011-2016	5.2%	b	4.4%	С	С	С	2.0%	b	2.6%	-9.0%	-16.1%	-9.5%	-10.3%	-5.6%	-9.9%	С	С	С	С	С	С	0.8%	-3.5%	0.2%	11.0%	5.7%	6.1%
2006-2011	19.4%	b	20.1%	С	С	С	2.0%	b	3.2%	4.7%	24.0%	6.8%	13.9%	-21.7%	11.8%	С	С	С	С	С	С	9.9%	0.1%	8.4%	11.2%	4.4%	4.2%
2006-2016	25.6%	b	25.4%	16.5%	b	16.2%	4.1%	b	5.9%	-4.7%	4.0%	-3.3%	2.2%	-26.1%	0.7%	12.9%	-5.4%	12.2%	С	С	С	10.7%	-3.4%	8.6%	23.3%	10.3%	10.6%
Median Age	•	•			•		•			•		•		•	•	•				-		•	•	1	'	•	
2016	23.5	38.9	23.6	23.8	30.4	24.8	26.5	35.1	26.8	27.9	45.2	30.8	23.3	33.4	23.9	С	С	С	С	С	С	23.6	44.7	25.6	24.3	40.1	37.4
Age of population 2016	(%)	•			•		•			•		•		•	•	•				-		•	•	1	'	•	
) to 14	30.5%	1.2%	30.5%	33.7%	2.1%	34.7%	29.9%	0.0%	29.9%	26.0%	1.0%	26.9%	32.8%	0.4%	33.0%	С	С	С	С	С	С	29.7%	1.6%	31.4%	5.4%	14.5%	19.9%
5 to 24	22.0%	0.0%	22.0%	16.8%	0.0%	16.8%	15.9%	1.3%	15.9%	12.5%	0.0%	13.0%	18.6%	0.4%	18.8%	С	С	С	С	С	С	16.3%	1.2%	17.5%	3.0%	9.6%	12.6%
25 to 54	36.6%	1.2%	37.8%	35.8%	2.1%	37.9%	39.5%	1.3%	40.8%	32.7%	8.2%	40.4%	35.3%	2.5%	37.6%	С	С	С	С	С	С	30.9%	5.3%	36.2%	6.0%	33.7%	39.6%
55 to 64	5.5%	0.0%	5.5%	5.3%	0.0%	6.3%	7.0%	0.0%	7.6%	6.7%	1.0%	7.7%	5.7%	0.0%	6.1%	С	С	С	С	С	С	5.9%	2.4%	8.3%	1.2%	12.1%	13.3%
5 years and over	4.3%	0.0%	4.3%	5.3%	0.0%	5.3%	5.1%	0.0%	5.7%	10.1%	2.4%	12.5%	4.0%	0.4%	4.4%	С	С	С	С	С	С	4.6%	2.1%	6.7%	0.8%	13.8%	14.6%
15 years and over	68.3%	1.2%	68.9%	63.2%	2.1%	65.3%	68.2%	1.9%	70.1%	61.1%	12.0%	73.6%	63.6%	3.4%	67.0%	С	С	С	С	С	С	57.7%	11.0%	68.6%	11.0%	69.1%	80.1%

Source: Statistics Canada 2007b,c,d,f,g,I,k,m,o; Statistics Canada 2012b,c,d,e,f,g,h,i; Statistics Canada 2017b,c,d,e,f,g.

Note: For confidentiality purposes, values, including totals were randomly rounded either up or down to a multiple of five or 10. The total value may not match the individual values since totals and sub-totals are independently rounded and may not total to 100%.

a = Other LSA Communities: Black Point, Turnor Lake, St. George's Hill, Michel Village. Data was not available for Descharme Lake, Garson Lake, and Bear Creek. As these communities are small, population and demographic information is supressed to maintain confidentiality. Where population profiles are not available for all of the Other LSA communities, no data is presented; b = Estimate not reliable due to small dataset and therefore not presented; c = Data not available for this area. Possible reasons include:

- the area does not meet the threshold for 250 or more Indigenous identity population;
- the area has been suppressed for data quality or confidentiality reasons; or
- the area is composed of or contains incompletely enumerated Indian reserves or Indian settlements.

I = Indigenous; NI = non-Indigenous; T = total; CRDN = Clearwater River Dene Nation; BRDN = Buffalo River Dene Nation; BNDN = Birch Narrows Dene Nation; LSA = local study area; RSA = regional study area; n/a= not applicable.



Table 4: Indigenous Identity Characteristics of Local Study Area Communities, Regional Study Area, Saskatchewan

Metric by Year		CRDN			ВІ	NDN			BRD	N		Buffalo Narrows				La Loche					LSA Subtotal			Other LSA Communities ^(a)					Census Division No.18 (RSA)					Saskatchewan			
	FN	м мі	- 1	FI	N M	I MI	- 1	FN	М	MI	1	FN	М	MI	- 1	FN	М	МІ	ı	FN	М	M	I I	FN	М	MI	ı	FN	М	MI	1	FN	М	MI	I		
Indigenous popul	ation			·					Ť																												
2016	780	30 -	81) 44	10 20) -	465	760	10	- 7	765	180	730	-	905	1,095	1,185	10	2,280	3,255	1,97	75 10	5,225	С	С	С	С	25,57	6,435	135	32,010	114,570	57,875	1,305	172,810		
2011	755	20 -	77) c	С	С	С	710	40	- 7	750	45	950	-	1,000	740	1,790	10	2,535	С	С	С	С	С	С	С	С	24,70	7,160	35	31,960	103,205	52,450	675	157,740		
2006	625	20 -	64	5 18	30 10) -	395	700	30	- 7	735	140	810	-	955	980	1,240	-	2,225	2,625	2,1	10 -	4,955	С	С	С	С	21,10	7,460	50	29,085	91,400	48,120	625	141,890		
Indigenous popul	ation ch	ange (%)																																		
2011-2016	3.3%	b n/a	5.2°	% c	С	С	С	7.0%	b r	n/a 2	.0%	b	b	n/a	-9.5%	48.0%	-33.8%	b	-10.1%	С	С	С	С	С	С	С	С	3.5%	-10.1%	285.7%	0.2%	11.0%	10.3%	93.3%	9.6%		
2006-2011	20.8%	b n/a	19.4	% c	С	С	С	1.4%	b r	n/a 2	.0%	b	b	n/a	4.7%	-24.5%	44.4%	b	13.9%	С	С	С	С	С	С	С	С	17.0%	-4.0%	-30.0%	9.9%	12.9%	9.0%	8.0%	11.2%		
2006-2016	24.8%	b n/a	25.6	% b	b b	b	b	8.6%	b r	n/a 4	.1%	28.6%	-9.9%	n/a	-5.2%	11.7%	-4.4%	b	2.5%	24.0%	-6.4	% с	5.4%	С	С	С	С	21.2%	-13.7%	170.0%	10.1%	25.4%	20.3%	108.8%	21.8%		

Source: Statistics Canada 2007b,c,e,f,h,j,l,n,o; Statistics Canada 2013b,d,f,h,j,l; Statistics Canada 2018 a,b,c,d,e,f,g,h.

Note: For confidentiality purposes, values, including totals were randomly rounded either up or down to a multiple of five or 10. The total value may not match the individual values since totals and sub-totals are independently rounded and may not total to 100%.

a = Other LSA Communities: Descharme Lake, Black Point, Garson Lake, Bear Creek, Turnor Lake, St. George's Hill, Michel Village. As these communities are small, population and demographic information is supressed to maintain confidentiality. Where population profiles are not available for all of the Other LSA communities, no data is presented; b = Estimate not reliable due to small dataset and therefore not presented; c = Data not available for this area. Possible reasons include:

- the area does not meet the threshold for 250 or more Indigenous identity population; or
- the area has been suppressed for data quality or confidentiality reasons; or
- the area is composed of or contains incompletely enumerated Indian reserves or Indian settlements.

n/a = not applicable; I = single Indigenous ancestry total (consisting of First Nations, Métis, and Inuit); FN = First Nations (North American Indian); M = Métis single ancestry; MI = multiple Indigenous ancestries; CRDN = Clearwater River Dene Nation; BNDN = Birch Narrows Dene Nation; BRDN = Buffalo River Dene Nation; LSA = local study area; RSA = regional study area;



Population, Age, and Sex Characteristics of Local Study Area Communities, Regional Study Area, and Saskatchewana Table 5:

Matria has Valar		CRDN			BNDN			BRDN		Buff	alo Nar	rows		_a Loche	•	Census Division No. 18 Indigenous (RSA			Census D	Division No	.18 (RSA)	Saskato	chewan In	digenous	Saskatchewan		
Metric by Year	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т
Population	•				•								•		•		•		•			•			•	•	•
2010	# 415	410	000	225	255	475	390	390	705	560	550	4440	1,135	1,235	0070	16035	16165	20005	18,640	18,425	07.005	84,730	90,290	475.000	545,785	552,565	4 000 050
2016	% 50.6%	50.0%	820	47.4%	53.7%	475	49.7%	49.7%	785	50.5%	49.5%	1110	47.9%	52.1%	2370	49.8%	50.2%	32205	50.3%	49.7%	37,065	48.4%	51.6%	175,020	49.7%	50.3%	1,098,350
2044	# 380	395	700	215	205	445	385	380	760	570	585	4455	1,265	1,345	0040	16050	15915	04000	18,375	18,180	00.500	75,845	81,895	457.740	511,555	521,825	4 000 000
2011	% 48.7%	50.6%	780	51.8%	49.4%	415	50.7%	50.0%	760	49.4%	50.6%	1155	48.5%	51.5%	2610	50.2%	49.8%	31960	50.3%	49.7%	36,560	48.1%	51.9%	157,740	49.5%	50.5%	1,033,380
2000	# 330	330	000	215	195	445	375	365	745	515	565	4000	1,170	1,175	0050	14535	14545	20005	17,090	16,830	00.000	69,565	72,325	444.000	475,240	492,915	000.400
2006	% 50.0%	50.0%	660	51.8%	47.0%	415	50.3%	49.0%	745	47.7%	52.3%	1080	49.8%	50.0%	2350	50.0%	50.0%	29085	50.4%	49.6%	33,920	49.0%	51.0%	141,890	49.1%	50.9%	968,160
Population change (%)														-													
2011-2016	9.2%	3.8%	5.1%	4.7%	24.4%	14.5%	1.3%	2.6%	3.3%	-1.8%	-6.0%	-3.9%	-10.3%	-8.2%	-9.2%	-0.1%	1.6%	0.8%	1.4%	1.3%	1.4%	11.7%	10.3%	11.0%	6.7%	5.9%	6.3%
2006-2011	15.2%	19.7%	18.2%	0.0%	5.1%	0.0%	2.7%	4.1%	2.0%	10.7%	3.5%	6.9%	8.1%	14.5%	11.1%	10.4%	9.4%	9.9%	7.5%	8.0%	7.8%	9.0%	13.2%	11.2%	7.6%	5.9%	6.7%
2006-2016	25.8%	24.2%	24.2%	4.7%	30.8%	14.5%	4.0%	6.8%	5.4%	8.7%	-2.7%	2.8%	-3.0%	5.1%	0.9%	10.3%	11.1%	10.7%	9.1%	9.5%	9.3%	21.8%	24.8%	23.3%	14.8%	12.1%	13.4%
Median age														-													
2016	23.1	24.1	23.8	23.4	25.4	24.6	27.6	26.2	26.8	29.4	33.3	30.8	21.8	26.3	24	22.5	24.4	23.6	25.1	26.2	25.7	23.1	25.4	24.3	36.9	38.7	37.8
2011	21.2	23.3	22	19.8	23.1	21.9	26.4	25	25.6	26.1	30.2	27.6	21.6	23.4	22.6	20.7	22.4	21.5	23.2	24.3	23.7	21.3	24	22.6	37	39.2	38.2
2006	21.3	21	21.2	20.9	19.2	20.1	23	22.5	22.8	25.9	28	27.3	19	22.1	20.5	20	21.4	20.7	22.5	23.3	22.9	20.4	22.9	21.7	37.5	39.8	38.7
Age of population 2016 (%)																											
0 to 19	22.0%	19.5%	41.5%	17.9%	21.1%	41.1%	19.7%	19.7%	38.9%	19.8%	15.8%	35.1%	22.4%	20.7%	42.8%	С	С	С	20.6%	19.6%	40.2%	44.5%	40.7%	42.5%	13.2%	12.6%	25.8%
20 to 44	19.5%	21.3%	40.2%	20.0%	20.0%	41.1%	16.6%	17.8%	33.1%	14.0%	15.8%	29.7%	15.8%	19.6%	35.2%	С	С	С	16.6%	17.2%	33.8%	33.3%	35.7%	34.5%	16.6%	16.3%	32.9%
45 to 64	6.7%	7.3%	14.6%	7.4%	7.4%	14.7%	12.1%	10.2%	21.7%	12.6%	12.2%	24.3%	7.4%	9.9%	17.3%	С	С	С	9.5%	9.7%	19.2%	17.5%	18.5%	18.0%	12.8%	12.9%	25.8%
35 years and over	2.4%	1.8%	4.3%	2.1%	3.2%	5.3%	3.2%	2.5%	5.1%	5.0%	5.0%	9.9%	2.5%	1.9%	4.6%	С	С	С	3.6%	3.2%	6.8%	4.8%	5.0%	4.9%	7.0%	8.5%	15.5%
15 years and over	67.5%	70.7%	69.5%	68.9%	60.8%	67.4%	73.1%	71.8%	68.8%	72.3%	74.5%	72.5%	65.2%	69.2%	67.1%	78.6%	78.5%	78.5%	68.3%	69.3%	68.8%	65.7%	68.3%	67.0%	79.8%	80.9%	80.4%
Age of population 2011 (%)																											
) to 19	21.8%	21.8%	45.5%	25.3%	22.9%	49.4%	18.4%	17.8%	37.5%	20.8%	17.3%	37.7%	23.0%	21.6%	44.1%	48.6%	45.0%	46.8%	22.3%	20.8%	43.1%	47.2%	42.9%	45.0%	13.3%	12.7%	26.1%
20 to 44	17.9%	19.9%	37.2%	16.9%	19.3%	34.9%	18.4%	19.1%	38.8%	12.6%	18.2%	31.6%	17.4%	20.9%	38.5%	32.2%	35.3%	33.8%	16.3%	17.4%	33.6%	31.8%	34.7%	33.3%	16.1%	15.9%	32.0%
45 to 64	6.4%	5.8%	13.5%	7.2%	6.0%	13.3%	9.9%	9.9%	20.4%	12.1%	10.8%	22.9%	6.5%	7.5%	14.2%	15.1%	15.5%	15.3%	9.0%	8.8%	17.8%	16.8%	17.6%	17.2%	13.5%	13.5%	27.0%
35 years and over	2.6%	0.6%	5.1%	2.4%	1.2%	2.4%	2.6%	2.6%	3.9%	3.5%	3.9%	7.4%	1.9%	1.5%	3.1%	4.2%	4.4%	4.3%	2.8%	2.7%	5.4%	4.2%	4.8%	4.5%	6.6%	8.3%	14.9%
15 years and over	65.7%	70.1%	67.0%	68.1%	66.7%	66.6%	72.6%	69.5%	70.5%	67.1%	75.4%	71.3%	65.4%	70.1%	67.8%	62.7	66.4	64.5	66.3%	68.3%	67.3%	64.0	67.7	65.9	80.3%	81.4%	80.9%

Source: Statistics Canada 2007 a,c,d,f,g,l,k,m,o; Statistics Canada 2012a,b,c,d,e,f,g,h; Statistics Canada 2017b,c,d,e,f,g; Statistics Canada 2018a.

Note: For confidentiality purposes, values, including totals were randomly rounded either up or down to a multiple of five or 10. The total value may not match the individual values since totals and sub-totals are independently rounded and may not total to 100%.

a = Data for Other LSA Communities (Descharme Lake, Black Point, Garson Lake, Bear Creek, Turnor Lake, St. George's Hill, Michel Village) is not available and therefore not presented. As these communities are small, population and demographic information is supressed to maintain confidentiality; b = Estimate not reliable due to small dataset and therefore not presented; c = Data not available, an Aboriginal population profile is not available for this area. Possible reasons include:

- the area does not meet the threshold for 250 or more Aboriginal identity population;
- the area has been suppressed for data quality or confidentiality reasons; or
- the area is composed of or contains incompletely enumerated Indian reserves or Indian settlements.

n/a = not applicable; M = male; F = female; T = total; CRDN = Clearwater River Dene Nation; BNDN = Birch Narrows Dene Nation; BRDN = Buffalo River Dene Nation; LSA = local study area; RSA = regional study area.



6.1.1.2 Local Study Area

The most recent population statistics for the LSA communities at the time of writing of this report are from the 2016 Statistics Canada census (2021 Statistics Canada census data is not due to be released until late April 2022) (Section 4.2, Secondary Data Collection). To help verify this information, qualitative data from KP interviews was provided for additional context, where available, for a number of communities.

6.1.1.2.1 Local Study Area Population Characteristics

Figure 11 shows the population of the LSA from 1981 to 2016 as reported in the Census of Canada for each five-year census period as well as the populations for the largest communities in the LSA (i.e., La Loche and Buffalo Narrows). The data shows population increases in the LSA from 1981 to 2011 followed by a small decline in 2016. La Loche's population trend was similar to that of the LSA, though not at the same rate, suggesting population growth also occurred in other LSA communities. Buffalo Narrows' population by contrast has remained fairly stagnant, with only minor variations in population growth and contraction over the same period. In 2016, the LSA population was 5,991 persons. The 2016 populations for communities in the LSA range in size from 2,372 people (i.e., La Loche) to 10 or fewer people (i.e., Descharme Lake and Garson Lake, individually) (Appendix A) ¹¹. The LSA population increased from 3,487 people in 1981 to 6,215 in 2011 and was followed by a decline to 5,991 people in 2016. The LSA population decline from 2011 to 2016 was primarily a result of the population decrease in La Loche (Section 6.1.1.2.2.2, La Loche).

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¹¹ The LSA includes Bear Creek, BNDN (Turnor Lake 193B), Black Point, Buffalo Narrows, BRDN 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data were not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake for 1981 to 2006.



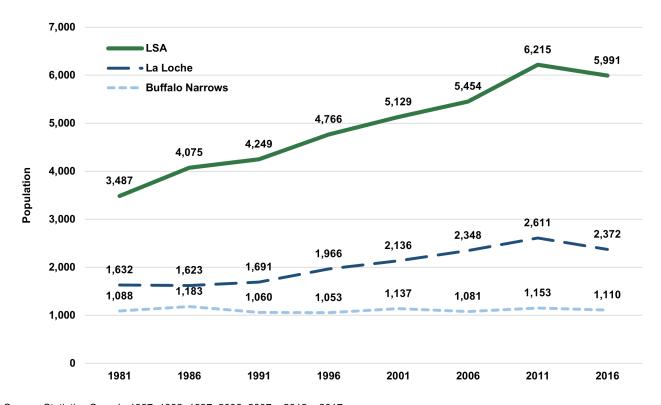


Figure 11: Local Study Area Population, 1981 to 2016

Source: Statistics Canada 1987, 1992, 1997, 2002, 2007a, 2012a, 2017a.

Note: Population numbers for 2011 and 2016 include four northern settlements (i.e., Bear Creek, Black Point, Descharme Lake, and Garson Lake) for which data were not available in previous Census Profiles. LSA = local study area.

Figure 12 illustrates the population of the Dene Nation communities in the LSA from 1981 to 2016, where data are available, as reported in the Census of Canada for each five-year census period (Table 5). The data shows substantial population increases in all three communities, which account for the rest of the population growth in the LSA identified in Figure 11. Effectively, on-reserve population growth constituted the bulk of population growth from 1981, with the remainder largely in La Loche.



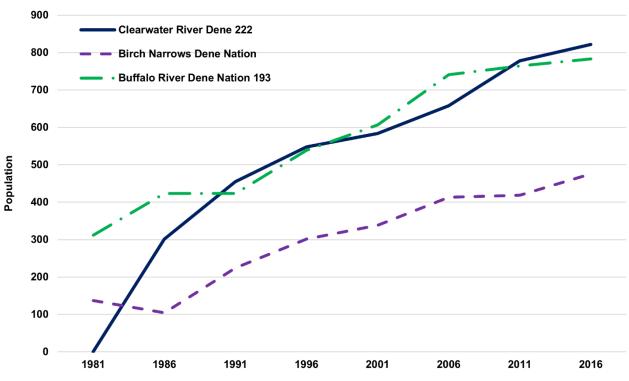


Figure 12: Local Study Area Selected Communities Population, 1981 to 2016

Source: Statistics Canada 1987, 1992, 1997, 2002, 2007a, 2012a, 2017a.

Note: Average annual percentage population changes calculated by InterGroup Consultants Ltd.

Figure 13 shows the change in the age distribution of the LSA population from 1986 to 2016. The proportion of LSA population 24 years of age or younger has steadily decreased between 1986 (i.e., 63.3%) and 2016 (i.e., 48.8%). The proportion of population 45 years or older has steadily increased over the same period (i.e., an increase from 13% to 25%) (Appendix A, Table A-3c).



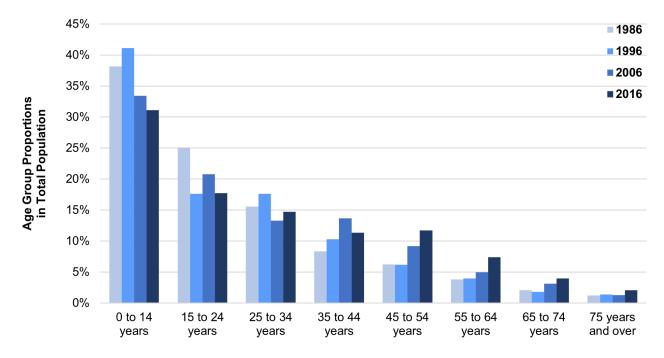


Figure 13: Population Distribution by Age Group for the Local Study Area, 1986 to 2016

Source: Statistics Canada 1987, 1992, 1997, 2002, 2007a, 2012a, 2017a.

Note: Data were not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.

Figure 14 shows the 2016 population for the LSA and Saskatchewan by sex and age cohort. With respect to gender balance in the LSA, females make up a slightly higher proportion (i.e., 51.2%) of the total population than males. By comparison, the populations of the RSA and Saskatchewan are more evenly split between females and males (i.e., 49.7% and 50.3% female portion for the RSA and Saskatchewan, respectively (Appendix A, Table18A-5b); Table 5). The age structure of the LSA population in 2016 was similar to the RSA, and younger than the Saskatchewan population (Appendix A, Table A-5a). Overall, the data reflects the higher proportions of youth, and the contraction of young working-aged cohorts, particularly males over 30. The contraction of male cohorts may be attributed to the lack of economic opportunities (Section 6.2.2, Overview of Local Study Area Economy, and Section 6.4, Labour Force Characteristics). Correspondingly, the data shows higher proportions of working-aged females in the 25 to 34 year old age cohorts. This aligns with labour force analysis (Section 6.4), which notes the main industries in the LSA are traditionally female orientated (e.g., service industries). This analysis was corroborated in discussions with the JWGs in August 2021 (BRDN-JWG 2021a; BNDN-JWG 2021b). The data also shows the proportions of older age cohorts in the LSA is substantially below the comparable Saskatchewan data, which highlights the challenges of northern rural living on aged residents.



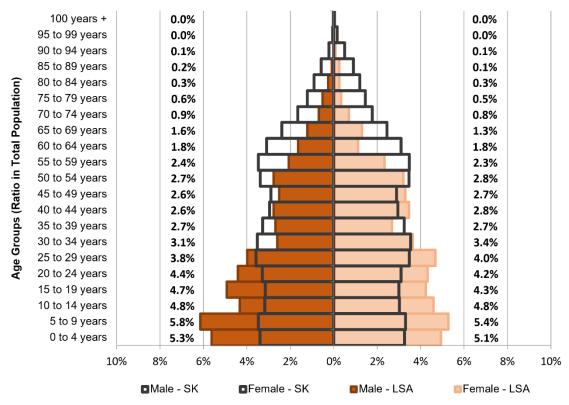


Figure 14: Population Age Structure by Sex for the Local Study Area and Saskatchewan, 2016

Ratio numbers in the chart are for LSA male (left) and female (right) population

Source: Statistics Canada 2017a.

Note: Data were not available for Bear Creek, Black Point, Descharme Lake, Garson Lake, and St. George's Hill.

SK = Saskatchewan; LSA = local study area.

6.1.1.2.2 Local Study Area Communities

6.1.1.2.2.1 Clearwater River Dene Nation

Clearwater River Dene Nation is the third largest LSA community, with a population of 820 (Table 5). The CRDN is predominantly First Nation (i.e., 95.1%) with some Métis (i.e., 3.7%; Table 4). Between 2011 and 2016, population growth in CRDN was modest, with a four-year growth rate of 5.1%, which is below the Indigenous provincial average (i.e., 11.0%) but above the RSA average (i.e., 1.4%; Table 4 and Table 5). Clearwater River Dene Nation is the LSA community with the highest growth rate between 2006 and 2016 (i.e., 24.2%).

Clearwater River Dene Nation is the youngest LSA community, with a median age of 23.8. Between 2006 and 2016, the median age of the CRDN increased slightly (i.e., 21.2 to 23.8) but remained lower than the median age of the provincial Indigenous population (i.e., 24.3) and RSA population (i.e., 25.7). The proportion of the working-age population (i.e., 20 to 64 years old) in the CRDN increased between 2011 and 2016 from 50.6% to 54.8%. The proportion of the population that is of working age in CRDN (i.e., 54.8%) is slightly higher than the RSA (i.e., 53.0%), and comparable to the Indigenous provincial average of 52.5%. The increase in the CRDN working-



age population between 2011 and 2016 (i.e., 4.1%) is larger than the increase at the RSA level (i.e., 1.6%) and Indigenous provincial level (i.e., 2.0%). The 4.1% increase in the working age population was the highest among the LSA communities. The CRDN has a lower proportion of the population who are of retirement age (i.e., 4.3%) compared to both the RSA (i.e., 6.8%) and the Indigenous provincial average (i.e., 4.9%). The proportion of people of retirement age in the CRDN decreased by 0.8% between 2011 and 2016 relative to a 4.1% increase in the proportion of the working-age population. The decrease in people of retirement age in the CRDN is contrary to the trend in the RSA and Indigenous provincial average over the same period (i.e., 1.4% and 0.4% increase, respectively).

The gender ratio in the CRDN population has remained relatively consistent across the 10 years ending in 2016, with slightly more males in the community than females (i.e., 50.6% compared to 50.0%), which is generally consistent with the RSA (i.e., 50.3% compared to 49.7%) (Table 5). Analysis of specific age groups shows higher proportions of males than females in the 0 to 19 years and the 65 years and over age groups, consistent with the RSA. The high male proportion of population in the 0 to 19 age group skews the overall gender ratio in the community. At the Indigenous provincial level, there are more females in the total population, but more males for the 0 to 19 age group.

6.1.1.2.2.2 La Loche

Despite a recent population decline, La Loche remains the largest LSA community, with a 2016 population of 2,370 (Table 5). In 2016, La Loche had slightly more Métis residents (i.e., 1,185) than First Nations (i.e., 1,095) (Table 4). The proportion of Métis residents in the community has declined by 605 people since 2011 (i.e., 33.8% decrease) while the proportion of First Nation residents has increased by 355 people (i.e., 48.0% increase).

The Northern Village of La Loche is also the LSA community that experienced the largest decline in population between 2011 and 2016 (i.e., 9.2% decrease). This population decline is in contrast to the population increases experienced at the provincial level and in the Indigenous provincial population during the same period (Table 5). This decrease was specifically observed in the population younger than 50 years of age. Key person interviewees identified the need to pursue employment and education opportunities elsewhere and lack of housing availability locally as reasons for leaving La Loche. An economic analysis completed for La Loche noted the community did not show the typical signs of population decline, for example, there remains a housing shortage despite several new builds (DMCA 2018). However, this could be indicative of overcrowding and housing shortages prior to depopulation.

The median age of the La Loche population in 2016 was 24.0 years. Between 2006 and 2016, the median age of the La Loche population increased from 20.5 years to 24.0 years (Table 5). The La Loche population remains younger than the provincial population (i.e., 37.8 years in 2016) but is approaching the provincial Indigenous median of 24.3. Among the LSA communities, La Loche has the lowest proportion of population in the workingage cohort (i.e., 52.5%), which is comparable to the Indigenous provincial average (i.e., 52.5%) and slightly below the RSA (i.e., 53.0%). The village has a slightly lower proportion of the population who are of retirement age (i.e., 4.6%) compared to the provincial Indigenous average (i.e., 4.9%) and RSA (i.e., 6.8%). However, La Loche's population is aging, with the proportion of retirees increasing by 1.5% between 2011 and 2016 relative to a 0.2% decrease in the proportion of the working-age population. The decrease in working-age population is contrary to the RSA and Indigenous provincial trend, which had a 1.6% and 2.0% increase, respectively over the same



period. The increase in retirees was comparable to the RSA trend (i.e., 1.4% increase over the same period), but higher than the Indigenous provincial trend (i.e., 0.4% increase over the same period).

More females than males live within La Loche (i.e., 1,235 females or 52.1% of the population compared to 1,135 males or 47.9% of the population), with the sex ratio widening between 2006 and 2016 (Table 5). This trend is different to the majority of other LSA communities, the RSA, and the province, but consistent with the LSA as a whole. There are more females than males within the 20 to 64 age group, and more males than females in the 0 to 19 and 65 years and over age group. Figure 15 presents a more detailed age breakdown by sex for La Loche for 2016.

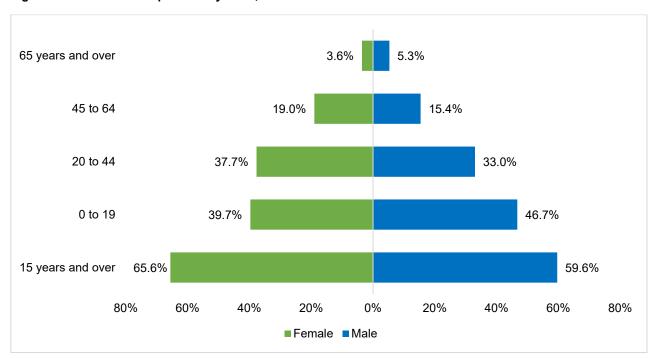


Figure 15: La Loche Population Pyramid, 2016

Note: Some population counts of geographic areas are adjusted to ensure confidentiality and may not total to 100%.

6.1.1.2.2.3 Birch Narrows Dene Nation

Birch Narrows Dene Nation is a predominantly First Nations community (i.e., 91.7% of overall population) with a small proportion that are Métis (i.e., 4.2%; Table 4). In 2016, the population of BNDN was 475, a 14.5% increase from 2011 (i.e., 415) and 2006 (i.e., 415). The rate of growth in the BNDN was the highest among the LSA communities between 2011 and 2016 (i.e., 14.5%) exceeding both the RSA average (i.e., 1.4%) and Indigenous provincial average (i.e., 11.0%; Table 4 and Table 5). The median age of BNDN residents in 2016 was 24.6 years, younger than the RSA median of 25.7 years and slightly older than Indigenous provincial median of 24.3 years. The BNDN has the highest proportion of population in the working-age cohort (i.e., 55.8%) among the LSA communities, which is higher than both the RSA (i.e., 53.0%) and the Indigenous provincial average (i.e., 52.5%).



However, BNDN's population is also aging. Birch Narrows Dene Nation has a higher proportion of the population who are of retirement age (i.e., 5.3%) compared to the Indigenous provincial average (i.e., 4.9%) but a slightly lower proportion than the RSA (i.e., 6.8%). The proportion of retirees increased by 2.9% between 2011 and 2016 relative to a 7.6% increase in the proportion of the working-age population. The rise in working age population was the highest among the LSA communities. The increase in retirees (i.e., 2.9%) was the highest among the LSA communities, and higher compared to the RSA trend (i.e., 1.4% increase over the same period) and Indigenous provincial trend (i.e., 0.4% increase over the same period). The increase in working-age population (7.6%) is much higher compared to the RSA trend (i.e., 1.6% increase) and the Indigenous provincial trend (i.e., 2.0% increase) over the same period.

There has been little change in the sex ratio in the community between 2011 to 2016, with the community continuing to have more females (i.e., 53.7%) than males (i.e., 47.4%) in 2016, a trend also seen at the provincial Indigenous level. The community has a larger percentage of females compared to the other LSA communities.

6.1.1.2.2.4 Buffalo River Dene Nation

Buffalo River Dene Nation is a predominantly First Nations (i.e., 96.8%) community with a small proportion of Métis (i.e., less than 1%; Table 4). In 2016, the population of BRDN was 785, a 3.3% increase from 2011 (i.e., 760) and 5.4% from 2006 (i.e., 745). Growth in the BRDN has been modest, with the growth rate between 2011 and 2016, less than a third of the Indigenous provincial average (i.e., 11.0%) but exceeding the RSA growth rate (i.e., 1.4%; Table 4 and Table 5).

Between 2006 and 2016, the median age of the BRDN increased (i.e., 22.8 to 26.8 years), and in 2016 is slightly older than the RSA median of 25.7 years and Indigenous provincial median of 24.3 years. The proportion of Buffalo River Dene Nation's population that is of working age (54.8%) is comparable to the RSA (i.e., 53.0%) and Indigenous provincial average (i.e., 44.0%). The proportion of BRDN's population that is of retirement age is 5.1%, slightly above the Indigenous provincial average (i.e., 4.9%), but lower than the RSA (i.e., 6.8%). The population of BRDN is aging like the other LSA communities, with the proportion of retirees increasing by 1.2% between 2011 and 2016 relative to a 4.4% decrease in the proportion of the working-age population. The decrease in working age population was highest among the LSA communities. The decrease in working-age population is also contrary to the trend seen at the Indigenous provincial level (i.e., 2.0%increase) and RSA (i.e., 1.6% increase).

Slightly more females than males lived in BRDN in 2016 (i.e., 50.3% compared to 49.7%); however, only the 20 to 44 year age group had more females, suggesting a disproportionate distribution of females in the community within this age cohort. There has been a slight change in the sex ratio in BRDN between 2006 and 2016, as the community had more males in 2006 (i.e., 50.6%).

6.1.1.2.2.5 Buffalo Narrows

Buffalo Narrows is the second largest community in the LSA with a 2016 population of 1,110 (Table 5). The Buffalo Narrows population is predominantly Métis (i.e., 65.8%) with some First Nations (i.e., 16.2%; Table 4). The community has experienced fluctuations in the number of First Nation and Métis residents, with the number of Métis rising from 810 to 950 between 2006 and 2011, and falling to 730 in 2016. The number of First Nation residents in the community declined from 140 to 45 between 2006 and 2011, and rose to 180 in 2016 (Table 4). Part of this change could be attributed to the different census approach in 2011 which was voluntary and may



have resulted in fewer responses and reduced accuracy. Between 2011 and 2016, the population of Buffalo Narrows decreased by 3.9%, while the RSA and provincial Indigenous populations experienced population increases during the same period (i.e., 1.4% and 11.0%).

Buffalo Narrows has the oldest population of the LSA communities, with a median age of 30.8 years compared to the 2016 RSA median of 25.7 years and the provincial Indigenous median of 24.3 years. Between 2006 and 2016, the median age of the Buffalo Narrows population increased by 3.5 years. This is consistent with the provincial Indigenous population characteristics, as the provincial Métis population is younger (i.e., median age of 28.5 years) compared to the non-Indigenous population (i.e., 37.8 years), but oldest among the Indigenous Groups (i.e., 22.2 years for First Nations and 26.5 years for Inuit) (Statistics Canada 2018h). Buffalo Narrows has the second lowest proportion of population in the working-age cohort (i.e., 54.0%) amongst the LSA communities, and the highest proportion of the population who are of retirement age (i.e., 9.9%). The population of Buffalo Narrows is aging, with the proportion of retirees increasing by 2.5% between 2011 and 2016 relative to a 0.5% decrease in the proportion of the working-age population. The decrease in working-age population is contrary to the Indigenous provincial trend, which had a 2.0% increase over the same period. However, the increase in retirees (i.e., 2.5%) was above the Indigenous provincial trend (i.e., 0.4%).

There has been some change in the sex ratio of the Buffalo Narrows population between the most recent year of data (i.e., 2016) and ten years prior. Slightly more males than females now live in Buffalo Narrows; however, only the 0 to 19 years age group and the 45 to 64 years and over age group have more males (Figure 16; Table 5). As in other communities, the large size of the male 0 to 19 years age group population skews the sex ratio in the community. Figure 16 presents a more detailed age breakdown for 2016 by sex for Buffalo Narrows.

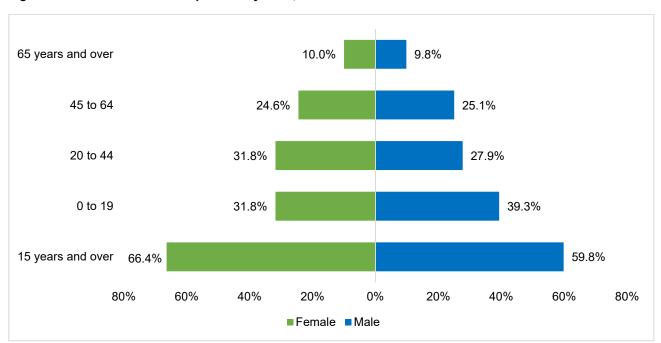


Figure 16: Buffalo Narrows Population Pyramid, 2016

Note: Some population counts of geographic areas are adjusted to ensure confidentiality and may not total to 100%.



6.1.1.2.2.6 Other Local Study Area Communities

The Other LSA Communities, Bear Creek, Descharme Lake, Garson Lake, Black Point, Michel Village, and St. George's Hill, are small communities, with a combined total population of 428 people, ranging in size from 10 to 149 people in 2016. Due to the small populations, demographic information about these communities is limited, with many census indicators rounded or supressed to maintain confidentiality of residents. Based on available information, Black Point, Turnor Lake, St. George's Hill, and Michel Village are understood to be predominantly Indigenous. No further quantitative population and demographics information is available for the Other LSA Communities.

More recent qualitative data is available for some of the individual communities that make up the Other LSA Communities. Less than 80 people resided in Black Point in 2019, a decrease in recent years as people moved to La Loche where there is a housing program (2019 to 2021 KP interview program). The largest age demographic in Black Point is the 40 to 60 cohort, which makes up approximately 50% of the population. It was also reported that around 30% of the population is over age 60, with the remainder under age 40 (2019 to 2021 KP interview program). In Michel Village, the most recent population count was 59, consisting primarily of adults, with few Elders and children.

6.1.1.2.3 Summary of LSA Population Structure

The LSA populations are predominantly Indigenous, with the Indigenous population ranging from 87.2 to 98.2% within the LSA communities (Table 4). Much of the Indigenous population identify as having First Nations ancestry, with a smaller number of people identifying as Métis (Table 5). Between 2006 to 2016, the proportion of people identifying as having First Nations ancestry has increased while the proportion identifying as having Métis ancestry has decreased (Table 5). Very few residents claim multiple Indigenous ancestries, and none claimed Inuit ancestry. With two exceptions, the LSA communities are predominantly of single First Nation identity (Table 5). The populations of the CRDN, BNDN, and BRDN are primarily First Nations, with little change in Indigenous identity between 2006 and 2016. Buffalo Narrows is a predominantly Métis community, and La Loche is a mixed community with more Métis residents than First Nation.

Population growth in the LSA communities over the past three census periods has been robust in BNDN, modest in some LSA communities (i.e., CRDN and BRDN), and fluctuating in other communities (i.e., Buffalo Narrows, La Loche). The LSA communities have a higher proportion of the population aged 19 and younger and a lower proportion of the population aged 65 and older when compared to the total population of Saskatchewan. This pattern is consistent with populations with higher-than-average birth rates and out-migration of post-secondary and working-aged people to pursue education and employment opportunities. Nationally, there is a trend of higher population growth rates for Indigenous Peoples in Canada, due to factors including a younger age structure and higher birth rates (Statistics Canada 2015a). The population growth rates in the LSA communities are variable, and the ten-year population growth is below the provincial average for most LSA communities except for the CRDN and BNDN. This may be attributed to other factors including out-migration, which can also affect population growth rates, and which may affect individual communities differently.

Communities with higher proportions of younger residents can experience more economic pressures on the working-age population to support children and families. Younger populations may also place additional demands on health, education, and other social services (Irvine et al. 2011). Additional discussion on demands for health, education, and social services is provided in Section 6.3, Community Features and Infrastructure. Overall,



females make up a slightly higher proportion of the total LSA population than men. There has been very little change in the gender composition of the LSA communities between 2006 and 2016.

6.1.2 Migration

Population mobility can be a key driver of population changes. Migrants represent people who relocated to a new census subdivision and include both internal migrants who moved to a different city, town, township, village, or Indian Reserve within Canada, and external migrants who lived outside Canada at an earlier date. Migrants do not include people who moved within the same census subdivision 12 (Statistics Canada 2017b). The analysis of population migration data can assist in the determination of the stability of a community. Less migration occurrence can highlight the presence of long-established connections and strong community ties, while high rates of migration may be indicative of community dynamism and resilience due to increased ability to react to regular change and influxes of a diverse population.

Figure 17 shows the proportion of the LSA, RSA, and Saskatchewan population that migrated within the last year of available data and the five years previous to that (i.e., 2011-2016)(Appendix A, Table A-9). Note that in the context of the LSA and RSA, this does not capture outmigration from the communities. Rather, outmigration is better understood through the combined analysis of migrants within the community, and the overall population decline experienced by a community. A smaller proportion of the LSA population are migrants within the last year of available data and the five years previous compared to the RSA and Saskatchewan as a whole. Among the LSA communities, La Loche had the lowest migration rate within 1 year (i.e., 1.1%) and within 5 years (i.e., 3.8%).Buffalo Narrows had the highest migration rate with 1 year (i.e., 4.3%) and the BRDN had the highest migration rate within the last 5 years (i.e., 13.1%;) (Appendix A, Table A-9b). Much of Buffalo Narrow's migration is likely due to service sector workers and Crown corporation staff rotating into positions elsewhere.

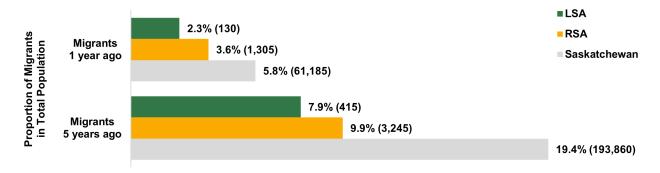
Some common reasons for migration stated by LSA residents include attending school, limited housing availability within a community, and limited availability of employment. Residents of smaller communities within the LSA often move to larger communities such as Buffalo Narrows or La Loche for schooling and housing. Some LSA residents commented that people who leave the community for schooling often do not return, as they seek further education or employment opportunities elsewhere (2019 to 2021 KP interview program).

¹² Statistics Canada defines non-migrant movers as those who moved within the same census subdivision. Migrants are defined as those who do not live in the same census subdivision as they did in the last reference period.

¹³ To minimize rounding error and due to data unavailability, LSA communities with less than 400 population as of the 2016 Census were not included in this comparison.



Figure 17: Proportion of Population Who Were Migrants within 1 Year and 5 Years, 2016



Source: Statistics Canada 2017a.

Note: Data were not available for Bear Creek, Descharme Lake, and Garson Lake.

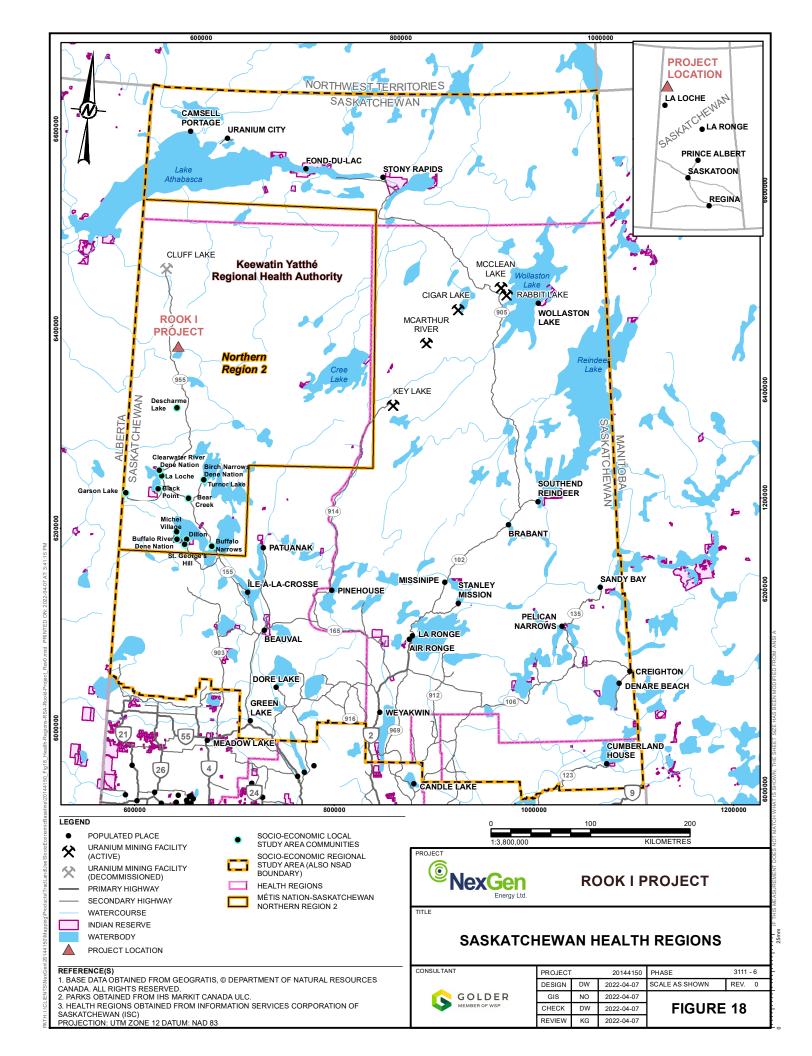
LSA = local study area; RSA = regional study area.

6.1.3 Population Projections

Statistics Canada prepares population projection scenarios by health region ^{14,15} and include low-, medium-, and high-growth, as well as slow- and fast-aging scenarios. The projections are not available at the individual community level. The projections are developed considering trends in birth rate, mortality, and migration, and in discussion with experts (Chagnon et al. 2020). Additional detail on assumptions related to each scenario are provided in Appendix A, Table A-10a and Table A-10b. The Keewatin Yatthé Health Region (KYHR; Figure 18) includes the communities in the LSA (i.e., 5,991 people in 2016) as well as other communities, and included a population of approximately 11,000 in 2018 (Appendix A, Table A-10a). Figure 19 shows the range of cumulative percent changes in population for the KYHR from 2018 forecasted through to 2049 based on nine scenarios. The cumulative percentage changes were calculated by dividing the forecast population in each year by the 2018 base year, which was the year these future forecasts were projected from (i.e., the base year). The projections indicated a cumulative increase of approximately 7% from 2018 to 2049 in the High Growth Scenario to a decrease of approximately 10% in the Low Growth Scenario for the same period. Projections should be interpreted with caution due to the small population size of the health region and are intended to show a range of potential future population scenarios.

¹⁴ Health region refers to administrative areas defined by the provincial ministries of health (Statistics Canada 2015b). Saskatchewan had 13 health regions but combined them in 2017 (Statistics Canada 2015c).

¹⁵ The projections were not available at the individual community level. The projections were developed considering trends in fertility, mortality and migration, and in discussion with experts (Chagnon et al. 2020).





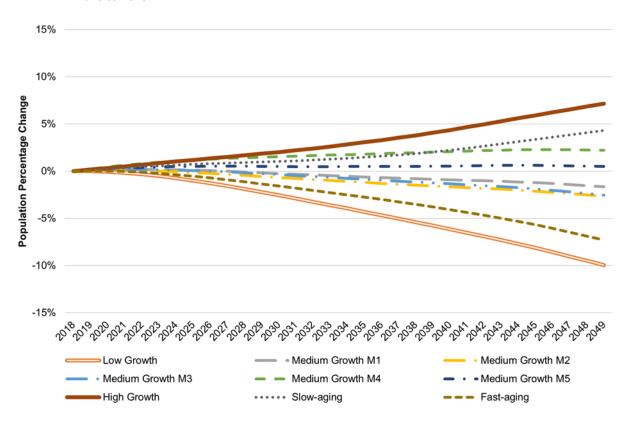


Figure 19: Cumulative Forecast Percentage Population Change by Scenario for Keewatin Yatthé Health Region, 2018 to 2049

Source: Statistics Canada, Custom projections for Health Regions in Canada (2018 to 2049). Raw data and discussions of assumptions presented in Appendix A, Table A-10, and Table A-10a.

Applying these increases and decreases to the LSA would result in a population range of approximately 5,400 to 6,400 by 2049, and average annual population changes ranging from a decrease of 0.34% to an increase of 0.22%. By contrast, Statistics Canada projects average annual population increases for Saskatchewan of between 0.84% and 1.72% for the period from 2018 through 2043 (Statistics Canada 2019 Appendix A, Table A-10a). This variability in the population projection estimated for the KYHR is consistent with past population trends for the LSA communities.

6.2 Economic Profile

The economic profile considers opportunities for employment and participation in the economic life of the community, including the monetary or financial resources that communities and municipalities use to achieve their economic objectives. Economic assets are key determinants of a community's overall economic vitality.

The following subsection documents the economic profile of the LSA communities in comparison to the RSA and Saskatchewan.



6.2.1 Economic Production

6.2.1.1 Regional Study Area Economy

The economy of the RSA is notably different than Saskatchewan overall. Mining, quarrying, and oil and gas extraction, educational services, public administration, and health care and social assistance accounted for a larger proportion of employment in the RSA in 2016 compared to the province (Section 6.4.2, Employment by Industry Sector). Other sectors such as agriculture, forestry, fishing and hunting, manufacturing, and retail trade, comprised a lower percentage of total employment in the RSA compared to the province.

The RSA had an employment rate of 37.2% in 2016, corresponding to a total of approximately 9,000 people employed among 902 employers, and a median income of \$19,930 in 2015 (Statistics Canada 2017h,i). Overall, the economy of the RSA is relatively less diverse and underdeveloped compared with Saskatchewan as a whole.

The traditional economy or subsistence economy is also important to supporting the livelihood of many individuals and communities in the RSA; further information on the traditional economy and its importance can be found in Section 6.5.2, Traditional Economy.

In 2016, a report by Keewatin Career Development Corporation indicated that the high youth population in the RSA makes overall growth challenging. The report calculated youth entering the workforce at 600 per year against retirement at 240 per year. To maintain the current rate of employment, the RSA would have to create 360 new jobs or export that many workers. To match the provincial employment rate over the next 10 years, the RSA would need to add an additional 700 jobs per year. In total, the RSA would need to add around 1,000 jobs per year, or export that many workers or have a combination of the two to maintain current employment rates (KCDC 2016).

Saskatchewan employee wages and salaries in 2019 totaled \$28.9 billion (in nominal [i.e., current] rather than real [i.e., inflation adjusted] dollars). The contribution of the mining and oil and gas extraction sector to employee wages and salaries in the province has been generally increasing between 2006 to 2016, with only a decrease from 2014 to 2016. In 2019, the sector contributed \$2.5 billion in employee wages and salaries (i.e., 8.6% of the provincial total). This was a 65.6% increase from approximately \$1.5 billion in 2009 (i.e., 7.3% of the provincial total) (Saskatchewan Bureau of Statistics 2021a). Information on wages and salaries at the RSA level was not available.

6.2.1.2 Gross Domestic Product

Gross domestic product (GDP) is a common measure of the value of goods and services produced in a jurisdiction over a particular time period. Mining and oil and gas extraction are the largest industries in Saskatchewan, accounting for over a quarter of the Saskatchewan GDP in 2020, or \$19.8 billion (Table 6). Other industries supporting the mining industry such as transportation and warehousing, professional, scientific, technical, and hospitality-related services, are also important service-producing industries contributing to the provincial economy. Data disaggregation by type of mining was not available. The next highest producing industry sectors in Saskatchewan are management of companies and enterprises (i.e., 10.0% of total GDP) and agriculture, forestry, fishing, and hunting (i.e., 9.5%; Table 6).



Pre-pandemic, growth in the mining industry's GDP between 2016 and 2019 was 8.8%, outpacing almost all other goods-producing industries except for utilities (i.e., 9.4%). In 2020, the COVID-19 pandemic resulted in a notable decrease in the GDP of several industries. The mining industry sector experienced a 9.9% decrease in GDP from 2019 to 2020. In 2020, operations at Cameco's Cigar Lake mine and its partner mill, McClean Lake Mill, were temporarily shut down twice (a five-month suspension from March to July 2020 and December 2020 to April 2021) due to the threat posed by the COVID-19 pandemic (World Nuclear News 2021). The total workforce at Cigar Lake was 320 Cameco employees and 240 contractors; however, when under care and maintenance, the workforce dropped to about 75, split across two shifts. The workforce at McClean Lake Mill was reduced from 160 to 50 during care and maintenance (SaskToday 2020).

Table 6: Gross Domestic Product by Industry, Saskatchewan, Millions of Chained (2012) Dollars 16, 2016 to 2020

Metric	2016	2017	2018	2019	2020	% Change 2016-2019	% Change 2016-2020	Percentage of Total
All industries	79,317.50	81,121.10	82,387.50	81,454.20	77,272.80	2.7%	-2.6%	100.0%
Goods-Producing Industries	40,451.80	41,608.40	41,999.40	40,299.80	37,572.30	-0.4%	-7.1%	48.6%
Agriculture, forestry, fishing, and hunting	7,176.70	6,990.30	6,923.70	7,074.70	7,327.60	-1.4%	2.1%	9.5%
Mining, quarrying, and oil and gas extraction	20,187.10	22,023.70	22,609.60	21,971.50	19,805.10	8.8%	-1.9%	25.6%
Utilities	1,664.10	1,770.70	1,838.40	1,821.00	1,772.60	9.4%	6.5%	2.3%
Construction	6,210.50	6,094.20	5,844.00	5,203.60	4,575.80	-16.2%	-26.3%	5.9%
Manufacturing	4,707.30	4,751.40	4,951.30	4,562.10	4,225.90	-3.1%	-10.2%	5.5%
Service-producing industries	38,723.40	39,436.70	40,240.70	40,702.10	39,083.00	5.1%	0.9%	50.6%
Wholesale trade	3,740.80	3,782.80	3,941.50	3,917.00	3,849.80	4.7%	2.9%	5.0%
Retail trade	3,202.30	3,273.70	3,322.10	3,290.10	3,184.30	2.7%	-0.6%	4.1%
Transportation and warehousing	3,511.10	3,847.00	3,851.60	3,836.50	3,507.70	2.8%	-0.1%	4.1%
Information and cultural industries	1,293.60	1,250.20	1,249.30	1,292.80	1,264.80	2.9%	-2.2%	4.1%
Finance and insurance	2,472.80	2,606.40	2,693.50	2,761.60	2,899.80	9.3%	17.3%	4.5%
Real estate and rental and leasing	7,300.70	7,490.80	7,604.30	7,689.40	7,791.60	-0.1%	6.7%	1.6%
Professional, scientific, and technical services	1,608.50	1,545.90	1,567.30	1,645.70	1,582.10	11.7%	-1.6%	3.8%
Management of companies and enterprises	307.60	227.20	168.50	135.40	87.40	5.3%	-71.6%	10.1%
Administrative and support, waste management and remediation services	903.00	882.80	896.00	863.40	754.90	2.3%	-16.4%	2.0%
Educational services	3,376.00	3,447.00	3,555.60	3,642.80	3,459.10	-56.0%	2.5%	0.1%
Health care and social assistance	4,425.10	4,475.80	4,603.00	4,728.20	4,444.00	-4.4%	0.4%	1.0%
Arts, entertainment, and recreation	419.20	429.00	429.30	430.80	275.30	7.9%	-34.3%	4.5%
Accommodation and food services	1,172.60	1,141.20	1,157.30	1,175.20	852.9	6.8%	-27.3%	5.8%
Other services (except public administration)	1,156.50	1,185.30	1,202.10	1,210.00	1,072.50	2.8%	-7.3%	0.4%
Public administration	3,903.00	3,963.20	4,094.60	4,156.30	4,153.10	0.2%	6.4%	1.1%

Source: Statistics Canada 2021a.

Note: For chained dollars, the aggregates are not equal to the sum of their components.

16 Chained Dollars is a method of adjusting real dollar amounts for inflation over time, so as to allow comparison of figures from different years.



In its 2020/2021 mid-year economic report, the Saskatchewan Bureau of Statistics (2021b) noted the provincial economy was affected by both the COVID-19 pandemic and fall in global oil prices. At the mid-point of the 2020/2021 fiscal year, the economy was noted to have performed better than originally anticipated in the 2020 budget. Employment recovery was noted to be uneven across industries, with employment in accommodation and food services in October 2020 still well below pre-pandemic levels while employment in construction and wholesale and retail trade had rebounded. Equivalent employment information for the mining and oil and gas sector was not provided in the mid-year economic report. The 2020/2021 mid-year economic report noted no material changes to the medium-term economic outlook compared to previous Government of Saskatchewan economic reports, which showed provincial revenues rebounding and reductions in provincial deficits through 2024/2025. This lack of material changes was driven in part by substantial growth in non-renewable resource revenues, though resource revenues were not forecast to recover to 2019/2020 levels until 2023/2024 (Saskatchewan Ministry of Energy and Resources 2020).

6.2.1.3 Major Capital Projects

Major proposed projects in the RSA include the following (Government of Saskatchewan n.d.b):

Denison Wheeler River Project

Denison Mines Corp. (Denison) is proposing to develop an in-situ recovery uranium mining and processing operation located in the eastern portion of the Athabasca Basin in northern Saskatchewan approximately 4 km west of Highway 914, midway between Cameco Corporation's Key Lake Mill and McArthur River Mine. The proposed project is expected to produce up to 5,400 tonnes of uranium octoxide (yellowcake) annually for 20 years. The project will be assessed under Canadian Environmental Assessment Act, 2012 and the proponent is expected to enter the construction phase in 2022, with operations continuing until decommissioning in 2044 (IAAC 2020b).

Rabbit Lake Tailings Management Facility Expansion Project

Cameco Corporation is proposing to extend the life of the Rabbit Lake Operation by expanding the tailings facility located at the current site. The project would consist of modifications to the site's existing facility components and processes, as well as licensed activities at Rabbit Lake including increasing the tailings management capacity from 9 to 12 million cubic meters. The additional 3 million cubic meters of tailings capacity would support continued mine activities. In 2018, Cameco suspended production at five uranium sites in North America including the Rabbit Lake facility under care and maintenance. However, in February 2022 announced that it would restart operations amid uranium price gains (S&P Global 2022).

Highway 914 All-Weather Road

The Saskatchewan Ministry of Highways and Infrastructure is proposing a project which includes the construction of a 51.7 km all-weather road between the existing roads to the McArthur River and the Cigar Lake Mine Site in northeastern Saskatchewan. The project would include the construction of the all-weather road, water crossings, temporary structures including: construction roads, work camps, water withdrawal facilities, aggregate and borrow pits, as well as all physical works and undertakings associated with fish habitat compensation planning. The project is expected to take approximately three years to complete and will connect Highway 905 and 914 (MBC News 2021).



6.2.2 Overview of Local Study Area Economy

This subsection provides an overview of the LSA economy with specific reference to regional connectivity, key centres, and economic vitality. The proceeding subsections provide further detailed context to the overview.

The LSA is economically supressed by a lack of economic opportunity due to no suitably sized primary industry since the decline of the fur industry in the 1960s. Labour force participation rates in LSA communities are low and unemployment rates are high, with employment concentrated primarily in government-funded service sectors and Crown corporations. There are lower employment rates in rural sectors, including those associated with agriculture, forestry, fishing and hunting, manufacturing, and retail trade, than in the province overall. The LSA has a limited tourism industry or infrastructure and limited manufacturing. Fishing and commercial forestry activities contribute to the LSA economy, though to a limited scale. Mineral exploration and investment activity in the LSA is growing and northern businesses have expanded their scope of goods and services. However, challenges remain as distance to markets and energy costs remain high. From 2008 to 2017 there was 328.3 million pounds of measured and indicated uranium resources found in the west side of the province, with more than 70% of the resources located north of La Loche (DMCA 2018). La Loche is the closest urban settlement on Highway 955 to the uranium opportunities in northwestern Saskatchewan; however, the only mineral related activity occurring in this area at present is exploration activity.

6.2.2.1 Local Business Diversity

Residents of the LSA have noted there are a limited number of locally owned businesses, and that goods and services must often be sourced from outside the LSA communities (2019 to 2021 KP interview program). Key Person interview participants noted several local businesses in Buffalo Narrows and La Loche have experienced some growth in recent years due to mineral exploration in the area. Other customers include local residents, governments, government employees, the RCMP, and hospitals. CenterPoint Grocery and Pharmacy, and P&R Service in La Loche have been working with NexGen to provide food and fuel for the current exploration camp located at Patterson Lake (2019 to 2021 KP interview program). While the existing stores in Buffalo Narrows meet the needs of the community, interviews indicated that the price for products, food (especially fresh food), and fuel are high. Residents noted a strong interest in expanding local business opportunities, including exploring partnerships between communities. Local study area residents have commented they see substantial value not just in expanding employment opportunities, but also ownership interests in businesses (BNDN-JWG 2021a; BRDN-JWG 2020).

Table 7 presents the registered businesses in the LSA communities. Buffalo Narrows has the greatest variety of businesses amongst the LSA communities followed by La Loche and CRDN. The CRDN owns four construction corporations including RobWel constructors (in Meadow Lake), IWL Steel Fabricators (in Saskatoon and Martensville), Clearwater River Enviro Limited Partnership, and Clearwater Pipe Rentals Limited Partnership (RobWel 2018). The BRDN has partial ownership of two mills (Meadow Lake pulp mill, oriented strand board mill), Polar Oils, Mystic Management, and fisheries. Interviewees noted that there is only one store in the community.

In comparison to other northern communities in the RSA, the LSA communities exhibit less business activity. A 2018 study compared La Loche and the CRDN to other RSA communities to illustrate the shortage of business activity in the La Loche / CRDN area (DMCA 2018). In 2016, La Loche and the CRDN had a combined 23 businesses. For comparison, the community of Tisdale¹⁷, a community located in central Saskatchewan with a

¹⁷ Tisdale does not have a trading area and is not on a highway with large volumes of traffic.



similar population count as La Loche and the CRDN combined, had 241 businesses. La Ronge, a community with double CRDN's population and located on a highway near an operating mine in northeastern Saskatchewan, had 125 businesses

Table 7: Registered Businesses in Local Study Area Communities

Sector	CRDN	La Loche	BNDN	BRDN	Buffalo Narrows
Gas bars, automotive services, and maintenance	n/a	5	n/a	n/a	6
Construction and trucking services	4	2	n/a	n/a	6
Restaurants and taverns	n/a	2	n/a	1	3
Lumber and hardware supply stores	n/a	2	n/a	n/a	1
Grocery and convenience stores	1	4	1	2	2
Outfitters	n/a	1	1	n/a	3
Financial and insurance services	n/a	n/a	n/a	n/a	2
Other Services	2	n/a	1	1	3

Source: BNDN 2013; CRDN 2013; BNEDC 2021a; RobWel 2018; Northern Business Directory 2016, 2017; 2019 to 2021 KP interview program. Note: The smaller LSA communities do not have registered businesses.

CRDN = Clearwater River Dene Nation; BNDN = Birch Narrows Dene Nation; BRDN = Buffalo River Dene Nation; n/a = not applicable; LSA = local study area.

Various outfitting establishments outside La Loche provide seasonal income to residents. Businesses in La Loche hire local employees and report low staff turnover. Currently, there are no motels or temporary accommodations in La Loche (2019 to 2021 KP interview program). Temporary accommodations available in Buffalo Narrows include the Waterfront Inn and Krows Nest Inn, lodges, guest houses, and campgrounds (BNEDC 2021b). All staff are local, with low turnover rates reported (2019 to 2021 KP interview program).

The 2018 economic, sector, and demographic study identified the notable business shortages in the La Loche / CRDN region in the sectors of utilities; manufacturing; information; cultural; and arts, entertainment, and recreation (DMCA 2018). The study also noted that there were limited companies related to mining, construction, accommodation, and food services. The CRDN, BNDN, and BRDN have access to business planning and economic development support services as member Nations of the MLTC (MLTC 2021; MLTC 2020g). La Loche's Economic Development Corporation has a mission to showcase cultural identity, build capacity, and create economic opportunity so that people in the community can reach their potential while enhancing and encouraging personal and community development (LLEDC 2018). Buffalo Narrows has an Economic Development Corporation that was intended to identify and undertake viable opportunities for community business development, and to stimulate employment through business ventures (BNEDC 2021a). Other communities such as the BNDN and BRDN have economic development officers.

Funding programs available to support economic development include the following:

- Indigenous Business Funding Programs from the Government of Saskatchewan (Government of Saskatchewan n.d.c):
 - Clarence Campeau Development Fund (Métis Development Fund): provides equity for Métis businesses, loan support to community economic development initiatives, and assistance for Métis business owners and entrepreneurs to develop management skill.



- Saskatchewan Indian Equity Foundation Inc.: Indigenous financial institution that offers developmental lending to First Nations businesses in Saskatchewan.
- SaskMétis Economic Development Corporation: Aboriginal Capital Corporation that finances the start-up, acquisition, and expansion of Métis-controlled small businesses in Saskatchewan.
- The Saskatchewan Indigenous Economic Development Network.
- Indigenous Business Development Services: support for entrepreneurs in Saskatchewan.
- Business and economic development from the Government of Canada (Government of Canada 2021a):
 - Aboriginal Entrepreneurship Program;
 - Lands and Economic Development Program;
 - Aboriginal Forestry Initiative;
 - Strategic Partnerships Initiative;
 - Procurement Strategy for Aboriginal business; and
 - Community Opportunity Readiness Program.

6.2.2.2 Major Capital Projects

The only other major mining project, existing or proposed, in the LSA is the Fission Patterson Lake South Property, which is planned by Fission Uranium Corp. (Fission 2019, 2021). The lifespan of the Fission Patterson Lake South Property was estimated based on available information and some necessary assumptions. Public information describes a projected three-year construction period and seven-year operating period (i.e., production and processing; Fission 2019, 2021). The anticipated start of construction and duration of active decommissioning at the Fission Patterson Lake South Property were not publicly available at the time of report writing.

6.2.3 Government Revenues

6.2.3.1 Uranium Royalties

Uranium royalties in Saskatchewan are payable in accordance with *The Crown Mineral Royalty Regulations* pursuant to *The Crown Minerals Act*. The Saskatchewan uranium royalty system has three components (Government of Saskatchewan 2021d):

- basic royalty 5% of gross revenue;
- profit royalty rates increase from 10% to 15% as net profit increases; and
- Saskatchewan Resource Credit a credit of 0.75% of gross revenue.

The Government of Saskatchewan reported total non-renewable resource revenues from all sources (including oil and gas, potash, and other non-renewable resources) for Saskatchewan of \$1.750 billion in 2019/20 and \$1.735 billion in 2018/19.



The Saskatchewan Ministry of Energy reported uranium resource revenues of \$42.4 million in 2020/21 and a decrease from \$53 million in 2019/20 due to a decrease in sales volumes (Saskatchewan Ministry Energy and Resources 2020, 2021). This can be attributed to the suspension of Cameco's Cigar Lake operations and the McClean Lake Mill due to COVID-19. However, this still represented a 51.4% increase from 2018/19, when uranium resource revenues were \$28 million (Saskatchewan Ministry of Energy and Resources 2019).

6.2.3.2 Resource Surcharge

Large resource corporations in Saskatchewan are subject to the Corporation Capital Tax Resource Surcharge pursuant to *The Corporation Capital Tax Act*. A tax rate of 3.0% is applied to the value of resource sales (Ministry of Finance 2021).

Total resource surcharge revenues reported by the provincial government were \$413 million in 2020 and \$394 million in 2019, which includes the resource surcharge of 3% (Government of Saskatchewan 2020a).

6.2.3.3 Mineral Surface Lease Agreements

Section 5-16 of *The Crown Resource Lands Regulation*, 2019 under *The Provincial Lands Act, 2016* enables the minister responsible for the administration of *The Forest Resources Management Act* to issue a mineral surface lease to access Crown resource land for mineral extraction. Mineral Surface Lease Agreements apply to mines operating on Crown Land in the NSAD and are administered by the Ministry of Government Relations and ENV to provide long-term land rental (Government of Saskatchewan 2021e). Fees associated with MSLAs are set out in Section 6-3 of *The Crown Resource Lands Regulation*, 2019.

6.2.3.4 Corporate Income Tax

Federal corporate income taxes are payable to the Government of Canada pursuant to the *Income Tax Act*. The 2021 corporate tax rate after the general tax reduction was 15%. The Government of Canada reported corporate income tax revenues of \$50.060 billion in 2019/2020 and \$50.368 billion in 2018/19.

Provincial corporate income taxes are payable and to the Government of Saskatchewan pursuant to The *Income Tax Act, 2000*. The 2021 corporate income tax rate in Saskatchewan was 12% according to Section 56(1) of the *Income Tax Act, 2000*. The Government of Saskatchewan (2020a) reported corporation income tax revenues of \$787 million in 2020 and \$586 million in 2019.

6.2.3.5 Individual Income Tax

Federal individual income taxes are payable to the Government of Canada pursuant to the *Income Tax Act*. The 2021 individual income tax rates ranged from 15% to 33% depending on the tax bracket. The Government of Canada (2019b; 2021c) reported individual income tax revenues of \$167.576 billion in 2019/2020 and \$163.881 billion in 2018/2019.

Provincial personal income taxes are payable to the Government of Saskatchewan pursuant to *The Income Tax Act, 2000*. The 2021 personal income tax rates in Saskatchewan ranged from 10.5% to 14.5% depending on the tax bracket. The Government of Saskatchewan (2020a) reported individual income tax revenues of \$2.629 billion in 2020 and \$2.340 billion in 2019.



6.2.3.6 Government Revenue Summary

Several provincial and federal sources of revenue can be affected by the uranium sector. The primary sources of government revenue that could be affected by the Project are uranium royalties, resource surcharges, mineral surface lease payments, corporate income tax, and individual income tax.

Table 8 presents historical non-renewable resource revenue and mineral rights tax for the years 2017/2018 to 2020/2021. There have been substantial changes in uranium resource revenue from year-to-year. In the most recent period for which data are available (2020/2021), provincial uranium resource revenue totalled \$4.2 billion, the lowest amount in recent years, and a 92.0% decrease over the previous period (i.e., 2019/2020). This can be attributed to the lower sales volumes due to the suspension of Cameco's Cigar Lake operations and the McClean Lake Mill.

Pre-pandemic revenue from uranium consistently made up the third or fourth largest share of revenue, ranging from 2.1% to 6.3% of the total from 2017/2018 to 2019/2020. Although the Government of Saskatchewan received a \$59.8 million transfer from the federal government in the 2020/2021 fiscal year, overall revenue declined due to the precipitous drop in non-renewable resource revenue (especially oil and uranium) from lower demand during the COVID-19 pandemic and uranium mill shutdowns.

Table 8: Provincial Non-renewable Resource Revenue and Other Own-Source Revenue Summary, 2017/2018 to 2020/2021, Thousands of Dollars

Matria	2017/2018		2018/2019		2019/2020		2020/2021	
Metric	\$	%	\$	%	\$	%	\$	%
Non-renewable resource revenue								
Oil	650,460	53.1	678,273	50.2	663,528	49.1	369,760	40.4
Crown Land sales	64,684	5.3	58,088	4.3	17,127	1.3	6,652	0.7
Natural gas	6,083	0.5	3,292	0.2	4,263	0.3	8,424	0.9
Potash	308,675	25.2	536,008	39.7	554,426	41.0	423,147	46.2
Uranium	76,736	6.3	28,230	2.1	53,264	3.9	4,237	0.5
Other minerals	34,018	2.8	37,384	2.8	44,346	3.3	33,937	3.7
Total non-renewable resources ^(a)	1,140,656	93.1	1,341,275	99.2	1,336,954	98.9	846,157	92.4
Other own-source revenue								
Mineral rights tax	9,365	8.0	9,429	0.7	11,409	8.0	9,704	1.1
Sales, services, and service fees	3,765	0.3	252	0.0	941	0.1	362	0.0
Other miscellaneous revenue	5,869	0.5	549	0.0	2,417	0.2	170	0.0
Total other own-source revenue	18,999	1.6	10,230	0.8	14,767	1.1	70,046	7.6
Transfers from the federal government	65,201	5.3	n/a	n/a	n/a	n/a	59,810	6.5
Total revenue ministry of energy and resources	1,224,856	100.0	1,351,505	100.0	1,351,721	100.0	916,203	100.0

Source: Saskatchewan Ministry of Energy and Resources 2018, 2019, 2020, 2021.

Totals may not add up due to rounding

a) Includes oil, Crown Land sales, natural gas, potash, uranium, and other minerals.

n/a = not applicable.



6.2.4 Economic Challenges and Development Priorities

This subsection describes the key challenges and development priorities for the RSA.

Economic diversification is a known driver of employment opportunities and increases to labour force participation rates. The RSA has limited economic diversity, with many economic sectors relatively underdeveloped, reflected in industry sector employment (Section 6.4.2, Employment by Industry Sector). Occupations are concentrated in the sectors of mining, education, and health (Section 6.4.2, Employment by Industry Sector). The RSA has relatively low employment rates and labour force participation rates (Section 6.4.1, Labour Market). While the RSA is the host for several major mining operations (Section 5.1.1.5, Uranium Mining Industry), the RSA economy often does not experience the value of the direct and indirect spending as many mining jobs are held by people who reside outside the RSA (KCDC 2016).

The high proportion of young people in the RSA population is a challenge in terms of expanding education and training and creating economic growth that can match the number of young people entering the workforce (KCDC 2016). The growing size of the senior population presents challenges for health service provision and supportive living services.

6.2.4.1 **Economy**

The low population density and remoteness of the communities in the RSA are a challenge to economic development. The RSA has a less diversified economy, a more limited access to services and educational opportunities, and higher transportation costs. In many of the RSA communities, transportation costs are very high or precarious (e.g., remote fly-in communities that may only be accessible by winter road). The lack of supporting infrastructure for the communities and the distance between communities and major urban hubs (of which none are located in the RSA) increases the cost of living and operating a business, with higher costs for transportation, construction materials, food, and utilities (Saskatchewan Chamber of Commerce 2014).

Based on previous feedback from Indigenous Groups, stakeholders, community workshops, research, and interviews, it has been identified that the lack of economic opportunity within the region is a contributing factor to diminishing interest in training and education, as there are limited employment opportunities available. Recommendations made in relation to improving continued economic growth include (DMCA 2018):

- promoting exploration and investments within the RSA;
- exploring additional industry development such as manufacturing, metal fabrication, and alternative energy production; and
- development of an all-season road to Fort McMurray to increase tourism development opportunities.

During the 1990s, northern Saskatchewan (predominantly the western portion) was the focus of large expansion within the uranium mining/milling industry. The exploration for, and discovery of, uranium gradually shifted from the east side of the province to the west side, where La Loche is located. La Loche remains the closest major community situated on the only corridor which provides access to the most recent uranium discovery/exploration projects.



6.2.4.1.1 Joint Federal-Provincial Panel on Uranium Developments in Northern Saskatchewan

The Joint Panel (Section 5.1.1.4.10) conducted public reviews of seven environmental impact statements covering the mining and milling of nine separate ore bodies. The Joint Panel provided over 100 recommendations focusing on stimulating changes in government policy, industry action, training-for-employment programs, employment statistics, and northern business development.

The Joint Panels recommendations included the following recommendations (Minister of Supply and Services Canada 1993):

- the approval of the Dominique-Janine Extension at the Cluff Lake mine;
- that permission to proceed not be granted to the proposed Mid-west Joint Venture mine;
- that the McClean Lake Project be delayed for at least 5 years to allow time for education, training and research;
- that start-up of any other approved projects also be spread over a number of years so that companies could work to keep training aligned with the pace of development in communities;
- that the adoption of a *Human Resource Development Agreement* take place to include employment objectives which would balance retention of workforce employees originating from nearby communities; and
- promotion of business opportunities for northerners to participate in available opportunities.

Human Resource Development Plans created for the purpose of proposed projects must include reporting on employment statistics for proposed projects to the Ministry of the Economy Labour Market Services on behalf of on-site contractors. Information must include:

- a list of employees on-site in each Employment Classification of the Operation;
- identification regarding who are residents of Saskatchewan's North, as well as who is from the designated Priority Recruitment Communities;
- detailed information regarding the nature and value of goods and services purchased during the year during the construction, operation, reclamation, and decommissioning phases;
- a description of activities undertaken by the operator of the project and its on-site contractors to achieve any objectives in the Business Opportunities Forecast for the year;
- the preparation of a five-year rolling Business Opportunities Forecast which must be updated annually;
- information on compliance with the Social and Economic Benefits Commitments, which are listed in Appendix "C". [MSLA Article 18.2]; and
- outlined commitments to work with appropriate government agencies and industry counterparts, to develop
 and fund a means by which to study the impacts of uranium mining operations on the vitality of communities
 in the NSAD through the study of selected representative communities.



Although the Government of Saskatchewan did not accept the recommended 5-year delay for the McClean Lake Project, it did commit to implementing the majority of the other recommendations made by the Joint Panel largely due to outside political pressure. The Government of Saskatchewan also initiated the first 5-year Multi-Party Training Plan (MPTP) in late 1993 with regards to training for employment in the uranium mining industry, and based on early success, the MPTP was renewed in 1998, 2003, and 2010. Information on the current status of MPTP was not available. The MPTP is further discussed in Section 6.6.4, Mining-Specific Training.

6.2.4.1.2 Northern Development Fund

In February 1995, the province announced the \$4-million NDF to stimulate economic development in northern Saskatchewan and to support northerners in business creation in response to an expanding uranium sector as describes in Section 5.1.1.4.8, Northern Development Fund. To qualify, individual applicants were required to have been resident in the NSAD for at least 10 years.

The NDF had three main program elements, for which the government initially allocated approximately \$2.6 million annually. They were:

- a \$2-million loan program for northern businesses, especially those pursuing diversification opportunities and resource industry contracts;
- support and \$315,000 in funding for new Community-based Regional Economic Development Organizations;
 and
- \$250,000 in targeted assistance to businesses for marketing, promotion, and research and development activities.

The NDF program development and implementation was driven by the Northern Economic Development office in La Ronge and administered by Saskatchewan Northern Affairs. In an area of the province with relatively few commercial banking services, the NDF provided an alternative source for northern residents who might not be able to obtain financing elsewhere.

The NDF program also established a Northern Review Board composed of northern residents. The Board was established to ensure that northerners had meaningful input on the fund's administration, planning, priority-setting, and coordination of government and community economic development.

It is important to note that the NDF also included a component to assist northerners who, rather than pursue business opportunities to supply goods or services to the mining sector, wanted to continue traditional economic activities such as commercial fishing and trapping by providing short-term loans for equipment and supplies.

An additional \$1.4 million under the NDF was to be used to provide increased professional and technical business advice to northerners and to develop an organizational training and business skills enhancement package. It also provided for the creation of a "northern business directory".

By the end of the 2004-2005 fiscal year, the NDF had provided almost \$16 million in loans and \$5.7 million in grants, assisting northern residents to participate in the northern economy more fully. The NDF was discontinued sometime after 2007. In part, the NDF contributed to a large growth in the value of goods and services provided by northern business to the mining industry in the RSA. Analysis of annual mineral industry purchase data from northern businesses in Saskatchewan for the period 1991 to 2018 (Government of Saskatchewan 2018a) shows



an increase in spend from approximately \$100 million in 1995 to a peak of approximately \$624 million in 2012. Between 2012 and 2018, the total value of purchases decreased to approximately \$178 million, which is similar to the years 2005 and 2006. The peak and later decline in purchase value aligns with fluctuations in the uranium mining industry in northern Saskatchewan. As of the writing of this report, no data has been provided by the Government of Saskatchewan since 2018.

6.2.4.1.3 Challenges for Local Businesses

Over time, northern businesses servicing the uranium sector have expanded their scope of goods and services to include heavy construction services, transportation, and bulk commodities, as well as the customer base for their existing services (CVMPP 2013). However, challenges remain largely because distance to markets and energy costs remain high. For example, there are only two larger stores in La Loche, and the prices and cost of living is reported to be high (2019 to 2021 KP interview program).

The highway leading to the La Loche region is not a thoroughfare, no developed attractions in the region are established, nor are hotel and restaurant amenities available. The region only contains one provincial park, which experiences a limited number of visitors annually. The outfitting industry in the region is also small and underdeveloped. Ideas to mitigate local business challenges include the construction of an all-season road link between Fort McMurray and La Loche to create development opportunities along the corridor to promote tourism and related activities in the region (DMCA 2018).

Improvements to the region's transportation infrastructure could work to lower energy costs and distance to markets, mitigate financial barriers local businesses may face in relation to developing opportunities and growth in relation to the manufacturing sector, and service the mineral sector (DMCA 2018). A local example includes the Northern Resource Trucking Limited Partnership, a joint venture between several communities including the CRDN and BNDN. Though based in Saskatoon, the joint venture focuses on long-distance hauling between mine sites in the RSA (NRTLP 2022). A study conducted on the socio-economic effects of uranium mining within the RSA highlighted that the size of contracts and the administrative requirements of managing uranium sector contracts also remain barriers to participation by northern-owned businesses (CVMPP 2013).

During JWG meetings, local residents noted economic development and contracting with local businesses is a priority for their communities, with a BRDN member stating, "we want to own the company, to be the contractor in a meaningful partnership – a huge percentage of the company" (BRDN-JWG 2020).

6.2.4.2 Employment, Education and Training

During KP interviews, several LSA residents noted they felt left out of the economic benefits of the uranium industry. Residents expressed that the mines in the Athabasca Basin tended to focus on the communities nearest to the uranium mines and that employment and business opportunities from those mines did not benefit communities in the northwest to the extent they should have. Despite this sentiment, many residents of the LSA communities have expressed interest in employment opportunities closer to home, including employment in the mining sector (CVMPP 2013; 2019 to 2021 KP interview program). Communities in the LSA have historically had lower employment rates in the uranium mining industry compared to other communities in the RSA. For example, employment rates in uranium mining in 2006 for LSA communities (i.e., 2.6% for La Loche and the CRDN, 5.2% for Buffalo Narrows, and 4.3% for Turnor Lake) were lower in comparison to select communities in the RSA



(i.e., 11.4% for Wollaston Lake, 11.7% for Air Ronge, and 9.2% for La Ronge¹⁸; CVMPP 2013). This lower employment rate was attributed to the considerable distance between the LSA communities and the current uranium mines in northeastern Saskatchewan; however, it could also be a result of other operations' Human Resource Development Agreements (required as a condition of MSLAs) that prioritize hiring in proximity to the respective sites.

The RSA has lower levels of educational attainment than Saskatchewan overall (Section 6.6.1, Educational Attainment) for high school, college, and university graduates. Lower educational levels are linked to lower employment and incomes as residents do not have the qualifications to fill some of the employment available. Residents of the RSA are underrepresented in professional, technical, and trade occupations relative to the number of positions employed, particularly in the mining industry (KCDC 2016).¹⁹

The median age in the RSA is much lower in comparison to Saskatchewan and somewhat lower compared to the broader north. This lower median age in the RSA gives the workforce an advantage due to the youthfulness of the population, whereas other places may face challenges surrounding aging workforces. However, lack of education and training opportunities has been cited by residents in the LSA as a barrier to employment in the uranium sector. Human Resources and Skills Development Canada estimates that 70% of new jobs will require a post-secondary education, which requires a Grade 12 education (DMCA 2018). Local study area residents have commented that positions that require higher education and skill levels are often not filled by local employees. Some LSA residents commented that various mines employing residents in the RSA closed before some employees had the opportunity to obtain their formal trade tickets on-the-job. Despite having training and relevant work experience that they felt should have allowed them to meet the qualification requirements, workers that did not have the formal trade tickets faced barriers in gaining other employment following mine closure (2019 to 2021 KP interview program).

6.3 Community Features and Infrastructure

Existing community features and infrastructure are further described in this subsection. Information included within this subsection is inclusive to communities within the LSA, but context regarding the RSA is provided. This subsection discusses aspects such as community housing stock and conditions, recreational services and facilities, healthcare services and social support, education and training institutions, and protective and emergency services. Information regarding topics on community infrastructure such as water and waste management, power and energy generation, telecommunications, and transportation are also discussed.

6.3.1 Regional Study Area

SaskBuilds is responsible for providing a central focus within the Government of Saskatchewan to coordinate infrastructure planning and delivery (SaskBuilds n.d.a). This includes the development of an annually updated integrated infrastructure plan that is used to inform the budget development process. Through this process, SaskBuilds helps ministries work toward strategically aligning infrastructure investments to the province's economic growth, population growth, and quality of life priorities.

¹⁸ 2006 data were the most recent available at the time research for the 2013 Community Vitality Monitoring Partnership Program report was undertaken.



On 3 October 2018, the governments of Canada and Saskatchewan announced the signing of an Integrated Bilateral Agreement under the Investing in Canada Plan to provide long-term infrastructure funding over the next decade (SaskBuilds n.d.b). Projects under this agreement were intended to improve community health and safety, economic growth and sustainability, environmental protection, and quality of life through investments in:

- northern, rural, and remote roads and airports;
- municipal and regional infrastructure;
- greenhouse gas mitigation; and
- culture and recreation facilities.

6.3.2 Local Study Area

6.3.2.1 Housing

Housing in the LSA is described for both First Nations on-reserve and for other communities as the ownership and management of housing maintenance in these communities is distinct. At the time of writing, information on on-reserve housing in CRDN was not available. This information will be integrated when available.

6.3.2.1.1 Community Housing

Housing in the LSA is described for both First Nations on-reserve and for other communities as the ownership and maintenance of housing in these communities is distinct. "Providing and managing housing on-reserve is the responsibility of First Nations. The Government of Canada provides funding to First Nations for safe and affordable on-reserve housing" (Indigenous Services Canada 2016). In the LSA, housing on-reserve is largely provided by the bands, while some housing is privately owned by members in Dillon, Birch Narrows, and Clearwater River²⁰, which is not fully represented in Census of Population data (2019 to 2021 KP interview program). The bands maintain current housing stock and build new houses. Due to limited funding and high demand for housing, housing can be slow to build and maintain, which results in members moving to different communities until housing in available (Rook I Project KPI Program 2019-2021). There is currently a waitlist for band housing in Birch Narrows and Buffalo River Dene Nation (Dillon). Table 9 outlines the private households by tenure and occupied private dwellings by conditions for LSA reserves (i.e., CRDN, BNDN, and BRDN). It is important to note that the dataset has random round to 0 or 5, resulting in not all values adding up to totals. This data is therefore useful to provide an indication of the housing situation rather than precise data of the exact situation.

Due to limited funding and high demand for housing, housing can be slow to build and maintain, which results in members moving to different communities until housing is available (2019 to 2021 KP interview program). Housing was noted as an important part of community well-being by the BRDN, and it was indicated that there is currently a housing shortage at Clearwater River Band No. 222 (TSD V.3: CRDN Socio-economic and Harvest Study for NexGen Rook I Project). In particular, the need for better housing was identified, and there is some concern regarding a lack of available land supply for housing (TSD V.3: CRDN).

Due to the high demand for housing, prioritizing housing for families over single people occurs for members of both BNDN and BRDN. Housing conditions are variable in Dillon and Birch Narrows (2019 to 2021 KP interview

²⁰ All on-reserve CRDN residents, primarily residing in Clearwater River Dene Band No. 222, henceforth referred to as Clearwater River.



program). Housing was noted as an important part of community well-being by the BRDN, and it was indicated that there is currently a housing shortage in Dillon (BRDN-JWG 2020). There is currently a waitlist for band housing in Birch Narrows and BRDN (i.e., Dillon). In 2020, there was a waitlist of 30 or more people in Birch Narrows, and people may be on the waitlist for several years (2019 to 2021 KP interview program). In Dillon, the housing waitlist is extensive²¹ and homelessness is an issue. In 2019, the BRDN bought a camper trailer for those in need as there is no formal housing for the homeless.

Due to the high demand for housing, prioritizing housing for families over single people occurs for members of both the BNDN and BRDN. Funding from Canada-Indigenous Relations and Northern Affairs Canada depends on population statistics, and interviewees noted that not everyone was available for the census count, making the statistics inaccurate (2019 to 2021 KP interview program).

In 2016, most dwellings on-reserve in the LSA required regular maintenance or minor repairs (i.e., 62% in Clearwater River, 69% in Birch Narrows, and 59% in BRDN [Dillon]; Table 9). Major repairs required in Birch Narrows and BRDN (Dillon) include treating black mould and fixing or replacing roofing (2019 to 2021 KP interview program). Extensive renovations since 2016 have occurred in Dillon. Black mould is a common problem in Dillon and Birch Narrows, and can often result in families moving into temporary housing while issues are addressed (2019 to 2021 KP interview program).

Table 9: Private Households by Tenure and Occupied Private Dwellings by Conditions for LSA Reserves, 2016

Housing Characteristics	CRDN ^(a,b,c)	BNDN ^(a,b,d)	BRDN ^(a,b,e)
Private households by tenure ^(f,g)	185	130	235
Owner	10 (5%)	0 (0%)	35 (15%)
Renter	15 (8%)	10 (8%)	15 (6%)
Band housing	170 (91%)	120 (92%)	180 (77%)
Occupied private dwellings by dwelling condition ^(g,h)	185	130	230
Only regular maintenance or minor repairs needed	115 (62%)	90 (69%)	135 (59%)
Major repairs needed	75 (41%)	40 (31%)	100 (43%)

Source: Statistics Canada 2016 .

a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Statistics Canada refers to CRDN as Clearwater River Dene Nation Band 222.

d) Statistics Canada refers to BNDN as Birch Narrows Dene Nation – Turnor Lake 193B.

e) Statistics Canada refers to BRDN as Buffalo River Dene Nation Band 193.

f) Tenure: refers to whether the household owns or rents their private dwelling. The private dwelling may be situated on rented or leased land or be part of a condominium. A household is considered to own their dwelling if some member of the household owns the dwelling even if it is not fully paid for, such as if there is a mortgage or some other claim on it. A household is considered to rent their dwelling if no member of the household owns the dwelling. A household is considered to rent that dwelling even if the dwelling is provided without cash rent or at a reduced rent or if the dwelling is part of a cooperative.

For historical and statutory reasons, shelter occupancy on Indian reserves or settlements does not lend itself to the usual classification by standard tenure categories. Therefore, a special category, band housing, has been created and is included in the classification of tenure.

g) 25% sample data.

h) Dwelling condition refers to whether the dwelling is in need of repairs. This does not include desirable remodelling or additions.

CRDN = Clearwater River Dene Nation; BNDN = Birch Narrows Dene Nation; BRDN = Buffalo River Dene Nation.

²¹ The waitlist count is not exact, with some interviewees indicating that it is over 100 people; however, it should be noted that some applicants reapply multiple times (2019 to 2021 KP interview program).



6.3.2.1.2 Off-Reserve Housing

Information on off-reserve housing in the LSA communities was provided through KP interviews. Housing is reported to be very overcrowded in La Loche and some people reside in houses with 10 to 15 other people (2019 to 2021 KP interview program). La Loche has about 700 units, with no more than 10% privately owned. Based on available information, of these 700 units, over 300 units are owned by the La Loche Housing Corporation (affiliated with Sask Housing), 55 units are owned by Northern Lights School, approximately 20 units are owned by the RCMP, and approximately 20 units are owned by the health authority (2019 to 2021 KP interview program). Methy Housing Corporation owns 129 units in La Loche, the majority of which are duplexes and some four-plexes. In recent years, the only new housing stock in the community has been built by Methy Housing. In 2019, Methy Housing was in the process of building 16 new homes and had a waitlist of over 300 people. From 2020 to 2021, NexGen seconded some of the LPA workers for the Project to Methy Housing to assist with a range of activities including house construction and renovations.

Housing in La Loche was previously developed by the provincial government through what evolved into the Saskatchewan Housing Corporation. In the 1990s, the Government of Saskatchewan stopped direct delivery from the province and eventually switched to providing funding through programs like the Rental Development Program through Saskatchewan Housing. Other funding is provided by the Provincial Métis Housing Corporation. Housing is funded through partnerships with programs. The village also has made efforts to secure housing for nurses of the health district. Methy Housing Corporation indicated that once the current subdivided lots are complete, the town will have no serviced lots remaining. Servicing new subdivisions comes at considerable costs (e.g., approximately \$1.4 million per subdivision).

High rental costs and crowded conditions, along with lack of available housing relative to the demand, is also common in Buffalo Narrows. Although there is considered to be less homelessness in Buffalo Narrows compared to La Loche, exact numbers are unknown since many reside with friends and relatives (Prairie ID Consulting 2015). The lack of housing in municipalities in the LSA was noted as something that detracts from community well-being by Métis citizens (MN-S-JWG 2020).

Housing shortages also affect the northern hamlets and settlements in the LSA, which do not have enough housing or developed land to meet demand, often resulting in younger residents moving away. The people in northern hamlets and settlement believe that many residents would return if more housing were made available (2019 to 2021 KP interview program).

6.3.2.1.3 Housing Stock and Conditions

Black Point has 26 houses, of which 23 are inhabited full-time; the remainder are owned by those who live in southern Saskatchewan and stay in the community on a temporary basis (2019 to 2021 KP interview program). Many of the houses are older and a minority of them are newer. Some houses were built in the early 1990s through the Métis housing program and are not in good condition (2019 to 2021 KP interview program). In Black Point, most private dwellings require major repairs (Table 10). Many homeowners owe money on land taxes, so they do not qualify for grants to renovate them.

Housing conditions are variable in Dillon and Birch Narrows (2019 to 2021 KP interview program). In Dillon, mould is a persistent issue in homes and repairs are needed for roofing issues as the weather causes shingles to erode (2019 to 2021 KP interview program). In La Loche, Buffalo Narrows, Turnor Lake, St. George's Hill, and Michel



Village, most private dwellings require regular maintenance or minor repairs (Table 10). Issues include mould and inadequate windows and doors. Michel Village has 26 houses that are in fair condition and seasonally inhabited. In Dillon, those with mould in their homes receive modular homes (2019 to 2021 KP interview program). In La Loche, the homes are in average condition and typically last 30 years. While the community has the capability for repairs, their access to funding is limited.

Table 10 presents the number of private households by tenure and condition for La Loche, Turnor Lake, Buffalo Narrows, and other northern villages and hamlets within the LSA. Renting is more common in La Loche, with the majority of dwellings rented by residents (430 rented dwellings verses 225 owned by occupants) from local companies, such as Methy Housing Corporation. Except for Turnor Lake, most private dwellings in the other municipalities in the LSA are owned by the occupant.

In La Loche, some of the houses do not have running water or sewage. The community does not have sufficient revenues for upgrades. Some participants in key person interviews indicated that a number of communities members do not pay taxes due to their belief that they are receiving minimal services, which also leads to additional community members not paying taxes given their understanding that not all community members are paying taxes (2019 to 2021 KP interview program).

Table 10: Private Households by Tenure and Occupied Private Dwellings by Conditions for Local Study Area Communities, 2016

Metric	La Loche ^(a,b)	Buffalo Narrows ^(a,b)	Turnor Lake ^(a,b)	Black Point ^(a,b)	St. George's Hill ^(a,b)	Michel Village ^(a,b)
Private households by tenure ^(c,d)	655	400	45	20	45	20
Owner	225 (34%)	245 (61%)	20 (44%)	10 (50%)	30 (67%)	15 (75%)
Renter	430 (66%)	150 (38%)	20 (44%)	0 (0%)	15 (33%)	0 (0%)
Occupied private dwellings by dwelling condition ^(d,e)	655	400	45	15	45	25
Only regular maintenance or minor repairs needed	505 (77%)	345 (86%)	30 (67%)	0 (0%)	25 (56%)	15 (60%)
Major repairs needed	155 (24%)	55 (14%)	15 (33%)	10 (67%)	20 (44%)	0 (0%)

Source: Statistics Canada 2016 .

Note: Due to supressed data, Ducharme Lake and Garson Lake have been omitted from the table.

d) 25% sample data.

e) Dwelling condition: refers to whether the dwelling is in need of repairs. This does not include desirable remodelling or additions.

a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Tenure: refers to whether the household owns or rents their private dwelling. The private dwelling may be situated on rented or leased land or be part of a condominium. A household is considered to own their dwelling if some member of the household owns the dwelling even if it is not fully paid for, such as if there is a mortgage or some other claim on it. A household is considered to rent their dwelling if no member of the household owns the dwelling. A household is considered to rent that dwelling even if the dwelling is provided without cash rent or at a reduced rent or if the dwelling is part of a cooperative.



6.3.2.2 Recreational Services and Facilities

Recreational facilities are similar among the LSA communities, with each having some indoor and outdoor facilities. Each community has some form of organized recreational services that is volunteer- or community-run. Information on levels of use, capacity, and program/infrastructure gaps was not available for each LSA community.

6.3.2.2.1 Clearwater River Dene Nation

Recreation infrastructure provided to CRDN members living on-reserve include an indoor rink and an outdoor rink, a beach volleyball court, a local playground, a community hall, a small bike park, and baseball diamonds (CRDN 2013). NexGen has also supplied recreational equipment such as an indoor gym equipment for the CRDN Youth Centre in 2020.

At the time of writing, additional information on recreational services and facilities in CRDN was not available. This information will be integrated when available.

6.3.2.2.2 La Loche

La Loche has a hockey arena, town park, skateboard park, two outdoor rinks, and a library available to residents. NexGen provides funding for the La Loche Sports, Recreation and Culture Board employees to maintain and operate the recreational facilities including the hockey arena and outdoor rinks. This funding also supports other recreational and cultural activities (e.g., crafts). In a partnership with La Loche Sports, Recreation and Culture Board, NexGen provided fencing for the children's spray park in La Loche.

The nearby lakes offer a range of activities including fishing, boating, swimming, camping, sightseeing, picnicking, and touring. In the winter, residents hunt, ice skate, snowmobile, and ski. The La Loche Arena Complex includes the Robbie Fontaine Memorial Arena, which is used regularly throughout the winter months. Sports programs such as hockey are available at the arena. Recreation programs for students such as volleyball are supported through the high school (NLSD 2020a).

Since 2017, NexGen has provided support to minor volleyball and hockey teams in the LPA communities. This supports local youth engagement in sports and provides opportunities to participate in sporting events throughout the province and across Canada. These sports programs were suspended during the pandemic but resumed for the 2021-2022 year and is an ongoing initiative.

Bingo and other community and social events are also available to the residents of La Loche. Bingo is provided by the local radio station, CHPN Radio, which also provides community TV (Northern Business Directory 2017). In 2016, a community wellness plan was developed for the community of La Loche, which included the planning of family events such as picnics to celebrate Mother's Day, Father's Day, and National Aboriginal Day (La Loche 2018, Appendix F). Treaty Days are an annual social event held in La Loche.

Since 2018, NexGen has provided funding for on-going recreational programming through the La Loche Sports, Recreation and Culture Board. This program provides structured after-school and summer-holiday recreational events and opportunities for the youth community and community members. The programming consists of activities such as beadwork, holiday decorating, traditional music lessons, and free public skating. The program was paused in Q2 2020 due to disruptions associated with the pandemic and resumed in Q3 2020. The



recreational programming was adjusted during the pandemic to accommodate all Covid-19 related restrictions and public health orders.

Dene High School has a weight room for students and is also open to community members for a small fee. The facility is in regular use and is fully staffed to assure being open to the community (2019 to 2021 KP interview program; 2020 youth workshop).

6.3.2.2.3 Birch Narrows Dene Nation and Turnor Lake

The BNDN recognizes that recreation is important to youth and adults and plays an important role in preventing social and health issues, including substance abuse (BNDN 2018). Birch Narrows Dene Nation members and residents of Turnor Lake have access to an indoor ice rink, baseball diamonds, school gym, weight room, and running track on the reserve (BNDN 2018; 2019 to 2021 KP interview program). The lake and surrounding areas provide opportunity for outdoor activities include fishing, canoeing, hiking, cross-country skiing, and other activities.

There is bingo two nights a week in Birch Narrows (2020 youth workshop; BNDN 2013; 2019 to 2021 KP interview program). The BNDN has one employee and one elected councillor who provide recreation activities. Volunteers run many of the programs and they rely on financial support from fundraising or corporations. Birch Narrows Dene Nation youth would like support for basketball, hockey, and soccer programming (BNDN 2018).

6.3.2.2.4 Buffalo River Dene Nation (Dillon)

The BRDN plan events for both winter and summer while working through the year with youth. The band holds local summer and winter games, which include activities such as hockey, basketball, running, canoeing, badminton, basketball, baseball, and volleyball. As the community is located along Peter Pond Lake, members fish and boat on the lake. The BRDN holds an annual fishing competition.

On-reserve recreational facilities include a hockey arena, beach volleyball court, and school gym. The hockey arena recently had an upgrade of the cooling system (2019 to 2021 KP interview program).

Gaps in the community include a lack of playgrounds, water parks, and recreational facilities where youth can play games and activities, such as pool. There is also a gap in Elders facilities for activities within the community (2019 to 2021 KP interview program). Other gaps include instructors for swimming and ball games.

6.3.2.2.5 Buffalo Narrows

Buffalo Narrows has various recreation opportunities. There is a hockey arena, the Lakeview Complex Arena, as well as a baseball and soccer field. The Lakeview Complex hockey arena uses artificial ice and is heavily used by the community (NLSD 2020b; 2019 to 2021 KP interview program).

Buffalo Narrows has a volunteer-run community recreation board. The board relies on fundraising and grants to offer recreation events. These events include movie nights, gym nights, craft nights, women- and men-specific event nights that provide various activities for the community members to participate in such as cooking and knife making, paint nights, bingo, and various sports nights (2019 to 2021 KP interview program).

Baseball is offered as a local activity in the summer, though it does not have a designated league. Hockey is offered primarily in the winter with various leagues, including an adult recreation league, minor leagues, and a senior league. Programming is limited by the amount of time volunteers can dedicate to recreation programming and funding (2019 to 2021 KP interview program).



The community is situated between Peter Pond Lake and Churchill Lake, which offers opportunities for outdoor recreation such as canoeing, kayaking, and fishing. There are also hiking trails close to the community (Tourism Saskatchewan n.d.). Other recreation activities near Buffalo Narrows include Buffalo Narrows Sand Dunes Park, which includes Big Buffalo Beach Recreation Area and is located a few kilometres from the village. This area is a sandy beach located along the southwest shore of Big Peter Pond Lake (Tourism Saskatchewan n.d.).

6.3.2.3 Social Services

6.3.2.3.1 Meadow Lake Tribal Council

The MLTC runs programs for members of the CRDN, BNDN, and BRDN. These programs include the Meadow Lake Child and Family Services, Youth Development Program, and the Justice Program. Programs are run by a committee of band councillors associated with the MLTC who make the decisions for funding and programming. Programs include the following:

- The Child and Family Services Program includes child prevention services, alternate/foster care services, family connections services, and family support. The program relies more heavily on prevention workers who work directly with families. It is preferred that children remain with their families whenever possible rather than apprehending and placing in alternate/foster care (MLTC 2018; 2019 to 2021 KP interview program).
- The Youth Development Program includes support to maintain youth programing, team building and prevention programming, and the National Aboriginal Youth Suicide Prevention Strategy. Resources distributed include those from Educators for Social Responsibility, Reclaiming Youth, Circle of Courage, Violence Prevention, Self Esteem Information, Developmental Assistance, and Search Institute (MLTC 2018).
- The Sport Program is a portion of youth development provided by the MLTC. To provide this program, the MLTC partners with various organizations such as Federation of Sovereign Indigenous Nations Sports, Culture, and Recreation Board, Saskatchewan Sports, sport governing bodies, and the Saskatchewan Lotteries. The purpose of this program is to support the delivery of community-based recreation and leisure programming and to give First Nation youth an opportunity to develop and grow into young adults (MLTC 2021).
- The Justice Program provides restorative and community-based justice services. The program is facilitated through a Justice Coordinator who provides services, which include mediation files, fine options plans, court appearances, and other justice initiatives (MLTC 2018). It was indicated during KP interviews that mediation and circles are generally supported in Dillon whenever possible through the Justice Program due to tensions with the RCMP (2019 to 2021 KP interview program).

Additional programming includes one that brings in social life skills programs for clients (2019 to 2021 KP interview program). Currently, the MLTC's social development department has 83 clients (2019 to 2021 KP interview program). Another program provides funding for post-secondary education for First Nation members, which pays for tutors, living allowances, books, and travel to and from the institute. The program has a maximum capacity of 20 students; currently, five students are supported.



6.3.2.3.2 Clearwater River Dene Nation

Programs offered in the CRDN included Project Venture, which provided to high-risk Indigenous youth from Clearwater River School and Dene High School. The program used outdoor activities and games to teach youth about their Indigenous culture, as well as life skills such as problem solving and communication. The program also aimed to reduce substance abuse, drug-related crime, and interpersonal violence. The Government of Canada provided \$2.2 million in funding toward the project, which was distributed over five years between 2016 to 2021. In 2021, Public Safety Canada was conducting performance monitoring and assessment of the program (Public Safety Canada 2021).

At the time of writing, information on social supports in CRDN was not available. This information will be integrated when available.

6.3.2.3.3 La Loche

The La Loche Friendship Centre is an important resource and gathering place in the community and is dedicated to promoting sport, culture, recreation, youth, and community (La Loche Friendship Centre 2020). It is a not-for-profit organization run by the Aboriginal Friendship Centres of Saskatchewan, which runs friendship centres across the province and is funded by the Government of Canada via the Native Association of Friendship Centres and through Provincial and Territorial associations (Aboriginal Friendship Centres of Saskatchewan 2018). Programs run out of the La Loche Friendship Centre include:

- The Justice Program focuses on mediation in the court system. The purpose of the program is to assist those with low incidences of crime or those that have committed non-violent offences such as vandalism. To participate in the program, victims of the offender must agree to participation (2019 to 2021 KP interview program).
- The Youth Intervention Program is aimed at young offenders within the community between the ages of 14 and 23 and mandated by their probation officers. The program focuses on integrating youth into society and providing them with training and employment opportunities (2019 to 2021 KP interview program). The program has one staff member.
- The Homelessness Initiative provides a sheltered indoor space for the unhoused to spend their time during the day. The initiative focuses on providing necessary services to those in need, including seasonally-appropriate clothing and three meals a week (i.e., Monday, Wednesday, and Friday) to unhoused individuals and low-income families (2019 to 2021 KP interview program). The program serves around 100 people a day.
- The Family Support Program works with at-risk families mandated by the Ministry of Social Services to participate. Those mandated into the program are at a higher risk of children being removed from the home based on court decisions. Other clients use the diversion services, which aim to assist in the development of healthy families and children. These clients are either community-referred or walk-in. The program has two program workers and a coordinator. The program has a diverse group of clients and over 100 applicants (La Loche Friendship Centre 2020; 2019 to 2021 KP interview program).



Other social services in La Loche include Project Venture (Section 6.3.2.3.2, Clearwater River Dene Nation), Kids First North, and Healthy Moms, Babies and Families. Kids First North is a voluntary, confidential support program designed to help families in early years of development when the child is five and under. It aims to provide support, knowledge, and build family strengths. It is provincially funded and directed (Kids First North 2018). Healthy Moms, Babies and Families is a prenatal and postnatal nutrition support group that assists in transportation to and from check-ups and referrals to other agencies in the community (Northern Business Directory 2017). The program provides services to Indigenous Groups, those living in rural and remote areas, single parents, and teen parents. Funding is provided by the Canada Prenatal Nutrition Program and the Public Healthy Agency of Canada (Government of Canada 2016b).

6.3.2.3.4 Birch Narrows Dene Nation and Turnor Lake

Social assistance is provided in BNDN through the MLTC. Along with funding assistance, MLTC bring programs in for clients, such as social life skills and helping members apply for jobs (2019 to 2021 KP interview program). Social services programs available at facilities such as the Annie Bagg Memorial Nursing Station (Northern Saskatchewan Health Services 2009a) are available for both BNDN members and Turnor Lake residents (2019 to 2021 KP interview program). The community has a land-based coordinator that combines healing and having youth go out on the land and participate in land-based activities such as going onto a trapline (2019 to 2021 KP interview program).

Along with programs run in the community through the MLTC, the BNDN has their own Youth Development Program that has run annually since 2005. The Youth Development Program provides an opportunity for youth in the community to get together in a combination of traditional and Christian approaches and share meals and time together, ending in a candlelight vigil. The program runs for four days and three nights. Other communities in the region, such as La Loche, have participated in the program in the past (2019 to 2021 KP interview program).

The community is looking to increase their outreach to members through a range of means, including:

- establishing programming for Elders;
- establishing a women's and men's group; and
- providing youth group activities.

The BNDN want to establish programming to ensure members with special needs are included and supported. In addition, the BNDN would like continuing and ongoing support for the community crisis team and increased education on community social issues such as addictions, suicide prevention, and reducing shame (BNDN 2018). The BNDN would also like a youth centre, since the old one has closed (BNDN-JWG 2020; 2020 youth workshop).

6.3.2.3.5 Buffalo River Dene Nation (Dillon)

Programs funded by Jordan's Principle, , are run out of the health centre. Jordan's Principle is a legal rule established in 2016 by the Government of Canada after the Canadian Human Rights Tribunal determined the government's method for services for First Nations children in Canada was discriminatory. Through the funding provided through Jordan's Principle, the BRDN can provide mental health support to youth in the community, as well as provide cost assistance for families with disabled children. Programs funded by Jordan's Principle assist



First Nations children in accessing products, services, and supports when they need them, which includes health, social, and educational needs (Government of Canada 2021b).

During National Addictions Awareness Week in 2019, many programs were run to inform residents of the causes of addictions and how to prevent or reduce the effects. These programs were run in association with the health centre and with help from funding from Jordan's Principle (2019 to 2021 KP interview program). The community also hosts several events throughout the year focusing on wellness for men, women, couples, and youth, and cultural and land-based activities for students.

Currently, there is no aftercare in the community to assist those that return from facilities to treat mental health and addictions. The only option offered within the community for those seeking support mental health and addiction support is the clinic (BRDN-JWG 2021c). There is a desire within the community to offer a program on mental health awareness (2019 to 2021 KP interview program). Key person interviewees indicated that often, residents are reluctant to seek assistance. It was further indicated by some interviewees that reasons for this include bullying from other residents and a reluctance to own up to their own actions and that residents are often struggling through grief and loss (2019 to 2021 KP interview program).

Buffalo River Dene Nation members have noted that there is a lack of social services and facilities in the community. Facilities the community would like to see in place include a youth centre, Elder's centre, and friendship centre (KP Interviews; BRDN-JWG 2020). Key person interviews also identified a need for homecare for Elders in Dillon as there are no services currently available.

In 2019, the Social Assistance department for the BRDN had a portfolio of around 200 clients. The social assistance programs assist members seeking employment with needs such as childcare, transportation, and health and safety certification. Future development of programs included an education upgrading program and driver's education. The Social Assistance Departments typically try not to have more than 10 to 20 clients in a program at once (2019 to 2021 KP interview program).

6.3.2.3.6 Buffalo Narrows

The Buffalo Narrows Friendship Centre oversees three programs in the community:

- **Kids First North** is designed to assist families in early years of development when the child is five and under (Kids First North 2018; 2019 to 2021 KP interview program).
- Family Support Services is mandated by the provincial government and includes three field workers (Government of Saskatchewan 2018b). The program focuses on families in crisis within the community. Workers check in on local families and provide recommendations based on living conditions and family structure. If recommended, children may be removed from the home temporarily. Parents continue to be contacted when children have been removed to determine whether children can be reunited with their parents in the future (2019 to 2021 KP interview program).
- The Aboriginal Head Start School Program consists of early education for ages three and four to allow them to be prepared for kindergarten. Programming is conducted at a secondary location near the Little Eagles Daycare and Twin Lakes Community School (2019 to 2021 KP interview program).



Homeless people in Buffalo Narrows often spend their day at the Friendship Centre. Occasionally, the Friendship Centre will provide meals for the homeless, but meal provision is limited by available funding. Community events at the Friendship Centre are also limited due to funding (2019 to 2021 KP interview program).

Other social services available in Buffalo Narrows include the Buffalo Narrows NorthSask Victim Services and Children Exposed to Violence. The NorthSask Victim Services includes crisis intervention, information support, and referrals to other specialized programs for victims of crime and is offered by the Government of Saskatchewan (Government of Saskatchewan 2018b). Children Exposed to Violence is a government program in Saskatchewan aimed at children and youth who have witnessed or experienced interpersonal violence or abuse with the goal of preventing them from becoming victims or perpetrators of violence and abuse in the future (Government of Saskatchewan 2018b).

Key person interviews identified a lack of a physical space for Elders in the community to gather.

6.3.2.3.7 Other Social Assistance Programs

Other social assistance programs include the Saskatchewan Income Support funded by the Government of Saskatchewan. In 2021, the Saskatchewan Income Support program replaced two previous programs: the Saskatchewan Assistance Program and Transitional Employment Allowance. Key person interviews indicated that this change from the separate social assistance programs to Saskatchewan Income Support would greatly affect low-income residents in La Loche and Buffalo Narrows, and the funding is insufficient to cover the cost of groceries and travel (2019 to 2021 KP interview program). Social Assistance is depended upon in La Loche as a financial lifeline. Previously, the Saskatchewan Assistance Program and Transitional Employment Allowance programs covered the cost of utilities for clients, but under the new Saskatchewan Income Support program, the costs of rent, utilities, taxes, and all other home-related costs are under a shelter benefit, meaning a single adult would have to pay for all the home-related costs with \$500 to \$600 a month (CTV News 2021).

Common issues in La Loche and Buffalo Narrows include housing, finances, food security, and child and family related matters. Although federal programs are available, residents will often call provincial government social services for additional information and referrals. Key person interviews indicated that additional programs and services that would benefit the community include teaching life skills, and financial management.

6.3.2.4 Education and Training Institutions

6.3.2.4.1 Daycare and Preschool

Data on the capacity of schools in the LSA communities was not available for each community. Childcare facilities are available in La Loche, BNDN, Dillon (BRDN), and Buffalo Narrows. All childcare available in the LSA has a waitlist due to limited space.

Dillon (BRDN) has a new pre-school and daycare modular facility with space for twelve children at the daycare and 10 children for the pre-school (2019 to 2021 KP interview program). The waitlist typically has three to five children. At the time of interviews, the previous daycare was at capacity and the building floor was collapsing. Indigenous Services Canada provided funding for the new building. Difficulty in finding childcare was noted as a barrier to employment and education during the KP interviews.

Buffalo Narrows has a daycare/pre-school facility, Buffalo Narrows Little Eagles Daycare, with nine staff members and space for 36 full-time children (2019 to 2021 KP interview program). The daycare had a waitlist of nine



children in 2019. Childcare spaces fill up quickly and many mothers will add their names to the waitlist when they are on maternity leave. In 2019, the facilities were sufficient for the community's needs. The facility typically has around six infants, 10 toddlers and around 20 pre-schoolers. Buffalo Narrows also has an Aboriginal Head Start Program with 40 pre-school spaces and six staff members. In 2019, the pre-school had an enrollment of 26. The program is free and paid for by Northern Lights School Division (NLSD). Parents will also use other parents and those on maternity leave for supplemental childcare. While the facility will take casual walk-ins, they do not become available until the day of after 9:30 am. Some spots include children in pre-Kindergarten and Kindergarten. Those students still count as a full slot as they arrive before school, have lunch at the daycare, and stay after school until pick-up. Since the daycare is located beside Twin Lakes Community School and the Aboriginal Head Start Pre-school, students are taken to the facilities by the staff at the daycare (2019 to 2021 KP interview program).

The La Loche Daycare has twelve spaces (three infant; five toddlers; three pre-Kindergarten, and one flexible pre-Kindergarten). Enrollment is full and there is a waitlist of two to three months. Priority spots are given to parents who are in high school so that they can continue to attend school. The La Loche Preschool, which opened in 2019, has capacity for 80 children.

6.3.2.4.2 Primary and Secondary Education

6.3.2.4.2.1 Administration

Public primary and secondary school education in the LSA communities is administered under the NLSD No.113, which is the administrative body for all public schools in the RSA. Most students between kindergarten and Grade 12 in the NLSD self-identify as Indigenous. Between 2015/2016 and 2018/2019, Indigenous students made up over two-thirds of the total enrollment in the LSA ,and in 2019/2020 they made up over three-quarters of total enrollment (NLSD 2020c). In 2020, the NLSD had 280 full-time equivalent (FTE) teachers and 265 other educational staff (positions that support educational programming). Transportation costs are waived by the NLSD for students in remote communities who are required to leave their communities to attend high school, which includes costs for mileage, room and board, and airfare.

6.3.2.4.2.2 Educational Institutions

Twin Lakes Community School in Buffalo Narrows offers Kindergarten through Grade 12 for approximately 300 children from Buffalo Narrows and the surrounding area, and is staffed with 20 teachers (Twin Lakes Community School n.d.; 2019 to 2021 KP interview program). The school can accommodate around 350 students and has class sizes of 25 students. Aside from the core school subjects, such as math and English, it offers welding, carpentry, commercial cooking, and drafting. The school offers Adult 12 (Grade 12 education for adults aged 18 to 21), after which students would have to transfer to Northlands College (2019 to 2021 KP interview program). Enrollment has decreased between 2006 and 2016 along with staff numbers. Contributing to this was the closure of certain mines, which caused some community members to leave. The school has an even distribution of students across grades.

Buffalo River School in Dillon offers Kindergarten to Grade 12 for approximately 300 students for the BRDN and neighbouring hamlets. Enrollment fluctuates year-to-year and at the end of the year as well. It is unknown why enrollment rates decrease towards the end of the school year (2019 to 2021 KP interview program). The school has six teachers for Kindergarten to Grade 9, four high school teachers, two coordinators, and six interventionists (e.g., for math, literacy, targeted behaviour) (Buffalo River School 2021). The school has a land-based teacher



who organizes a fish camp, berry picking, Elder stories, and rabbit snares. The school is understaffed and needs five additional teachers, and interviewees indicated that it would be good to have a separate high school (2019 to 2021 KP interview program). For Adult 12 education, the nearest campus is Northlands College in Buffalo Narrows. The community does not have the capital funds to build an education centre. Students from Michel Village and St. George's Hill are bussed to Buffalo River School for high school programs, while those in grades under Grade 9 attend school in St. George's Hill (2019 to 2021 KP interview program). Since 2017, the community has had a land-based coordinator with funding from the MLTC. The land-based coordinator sets up camps (e.g., fish camps) at Vermette Lake and takes students out for land- and water-based activities with Elders.

Birch Narrows Community School located in BNDN serves students from both the BNDN and Turnor Lake. In the 2019 to 2020 year, there were 206 students enrolled and the school can accommodate up to 350 students (KP Interviews). Adult students are integrated into the classroom and are allowed to attend until 21, after which they would have to pursue adult education elsewhere, such as Buffalo Narrows or La Loche (2019 to 2021 KP interview program). Enrollment in the school has slightly increased between 2006 to 2016 and there are more elementary students than secondary students (2019 to 2021 KP interview program). Enrollment fluctuates year-to-year. In 2017, many people left the community for further education and enrollment dropped to 180 (2019 to 2021 KP interview program). The school would like to expand its programming, but lacks the skilled labour to convert storerooms to offices and space for special education and home-economics (2019 to 2021 KP interview program). In the 2017/2018 school year, the school had eight graduates; graduation rates fluctuate. Interviews indicated that having assistance with post-secondary application processes would help the students. Graduates of the school may leave the community to continue further education at Northlands College, which is closer to home, and many become educational assistants.

Clearwater River School in CRDN is a Kindergarten to Grade 9 school and is staffed by 18 teachers (Clearwater River School 2021). In the 2019 to 2020 school year, the school had 230 students (CBC 2020). Students from the CRDN attend Dene High School in La Loche based on available programing.

Sasdaze in Bear Creek is a one-room elementary school that has one teacher and one educational assistant. The school has educated between six and 13 students in any given year since it opened in 2003. The school has had difficulties finding permanent staff and has had a new teacher every year or every other year between 2013 and 2019 (Saskatoon StarPhoenix 2019).

As the most populated LSA community, La Loche has the largest educational facilities and provides primary and secondary education for the community and surrounding areas, which includes Black Point, Descharme Lake, and Garson Lake. Black Point, Descharme Lake, and Garson Lake do not have any education facilities (2019 to 2021 KP interview program). The Ducharme Elementary School in La Loche is a Kindergarten to Grade 6 school with 31 teachers that provides education for approximately 500 students from La Loche and the surrounding areas (NLSD n.d.). Dene High School in La Loche provides Grade 7 to 12 education and has supporting programs including a breakfast and lunch program for students, and a wellness centre. The school has seen enrollment fluctuate between 350 to 450 students between 2015 and 2019; this fluctuation is linked to the classes offered and movement of students to surrounding communities. Attendance increased between 2016 to 2019 due to programs such as the breakfast and lunch program, and the open wellness centre, which is staffed by three workers and a therapist once a month.



The elementary school has traditional education programs that provide outdoor education opportunities for children, including a modular farm from President's Choice Children's Charity. The high school offers trades courses in construction and carpentry, as well as an Adult 12 program. Adult 12 is an educational program designed for adult learners (i.e., 18 and over) to achieve a Saskatchewan Grade 12 standing (Northlands College 2021). Students in the Adult 12 program are integrated into other classes as Adult 12 class sizes are often too small to have their own lessons, and because of limited teaching staff and classroom space. Interview participants noted that there is limited time or resources to offer many courses outside the standard high school level courses (2019 to 2021 KP interview program).

Since 2017, through a partnership with the Breakfast Club of Canada, NexGen has provided funding for the provision of healthy breakfasts to over 1,100 students each school day, and the employment of eight local cooks to prepare the breakfasts at the Ducharme Elementary School, Dene High School, and Clearwater River Dene School. Schools in Saskatchewan closed in Q2 2020 due to the pandemic, and in May 2020, food boxes were delivered to the homes of each student. The schools each had a uniquely modified breakfast program reflective of the current conditions at the school as the pandemic progressed and schools alternated between online and inperson learning. NexGen continues to fund the Breakfast Program in all three schools.

Participants in JWG sessions noted concerns about not enough training facilities for both youth and adults, not enough students taking maths and sciences in high school, and the frequent need for students to leave the community to pursue further education (MN-S-JWG 2020; BRDN-JWG 2020; BNDN-JWG 2020). Teacher retention is difficult, and many positions are filled by substitutes without degrees.

6.3.2.4.3 Post-Secondary Education

The only post-secondary education facilities in the LSA are located in La Loche and Buffalo Narrows.

Gabriel Dumont Institute (GDI) has a location in La Loche. Programs offered include programs to support adults to upgrade their education (including Adult 12), various post secondary courses, and industry-recognized training and programs leading into an apprenticeship (GDI 2021). Training courses that have been offered include (GDI 2021):

- industrial mechanic (millwright);
- multi-sector safety ticket training;
- enhanced introduction to carpentry;
- construction trades training;
- heavy equipment operator; and
- heavy equipment and truck and transport technician.

Training courses vary depending on labour market conditions and the GDI meets regularly with northern companies to determine the programs that may be required for current employment needs. There is high demand for training at the GDI, resulting in waitlists for most programs (GDI 2021). Currently, there are space and equipment constraints at GDI and they have rented space at the neighbouring high school. There is a waitlist for programs offered at the La Loche location for every program as enrollment is higher than available seats (2019 to



2021 KP interview program). The La Loche campus has requested mental health and addictions awareness courses as well as driving courses for the near future, though Class 5 driving lessons have occurred in Buffalo Narrows and Beauval in 2020 and 2021

The GDI in La Loche also offers Adult Basic Education levels 1 to 4 to community members. These programs provide a range of educational skills from literacy to interpersonal skills to lifelong learning skills. The Northern Economic Development Intern Program run through the GDI offers online distance learning with a paid internship that involves data management, mapping, and workplace skill development (GDI 2021; 2019 to 2021 KP interview program). Currently, the GDI rents two buildings, and students taking essential skills are in the curling rink lobby due to space constraints. According to interviews with the GDI, community members do not face challenges in finding employment upon completion of post-secondary training and there is a shortage of trained workers.

Northlands College has a campus in Buffalo Narrows with a small satellite campus in La Loche located at Dene High School. Northlands College in Buffalo Narrows offers post-secondary education to approximately 80 students from Buffalo Narrows as well as surrounding communities including La Loche, Turnor Lake, Dillon, Île-à-la-Crosse, Beauval, Pinehouse, and others. Learning programs include Nursing, Institutional Cooking, Bachelor of Arts, Bachelor of Social Work, as well as other certificate and diploma programs. Northlands College offers Adult 12 as well as a variety of university level courses. The Buffalo Narrows campus has less capacity than the La Ronge campus (2019 to 2021 KP interview program). Interview respondents indicated that they could obtain safety tickets through Northlands College. Interviewees also identified a need for a community higher education building (2019 to 2021 KP interview program).

Currently, there are no post-secondary programs offered in Birch Narrows and Dillon (2019 to 2021 KP interview program). A BNDN member commented they would like to see more training offered in the community, stating, "I believe in bringing the training to our community rather than the students travelling out" (BNDN-JWG 2021a). While there are opportunities to get training for jobs in industry, a BRDN member noted that workers do not have the skills to get to the next steps such as obtaining a Driver's licence. Additional information about post-secondary programs offered for the CRDN were not available at the time of writing.

Funding available for post-secondary community members includes a post-secondary alliance from the federal government, which pays for tuition, books, and living expenses (2019 to 2021 KP interview program).

6.3.2.5 Healthcare Facilities and Services

Multiple jurisdictions provide health services in the RSA, including Northern Saskatchewan Population Health Unit (NSPHU 2016):

- Saskatchewan Health Authority: previously, the LSA communities were under the health jurisdiction of the Keewatin Yatthé Regional Health Authority. All 12 health authorities in the province were amalgamated into the single SHA in 2017.
- **First Nations**: Some services in the LSA communities are currently provided by the MLTC as responsibilities related to the administration of health services have been transferred from the federal government to individual First Nations.
- **Population Health Unit** (northern health authorities): provides specialized services via the northern health authorities and First Nations' co-operative partnership.



Northern Inter-Tribal Health Authority: covers several communities outside of the northern health authorities.

The SHA facilities in the LSA include the La Loche Health Centre and Hospital and the Buffalo Narrows Health Centre. To access health services, residents in the smaller hamlets and villages travel to a larger community centre, primarily Dillon, for less severe, non-emergency medical issues, and Île-à-la-Crosse or La Loche for medical issues such as emergencies and more specialized services (2019 to 2021 KP interview program). To access further services, community members travel to larger centres such as Île-à-la-Crosse, Meadow Lake, Prince Albert, Saskatoon, and North Battleford (2019 to 2021 KP interview program).

Health services on-reserve in First Nations communities in the LSA are directed by the planning committee of the MLTC (2019 to 2021 KP interview program). The MLTC Health Committee is made up of band councillors from the communities that hold the health portfolio. The committees direct and implement changes for health services within the communities and occasionally conduct studies to inform further decisions (2019 to 2021 KP interview program).

The MLTC, which employs approximately 90 workers, provides services to their nine First Nations, which include the CRDN, BNDN, and BRDN. These services include addictions, community health and wellness, community education, counselling services, health advocacy, and nutrition. The MLTC has an agreement with the Northern Inter-Tribal Health Authority where the Northern Inter-Tribal Health Authority provides the MLTC with expertise in emergency situations, such as the COVID-19 pandemic, and other information including topics such as immunizations. The MLTC also works with the SHA as partners when required for health services such as doctor days on-reserve (2019 to 2021 KP interview program).

There are limited services provided to members of the CRDN, BRDN, and BNDN, including psychiatric, dental, and optometry services. Dental therapy and psychiatric care are available within the communities on a sporadic schedule, while no optometry is available within the communities. To access these services, members must travel to Île-a-la-crosse, Meadow Lake, Prince Albert, North Battleford, or Saskatoon. Mental health therapists, when brought into the community, are often not well received. During KP interviews, it was shared that often, residents do not trust the therapist, particularly if they have connections to the community, and would prefer to speak to someone from outside the community. Mental health therapists are not brought in on a regular schedule into the community, and are primarily brought in during a crisis (2019 to 2021 KP interview program).

A 2018 report on Indigenous Health in the SHA indicated that there is a need for better access to health services in northern Saskatchewan. Common visions of improved Indigenous health and health care include adopting a holistic approach, recognizing traditional medicines and practices, more respectful care, and enhanced and culturally responsive services. Currently, there is an absence of Indigenous-specific elements in programs for a predominantly Indigenous population in the former KYHR. This is partly due to a lack of capacity and resources to meet service demand in the north, making it difficult to enhance services to be more culturally responsive (Government of Saskatchewan 2018c). The largest former health regions, which also contain the largest urban centres (Saskatoon, Regina, and Prince Albert), have the most Indigenous-focused programs and services. No Indigenous awareness/cultural competence training is found in the former KYHR.

Data on system capacities and usage of the LSA healthcare facilities are not available.



6.3.2.5.1 Clearwater River Dene Nation

Services available at the CRDN Health Centre include (Northern Saskatchewan Health Services 2009b):

- primary care services (nurse practitioner, physician services, maternal child health worker);
- dental therapist;
- dietitian; and
- Nurse-in-charge/nurse manager; and
- mental health/holistic health services (services may include family support, suicide prevention, youth suicide services, addictions, National Native Alcohol and Drug Abuse Program (NNADAP) workers, and mental health therapists).

The Armand Bekkattla treatment centre, which is part of the NNADAP, is located in Clearwater River. The facility is available for all First Nation and Inuit individuals and has programs for concurrent disorders, residential schools, child counselling, and couples counselling. The facility accepts clients with physical disabilities, pregnant individuals, court referral or corrections clients, and clients on methadone, suboxone, or other psychoactive medications (Government of Canada 2021e).

6.3.2.5.2 La Loche

The La Loche Health Centre and Hospital provides health services and programming to the residents of La Loche and the surrounding area. The facility has physician services four days a week, with three full-time physicians available at any one time. Physicians work on a two week-in / two-week out schedule, each contributing 26 weeks of service annually (Keewatin Yatthé Regional Health Authority 2017). Physicians at the La Loche Health Centre and Hospital also travel to outlying clinics (2019 to 2021 KP interview program). It was indicated during KP interviews that there are staffing challenges due to cost of living, job availability for spouses, and culture shock due to the remoteness of the location (2019 to 2021 KP interview program).

Facilities and services available at the La Loche Health Centre and Hospital include:

- acute and emergency care;
- medical clinics (walk-in and appointments);
- long-term care;
- x-ray and laboratory services;
- public health clinic;
- home care;
- in-patient social detoxification;
- mental health and addictions;
- community outreach and educations services;



- dental therapy;
- physical therapy;
- tuberculosis and human immunodeficiency virus (HIV) educators; and
- community health development programs (Keewatin Yatthé Regional Health Authority 2017; 2019 to 2021 KP interview program).

La Loche residents will travel to Turnor Lake or Meadow Lake to access health services not available in La Loche. Mental health services within the community are on an outpatient basis. Addiction services, such as outpatient and detoxification services, are available at the La Loche Family Healing Unit. National Native Alcohol and Drug Abuse Program services for First Nation and Inuit residents are available in Clearwater River at the Armand Bekkattla treatment centre (WorkSafe Saskatchewan 2020; Government of Canada 2021e). In 2019, La Loche had four detoxification beds (2019 to 2021 KP interview program).

6.3.2.5.3 Birch Narrows Dene Nation

The Annie Bagg Memorial Nursing Station is in Birch Narrows and serves BNDN members and residents of Turnor Lake (Northern Saskatchewan Health Services 2009a; 2019 to 2021 KP interview program). The nursing station has a nurse practitioner on staff and physician services once a week from the La Loche Health Centre and Hospital. Dental therapy services are provided by the MLTC every few months, though the schedule may vary. Mental health therapy is a service provided in the community, with an approved list of therapists provided by Health Canada. Therapists are brought in when required, such as during a community crisis (2019 to 2021 KP interview program).

Services provided at the facility include (Northern Saskatchewan Health Services 2009a; 2019 to 2021 KP interview program):

- addiction services;
- dental therapy (provided by the MLTC, once every few months);
- home care services;
- mental health/holistic services (from approved list from Health Canada; no regular schedule, as needed);
- primary care services; and
- TeleHealth services.

The closest hospital to the community is the La Loche Health Centre. For services not available in Birch Narrows or La Loche, residents travel to Île à-la-crosse or Meadow Lake. Birch Narrows Dene Nation members would like a larger heath centre and a treatment centre for addictions and mental health in the community itself (BNDN-JWG 2020).



6.3.2.5.4 Buffalo River Dene Nation (Dillon)

The Buffalo River Health Clinic is located in Dillon and is over capacity. It is a primary care clinic that has approximately 29 staff members, including administrative staff and nursing staff, and provides the following services (Northern Saskatchewan Health Services 2009c; 2019 to 2021 KP interview program):

- addiction services;
- home care services (four homecare/home health aids);
- family support workers (two child and family service workers);
- medical transportation;
- primary care services;
- tuberculosis services; and
- wellness coordinator.

For services not available at the Buffalo River Health Clinic, BRDN and Dillon residents travel to St. Joseph's in Île-a-la-crosse. If further services not offered are required, members travel to Meadow Lake, North Battleford, Prince Albert, and Saskatoon. Services that could be used in the community include increased cancer screening. Key person interviewees shared that, when cancer is detected within the community, it is often at a more advanced stage, thus resulting in a greater likelihood of adverse outcomes (2019 to 2021 KP interview program). More nurses are needed in the community due to the population increase (2019 to 2021 KP interview program).

Providing adequate Elder care in Dillon is difficult within the community as there is no long-term care facility. Previously, Elders would remain in the community and family would care for them, but as more BRDN members participate in the wage economy and family members leave the community for work and education, Elders may have to leave the community for care if they require assistance. There is currently no hospice care in the community to assist in meals and home care for Elders (BRDN-JWG 2020; 2019 to 2021 KP interview program).

6.3.2.5.5 Buffalo Narrows

Buffalo Narrows has a primary care clinic with a 24/7 on-call registered nurse coverage and emergency medical services (Keewatin Yatthé Regional Health Authority 2017). Physician services are available four days a week with a nurse practitioner on staff and available during open hours five days a week (2019 to 2021 KP interview program). Other services available include:

- public health;
- home care;
- mental health and addictions;
- dental therapy;
- community outreach and education services;
- medical transportation; and
- community health development programs.



For services not available in Buffalo Narrows, residents often travel to Prince Albert, Saskatoon, and North Battleford, with some preferring to travel to Edmonton. The closest optometrists and dentists are in Meadow Lake, Prince Albert, and Saskatoon (2019 to 2021 KP interview program).

Outpatient services for mental health and addictions are available at the Buffalo Narrows Health Centre (WorkSafe Saskatchewan 2020). Key person interviewees indicated that the community has a lack of strong support groups for dealing with addictions. For treatment and one-on-one counselling, clients must go to southern Saskatchewan as there are insufficient beds in Buffalo Narrows. The youth development coordinator does inhome assessments in Buffalo Narrows and La Loche. Mental health programs offered address issues such as depression, anxiety, trauma, grief, anger, self-esteem, and conflict resolution (2019 to 2021 KP interview program). Key person interviews indicated that youth social services in northern Saskatchewan often have low uptake, possibly due to fear of stigmatization. Social services in northern Saskatchewan lack variety compared to the service offerings in cities.

6.3.2.5.6 Other Local Study Area Communities

In the Other LSA Communities, residents requiring social services contact provincial government social services for assistance (2019 to 2021 KP interview program). Additional information about social services in these communities was not available.

6.3.2.6 Protective and Emergency Services

6.3.2.6.1 Policing

Policing services in the LSA communities are provided by the RCMP from two main detachments: one in La Loche, and one in Buffalo Narrows. The Buffalo Narrows detachment has two additional stations, one in Turnor Lake / Birch Narrows and one in Dillon. Information on the capacity of these detachments is presented in Table 11. The posts in La Loche and Buffalo Narrows are three-year postings, while Turnor Lake and Dillon are two-year postings unless an extension is requested or required (2019 to 2021 KP interview program). A new RCMP detachment is expected to open in a few years in Dillon. The RCMP in Dillon (BRDN) enforce provincial laws and the federal *Indian Act*, but do not enforce community by-laws. Current by-laws in Dillon do not allow bootlegging, which is enforced by the BRDN council (2019 to 2021 KP interview program).

Table 11: Policing Services in Local Study Area Communities

Station	Communities Served	Staffing
Buffalo Narrows	Buffalo Narrows, Turnor Lake, BNDN, BRDN, Dillon, St. Georges Hill, Michel Village, the Landing (CRDN), Bear Creek	Seven regular staff Two support staff One victim services staff Five part-time guards
Dillon	Part of the Buffalo Narrows detachment	Five regular staff One support staff
Turnor Lake	Part of the Buffalo Narrows detachment	Five regular staff One support staff
La Loche	La Loche, CRDN, Black Point, Garson Lake, Descharme Lake, some of Clearwater Provincial Park	n/a ^(a)

Source: RCMP 2018a; RCMP 2018b; 2019 to 2021 KP interview program.

a) La Loche RCMP detachment did not provide staffing breakdown but stated that it was fully staffed.

n/a = not available; CRDN = Clearwater River Dene Nation; BNDN = Birch Narrows Dene Nation; BRDN = Buffalo River Dene Nation.



The main policing issues within the LSA communities include addiction and interpersonal violence, as well as traffic by-law violations, drug-related crime (i.e., home invasions), mischief, and violence (2019 to 2021 KP interview program). Previously, the Buffalo Narrows detachment had one location in Buffalo Narrows that also serviced the smaller LSA communities (such as Dillon, St. George's Hill, and Michel Village) but resulted in delays in response time due to travel. Communities requested that the detachment have locations in the smaller communities such as Dillon and Birch Narrows. There is dissatisfaction with the current system that requires calls to be directed outside the communities before police will attend an incident in the community. Facilities in Dillon currently require upgrading (2019 to 2021 KP interview program). Due to the requirement for upgrading, arrests in Dillon, St. George's Hill, and Michel Village are transported to Buffalo Narrows. Holding cells are available in Buffalo Narrows, Birch Narrows / Turnor Lake, and La Loche (2019 to 2021 KP interview program).

Provincial court dates vary throughout the LSA but are available locally depending on the nature of the offence. Court dates for trials and dockets vary by month. In the case of trials, they are conducted in person while dockets are conducted by video at the local circuit point. Circuit point locations are available in the La Loche Provincial Building, the Turnor Lake / BNDN arena, the BRDN Band Hall, and the Buffalo Narrows Provincial Building. Trials regarding traffic tickets currently occur over the phone (Courts Saskatchewan 2021a). Matters relating to the Court of Queen's Bench are handled in Meadow Lake and are filed through the Battleford Queen's Bench Local Registrar's Office or Sheriff's Office (Courts Saskatchewan 2021b), while court of appeal is handled through Saskatoon and Regina (Courts Saskatchewan 2021c).

6.3.2.6.2 Fire Suppression

Fire suppression services are conducted by communities in the LSA on a volunteer basis. The La Loche fire department provides services to La Loche, Black Point, and the CRDN (2019 to 2021 KP interview program). The fire department has 10 regular volunteers and 10 supplemental volunteers that also assist when available. The service has a few fire trucks, a water truck, and jaws of life (La Loche 2018; 2019 to 2021 KP interview program). In 2021, a new 4,800 square feet fire hall opened in a more central location in La Loche (LaRonge Now 2021). Black Point has some fire suppression equipment; however, this equipment is insufficient for a major fire incident (2019 to 2021 KP interview program).

Fire suppression services in Birch Narrows and Turnor Lake are provided by the BNDN (BNDN 2013). Additional information on the BNDN fire department was not publicly available. In Dillon, fire suppression is handled by two crews of 10 volunteer firefighters with fire trucks maintained and driven by the heavy equipment workers of the BRDN maintenance crew. Equipment is stored at the local fire hall and the community received a new fire truck in 2019 (2019 to 2021 KP interview program). Services in Buffalo Narrows are provided by the local fire hall, with approximately 10 volunteer firefighters. The fire hall has two response vehicles, one 400-gallon tank truck, and a 900-gallon pumper truck. Other fire services within the community are located at the Buffalo Narrows airport and consist of the Fire Management and Forest Protection base (Buffalo Narrows 2021). The Other LSA Communities have their own fire suppression equipment but may also rely on support from other communities during a fire event. For example, crews in La Loche may assist in Black Point either with personnel or with additional equipment, if necessary (2019 to 2021 KP interview program)

The Saskatchewan Public Safety Agency has four wildfire bases in the northwestern Buffalo Narrows response region (SPSA 2021). There is a fire base and regional response centre located in Buffalo Narrows, a fire base located in La Loche, and two satellite bases located at Turnor Lake and Dillon Lake (SPSA n.d.). Emergency



services officers and protections officers that are stationed at response centres are trained to assist first responders and communities during and after emergencies or disasters (SPSA n.d.). An emergency response team is typically a four-person team including a crew leader, with there being three different types of response crews based on their responsibilities. The Saskatchewan Public Safety Agency Type 1 response crews can assist Type 2 and Type 3 crews on sustained action fires and also work on initial and sustained wildfires and assist communities during times of flooding and other emergencies. Type 2 crews are referred to as First Nation and northern community crews, and through formal agreements with First Nations and northern communities, work on sustained fire action and assist Type 1 crews for the initial response to new wildfires (SPSA n.d.). The Type 2 crew consists of a five-person team including a crew leader, and Type 3 crews are emergency fire personnel that are qualified firefighters hired on an emergency basis to support Type 1 and Type 2 crews working on sustained action wildfires (SPSA n.d.).

In 2018, Prince Albert Grand Council initiated a Wildfire Task Force to evaluate the emergency response work crews in Northern Saskatchewan. In 2018, there were 58 Type 2 First Nation and 22 northern work crews but the Wildlife Task Force concluded it would be beneficial to move to an eight-person or ten-person crew including a cook and camp helper and switch to a remote camp model instead of flying in daily (PAGC 2018). Information on the current number of fire crews is not available.

6.3.2.6.3 Emergency Medical

Ambulance services for the LSA communities are based out of La Loche through the municipalities and SHA. In some instances, this means that ambulance services come from Île-à-la-Crosse, which is located in the RSA. Patients are typically transported to the La Loche and Île-à-la-Crosse health centres to receive primary care (Keewatin Yatthé Regional Health Authority 2017; 2019 to 2021 KP interview program).

6.3.2.7 Water and Waste Management

Information about the water and waste management systems in the LSA communities are presented in Table 12.

Table 12: Water Sources and Wastewater in Local Study Area Communities

Station	Water Source	Sewage Facilities
Bear Creek	Water hauled from the water treatment plant, with source water from a local well.	Privy pits or septic tanks for liquid waste disposal. Septic tanks are serviced by a septic truck owned by the settlement and waste is transported to either La Loche or Turnor Lake lagoons.
Black Point	Water trucked from La Loche.	Sewage holding tank, sewage trucked to La Loche treatment system.
Buffalo Narrows	Water treatment plant, with pump station.	On-site sewage tank.
Descharme Lake	Community well, no water treatment.	Individual pit privies, school pipes to marsh, no wastewater treatment.
Dillon	n/a	n/a
Garson Lake	Well water hauled to holding tanks.	Individual pit privies for sewer.
La Loche	Four wells located near water treatment plant #2. Three water treatment plants.	Gravity flow service connections and collection mains. Two sewage pump trucks to service buildings not connected to the sanitary sewer system. Three sewage pumping stations. Three-cell facultative lagoon.



Table 12. Water Cources and Wastewater in Local Study Area Committees	Table 12:	Water Sources and Wastewater in Local Study Area Communities
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Station	Water Source	Sewage Facilities
Michel Village	Lake, with water treatment.	Piped water and sewer system to most businesses and residents. Wastewater treatment is facultative lagoon.
St. George's Hill		Sewer system to most businesses and residents. Wastewater treatment is facultative lagoon.
Turnor Lake	residents, with water treatment.	Sewer system to most businesses and residents; facultative lagoon. Band uses the Hamlet's lagoon.

Source: Bear Creek 2020; Village of La Loche 2018; 2019 to 2021 KP interview program. n/a = information not available.

6.3.2.8 Power Generation and Distribution

SaskPower provides electrical services for the LSA communities as electricity is provincially regulated. Electricity in Saskatchewan is predominantly produced from fossil fuels (approximately 43% from natural gas, 40% from coal, and a very small fraction of petroleum in remote off-grid communities; Canada Energy Regulatory 2021). Natural gas is regulated and there are four natural gas companies (i.e., Just Energy, Peak Energy, Future Now Energy, and SaskEnergy; Energy Rates 2021). No natural gas is available in the smaller LSA communities (Bear Creek, Descharme Lake, Garson Lake, Black Point, Michel Village, St. George's Hill) and oil, propane, and wood are used as heating fuels (Planning for Growth 2012a,b,c,d,e; 2019 to 2021 KP interview program).

6.3.2.9 Telecommunications

La Loche does not have cellular coverage. Black Point has cellular service but does not have internet service (2019 to 2021 KP interview program). Internet and cellular service in Bear Creek, Descharme Lake, and Garson Lake are reported to be below average (2019 to 2021 KP interview program). Internet service and cellular coverage information for the Other LSA Communities was not available.

6.3.2.10 Transportation and Transportation Infrastructure

6.3.2.10.1 Public Transportation

Buffalo Narrows and La Loche each had one bus depot that provided passenger service north to La Loche and south to Prince Albert, which was operated by the Saskatchewan Transportation Company (Northern Business Directory 2016). However, this service was terminated in 2017 and no private companies have filled the gap left by the loss of service (CBC 2019). Buffalo Narrows can be reached through private bus charter transportation such as Prince Albert Northern Bus Lines (Prince Albert Northern Bus Lines n.d.).

The regional connectivity in the RSA and between the LSA communities is centred on Highway 155. The driving distance between LSA communities can take up to two hours (e.g., La Loche to BRDN) along the highway. Due to the distance between communities and lack of public transportation, private vehicles are the primary method of transportation in and out of the LSA communities (Section 6.3.2.4, Education and Training Institutions; Section 6.3.2.5, Healthcare Facilities and Services). Some residents must leave communities to work and the lack of access to private vehicles and driver's licence testing in certain communities has been cited by some interviewees as a barrier to employment (2019 to 2021 KP interview program).



6.3.2.10.2 Highways

The provincially managed paved and gravel highways leading to the proposed Project location include Provincial Highway 155 (paved) and Provincial Highway 955 (gravel). NexGen's exploration camp is approximately 160 km north of La Loche off Highway 955 and is accessed by a private 13 km all-season road which travels east from Highway 955.

6.3.2.10.2.1 Highway 155

Highway 155 is an all-weather paved highway with a speed limit of 100 km/h; however, the highway travels through Buffalo Narrows and La Loche where the speed reduces to 50 km/h (Wagner 2018). The total length of Highway 155 is about 300 km and intersects at Highway 55 at Green Lake and Highway 955 at La Loche. The narrowest portion is 8 m wide, shoulder-to-shoulder (Saskatchewan Government Insurance 2018; Wagner 2018). Current traffic volumes on Highway 155 are not an issue with respect to road integrity (Saskatchewan Government Insurance 2016). Current safety concerns relate to the large trucks on the highway, as well as the unevenness of the road and the speed of the vehicles (e.g., increased the risk of a trailer sliding into the other lane; 2019 to 2021 KP interview program).

Highway 155 is designated as a secondary highway (Government of Saskatchewan 2016a). As a secondary highway, trucks with a maximum gross vehicle weight of 61,800 kg and a nine-axle configuration (i.e., tridem drive truck tractor B train combination) are allowed to operate over this highway (Government of Saskatchewan 2016a). Updated weight restrictions for specific vehicles travelling on primary or secondary highways can be found by contacting the Saskatchewan Ministry of Highways and Infrastructure (Wagner 2018). Highway 155 has seasonal restrictions dependent on weather in the spring (freeze/thaw and flooding) that normally begins in March or April for a duration of six weeks. During this six-week period, the highway reduces to secondary weight limits, resulting in 1,650 kg maximum per tire (i.e., 5,000 for single axle, 13,200 for tandem, 19,800 for tridem; Wagner 2018).

Maintenance for highways in Saskatchewan is completed by the Ministry of Highways and Infrastructure; however, maintenance may be contracted out from time-to-time to address lack of resources due to equipment breakdowns or shortage of equipment operators (Read 2018). Maintenance is prioritized by average annual daily traffic (Read 2018):

- Level 1 highways (i.e., inter-provincial routes) receive the highest priority and have average annual daily traffic of over 1,500 vehicles;
- Level 2 highways have priority after Level 1 and have average annual daily traffic of 300 to 1,500 vehicles; and
- Level 3 highways have the lowest priority with average annual daily traffic of less than 300 vehicles.

Highway 155 is a Level 2 priority highway and maintenance is primarily provided by the highway maintenance shops in La Loche, Buffalo Narrows, and Green Lake. Within 12 hours of a storm, Level 2 highways receive snow plowing from driving lanes and ice treatment or assessment (Read 2018).

6.3.2.10.2.2 Highway 955

Highway 955, known locally as the Semchuk Trail, is an all-weather highway that is almost entirely unpaved, except for approximately 4.5 km of paved highway from La Loche to the turn off to the CRDN reserve. Highway



955 extends for 245 km from La Loche, to the closed Cluff Lake Mine, and then an additional 25 km to Carswell Lake for a total of approximately 270 km. The speed limit on Highway 955 is 80 km/h, although the portion of the highway through La Loche is 50 km/h (Wagner 2018). Highway 955 traffic volumes are not an issue with respect to road integrity (Wagner 2018). The narrowest portion of Highway 955 is 7 m wide shoulder-to-shoulder (Wagner 2018). Highway 955 does not have formal services, such as gas stations, and drivers using the route should carry extra fuel and other supplies (Wagner 2018).

Highway 955 is designated as a secondary highway (Government of Saskatchewan 2016a). As a secondary highway, trucks with a maximum gross vehicle weight of 61,800 kg and a nine-axle configuration (i.e., tridem drive truck tractor B train combination) are allowed to operate over this highway (Government of Saskatchewan 2016a). The highway has a permanent bridge and highway restriction from south of Douglas River bridge to the north limits of Highway 955 near Carswell Lake (Government of Saskatchewan 2016a). The maximum gross vehicle weight allowed on this stretch of Highway 955 is 41,500 kg (Government of Saskatchewan 2016a). The south point of the bridge and highway restriction, Douglas River bridge, is north of the 13 km all-season road to the NexGen exploration camp. Updated weight restrictions for specific vehicles travelling on primary or secondary highways are established by the Saskatchewan Ministry of Highways and Infrastructure (Wagner 2018). The highway has seasonal restrictions dependent on weather in the spring (freeze/thaw and flooding) that normally begins in March or April for a duration of six weeks. During this six-week period, the highway reduces to secondary weight limits resulting in 1,650 kg maximum per tire (i.e., 5,000 for single axle, 13,200 for tandem, 19,800 for tridem; Wagner 2018).

Maintenance on Highway 955 is based on Level 3 priority and is primarily provided by the highway maintenance shop in La Loche. During the winter months, snow removal commences as soon as resources are available without jeopardizing services on Level 1 or Level 2 highways. Snow should be plowed, and ice treated or assessed within 24 hours of the end of a storm (Wagner 2018). During the summer months, dust control, involving application of calcium chloride solution, occurs on Highway 955. The dust treatment is tendered out by the Government of Saskatchewan each year (Wagner 2018).

6.3.2.10.3 Traffic Volumes

Traffic volume is measured by annual travel (million-vehicle-kilometre [MVkm]) for Provincial Highway 155 and Provincial Highway 955 (Saskatchewan Government Insurance 2018). Highway 155 annual travel is 51 MVkm and Highway 955 annual travel is 10 MVkm (Saskatchewan Government Insurance 2018). In 2020, traffic volume along Highway 155 connecting the LSA communities ranged from 150 vehicles per day (Turnor Lake) to 1,650 vehicles per day (La Loche; Government of Saskatchewan 2020c). In 2020, Highway 955 north of La Loche had an average daily traffic volume of 190 vehicles (Government of Saskatchewan 2020c).

6.3.2.10.4 Traffic Collisions

Traffic accident rates are based off the number of accidents per annual travel (accidents per MVkm) for a given highway or region (i.e., Saskatchewan). The total number of accidents reported by Saskatchewan Government Insurance (2018) in 2018 for Highway 155 and 955, was 59 and 8 accidents, respectively. Given the annual travel of 51 MVkm for Highway 155, and annual travel of 10 MVkm for Highway 955, the accident rates (accidents per MVkm) were 1.16 for Highway 155 and 0.8 for Highway 955 (Saskatchewan Government Insurance 2018).



Traffic collisions in the RSA occur at a lower frequency compared to the province (Irvine and Quinn 2019). Between 1998 and 2014, the injury rate from traffic collisions in the RSA declined from 55 to 44 injuries per 10,000 population. During the same time period, the provincial injury rate decreased from 73 to 61 injuries per 10,000 population. However, the percentage of injuries from traffic collisions that involved an impaired driver was over double in the RSA, compared to the province, ranging from 26% to 28% compared with 10% to 12%. Data for the individual LSA communities was not available. Saskatchewan Government Insurance (2018) reported that 15.6% of rural traffic accidents involved wildlife, 0.4% of the rural traffic accidents involved pedestrians, and 0.1% of all traffic collisions involved a vehicle fire or explosion.

6.3.2.11 Air Transportation Infrastructure

6.3.2.11.1 La Loche Airport

The La Loche Airport is located southeast of La Loche off Highway 155. Maintenance at the airport, including repairs, salting, and plowing, is conducted by the La Loche-based provincial government highways crew. Aside from the runway and one hangar, there is no supporting infrastructure. Three- to nine-passenger charters are the most common planes that use the La Loche Airport. Charters typically include medical transportation, court party, and RCMP, with larger planes using it when required (Saskatchewan Highways and Transportation 2002; 2019 to 2021 KP interview program). The airport is busier in the summer.

6.3.2.11.2 Buffalo Narrows Airport

The Buffalo Narrows Airport is located south of Buffalo Narrows off Highway 155. The airport consists of a runway, passenger terminal, hanger, weather station, government building, highways crew building, a fire cache, and two privately owned small hangers. Primary maintenance for the runway, including repairs, salting, and plowing, is conducted by the Saskatchewan Ministry of Highways and Infrastructure (2019 to 2021 KP interview program).

The runway at the Buffalo Narrows Airport can accommodate airplanes in size up to an ATR 72, which can seat up to 78 passengers (ATR 2021), and provides sufficient capacity for the Project, which anticipates requiring capacity for a Bombardier Dash 8 Q300 (i.e., to accommodate 48 passengers) or ATR 42-320 (i.e., to accommodate 42 passengers), which is the most common plane using the airport (Stantec 2021; ATR 2021; 2019 to 2021 KP interview program). The most common use for the current air traffic services is charters. Typical air traffic at the airport includes medical transportation, court party, and RCMP (Saskatchewan Highways and Transportation 2002; 2019 to 2021 KP interview program).

6.4 Labour Force Characteristics

Existing labour force characteristics, including labour market information, employment challenges, and employment statistics by industry sector are explored within this subsection for both Indigenous and non-Indigenous communities located within the LSA and RSA.

6.4.1 Labour Market

Unemployment and labour force participation are two key indicators that characterize the labour market of a region or community. Labour force participation measures the proportion of people of working age (defined by Statistics Canada as aged 15 and over) who currently have a job (full-time or part-time), or who are actively



looking for work²². Over the last three decades, the Canadian labour force participation rate has ranged from approximately 64.5% to 67.5% (Trading Economics 2019). The unemployment rate measures the percentage of labour market participants who do not have a job²³. Data on labour force participation and unemployment in the LSA communities and RSA are presented in Table 13. Given that most of the population and labour force of each LSA community identifies as Indigenous, the provincial Indigenous population's labour market indicators are discussed throughout this subsection for comparative purposes.

6.4.1.1 Regional Study Area

A 2013 review of the socio-economic effects of uranium mining in Northern Saskatchewan noted that the total number of RSA residents participating in the workforce increased from 5,924 in 1976 to 11,272 in 2006. Despite this increase, employment and unemployment rates in the RSA remained relatively stable from 1976 to 2006 due to concurrent population growth (CVMPP 2013). The labour force of the RSA increased by 6.7% from 2011 to 2016, to 12,360 people, while the participation rate rose from 46.7% to 48.9% (Table 13). Between 2006 and 2016, the participation rate in the RSA has been consistently lower than the provincial average . The RSA unemployment rate and percentage of people not in the labour force have also been consistently higher compared to the province during this same period. The RSA participation rate was higher among males (i.e., 51.9%) than females (i.e., 45.9%), a trend that is also reflected in the average provincial rates (i.e., 73.3% and 63.4%, respectively). In 2016, unemployment was higher in the RSA than the provincial average (i.e., 23.7% compared to 7.1%), with males having a higher rate than females (i.e., 28.7% compared to 18.2%, respectively). Unemployment in the overall RSA labour force has risen from 20.2% in 2006 to 23.7% in 2016.

²² One demographic of people who are not considered to be in the labour force are discouraged workers (also known as discouraged job seekers). These are people who would like to work, but do not have a job and are not looking for a job because they do not believe they will be able to find suitable work (Statistics Canada 2014). Other people who are not considered labour force participants include full-time students (including those looking for work), stay-at-home parents and homemakers, retirees, seasonal workers in the off-season, and people who cannot work in the long-term for reasons of illness or disability (Statistics Canada 2007f).

²³ Taken alone, a low unemployment rate implies that the economy is doing well; however, low unemployment coupled with low participation rate can indicate a high proportion of discouraged workers or retirees. To better understand the unemployment rate as an indicator of labour market activity and health, the age distribution of the community should be considered. A large proportion of the population over 65 years of age suggests that retirees are influencing the lower participation rate. Similarly, a large population of people in their late teens and early twenties could indicate lower participation due to a large proportion of full-time students. Low unemployment coupled with high participation is typically an indicator of strong economic performance, as it implies that the majority of people who wish to be employed are.



Table 13: Labour Market Statistics for the Local Study Area Communities, Regional Study Area, and Saskatchewan

Metric by Year		CRDN			BNDN			BRDN		Buffa	alo Nar	rows	ı	_a Loch	ie		us Census No.18 (RSA		Census	Division No	o.18 (RSA)	Saskat	chewan Indi Population		Saskatchewan			
metric by real	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	M	F	Т	М	F	Т	M	F	Т	M	F	Т	
2016																												
Number of people in the labour force	140	135	270	85	80.0	165	135	120	255	220	260	480	270	260	525	4,910.00	4,485.00	9,390.00	6,540.00	5,820.00	12,360.00	33,370.00	33,445.00	66,815.00	311,105.00	274,430.00	585,535.00	
Participation rate (%)	50.9	46.6	47.8	56.7	50.0	52.4	50.0	43.6	46.8	60.3	64.2	62.7	36.7	30.4	33.1	47.1	41.4	44.2	51.9	45.9	48.9	60	54.2	56.9	73.3	63.4	68.3	
Unemployment rate (%)	53.6	33.3	44.4	41.2	25.0	33.3	40.7	25.0	33.3	18.2	7.7	12.5	35.2	21.2	27.6	36.4	22.7	29.9	28.7	18.2	23.7	21.6	15.6	18.6	8	6.1	7.1	
2011																												
Number of people in the labour force	80	85	165	а	а	а	120	115	235	195	230	425	245	225	470	4,645	4,055	8,695	6,210	5,380	11,585	28,920	29,595	58,515	300,420	261,885	562,310	
Participation rate (%)	30.8	30.9	30.8	а	а	а	43.6	43.4	43.5	51.3	53.5	52.5	29.5	24.2	26.6	46.1	38.4	42.1	50.4	43.1	46.7	59.6	53.4	56.3	74.9	63.6	69.2	
Unemployment rate (%)	37.5	17.6	24.2	а	а	а	29.2	26.1	27.7	15.4	0	9.4	26.5	17.8	22.3	25.3	20.6	23.1	19.7	15.8	17.9	18.1	15.7	16.9	5.9	5.9	5.9	
2006																												
Number of people in the labour force	90	70	160	35	25	60	130	105	230	270	255	520	285	265	550	4,475	3,875	8,345	6,115	5,165	11,280	26,530	24,950	51,480	277,680	246,620	524,305	
Participation rate (%)	41.9	33.3	37.6	24.1	20.8	22.6	49.1	41.2	44.2	76.1	62.2	68	39.6	33.3	36.4	49.5	41.6	45.5	54.6	46.2	50.4	60.8	52.3	56.4	74.4	62.8	68.4	
Unemployment rate (%)	50	28.6	37.5	0	0	16.7	34.6	28.6	34.8	20.4	17.6	20.2	31.6	20.8	26.4	31.1	19.4	25.6	24	15.7	20.2	19.7	16.7	18.2	5.9	5.3	5.6	

Source: Statistics Canada 2007 a,c,d,f,g,l,k,m,o; Statistics Canada 2013 a,c,e,g,l,k; Statistics Canada 2017 b,c,d,e,f,g; Statistics Canada 2018a.

Note: For confidentiality purposes, values, including totals were randomly rounded either up or down to a multiple of five or 10. The total value may not match the individual values since totals and sub-totals are independently rounded and may not total to 100%. While the LSA includes Bear Creek, Descharme Lake, Garson Lake, Black Point, Michel Village, and St. George's Hill, information is not available for these communities due to low population.

a= data not available; M = male; F = female; T = total; CRDN = Clearwater River Dene Nation; BNDN = Birch Narrows Dene Nation; BNDN = Buffalo River Dene Nation; BNDN = Buffalo River Dene Nation; BRDN = Buffalo River Dene Nation; BNDN = Birch Narrows Dene Nation; BNDN = Buffalo River Dene Nation; BNDN = Buffalo

- the area does not meet the threshold for 250 or more Indigenous identity population;
- the area has been suppressed for data quality or confidentiality reasons; or
- the area is composed of or contains incompletely enumerated Indian reserves or Indian settlements.



6.4.1.2 Local Study Area Communities

6.4.1.2.1 Clearwater River Dene Nation

The CRDN labour force increased in size from 165 to 270 people from 2011 to 2016 (i.e., 63% increase). As such, during this period, participation in the labour force grew from 30.8% to 47.8% relative to the slight rise in participation rate of the provincial Indigenous population (i.e., 56.3% to 56.9%). It is not clear why there was such a strong trend of people entering the labour force from 2011 to 2016. Participation in the labour force is higher for males (i.e., 50.9%) than females (i.e., 46.6%) in the CRDN, but both are lower than that for the Indigenous provincial population (i.e., 60.0% and 54.2%, respectively). The difference between male and female participation in the CRDN is the smallest among the LSA communities at 4.3% and is a smaller gap than in 2006 when there was an 8.6% difference.

In 2016, unemployment in the CRDN was higher than the provincial Indigenous population (i.e., 44.4% and 18.6%, respectively) and was the highest among the LSA communities. Unemployment in the community has fluctuated between 2006 and 2016. The 2016 unemployment rate increased from a low of 24.2% in 2011 and is higher than the 2006 rate of 37.5%. Interestingly, the increase in the unemployment rate between 2011 and 2016 corresponds with the increase in the labour force participation rate noted above. The unemployment rate in the community has been consistently higher for males (i.e., 53.6% in 2016, 37.5% in 2011, and 50.0% in 2006) than females (i.e., 33.3% in 2016, 17.6% in 2011, and 28.6% in 2006). Among the LSA communities, the CRDN had the largest difference between the unemployment rate of males and females, with a 20.3% difference in 2016, a slight improvement from a decade earlier when there was a 21.4% difference.

A larger proportion of working-aged females in the CRDN are likely discouraged from entering the labour market by external factors. With females more commonly filling the role as primary care giver to young children, access to childcare is likely a common barrier to their participation in the labour force and in obtaining higher education.

6.4.1.2.2 La Loche

The La Loche labour force increased by 12% between 2011 and 2016, from 470 people to 525 people. During this period, while the community's participation rate grew from 26.6% to 33.1%, it remained the lowest among the LSA communities. Participation in the labour force is higher for males (i.e., 36.7%) than females (i.e., 30.4%), but both are much lower than that of the provincial Indigenous population (i.e., 60.0% and 54.2%, respectively). The participation rate difference between sexes has remained the same between 2006 and 2016 at 6.3%. La Loche's participation rate has fluctuated between 2006 and 2016 and is slightly lower than the 2006 rate (36.4%).

Unemployment in La Loche was higher than the provincial Indigenous population (i.e., 27.6% and 18.6%, respectively) in 2016, and the second lowest among the individual LSA communities. This is reflective of the fact that only a small portion of the working-age population is participating in the labour force, likely meaning less competition for employment opportunities. Unemployment in the community has fluctuated between 2006 and 2016, dropping from 26.4% in 2006 to 22.3% in 2011, and rising again to 27.6% in 2016. The unemployment rate in the community is higher for males than females with a widening difference; 14.0% difference in 2016 compared to 10.8% in 2006.

According to a 2018 report, La Loche has a lack of economic opportunities, discouraging many from participating in the labour force (DMCA 2018). Contributing factors to the lack of economic opportunities include the small number of employers in the absence of major industries, as well as the community's lack of economic diversity,



which has resulted in a shortage of employment opportunities (Section 6.2.4, Economic Challenges and Development Priorities). The 2018 report indicated that re-training, programming, and counselling will not be impactful until there are more economic opportunities.

6.4.1.2.3 Birch Narrows Dene Nation

In 2016, the BNDN labour force was 165 people. Longitudinal labour force data are not available for the BNDN due to data suppression (i.e., confidentiality or data quality reasons) by Statistics Canada. Participation in the labour force was higher for males (i.e., 56.7%) than females (i.e., 50.0%), and lower than the provincial Indigenous population (i.e., 60.0% and 54.2%, respectively). Unemployment in BNDN (i.e., 33.3%) was nearly double the provincial Indigenous population unemployment rate (i.e., 18.6%). The unemployment rate in the community was higher for males than females (i.e., 41.2% compared to 25%, respectively).

6.4.1.2.4 Buffalo River Dene Nation

The BRDN labour force increased in size from 2011 to 2016, from 235 people to 255 people. During this period, participation in the labour force grew from 43.5% to 46.8% relative to the slight rise in participation rate of the provincial Indigenous population (i.e., 56.3% to 56.9%). Participation in the labour force was higher for males (i.e., 50.0%) than females (i.e., 43.6%) in the BRDN, but both are much lower than that for the provincial Indigenous population (i.e., 60.0% and 54.2%, respectively). The difference between male and female participation in the BRDN is the highest among the individual LSA communities with a 6.4% difference, although this difference has decreased since 2006 when the rate was 7.9%.

In 2016, unemployment in the BRDN was higher than for the provincial Indigenous population (i.e., 33.3% and 18.6%, respectively). The 2016 unemployment rate is an increase from a low of 27.7% in 2011, but slightly lower than the 2006 rate of 34.8%. The difference in unemployment rate between the sexes reported has widened, from 6% (i.e., 34.6% for males compared to 28.6% for females) in 2006 to 15.7% (i.e., 40.7% for males compared to 25.0% for females) in 2016.

6.4.1.2.5 Buffalo Narrows

The Buffalo Narrows labour force increased by 13% between 2011 and 2016, from 425 people to 480 people. During this period, participation in the labour force grew i.e., from 52.5% to 62.7%, with Buffalo Narrows being the only LSA community to have a higher participation rate than the provincial Indigenous population (i.e., 56.9%). However, this participation rate is a decline from 2006 (i.e., 68.0%). Buffalo Narrows is also the only LSA community with a higher participation rate for females (i.e., 64.2%) than males (i.e., 60.3%), both higher than the provincial Indigenous averages (i.e., 60.0% and 54.2%, respectively). This is a reversal from 2006, when the male participation rate in Buffalo Narrows was 13.9% higher than the female participation.

In 2016, unemployment in Buffalo Narrows (i.e., 12.5%) was considerably lower than the provincial Indigenous population unemployment rate (i.e., 18.6%). Buffalo Narrows is the only LSA community with an unemployment rate lower than the provincial Indigenous average. Unemployment in the community has fluctuated between 2006 and 2016, with a low of 9.4% in 2011, but has remained lower than the 2006 rate of 20.2%. The unemployment rate in the community has remained higher for males than females between 2006 (i.e., 20.4% compared to 17.6%, respectively) and 2016 (i.e., 18.2% compared to 7.7%, respectively). The difference in unemployment rate in the community has widened between males and females, from 2.8% in 2006 to 10.5% in 2016.



The last downturn in the mining sector in the RSA affected workers in Buffalo Narrows, with reportedly more than 20 workers being affected. It was indicated by some participants during KP interviews that others who had worked for decades in companies such as Cameco, were not formally trained, did not acquire health and safety tickets and would have had to take certification again (2019 to 2021 KP interview program). However, many of the unemployed in Buffalo Narrows are also reported to not be looking for work. As they had previously worked in the mining industry, interviewees reported that they do not want employment that pays less than what they had previously earned. Key person interviews indicated that some residents in Buffalo Narrows feel overlooked as companies are perceived to not hire from Buffalo Narrows and solely employ workers from La Loche.

6.4.1.3 Employment Challenges

Challenges to successfully participating in the wage economy in the LSA communities were associated with the lack of employment opportunities within communities and the lower levels of educational attainment of the labour force (BNDN-JWG 2021b). For the residents of La Loche and the CRDN, the lack of economic opportunities also diminishes interest in training and education, as there are few employment opportunities, trained or not (DMCA 2018). The core challenges appear to be a lack of employment opportunities in the region, not training, though both require focus (DMCA 2018).

The main drivers of employment in the RSA are government services, education, health, and seasonal work. The seasonal employment opportunities such as seasonal firefighting, outfitting, and construction, are more often filled largely by males (2019 to 2021 KP interview program). Without a minimum level of education (Section 6.6, Education and Training), the types of employment available in the communities are perceived as not within reach. In addition, people who obtain further education often leave the communities to find employment, and do not return (2019 to 2021 KP interview program). The private services sector (i.e., retail, wholesale, accommodation, and food services) comprises fewer than 20% of employment opportunities in the La Loche / CRDN area, compared to the 45% for the province overall and 28% for the RSA, indicating a much higher level of private sector activity in other northern centres (DMCA 2018). Employment by industry is discussed further in Section 6.4.2.

Many KP interviewees noted a reluctance to leave their families for extended periods as a barrier to obtaining training and education or securing employment outside of the community (2019 to 2021 KP interview program). While the school systems in the LSA communities are working on improving rates of attendance, graduation, literacy, and numeracy, success in these metrics remains challenging. In the past, students had to leave their communities for southern Saskatchewan to complete secondary education as there were no high schools locally. Now that there are high schools, current challenges include recruiting and retaining qualified educators for communities (BNDN-JWG 2021b).

Key person interviews with BRDN members regarding unemployment identified contributing factors, including that although many community members have qualifications, they lack employment experience. Further, like those in other LSA communities, many are reluctant to leave their family ties in the community in search of employment elsewhere. During the JWG on economies in August 2021, a BRDN participant commented that they expected the unemployment rate for their community was higher in 2021 due to the COVID-19 pandemic (BRDN-JWG 2021a).

Additional challenges to obtaining wage employment include costs and availability of obtaining safety tickets, Driver's licences, childcare, and transportation (2019 to 2021 KP interview program). Some residents noted there



were no local program available for driver's education in many of the LSA communities, and residents must go to La Loche for class and Buffalo Narrows for the road tests (2019 to 2021 KP interview program). Discussions with LSA driver instructors noted they travel to CRDN, La Loche, BNDN, Buffalo Narrows, and BRDN to provide class 7 instructions for high school students and adults; however, the class 5 road tests are conducted in La Loche and Buffalo Narrows by SGI. The LSA community residents noted that online employment application processes can make it difficult to obtain employment, as many people do not have access to a computer or internet in their homes. Distance to employment was noted as a barrier to employment in the mining sector, particularly for women, due to family and childcare responsibilities.

Some LSA residents noted women may be more likely to enter the mining industry if employment opportunities were closer to home. It was also noted that this would benefit families in general, particularly in the ability to respond to family emergencies (2019 to 2021 KP interview program). A number of these barriers to employment have also been identified as being broadly applicable to the RSA, including lower levels of educational attainment, limited job and work experience opportunities in smaller communities, and the short-term or seasonal nature of many jobs (NLMC et al. 2011).

6.4.1.4 Local Study Area Communities Summary

The participation rate in the LSA communities overall is lower than the provincial average; conversely the unemployment rate and percentage of people not in the labour force are higher than the provincial average. Unemployment rates among the LSA communities was highest in CRDN (i.e., 44.4%) and lowest in Buffalo Narrows (i.e., 12.5%). Buffalo Narrows had the highest participation rate (i.e., 62.7%) and La Loche had the lowest (i.e., 33.1%). In order to develop a stronger labour market in the LSA, there is a need to increase the low labour force participation and reduce the relatively high unemployment rates through increases in employment opportunities.

6.4.2 Employment by Industry Sector

6.4.2.1 Regional Study Area

Figure 20 shows the percentage of employment by sector for 2016 for the LSA, RSA and Saskatchewan Appendix A, Table A-17a). The education sector is the primary employer in the RSA (17.6%) followed by the health care and social assistance sector (15.4%) and the public administration sector (14.1%) (Figure 20). Employment in the mining, quarrying and oil and gas extraction industry sector in the RSA in 2016 was higher than Saskatchewan (10.8% and 4.3% respectively). Employment in other primary industries such as agriculture, forestry, fishing, and hunting was lower in the RSA than in all of Saskatchewan (i.e., 2.2% and 8.9% respectively). Other industry sectors (a grouping of all other recorded, but not separately stated industry sectors) accounted for 22.1% of employment in the RSA.



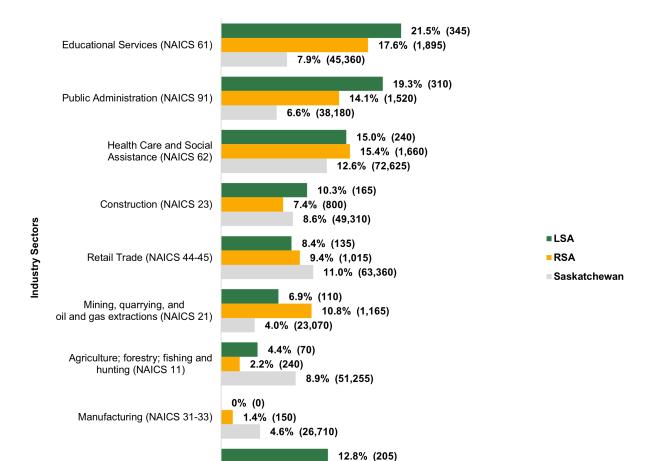


Figure 20: Employment by Industry Sector for Local Study Area, Regional Study Area, and Saskatchewan, 2016

Source: Statistics Canada 2017a.

Note: Data were not available for Bear Creek, Descharme Lake, and Garson Lake.

Other Sectors

LSA = local study area; RSA = regional study area; NAICS = North American Industry Classification System.

6.4.2.2 Local Study Area

In 2016, the industry sectors with the highest employment rates in the LSA were educational services, public administration, and health care and social services, consistent with the RSA. These sectors have consistently provided the highest proportion of employment in the LSA since 2001 (Figure 21). The industry sectors of construction, retail, and mining, quarrying and oil and gas extraction are also sizeable employment sectors in the LSA (i.e., 10.3%, 8.4% and 6.9% respectively). The agriculture, forestry, fishing, and hunting industry sector in the LSA had a low employment rate (i.e., 4.4%).

22.1% (2,385)

36.8% (211,665)

In 2016, employment in the mining, quarrying and oil and gas extraction industry sector in the LSA (i.e., 6.9%) was lower than the RSA (i.e., 10.8%) but higher than Saskatchewan (i.e., 4.0%). The mining, forestry, and oil and



gas industries were once the dominant employers in the LSA communities. When the Cluff Lake Mine closed in 2002, many of the miners from the LSA communities left Saskatchewan to go to Ontario and British Columbia for mining work (2019 to 2021 KP interview program). Employment in the mining, quarrying, and oil and gas extraction peaked in 2011 in the LSA (i.e., 11.2% of total employment)followed by a decline by 2016 (i.e., 6.9% of total employment); however, it remained higher than the provincial average (i.e., 3.9%). Employment in the agriculture, forestry, fishing, and hunting industry sector in 2016 was lower in the LSA than in all of Saskatchewan. LSA employment in the agriculture, forestry, fishing, and hunting industry sector peaked in 2001 (i.e., 8% of total employment), before declining sharply to 2.6% in 2006 and 1.7% in 2011 and increasing again in 2016 (i.e., 4.4% of total employment). The decline in employment in the agriculture, forestry, fishing, and hunting industry sector between 2001 and 2011 occurred in parallel to an increase in employment in the mining, quarrying, and oil and gas extraction sector. Provincially, construction, retail trade, agriculture, forestry, fishing, and hunting accounted for a larger share of employment than educational services or public administration.

The data indicate that employment in the LSA and RSA is particularly concentrated in government-funded service sectors, with lower employment rates in sectors such as agriculture, forestry, fishing and hunting, manufacturing, and retail trade than in the province as a whole. This was confirmed during JWG meetings, where it was noted that government services represent a large portion of employment, with comparatively little private business employment opportunities (BNDN-JWG 2021b; BRDN-JWG 2020). A 2018 economic analysis completed for the La Loche region also confirmed government services accounted for the majority of employment with comparatively few employment opportunities in the private sector (DMCA 2018).

Community members confirmed major employers in the LSA include the health district, government, and schools. Other sectors have at times been substantial employers in individual LSA communities (Appendix A, Table A-18b):²⁴ For example:

- In CRDN, in 2016, the construction sector was the second highest employer after educational services.
- In Buffalo Narrows, in 2011, the mining, quarrying, oil and gas extraction sector was the second highest employer after educational services.
- In BRDN, in 2011, the retail trade sector was the second highest after public administration and in 2001 the manufacturing sector was third highest after public administration and educational services (Appendix A, Table A-18a).
- No construction employment is available in Buffalo Narrows (2019 to 2021 KP interview program).
- Key person interview participants indicated that commercial fishing is declining as an industry due to regulations and stagnant quotas because of a focus on tourism and recreational fishing as a priority. Key person interviews identified a need to develop tourism in the LSA, as currently, tourists come in but do not spend their disposable income in the communities (e.g., bringing their own food). As a result, employment opportunities in the LSA are reliant to a large degree on government-funded service sectors.

²⁴ To minimize rounding error and due to data unavailability, LSA communities with less than 400 population as of the 2016 Census were not included in this comparison.



In Buffalo Narrows, the major employers were once forestry and mining but are now the government, education, and health sectors (2019 to 2021 KP interview program). While there are vacancies in these sectors in Buffalo Narrows, the employment requires degrees or trades certification and the positions were vacant for some time in 2019. The NLSD have several positions in the community that cannot be filled, which likely require teachers from outside the community. Most other employment opportunities in the community are seasonal (e.g., fire suppression, student programs). Those without educational certification or degrees must travel outside of the community for employment, with some working in Fort McMurray, Alberta, or mining in British Columbia, Ontario, or Southern Saskatchewan (2019 to 2021 KP interview program). Local contractors have been struggling in the community.

In Dillon (BRDN), the uranium and oil and gas industries were once the major employers in the community (2019 to 2021 KP interview program). Currently, the major employer in the community is the BRDN, which employs workers in education and healthcare. Between 2006 to 2016, there has been more variety in the types of jobs available to community members with more technical services, positions beyond entry level, and industrial technical jobs (e.g., environmental technicians, oil technicians, environmental monitors, gas technicians). Currently, many residents work at companies that provide services and goods to mining companies in Saskatchewan in jobs such as gas delivery, catering, drilling, environmental technician, security, geotechnical, and exploration (2019 to 2021 KP interview program). The type of employment skills needed in the community relate to positions in security, environment, heavy equipment, teaching, nursing, and law. The community has one company that builds houses employing around five workers and all other major construction is contracted out. Very few contractors are found in the community as those with trades certification tend to leave (2019 to 2021 KP interview program).

The LSA community members noted mining and oil and gas are also important sources of employment (2019 to 2021 KP interview program). Employment in mining, quarrying, and oil and gas extraction sector has ranged between 2.5% in 2001 and 11.2% in 2011 (Figure 21). During interviews, community members commented that there has been an increased awareness and opportunity for LSA residents to pursue employment opportunities in the oil and gas sector or mining outside of their home communities. More women in the BRDN are now involved in industrial employment such as heavy equipment and employment in the oil and gas industry (2019 to 2021 KP interview program). More recent estimates indicated approximately 200 LSA residents are potential workers with experience in mining, quarrying, or oil and gas; however, this value also likely included seasonal quarry workers and others with less transferable skills (BRDN-JWG 2021a).

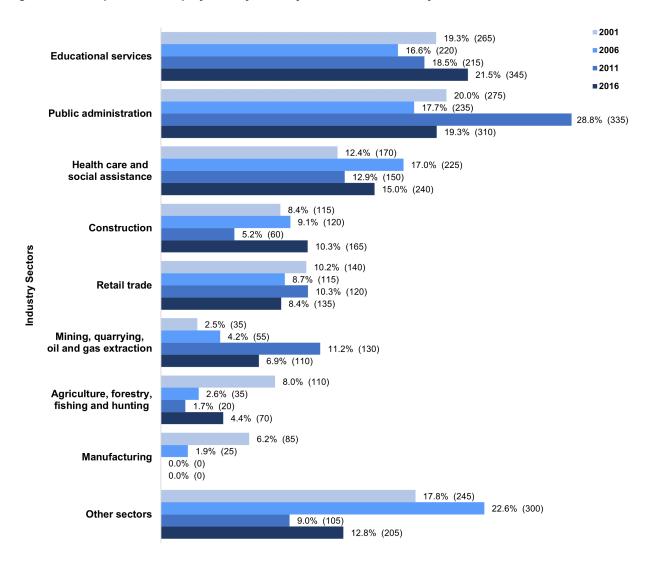
Many community members that work in mining or the oil and gas sector still reside within the LSA while working on rotation elsewhere such as in Fort McMurray, Cold Lake, potash mines, or uranium mines in other parts of Saskatchewan. It was noted that those working in Alberta commute longer distances between the worksite and home depending on the rotation schedule, while those working in the uranium industry in Saskatchewan can use pick-up points in Buffalo Narrows, Beauval, and Prince Albert (BRDN-JWG 2021a; 2019 to 2021 KP interview program).

Similar to the LSA, public administration, educational services, and health care and social assistance accounted for the highest share of employment in 2016 in the RSA. However, in Saskatchewan as a whole, the three sectors contributing to the highest share of employment were health care and social assistance (i.e., 12.6%), retail trade (i.e., 11.0%), and agriculture, forestry, fishing, and hunting (i.e., 8.9%) (Figure 20). Appendix A, Table A-17).



The construction sector is also a large employer in many LSA communities, and for people living on reserve at CRDN, the construction sector was the second highest employer after educational services (Appendix A, Table A-17, and Table A-17a). Local study area residents noted that many employment opportunities in the construction sector are cyclical or intermittent and often depend on the availability of government funding for infrastructure projects (2019 to 2021 KP interview program).

Figure 21: Proportion of Employment by Industry Sector for Local Study Area, 2001 to 2016



Source: Statistics Canada 2002, 2007a, 2012a, 2017a.

Note: Data were not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.

Local study area residents also noted during interviews that people may have to leave their home community to obtain work, and only return when local job opportunities are available, which may be a contributing factor to the decline in population from 2011 to 2016. Employment opportunities in the LSA are more common in healthcare



and education, and interview participants noted workers in these fields are more likely to be able to return to their home communities for employment. These sectors also predominantly employ women, which contributes to the generally higher employment rates for women in the LSA (Figure 22 and Appendix A, Table A-17a). Those seeking work in other sectors may not be able to find local employment that matches their skills and interests as easily. While some LSA residents continue to work in the mining sector, other former mine workers do not have credentials that are easily transferable to employment in other sectors (2019 to 2021 KP interview program). The remaining employment opportunities outside of healthcare and education are related to seasonal employment and are associated with band infrastructure (e.g., fire suppression, fishing in winter, working in the arena in winter) (2019 to 2021 KP interview program).

Figure 22 presents the distribution of employment by sector and sex in the LSA from the 2016 Census (Appendix A, Table A-17a). Females make up most of the employment in the educational services and health care and social services sectors in the LSA, which contributes to the higher employment rates for females in the LSA overall as compared to males. Females accounted for a larger proportion of employment in health care and social assistance (i.e., 85%) and educational services (i.e., 73%). Males accounted for a higher proportion of employment in public administration (i.e., 56%), construction (i.e., 93%), and mining, quarrying, and oil and gas extraction sector workforces (i.e., 100%).

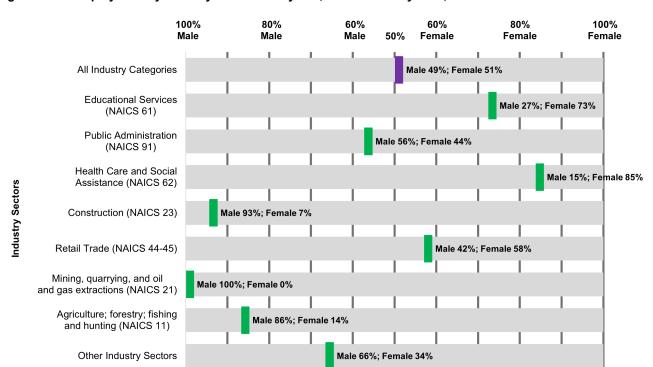


Figure 22: Employment by Industry Sector and by Sex, for Local Study Area, 2016

Source: Statistics Canada 2017a.

Note: Data were not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.

NAICS = North American Industry Classification System.



In the RSA and Saskatchewan, distribution of employment by sector and sex in 2016 were similar to the LSA, except the mining, quarrying, and oil and gas extraction sectors, where approximately 13% of employees were women (Appendix A, Table A-17a). Key person interviews indicated that flexible working arrangements are needed due to childcare commitments and being able to attend to family, including relatives (2019 to 2021 KP interview program). For communities in the LSA, the highest proportion of employment by women is observed in Buffalo Narrows (i.e., 55.4%) and the lowest is in BNDN (i.e., 46.9%) (Appendix A, Table A-17b)²⁵.

6.5 Income

The following sections describe income levels and income sources in the LSA communities compared to the RSA and Saskatchewan. Both the wage and traditional economies are examined.

Effects on income are characterized considering both wage or market income (e.g., employment income, income from trapping or commercial fishing), and traditional economy income. The traditional economy or subsistence economy refers to activities such as hunting, fishing, trapping, plant harvesting, and crafting that take place outside of the market or wage economy (Section 6.5.2). Traditional economy activities provide food and other necessities of life that support people and communities through personal use, giving to other members of the community for personal use, exchange, or barter, but are not purchased with cash.

Participation in the traditional economy is typically not captured in Statistics Canada labour force and income statistics. For example, BRDN members described people in their community who are farmers, wild rice harvesters, and loggers but who would not be captured in census employment statistics (BRDN-JWG 2021a). Economic activities associated with the traditional economy are described based on IKTLU Studies prepared for the Project, literature, information obtained through JWG meetings, and KP interviews to capture the importance of the traditional economy in supporting individuals and communities in the LSA. Usher et al. (2003) have noted that a mixed economy that integrates the market and traditional economies typically exists in Indigenous communities across the north in Canada. The LSA community members noted the traditional economy makes important contributions to the economic well-being of people and communities and participation varies by individual (BRDN-JWG 2021a). People can participate in both the wage or market economy and the traditional economy to meet their needs (Tough 1996; Myers 1996). Many traditional economy activities are largely seasonal. Where traditional economic opportunities are reduced, other sources of income are required to maintain quality of life.

6.5.1 Wage Economy

6.5.1.1 Regional Study Area

Table 14 shows select income indicators for the LSA, RSA and province of Saskatchewan in 2015. Table 15 and Figure 23 shows the breakdown of household income sources by the LSA, RSA, and province of Saskatchewan in 2015. Within the RSA, the total median personal income in 2015 was \$19,930, with minimal difference by sex (Table 14). This is lower than the median provincial income amongst of \$38,299. The percentage of RSA residents receiving employment income in 2015 was 72%, with males being more likely to receive employment income than females (i.e., 78.8% compared to 64.2%). The percentage of RSA residents receiving employment

²⁵ To minimize rounding error and due to data unavailability, LSA communities with less than 400 population as of the 2016 Census were not included in this comparison.



income in 2015 was similar to the Indigenous provincial population (i.e., 73.6%) (Figure 23). The proportion of the RSA population working full-time, full year was 21.3%, with females slightly more likely to work full-time throughout the year than males (i.e., 21.6% to 21.0%, respectively). This is lower than the figure for Saskatchewan as a whole (i.e., 35.3%).

6.5.1.1.1 Income Disparity

Wilson and Macdonald (2010) examined data from the 1996, 2001, and 2006 censuses to measure the income gap between Indigenous Peoples in Canada and non-Indigenous Canadians. In 2006, the median income for Indigenous Peoples was \$18,962, 30% lower than the median for other Canadians (i.e., \$27,097). The study reveals that income inequality occurs irrespective of where Indigenous people live in Canada. The income gap is \$7,083 higher in urban settings and \$4,492 higher in rural settings. Non-Indigenous people working on urban reserves have a median income 34% higher than Indigenous workers. On rural reserves, non-Indigenous Canadians have a median income 88% higher than their Indigenous colleagues.

The study also found that that educational attainment had increased for Indigenous Peoples but had not influenced income inequality except in situations where they had a university degree, in which case the income gap was much less. In 2006 the median income gap between Indigenous and non-Indigenous people with a Bachelor's degree was only \$646 while among those who had not completed secondary school the gap in median income between Indigenous and non-Indigenous people was \$3,027. Within the Indigenous population, new and notable trends were evident between males and females. Indigenous females were found to be finishing secondary school and obtaining university degrees at a higher rate than Indigenous males (28% compared to 8%). Indigenous females were also found to be earning median incomes closer to those of Indigenous males — a trend that is not replicated in the general Canadian population, Finally, Indigenous females who have obtained at least a Bachelor's degree have higher median incomes than non-Indigenous Canadian females with equivalent education - a gap of \$2,471 which increases to \$4,521 if they obtain a Master's degree. This is the only segment of the Indigenous population that exceeds the median incomes of their non-Indigenous counterparts. The study concludes that despite new strides made by Indigenous females in attaining university degrees, there has been a limited reduction in income disparity between Indigenous Peoples in Canada and non-Indigenous Canadians in the past 10 years. The information detailed here is presented in order to show that income disparity among Indigenous people is a national issue and is not exclusive to the RSA and LSA communities.



Table 14: Income of the Local Study Area Communities, Regional Study Area, and Saskatchewan

Metric by Year	CRDN			BNDN				BRDN			Buffalo Narrows			La Loche			Census Division No.18 (RSA)			Saskatchewan			Census Division No.18 Indigenous (RSA)			Saskatchewan Indigenous Population		
	М	F	Т	M	F	Т	М	F	Т	M	F	Т	M	F	Т	М	F	Т	M	F	Т	М	F	Т	М	F	Т	
2015																												
Average total income in 2015 among recipients (\$)	25,187	23,820	24,473	28,922	24,744	26,702	26,269	24,228	25,238	43,758	44,020	43,901	28,058	29,846	29,030	34,485	29,519	31,971	58,791	40,184	49,409	26,070	25,859	25,961	35,768	30,523	32,976	
Median total income in 2015 among recipients (\$)	9,056	16,960	14,688	16,384	19,648	19,008	16,640	16,080	16,352	32,896	31,552	31,872	15,728	24,589	21,043	19,618	20,612	19,930	46,117	31,978	38,299	14,744	19,215	17,278	23,087	23,825	23,553	
Employment income (%)	74.8	61	67.8	82.2	57.3	67.6	75.1	62.1	70.2	80.4	73.5	78.2	70.2	45.3	56.3	78.8	64.2	72	76.8	68	73.2	77	58.8	67.6	81.6	65.5	73.6	
Average employment income in 2015 among recipients (\$)	36,908	28,485	32,528	40,116	23,634	31,188	36,444	29,507	33,029	47,453	45,338	46,312	34,551	34,288	34,432	42,995	32,342	37,826	55,728	37,207	46,853	33,958	28,406	31,228	41,229	30,501	35,725	
Median employment income in 2015 among recipients (\$)	20,224	17,451	18,816	23,232	17,600	20,309	23,744	17,504	21,312	38,016	34,432	36,736	21,280	26,880	24,672	27,168	23,920	25,455	44,551	30,027	36,612	19,793	20,356	20,101	29,981	23,736	26,222	
Proportion of working-age population who worked full-year, full-time (%)	17.9%	24.6%	21.1%	23.3%	27.3%	25.4%	14.8%	20.0%	18.3%	24.4%	35.7%	30.4%	15.6%	16.4%	15.8%	21.0%	21.6%	21.3%	40.8%	29.9%	35.3%	15.4%	18.4%	17.0%	25.2%	23.1%	24.1%	
Median employment income in 2015 for full-year, full-time workers (\$)	33,920	39,040	38,528	44,928	20,544	32,064	34,688	33,728	34,176	77,539	66,822	70,460	51,840	51,968	51,904	60,018	44,783	50,924	62,070	48,579	55,368	42410	40095	40830	52209	43158	47038	
2010																												
Average income (\$)	16,293	18,843	17,578	n/a	n/a	n/a	19,606	18,159	18,899	42,840	39,802	41,181	20,080	22,196	21,203	28,612	24,599	26,604	48,611	33,119	40,798	22,204	21,322	21,754	28,478	24,522	26,354	
Median income (\$)	4,355	14,681	10,016	n/a	n/a	n/a	10,411	10,548	10,527	29,223	35,753	34,872	9,871	17,901	14,497	16,485	17,725	17,066	38,498	25,823	31,408	11,453	15,977	14,053	17,784	18,362	18,092	
Employment income as a proportion of total income (%)	72.3	58.6	62.6	n/a	n/a	n/a	84.3	65.4	73	77.7	78.7	78.2	66.7	43	54.1	79.7	63.5	72.1	79.5	70.1	75.6	77.7	58.4	68	81.8	66.5	74.1	
2005																												
Median income (\$)	6,032	9,248	8,176	5,520	11,232	9,184	9,120	10,560	10,272	22,257	25,453	24,848	8,024	14,560	11,912	12,848	13,963	13,600	29,589	19,873	23,755	9,067	12,855	11,236	13,477	14,094	13,843	
Earnings, as a% of total income	75.8	51.3	61.3	70.7	50.0	58.4	78	66.3	70.4	84.9	71.9	77.9	70.4	45.8	57.1	79	63.1	71.7	77.8	68.5	73.9	75.6	56.4	65.6	81.7	63.7	72.9	

Source: Statistics Canada 2007 a,c,d,f,g,I,k,m,o; Statistics Canada 2013 a,c,e,g,I,k; Statistics Canada 2017 b,c,d,e,f,g; Statistics Canada 2018a.

M = male; F = female; T = total; CRDN = Clearwater River Dene Nation; BNDN = Birch Narrows Dene Nation; BRDN = Buffalo River Dene Nation; LSA = local study area; RSA = regional study area

Table 15: Total Income Sources, for Local Study Area Communities, 2015

								LSA(c,d)							
	(CRDN	1	ı	BNDN	ı	E	BRDN	ı	Buffa	lo Nai	rows	La Loche			
	М	F	Т	M	F	Т	M	F	Т	M	F	Т	M	F	Т	
Employment income ^(a)	75%	61%	68%	82%	57%	68%	75%	62%	70%	80%	74%	78%	70%	45%	56%	
Government transfer payments(b)	20%	37%	29%	20%	39%	28%	22%	35%	28%	14%	20%	17%	25%	53%	41%	
Other	5%	2%	4%	n/a	4%	4%	3%	0%	2%	4%	5%	5%	5%	2%	3%	

Source: Statistics Canada 2016.

Note: For confidentiality purposes, values, including totals were randomly rounded either up or down to a multiple of five or 10. The total value may not match the individual values since totals and sub-totals are independently rounded and may not total to 100%.

a) Employment income: All income received as wages salaries and commissions from paid employment and net self-employment income from farm or non-farm unincorporated business and/or professional practice during the reference period. For the 2016 Census the reference period is the calendar year 2015 for all income variables.

b) Government transfers: All cash benefits received from federal provincial territorial or municipal governments during the reference period. It includes: Old Age Security pension Guaranteed Income Supplement Allowance or Allowance for the Survivor; Retirement disability and survivor benefits from Canada Pension Plan and Québec Pension Plan; Benefits from Employment Insurance and Québec parental insurance plan; Child benefits; Workers' compensation benefits; Working income tax benefit; Goods and services tax credit and harmonized sales tax credit; Other income from government sources. For the 2016 Census the reference period is the calendar year 2015 for all income variables.

c) The LSA includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, However, data is not available for Bear Creek, Black Point, Descharme Lake, Garson Lake, Michel Village, St. George's Hill, and Turnor Lake.

d) The LSA income source proportions in 2015 are calculated based on the weighted average of number of income recipients and Income source proportions of the Indian Reserves, villages, and hamlets.

LSA = local study area; M = male; F = female; T = total; BNDN = Birch Narrows Dene Nation; BRDN = Buffalo River Dene Nation; CRDN = Clearwater River Dene Nation.



6.5.1.2 Local Study Area Communities

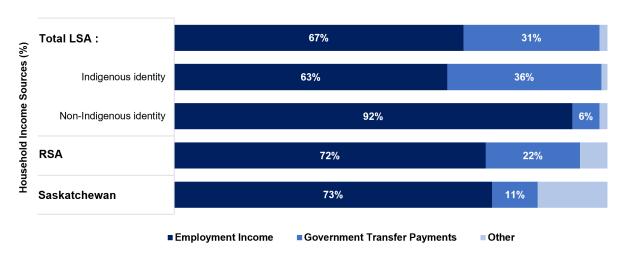
6.5.1.2.1 Income Sources

Government transfer payments in the LSA made up 31% of total income (Figure 23); this is notably higher among those residents who identify as Indigenous (i.e., 36%) as compared to non-Indigenous (i.e., 6%). Females in the LSA were also more likely to receive government transfers than males (i.e., 40% compared to 21%, respectively).

Within the RSA, 22% of the population received government transfer payments, which is higher among the Indigenous population (i.e., 29%) compared to the non-Indigenous population (i.e., 8%). The percentage of the population receiving income from government transfer payments is higher in the LSA (i.e., 31%) and RSA (i.e., 22%) compared to the province as a whole (i.e., 11%), as shown in Figure 23. At the provincial level, the Indigenous population is more likely to have received government transfers than the non-Indigenous population (i.e., 20% compared to 11%, respectively).

Further detail on income within each LSA community is presented in the following subsections.

Figure 23: Household Income Sources for the Local Study Area, Regional Study Area, and Saskatchewan, 2015



Source: Statistics Canada 2016.

Note: Data were not available for Bear Creek, Black Point, Descharme Lake, Garson Lake, Michel Village, St. George's Hill, or Turnor Lake. LSA = local study area; RSA = regional study area.

6.5.1.2.2 Clearwater River Dene Nation

In the CRDN, the total median personal income (i.e., income from all sources) of \$14,688 is lower than the Indigenous provincial median of \$23,553, lagging for both males and females. Median income among females in the CRDN is higher than among males (i.e., \$16,960 compared to \$9,056, respectively). The population of the CRDN is 15% less likely to work full-time throughout the year than the provincial population, and accordingly, a lower proportion of income in the CRDN is employment income (i.e., 74.8% for males and 61.0% for females in the CRDN, compared to 76.8% for males and 68% for females in Saskatchewan). Among those community members who work full-time, full-year, females also have a higher income than males, with a median income of \$39,040 compared to \$33,920 for females and males, respectively. Among the entire working-age population,



males make slightly more than females (\$25,187 compared to \$23,820 average, respectively; Table 14). In terms of income sources within CRDN, 29% of the population received government transfer payments while 68% received employment income. Females were more likely to receive government transfer payments than males (37% compared to 20%; Table 15).

6.5.1.2.3 La Loche

The total median personal income in 2015 in La Loche was \$21,043, which is slightly lower than the Indigenous provincial median of \$23,553 but slightly higher than the Indigenous RSA population (\$17,278). Female community members have a higher median income (i.e., \$24,589) compared to males (i.e., \$15,728). The population of La Loche is less likely to work full-time, full-year (i.e., 15.8%) compared to the RSA (i.e., 21.3%) and the province (i.e., 35.3%). Income among full-time, full-year workers shows little difference between males and females in La Loche. Males in La Loche were much more likely to receive employment income compared to females (i.e., 70.2% and 45.3%, respectively); this gap (i.e., 24.9%) is also observed in the Indigenous population of the RSA (i.e., 77.0% compared to 58.8%; a 18.2% gap) and province (i.e., 81.6% compared to 65.5%; a 16.1% gap; Table 14). In terms of income sources within La Loche, 41% of the population received government transfer payments while 56% received employment income. Females were more likely to receive government transfer payments than males (i.e., 53% and 25%, respectively; Table 15).

6.5.1.2.4 Birch Narrows Dene Nation

The total median personal income in the BNDN in 2015 was \$19,008, with females having a slightly higher income than males (i.e., \$19,648 and \$16,384, respectively). The rate of income from employment in the BNDN is higher among male community members (i.e., 82.2%) compared to females (i.e., 57.3%). The overall community figure of 67.6% receiving employment income is equal to the Indigenous RSA population (i.e., 67.6%) and lower than Indigenous provincial population figure (i.e., 73.6%). As shown in Table 14, the population of the BNDN is more likely to work full-time, full-year (i.e., 25.4%) compared to the RSA (i.e., 21.4%) and less likely than the province (i.e., 35.3%), with females more likely than males to work full-time, full-year (Table 14). In terms of income sources within the BNDN, 29% of the population received government transfer payments while 67% received employment income. Females were more likely to receive government transfer payments than males (i.e., 37% and 19%, respectively; Table 15).

6.5.1.2.5 Buffalo River Dene Nation

The total median personal income in the BRDN in 2015 was \$16,352, with no notable difference between males and females (Table 14). This figure is lower than the Indigenous RSA and provincial figures (i.e., \$17,278 and \$23,533, respectively). The percentage of people in the BRDN who work full-time, full-year was 17%), which was also lower than the RSA and province. The percentage of people in the BRDN who work full-time, full-year varied between males and females (i.e., 14.8% and 20.0%, respectively). In the BRDN, 70.2% of community members receive employment income, a figure that is higher among males (i.e., 75.1%) compared to females (i.e., 62.1%), and comparable to the RSA (i.e., 72%) and province (i.e., 73.2%; Table 15). In terms of income sources within the BRDN, 28% of the population received government transfer payments while 70% received employment income. Females were more likely to receive government transfer payments than males (i.e., 35% compared to 22%, respectively; Table 15).



6.5.1.2.6 Buffalo Narrows

Buffalo Narrows median personal income in 2015 was \$31,872, higher than other communities and the Indigenous RSA, and the Indigenous provincial population (i.e., \$17,278 and \$23,533 respectively). There is no notable difference between male and female median income (Table 14). The number of people receiving employment income in Buffalo Narrows (i.e., 78.2%) is also higher than in other communities, which is also higher than the Indigenous RSA (i.e., 67.6%) and the provincial Indigenous population (i.e., 73.6%), and has been consistent over time. Median income among full-time, full-year workers was also higher than in other communities at \$70,460, which is notably higher than the RSA (i.e., \$50,924) and province (i.e., \$55,368). Median income among full-time, full-year workers in Buffalo Narrows varied between males and females, being \$77,539 and \$66,822, respectively (Table 14). In terms of income sources within Buffalo Narrows, 17% of the population received government transfer payments, while 78% received employment income. Females were more likely to receive government transfer payments than males (i.e., 20% compared to 14%, respectively; Table 14).

As noted above, Buffalo Narrows has a higher median income when compared to the RSA and provincial Indigenous and non-Indigenous populations. As previously discussed in Section 6.4.1.2.5, Buffalo Narrows, has a higher participation rate in the labour force compared to other communities as well as a lower unemployment rate, both of which play a role in higher incomes. The median age in Buffalo Narrows is just over five years greater than in the rest of the LSA communities, which can affect income as most residents have been in the workforce for a longer duration, resulting in higher salaries. Buffalo Narrows also has the highest overall educational attainment among the LSA communities (Section 6.6.1.2.5, Buffalo Narrows). The community has seen increases for every level of education between 2006 and 2016 and exceeds the RSA averages and most provincial averages.

6.5.1.2.7 Other Local Study Area Communities

Data for Other LSA Communities was not available.

6.5.2 Traditional Economy

The importance of the traditional and wage economies were topics discussed with Indigenous Groups as part of KP interviews and the JWG meetings that took place in 2021. During those JWG meetings, it was indicated that Indigenous community members can meet their needs for food, clothing, and other necessities in various ways (e.g., via the market or modern economy [wage economy] or the sharing, subsistence, or non-wage, traditional economy). It is understood that many people may participate in the traditional economy, the wage economy, a combination of both, or neither. Feedback from JWGs and other LSA community members during KP interviews suggests that jobs such as fishing, logging, gathering wild rice, and trapping are the primary source of income for many individuals, but that they are not captured in census data because these are not part of the wage economy. Sources of income among community members come from many different avenues, with an estimated 80% of community members participating in the traditional economy in some form (2019 to 2021 KP interview program). The difference between government statistics and "real life" was highlighted by communities. Making a living off the land was noted as an important part of the local economy and one that should be protected. Understanding the extent of the traditional economy is an important step in ensuring that this information is considered within the assessment of the Project economic effects. The LSA community members noted the traditional economy makes important contributions to the economic well-being of people and communities. They also noted that participation in the traditional economy varied by individual. People with stable employment in the wage economy may spend less time harvesting but still may include Traditional Foods in their diet (BRDN-JWG 2021a).



Participation in the traditional economy also facilitates the transmission of social norms and cultural values across generations (Marks 1977; Usher et al. 2003; Duhaime et al. 2004). The IKTLU Studies completed by the CRDN, MN-S, BNDN, and BRDN all confirm the importance of participation in the traditional economy to community members in the LSA (TSD II: BNDN; TSD III: BRDN; TSD IV: MN-S; TSD V.1: CRDN). An IKTLU Study provided by the Ya'thi Néné Lands and Resources also provides context of the importance of these activities within the RSA (TSD VI: YLNR).

The traditional economy consists of many skills learned through kinship ties and operates at the household level. Butchering, skinning, net mending, mechanical repairs, and many other skills and specialized knowledge support the traditional economy (Usher et al. 2003). An LSA resident commented it takes a lot of skill and work to make garments from hides and furs (2021 trappers' workshop). Residents of the LSA that do not participate in the wage economy often turn to the traditional economy to meet their needs while those who have consistent employment in the wage economy may participate less frequently (BNDN-JWG 2021b; BRDN-JWG 2021a).

An LSA resident commented that trapping is a way of life as well as a hobby and fulfills a love of being outside (2021 trappers' workshop). Other residents have noticed many youths demonstrating a genuine interest in learning trapping and fishing (2021 trappers' workshop). An increase in youth interest may be supported by the increase in traditional land-based teaching in the schools within the LSA. Students are taught how to snare game, such as rabbits, and how to prepare the game (BNDN-JWG 2021b; BRDN-JWG 2021a; 2019 to 2021 KP interview program).

The wage or market economy supplies capital needed to participate in the traditional economy. For example, funds earned in the labour market support equipment and supply purchases such as snowmobiles, ammunition, and fuel (Tough 1996). As a result, a household that is successful in the traditional economy is often also successful in the wage or market economy as cash income can be used to purchase harvesting equipment and cover expenses (Usher et al. 2003). Clearwater River Dene Nation's IKTLU Study interim report states "a number of harvesters specifically described how wage-based jobs (individual or within the extended family) financially support the imperatives to live as Dene people engaged in land-based activities and the provision of food" (TSD V.1: CRDN).

Access to land and waters is essential to the traditional economy. This can be affected by downturns in commercial fishing and trapping industries that would otherwise help support travel to harvest areas or regional industrial development may reduce the land base or resources upon which the traditional economy depends. Reductions in harvests can lead to increased costs to purchase food and other necessities from the market economy and to increased impoverishment (Parlee 2015). A potential for increased commercial fishing in the region has been flagged as an opportunity for La Loche based on the increased demand for fish products that had occurred (DMCA 2018).

Traditional land and resource use is important for Indigenous Peoples throughout the LSA, as many LSA residents participate in the traditional economy. For those participating in both the traditional and wage economies, their increased level of activity in one often corresponds to a decreased level of activity in the other. This interaction between the traditional and wage economies enables some residents to maintain living standards when incomes levels are lower, including for seasonal workers. Specific information on participation in the traditional economy for each of the Indigenous Groups in the LSA communities is provided below.



6.5.2.1 Clearwater River Dene Nation

Traditional land and resource use is a primary value for CRDN members that is critical for many reasons, including economic considerations (TSD V.1). Clearwater River Dene Nation members have described the Patterson Lake area as a "backyard fridge" where harvesters know where to go to get the foods they need and noted:

To this day, our families depend on our ancient lands for a range of cultural, sustenance, livelihood, spiritual and socio-economic purposes. Our ability to depend and rely on our lands is still critical to our community. Our families generally face high levels of unemployment and must continue to depend on the land to put food on the table. Any impact, disruption or diminution of our community's ability to rely on our wildlife, fish, berries, plants, forests and water resources can result in serious impacts and ramifications. (CRDN 2019)

Any diminishment in opportunities to secure food has a substantial negative economic effect on CRDN community families (TSD V.1). Clearwater River Dene Nation members have noted their ability to access harvesting sites has been constrained by industrial development, for example, the Cluff Lake mine, as well as by drilling operations and camps in the immediate vicinity of Patterson Lake (TSD V.1: CRDN).

6.5.2.2 Métis Nation – Saskatchewan

Métis Nation – Saskatchewan members have noted that hunting, trapping, fishing, and plant gathering has helped preserve the survival of families and the land is an integral part of their livelihoods. Métis Nation – Saskatchewan members provided estimates that, on average, 70% of their food comes from hunting, trapping, fishing, and gathering (TSD IV: MN-S). Fishing is noted as an activity that supports both personal and commercial economic activity. The MN-S members have noted that in their view, there have been effects of global warming and pollution on the land and wildlife and a decline in quality of meat and pelts (TSD IV: MN-S).

6.5.2.3 Birch Narrows Dene Nation

Birch Narrows Dene Nation community members have estimated that 80% or more of the people in the community participate in some form of traditional economic activity (BNDN-JWG 2021a). Birch Narrows Dene Nation members have described the importance of harvesting wild foods in feeding family members and supporting households and the broader community by sharing food with Elders and other community members (TSD II: BNDN). A BNDN member noted that at times in the past they relied on very little store-bought food. Income from commercial trapping and fishing has been noted to be important for BNDN members (TSD II: BNDN). A BNDN member commented that "because you're working in a mine doesn't mean you are going to discontinue (traditional activities). In fact, because you have income, you're able to create that ability to be out there and to build cabins" (BNDN-JWG 2021a). Hunting, trapping, fishing, and other traditional economy activities are recognized by BNDN members as requiring considerable skill and practice (TSD II: BNDN; BNDN-JWG 2020; BNDN-JWG 2021a). Birch Narrows Dene Nation members have stated that in their view, their traditional hunting, trapping, and fishing has been affected by industrial development and disturbances related to the resource sector, including changes to animal quantities and migration patterns and decreased access to historically used areas (TSD II: BNDN). A BNDN member noted some youths are becoming more involved with traditional arts and crafts, noting "it's coming back. With Covid, with our roads blocked, people needed something to do. It brought a lot of artistic abilities in some of our young ladies, and some of the older ladies too" (BNDN-JWG 2021a). It was also



noted that some BNDN residents relied on selling clothing and crafts for cash income to supplement lost income during the COVID-19 pandemic (BNDN-JWG 2021a).

6.5.2.4 Buffalo River Dene Nation

A BRDN community member estimated that approximately 80% of community members participate in some form of traditional economy activities (BRDN-JWG 2021a). Buffalo River Dene Nation members have indicated meat obtained through hunting, trapping, and fishing are important food sources that support households and the community (TSD III: BRDN). Wood harvesting, communal gardening, berry picking, and wild rice harvesting have also been noted as important traditional economy activities (BRDN-JWG 2021a). Commercial fishing remains important to the livelihood of BRDN members (TSD III: BRDN), but declines in fur prices have been noted to make commercial trapping a more tenuous occupation as the lower prices make it more difficult for individuals to make a living (TSD III: BRDN). The BRDN members have indicated traditional hunting, fishing, and trapping require experience and skills not only in harvesting animals but also in processing and preserving the meat (TSD III: BRDN). Buffalo River Dene Nation members have indicated that in their view, traditional hunting, trapping, and fishing has been affected by climate change, industrial development and pollution, increased use by non-Indigenous resource users, and institutional changes including the introduction of fur conservation areas (TSD III: BRDN). It was noted during women's interviews that both partners in several BRDN families participate in the traditional economy including hunting, gathering, and fishing (2019 to 2021 KP interview program). Buffalo River Dene Nation members also noted participation in the traditional economy can ebb and flow depending on the availability of employment in the wage economy. People may only be able to participate in the traditional economy on weekends or holidays when they are employed in the wage economy but may increase their traditional economic activities during periods when wage employment isn't available. The BRDN members attributed a recent increase in participation in the traditional economy in part to due to an increase in traditional teachings in school (BRDN-JWG 2021a).

6.6 Education and Training

The following subsection describes education and training throughout Indigenous and non-Indigenous communities located within the LSA and RSA. Information provided includes educational attainment, attendance and graduation rates, and available training programs as well as challenges and/or barriers residents may face in attaining educational certifications.

6.6.1 Educational Attainment

Educational attainment has been shown to improve employment and income opportunities as well as lead to better health and well-being outcomes (Public Health in Canada 2008). Community-specific analyses of educational attainment for 25- to 64-year-olds are provided in the subsections below with statistical data presented in Table 16. In general, the largest segment of the population in the LSA communities have less than a high school certificate (i.e., ranging from 22.8% to 60.8%), compared to 38.9% for the Indigenous provincial average and 57.5% for the RSA (Table 16). This is reflective, in part, of the young population in the LSA communities and RSA compared to the province, but also other challenges as discussed below.

6.6.1.1 Regional Study Area

The RSA has a relatively young population, with proportionally high numbers of children and youth in the education system. These are major factors for the education services industry sector having the highest



employment rate in the RSA (Section 6.4.2, Employment by Industry Sector). The lower educational attainment and fly-in mine sites require large camp facilities, which accounts for the high number of cleaners and custodians. The prominence of the mining industry is also seen in the high number of underground miners, drillers, and mine labourers, as well as jobs to support camp operations such as cooks and custodial staff. The lower levels of educational attainment seen in the RSA led to good representation in these occupations due to the shorter training path; however, representation in the technical occupations is low as these jobs require substantial post-secondary education. Professional positions that require post-secondary education are typically filled by non-northern residents who have the requisite education, and these individuals usually choose not to live in northern communities (KCDC 2016).

A 2013 study on the socio-economic effects of uranium mining in the RSA noted fewer educational programs in communities, lower levels of funding, low rates of attendance, and high drop-out rates as being challenges to educational attainment for RSA residents (CVMPP 2013). Indigenous residents in the LSA were much more likely to have less than a high school certificate and much less likely to have a university degree than non-Indigenous LSA residents.

A previous study on socio-economic effects of the uranium industry noted the proportion of the population of Northern Saskatchewan residents with apprenticeship or trades certificates or diplomas increased between 1981 and 2006 (CVMPP 2013). In 2018, the government of Saskatchewan noted education benefits from mining operations in Northern Saskatchewan included contributions to scholarships for students and outreach to schools to increase career awareness and promote future opportunities in mining (Government of Saskatchewan 2018a). However, participants in JWG sessions noted concerns related to insufficient training facilities for both youth and adults, not enough students taking maths and sciences in high school, and the need for students to leave the community to pursue further education beyond high school (MN-S-JWG 2020; BRDN-JWG 2020; BNDN-JWG 2020).

6.6.1.2 Local Study Area Communities

6.6.1.2.1 Clearwater River Dene Nation

Educational attainment in the CRDN has fluctuated between 2006 to 2016 and remained lower than RSA and provincial averages for every level of educational attainment during the same period. The majority of the population over the age of 15 (i.e., 64.9%) has no certificate, diploma, or degree, compared to 57.5% of the RSA population and 38.9% of the provincial Indigenous population²⁶. However, the proportion of the CRDN population aged 15 and over without a certificate, diploma, or degree in 2016 was lower than both 2011 (i.e., 71.2%) and 2006 (i.e., 81.7%). A larger proportion of males (i.e., 73.2%) have no certificate, diploma, or degree compared to females (i.e., 58.6%), with the gap growing from 7.7% to 14.6% in the between 2006 and 2016.

Approximately 16.7% of the CRDN population over the age of 15 has high school as their highest level of education (Table 16). The high school graduation rate has continued to rise, increasing by 1.3% from 2011 to 2016, and 3.3% from 2006 to 2016. The high school graduation rate for males (i.e., 12.5%) was somewhat comparable to the RSA rate (i.e., 16.9%) but was less than a third of the provincial Indigenous rate (i.e., 43.6%).

²⁶ Due to differences in data collection, the Indigenous provincial average reported is for the population aged 15 years and over.



The high school graduation rate for females (i.e., 22.4%), was also near the RSA rate (i.e., 23.3%) but lower than the provincial Indigenous rate (i.e., 29.0%).

Much of the growth in the proportion of people with high school as their highest level of education was related to the fact that a smaller proportion of the population (both males and females) obtained an apprenticeship or trade during this period, dropping from 9.6% in 2011 to 6.1% in 2016, below the averages for the RSA (i.e., 7.4%) and provincial Indigenous population (i.e., 9.6%). This decrease is aligned with the RSA-level trend of a decrease in trades education attainment of 0.5% but is contrary to the provincial Indigenous trend, which saw a slight increase of 0.4%. Trades education is the one level of education where males have higher rates of attainment (i.e., 8.9%) than females (i.e., 5.2%) in the CRDN.

From 2006 to 2016, the proportion of the population aged 15 and over with a college or other non-university certificate or diploma increased from 1.9% to 6.1% (i.e., 4.2%), higher than the RSA increase (i.e., 2.8%) and provincial level increase during the same period (i.e., 2.5%); however, the actual proportion (i.e., 6.1%) remains below the provincial Indigenous average (i.e., 13.6%). This growth is fuelled primarily by female educational attainment. Attainment of a college diploma or certificate by females in the CRDN was 6.9% in 2016, still below the RSA (i.e., 10.8%) and province Indigenous average (i.e., 17.4%) in 2016.

While the proportion of university graduates in the CRDN has increased between 2006 to 2016 to 2.6% in 2016, it continues to be lower than the RSA (i.e., 4.2%) and provincial Indigenous averages (i.e., 7.6%). The increase in this metric (i.e., 2.6%) was a larger increase than for the RSA (i.e., 1.4%) but lower than the provincial increase during the same period (i.e., 3.1%). Like the trend in the RSA and Saskatchewan, CRDN females are more likely than CRDN males to hold a university degree, a trend that has continued between 2006 and 2016. Among the LSA communities, the CRDN has the lowest level of attainment at the university education level.

6.6.1.2.2 La Loche

Educational attainment in La Loche has fluctuated between 2006 to 2016, with increasing educational attainment in 2016 for all levels of education. Like other LSA communities, educational attainment in La Loche remains below RSA and provincial levels. The majority of populations aged 15 and over (i.e., 67.2%) have no certificate, diploma, or degree; this is substantially higher than the RSA (i.e., 57.5%) and provincial Indigenous average (i.e., 38.9%). The proportion of people without a certificate, diploma, or degree was lower in 2016 than in 2011 (i.e., 81.3) and 2006 (i.e., 80.4%). Like other LSA communities, a larger proportion of males aged 15 and over (i.e., 68.7%) continues to have no certificate, diploma, or degree compared to females (i.e., 65.9%).

Around 16.1% of the La Loche population aged 15 and over has completed high school as their highest level of education, lower than the RSA (i.e., 20.1%) and Indigenous provincial average (i.e., 28.2%). Mirroring the trends at the RSA and provincial level, this metric for La Loche has been steadily increasing between 2006 to 2016, from 12.2% in 2011 and 9.3% in 2006 (Table 16). The high school attainment rate for females (i.e., 17.6%) is above males (i.e., 13.6%).

In 2016, the proportion of the population aged 15 and over with an education in trades (i.e., 5.7%) had risen beyond 2011 levels (i.e., 1.1%) and the 2006 level (i.e., 3.4%). This mirrors the trend at the provincial Indigenous level, which also saw increases in trades education attainment during this period. However, the rates of attainment are still below the RSA (i.e., 7.4%) and Indigenous provincial averages (i.e., 9.6%). Like the other LSA



communities, males in La Loche are more likely to have a trades education than females (i.e., 8.2% compared to 2.9%, respectively) and this difference is widening, mirroring the RSA and provincial trends

From 2006 to 2016 the proportion of those with a college or other non-university certificate or diploma rose from 2.8% to 6.6% (i.e., 3.8% increase), comparable to the change at the RSA level (i.e., 3.9% increase), but lower than the provincial Indigenous average increase (i.e., 5.8%), This growth is fuelled primarily by females. Attainment of a college diploma or certificate by females in La Loche was 7.6% in 2016, higher than that for males (i.e., 5.4%).

The proportion of university graduates in La Loche has increased between 2006 and 2016 to 4.1% in 2016, still below the RSA and Indigenous provincial averages (i.e., 9.2% and 13.6%, respectively). The increase in this metric (i.e., 2.5%) was a larger increase than at the RSA (i.e., 1.4%) but lower than the provincial increase during the same period (i.e., 3.1%). Like the trend in the RSA and province, females are more likely than males to graduate university.

6.6.1.2.3 Birch Narrows Dene Nation

Educational attainment in the BNDN has improved between 2006 to 2016 for all levels. However, like other LSA communities, educational attainment in the community remains below RSA and provincial levels. The proportion of the population aged 15 and over that has no certificate, diploma, or degree (i.e., 45.2%) is lower than the RSA (i.e., 57.5%) but higher than the provincial Indigenous average (i.e., 38.9%). The proportion of people without a certificate, diploma, or degree was smaller than in 2006 (i.e., 66.1%). A larger proportion of males (i.e., 46.7%) have no certificate, diploma, or degree compared to females (i.e., 39.4%), a smaller difference (i.e., 7.3%) than in 2006 (a 22.2% difference). Disaggregated data for the BNDN from 2011 was not available.

Around 22.6% of the BNDN population aged 15 and over has high school as their highest level of education, a substantial increase from the 6.5% in 2006 (Table 16). Females have higher high school attainment (i.e., 24.2%) than males (i.e., 16.7%). Rates for this metric for both females and males are comparable to the RSA levels (i.e., 23.3% and 16.9%, respectively), but below the provincial Indigenous population (i.e., 27.3% and 29.0%, respectively).

The proportion of the population aged 15 and over with an education in trades (i.e., 12.9%) has risen substantially since 2006 (i.e., 8.9%), and is now higher than the RSA (i.e., 7.4%) and Indigenous provincial average (i.e., 9.6%). The increase for this metric (i.e., 12.9%) exceeded the increase experienced at the RSA level and provincial Indigenous level which have remained relatively constant. Males are over three times more likely to have a trades education than females in BNDN (i.e., 20.0% compared to 6.1%, respectively).

From 2006 to 2016, the proportion of those aged 15 and over with a college or other non-university certificate or diploma grew substantially from 0% to 12.9%, exceeding the RSA average (i.e., 9.2%) and just below the provincial Indigenous average (i.e., 13.6%). The increase in attainment in the BNDN for this metric was large compared to the change at the RSA level (i.e., 3.9%) and the provincial Indigenous population (i.e., 5.8%). Attainment of a college diploma or certificate by females in the BNDN was 15.2% in 2016, higher than the attainment levels for males (i.e., 10.0%).

The proportion of university graduates in the BNDN has increased over time from 0.0% to 8.1% in 2016, which is above the Indigenous RSA and Indigenous provincial averages (i.e., 4.2% and 7.6%, respectively). The increase



in this metric (i.e., 8.1%) was a larger increase than at the RSA and Indigenous provincial levels (i.e., 1.0% and 0.9%, respectively). Unlike the trend in the other LSA communities, the RSA, and the province, males are more likely than females to hold a university degree in BNDN. Birch Narrows Dene Nation has the second highest levels of university education achievement among the LSA communities.

6.6.1.2.4 Buffalo River Dene Nation

Educational attainment in BRDN has improved between 2006 to 2016 for all educational attainment levels. The proportion of the population with no certificate, diploma, or degree (i.e., 54.5%) is slightly lower than the RSA (i.e., 57.5%) and substantially higher than the provincial Indigenous average (i.e., 38.9%). The proportion of people aged 15 and over without a certificate, diploma, or degree (i.e., 54.5%) was smaller than in 2011 (i.e., 67.3%) and 2006 (i.e., 68.2%). A larger proportion of males (i.e., 56.4%) have no certificate, diploma, or degree compared to females (i.e., 52.7%), although the difference has narrowed from 18.2% to 3.7% between 2006 to 2016.

Approximately 10.0% of the BRDN population aged 15 or over has high school as their highest level of education, which is half of the RSA level (i.e., 20.1%) and considerably less than the Indigenous provincial level (i.e., 28.2%) (Table 16). This metric decreased slightly from 2011 (i.e., 11.4%) but was an improvement from 2006 (i.e., 9.8%). This trend contrasted with the trends at the RSA and provincial level, which continually saw increases between 2006 and 2016. Females are more likely to have a high school degree than males in the BRDN. The proportion of males in the BRDN with high school as their highest level of education (i.e., 7.3%) was less than a third of the provincial rate (i.e., 27.3%). The proportion of females in BRDN with high school as their highest level of education (i.e., 12.7%), was also substantially lower than the provincial rate (i.e., 29.0%).

Among the LSA communities, the BRDN has the largest proportion of its population with an education in trades (i.e., 19.1%) This is a substantial increase from 2011 (i.e., 7.3%) and 2006 (i.e., 5.5%) levels, while also exceeding the 2016 RSA (i.e., 7.4%) and provincial Indigenous (i.e., 9.6%) averages. Like most other LSA communities, more males are likely to have obtained a trades education than females in the BRDN. Interviews with key contacts indicated that limited construction training is available within the community, and some go to Northland College in Birch Narrows. The remainder go to large urban centres to obtain skills and do not return (2019 to 2021 KP interview program).

From 2006 to 2016, the proportion of those with a college or other non-university certificate or diploma doubled from 5.9% to 10.9%, comparable to the RSA (i.e., 9.2%), but still below the provincial Indigenous population (i.e., 13.6%). The increase in this metric was a larger increase than at the RSA during the same period (i.e., 3.9%) but slightly lower than the provincial increase (i.e., 5.8%). This growth is fuelled primarily by females. Attainment of a college diploma or certificate by males in the BRDN was 5.5%, an increase from 3.8% in 2006. Increases in the attainment of a college level education for females in the BRDN was similar, rising from 8.0% to 10.9% during the same period.

While the proportion of university graduates in the BRDN has increased over time to 5.5% in 2016, exceeding the RSA (i.e., 4.2%), it continues to be lower than the Indigenous provincial average (i.e., 7.6%). The improvement in this metric from 2006 to 2016 (i.e., 2.7%) was a larger increase than at the RSA (i.e., 1.4%) but lower than the provincial increase during the same period (i.e., 3.1%). Like the trend in the RSA and province, more females than males are likely to hold a university degree in the BRDN, a trend that has continued between 2006 to 2016 with



no males obtaining this level of education in 2016. Among the individual LSA communities, the BRDN has the third highest level of attainment at the university education level.

6.6.1.2.5 Buffalo Narrows

Buffalo Narrows has the highest overall educational attainment among the LSA communities (Table 16). The community has seen increases for every level of education between 2006 and 2016 and exceeds the Indigenous provincial educational attainment averages and almost all RSA averages. Only 32.2% of Buffalo Narrows have no certificate, diploma, or degree, lower than the Indigenous provincial average (i.e., 38.9%) and substantially lower than the RSA (i.e., 57.5%). The proportion of people without a certificate, diploma or degree was less than in 2011 (i.e., 43.4%) and 2006 (i.e., 43.3%). A substantially larger proportion of males (i.e., 43.1%) have no certificate, diploma or degree compared to females (i.e., 23.5%), with the difference remaining relatively constant between 2006 to 2016.

Around 19.1% of the Buffalo Narrows population aged 15 and over has completed high school as their highest level of education, lower than the Indigenous provincial average (i.e., 28.2%) and only slightly lower than the RSA average (i.e., 20.1%). This metric has fluctuated between 2006 to 2016, rising from 17.8% in 2006 to 29.6% in 2011 and falling to 19.1% in 2016. The high school attainment rate for males (i.e., 13.9%) was lower than the RSA (i.e., 16.9%) and provincial averages (i.e., 27.3%). The high school attainment rate for females (i.e., 23.5%), was also lower than the Indigenous provincial rate (i.e., 29.0%) but slightly higher than the RSA (i.e., 23.3%).

Among the LSA communities, Buffalo Narrows has the second largest proportion with an education in trades as their highest level of education (i.e., 16.4%), exceeding the 2016 RSA (i.e., 7.4%) and provincial Indigenous (i.e., 9.6%) averages. This is a substantial increase from 2011 (i.e., 5.1%) and 2006 (i.e., 10.4%) levels, while also exceeding the 2016 RSA (i.e., 7.4%) and Indigenous provincial (i.e., 9.6%) averages. Like most other LSA communities, more males (i.e., 19.4%) are likely to have obtained a trades education than females (i.e., 13.6%) in Buffalo Narrows.

Around 17.1% of the Buffalo Narrows population aged 15 and over has a college level education as their highest level of education, exceeding both the RSA (i.e., 9.2%) and Indigenous provincial populations (i.e., 13.6%). The increase in this metric (i.e., 6.6%) was a larger increase than at the RSA (i.e., 3.9%) and Indigenous provincial population increase (i.e., 5.8%) during the same period. Attainment of a college diploma or certificate by males in Buffalo Narrows was 15.5%, an increase from 10.3% in 2006. Increase in the attainment of a college level education for females in Buffalo Narrows (i.e., 5.2%) was smaller, rising from 13.3% to 18.5% during the same period.

The proportion of Buffalo Narrows residents aged 15 and over with a university degree or higher has steadily increased between 2006 to 2016, with a 2016 rate (i.e., 11.2%) substantially higher than the RSA (i.e., 4.2%) and Indigenous provincial average (i.e., 7.6%). The increase in this metric (i.e., 9.0%) was a substantial increase compared to the increases at the RSA and Indigenous provincial levels (i.e., 2.0% and 1.8%, respectively). Like the trend in the RSA and province, females are more likely than males to hold a university degree in Buffalo Narrows; however, the difference between females and male attainment has widened from 4.0% in 2006 to 6.7% in 2016. Among the LSA communities, Buffalo Narrows has the highest level of attainment at the university education level.



Although Buffalo Narrows has the highest level of overall educational attainment among the LSA communities, there are barriers to educational attainment that include lack of access to childcare, transportation, and housing (2019 to 2021 KP interview program). At Northlands College, only single housing is available with no housing for couples and families. The school also does not have staff members trained in mental health or councillors available that understand the trauma of students. Other challenges include the distance between post-secondary institutes and the community and community members commitments to their families. Interviewees noted that financial support is also difficult without scholarships or funding. English as a second language is another issue as Dene is the first language for the majority of residents (2019 to 2021 KP interview program).

6.6.1.2.6 Other Local Study Area Communities

Data for Other LSA Communities was not available.



Table 16: Highest Level of Educational Attainment in the Local Study Area Communities, Regional Study Area, and Saskatchewan (Indigenous)

Metric by Year		CRDN			BNDN			BRDN		Buf	falo Nar	rows		La Loch	ie	Census Di	vision No.18 (RSA	(SA; Indigenous)	Saskat	chewan (Ind	genous)
	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т
20	16	•	•	•	•							•	•	•					•		-
Total population aged 15 and over	280	290	570	150	165	310	275	275	550	360	405	760	735	850	1,585	10,415	10,825	21,245	55,640	61,685	117,325
No certificate; diploma or degree (%)	73.2	58.6	64.9	46.7	39.4	45.2	56.4	52.7	54.5	43.1	23.5	32.2	68.7	65.9	67.2	62.6	52.6	57.5	43.6	34.7	38.9
High school diploma or equivalent (%)	12.5	22.4	16.7	16.7	24.2	22.6	7.3	12.7	10	13.9	23.5	19.1	13.6	17.6	16.1	16.9	23.3	20.1	27.3	29	28.2
Apprenticeship or trades certificate or diploma (%)	8.9	5.2	6.1	20	6.1	12.9	25.5	12.7	19.1	19.4	13.6	16.4	8.2	2.9	5.7	10.6	4.4	7.4	13.8	5.8	9.6
College or other non-university certificate or diploma (%)	5.4	6.9	6.1	10	15.2	12.9	5.5	10.9	9.1	15.3	18.5	17.1	5.4	7.6	6.6	7.5	10.8	9.2	9.2	17.4	13.6
University certificate, diploma, or degree (%)	3.6	5.2	2.6	6.7	6.1	8.1	0	9.1	5.5	6.9	13.6	11.2	2.7	4.7	4.1	1.9	6.4	4.2	4.9	10.1	7.6
20	11																				
Total population aged 15 and over	250	270	520	а	а	а	265	260	525	305	375	680	785	895	1685	10,070	10,555	20,625	48,525	55,435	103,960
No certificate, diploma, or degree (%)	76	66.7	71.2	а	а	а	77.4	63.5	70.5	54.1	34.7	43.4	86.6	77.1	81.3	67.3	57.0	62.0	49.2	40.4	44.5
High school diploma or equivalent (%)	14	16.7	15.4	а	а	а	5.7	15.4	11.4	23.0	42.7	33.1	7.6	15.6	12.2	13.6	21.5	17.6	23.3	25.3	24.4
Apprenticeship or trades certificate or diploma (%)	8	7.4	9.6	а	а	а	9.4	5.8	7.6	9.8	2.7	5.1	3.2	1.1	1.8	11.3	5.2	8.2	14.1	7.2	10.4
College or other non-university certificate or diploma (%)	0	3.7	1.9	а	а	а	3.8	5.8	4.8	4.9	16.0	11.0	1.3	4.5	3.3	4.7	8.1	6.4	7.4	14.4	11.1
University certificate, diploma, or degree (%) at bachelor level or above	0	3.7	1.9	а	а	а	3.8	7.7	5.7	0.0	5.3	5.1	0.0	1.7	1.2	1.5	4.9	3.2	4.1	9.0	6.7
20	06																				
Total population aged 15 and over	210	205	410	140	115	250	260	250	510	290	375	670	670	730	1400	9,045	9,310	18,350	43,615	47,685	91,295
No certificate, diploma, or degree (%)	85.7	78.0	81.7	82.1	82.6	84.0	82.7	68.0	74.5	53.4	34.7	43.3	82.8	78.1	80.4	70.3	62.1	66.1	53.6	45.6	49.4
High school diploma or equivalent (%)	9.5	17.1	13.4	7.1	8.7	10.0	7.7	12.0	9.8	17.2	22.7	20.1	6.7	11.0	9.3	11.4	16.7	14.1	20.4	23.4	22.0
Apprenticeship or trades certificate or diploma (%)	4.8	0.0	0.0	7.1	0.0	4.0	5.8	4.0	5.9	10.3	10.7	10.4	6.7	3.4	5.0	10.1	5.0	7.5	12.3	7.4	9.8
College or other non-university certificate or diploma (%)	4.8	4.9	2.4	0.0	0.0	0.0	3.8	8.0	5.9	10.3	13.3	11.9	2.2	3.4	3.2	4.6	7.7	6.2	7.4	12.2	9.9
University certificate, diploma, or degree (%)	4.8	0.0	0.0	7.1	0.0	4.0	0.0	4.0	2.9	0.0	4.0	2.2	1.5	2.1	1.8	1.7	4.6	3.2	4.0	7.5	5.8

Source: Statistics Canada 2007 a,c,d,f,g,l,k,m,o; Statistics Canada 2013 a,c,e,g,l,k; Statistics Canada 2017 b,c,d,e,f,g; Statistics Canada 2018a.

Note: Statistics Canada data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5 and in some cases, 10. Totals may not add up due to rounding.

In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

Educational attainment data for 2016 were derived from 30% data. However, on Indian reserves and in remote communities, Statistics Canada attempts to obtain data from 100% of the population.

a= data not available; M = male; F = female; T = total; CRDN = Clearwater River Dene Nation; BNDN = Birch Narrows Dene Nation; BRDN = Buffalo River Dene Nation; n/a= not applicable; LSA = local study area; RSA = regional study area.



6.6.2 Primary and Secondary Education

6.6.2.1 Attendance Rates

Attendance is an important indicator with a strong correlation to measures of student achievement. Students with at least 80% attendance are much more likely to achieve higher educational outcomes than students with lower attendance (NLSD 2020c). Attendance for NLSD students overall was lower than the provincial average for all grades, with 63% of students achieving 80% attendance²⁷, in comparison to the provincial average of 86% (Figure 24). Attendance results have remained consistent between 2014/2015 to 2018/2019, with about 60% of students in all grades with at least 80% attendance (NLSD 2020c). In 2018/2019, the proportion of students in Grades 10 to 12 was considerably lower than the provincial average, with only 38% of all students in those grades achieving at least 80% attendance, compared to 75% of students in the province. Self-identified Indigenous students in the NLSD also had slightly lower rates of 80% attendance at 21%, lower than at the provincial level (i.e., 30%). Data on attendance rates for schools in each LSA community were not available.

²⁷ Percentages represent all attendance that occurred in the school division in the years reported. This includes all reported attendance for students attending the division during that year, whether or not they are currently enrolled in that division, but only includes attendance data while students were enrolled in the school division. Each percentage is a weighted average of the monthly percentages of students enrolled in the division with at least 80% and at least 90% attendance. Results for populations of fewer than 10 have not been reported to avoid identifying individuals or very small groups of students.



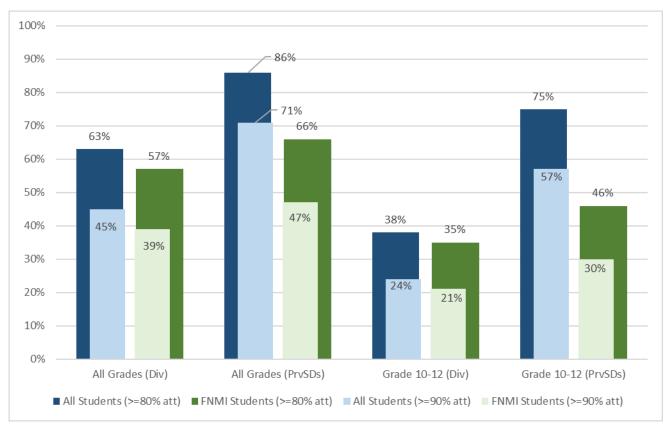


Figure 24: Percentage of Students with at Least 80% (and 90%) Attendance, Northern Lights School District 113, and Provincial School Divisions, 2018 to 2019

Source: NLSD 2019.

Note: Percentages represent all attendance that occurred in the school division in the years reported. This includes all reported attendance for students attending the division during that year, whether or not they are currently enrolled in that division, but only includes attendance data while students were enrolled in the school division. Each percentage is a weighted average of the monthly percentages of students enrolled in the division with at least 80% and at least 90% attendance. Results for populations of fewer than 10 have not been reported to avoid identifying individuals or very small groups of students.

FNMI = First Nations (Registered/Treat/Status Indian, Non-Status Indian), Métis, or Inuit/Inuk; Div = Northern Lights School Division; PrvSDs = Provincial School Divisions; ≥ = greater than or equal to.

At Birch Narrows School in BNDN, attendance is reported to be low, and the school schedule was altered to start earlier with students staying longer during the day and ending earlier. Attendance decreases in November and December (2019 to 2021 KP interview program). At Buffalo River School in Dillon, attendance is average for the middle school grades and relatively good for elementary and high school (2019 to 2021 KP interview program).

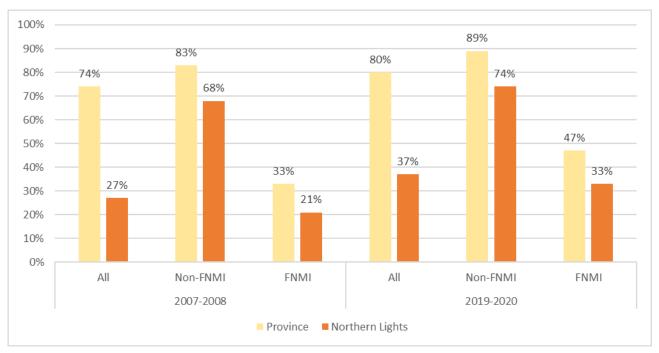
At Twin Lakes Community School in Buffalo Narrows, attendance rates vary throughout the school year. The lack of basic services in the communities affects attendance rates. For example, when individuals need to leave the community for medical appointments out of town, often the entire family will go with them, and students will miss several days of school (2019 to 2021 KP interview program).



6.6.2.2 Graduation Rates

For the 2019 to 2020 school year, 61% of students in the school division graduated Grade 12 within five years, a 20-year high for this measure (NLSD 2020c). Figure 25 shows the change in three-year graduation rates (students completing Grade 12 within three years of starting Grade 10) for the NLSD and province for the 2007/2008 cohort and the 2017/2018 cohort. While increases have been made in overall graduation rates (including Indigenous and non-Indigenous students) in the NLSD from 2006, rising from 27% to 37%, there is still a considerable gap for the NLSD (i.e., 37%) compared to the province (i.e., 80%). Graduation rates for self-identified Indigenous students in the NLSD (i.e., 33%) also remain lower than self-identified Indigenous students at the provincial level (i.e., 47%).

Figure 25: Three Year Graduation Rates, Province, and Northern Lights School Division No. 113 (2007 to 2008 Cohort and 2017 to 2018 Cohort)



Source: NLSD 2020c.

FNMI = First Nations (Registered/Treat/Status Indian, Non-Status Indian), Métis, or Inuit/Inuk; Non-FNMI = those who do not identify as First Nations, Métis or Inuit/Inuk; however, may also include FNMI students who choose not to self-identify.

The Dene High School in La Loche has an average graduating class of 25 students in recent years, with approximately 5% to 10% of students pursuing post-secondary education. Key person interview program participants noted that some students choose work for a period of time before pursuing post-secondary education, as moving from the community can be stressful. Most students stay within the community. The school has a graduation team that consists of a career transition teacher, administration, student support worker, social worker, and classroom teacher. The graduation team help students, including students at risk, and provide assistance with applications, résumés, and university tours.



Graduation rates at Twin Lakes Community School in Buffalo Narrows have increased in recent years, ranging from 52% to 62% from 2015 to 2019 (2019 to 2021 KP interview program). Typically, out of 10 students, five pursue post-secondary education while two or three students complete it (2019 to 2021 KP interview program). The school has benefited from supporting their students and receiving student feedback and modifying classroom instructions accordingly. Key person interviews indicated that greater parental involvement is an area for improvement. Some students continue their education in post-secondary or trade schools. Interviewees remarked that many students do not feel comfortable leaving the community due to the financial costs for additional education and differences in culture. Courses offered in the school that lead to post-secondary education or employment include trades-based courses such as welding, carpentry, commercial cooking, drafting, and clothing.

Between six and twelve students at Birch Narrows School in BNDN graduate annually (2019 to 2021 KP interview program). Interview participants noted students that pursue post-secondary education often must upgrade their marks, which typically occurs through Northlands College in Buffalo Narrows (2019 to 2021 KP interview program; BNDN-JWG 2021a). Students that plan on moving on to post-secondary education and are utilizing Indigenous government (band) funding must go through an application process. In recent years, there have been more students applying than available funding to send them to receive post-secondary education. Information on NexGen's contribution to scholarships programs is presented in Section 6.6.3, Challenges to Attaining Post-Secondary Success. Common areas for post-secondary studies include education, nursing, and office management (BNDN-JWG 2021a). Interviewees indicated that education programs need to set higher standards to achieve higher skills (2019 to 2021 KP interview program). Adult students are accepted for high school courses. Challenges for adult education include the need for daycare services and lunch programs.

Graduation rates at Buffalo River School in Dillon are relatively low, with six to 10 graduates out of a class of 20 in 2018/2019. The highest graduation rate between 2006 to 2016 was 50% (2019 to 2021 KP interview program). The school also includes a small post-secondary upgrading classroom (BRDN-JWG 2021a). Interview participants noted that many students who pursue post-secondary education return to the community before completing the program. Students often go to Buffalo Narrows to take post-secondary education at Northlands College (2019 to 2021 KP interview program). Those that travel further for education to locations such as Saskatchewan Polytechnic can experience issues including culture shock and difficulty accessing childcare (BRDN-JWG 2021a).

6.6.3 Challenges to Attaining Post-Secondary Success

A 2008 report prepared for the Community Vitality Monitoring Partnership Program sought to understand the factors influencing the ability of people from the area to access and succeed at post-secondary education programs (CVMPP 2008). Although focused on the communities of the Athabasca Basin (i.e., a portion of the RSA), many of the aspects identified in the report apply equally to the LSA.

To understand the factors that influence residents' decisions to pursue and ability to succeed in post-secondary education, the study considered the perspectives of multiple stakeholders related to education in the Athabasca Basin. The results of consultation painted a complex picture of the factors that affected residents in attending and succeeding in post-secondary programs. Many of these challenges were paralleled by other research on access and affordability of post-secondary education in Canada.



The characteristics identified to be an impediment to post-secondary education include:

- not completing high school;
- having young families;
- having parents with no experience with post-secondary education; and
- living in remote communities without post-secondary facilities.

The study found that residents of the Athabasca Basin faced a series of challenges, many of which are common to many remote northern and Indigenous communities across Canada. Social challenges were found to be the largest barrier to overcome, followed by:

- Academic challenges, many of which resulted from the quality of education received in the communities;
- A general lack of awareness of the benefits of a post-secondary education; and
- A lack of awareness of employment opportunities in the region contributed to the low overall perceived value of education by many respondents.

Reinforcing the value of an education was seen as necessary not only at the post-secondary level, but also in the primary, middle, and secondary school levels.

Respondents also faced financial challenges associated with attending post-secondary institutions far from home. Most of the respondents were eligible for funding under Indigenous and Northern Affairs Canada's Post-Secondary Student Support Program and as such comments focused more on cost-of-living aspects of post-secondary education versus concerns about direct education costs like tuition and books. The study found some cultural challenges associated with attending and completing post-secondary programs, such as language and discrimination, though in comparison to other challenge areas, culture was less of a concern for respondents.

In 2016 NexGen established the summer student program. The program aims to build skills and confidence in young adults through skillful employment at the existing exploration site. To date, over 60 students have been employed in the summer student program. In 2020, the program did not proceed due to the pandemic. In 2021, the program resumed in a revised format in which summer students were hired to work within their LPA community. The 2021 program primarily consisted of a youth-Elder interview program. In 2021, four summer students participated in the program, two students in BRDN and two students in Buffalo Narrows with Métis Local 62. NexGen is planning to resume the summer student program at the Rook I site in 2022.

Since 2017, NexGen has provided up to four scholarships per year to students from LPA communities to successfully pursue their post-secondary education. To date, seven students have received scholarships, many of which have received scholarships throughout multiple academic years due to continued eligibility. Due to disruptions associated with the pandemic, the 2020/2021 scholarship program was focused on the continued support of the current scholarship recipients and there were no new scholarship recipients. The program accepted a new recipient for the 2021/2022 academic year. This is an ongoing initiative. NexGen also currently provides bursaries to support students pursuing post-secondary education (NexGen 2021a).



6.6.4 Mining-Specific Training

The uranium sector and government partners have historically provided several training opportunities for northern workers including student work placements originally through the MPTP and more recently in partnerships with Northern Career Quest (Government of Saskatchewan 2018a). The MPTP was a collaborative effort developed by government, industry, and local public and Indigenous communities to maximize training and advancement opportunities in the uranium sector.

6.6.4.1 Multi-Party Training Plan

The recommendations of the Joint Panel (Section 6.2.4.1.1) included many that influenced government and industry in terms of northern community wellness, northern employment, and business participation in the industry. The recommendations stimulated changes in government policy and industry actions, which resulted in changes in the northern training-for-employment programs, employment statistics, northern business development, and the industry's purchases of goods and services from those businesses.

The MPTP was a unique multi-stakeholder partnership between public, private and non-profit organizations. Phase I of the MPTP was started in July 1993 as a \$10.5 million training-to-employment initiative among the province, federal government, Aboriginal agencies, Northlands College, and the northern mining industry.

Phase II was signed in 1998, expanding the total commitment to \$13 million and its membership and goals to include economic development. Phase III of the MPTP was announced in 2003, and by 2008, a total of \$40 million had been invested in training northerners for highly skilled jobs, primarily in the mining industry in northern Saskatchewan.

The MPTP enabled mining companies to pool their labour projections and other partners to combine resources in linking training directly to the mineral sector's demand. Training initiatives were identified by the Mineral Sector Steering Committee of the Northern Labour Market Committee, which consisted of 14 partnering agencies including:

- Apprenticeship and Trade Certification Commission;
- Northlands College;
- Prince Albert Grand Council;
- MLTC;
- Methy Pathways Board Inc.;
- Northcote Métis Development Corporation;
- Métis Employment and Training, Beauval;
- Jim Brady Employment and Training Centre;
- Cameco Corporation;
- Claude Resources Inc.;



- COGEMA Resources Inc.;
- Saskatchewan Learning;
- Saskatchewan Northern Affairs; and
- Saskatchewan Community Resources and Employment.

The MPTP-coordinated programs included education upgrading, apprenticeship training, workplace preparation, and technical skills training. Programs were planned by the Mineral Sector Steering Committee to meet current skill needs. Types of programs offered included underground mining, mill operator, chemical technician, mineral exploration technician, and academic upgrading (NLMC et al. 2011). In its 1997 report (Cumulative Observations), the Joint Panel noted programs such as the MPTP were important to make sure northern Saskatchewan residents can continue to access economic opportunities in the uranium sector (IAAC 2016).

During its initial two phases (i.e., 10 years), the MPTP supported the training, hiring and advancement of residents of northern Saskatchewan in the mining industry. More than 1,200 training certificates were awarded in apprenticeship, technical and skills training, and in academic upgrading during MPTP Phase I and Phase II. Eighty-three percent of the students in Phase I and Phase II completed their programs, and it has been estimated that 81 per cent of the students in the first two phases of the MPTP were Indigenous.

When the three phases (i.e., 15 years) are examined, a total of 4,933 residents of Northern Saskatchewan enrolled in the programs, with the majority enrolling during the second phase (i.e., 2,109 enrollments). Total enrollment included 1,947 enrollments for workplace education, 1,149 enrollments for basic education, 1,132 enrollments for skills training, 414 enrollments for apprenticeship training, and 291 enrollments for technical training (CVMPP 2013). A fourth and final five-year term for the MPTP was signed and implemented in 2010.

6.6.4.2 Northern Career Quest

Today, Indigenous community members in northern Saskatchewan can access mine-specific training through the Northern Career Quest Partnership. Northern Career Quest Inc. (NCQ) is a registered "not-for-profit", industry-led training program directed toward Indigenous residents in northern Saskatchewan. Northern Career Quest has linked with the MPTP for the Mineral Sector to expand the job and training links for its clients in partnership with government and companies in Saskatchewan and Alberta (ASKI 2011).

Working with training institutions active in northern Saskatchewan (i.e., Northlands College, Gabriel Dumont Institute and the Saskatchewan Indian Institute of Technologies), NCQ leverages its industry partnerships to meet the needs of both labour supply and demand in response to emerging needs of businesses, including, but not limited to, the mining, natural resource, and infrastructure sectors. Since its inception, both uranium mining companies active in northern Saskatchewan have partnered on a regular basis with NCQ to deliver training specific to employment within their operations. Training is offered on-site at mines for employees of companies such as ORANO Canada (formerly Areva Resources Canada Inc.), Cameco Corporation, and Athabasca Basin Security (Northern Career Quest 2021). Residents from CRDN, La Loche, Birch Narrows, Turnor Lake, Dillon, and Buffalo Narrows are noted to have participated from 2008 to 2012 (Northern Career Quest 2013). Additionally, Aggressive Drilling provides training and employment for community members in partnership with Northern Career Quest Partnership and NexGen (NexGen 2021b). Between 2008 and 2017, Northern Career Quest, saw a total of 3,834 graduates from various communities in Northern Saskatchewan (Northern Career Quest 2021).



The majority of funding to support NCQ programs is secured from the federal and provincial governments, under four-year funding agreements, with mining companies generally providing 'in-kind" contributions related to their specific training needs. Northern Career Quest funding is for the training of Indigenous people in programs that lead to new long-term and/or full-time employment opportunities, or for training with existing employees leading to succession opportunities. All programs delivered by NCQ must have guaranteed employment and the training delivered must be either industry or institution approved.

In November 2021 the Government of Saskatchewan, through the Canada-Saskatchewan Labour Market Transfer Agreements, provided approximately \$2 million in funding to Northern Career Quest to support training and employment services to Indigenous job seekers residing in the northern part of the Saskatchewan (Government of Saskatchewan 2021f). The funding enables Northern Career Quest to diversify its training and employment services beyond just the resource sector.

Advances have been made towards increasing education levels in the RSA since 1992, particularly in post-secondary training relevant to the mining industry, such as apprenticeships and trades where attainment rates for apprentices are higher than in other parts of the province. This reflects considerable efforts by industry and government in post-secondary programming through initiatives such as the MPTP. While the number of northern Saskatchewan residents 15 years and older with at least a high school certificate or equivalent has increased substantially from 1976 to 2006, education attainment rates in northern Saskatchewan have not reached parity with provincial rates (CVMPP 2013). Analysis of historical mining sector employment data for northern Saskatchewan for the period 1992-2018 shows a steady increase in the participation of northern contractors and northern mine employees in northern mining workforces (Government of Saskatchewan 2018a). Consistent with trends in the value of annual mineral industry purchases from northern businesses, northern Saskatchewan participation in the uranium mining industry peaked in 2012 at approximately 1,800 people before declining substantially to a little over 500 people in 2018.

NexGen initiated a summer student internship program in 2016 for both high school and post-secondary students (NexGen 2021c). High school students experience opportunities in areas including geology, surveying, camp maintenance, and industrial cooking. Post-secondary students receive hands-on work experience. A summer student mentorship program brings participants who have completed the high school program back to mentor new students (NexGen 2021c).

In addition, NexGen has initiated discussions with LPA community representatives, training institutions active in the NSAD (i.e., Northlands College, the GDI, and the Saskatchewan Indian Institute of Technologies), and Northern Career Quest Partnership in an effort to stimulate the development of a MPTP-style training program to maximize training opportunities for LPA community members to facilitate securing employment opportunities at the Project.

In 2013, the Community Vitality Monitoring Partnership²⁸ reviewed the socio-economic effects of the modern era of uranium mining on northern Saskatchewan and noted that initiatives like the MPTP contributed to increased education levels, specifically post-secondary training relevant to the mining sector. Based on the review, the Community Vitality Monitoring Partnership made several recommendations to further improve northern

²⁸ The Community Vitality Monitoring Partnership is a partnership of government ministries, regional health units and uranium mining producers that works to identify and track indicators that provide insight into community vitality.



participation in economic benefits from the uranium sector (CVMPP 2013). Some of the more pertinent recommendations were:

- Multi-stakeholder approaches (i.e., provincial government, federal government, tribal councils, school boards, and communities) should:
 - discuss how to place more effort on early childhood development; and
 - provide support for bridging programs between high schools and colleges/universities.
- Uranium mining companies should target some education efforts and donations to invest in early childhood development.
- Uranium mining companies should explore ways for small northern companies to participate more in mine contract opportunities.
- School boards, tribal councils and education institutions should provide dedicated career counselling in schools in northern Saskatchewan with the support of industry, where appropriate.

A lack of educational and training opportunities is often noted as a barrier to educational attainment as well as affordability of programs. By implementing programs that target those communities that find access to education and training challenging, attainment can be improved.

6.7 Community Health

This subsection describes the health and well-being of the RSA with reference to a suite of key health indicators. Health indicator data are presented at the level of the RSA²⁹ and Keewatin KYHR level (Figure 18), which was the health authority that included the LSA communities before Saskatchewan amalgamated the health regions in the province in 2017. Data are presented at the regional level to ensure the confidentiality of the communities in the LSA, many of which have small populations. Data at the community level are not publicly available. More recent data was not available.

This subsection also discusses LSA community perspectives of health with reference to the findings of KP interviews.

6.7.1 Physical Health

In a 2016 report on Northern Saskatchewan Health Indicators, a smaller proportion of the RSA off-reserve population reported perceiving their own health status as very good or excellent compared to the province as a whole (Irvine et al 2017). The perceptions of health status in the RSA remained relatively stable between 2007 to 2008 and 2013 to 2014, ranging between 44% and 48% of people feeling their mental health status was good or very good while the provincial rate ranged from 55% to 60%.

²⁹ The RSA contains the former health regions of Keewatin Yatthé, Mamawetan Churchill River, and Athabasca health Authority.



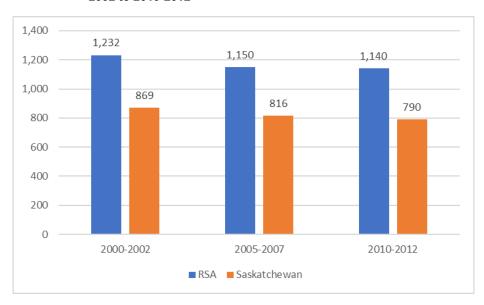
6.7.1.1 Regional Study Area

6.7.1.1.1 Mortality Rate

Mortality data can further help provide insight on the health status of an entire community. For example, the premature mortality rate (i.e., occurring before the age of 75) has been identified as one of the best single measures of overall community health. Communities with higher premature mortality rates tend to have higher rates of illnesses, hospital utilization, and poorer overall health. Mortality data by cause allows for the determination of the number of deaths that may have been preventable. Mortality data are taken from the Saskatchewan Vital Statistics Database and excludes out-of-province deaths.

In the RSA, total crude mortality rates are approximately 1.5 to 2 times as high as the province (NSPHU 2017a). Between 2000 and 2012, total mortality in the RSA has decreased slightly, but remains at rates greater than the province overall (Figure 26). Mortality rates, like in other parts of the country, progressively increase with age and are highest in both males and females aged 85 years and over. Males have higher morality rates than females in almost all age groups (NSPHU 2017a).

Figure 26: Age-Standardized Mortality, All Causes, 3-Year Average, Regional Study Area, and Saskatchewan, 2000-2002 to 2010-2012



Source: Statistics Canada Table 102-4313, via NSPHU 2017a.

RSA = regional study area.

The leading causes of death in the RSA are injuries, cancers, circulatory diseases, and respiratory diseases (Table 17). In the former KYHR, the leading cause of death was cancers.



Table 17: Number of Deaths by Common Causes in the Keewatin Yatthé Health Region and the Regional Study Area, 2005 to 2012

Metric	KYHR	RSA	
External causes of morbidity/mortality (injuries)	130	430	
Cancers	152	366	
Circulatory	113	321	
Respiratory	50	131	
Endocrine, nutritional, and metabolic	21	n/a	
Digestive	24	n/a	
Mental disorders	22	n/a	
Infectious and parasitic diseases	17	n/a	
Nervous system	20	n/a	
Genitourinary	20	n/a	
Congenital anomalies	5	n/a	
Symptoms, signs, and ill-defined conditions	14	n/a	
Conditions originating in the perinatal period	6	n/a	
Other	7	496	
Unknown	18	n/a	
Total	619	1,744	

Source: Saskatchewan Vital Statistics via NSPHU 2017a.

KYHR = Keewatin Yatthé Health Region; RSA = regional study area; n/a = not available.

Some of the main specific causes of death in the RSA include ischemic heart disease, intentional self-harm, lung cancer, motor vehicle collisions, cerebrovascular disease, and chronic obstructive pulmonary disease (COPD; Table 18). Injuries are the leading causes of death in most age groups in the RSA, with intentional self-harm, motor vehicle traffic crashes, assault, and accidental poisonings being most common. In the older age groups (i.e., 50 to 59 and 50 and above), chronic disease becomes the leading causes of death with ischemic heart disease, lung cancer and diabetes being most common.

Table 18: Ranking of Common Causes of Mortality by Age Group Regional Study Area, 2005 to 2014

Age Group	First	Second	Third	
1 to 9	Drowning	<5	<5	
10 to 19	Intentional self-harm	Assault	Motor vehicle collisions	
20 to 29	Intentional self-harm	Motor vehicle collisions	Accidental poisoning	Assault
30 to 30	Intentional self-harm	Motor vehicle collisions	Accidental poisoning	Assault
40 to 49	Intentional self-harm	Motor vehicle collisions	Ischemic heart disease	
50 to 59	Ischemic heart disease	Lung cancer	Motor vehicle collisions	
50 and above	Ischemic heart disease	Lung cancer	Diabetes mellitus	
Overall	Ischemic heart disease	Intentional self-harm	Lung cancer	

Source: Saskatchewan Vital Statistics via NSPHU 2017a.

< = less than.



Avoidable deaths are defined as untimely deaths that should not occur in the presence of timely and effective health care (i.e., treatable deaths) or other public health practices, programs, and policy interventions (i.e., preventable deaths)³⁰. The RSA has close to twice the rate of avoidable mortality compared to both the province and nation as a whole (NSPHU 2017a). Between 2005 and 2014, 74% of all deaths in the RSA were premature, having occurred in individuals aged 74 years and younger. Rates of preventable mortality are between two to three times the rates of treatable mortality in the RSA. Across the north (i.e., in the RSA), this discrepancy has remained similar between 2005 and 2014. Of total deaths in the RSA, 57% are considered avoidable, 14% are unavoidable, and 3% unknown. These three subcategories are classified as premature deaths and combined, account for 74% of total mortality in the RSA. The avoidable deaths (57%) are further divided into the two subcategories of preventable at 41% and treatable at 16%. The leading causes of preventable mortality in the RSA are suicide, transport accidents, lung cancer, alcohol-related diseases, ischaemic heart disease, accidental poisonings, assault other external causes of accidental injury, drowning, and chronic obstructive pulmonary disorders (NSPHU 2017a). The leading causes of treatable mortality include ischaemic heart disease, congenital malformations, complications of perinatal period, colorectal cancer, breast cancer, diabetes mellitus, pneumonia, sepsis, cerebrovascular diseases, and renal failure.

6.7.1.1.2 Infant Mortality

Infant and maternal health indicators provide good information about the health of the overall community and are closely linked to non-medical determinants of health such as poverty, education, levels, and employment (FNIGC 2012). Premature mortality rates and infant mortality have often been found to be some of the best measures of health in a community, with higher rates of infant mortality corresponding with poorer overall health. Data from the Saskatchewan Year-end Hospitalization File (Discharge Abstract Database) and the Saskatchewan Vital Statistics Database were used to calculate infant mortality (NSPHU 2017a).

The infant mortality rate in the RSA was 10.6 deaths per 1,000 live births in the period between 2004 and 2013 and was lower in the KYHR over the same period at 7.6 infant deaths per 1,000 live births. Causes of mortality by northern health unit were unavailable; therefore, RSA data are presented in aggregate. The major causes of infant mortality in the RSA included congenital anomalies (i.e., 33%), perinatal conditions (i.e., 23%), and symptoms and signs of ill-defined conditions including sudden infant death syndrome (i.e., 14%), respiratory conditions (i.e., 7%), and infectious and parasitic diseases (i.e., 7%). Congenital anomalies remain the leading cause of infant mortality for both the greater Province of Saskatchewan and Canada as a whole. Rates for the whole of Canada (i.e., 23%) are lower in comparison to the Province of Saskatchewan, which remains similar to what is found within the RSA (i.e., 33%). Recent research has identified a gene in one fatal congenital condition found in northern Saskatchewan, which could be mitigated to a degree by screening and enhanced genetic counselling (NSPHU 2017a).

6.7.1.1.3 Chronic Disease

Chronic disease is an important measure of a community's overall health because not only does it reflect a community's demographics, but it also has negative effects on the quality of life of affected individuals, causes premature deaths, and creates adverse economic effects on families, communities, and societies (WHO 2005). In Canada, two-thirds of all deaths each year are a result of major chronic diseases (e.g., cardiovascular diseases,

³⁰ Preventable deaths are linked to factors which can be modified, such as physical activity, healthy eating, smoking, or alcohol consumption, in addition to public health interventions such as vaccination or safety legislation (NSPHU 2017a).



cancers, chronic respiratory diseases, diabetes) and they are largely preventable (Public Health Agency of Canada 2016). The Northern Saskatchewan Population Health Unit Mortality Report identifies the leading causes of death in northern Saskatchewan to be injuries, cancers, circulatory diseases, and respiratory diseases (NSPHU 2017a).

Crude rates of most chronic diseases are either similar or slightly lower in the RSA, compared to the province. Age-standardized rates, which control for the effect of age, indicate a lower risk of many chronic diseases, including diabetes, ischemic heart disease, COPD, and heart failure (Irvine and Quinn 2019). Figure 27 shows the age-standardized rates for selected chronic diseases in the RSA and province. The most common chronic disease in the RSA is hypertension, followed by diabetes and COPD.

30% 26%_{25%} 25% 20% 13% 12% 15% 13% 12% 10% 9% 10% 8% 8% 5% 5% 4% 5% 3% 3% 0% Asthma Diabetes Hypertension Ischemic Heart Osteo-arthritis Stroke Chronic Heart Failure Disease obstructive pulmonary disease ■ RSA ■ Saskatchewan

Figure 27: Age-Standardized Rates, Selected Chronic Diseases, Regional Study Area, and Saskatchewan, 2014/2015

Source: Ministry of Health 2014/15 via Irvine and Quinn 2019 RSA = regional study area.

6.7.1.1.3.1 Diabetes

Over the 2005 to 2014 period, diabetes is the third ranked common cause of mortality for the 60 years and above age group in the RSA (NSPHU 2017a; Figure 27). Indigenous Peoples are among the highest-risk populations for diabetes and diabetes-related complications in Canada (Harris et al 2013). The 10-year average crude mortality rate from diabetes mellitus in the treatable sub-category (i.e., Type 2), in northern Saskatchewan, was 5.5 cases per 100,000 population from 2005 to 2014. Sixty-nine people died of diabetes in northern Saskatchewan in the 2005 to 2014 period, out of a total 1,745 deaths in the period (NSPHU 2017a). The age-standardized prevalence rate of diabetes in northern Saskatchewan was over 12%, which was the highest for the health regions in Saskatchewan and higher than the provincial prevalence rate of just under 8% (Government of Saskatchewan



2016b). Individuals who are overweight or obese are at higher risk of developing a variety of health conditions, including Type 2 diabetes, heart disease, and some cancers. Diabetes usually has multiple risk factors and may take many years to develop. In a 2006 report from the Indigenous Peoples' Health Research Centre, diabetes was the most common identified health issue affecting Saskatchewan Indigenous populations in the category of chronic diseases, nutrition, and lifestyle. Overall, diabetes ranked as the third most common mentioned health issue, with many participants observing that it is tied to larger issues of lifestyle, physical activity, and nutrition (Sinclair et al. 2006).

6.7.1.1.3.2 Cancer

Incidence rates and mortality rates for cancer are presented below for the three northern health regions in aggregate in Saskatchewan Cancer Agency's Saskatchewan Cancer Control Report: Profiling Cancer in Regional Health Authorities. The data are taken from the Saskatchewan Cancer Registry, maintained by the Saskatchewan Cancer Agency. The incidence of cancer, or total number of new cases (i.e., crude rate), in the three northern health regions in the 2010 to 2014 period was 216 cases in females and 224 cases in males (Saskatchewan Cancer Agency 2017).

Breast cancer was the cancer with the highest incidence rate in females in northern Saskatchewan in the 1995 to 2014 period. The age-adjusted rate of breast cancer females in the three northern health regions fluctuated between 64.3 per 100,000 and 111.1 per 100,000 in the 20-year period, displaying an upward fluctuating trend, compared to the relatively stable provincial trend in the same time period. Age-adjusted breast cancer mortality rates in the three northern health regions comprising the RSA have been declining since the 2007 to 2010 period, when they reached a peak at 42.0 per 100,000. Provincial rates have also been declining, though less dramatically with rates falling from approximately 21.0 per 100,000 in 2007-2010 to 19.0 per 100,000 in 2011-2014 (Saskatchewan Cancer Agency 2017).

Prostate cancer was the cancer with the highest incidence rate for males in the three northern health regions in the 1994 to 2014 period. The age-adjusted prostate cancer incidence rate in northern Saskatchewan has increased in the 1995 to 2014 period from 56.7 per 100,000 to 93.1 per 100,000. The age-adjusted prostate cancer incidence rate in northern Saskatchewan was initially much lower than the very high provincial rate; however, has been slowly increasing toward the provincial rate, which, in turn, has been declining. Prostate cancer mortality rates have been increasing in the northern health regions, from 9.9 per 100,000 to 26.4 per 100,000 over the 20-year period and simultaneously declining in the province as whole (Saskatchewan Cancer Agency 2017).

Lung cancer was the second most prominent cancer for both males and females in northern Saskatchewan. Lung cancer incidence rates in females in the northern health regions remained consistently higher than provincial rates over the 1995 to 2014 period, climbing to 82.5 per 100,000 in 2011 to 2014. For males, age-adjusted lung cancer incidence rates have been declining in the north after a high rate of incidences in the late 1990s of 115.2 per 100,000 in the 1999 to 2002 period, to a rate which is closer to, but still slightly higher than the province as a whole. As opposed to incidence, age-adjusted lung cancer mortality rates for both sexes have been declining in the 1995 to 2014 time period, but remain higher than provincial rates, particularly for females. For males, the age-adjusted mortality rate for lung cancer in the north peaked at 109.8 per 100,000 in 1999 to 2002, then declined to 51.4 per 100,000 in 2011 to 2014. For females, age-adjusted lung cancer mortality rates in northern



Saskatchewan declined from 67.1 per 100,000 to 48.4 per 100,000 over the 20-year period (Saskatchewan Cancer Agency 2017).

Colorectal cancer is the third most common type of cancer in males and females in northern Saskatchewan, with rates increasing over time for both sexes. For females, colorectal cancer rates increased from 28.7 per 100,000 in 1995 to 1998 to 47.6 per 100,000 in 2011 to 2014, while in males the rates increased from 49.6 per 100,000 to 66.4 per 100,000 over the period. In males, northern Saskatchewan rates, though increasing, remained below provincial rates, which are also increasing. For females, the northern Saskatchewan rate started out lower than the provincial rate at the outset of the period and ended the 20-year period close to par with the provincial rate. Age-adjusted mortality rates for colorectal cancer in the 1995 to 2014 period have shown an increase in both sexes, for females it increased from 8.2 per 100,000 to 15.4 per 100,000 over the 20-year period (Saskatchewan Cancer Agency 2017).

6.7.1.1.4 Communicable Disease

Common communicable diseases in the RSA include chlamydia, gonorrhea, HIV, hepatitis C, and tuberculosis (Irvine et al. 2017). Rates of these communicable diseases in the RSA were substantially higher than the provincial averages (NSPHU 2017b).

6.7.1.1.4.1 Human Immunodeficiency Virus

Crude rates of new diagnoses of HIV are higher in northern Saskatchewan compared to the rest of the province, there was a peak in 2012. In the northern Saskatchewan population, there were an average of eight new diagnoses of HIV per 100,000 cases between 2007 and 2011, which doubled to an average of 16 per 100,000 cases between 2012 and 2016. The crude rate of newly diagnosed persons with HIV was found to be 29 per 100,000 in the KYHR in the 2007 to 2011 period, with a jump to 50 per 100,000 in the 2012 to 2016 period. In the 2007 and 2016 period, the highest number of cases were among males aged 30 to 49. Self-reported risk factors among newly diagnosed individuals included intravenous drug use at 47% and heterosexual contact at 35%, with the remaining 18% in the "other" category (NSPHU 2017b).

6.7.1.1.4.2 Sexually Transmitted Infections

In terms of sexually transmitted infections, northern Saskatchewan's chlamydia rate was approximately eight to twelve times the Canadian crude rate and the gonorrhea rate was approximately 14 to 36 times greater than the Canadian crude rate. The KYHR has a higher crude rate than the northern Saskatchewan rate for both chlamydia and gonorrhea. The age-standardized, 10-year average (2007 to 2016) chlamydia rate was at 2,096 cases per 100,000 in northern Saskatchewan while in the KYHR, the age-standardized, 10-year average chlamydia rate for the same period was 2,300 cases per 100,000. For gonorrhea, the age-standardized, 10-year average for northern Saskatchewan (2007 to 2016) was 704 cases per 100,000 population, and 824 cases per 100,000 in the KYHR. Overall, gonorrhea and chlamydia rates were found to be higher in the 15 to 29 age group, particularly in females. The higher rate among females may reflect increased screening during routine check-ups for prenatal care, contraceptive counselling, pap smear screening, or other related interactions with the health care system where diagnoses would occur (NSPHU 2017b).



6.7.1.1.4.3 Hepatitis C

Crude rates of newly diagnosed hepatitis C fluctuates annually in northern Saskatchewan and have been higher than the rest of the province since 2012. From 2007 through 2016, there were 30% more cases of newly diagnosed hepatitis C in males compared to females in the northern Saskatchewan. In 2016, the crude rate in northern Saskatchewan was 110 cases per 100,000, about 1.8 times the rate of Saskatchewan as a whole. The crude rate of newly diagnosed hepatitis C infections for KYHR was 64 per 100,000 in the 5-year period between 2007 and 2011 and 94 per 100,000 in the period between 2012 and 2016 (NSPHU 2017b).

6.7.1.1.4.4 Tuberculosis

There has been a declining trend in the crude rates of new and relapsed tuberculosis cases in northern Saskatchewan between 2004 and 2016; however, rates remain between eleven and 22 times greater than the province. The KYHR has seen a decrease in crude rates of new and relapsed tuberculosis cases at 233 per 100,000 in the 2007 to 2011 period and 151 cases per 100,000 in the 2012 to 2016 period. The other northern health regions also exhibit declining trends (NSPHU 2017b).

6.7.1.1.5 Personal Behaviours

Personal behaviours and lifestyle choices also contribute to the overall level of health in a community. Some personal behaviours, such as smoking or diet (to the extent that is not influenced by socio-economic factors) can be altered to minimize the risks of other health conditions. The individual behaviours discussed below are smoking, alcohol use, physical activity, and dietary practices.

Data are derived from the Canadian Community Health Survey, a national cross-sectional survey for individuals twelve years of age and older, and includes data collection for health status, health care utilization and health determinants. Individuals living on reserves and other Aboriginal settlements are excluded. The Mamawetan Churchill River Health Region, KYHR, and the Athabasca Health Authority are grouped together to provide one northern Saskatchewan off-reserve estimate (NSPHU 2016).

6.7.1.1.5.1 Smoking

Smoking refers to the population aged twelve and over who reported being a current daily or occasional smoker. Smoking rates in northern Saskatchewan are higher than provincial rates. In 2014, the smoking rate for females was 49% and 46% for males as compared to the provincial female rate of 20%, and the provincial male rate of 23%. The overall smoking rate of northern Saskatchewan in 2013 to 2014 was 41%, which is high in comparison to many other northern regions in Canada.

Due to the higher smoking rates, non-smokers in northern Saskatchewan are more likely to be exposed to second-hand smoke compared to their provincial counterparts. In 2013 to 2014, 21% and 14% of non-smokers, respectively, in northern Saskatchewan reported being exposed to second-hand smoke in vehicles/public places or at home, on every day or almost every day in the past month, compared to 17% and 4%, respectively, of non-smoking Saskatchewan residents (NSPHU 2016).

6.7.1.1.5.2 Heavy Drinking

Heavy drinking refers to males who reported having five or more drinks, or women who reported having four or more drinks, during one occasion, at least once per month over the past year. Northern Saskatchewan has similar rates of heavy drinking for males compared to Saskatchewan and other northern regions in Canada, whereas



there are higher rates in northern Saskatchewan for females. In 2013 to 2014, 18% of females and 26% of males in northern Saskatchewan reported heavy drinking compared to 13% and 25% of their provincial counterparts, respectively (NSPHU 2016).

6.7.1.1.5.3 Physical Activity

Physical activity refers to the nature, frequency, and duration of Canadian Community Health Survey respondents' participation in leisure-time physical activity. Respondents are classified as active, moderately active, or inactive based on an index of average daily physical activity over the past three months. The rates of active or moderately active physical activity levels in northern Saskatchewan range between 50% in 2007 to 2008 and 58% in 2013 to 2014. Corresponding rates in Saskatchewan range between 48% and 53% (NSPHU 2016).

6.7.1.1.5.4 Dietary Practices

Dietary practices are influenced by socio-economic status and food security. Poor nutrition, defined as a low rate of fruit and vegetable consumption in the NSPHU report (2016a) Social Determinants of Health: Personal Health Practices and Personal Resources, is connected to the high cost of healthy food in the region, as well as to the limited facilities and resources for operating programs for physical activity (Sinclair et al. 2006).

The proportion of the northern population that reports consuming five or more fruit and vegetables a day has remained fairly stable, from 35%, between 2007 to 2008 and 41% between 2013 to 2014. During the same time period, the provincial rate ranged between 35% and 39% (NSPHU 2016).

6.7.1.1.6 Food

6.7.1.1.6.1 Food Insecurity

Food insecurity is "the inability to acquire or consume an adequate diet quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so" (Health Canada 2020). According to the Regional Health Survey Phase 3 (FNIGC 2018), people living in First Nations communities (i.e., reserves and settlements) have higher rates of food insecurity nationally than the general population in Canada, though the rate has decreased slightly for adults since the Regional Health Survey Phase 2, which was conducted between 2008 and 2010. Access to Traditional Foods is an important way to help alleviate food insecurity for First Nations people, as more than half of First Nations adults who had Traditional Foods shared with their households reported always or almost always eating nutritious, balanced meals. Traditional Foods are spiritually or nutritionally valuable native plant or wildlife species that are harvested locally. They reflect Indigenous Knowledge, and the relationship Indigenous Peoples have with the area where they live (Council of Canadian Academies 2014). More First Nations adults were considered severely food insecure when they never had Traditional Food shared with their household (i.e., 17.4%; FNIGC 2018).

Statistical information describing provincial Indigenous food insecurity is available through the First Nations Food, Nutrition and Environment Study. For First Nations people living in Saskatchewan, 37% of First Nations households were classified as food insecure. Twenty-seven percent of all households were considered moderately food insecure and 10% were considered severely food insecure. Households with children experienced greater food insecurity than households without children (i.e., 41% and 25%, respectively; Chan et al. 2018). High food prices are common, particularly for fresh produce in the RSA (DMCA 2018).



Grocery stores in the LSA are in La Loche (Centerpoint Grocery Story and Northern Store), Birch Narrows (Birch Narrows Grocery-Gas Bar), and Buffalo Narrows (i.e., Northern Store). A convenience store is in BRDN (Dillon). Prices in grocery stores in the communities have been noted to be high due to transportation costs, low volumes of sales (as compared to larger centres), and limited competition. Many residents purchase groceries when they travel to larger cities such as North Battleford, Prince Albert, and Saskatoon. The types of foods available and costs influence diets in the LSA. In La Loche, the President's Choice modular farm is used to provide fresh produce to students in La Loche schools. There is a community garden located in Buffalo Narrows with a food bank available. Country foods are typically shared with Elders and other community members by family and friends (2019 to 2021 KP interview program).

6.7.1.1.6.2 Traditional Diet

Harvesting country foods (i.e., Traditional Foods) is important to Indigenous communities for a range of reasons, including its importance in supporting social bonds within families and communities, maintaining cultural identities, forming a nutritious part of the Indigenous diet (Council of Canadian Academies 2014), and offsetting the high cost of living in northern Saskatchewan and food insecurity (Council of Canadian Academies 2014; CVMPP 2005). The importance of harvesting country foods is shared by the Indigenous communities in the LSA, as they noted in the quotes below:

Many CRDN members depend on food harvested from Up North. Diminished opportunities to secure food will have a tangible and substantial negative economic impact on community families. This impact will be compounded if foods from preferred harvesting areas are not deemed to be safe, forcing households to resort to imported store-bought food. As noted by one CRDN member, being cash-poor and eating well is not the same as simply being cash-poor. Not only would such a shift impose an economic (cash) hardship; it would deprive CRDN families of healthy, nutritious, and culturally affirming foods, customs, and traditions which are fundamental to Denesųliné heritage and identity. (TSD V.1: CRDN)

Reliance on the land is still considerable, members estimating that on average 70% of their food comes from hunting, trapping, fishing, and gathering. Another member estimates that 50% of his diet consists of Traditional Food, the likes of fish, duck and moose. Others in the community almost exclusively rely on Traditional Food: one member, for example, estimates that 95% of his diet comes from the land, primarily moose but also deer, grouse, and fish, as well as dried meat; one couple lived for an entire year in a cabin up the river, eating bannock, fish, rabbit, deer, and the like; another member eats Traditional Food every day. The closest store to St. George's Hill is in Dillon, which is 9 km from St. George's Hill and 26 km from Michel Village. Additionally, store-bought food is not only too expensive but also unhealthy, leaving them with no other option than to live off the land. (TSD IV: MN-S)

Mostly off the land instead of always having to run to the store where you spend your money on high-priced food. . . . I . . . hardly eat . . . from the store. I always make sure I have a lot of moose meat, fish and rabbits and whatever I can get. . . . I've been living that way for quite a while now, ever since . . . I was able to get a gun and go out and shoot. And I have nets that I get people to set for me and I get fish. ... It's very important to me [for her to get her food from the land]. Because . . . when I go



to the south –. . . I go to the restaurants, I eat fast food. Oh, I get sick. I really get sick for a couple days.... (TSD II: BNDN)

Well, like we're talking about, this is very important, . . fishing and hunting and you know all these animals, what we use it for food, that's what we care for. . . . I don't [want to] buy a big steak all the time from the store here because it costs so . . . much. You know? We like fishing, we like fish. If I didn't eat whitefish for one month, . . . I get hungry for fish. I [have to] get one or two, you know. (TSD III: BRDN)

For Indigenous Peoples, one aspect of food security and healthy diets is continued access to traditional or country foods. "In Saskatchewan, Traditional Food harvesting (hunting, fishing, and gathering of wild plants), is an important part of the Traditional Food systems and food security of First Nations communities" (Chan et al. 2018). The First Nations Food Nutrition and Environment Study (Chan et al. 2018) found that almost all First Nation adults in Saskatchewan (i.e., 94%) reported eating Traditional Foods as part of their diet. Of the population included in the survey, First Nations adults in Saskatchewan ate land mammals (i.e., 83%), berries (i.e., 78%), fish (i.e., 51%), wild birds (i.e., 46%), and wild plant foods and teas (i.e., 43%; Chan et al. 2018).

The communities in the LSA have noted the importance of Traditional Foods in their diet. The CRDN (TSD V.1: CRDN) engage in land-based activities in part to provide food for their families and members are concerned about the potential for harvesting contaminated resources in their traditional territory.

Métis Nation – Saskatchewan citizens who participated in the IKTLU Study (TSD IV: MN-S) estimate that, on average, 70% of their diet comes from hunting, trapping, fishing, and gathering plants, with one citizen estimating that 95% of his diet came from the land. Aside from continuing to eat as their ancestors did, MN-S citizens rely on Traditional Foods to supplement store-bought food because going to a grocery store for some citizens can involve travel, store-bought food is expensive, and store-bought food is considered unhealthy.

The proportion of Traditional Food varies for BRDN members depending on their lifestyle. Some members estimate that their diet is over 80% country foods, while others note that the amount of country foods in one's diet depends on lifestyle and the season (BRDN-JWG 2021a). The BNDN and BRDN noted that approximately 80% of their populations were active in the traditional economy, which included harvesting for personal, family, and community consumption (BNDN-JWG 2021b; BRDN-JWG 2021a).

6.7.2 Local Study Area Community Perspectives on Health

The following subsection presents community perspectives of health in each LSA community. The perspectives presented are not based on formal health indicator data for the RSA or LSA, though there are similarities in the prevalence of some conditions and concerns expressed by community members and administrative staff in LSA communities. Where possible, community health concerns have been linked to regional health statistics and community and health authority planning.

6.7.2.1 Clearwater River Dene Nation

The CRDN indicated a desire to undertake KP interviews for their community independently, and NexGen provided the KP interview guide and directions for interviewers. At the timing of the writing of this report, the CRDN interview results had not yet been provided to NexGen.



6.7.2.2 La Loche

Health issues in La Loche are described as varying by group within the population. Men are considered to have a poorer health status due to lifestyle and employment. The homeless in La Loche are often men rather than women (Prairie ID Consulting 2015; 2019 to 2021 KP interview program). Community health concerns for La Loche include (2019 to 2021 KP interview program; 2020 youth workshop):

- addictions (drugs and alcohol);
- mental health;
- HIV and tuberculosis;
- suicide;
- heart problems;
- lack of health and wellness resources;
- lack of local heath services such as dentistry and optometry; and
- access to adequate health services.

Elders and seniors in the community are the age group most afflicted by respiratory disease and heart disease. Elders and seniors experience difficulties accessing services and lack access to long-term care homes and home care services (2019 to 2021 KP interview program).

6.7.2.3 Birch Narrows Dene Nation and Turnor Lake

Residents of Birch Narrows and Turnor Lake report overall good health within both communities. Interviewees indicated that social support contributes to good health in the community, and activities that bring individuals together (2019 to 2021 KP interview program). The community has several social activities such as poker rallies, skating parties, food hampers, and home visits that serve to bring a sense of community and provide activities for people.

While the nursing station (the Annie Bagg Memorial Nursing Station in Turnor Lake) has regularly scheduled physician visits, resident access to health services could be improved. Residents must travel for any specialist treatments, often travelling as far as Saskatoon (2019 to 2021 KP interview program). Community health concerns for the BNDN and Turnor Lake include (2019 to 2021 KP interview program; 2020 youth workshop):

- addictions (drugs and alcohol);
- mental health;
- diabetes; and
- forest fires.

With drugs entering the community, residents have expressed concern about the health of community residents in the next five to 10 years. Additionally, government policies such as the removal of trapping cabins affect their ability to be on the land, which can affect health (2019 to 2021 KP interview program). Residents of BNDN expressed that the uncertainty regarding the future of their cabins can influence their health as they do not know that "culturally things are being honoured and respected".



The concern about mental health and addictions in Birch Narrows and Turnor Lake is reflected in northern Saskatchewan health statistics. Residents of the RSA reported higher rates of life stress (i.e., ranging between 19% and 23%) and lower mental health status (i.e., ranging between 56% and 64% self-reporting excellent or very good mental health) overall when compared to provincial rates (Section 6.7.1, Physical Health). The BNDN's concerns about mental health and addictions are reflected in the community's goals to improve social services, increase awareness and education on community social issues, provide preventative services, and address addictions (Section 6.10, Aspirations). The SHA's Recovery Plan for 2021 to 2022 also hopes to address recommendations in the Mental Health and Addictions Plan and invest in healthcare infrastructure. Birch Narrows Dene Nation would like a treatment centre for mental health and addictions in their own community, rather than having to travel to neighbouring communities to access treatment (Section 6.3.2.5).

The BNDN's concern about diabetes as a health issue in the community reflects the prevalence rate of diabetes in northern Saskatchewan (i.e., over 12%), which was the highest of the Saskatchewan health regions and higher than the provincial prevalence rate (i.e., under 8%; Section 6.7.1.1.3.1, Diabetes). The BNDN hopes to address these concerns through the following goals in the comprehensive community plan: investing in community health facilities, introducing new health services, and improving medical transportation services (Section 6.10.1.4, Birch Narrows Dene Nation).

Forest fires are an issue due to smoke inhalation and proximity to communities, homes, and other infrastructure, including hunting cabins. Forest fires also reduce the availability of country foods as animals move out of the area after a fire (2019 to 2021 KP interview program).

6.7.2.4 Buffalo River Dene Nation (Dillon)

Community health concerns for the BRDN include (2019 to 2021 KP interview program; 2020 youth workshop; BRDN-JWG 2021a):

- diabetes;
- cancer;
- tuberculosis:
- cardiac diseases:
- addictions (drugs and alcohol); and
- mental health.

Diabetes is the most common physical health issue in the community and primarily affects men and women of middle age and above (2019 to 2021 KP interview program). The BRDN's concern about diabetes as a health issue in the community reflects the prevalence rate of diabetes in northern Saskatchewan (i.e., over 12%), which was the highest of the Saskatchewan health regions and higher than the provincial prevalence rate (i.e., under 8%; Section 6.7.1.1.3.1).

Cancer is noted to affect women more than men in the community. Concern for the effects of cancer on women in BRDN reflects the incidence of breast cancer in the three northern health regions, which displayed an upward



fluctuating trend between 64.3 per 100,000 and 111.1 per 100,000 from 1995 to 2014, compared to the relatively stable provincial trend in the same period (Saskatchewan Cancer Agency 2017).

Tuberculosis was found in high rates within the community until the past 10 years. As a result of a successful tuberculosis program in the community, the instances of the disease have been greatly reduced (2019 to 2021 KP interview program). Cardiac diseases primarily affect residents aged 50 years and over (2019 to 2021 KP interview program).

Respiratory health concerns were also raised in relation to the condition of the roads leading into the community (2019 to 2021 KP interview program). The roads are uneven, have potholes, and are very dusty. The quality of the roads has also been noted to extend emergency response times from ambulances that travel from Buffalo Narrows or Ile-à-la-Crosse (2019 to 2021 KP interview program; 2020 youth workshop).

6.7.2.5 Buffalo Narrows

Community health concerns in Buffalo Narrows include (2019 to 2021 KP interview program; 2020 youth workshop):

- mental health, including intergenerational trauma;
- access to fresh, affordable foods;
- available medical services;
- cancer:
- respiratory disease;
- cardiac disease:
- air quality due to dust;
- water quality when partaking in activities on the lands/waters; and
- addictions (drugs and alcohol).

Common health issues for adults include cancer, mental health, and addictions, with cancer affecting men more than women in the community. Concern for the effects of cancer on men in Buffalo Narrows reflects the incidence of prostate cancer in the three northern health regions. Prostate cancer had the highest incidence rate for males in the three regions, with its incidence rate in northern Saskatchewan increasing from 56.7 per 100,000 to 93.1 per 100,000 from 1995 to 2014. Breast cancer is more likely to be identified by visiting health professionals due to visits from the Cancer Bus, which travels between communities throughout Saskatchewan. The purpose of the bus is to assist in the early detection of breast cancer and is fully booked when it has arrived in the community (2019 to 2021 KP interview program; Saskatchewan Cancer Agency 2017).

Prevalent health conditions amongst Elders and seniors in the community often include lung disease, COPD, emphysema, and heart problems, with many of these issues often affecting females at a higher proportion than males. Seniors in the community do not have access to free transportation to medical appointments located outside the community. Seniors can book for medical appointment transportation provided there is available



space, though they are responsible for their own meals, accommodation, and any associated transportation costs during the trips (2019 to 2021 KP interview program).

Various residents of Buffalo Narrows noted that a primary concern related to health is the differences in the quality of water in the lakes in recent years, noting an increase in sludge in the river system. This affects the fish and animals the community uses as food (2019 to 2021 KP interview program).

6.7.2.6 Other Local Study Area Communities

Health issues in the Other LSA Communities was not available.

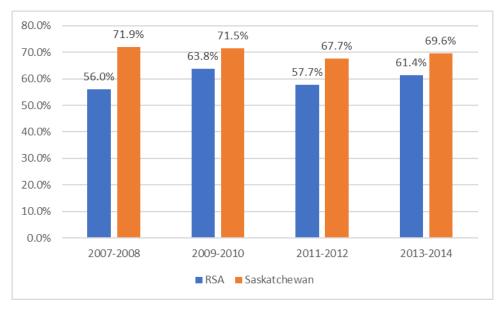
6.7.3 Mental Health

This subsection provides a description of mental health conditions based on quantitative data available for the RSA, as well as qualitative information for the LSA communities. Quantitative data on the mental health of the LSA communities was not available.

6.7.3.1 Regional Study Area

In a 2016 report on Northern Saskatchewan Health Indicators, a smaller proportion of the RSA off-reserve population reported perceiving their own mental health status as very good or excellent compared to the province (Irvine and Quinn 2016). The RSA rate remained relatively stable between 2007/2008 and 2013/2014, ranging between 56% and 64% while the provincial rate ranged from 68% to 72% (Figure 28). Between 2007/2008 and 2013/2014, the RSA off-reserve population indicated similar rates of life stress compared to the province at a whole, with rates ranging from 19% to 23%, compared to the provincial rates of 19% to 20% (Irvine and Quinn 2016). The SHA's Recovery Plan for 2021 to 2022 also hopes to address recommendations in the Mental Health and Addictions Plan (SHA 2021).

Figure 28: Population Aged 12 and Over, Off-Reserve, with Mental Health Status as Very Good or Excellent, Regional Study Area, and Saskatchewan 2007/2008 to 2013/2014



RSA = regional study area.



6.7.3.2 Local Study Area

6.7.3.2.1 Clearwater River Dene Nation

The CRDN indicated a desire to undertake KP interviews for their community independently, and NexGen provided the KP interview guide and directions for interviewers. At the timing of the writing of this report, the CRDN interview results had not yet been provided to NexGen.

6.7.3.2.2 La Loche

Mental health is thought to be one of the largest challenges facing the community. Suicide is a major challenge for youth and is more prevalent now than in the 1980s. Lack of full-time mental health professionals in the community is considered an issue by residents (TSD IV: MN-S). The remoteness of the community has been cited in interviews as a contributing factor to mental health challenges and suicide (2019 to 2021 KP interview program).

Mental health and addictions concerns are reflected in current programming in La Loche, including services such as Project Venture, and those that run out of the La Loche Friendship Centre (Section 6.3.2.3.3, La Loche). The community hopes to address mental health and addictions further through the La Loche Official Community Plan, particularly through its Holistic Health and Youth Wellness themes (Section 6.10.1.3, La Loche).

6.7.3.2.3 Birch Narrows Dene Nation and Turnor Lake

Results from KP interviews noted that stigmatization prevents people from coming forward when they have mental health issues, though people are becoming more open with their mental wellness and seeking help. There is reported to be a lack of supports for mental health in BNDN and Turnor Lake. Intergenerational trauma, feelings of marginalization in society, and addictions are major issues in mental health within the community and contributes to poor health (2019 to 2021 KP interview program). Having more openness to discuss mental wellness, especially from Elders, can help community members heal and understand how to deal with issues. Some improvement in mental wellness has also been made by creating a connection to the environment.

The BNDN's concerns about mental health and addictions are reflected in the community's goals to improve social services, increase awareness and education on community social issues, provide preventative services, and address addictions. Birch Narrows Dene Nation would like a treatment centre for mental health and addictions in their own community, rather than having to travel to neighbouring communities to access treatment (Section 6.10.1.4).

6.7.3.2.4 Buffalo River Dene Nation (Dillon)

Key person interview participants indicated that young people have substance use issues and the community has seen several suicides, including youth suicides (2019 to 2021 KP interview program). Participants in the KP interviews also indicated that alcohol is still present in the community, despite the reserve being a dry reserve (i.e., no alcohol is permitted) and bylaws being in place (2019 to 2021 KP interview program). There have been periods of high suicides in the LSA communities and the RCMP noted that a few years ago the number of calls received that related to suicide had increased (2019 to 2021 KP interview program).

For BRDN members with mental health and addictions issues, members who leave for treatment have no aftercare available to them upon return, which could lead to relapse (BRDN-JWG 2021a). The community also has a high suicide rate due to the lack of available care. Currently, the only available care is at the health centre



(BRDN-JWG 2021a). The BRDN would like a mental health awareness program established in the community (Section 6.10.1.5, Buffalo River Dene Nation [Dillon]).

6.7.3.2.5 Buffalo Narrows

Youth in the community often suffer from mental health issues such as depression, aggression, and addictions (2019 to 2021 KP interview program). Lack of mental health professionals in the community full time is considered an issue by residents (TSD IV: MN-S). Buffalo Narrows is working to address mental health concerns through programs such as the Buffalo Narrows NorthSask Victim Services and Children Exposed to Violence, which provide crisis intervention, information, and referrals to other programs.

6.7.3.2.6 Other Local Study Area Communities

Information about mental health in the Other LSA Communities was not available.

6.8 Public Safety

Figure 29 outlines the criminal code violations (i.e., crimes) committed each year for the Buffalo Narrows and La Loche RCMP Detachment areas (i.e., the two detachments in the LSA). The data shows the number of violations in the Buffalo Narrows RCMP Detachment area are lower than those in the La Loche RCMP Detachment area; however, violations in the Buffalo Narrows RCMP Detachment area are increasing each year and trending higher, while the La Loche RCMP Detachment area are more variable but trending lower. There was a 55.1% increase in total criminal code violations from 2015 to 2020 for the Buffalo Narrows RCMP Detachment area. The La Loche RCMP Detachment area reported total criminal code violations decreased 9.8% from 2015 to 2020. Despite the decrease in criminal code violations in the La Loche RCMP Detachment area, interviews indicated that there is a perception that the community is not safe (2019 to 2021 KP interview program). Saskatchewan criminal code violations increased by 2.2% in the same period. Data for Saskatchewan are not shown on the graph below due to the comparatively large numbers of violations that would make presentation against Buffalo Narrows and La Loche data illegible.



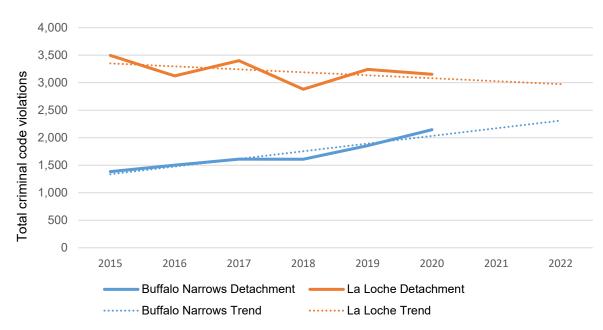


Figure 29: Criminal Code Violation Data for Buffalo Narrows and La Loche Detachments, 2015 to 2020

Additional crime rate data shows the Buffalo Narrows RCMP Detachment area experienced a 51.7% increase in the crime rate³¹ from 2015 to 2020, while the La Loche RCMP Detachment area crime rate decreased by 9.2% (Figure 30). The provincial crime rate decreased by 5.4% in the same period. The Buffalo Narrows RCMP Detachment area crime rate is trending to surpass the La Loche RCMP Detachment area rate around 2023. Incarceration rates for the LSA communities and RSA are not available.

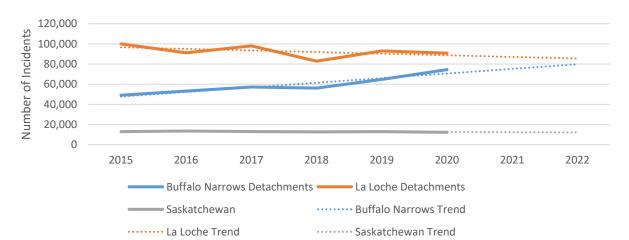


Figure 30: Crime Rate Data for Buffalo Narrows and La Loche Detachments, 2015 to 2020

Source: Statistics Canada 2021b

³¹ Crime rate is presented as the number of incidences per 100,000 people.



Interviewees in the KP interview program felt that substance abuse issues (e.g., alcohol) are prevalent in many of the LSA communities (e.g., Turnor Lake, Dillon, La Loche, and Buffalo Narrows) and drug abuse (e.g., crack cocaine) is prevalent in Buffalo Narrows and La Loche and also in the smaller communities to a lesser extent (2019 to 2021 KP interview program). Poverty, unemployment, lack of education, isolation, lack of pro-social relationships, inadequate resources, and intergenerational trauma were identified as contributing factors for issues within the communities. The communities do not have social supports related to domestic abuse and the closest women's shelter is in Meadow Lake. Due to lack of local support services in the LSA, the RCMP is then used as Family Services and Social Services on a 24-hour basis (2019 to 2021 KP interview program).

Feedback during KP interviews indicated that members in Turnor Lake and BNDN feel very safe in the community due to its isolated location; some community members sleep with unlocked doors. Community members in BRDN also report feeling safe in their community, though they have noted that there are higher rates of addiction than before (2019 to 2021 KP interview program).

6.9 Community Well-Being

Defined very broadly, community well-being is "the combination of social, economic, environmental, cultural, and political conditions identified by individuals and their communities as essential for them to flourish and fulfill their potential" (Wiseman and Brasher 2008). This subsection describes the community well-being of each community, where data is available, based on their community well-being index score and is complemented by information obtained through community interviews and engagement.

The community well-being index calculated by Statistics Canada (Figure 31) uses data on education, labour force, income, and housing to provide "a relatively quick and convenient measure of well-being, focusing on the socio-economic dimensions" (Murphy 2010). The index is intended to provide a systematic summary of socio-economic well-being for communities, illustrate differences across communities, enable tracking over time, and be compatible with other community-level data on well-being (Indigenous Services Canada 2019a). Data for the smaller LSA communities were not available.

The component scores consider the following indicators:

- income, which is based on income per capita;
- education, which factors in the proportion of a community's population, 20 years and older, that has at least a high school certificate and the proportion of a community's population, 25 years and older that has at least a bachelor's level degree;
- housing, which comprises indicators on housing quantity and quality; and
- labour force activity, which quantifies the labour force participation and employment rate in the community for members between the age of 20 and 64 (Indigenous Services Canada 2019b).

Of the four component scores, education, income, and housing are generally acknowledged as key social determinants of health. The community well-being index presents a quantitative assessment of community well-being based on census data. These data can all be tied to the social determinants of health as quantitative data from a point in time (i.e., the census) for a select set of measurement indicators, but do not capture all aspects of well-being.



Figure 31 highlights the community well-being index scores across the four indicators for each main LSA community for the past three census years (i.e., 2006 to 2016). The scores show variations by indicators in all communities, with education scores the lowest, and housing the highest except for the CRDN, which had labour force activity as the highest in 2006 and 2011. Buffalo Narrows' scores are more similar to Saskatchewan, while the others are well below Saskatchewan scores.

Figure 31: Community Well-Being Index Scores^(a) for the Local Study Area Communities^(b) and Saskatchewan, 2006 to 2016 Census Years



Source: CIRNAC 2019b.

- a) Each community well-being score and each component score can range from a low of 0 to a high of 100.
- b) Data for the Other LSA Communities were not available.
- c) The community well-being index is calculated for Clearwater River Dene 222.
- d) Mean score for Saskatchewan calculated by InterGroup Consultants.

CRDN = Clearwater River Dene Nation; BRDN = Buffalo River Dene Nation; BNDN = Birch Narrows Dene Nation; LSA = local study area.

Figure 32 highlights the LSA composite community well-being index across the four indicators for the past three census years (i.e., 2006 to 2016). This composite index for the LSA shows the range of scores from a regional perspective. Trend lines are also applied to show the average trend across the region. This shows income, education, and housing scores trending upward, while labour force activity is stagnant.



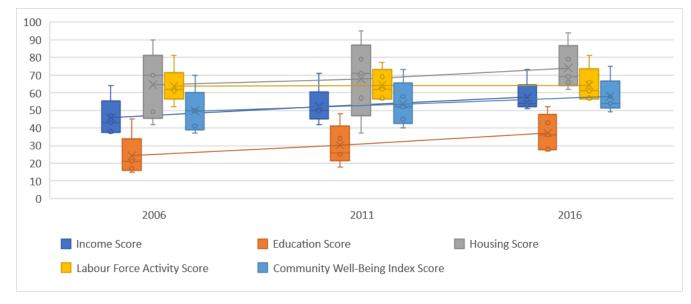


Figure 32: Local Study Area Composite Community Well-Being Index Scores (a), 2006 to 2016 Census Years

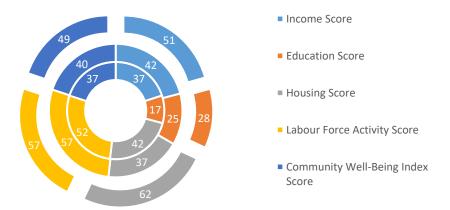
a) Each community well-being score and each component score can range from a low of 0 to a high of 100.

6.9.1.1 Clearwater River Dene Nation

Figure 33 shows the community well-being score for the CRDN for the last three census years, with 2006 in the innermost ring and 2016 the outermost ring. The CRDN has the lowest community well-being score (i.e., 49) among the LSA communities in 2016, due to it having the lowest component scores for income (i.e., 51) and housing (i.e., 62), and only a slightly higher education score (i.e., 28) than La Loche (i.e., 27). However, the CRDN's community well-being score has improved by 12 points between 2006 to 2016 (Figure 33), the second highest increase among the LSA communities (Figure 31). Between 2006 and 2016, the CRDN has seen increases in every metric, specifically housing, income, and education, with increases of 20, 14, and 11 points, respectively. A slight increase in labour force activity score (i.e., 5-points) was also observed for the CRDN between 2006 and 2016 (Figure 33). Between 2006 and 2016, the CRDN experienced greater increases in component scores and overall community well-being than the province during the same period, but scores were still substantially lower, ranging from 22 to 27 points behind provincial index scores.



Figure 33: Clearwater River Dene Nation^(a) Community Well-Being Index Scores^(b), 2006 to 2016 Census Years



- a) The community well-being index is calculated for Clearwater River Dene 222.
- b) Each community well-being score and each component score can range from a low of 0 to a high of 100.

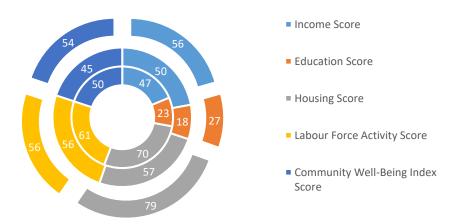
6.9.1.2 Métis – Nation Saskatchewan Northern Region 2

Figure 34 and Figure 35 shows the community well-being score for the predominantly Métis communities of La Loche and Buffalo Narrows, respectively, for the last three census years. In Figure 34 and Figure 35, community well-being scores are presented with 2006 in the innermost ring and 2016 in the outermost ring.

For residents of La Loche, the community well-being score has remained fairly consistent between 2006 and 2016, decreasing to 45 in 2011 and improving to 54 in 2016 (Figure 34). The decrease in score in 2011 was driven by lower component scores in education, housing, and labour force activity. In 2016, La Loche had the lowest component scores for education and labour force activity among the LSA communities at 27 and 56, respectively, and experienced a drop in its labour force activity score from 61 to 56 (Figure 31). Between 2006 and 2016, La Loche experienced a greater increase in its housing score with a 9-point increase compared to Saskatchewan, which had no increase. Like most of the other LSA communities, La Loche has consistently had lower component scores and overall community well-being score compared to the province.



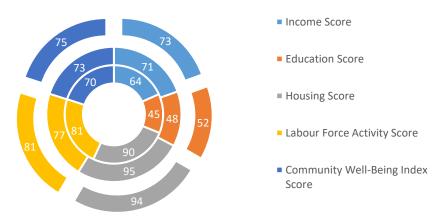
Figure 34: Métis Nation – Saskatchewan Northern Region 2 Community Well-Being Index Scores^(a) for La Loche, 2006 to 2016 Census Years



a) Each community well-being score and each component score can range from a low of 0 to a high of 100.

Buffalo Narrows has the highest community well-being score of the LSA communities, with a 75 in 2016 and the highest scores for all components (Figure 31). In 2016, Buffalo Narrows had a community well-being score that matched the provincial score; Buffalo Narrows scored at the provincial level for income, and exceeded it for housing (Figure 35). The community has experienced increases in almost all component scores between 2006 and 2016, but experienced lower score component increases compared to Saskatchewan as a whole (Figure 31). Between 2006 and 2016, the community's community well-being score increased from 70 to 75, with increases in all components except for labour force activity (Figure 35).

Figure 35: Métis Nation – Saskatchewan Northern Region 2 Community Well-Being Index Scores^(a) for Buffalo Narrows, 2006 to 2016 Census Years



Source: CIRNAC 2019b.

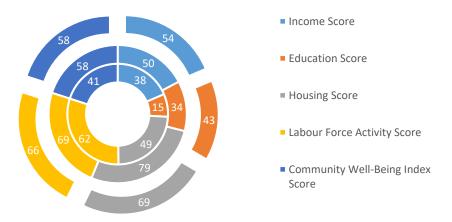
a) Each community well-being score and each component score can range from a low of 0 to a high of 100



6.9.1.3 Birch Narrows Dene Nation

Figure 36 shows the community well-being score for the BNDN for the last three census years, with 2006 in the innermost ring and 2016 the outermost ring. The BNDN has the second highest community well-being score among the LSA communities, with 58 in 2016. The community well-being score for the BNDN increased between 2006 and 2016 from 41 to 58 but remains below the provincial score of 75 (Figure 31). between 2006 and 2016, there were substantial increases in education, income, and housing, with larger increases than Saskatchewan as a whole during the same period; however, during this period, scores were still lower than the province by 10 to 19 points. Among the LSA communities, the BNDN experienced the largest increases in education component scores, rising from 15 to 43 points between 2006 and 2016. The BNDN's labour force activity score increased the least of the community well-being index scores between 2006 to 2016 (i.e., 4 points) and was higher in 2011 than in 2006 and 2016 (Figure 36).

Figure 36: Birch Narrows Dene Nation Community Well-Being Index Scores (a), 2006 to 2016 Census Years



Source: CIRNAC 2019b.

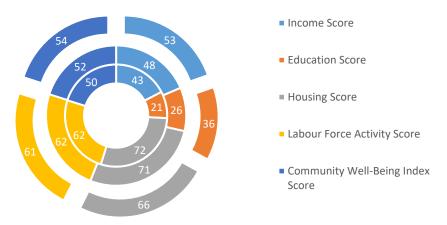
a) Each community well-being score and each component score can range from a low of 0 to a high of 100.

6.9.1.4 Buffalo River Dene Nation

Figure 37 shows the community well-being score for the BRDN for the last three census years, with 2006 in the innermost ring and 2016 the outermost ring. The BRDN had a community well-being score of 54 in 2016, the same as La Loche (Figure 31). Between 2006 and 2016, the BRDN saw steady increases in its community well-being score, driven primarily by increases in its education and income scores with 15- and 10-point increases, respectively (Figure 37). However, the BRDN is the only LSA community to see decreases in both housing and labour force activity scores, with 6- and 1-point decreases, respectively, during the same period (Figure 31). The decrease in the BRDN's housing score was the largest decrease among LSA communities for any component. The BRDN has lower component scores than the province for every component by 17 to 23 points (Figure 31).



Figure 37: Buffalo River Dene Nation Community Well-Being Index Scores^(a), 2006 to 2016 Census Years



a) Each community well-being score and each component score can range from a low of 0 to a high of 100.

6.9.2 Community Definitions of Well-being

Participants in the KP interviews had similar had similar answers regarding what contributed to their quality of life in their communities. Health, societal and cultural, economic, educational, and neighbourhood and physical environment elements were identified during KP interviews as the key components of well-being. Many KP interview participants reported that they felt a sense of community in their respective communities and liked that their smaller communities were quieter and had slower paces of life [than the cities] (2019 to 2021 KP interview program). Interviewees indicated that the majority of peoples' families are nearby, and people know their community members and can count on them in times of crisis. Some remarked on how caring, hilarious, helpful, and resilient the people were. Others remarked on the land, clean air, freedom, and the ability to conduct land-based activities (e.g., camping, snowshoeing, quad rides, hunting, fishing, swimming, berry picking, picnics) and live off the land. The people and respective communities contribute to the quality of life, and the lower cost of living is considered an advantage (2019 to 2021 KP interview program). Interviewees report that employment also improves their quality of life. No information from the CRDN is reported in this subsection as a separate KP interview program is being undertaken by the CRDN at their request; at the time of writing, findings from these activities were not available.

6.9.2.1 Metis – Nation Saskatchewan Northern Region 2

Freedom and access to nature are important aspects of community well-being for the Métis (MN-S-JWG 2020). The friendliness of the community is comparable to that of a family. The importance of language and living off the land was described by MN-S members. Access to safe hunting, fishing, and trapping is important, as many live off Traditional Foods. One respondent talked about the importance of hearing the noises of nature within the community. Interviewees also expressed concerns about how access to Traditional Foods will be affected by resource development (MN-S-JWG 2020).



6.9.2.2 Birch Narrows Dene Nation

Participants in the KP interview program felt that aspects that detract from BNDN members' quality of life include the presence of bootleggers, drug dealers, and gangs. Interview respondents indicated that some current issues could arise from higher incomes and that there is a lack of economic opportunity and leaving the community for education and work leads to a loss of culture, identity, language, and land. Key person interview participants suggested that leaving the community for opportunity also weakens familial bonds. Some KP interviewees indicated that younger workers have higher incomes from working in the mining industry but have difficulty with financial management and have substance use issues (2019 to 2021 KP interview program). Members of the BNDN shared their opinion that when those working out of the community return home, they can experience challenges with bonding with family, and some individuals use drugs while away from work (BNDN-JWG 2021b). Interview respondents suggested that having financial management education would be beneficial before employment. Lack of immediate resources was also identified as an issue that affects quality of life for BNDN residents. Doctors in the community are not consistent and residents do not have a regular family doctor or an ambulance. Respondents also mention concern over land use, as people are afraid that they will lose access to the lands they use for traditional hunting, trapping, and fishing. Others noted that guality of life has changed for the BNDN due to the community members becoming more materialistic and distracted by technology (2019 to 2021 KP interview program). In KP interviews, it was suggested that children and youth do not spend as much time outside, have poor attendance and when they do attend, they are tired.

6.9.2.3 Buffalo River Dene Nation

In Dillon, BRDN members described that the close-knit community has members feeling like everyone in the community is like family. Having a connection to the land and water for hunting, trapping, and fishing for sustenance and family connections is critical to community well-being (BRDN-JWG 2020). Interviewees described quality of life as good for those with employment, but with the high rates of unemployment, many of the young people have substance use issues and the community has high suicide rates. The lack of recreational programs and afterschool programs contributes to feelings of ennui for young people. Some KP interview participants felt that aspects that detract from the quality of life in BRDN include the lack of opportunities, employment, housing, and cycle of hopelessness of being reliant on welfare (2019 to 2021 KP interview program).

6.9.2.4 Buffalo Narrows

Interviews with Buffalo Narrows members indicated that the overall well-being of Buffalo Narrows was considered good as there is employment and more resources in the community than neighbouring communities (2019 to 2021 KP interview program). Like the other LSA communities, interviewees stated that the close-knit, small-town feeling contributes to the quality of life in the community. Outdoor lifestyle contributes positively to mental health and stress relief. Elders were also noted to be a positive factor in quality of life in the community.

Addictions and substance use detracts from quality of life in Buffalo Narrows. Interviews indicated that there is a lack of resources to address addictions within the community and they must leave the community to get treatment and support (2019 to 2021 KP interview program). Concerns were expressed about how resource development within the area will affect animals in the area since hunting and trapping is a primary method to access food for some families (BNDN-JWG 2021b). The community has a limited selection of stores and services such as grocery stores, restaurants, and medical services. Since there is such a limited selection, many families struggle as prices for basic goods and necessities can be higher than in other areas (BNDN-JWG 2021b). Difficulty in obtaining



medical treatment was also described as a detriment to quality of life, as travelling for medical treatment to see dentists or optometrists are a three-hour long drive (2019 to 2021 KP interview program).

6.9.2.5 La Loche

Interviews with La Loche residents indicated that quality of life in the community has declined over time. Contributing factors include the lack of services and infrastructure resulting in travel to other communities for medical treatment (2019 to 2021 KP interview program). The community also lacks health and wellness resources, especially mental health. Some noted that the community is losing many depressed youths to suicide. The community also lacks recreational infrastructure and there is no place for youth to go. The lack of improvement to housing is a detriment to quality of life (2019 to 2021 KP interview program). Social issues are apparent in the community and include alcohol and drug use, which was cited multiple times as a detriment to quality of life. Interviewees indicated that there is more apathy in the younger generation and more distractions such as cell phones and video games, which detract from quality of life. While there are more opportunities, fewer younger people are taking advantage of the opportunities. Many remarked that they wished for more economic opportunities and employment for young people.

6.9.2.6 Summary of NexGen Community Investments

NexGen has and plans to continue to make investments within the LSA communities. Community initiatives conducted include, but are not limited to:

- school breakfast program: Since 2017, through a partnership with the Breakfast Club of Canada, healthy breakfasts are provided to over 1,100 students each school day and eight local cooks are employed to prepare the breakfasts at the Ducharme Elementary School, Dene High School, and Clearwater River Dene School. Schools in Saskatchewan closed in Q2 2020 due to the pandemic, and in May 2020, food boxes were delivered to the homes of each student. The schools each had a uniquely modified breakfast program reflective of the current conditions at the school as the pandemic progressed and schools alternated between online and in-person learning. NexGen continues to fund the Breakfast Program in all three schools. NexGen also funded renovations at Ducharme Elementary to create and upgrade a kitchen space suitable to make breakfast for the students.
- summer student program: This program was established in 2016 and aims to build skills and confidence in young adults through skillful employment at the existing exploration site. To date, over 60 students have been employed in the summer student program. In 2020, the program did not proceed due to the circumstances of the COVID-19 pandemic. In 2021, NexGen adapted to ensure the program resumed in a revised format, in which summer students were hired to work within their communities. The 2021 program primarily consisted of a youth-Elder interview program whereby four summer students participated in the program: two students in the BRDN and two students in Buffalo Narrows with Métis Local 62. NexGen is planning to resume the summer student program at the existing exploration site in 2022.
- scholarships for local students: Since 2017, NexGen has provided up to four scholarships per year to students from the LPA to successfully pursue their post-secondary education. To date, seven students have received scholarships, many of which have received scholarships throughout multiple academic years due to continued eligibility. Due to disruptions associated with the pandemic, the 2020/2021 scholarship program was focused on the continued support of the current scholarship recipients and there were no new



scholarship recipients. The program accepted a new recipient for the 2021/2022 academic year. This is an ongoing initiative.

- recreational program: Initiative began in 2018 in which NexGen provides funding for recreational programming through the La Loche Sports, Recreation and Culture Board. This program provides structured after-school and summer-holiday recreational events and opportunities for the youth community and community members. The programming consists of activities such as beadwork, holiday decorating, traditional music lessons, and free public skating. Program was paused in Q2 2020 due to disruptions associated with the pandemic and resumed in Q3 2020. The recreational programming was adjusted during the pandemic to accommodate all Covid-19 related restrictions and public health orders. This is an ongoing initiative.
- youth sports program: Since 2017, each year, NexGen provides support to minor volleyball and hockey sports teams in the LPA. This support keeps the local youth engaged in sports and provides them with opportunities to participate in sporting events throughout the province and across Canada. These sports programs were suspended during the pandemic, but have resumed for the 2021-2022 year. This is an ongoing initiative, currently sponsoring the La Loche Lakers club volleyball team.
- dog adoption program: Since 2015, through collaboration with the Meadow Lake Humane Society, NexGen has fostered over 35 dogs at the Project site and is proud to say nearly 100% of the fostered dogs have found a forever home somewhere in Canada. This is an ongoing initiative that continued throughout the pandemic.
- community liaison: In July 2021, NexGen retained a dedicated community liaison officer in La Loche who will act as a conduit between communities and NexGen. Housed in a permanent office in La Loche, the community liaison officer is involved in engagement events and community discussions and is available to answer questions and discuss the Project with community members.
- other community initiatives: These initiatives include a diamond driller helper training course (2018), funding a Métis Youth Cultural Music Program (2019), and funding the Community Pandemic Coordinators (2020). Additional information on the Community Pandemic Coordinators is included in Section 2.5.6, Engagement Challenges.

All community initiatives will continue to be developed based on the needs and wants of the community and will be reviewed and amended as required to meet the changing needs of the community.

6.10 Aspirations

Aspirations of Indigenous communities within the LSA and RSA are described within this subsection related to potential future development and growth opportunities. Aspirations range from the expansion of employment, training, and labour markets, to increased development of social, cultural, and tourism programs. Additional information regarding community goals pertaining to aspirations outlined throughout this subsection were largely obtained through KP interviews, JWG meetings, and IKTLU Studies with participating communities.



Effective governance has been identified as a key contributing factor to a community's socio-economic progress and overall well-being as it allows Indigenous communities to (AANDC 2015):

- "take greater control over the decisions that affect their lives;
- carry out effective relationships with other governments;
- take advantage of economic development opportunities;
- improve programs and services; and
- enhance their social and economic well-being."

Indigenous governance needs to balance the traditions and culture. Indigenous Peoples are not homogenous, and the most appropriate form of governance will vary among nations (RCAP 1996).

Governance is an important tool for self-determination (Missens 2008), which is a key social determinant of health for Indigenous Peoples as it influences other social determinants of health, such as education, housing, and safety by ensuring that Indigenous People are participating in decision making that affects the well-being of their communities (Reading and Wien 2009). Aspects of self-determination through discussions about freedom and control at JWG meetings reinforce the influence of self-determination on community well-being. This subsection describes formal goals and plans based in information that is publicly available, along with the hopes and aspirations community members shared during the KP interview program and JWG meetings.

6.10.1.1 Clearwater River Dene Nation

The CRDN indicated a desire to undertake KP interviews for their community independently, and NexGen provided the KP interview guide and directions for interviewers. At the timing of the writing of this baseline report, the CRDN interview results had not yet been provided to NexGen.

6.10.1.2 Métis Nation – Saskatchewan

Through the JWG processes and KP interviews, MN-S citizens living in the NR2 communities shared their goals and aspirations for the future, which include economic opportunities, maintaining Métis ways of life, and preserving environmental integrity.

When MN-S citizens talked about economic opportunities, it was typically within the context of future opportunities such as those potentially available through mining operations: "It is important that our youth go into technical fields too, not just labour. Other uranium companies have good training programs for technical fields and train students just out of school into trades like power engineering" (MN-S-JWG 2019). Opportunities that are close to home are important, "We have qualified people who are going out to BC and Ontario looking for work, when they could be working close to home. They should be employed before people from the south are hired to work in this area" (MN-S-JWG 2019). Participants in the KP interview program also see substantial future economic opportunities that could help community members end the cycle of poverty (2019 to 2021 KP interview program).

Maintaining Métis identity is another important goal for MN-S citizens, which they described through their connection and relationship with the land and freedom. Citizens noted that cultural identity and taking pride in their Métis identity is important. Without a sense of identity, social issues arise, and people feel lost (2019 to 2021 KP interview program). Another citizen echoed this sentiment at a JWG meeting: "All children want to learn where



they are from, who they are and where they are going. If we do not teach them our culture, they are angry at us later" (MN-S-JWG 2019). Métis Nation – Saskatchewan citizens of NR2 have taken steps to ensure that their goal of maintaining Métis ways of life continues through school programming and culture days.

Another goal of MN-S citizens is the preservation of environmental integrity for current and future generations.

Environment is very important; I am an Elder today. I was born in the North, and it was pristine. Today with the mining industry, I see changes coming. Changes that relate to pollution affect my children, my grandchildren and the children still not born. That is my biggest focus: make sure we don't leave the uranium sitting behind. We want to see no footprint. I want to see a clean environment. I have nothing against what you are doing, the world needs it, but at the same time don't leave us the garbage. (MN-S-JWG 2019a)

and

When it comes to environment, we only have one command and that is respect for all living things and all the dead things. If you do not respect the earth and can't grow food, you won't last for more than two months. If you don't respect the water and keep it clean and pure, you only live for two weeks. If you don't respect the air and keep it clean, you only live for two minutes. (MN-S-JWG 2019)

6.10.1.3 La Loche

In 2016 and 2017, La Loche embarked on a process to develop a community wellness plan in response to the 2016 shooting at Dene High School (La Loche 2017). One product of the community wellness plan was a vision and mission statement for the community. The vision statement is Ela nadetser (together we are strong) and the mission statement is: "The Northern Village of La Loche is a Dene-Métis community focused on assisting its people to become healthy productive community members through economic development and culture while protecting its natural resources." Supporting the community's vision are the six themes to support a safer and healthier community in the Community Wellness Plan and the goals articulated in the Official Community Plan (La Loche 2018), which was developed to meet the requirements set out in *The Planning and Development Act*, 2007.

The Community Wellness Plan is in place from 2017 to 2022 with the understanding that it will be revised and updated continuously. It is intended to be a living document. The Community Wellness Plan established six themes and 26 actions to support a safer and healthier community (La Loche 2017). The themes are:

- holistic health, which includes a range of actions including securing five trained Indigenous doulas / birth workers in the north, developing a traditional parenting program, and suicide prevention;
- empowerment (accountability), which includes actions to support intra-community and intra-agency collaboration, increasing awareness of services available in La Loche, and planting a community garden;
- language and culture, which includes creating strategies to promote language and culture as protective factors and working to support Elders;
- youth wellness, which includes developing a mentorship program, a for-credit land-based course, and building a new Ducharme School Cabin;



- public safety, which includes revitalizing the women's wellness group and increasing awareness of alternative justice measures; and
- reduction of poverty, which includes creating an economic development corporation and planning for construction of an office/business building in the community.

The Official Community Plan (La Loche 2018) also articulates a series of goals, which are presented in Table 19. The goals developed for the Official Community Plan reflect some of the same values expressed in the KP interviews and JWG meetings. La Loche's goals for managing and maintaining the natural environment, supporting the culture of residents, and ensuring that the services provided in the community support the health and well-being of residents are relevant to fostering community well-being.

Table 19: Official Community Plan Goals

Theme	Goals
Responsible governance	La Loche will be known for its leadership through transparency, responsiveness, and accountability. Residents of La Loche will have a voice and be encouraged to participate, where possible, on decisions that affect the future of the community. Leaders will have a broad and long-term perspective that is rooted in an understanding of the historical, cultural, and social complexities of the community.
Natural environment	Planning and developments will be integrated with the natural environment to better manage municipal land and water resources. Protection of the shoreline, wetlands, and land with ecological value will be encouraged to improve the environmental quality and enhance biodiversity in the community.
Built environment	La Loche will be a pleasant, livable, walkable, and accessible community. The community will grow sustainably and efficiently maximize the use of existing infrastructure and buildings to avoid unforeseen operating and development costs. Diverse and affordable housing opportunities will be available that reflect the needs of current residents and future generations.
Economic diversification and growth	La Loche will strive to create a diverse economy with a wide range of rewarding jobs and training opportunities. Entrepreneurial activities will be promoted for a sustainable economy. Diverse employment opportunities will be encouraged to ensure sustainable growth by promoting tourism, recreation, commercial and industrial ventures, and natural resource industries.
Culture and society	Cultural heritage will be expressed by supporting events and business avenues that embrace the culture of residents. La Loche will promote cultural attractions and community facilities such as schools, libraries, daycare centres, and leisure and cultural facilities. Use of public spaces will encourage informal social activity, scheduled recreation, and civic gatherings. Opportunities will be provided for leisure, recreation, sports, and other activities.
Health, safety, and community well-being	Council will continue to play a significant role in the community's health, safety, and well-being in terms of provision of supporting services, including social, administrative, judicial, and medical services. Council will support development that ensures residents of the community have access to a range of services and facilities that meet their needs. Planning decisions ill embrace and reflect strong cultural values.
Community engagement and inter-municipal cooperation	Effective and inclusive resident participation will be encouraged in community planning decisions. Council will commit to continual cooperation with the neighbouring CRDN to enhance regional partnerships, promote regional services and facilities, and support regional growth and development. La Loche will be a community that strives for health, well-being, and safety for all residents.

Source: La Loche 2018.

CRDN = Clearwater River Dene Nation.



The major regional tourism opportunities in La Loche are centred around a potential all-season road from La Loche to Fort McMurray (DMCA 2018). This road would create a development opportunity for cottage and recreation property development as La Loche is the first community that would be encountered when travelling east from Alberta. A 2018 report noted that there would be considerably more interest in building hotels, restaurants, and service stations in a northwestern tourism corridor if the La Loche-Fort McMurray road link were constructed.

6.10.1.4 Birch Narrows Dene Nation

In 2018, the BNDN completed a comprehensive community plan. The Comprehensive Community Plan outlines the goals for growth and development in Birch Narrows and provides direction to leadership, staff, and community members on how to address key issues. The Comprehensive Community Plan was developed through engagement with leadership, staff, and community members (BNDN 2018).

The community vision statement for the BNDN is:

We are the Indigenous Denesųliné of the Eghes t'oni'a (Clear Lake) Region and the Creator put us in this region to act for the benefit of our children and their children.

As a unified community, we continue to affirm our authority to manage the affairs of the Birch Narrows Dene Nation which include the passing of a constitution, laws, ordinances, statues, regulations, codes, policies and resolutions. (BNDN 2018)

The value statement is "As proud and united Birch Narrows Dene Nation citizens, we value health, self-reliance, education, and our culture" (BNDN 2018). To support the vision and values of the BNDN, the comprehensive community plan establishes goals for 12 areas, which are presented in Table 19.

- Governance and administration:
 - Establish and enforce bylaws and policies to govern the community.
 - Engage members in governing the community.
- Language and culture:
 - Support members in conducting traditional ceremonies.
 - Ensure that the Dene and Cree languages are preserved for future generations.
 - Provide opportunities for members to learn traditional skills.
 - Provide opportunities for Elders to share their teachings with youth members.
 - Study, document, and share Birch Narrows history with members.
- Caring for community:
 - Improve community social services.
 - Create opportunities for members to gather.



- Encourage community involvement and support member lead initiatives.
- Provide Preventative Support Programs.
- Education members and increase awareness of community social issues.

Justice:

- Ensure the community is a safe place to live.
- Strengthen the relationship between community members and the RCMP.

Recreation:

- Ensure members have access to recreation opportunities.
- Healing and wellness.
 - Invest in community health facilities.
 - Provide additional health services.
 - Improve health staff capacity.
 - Address addictions in the community.
 - Improve the community medical transportation service.

Education:

- Enhance school programming.
- Make positive connections between school and community.
- Invest in and support post-secondary education for members.
- Employment and training:
 - Create employment opportunities in the community.
 - Provide training and workshops to build members' employable skills.

■ Economic Development:

- Support local business development and entrepreneurship in the community.
- Pursue the development of additional commercial enterprises in the community.
- Research and prepare for resource companies' interest in the community.

Lands and resources:

- Keep a strong personal connection with land and environment.
- Protect natural areas in the community.



Housing:

- Provide more housing in the community.
- Maintain current housing stock.
- Support members living in urban centres.
- Infrastructure and facilities:
 - Build additional community facilities.
 - Ensure that community infrastructure and facilities are well equipped to support programs and services.

While all the goals presented in the comprehensive community plan support community well-being by ensuring engaged, healthy, supported, and culturally connected members, of particular importance, as discussed during KP interviews and the JWG meetings, are the goals to foster language and culture, improve and expand social and health services, and protect the environment.

Many of these goals came up during the KP interviews and JWG meetings. Birch Narrows Dene Nation members expressed the hope for additional community facilities, including a bigger health centre and band office, more classroom space, and a youth centre (BRDN-JWG 2020) as well as the need for more housing in the community (2019 to 2021 KP interview program). The community-wide commitment to maintain cultural activities is demonstrated by the commitment to land-based education. The BNDN's goals to protect the environment and pursue economic development opportunities are both advanced through the establishment of Nuh Nene (Our Land) Department.

Nuh Nene

During the JWG process and in the IKTLU Studies, BNDN members have noted the need to organize internally:

We have to organize as a community, and as leadership within the community, it is upon us to how we are going to participate with NexGen or other companies. The north is going to change. What does that mean for us? There will be major impact, but also major benefits. It will change with or without us, so preferably with us. (BNDN-JWG 2019)

The need to organize comes from the increase in industrial development and encroachment on BNDN traditional territory by government policies, recreational users, and industry:

The biggest fear for Indigenous land users is, when you look at the Saskatchewan government's Duty to Consult document, with agricultural land and leased land to agriculture, First Nations people and Indigenous land users are prohibited from going on without permission. That's one of the greatest fears we have, that with a lot of leases throughout the north, we hope the government will not play dirty and impose – so far, they haven't mentioned anything related to mining leases and that whole concept of needing permission from the lessees to go and hunt and use the land. It hasn't happened as far as we are aware. But one of the fears we have is that maybe at some point government will impose such an idea to prevent people going on these leased lands. It may come to that, who knows. (BNDN-JWG 2021c)



The increase in mineral exploration and development and the need for a consistent, proactive approach to consultation to preserve environmental integrity and Indigenous and Treaty rights, while advancing partnership opportunities and the associated benefits, led the BNDN to establish the Nuh Nene Department. In June 2021, Chief and Council endorsed the creation of the Nuh Nene Department and provided a mandate. The following principles guide the department:

- **Rights**: Talks on a nation-to-nation basis, acknowledge unceded territory, honour Aboriginal and Treaty rights, self-determination, United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), and free, prior, and informed consent; acknowledge the Truth and Reconciliation Commission findings and the legacy of colonialism; and exercise good faith and mutual respect.
- **Environmental protection**: integration of Indigenous Knowledge, environmental stewardship and protection, and roles for members in environmental monitoring.
- Meaningful consultation and accommodation: community participation, capacity building, net benefit, early involvement, and collaboration with neighbours (e.g., Turnor Lake Métis Local 40, northern hamlet of Turnor Lake).

The Nuh Nene Department will report directly to Chief and Council and includes a board, manager, and staff. The board will include five to seven members, including a councillor, three to five BNDN members, and an Elder Advisor. All members are appointed by Chief and Council. The manager is responsible for day-to-day operations.

The Nuh Nene Department is a tool to assert self-determination and control over developments that affect the BNDN, their members, and their traditional territory. As a BNDN member shared on the importance of self determination and having a say regarding developments in their traditional territory:

We have been brainwashed that we don't own this land, and perhaps we do have a say. We are trying to overcome this. We are telling our kids you have a right or a say of what happens on our land. We used to hear words of hopelessness, but UNDRIP has breathed rights into us, and we want our kids to catch hope. It is time we start talking Nation to Nation; we can't lose that. (BNDN-JWG 2019)

6.10.1.5 Buffalo River Dene Nation (Dillon)

In BRDN, the community has goals of preserving their culture, language, and helping youth understand what it is to be Dene (2019 to 2021 KP interview program). Other aspirations include community facilities for Elders and youth to gather and host activities. The community also aspires to get back to the forestry industry, which used to have a large sawmill in the community and residents were employed in all areas (e.g., loggers, drivers, planters). Diversifying the economy would increase employment and help families to pay for education (2019 to 2021 KP interview program). The community is also interested in developing its tourism industry, setting up lodges, and hosting excursions, like fishing.



The BRDN has a custom electoral act that has the following declaration outlining the overall goals for community leadership:

- The BRDN Government recognizes the responsibility of the elected leadership to the Creator and the Dene people and will uphold the responsibility to the Creator and the Dene people to protect:
 - The inherent and Aboriginal Rights of the Dene people as an indigenous people;
 - The Treaty 10 signed with the Dene Nation and all rights of the Dene people accorded by Treaty 10;
 - The democratic laws, institutions, and principles which have always been part of our history;
 - The spiritual beliefs, language, traditions, culture, and customs of the Dene people; and
 - The natural laws and responsibilities and obligations that govern our relationship with the Creator and the right to live in harmony with nature and mankind. (Buffalo River Dene Nation Band Custom Election Act 2017)

The responsibilities included in the declaration are apparent in, for example, the land-based programming provided to BRDN members to support language traditions, culture, and customs of the Dene people. The ability to fully express their culture, maintain their way of life, and govern themselves supports values related to community well-being shared in the KP interviews and JWG meetings.

6.10.1.6 Buffalo Narrows

In 2019, Buffalo Narrows adopted its Official Community Plan. The Official Community Plan provides a framework of goals, objectives, and policies to guide land management and use within municipal boundaries. The municipal goals set out by Buffalo Narrows in the Official Community Plan echo some of the goals from the village's earlier strategic plan (Buffalo Narrows 2016). The goals are (Buffalo Narrows 2019):

- Diverse and sustainable growth, including diverse land use activities and maintenance a positive relationship with environmental values, resource capabilities, and community strength.
- Orderly and efficient development, including cost-efficient development consistent with the vision and goals of the community.
- Serve as a strong regional centre, including maintaining and enhancing the role of the village as an administrative and service centre in northwest Saskatchewan.
- Enhance community attractiveness to enhance the Buffalo Narrows as a recreation and tourism destination.
- Build a healthy, resilient community to ensure that the village can take advantage of economic development opportunities.

The strategic plan established goals related to economic development, serving as a regional centre, and attracting tourists to the area. The strategic plan also highlighted the need for additional infrastructure and services in the community, which participants in the KP interview program noted were still needed. Participants in the KP interview program also expressed their desire to pursue economic development opportunities (2019 to 2021 KP interview program).



7.0 SUMMARY OF RESULTS

Population and Demographics

The RSA and LSA are predominantly Indigenous with the majority identifying as First Nations, followed by Métis. Buffalo Narrows and La Loche are the only LSA communities that are primarily Métis. Between 2006 to 2016, the proportion of people identifying as having First Nations ancestry in the RSA and LSA has increased while the proportion identifying as having Métis ancestry has decreased. Population growth in the LSA communities over the past three census periods has been robust in BNDN, modest in some LSA communities (i.e., CRDN and BRDN), and fluctuating in other communities (i.e., Buffalo Narrows, La Loche). Buffalo Narrows has the oldest population among the LSA communities and CRDN has the youngest.

The RSA and LSA communities have large youth populations with a considerably higher proportion of the population aged 0 to 19 and lower retirement age population than the provincial averages but near the provincial Indigenous averages. This suggests a younger population with a greater share having yet to reach working age relative to that of the province. Communities with higher proportions of younger residents can experience more economic pressures on the working-age population to support children and families. Younger populations may also place additional demands on health, education, and other social services. Overall, women make up a slightly higher proportion of the total LSA population than men, which is common in cities but not in rural areas. There has been very little change in the gender composition of the LSA communities between 2006 and 2016.

Economic Profile

The economy of the RSA is driven by the industry sectors of mining, quarrying, and oil and gas extraction, educational services, and health care and social assistance, with jobs relating to these sectors dominating the workforce. Other sectors such as agriculture, forestry, fishing and hunting, manufacturing, and retail trade comprised a lower percentage of total employment in the RSA compared to the province as a whole.

Uranium is the primary commodity in the RSA and capital investment in the RSA is tied to the activity levels in uranium mining. Since the discovery of uranium deposits in the RSA, the primary economic focus has been building human resource and business capacity to meet the needs of the mining sector. Northern workers have been successful in securing positions at northern sites and northern-owned businesses provide a large portion of services to the operations.

Although rich in natural resources, the RSA faces several challenges in terms of economic development, employment, and service delivery. The RSA has lower levels of educational attainment than the province overall for high school, college, and university graduates. Lower educational levels are linked to lower employment and incomes as residents do not have the qualifications to fill some of the employment opportunities available. Residents of the RSA are underrepresented in professional, technical, and trade occupations relative to the number of positions employed, particularly in the mining industry. Other challenges to economic development in the RSA are the low population density and remoteness of the communities. The RSA has a less diversified economy and more limited access to services and educational opportunities as well as higher transportation costs. In many of the RSA communities, transportation is very costly or precarious (e.g., only accessible by winter road). The lack of supporting infrastructure for the communities and the distance between communities and major



urban hubs increases the cost of living and operating a business, with higher costs for transportation translate into higher costs for such items as construction materials, food, and utilities.

The LSA is economically supressed by a lack of economic opportunity due to no suitably sized primary industry since the decline of the fur industry in the 1960s. Most employment is concentrated in public sector positions including Indigenous governance and municipalities. In addition, most industries in the LSA are traditionally female-dominated industries like health, education and social services. There is also evidence that some economic activities associated with the traditional economy are occurring in the LSA which may not be captured in the census data.

A limited number of locally owned businesses operate within the LSA communities and goods and services are often sourced externally. In comparison to other northern communities in the RSA, the LSA communities exhibit less business activity. While several local businesses in Buffalo Narrows and La Loche have experienced some growth in recent years due to mineral exploration in the area, a 2018 study noted that there were limited companies in the La Loche / CRDN region related to mining, construction, accommodation, and food services. Interviews with residents indicated a strong interest in expanding local business opportunities, including exploring partnerships between communities. Local study area residents have commented they see substantial value not just in expanding employment opportunities, but also ownership interests in businesses.

Labour Force Characteristics

The RSA has seen an increase in people participating in the workplace over the past 10 years, with stable levels of unemployment and employment. The participation rate in the RSA has been consistently lower than the provincial average from 2011 to 2016. Among LSA communities, the participation rate is lower than the provincial average; correspondingly, the unemployment rate and percentage of people not in the labour force are higher than the provincial average. There are lower employment rates in rural industry sectors in the LSA, including those associated with agriculture, forestry, fishing and hunting, manufacturing, and retail trade, than in the province overall.

Clearwater River Dene Nation

The labour force of the CRDN increased by 63% between 2011 and 2016. During this period, participation in the labour force grew from 30.8% to 47.8% relative to the slight rise in participation rate of the provincial Indigenous population (56.3% to 56.9%). Unemployment in CRDN was considerably higher than the provincial Indigenous population and is the highest among LSA communities. Among the LSA communities, CRDN had the largest difference between the unemployment rate of males and females, with a 20.3% difference in 2016, a slight improvement from 2006 when there was a 21.4% difference.

La Loche

In 2016, the labour force in La Loche was 525 people which increased from 170 people in 2011. The labour force and participation in the labour force in La Loche decreased between 2011 and 2016 (26.6% to 33.1%). Growth for La Loche remained the lowest among the LSA communities. Participation in the labour force for males (36.7%) remains higher than females (30.4%) for La Loche and unemployment rates have fluctuated in the community between 2006 to 2016 – dropping from 26.4% in 2006 to 22.3% in 2011 and rising again to 27.6% in 2016.



Unemployment in La Loche (27.6%) was higher than the provincial Indigenous population (18.6%) in 2016, and the second lowest among the individual LSA communities.

Birch Narrows Dene Nation

In 2016, the labour force in BNDN was 165 people. Extensive data on labour force characteristics for BNDN are not available due to data suppression (confidentiality or data quality reasons) by Statistics Canada. However, participation in the labour force was higher for males (56.7%) than females (52.4%) and lower than the provincial Indigenous population (60.0% and 54.2% respectively). Unemployment in BNDN (33.3%) in 2016 was approximately double than that of the provincial Indigenous population (18.6%).

Buffalo River Dene Nation

From 2011 to 2016, the workforce in BRDN increased substantially (from 235 to 255 individuals) and participation grew from 43.5% to 46.8%. Participation in the labour force in BRDN was higher for males (50.0%) than females (43.6%). However, these percentages remain lower than the provincial Indigenous population (60.0% and 54.2% respectively). The unemployment rate in BRDN was higher in 2016 (33.3%) than that of the provincial Indigenous population (18.6%).

Buffalo Narrows

The labour force in Buffalo Narrows increased by 13% between 2011 and 2016 (from 425 to 480 individuals) and participation grew from 52.5% to 62.7%. During this time, Buffalo Narrows was the only LSA community to have a higher participation rate than the provincial Indigenous population (56.9%). However, this participation rate is a decline from 2006 (68.0%). The community of Buffalo Narrows is also the only LSA community which has a higher participation rate for females (64.2%) than males (60.3%) which are both higher than the provincial Indigenous averages (60.0% and 54.2% respectively). Unemployment in Buffalo Narrows (12.5%) was considerably lower than the provincial Indigenous average (18.6%) and unemployment rates for males (18.2%) are higher than females (7.7%) as of 2016.

Industry Sector of Employment and Wage Economy

The mining, forestry, and oil and gas industries were once the dominant employers in the LSA communities. Information from community members suggests that when the Cluff Lake Mine closed in 2002, some miners from the LSA communities left the province to go to Ontario and British Columbia for mining work. Employment in the mining, quarrying, and oil and gas extraction peaked in 2011 in the LSA communities (11.2% of total employment) followed by a decline by 2016 (6.9% of total employment); however, it remained higher than the provincial average. Employment in other primary industries such as agriculture, forestry, fishing, and hunting was lower in the LSA and RSA than in all of Saskatchewan. Provincially, construction, retail trade, agriculture, forestry, fishing, and hunting accounted for a larger share of employment than educational services or public administration.

The sectors with the highest employment rates in the LSA and RSA are educational services, public administration, and health care and social services. These sectors have consistently provided the highest portion of employment since 2001 and are almost entirely public sector positions. In Buffalo Narrows, the major employers were once forestry and mining and are now the government, education, and health sectors while in Dillon, the uranium and oil and gas industries were once the major employers in the community. Currently, the



major employer in the community is BRDN, which employs workers in education and healthcare. This has meant an increasing dominance of public sector employment in the LSA communities, coupled with limited to no private sector opportunities in the LSA, particularly primary industry.

Wage Economy

In terms of income amongst LSA communities, at \$31,872 per year, Buffalo Narrows had a substantially higher median income compared to other communities. This is mainly due to higher numbers of employment opportunities associated with Buffalo Narrows hosting more provincial government corporations and services. This median income is slightly less than the median income for the Indigenous provincial population but more than the median income for the RSA. The CRDN had the lowest median income among LSA communities of \$14,688.

Participation rates in the LSA are well below those for the province. Buffalo Narrows also has a higher participation rate in the labour force compared to other communities, as well as lower unemployment rate, which play a role in higher incomes and aligns with the increased number of employment opportunities. The median age in Buffalo Narrows is just over five years greater than in the rest of the LSA communities, which can affect income as the majority of residents have been in the workforce for a longer duration resulting in higher salaries. Buffalo Narrows also has the highest overall educational attainment among the LSA communities. Among the LSA communities, the role of the wage economy is notably the strongest in Buffalo Narrows. The wage economy in Buffalo Narrows is something of an outlier, among other LSA communities La Loche has the highest median income of \$21,043 while CRDN has the lowest at \$14,688. Excluding Buffalo Narrows, LSA communities have similar labour force profiles in terms of median income and participation rates; participation rates are highest in BNDN (52.4%) and lowest in La Loche (33.1%). All LSA communities have a participation rate lower than the Indigenous population of Saskatchewan (56.9%) except for Buffalo Narrows (62.7%).

Traditional Economy

The traditional economy is important to livelihoods in the LSA communities. The traditional economy provides food and other necessities of life that support people and communities through personal use, giving to other members of the community, exchange, or barter. Participation in the traditional economy also facilitates the transmission of social norms and cultural values across generations. Participation levels vary by community and individuals, though smaller communities tend to be more engaged in the traditional economy than individuals in larger communities. The BNDN and BRDN both noted that approximately 80% of their members were engaged in the traditional economy to some extent .

The First Nations Food Nutrition and Environment Study found that almost all Indigenous adults in Saskatchewan (94%) reported eating Traditional Foods as part of their diet. Of the population included in the survey, Indigenous adults in Saskatchewan ate land mammals (83%), berries (78%), fish (51%), wild birds (46%), and wild plant foods and teas (43%). The LSA community members noted the traditional economy makes important contributions to the economic well-being of people and communities. They also noted that participation in the traditional economy varied by individual. People with stable employment in the wage economy may spend less time harvesting but still may include Traditional Foods in their diet (BRDN-JWG 2021a)..

The wage or market economy supplies capital needed to participate in the traditional economy. For example, funds earned in the labour market support equipment and supply purchases such as snowmobiles, ammunition,



and fuel. As a result, a household that is successful in the traditional economy is often also successful in the wage or market economy as cash income can be used to purchase harvesting equipment and cover expenses.

Education and Training

The population within the LSA communities generally has a lower educational attainment compared with the Indigenous provincial population and the RSA. Among other challenges, this is reflective of the young population in the LSA communities and RSA compared to the province. The geographic isolation and relatively small population contribute to limited educational opportunities in the LSA. The highest proportion of the population aged 15 years old or older with less than a high school certificate in 2016 was in La Loche and the lowest was in Buffalo Narrows. Buffalo Narrows has the highest share of population aged 15 years old or older with a post-secondary non-university certificate or diploma, a university certificate or diploma below the bachelor's level, and a university degree at bachelor level or above among communities in the LSA. Buffalo Narrows has higher levels of educational attainment than the other LSA communities, possibly influenced by its labour market indicators and more robust business environment.

The proportion of the population aged 15 and over with an apprenticeship or trades certificate or diploma as their highest level of education in the LSA in 2016 is similar to the proportion for Saskatchewan as a whole. However, participants in JWG sessions noted concerns related to insufficient training facilities for both youth and adults, not enough students taking maths and sciences in high school, and the need for students to leave the community to pursue further education beyond high school.

Educational attainment has fluctuated between 2006 and 2016 for CRDN and La Loche and remains below RSA and provincial levels for both communities. From 2006 to 2016 in CRDN, the proportion of those aged 15 and over with a college or other non-university certificate or diploma as their highest level of education had a comparable increase to the RSA but lower than the provincial level increase during the same period. The actual proportion remains below the provincial Indigenous average. The proportion of university graduates in La Loche has increased between 2006 and 2016 but was still below the RSA and Indigenous provincial averages. La Loche has the lowest proportion of females achieving a university degree among the LSA communities and the second lowest for the total population aged 15 and over.

Educational attainment has increased in every level of education between 2006 and 2016 for BNDN, BRDN, and Buffalo Narrows. Educational attainment is still below the RSA and provincial levels for BNDN. While the proportion of university graduates in BNDN has increased over time, it is still below the RSA and Indigenous provincial averages. Unlike the trend in the other LSA communities, the RSA, and the province, males are more likely than females to hold a university degree in BNDN. Among the LSA communities, BRDN has the largest proportion of its population with a trades education, and exceeds the 2016 RSA and provincial Indigenous averages. More males are likely to have obtained a trades education than females in BRDN.

Buffalo Narrows has the highest overall educational attainment among the LSA communities. The community has seen increases for every level of education between 2006 and 2016 and exceeds the Indigenous provincial educational attainment averages and almost all RSA averages. There are barriers to educational attainment that include lack of access to childcare, transportation, and housing. Interviewees noted that financial support is difficult without scholarships or funding. English as a second language is another issue as Dene is the first language for the majority of residents.



Community Health

Between 2006 and 2016, total mortality in the RSA has decreased slightly, but remains at rates greater than the province overall. Mortality rates progressively increase with age and are highest in both males and females age 85 years and over. Males have higher morality rates than females in almost all age groups.

Injuries are the leading causes of death in most age groups in the RSA with intentional self-harm, motor vehicle traffic crashes, assault, and accidental poisonings being most common. In the older age groups, chronic disease becomes the leading causes of death with ischemic heart disease, lung cancer, and diabetes being most common.

Crude rates of most chronic diseases are either similar or slightly higher in the province, compared to the RSA. The most common chronic disease in the RSA is hypertension followed by diabetes and COPD. The prevalence rate of diabetes in northern Saskatchewan was highest among all health regions in Saskatchewan and higher than the provincial prevalence rate. Overall, diabetes ranked as the third most commonly noted health issue, with many observing that it is tied to larger issues of lifestyle, physical activity, and nutrition. Breast cancer had the highest incidence rate in females and prostate cancer had the highest incidence rate in males, followed by lung cancer and colorectal cancer for both sexes.

Common communicable diseases in the RSA include chlamydia, gonorrhea, HIV, hepatitis C, and tuberculosis. Self-reported risk factors among newly diagnosed individuals included intravenous drug use and heterosexual contact. Rates of these communicable diseases in the RSA were substantially higher than the provincial averages.

Looking at personal behaviours and lifestyle choices, smoking rates in northern Saskatchewan are higher than provincial rates, which also increases exposure to second-hand smoke in vehicles / public spaces and at home. Northern Saskatchewan has similar rates of heavy drinking compared to Saskatchewan and other northern regions in Canada.

Households with children experienced greater food insecurity than households without children. High food prices are common, particularly for fresh produce in the RSA. Traditional foods are an important part of the Traditional Food systems and food security and help offset the high cost of living in northern Saskatchewan.

Social support contributes to good health in the community, and activities that bring individuals together. There were expressed concerns about mental heath and addictions, as well as the prevalence of diabetes, cancer, and tuberculosis within the communities. The effect of forest fires on health and Traditional Food security were also mentioned.

Residents of northern Saskatchewan reported higher rates of life stress and lower mental health status overall when compared to provincial rates. Suicide is a major issue with the LSA. There are programs in place to support mental health issues in La Loche and BNDN, and Buffalo Narrows. However, stigmas remain against seeking assistance and a reported lack of support for mental health and addictions issues when individuals return home from programs and treatment centres. There is a drive within communities to provide more crisis intervention, information, and referrals to other programs.

Poverty, unemployment, lack of education, isolation, lack of pro-social relationships, inadequate resources, and intergenerational trauma were identified as contributing factors for policing issues in the communities. The



communities do not have social supports related to domestic abuse and the closest women's shelter is in Meadow Lake

Buffalo Narrows Detachment experienced a large increase in total criminal code violations within the last five years in comparison to the province, while La Loche Detachment reported a decrease in criminal code violations and the crime rate. Members in Turnor Lake and BNDN feel very safe in the community due to its isolated location with some sleeping with unlocked doors.

Mortality, chronic illness, and communicable diseases are greater risks for those in the RSA than for the province. Hypertension and diabetes are the most prevalent chronic diseases within the area. Residents within northern Saskatchewan face greater poverty, unemployment, lack of education, isolation, and intergenerational trauma, which contribute to reported higher rates of life stress and lower mental health status than the province. Lack of social supports increase isolation, decreases mental health well-being, and increases addiction and relapse in the RSA.

Community Features and Infrastructure

In the LSA, housing on-reserve is largely provided by the bands, while some housing is privately owned by members in Dillon, Birch Narrows, and CRDN. Due to limited funding and high demand for housing, housing can be slow to build and maintain, which results in members moving to different communities until housing in available. Waitlists for band housing are common and housing in the LSA communities are overcrowded. Housing conditions are variable with most dwellings on-reserve in the LSA requiring regular maintenance or minor repairs. Common issues include mould and inadequate windows and doors.

Recreational facilities are similar among the LSA communities with each having some indoor and outdoor facilities. Each community has some form of organized recreational services that is volunteer- or community-run. Gaps in recreational services include support for sports programming, playground facilities, and facilities specific for youth and Elders. The MLTC runs programs for members of CRDN, BNDN, and BRDN. These programs include the Meadow Lake Child and Family Services, Youth Development Program, and the Justice Program. Common issues in the La Loche and Buffalo Narrows include housing, finances, food security, and child and family related matters. Communities indicated that they want to increase their community outreach, establish programming for members with special needs, mental health, and addictions, and have programs and facilities for youth and Elders.

Multiple jurisdictions provide health services in the RSA and LSA communities. To access health services, residents in the smaller hamlets and villages must travel to a larger community centre, primarily Dillon, for less severe, non-emergency medical issues and Île-à-la-Crosse or La Loche for medical issues such as emergencies and more specialized services. To access further services, community members must travel to larger centres such as Île-à-la-crosse, Prince Albert, Saskatoon, Meadow Lake, and North Battleford. Mental health professionals, such as therapists, are often not well received when brought into the community.

Policing services are provided by the RCMP, who have two main detachments in the LSA: one in La Loche and one in Buffalo Narrows. Violations in the Buffalo Narrows RCMP Detachment area are lower than those in the La Loche Detachment Area. However, the rate of violations in the Buffalo Narrows Detachment increased by 55.1% between 2015 and 2020 in comparison to La Loche, where rates declined by 9.8% between 2015 and 2020. The



crime rates for the Buffalo Narrows and La Loche detachment areas remain well above the average for the Province of Saskatchewan despite the provincial average decreasing during the same period (5.4% from 2015 to 2020; Section 6.8, Public Safety). The main policing issues within the LSA communities include addiction and interpersonal violence, as well as traffic by-law violations, drug-related crime (i.e., home invasions), mischief, and violence. There is dissatisfaction with the current system that requires calls to be directed outside the communities before police will attend an incident in the community. Fire suppression services are conducted by all LSA communities on a volunteer basis. Ambulance services for the LSA communities are based out of La Loche through the municipalities and SHA.

Water is typically sourced from local wells in the LSA communities and waste is sent to various lagoons, pit privies, or trucked to La Loche. Power generation is predominantly from fossil fuels and regulated for both electricity and natural gas. Cell and internet coverage is not consistent among the LSA communities.

The regional connectivity in the RSA and between the LSA communities is centred on Highway 155. The driving distance between LSA communities can be up to two hours along the highway. Due to the distance between communities and lack of public transportation, private vehicles are the primary method of transportation. Also due to the unevenness of services provided in the LSA communities, residents must often travel outside of their communities to access education, medical, and social services. Traffic volume and traffic collisions are relatively low in the RSA compared to the provincial average. There are two airports near the LSA communities of Buffalo Narrows and La Loche that are primarily used for charter flights.

Community Well-Being

Clearwater River Dene Nation has the lowest community well-being score among the LSA communities (49), due to it having the lowest component scores for income (51) and housing (62). However, CRDN's community well-being score has improved by 12 points between 2006 to 2016, the second highest increase among the LSA communities. Buffalo Narrows has the highest community well-being score (75) of the LSA communities in 2016 and the highest scores for all components. In Buffalo Narrows in 2016, the community well-being income component matched the provincial income component score, and the housing component score exceeded the provincial housing component score a; the Buffalo Narrows community has experienced increases in almost all component scores between 2006 and 2016.

KP interviews from the LSA communities had similar answers regarding what contributed to their quality of life in their communities. Community members identified the following as affecting community well-being:

- employment, incomes, and economic opportunity;
- quality of housing;
- land, clean air, freedom, and the ability to do land-based activities;
- the presence of bootleggers, drug dealers, and gangs in the community;
- loss of culture, traditions, and language;
- substance abuse and alcoholism;
- suicides;



- reliance on welfare; and
- maintaining the close-knit community environment.

Maintaining employment and providing opportunities to be financially independent are crucial in maintaining the well-being of communities; this is viewed as a keystone to local socio-economic development. Economic prosperity is also supported by having an educated and healthy population, along with planning and governance. It is important to note that growth must not, however, come at the expense of traditional practices, culture, or heritage. Ensuring that economic prosperity and traditional ways can develop in tandem will be important for developing and sustaining community well-being.

Aspirations

Aspirations of Indigenous communities within the LSA and RSA range from the expansion of employment, training, and labour markets to increase the development of social, cultural, and tourism programs. Communities within the LSA and RSA expressed an interest in continued engagement and participation opportunities regarding the Project and Project-related activities and noted the need for further relationship-building with NexGen. The preservation of the ecological environment, the health of local people and the integration of community and Indigenous Knowledge into the assessment process for the Project was also noted by Indigenous communities as highly important. Project engagement with LSA communities in the form of KP interviews, JWG meetings, and IKTLU Studies identified the following Project specific community aspirations:

- active community participation and engagement;
- commitments related to additional community infrastructure;
- health, safety, and community well-being;
- preservation of historical and cultural heritage;
- protection and conservation of the natural environment; and
- training, education, employment, business and contracting opportunities.

NexGen is committed to ensuring that the Project does not result in disadvantages for community members and helps them to achieve their goals and aspirations. NexGen has already and plans to continue to make investments in LSA communities through various initiatives. Continued engagement with communities will continue throughout the life of the Project.

7.1 Community Strengths and Challenges

The following subsections provide a summary of community strengths and challenges for the LSA based on the socio-economic baseline profile provided in this report. These present both opportunities and areas where additional work is required to realize the full benefits of the Project.



7.1.1 Strengths

Population and Demographics

The LSA population is younger than the province of Saskatchewan but comparable with the Indigenous provincial population average. The large youth population represents a potential untapped employment resource, with a relatively large and available pool of labour due to its favourable age structure. Population projections indicate that the population is expected to increase at a higher rate than the provincial average. These demographic factors indicate that LSA communities could play a key role in mitigating future labour shortages in the RSA and Saskatchewan, both of which have an older age structure.

Economic Profile

Mineral exploration and investment activity in the LSA is growing. The LSA communities and businesses have some experience with mining given the long-term prominence of the industry in northern Saskatchewan, though considerably less than other RSA communities. Several local businesses in Buffalo Narrows and La Loche have experienced some growth in recent years due to mining exploration in the area. Residents have expressed a strong interest in expanding local business opportunities including exploring partnerships between communities to develop businesses together.

Community Features and Infrastructure

Several LSA communities noted strong community facilities and supports including schools, childcare, and recreational facilities. Facilities such as the La Loche Friendship Centre are an important resource and gathering place in the community and is dedicated to promoting sport, culture, recreation, youth, and community. Other social services in La Loche include Project Venture, Kids First North, and Healthy Moms, Babies and Families.

Social assistance is provided in BNDN through the MLTC which provides services for members of the CRDN, BNDN and BRDN. Along with funding assistance, the MLTC bring programs in for clients such as social life skills and helping members apply for jobs (2019 to 2021 KP interview program). Along with programs run in the community through MLTC, the BNDN has their own Youth Development Program that has run annually for the past 14 years. The BNDN has expressed a desire to further grow programming to support members with special needs.

Information on recreational services, on-reserve housing, social supports in CRDN was not available at the time of the report. However, this information will be integrated when available. Clearwater River School is located in CRDN and serves Kindergarten to Grade 9 aged children and the community has one treatment centre (The Armand Bekkattla Treatment Centre) which is part of the National Native Alcohol and Drug Abuse Program. The facility provides services related to programs aimed at concurrent disorders, residential school survivors, counselling, rehabilitation, and pregnancy care.

Labour Force Characteristics

Analysis of the LSA communities shows notable differences in the labour force, employment, and income characteristics of Buffalo Narrows compared to La Loche and other communities of the LSA. Relative to other LSA communities, Buffalo Narrows had higher participation and employment rates, and higher personal and



household income levels in 2016, which is likely due to the increased number of employment opportunities because it operates as a regional services centre for many provincial corporations and services. La Loche is the closest municipality on Highway 955 to the uranium opportunities in north-western Saskatchewan; however, only exploration activities are currently ongoing in this area and therefore limited employment opportunities currently exist.

The LSA population has some experience with the mining sector given that the uranium industry was once the major employer in many of the communities. However, limited opportunities exist as there have been no active mines in the LSA since Cluff Lake mine (i.e., only fly-in/fly-out and drive-in/drive-out). Many community members that work in mining or the oil and gas sector still reside within the LSA while working on rotation elsewhere such as in Fort McMurray, Cold Lake, and potash mines in Alberta, or uranium mines in northeastern Saskatchewan.

Residents of the LSA that do not participate in the wage economy often turn to the traditional economy to meet their needs, while those who have consistent employment in the wage economy may participate less frequently. The traditional economy in LSA communities is an important part of the socio-economic fabric and the livelihoods of residents and remains strong. A large portion of the LSA population's income is derived from government transfers.

Education and Training

Educational attainment has improved in all LSA communities between 2006 and 2016. Females have overall higher rates of educational attainment for almost all levels of education. Buffalo Narrows has higher levels of educational attainment than the other LSA communities, possibly influenced by the Northlands College campus located within the community, economic opportunities (as evidenced by its higher participation rates and lower unemployment rates), and more robust business environment (e.g., its role as a regional centre providing government and commercial services to the northwest of the province). Improved educational attainment has a direct effect on labour market outcomes and is associated with other benefits such as economic growth, reduced criminal activity and improved health.

Transportation costs are paid for students in remote communities who are required to leave their communities to attend high school, which includes costs for mileage, room and board, and airfare. At the Dene High school in La Loche, there is a graduation team that assist students, including students at risk, aiding with applications, résumés, and university tours. Post-secondary education funding is available which includes funding for tuition, books, and living expenses. Two post-secondary campuses in La Loche and Buffalo Narrows offer a variety of post-secondary education and training courses, and these locations are relatively close to the other LSA communities.

Health and Well-Being

A noted strength in this area included perceptions of personal safety, which in most communities, were self-reported as good, with people generally feeling safe and some people noting sleeping with unlocked doors. The health of community members varied by community; however, residents of Birch Narrows and Turnor Lake report good overall heath within their respective communities. Social activities in these communities such as poker rallies, skating parties, food hampers and home visits helping to bring a sense of community.



Community Features and Infrastructure

All communities were noted to have recreational facilities available to them in some form such as sports facilities, libraries, and parks. Several social supports were recorded in communities such as child and family services, youth development programs, and sports programs. Healthcare facilities such as hospitals and primary care centres, as well as emergency services, are reported to be available in communities. Road infrastructure is deemed sufficient for the local population and roads are generally safe with lower-than-average collision rates.

Community Well-being

Several community members mentioned the importance of close-knit communities in strengthening community well-being. Residents' connection to the land was also noted as a strength. Community members noted several factors in helping improve and maintain community well-being including ensuring employment opportunities for community members and making sure that housing standards are high.

7.1.2 Challenges

Economic Profile

The LSA is economically supressed with a lack of economic opportunity due to no suitably sized primary industry since the decline of the fur industry in the 1960s and the unrelated increase in population. The private services sector comprises fewer than 20% of employment in the La Loche / CRDN area, compared to the 45% for the province overall and 28% for the RSA, indicating a much higher level of private sector activity in other northern centres (DMCA 2018). There are limited employment opportunities for all residents in the LSA. There is limited tourism industry or infrastructure in the LSA, and limited manufacturing. Fishing and commercial forestry activities contribute to the LSA economy, though to a limited scale.

The RSA also has a less diversified economy, more limited access to services and educational opportunities, and high transportation costs. The lack of supporting infrastructure for the communities and the distance between communities and major urban hubs (of which none are located in the RSA) increases the cost of living and operating a business due to higher costs for transportation and therefore higher costs for construction materials, food, and utilities. Within the RSA, the size of contracts and the administrative requirements of managing uranium sector contracts are barriers to participation by many northern-owned businesses. Residents of the LSA have noted there are a limited number of locally owned businesses, and that goods and services must often be sourced from outside the LSA communities.

Community Features and Infrastructure

Housing within LSA communities is a key challenge and can be slow to build and maintain due to limited funding and high demand. There is currently a waitlist for band housing in BNDN and BRDN (Dillon). In 2020, there was a waitlist of 30 or more people in BNDN and people may be on the waitlist for several years. Many homes on reserve lands require regular maintenance or minor repairs, issues such as black mould has been noted in some communities and has resulted in families moving into temporary housing. The majority of the LSA communities rely on water wells as their water source. The majority of LSA communities use facultative lagoons for wastewater treatment, with a few using individual pit privies.



Housing is reported to be very overcrowded in La Loche and some people reside in houses with 10 to 15 other people. Issues with running water and sewage services in La Loche have also been reported. High rental costs and crowded conditions, along with lack of available housing relative to the demand, is also common in Buffalo Narrows. Housing shortages also affect the northern hamlets and settlements in the LSA, which do not have enough housing or developed land to meet demand, often resulting in younger residents moving away, such as from Black Point to La Loche.

Buffalo River Dene Nation members have noted that there is a lack of social services and facilities in the community. Facilities the community would like to see in place include a youth centre, Elder's centre, and friendship centre. Key person interviews also identified a need for homecare for Elders in Dillon as there are no services currently available and identified a lack of a physical space for Elders to gather in the Buffalo Narrows.

The LSA is characterized by a dispersed settlement pattern of primarily small and highly remote communities and has limited regional connectivity. Highway 155 is the primary transport route that connects the LSA communities to the regional centres in southern Saskatchewan and has been identified by numerous sources as in need of serious repairs in multiple locations. Regional connectivity is identified as a challenge to economic expansion in the LSA.

Labour Force Characteristics

Labour force participation and employment rates in the RSA and LSA communities are lower than the provincial average; conversely, the unemployment rate and percentage of people not in the labour force are higher than the provincial average. Within the RSA, the main employers are mining, quarrying, oil and gas extraction, education services, public administration, and health care and social assistance. Employment in the LSA is particularly concentrated in government-funded service sectors, with lower employment rates in common rural sectors including agriculture, forestry, fishing and hunting, manufacturing, and retail trade than in the province overall. Challenges for Indigenous youths/young adults are likely to be different than older age groups such as not having enough work experience for available jobs, having less availability for work, and not knowing what type of job to explore.

Challenges to successfully participating in the wage economy in the LSA communities were associated with the lack of employment and training opportunities within communities and the lower levels of educational attainment of the labour force. The lack of employment opportunities was also cited as a factor for outmigration from the LSA communities. Many others have noted a reluctance to leave their families for extended periods as a barrier to obtaining training and education or securing employment outside of the community. Distance to employment was noted as a barrier to employment in the mining sector, particularly for women, due to family and childcare responsibilities. Some LSA residents noted women may be more likely to enter the mining industry if employment opportunities were closer to home. It was also noted that this would benefit families in general, particularly in the ability to respond to family emergencies.

Education and Training

In general, the largest segment of the population in the LSA communities have less than a high school certificate, ranging from 32.2% (Buffalo Narrows) to 67.2% (La Loche). JWG participants indicated that the standards for highs school certificate achievement have been lowered, meaning many graduates may not qualify for Grade



12 proficiency (BRDN-JWG 2021c). Lower levels of education attainment in the LSA communities indicate that employment in industries that require post-secondary or trades education may be difficult. Therefore, these types of occupations are typically filled by non-northern residents who have the requisite education. Participants in JWG sessions noted concerns about not enough training facilities for both youth and adults, not enough students taking maths and sciences in high school, and the frequent need for students to leave the community to pursue further education. While the school systems in the LSA communities are working on improving rates of attendance, graduation, literacy, and numeracy, success in these metrics remains challenging and below the RSA and provincial averages. Educational staffing challenges include recruiting and retention of qualified educators for communities, which also affects the types of programs available.

Additional challenges to educational attainment include costs and that most post-secondary education requires students to complete all or part of their schooling outside their community or the LSA. There are also challenges with the availability of obtaining safety tickets, driver's licences, childcare, and transportation. The LSA community residents noted that online employment application processes can make it difficult to obtain employment, as many people do not have access to a computer or internet in their homes. Interviewees indicated that leaving their communities for further education can be stressful, a financial burden, and a culture shock.

Health and Well-being

In the RSA, total crude mortality rates are approximately 1.5 to 2 times as high as the provincial rate. Age-standardized rates indicate a higher risk of many chronic diseases in the RSA, including diabetes, ischemic heart disease, COPD, and heart failure. Smoking rates in the RSA are also higher than provincial rates. High food prices are common, particularly for fresh produce in the RSA, which may be contributing factors to the higher mortality rates. Many community members noted difficulties with keeping doctors and healthcare providers within the community and having to travel outside their communities for specialized medical services such as psychiatric, dental, and optometry services. These travel distances can deter some community members from seeking early treatment or diagnosing illnesses. Common community health concerns include addictions (drugs and alcohol), mental health, and lack of access to medical services.

The number of crimes in the Buffalo Narrows RCMP Detachment area are lower than those in the La Loche RCMP Detachment area; however, criminal code violation (i.e., crime) rates in the Buffalo Narrows RCMP Detachment area are increasing each year and trending higher, while crime rates in the La Loche RCMP Detachment area are more variable but trending lower. Despite the decrease in criminal code violations in the La Loche RCMP Detachment area, interviews indicated that there is a perception that the community is not safe (2019 to 2021 KP interview program).

Community Well-being

Challenges and obstacles to community well-being included low income and a lack of employment opportunities. For young people, this can result in out migration, including having to travel outside the community for employment, as well as drug and alcohol abuse. The loss of culture and tradition was also viewed as a challenge as the make up of communities change over time. Social service programs are lacking for youth, special needs, mental health, and Elders in the LSA communities.



Review of community well-being indexes showed that CRDN had the lowest score among LSA communities, which was largely due to lower scores in income and housing. Buffalo Narrows had the highest community well-being index score, which is linked to their higher incomes and employment figures compared to other LSA communities. All communities in the LSA have low education scores, which resulted in overall scores lower than Saskatchewan.

7.2 Closure

The purpose of the socio-economic baseline was to present a comprehensive overview of the existing socio-economic conditions in the LSA communities and evaluate these in relation to the RSA and the province. This baseline report provides a detailed account of each LSA community and their strengths, challenges and aspirations and is intended to provide context on the day to day lives of community members when reviewing other components evaluated in the EA.

NexGen is committed to managing the negative effects of the Project on community members and sustainably maximize opportunities to help communities to achieve their goals and aspirations. Mitigation measures to minimize adverse effects to communities and enhance benefits would be developed in collaboration with communities, which would include respecting Indigenous and Local Knowledge and Indigenous practices and traditions. Benefit Agreements have been developed and are being negotiated to define the environmental, cultural, economic, training, employment, and business opportunities and other benefits to be provided to the primary Indigenous Groups by NexGen and to confirm the consent and support of those groups for the Project. Continued engagement with communities will continue throughout the remainder of the EA and beyond, as has been the strategic approach by NexGen since early exploration activities.



CLOSING

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Appendix A Socio-Economic Statistical Data



Table A-1a: Population of LSA, Northern Saskatchewan (RSA), and Saskatchewan, 1981 to 2016

Davies				Popul	ation			
Region	1981	1986	1991	1996	2001	2006	2011	2016
LSA (a,b,c)	3,487	4,075	4,249	4,766	5,129	5,454	6,215	5,991
Northern Saskatchewan (a,b,d)	25,304	25,340	26,735	31,104	32,029	33,919	36,557	37,064
Saskatchewan (a,b)	968,313	1,009,613	988,928	990,237	978,933	968,157	1,033,381	1,098,352

Parion		Aver	age Annual	Change in	Population	(%) ^(e)	
Region	1982-1986	1987-1991	1992-1996	1997-2001	2002-2006	2007-2011	2012-2016
LSA	3.2%	0.8%	2.3%	1.5%	1.2%	2.6%	-0.7%
Northern Saskatchewan	0.0%	1.1%	3.1%	0.6%	1.2%	1.5%	0.3%
Saskatchewan	0.8%	-0.4%	0.0%	-0.2%	-0.2%	1.3%	1.2%

Source: Statistics Canada 1981-2016 Census



a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake for 1981-2006.

d) North Saskatchewan is defined as Census Division No.18.

e) Average annual percentage population changes calculated by InterGroup Consultants Ltd. LSA = local study area.



Table A-1b: Population of Local Study Area Communities, 1981 to 2016

Community				Popula	tion ^(a,b)				
Community	1981	1986	1991	1996	2001	2006	2011	2016	
Bear Creek	n/d	n/d	n/d	n/d	n/d	n/d	55	33	
Birch Narrows Dene Nation	137	104	224	302	338	413	419	476	
Black Point	n/d	n/d	n/d	n/d	n/d	n/d	80	43	
Buffalo Narrows	1,088	1,183	1,060	1,053	1,137	1,081	1,153	1,110	
Buffalo River Dene Nation 193	312	423	423	539	607	741	764	783	
Clearwater River Dene 222	0	301	455	548	584	658	778	822	
Descharme Lake	n/d	n/d	n/d	n/d	n/d	n/d	n/d	10	5
Garson Lake	n/d	n/d	n/d	n/d	n/d	n/d	0	10	
La Loche	1,632	1,623	1,691	1,966	2,136	2,348	2,611	2,372	
Michel Village	130	110	87	75	70	79	66	57	
St. George's Hill	115	112	124	85	102	19	100	131	
Turnor Lake	73	219	185	198	155	115	179	149	
LSA Total(c)	3,487	4,075	4,249	4,766	5,129	5,454	6,215	5,991	

Community	Average Annual Change in Population (%) ^(d)											
Community	1982-1986	1987-1991	1992-1996	1997-2001	2002-2006	2007-2011	2012-2016					
Bear Creek	n/d	n/d	n/d	n/d	n/d	n/d	-9.7%					
Birch Narrows Dene Nation	-5.4%	16.6%	6.2%	2.3%	4.1%	0.3%	2.6%					
Black Point	n/d	n/d	n/d	n/d	n/d	n/d	-11.7%					
Buffalo Narrows	1.7%	-2.2%	-0.1%	1.5%	-1.0%	1.3%	-0.8%					
Buffalo River Dene Nation 193	6.3%	0.0%	5.0%	2.4%	4.1%	0.6%	0.5%					
Clearwater River Dene 222	n/d	8.6%	3.8%	1.3%	2.4%	3.4%	1.1%					
Descharme Lake	n/d	n/d	n/d	n/d	n/d	n/d	-12.9%					
Garson Lake	n/d	n/d	n/d	n/d	n/d	n/d	n/d					
La Loche	-0.1%	0.8%	3.1%	1.7%	1.9%	2.1%	-1.9%					
Michel Village	-3.3%	-4.6%	-2.9%	-1.4%	2.4%	-3.5%	-2.9%					
St. George's Hill	-0.5%	2.1%	-7.3%	3.7%	-28.5%	39.4%	5.5%					
Turnor Lake	24.6%	-3.3%	1.4%	-4.8%	-5.8%	9.3%	-3.6%					
LSA Total ^(c)	3.2%	0.8%	2.3%	1.5%	1.2%	2.6%	-0.7%					

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a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) The LSA includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data are not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake for 1981 to 2006.

d) Average annual percentage population changes calculated by InterGroup Consultants Ltd.

LSA = local study area; n/d = no data available.



Table A-2a: Population Distribution by Age Group for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

		Population (f	a,b)	Age Group Proportions ^(e)							
Age Group	LSA ^(c)	Northern Saskatchewan (RSA) ^(d)	Saskatchewan	LSA	Northern Saskatchewan (RSA)	Saskatchewan					
Total - Population in private households	5,805	37,065	1,098,350	100.0%	100.0%	100.0%					
0 to 14 years	1,805	11,565	215,685	31.1%	31.2%	19.6%					
15 to 24 years	1,030	6,550	137,720	17.7%	17.7%	12.5%					
25 to 34 years	855	5,310	155,045	14.7%	14.3%	14.1%					
35 to 44 years	660	4,005	136,540	11.4%	10.8%	12.4%					
45 to 54 years	680	4,005	138,825	11.7%	10.8%	12.6%					
55 to 64 years	430	3,115	144,110	7.4%	8.4%	13.1%					
65 to 74 years	230	1,690	90,970	4.0%	4.6%	8.3%					
75 years and over	120	835	79,455	2.1%	2.3%	7.2%					

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a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Descharme Lake, and Garson Lake.

d) Northern Saskatchewan (RSA) is defined as Census Division No.18.

e) Age group proportions calculated by InterGroup Consultants Ltd.

LSA = local study area; RSA = regional study area.



Table A-2b: Population Distribution by Age Group for Local Study Area Communities, 2016

		_			Population ^(a,b)		_	_	
Age Group	Birch Narrows Dene Nation - Turnor Lake 193B	Black Point	Buffalo Narrows	Buffalo River Dene Nation 193 (Peter Pond Lake 193)	Clearwater River Dene 222	La Loche	Michel Village	Turnor Lake	LSA Total ^(c)
Total - Population in private households	475	45	1,110	785	820	2,370	55	145	5,805
0 to 14 years	165	10	295	235	255	780	10	55	1,805
15 to 24 years	80	0	175	125	180	440	10	20	1,030
25 to 34 years	100	5	120	125	125	355	5	20	855
35 to 44 years	45	5	130	80	110	275	0	15	660
45 to 54 years	40	10	140	115	70	265	20	20	680
55 to 64 years	30	5	130	55	50	145	5	10	430
65 to 74 years	10	5	70	30	25	75 10	10	5	230
75 years and over	20	5	35	15	5	35	0	5	120
Age distribution ^(d)									
0 to 24	51.6%		42.3%	45.9%	53.0%	51.5%	n/c	n/c	n/c
25 to 54	38.9%		35.1%	40.8%	37.2%	37.8%	n/c	n/c	n/c
55+	12.6%		21.2%	12.7%	9.8%	10.8%	n/c	n/c	n/c



a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) The LSA includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data are not available for Bear Creek, Descharme Lake, and Garson Lake.

d) Age distribution percentages calculated by InterGroup Consultants Ltd.

LSA = local study area, n/c = not calculated due to lack of data.



Table A-3a: LSA Population Distribution by Age Group for 1986 through 2016

Ara Craun			Populat	tion in the l	_SA ^(a,b,c)			
Age Group	1986	1991	1996	2001	2006	2011	2016	
Total - Population in private households	4,075	4,240	4,765	5,125	5,445	5,885	5,805	
0 to 14 years	1,555	1,695	1,960	2,010	1,820	1,835	1,805	
15 to 24 years	1,020	920	840	865	1,130	1,245	1,030	
25 to 34 years	635	730	840	840	725	770	855	
35 to 44 years	340	385	490	640	745	805	660	
45 to 54 years	255	250	295	375	500	630	680	
55 to 64 years	155	185	190	240	270	355	430	
65 to 74 years	85	85	85	100	170	175	230	
75 years and over	50	45	65	65	70	80	120	
	Age Group Proportions in LSA ^(d)							

Age Group			Age Group	Proportion	ns in LSA ^(d)		
Age Group	1986	1991	1996	2001	2006	2011	2016
0 to 14 years	38.2%	40.0%	41.1%	39.2%	33.4%	31.2%	31.1%
15 to 24 years	25.0%	21.7%	17.6%	16.9%	20.8%	21.2%	17.7%
25 to 34 years	15.6%	17.2%	17.6%	16.4%	13.3%	13.1%	14.7%
35 to 44 years	8.3%	9.1%	10.3%	12.5%	13.7%	13.7%	11.4%
45 to 54 years	6.3%	5.9%	6.2%	7.3%	9.2%	10.7%	11.7%
55 to 64 years	3.8%	4.4%	4.0%	4.7%	5.0%	6.0%	7.4%
65 to 74 years	2.1%	2.0%	1.8%	2.0%	3.1%	3.0%	4.0%
75 years and over	1.2%	1.1%	1.4%	1.3%	1.3%	1.4%	2.1%

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a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) The LSA includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data are not available for Bear Creek, Descharme Lake, and Garson Lake for all Census years, Black Point for 1986 to 2011, St. George's Hill for 2006 and 2016, and Turnor Lake for 2011.

d) Age group proportions calculated by InterGroup Consultants Ltd.

LSA = local study area.



Table A-3b: Population Distribution by Age Group for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 1986 and 2016

			Num	nber of Population					
Age Group	L	SA ^(a,b,c)	Northern Saskate	chewan (RSA) ^(a,b,d)	Saskatchewan (a,b)				
	1986	2016	1986	2016	1986	2016			
Total - Population in private households	4,075	5,805	25,340	37,065	1,009,610	1,098,350			
to 14 years	1,555	1,805	9,795	11,565	245,715	215,685			
15 to 24 years	1,020	1,030	5,300	6,550	167,515	137,720			
25 to 34 years	635	855	3,985	5,310	170,505	155,045			
35 to 44 years	340	660	2,430	4,005	118,160	136,540			
15 to 54 years	255	680	1,600	4,005	89,010	138,825			
55 to 64 years	155	430	1,155	3,115	90,105	144,110			
65 to 74 years	85	230	720	1,690	75,545	90,970			
75 years and over	50	120	350	835	53,050	79,455			

			Age C	Froup Proportions ⁽	e)	
5 to 24 years 25 to 34 years 25 to 44 years 25 to 54 years 25 to 64 years		LSA	Northern Sask	atchewan (RSA)	Sask	atchewan
	1986	2016	1986	2016	1986	2016
0 to 14 years	38.2%	31.1%	38.7%	31.2%	24.3%	19.6%
15 to 24 years	25.0%	17.7%	20.9%	17.7%	16.6%	12.5%
25 to 34 years	15.6%	14.7%	15.7%	14.3%	16.9%	14.1%
35 to 44 years	8.3%	11.4%	9.6%	10.8%	11.7%	12.4%
45 to 54 years	6.3%	11.7%	6.3%	10.8%	8.8%	12.6%
55 to 64 years	3.8%	7.4%	4.6%	8.4%	8.9%	13.1%
65 to 74 years	2.1%	4.0%	2.8%	4.6%	7.5%	8.3%
75 years and over	1.2%	2.1%	1.4%	2.3%	5.3%	7.2%



a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) The LSA includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data are not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake for 1986 and St. George's Hill for 2016.

d) Northern Saskatchewan (RSA) is defined as Census Division No.18.

e) Age group proportions calculated by InterGroup Consultants Ltd.

LSA = local study area; RSA = regional study area.



Table A-3c: Population Distribution by Age Group for Local Study Area Communities, 1986 and 2016

	Number of Population ^(a,b)																			
Age Group	Birch Narrow	s Dene Nation	Black Point		Buffalo Narrows		Buffalo River I	Dene Nation 193	Clearwater R	iver Dene 222	La Loche		Michel Village		St. Georg	ge's Hill	Turno	or Lake	LS	SA (c)
	1986	2016	1986	2016	1986	2016	1986	2016	1986	2016	1986	2016	1986	2016	1986	2016	1986	2016	1986	2016
Total - Population in private households	105	475		45	1,185	1,110	420	785	300	820	1,625	2,370	110	55	110	n/d	220	145	4,075	5,805
0 to 14 years	40	165		10	410	295	145	235	135	255	665	780	40	10	35	n/d	85	55	1,555	1,805
15 to 24 years	25	80		0	235	175	130	125	80	180	420	440	30	10	45	n/d	55	20	1,020	1,030
25 to 34 years	10	100		5	245	120	55	125	35	125	245	355	10	5	10	n/d	25	20	635	855
35 to 44 years	10	45		5	115	130	25	80	25	110	120	275	5	0	10	n/d	30	15	340	660
45 to 54 years	10	40		10	85	140	25	115	25	70	80	265	10	20	5	n/d	15	20	255	680
55 to 64 years	10	30		5	50	130	20	55	10	50	60	145	5	5	0	n/d	0	10	155	430
65 to 74 years	0	10		5	35	70	15	30	0	25	30	75	5	10	0	n/d	0	5	85	230
75 years and over	0	20		5	20	35	10	15	0	5	15	35	0	0	0	n/d	5	5	50	120

							Age (Group Proportion	S ^(d)										
Age Group	Birch Narrow	s Dene Nation	Black Point	Buffalo	Narrows	Buffalo River	Dene Nation 193	Clearwater R	liver Dene 222	La L	oche	Michel	Village	St. Georg	ge's Hill	Turno	r Lake	LS	6A (c)
	1986	2016	1986 2016	1986	2016	1986	2016	1986	2016	1986	2016	1986	2016	1986	2016	1986	2016	1986	2016
0 to 14 years	38.1%	34.7%	22.2%	34.6%	26.6%	34.5%	29.9%	45.0%	31.1%	40.9%	32.9%	36.4%	18.2%	31.8%	n/d	38.6%	37.9%	38.2%	31.1%
15 to 24 years	23.8%	16.8%	0.0%	19.8%	15.8%	31.0%	15.9%	26.7%	22.0%	25.8%	18.6%	27.3%	18.2%	40.9%	n/d	25.0%	13.8%	25.0%	17.7%
25 to 34 years	9.5%	21.1%	11.1%	20.7%	10.8%	13.1%	15.9%	11.7%	15.2%	15.1%	15.0%	9.1%	9.1%	9.1%	n/d	11.4%	13.8%	15.6%	14.7%
35 to 44 years	9.5%	9.5%	11.1%	9.7%	11.7%	6.0%	10.2%	8.3%	13.4%	7.4%	11.6%	4.5%	0.0%	9.1%	n/d	13.6%	10.3%	8.3%	11.4%
45 to 54 years	9.5%	8.4%	22.2%	7.2%	12.6%	6.0%	14.6%	8.3%	8.5%	4.9%	11.2%	9.1%	36.4%	4.5%	n/d	6.8%	13.8%	6.3%	11.7%
55 to 64 years	9.5%	6.3%	11.1%	4.2%	11.7%	4.8%	7.0%	3.3%	6.1%	3.7%	6.1%	4.5%	9.1%	0.0%	n/d	0.0%	6.9%	3.8%	7.4%
65 to 74 years	0.0%	2.1%	11.1%	3.0%	6.3%	3.6%	3.8%	0.0%	3.0%	1.8%	3.2%	4.5%	18.2%	0.0%	n/d	0.0%	3.4%	2.1%	4.0%
75 years and over	0.0%	4.2%	11.1%	1.7%	3.2%	2.4%	1.9%	0.0%	0.6%	0.9%	1.5%	0.0%	0.0%	0.0%	n/d	2.3%	3.4%	1.2%	2.1%

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a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) The LSA includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data are not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake for 1986 and St. George's Hill for 2016.

d) Age group proportions calculated by InterGroup Consultants Ltd.

LSA = local study area, n/d = no data or guideline available.



Table A-4: LSA and La Loche Population Change from 2011 to 2016

Arra Craum		La Loch	ne		LSA (a,b,	c)
Age Group	2011	2016	Change	2011	2016	Change
Total - Population in private households	2,610	2,370	(240)	5,885	5,805	(80)
0 to 49 years	2,295	1,985	(310)	5,015	4,690	(325)
50 years and over	310	385	75	880	1,115	235

Source: Statistics Canada 2011-2016 Census.

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, Garson Lake, and Turnor Lake for 2011, for Bear Creek, Descharme Lake, Garson Lake, and St. George's Hill for 2016.





Table A-5a: Population Age Structure by Sex, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

A C(e)			LSA (a,b,c)				Northern	Saskatchewan (RSA) (a,b,d)		Sa	skatchewan ^{(a,t}	p)	
Age Group ^(e)	Total	Male - LSA	Female - LSA	% Male	% Female	Total	Male - RSA	Female - RSA	% Male	% Female	Total	Male - SK	Female - SK	% Male	% Female
Total Population	5,775	2,810	2,955			37,065	18,640	18,425			1,098,355	545,785	552,565		
0 to 4 years	615	325	285	-5.63	4.94	3,850	1,960	1,890	-5.29	5.10	73,130	37,335	35,795	-3.40	3.26
5 to 9 years	680	355	305	-6.15	5.28	4,165	2,165	1,995	-5.84	5.38	74,460	38,150	36,305	-3.47	3.31
10 to 14 years	510	250	265	-4.33	4.59	3,555	1,785	1,775	-4.82	4.79	68,095	34,920	33,175	-3.18	3.02
15 to 19 years	525	285	245	-4.94	4.24	3,345	1,725	1,610	-4.65	4.34	67,655	34,680	32,980	-3.16	3.00
20 to 24 years	510	255	250	-4.42	4.33	3,210	1,635	1,575	-4.41	4.25	70,060	36,070	33,990	-3.28	3.09
25 to 29 years	510	230	270	-3.98	4.68	2,900	1,425	1,475	-3.84	3.98	77,525	39,290	38,235	-3.58	3.48
30 to 34 years	355	150	210	-2.60	3.64	2,410	1,140	1,270	-3.08	3.43	77,520	38,610	38,915	-3.52	3.54
35 to 39 years	300	155	155	-2.68	2.68	2,005	990	1,015	-2.67	2.74	71,590	35,940	35,650	-3.27	3.25
40 to 44 years	340	160	200	-2.77	3.46	2,000	960	1,040	-2.59	2.81	64,950	32,510	32,440	-2.96	2.95
45 to 49 years	335	145	190	-2.51	3.29	1,965	950	1,010	-2.56	2.72	63,575	31,780	31,795	-2.89	2.89
50 to 54 years	350	160	185	-2.77	3.20	2,040	985	1,050	-2.66	2.83	75,245	37,230	38,015	-3.39	3.46
55 to 59 years	250	120	135	-2.08	2.34	1,750	890	860	-2.40	2.32	76,195	38,070	38,130	-3.47	3.47
60 to 64 years	170	95	65	-1.65	1.13	1,365	685	675	-1.85	1.82	67,915	33,935	33,985	-3.09	3.09
65 to 69 years	150	70	75	-1.21	1.30	1,060	585	480	-1.58	1.30	53,230	26,285	26,945	-2.39	2.45
70 to 74 years	90	40	40	-0.69	0.69	630	325	305	-0.88	0.82	37,740	18,225	19,510	-1.66	1.78
75 to 79 years	60	30	20	-0.52	0.35	425	225	200	-0.61	0.54	29,400	13,410	15,985	-1.22	1.46
80 to 84 years	30	15	15	-0.26	0.26	250	125	120	-0.34	0.32	23,120	9,950	13,170	-0.91	1.20
85 to 89 years	10	5	15	-0.09	0.26	110	60	55	-0.16	0.15	16,280	6,305	9,975	-0.57	0.91
90 to 94 years	0	0	5	0.00	0.09	40	20	25	-0.05	0.07	8,005	2,510	5,485	-0.23	0.50
95 to 99 years	0	0	0	0.00	0.00	0	0	0	0.00	0.00	2,290	525	1,760	-0.05	0.16
100 years +	0	0	0	0.00	0.00	5	0	0	0.00	0.00	370	50	325	0.00	0.03

a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, Garson Lake, and St. George's Hill.

d) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.

e) Male and female proportions by age groups calculated by InterGroup Consultants Ltd.

LSA = local study area; RSA = regional study area; SK = Saskatchewan; n/c = not calculated.



Table A-5b: Proportion of Population by Sex, Average and Median Ages of Population, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

Metric ^(e)	Birch Narrows Dene Nation ^(a,b)	Black Point (a,b)	Buffalo Narrows (a,b)	Buffalo River Dene Nation 193 ^(a,b)	Clearwater River Dene 222 ^(a,b)	La Loche ^(a,b)	Michel Village (a,b)	Turnor Lake ^(a,b)	Local Study Area (LSA) (a,b,c)	Northern Saskatchewan (RSA) ^(a,b,d)	Saskatchewan ^{(a,b}
Total - Age groups and average age of the population - 100% data	475	45	1,110	785	820	2,370	55	145	5,805	37,065	1,098,350
Male	225	20	560	390	415	1,135	20	70	2,835	18,640	545,785
Female	255	20	550	390	410	1,235	30	85	2,975	18,425	552,565
Proportions by Sex							•				•
Male	47.4%	44.4%	50.5%	49.7%	50.6%	47.9%	36.4%	48.3%	48.8%	50.3%	49.7%
Female	53.7%	44.4%	49.5%	49.7%	50.0%	52.1%	54.5%	58.6%	51.2%	49.7%	50.3%
Average age of the population	27.8	38.1	34.0	29.7	27.1	27.6	38.8	27.2	29.2	29.7	39.1
Male	28.0	39.0	33.1	30.5	26.7	26.5	44.2	23.8	28.6	29.6	38.2
Female	27.7	37.2	35.0	29.0	27.5	28.5	34.8	30.0	29.7	29.9	40.0
Median age of the population	24.6	39.8	30.8	26.8	23.8	24.0	40.8	23.4	N/A	25.7	37.8
Male	23.4	39.8	29.4	27.6	23.1	21.8	50.0	21.3	N/A	25.1	36.9
Female	25.4	38.5	33.3	26.2	24.1	26.3	31.8	23.9	N/A	26.2	38.7

LSA = local study area; RSA = regional study area; n/c = not calculated.



a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Descharme Lake, Garson Lake, and St. George's Hill.

d) Northern Saskatchewan (RSA) is defined as Census Division No.18.

e) Proportions by sex calculated by InterGroup Consultants Ltd.



Table A-6a: Proportion of Population Identifying as Indigenous, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

				Local St	udy Area (LSA) (a,b,c)						Northe	rn Saska	atchewar	n (RSA) ⁽	a,b,d)						Sask	atchewa	1 ^(a,b)			
Age Group ^(e)		Total		Indi	genous ide	entity	Non-In	digenous	identity		Total		Indig	enous id	lentity	Non-Ir	ndigenou	us identity		Total		Indige	enous id	entity	Non-In	digenous	identity
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total - Population in private households - 25% sample data	5,820	2,840	3,050	5,565	2,700	2,915	255	130	135	36,850	18,515	18,335	32,205	16,035	16,165	4,650	2,480	2,165	1,070,560	533,385	537,170	175,020	84,730	90,290	895,535	448,655	446,885
0 to 14 years	1,800	940	890	1,785	915	875	30	10	10	11,555	5,900	5,650	10,955	5,615	5,345	600	290	310	213,260	109,120	104,140	57,690	29,085	28,605	155,570	80,035	75,540
15 to 24 years	1,015	535	490	1,015	520	500	20	-	10	6,435	3,305	3,135	6,000	3,060	2,935	440	240	200	135,065	68,855	66,205	31,810	15,900	15,910	103,250	52,960	50,295
25 to 34 years	890	395	505	805	365	455	90	50	50	5,385	2,575	2,810	4,670	2,225	2,440	715	350	370	152,675	76,695	75,975	25,630	11,820	13,805	127,045	64,875	62,170
35 to 44 years	635	280	345	595	275	320	60	10	25	3,915	1,920	1,995	3,325	1,600	1,725	590	315	270	134,695	67,290	67,405	19,770	9,065	10,705	114,925	58,230	56,695
45 to 54 years	740	305	430	700	275	410	35	20	30	4,045	1,935	2,115	3,385	1,605	1,780	665	325	340	136,815	67,860	68,955	18,535	8,600	9,935	118,270	59,265	59,010
55 to 64 years	390	215	190	350	200	175	10	25	10	3,055	1,560	1,490	2,180	1,070	1,105	875	495	385	142,065	70,665	71,405	13,005	6,235	6,770	129,060	64,430	64,630
65 years and over	380	200	180	340	165	185	35	35	10	2,460	1,315	1,145	1,695	855	840	765	460	305	155,985	72,895	83,095	8,580	4,025	4,550	147,410	68,865	78,545
Proportion																											
0 to 14 years	31%	33%	29%	32%	34%	30%	12%	8%	7%	31%	32%	31%	34%	35%	33%	13%	12%	14%	20%	20%	19%	33%	34%	32%	17%	18%	17%
15 to 24 years	17%	19%	16%	18%	19%	17%	8%	0%	7%	17%	18%	17%	19%	19%	18%	9%	10%	9%	13%	13%	12%	18%	19%	18%	12%	12%	11%
25 to 34 years	15%	14%	17%	14%	14%	16%	35%	38%	37%	15%	14%	15%	15%	14%	15%	15%	14%	17%	14%	14%	14%	15%	14%	15%	14%	14%	14%
35 to 44 years	11%	10%	11%	11%	10%	11%	24%	8%	19%	11%	10%	11%	10%	10%	11%	13%	13%	12%	13%	13%	13%	11%	11%	12%	13%	13%	13%
45 to 54 years	13%	11%	14%	13%	10%	14%	14%	15%	22%	11%	10%	12%	11%	10%	11%	14%	13%	16%	13%	13%	13%	11%	10%	11%	13%	13%	13%
55 to 64 years	7%	8%	6%	6%	7%	6%	4%	19%	7%	8%	8%	8%	7%	7%	7%	19%	20%	18%	13%	13%	13%	7%	7%	7%	14%	14%	14%
65 years and over	7%	7%	6%	6%	6%	6%	14%	27%	7%	7%	7%	6%	5%	5%	5%	16%	19%	14%	15%	14%	15%	5%	5%	5%	16%	15%	18%

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a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.

d) Northern Saskatchewan (RSA) is defined as Census Division No.18.

e) Proportions by age groups calculated by InterGroup Consultants Ltd.

LSA = local study area; RSA = regional study area; n/d = no data available.



Table A-6b: Proportion of Population Identifying as Indigenous, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

i abie A	-6D.	Propor	rtion of Pop	uiatioii i	uentiny	iliy as	illulgellous	s, ioi Locai	Study Are	a, North	Jili Saskat	chewan (ite	gioriai o	uuy A	icaj, a	iila oaskate	newan, 20	10									
			L	ocal Stu	dy Area	(LSA)	(a,b,c)					Nort	hern Sask	atchew	an (RS	(a,b,d)						Saska	atchewa	n ^(a,b)			
Metric	Total identity ^(e)	Aboriginal identity, total ^(f)	Aboriginal	First Nations ⁽	_{h)} Métis	Inuk (Inuit)	Multiple Aboriginal responses ⁽ⁱ⁾	Aboriginal responses NIE ^(j)	Non- Aboriginal identity	Total identity ^(e)	Aboriginal identity, total ^(f)	Aboriginal	First Nations ^(h)	Métis	Inuk (Inuit)	Multiple Aboriginal responses ⁽ⁱ⁾	Aboriginal responses NIE ^(g)	Non- Aboriginal identity	Total identity ^(e)	Aboriginal identity, total ^(f)	Single Aboriginal responses, total ^(g)	First Nations ^(h)	Métis		Multiple Aboriginal responses ⁽ⁱ⁾	Aboriginal responses NIE ^(g)	
Populati	on																										
Total - both sex	5,820	5,565	5,550	3,430	2,120	0	20	0	255	36,850	32,205	32,010	25,575	6,435	10	135	50	4,650	1,070,560	175,020	172,810	114,565	57,880	360	1,300	905	895,535
Male	2,840	2,700	2,710	1,720	995	0	10	0	130	18,515	16,035	15,945	12,730	3,215	10	60	25	2,480	533,385	84,730	83,750	55,275	28,330	150	600	380	448,655
Female	2,985	2,850	2,850	1,710	1,125	0	n/d	0	135	18,335	16,165	16,065	12,845	3,220	0	70	30	2,165	537,170	90,290	89,055	59,290	29,555	215	705	530	446,885
Ratio in	Total Pop	ulation ^(k)																									
Total - both sex	100.0%	95.6%	95.4%	58.9%	36.4%	0.0%	0.3%	0.0%	4.4%	100.0%	87.4%	86.9%	69.4%	17.5%	0.0%	0.4%	0.1%	12.6%	100.0%	16.3%	16.1%	10.7%	5.4%	0.0%	0.1%	0.1%	83.7%
Male	100.0%	95.1%	95.4%	60.6%	35.0%	0.0%	0.4%	0.0%	4.6%	100.0%	86.6%	86.1%	68.8%	17.4%	0.1%	0.3%	0.1%	13.4%	100.0%	15.9%	15.7%	10.4%	5.3%	0.0%	0.1%	0.1%	84.1%
Female	100.0%	95.5%	95.5%	57.3%	37.7%	0.0%	0.0%	0.0%	4.5%	100.0%	88.2%	87.6%	70.1%	17.6%	0.0%	0.4%	0.2%	11.8%	100.0%	16.8%	16.6%	11.0%	5.5%	0.0%	0.1%	0.1%	83.2%
Ratio in	Total Abo	riginal iden	ntity ^(k)		•																		•				
Total - both sex	n/c	100.0%	99.7%	61.6%	38.1%	0.0%	0.4%	0.0%	n/c	n/c	100.0%	99.4%	79.4%	20.0%	0.0%	0.4%	0.2%	n/c	n/c	100.0%	98.7%	65.5%	33.1%	0.2%	0.7%	0.5%	n/c
Male	n/c	100.0%	100.4%	63.7%	36.9%	0.0%	0.4%	0.0%	n/c	n/c	100.0%	99.4%	79.4%	20.0%	0.1%	0.4%	0.2%	n/c	n/c	100.0%	98.8%	65.2%	33.4%	0.2%	0.7%	0.4%	n/c
Female	n/c	100.0%	100.0%	60.0%	39.5%	0.0%	0.0%	0.0%	n/c	n/c	100.0%	99.4%	79.5%	19.9%	0.0%	0.4%	0.2%	n/c	n/c	100.0%	98.6%	65.7%	32.7%	0.2%	0.8%	0.6%	n/c

Source: Statistics Canada 2016.

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.
- d) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.
- e) Users should be aware that the estimates associated with this variable are more affected than most by the incomplete enumeration of certain Indian reserves and Indian settlements in the 2016 Census of Population. For more information on Aboriginal variables including information on their classifications the questions from which they are derived data quality and their comparability with other sources of data refer to the Aboriginal Peoples Reference Guide Census of Population 2016.
- f) 'Aboriginal identity' includes persons who are First Nations (North American Indian) Métis or Inuk (Inuit) and/or those who are Registered under the Indian Act of Canada) and/or those who have membership in a First Nation or Indian band. Aboriginal peoples of Canada are defined in the Constitution Act 1982 section 35 (2) as including the Indian Inuit and Métis peoples of Canada.
- g) 'Single Aboriginal responses' includes persons who are in only one Aboriginal group that is First Nations (North American Indian) Métis or Inuk (Inuit).
- h) Users should be aware that the estimates associated with this variable are more affected than most by the incomplete enumeration of certain Indian settlements in the 2016 Census of Population. For additional information refer to the Aboriginal Peoples Reference Guide Census of Population 2016.

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- i) 'Multiple Aboriginal responses' includes persons who are any two or all three of the following: First Nations (North American Indian) Métis or Inuk (Inuit).
- j) 'Aboriginal responses not included elsewhere' includes persons who are not First Nations (North American Indian) Métis or Inuk (Inuit) but who have Registered or Treaty Indian status and/or Membership in a First Nation or Indian band.
- k) Ratios in total population and total Aboriginal identity, including by sex, calculated by InterGroup Consultants Ltd.
- LSA = local study area; RSA = regional study area; n/c = not calculated.





Table A-6c: Proportion of Population Identifying as Indigenous, for Local Study Area Communities, 2016

Identity	Birch Narrows Dene Nation ^(a,b)	Buffalo Narrows ^(a,b)	Buffalo River Dene Nation 193 ^(a,b)	Clearwater River Dene 222 ^(a,b)	La Loche ^(a,b)	Michel Village ^(a,b)	St. George's Hill ^(a,b)	Turnor Lake ^(a,b)	LSA Total ^(c)
Total identity ^(d)	475	1,040	780	820	2,365	60	130	150	5,820
Aboriginal identity ^(e)	460	910	770	810	2,280	60	130	145	5,565
Single Aboriginal responses ^(f)	465	905	770	810	2,280	55	120	145	5,550
First Nations ^(g)	440	180	755	780	1,095	20	100	60	3,430
Métis	20	730	10	30	1,185	35	20	90	2,120
Inuk (Inuit)	0	0	0	0	0	0	0	0	0
Multiple Aboriginal responses ^(h)	0	0	0	0	10	0	10	0	20
Aboriginal responses not included elsewhere ⁽ⁱ⁾	0	0	0	0	0	0	0	0	0
Non-Aboriginal identity	15	135	10	10	85	0	0	0	255
Proportions of Aboriginal and Non-Aboriginal identity ^(j)	•								
Aboriginal identity	96.8%	87.5%	98.7%	98.8%	96.4%	100.0%	100.0%	96.7%	95.6%
Non-Aboriginal identity	3.2%	13.0%	1.3%	1.2%	3.6%	0.0%	0.0%	0.0%	4.4%
Proportions of Aboriginal identity groups ^(j)	•								
Single Aboriginal responses	101.1%	99.5%	100.0%	100.0%	100.0%	91.7%	92.3%	100.0%	99.7%
First Nations	95.7%	19.8%	98.1%	96.3%	48.0%	33.3%	76.9%	41.4%	61.6%
Métis	4.3%	80.2%	1.3%	3.7%	52.0%	58.3%	15.4%	62.1%	38.1%
Inuk (Inuit)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Multiple Aboriginal responses	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	7.7%	0.0%	0.4%
Aboriginal responses not included elsewhere	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population of data can be due to poor data quality or to other technical reasons.
- c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.
- d) Users should be aware that the estimates associated with this variable are more affected than most by the incomplete enumeration of certain Indian settlements in the 2016 Census of Population. For more information on Aboriginal variables including information on their classifications the questions from which they are derived data quality and their comparability with other sources of data refer to the Aboriginal Peoples Reference Guide Census of Population 2016.
- e) 'Aboriginal identity' includes persons who are First Nations (North American Indian) Métis or Inuk (Inuit) and/or those who are Registered under the Indian Act of Canada) and/or those who have membership in a First Nation or Indian band. Aboriginal peoples of Canada are defined in the Constitution Act 1982 section 35 (2) as including the Indian Inuit and Métis peoples of Canada.
- f) 'Single Aboriginal responses' includes persons who are in only one Aboriginal group that is First Nations (North American Indian) Métis or Inuk (Inuit).
- g) Users should be aware that the estimates associated with this variable are more affected than most by the incomplete enumeration of certain Indian reserves and Indian settlements in the 2016 Census of Population. For additional information refer to the Aboriginal Peoples Reference Guide Census of Population 2016

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- h) 'Multiple Aboriginal responses' includes persons who are any two or all three of the following: First Nations (North American Indian) Métis or Inuk (Inuit).
- i) 'Aboriginal responses not included elsewhere' includes persons who are not First Nations (North American Indian) Métis or Inuk (Inuit) but who have Registered or Treaty Indian status and/or Membership in a First Nation or Indian band.
- j) Proportions of Aboriginal and non-Aboriginal identity, and proportions of Aboriginal identity groups calculated by InterGroup Consultants Ltd.
- LSA = local study area.





Table A-7: LSA First Nation Communities Registered Population as of June, 2021

		Number of F	People			Ratio in 1	Γotal	
Residency	Clearwater River Dene	Buffalo River Dene Nation	Birch Narrows First Nation	Total	Clearwater River Dene	Buffalo River Dene Nation	Birch Narrows First Nation	Total
Registered On Own Reserve	1,049	794	448	2,291	38.0%	51.7%	51.5%	44.3%
Registered On Other Reserves	39	46	42	127	1.4%	3.0%	4.8%	2.5%
Registered On Own Crown Land	0	0	0	0	0.0%	0.0%	0.0%	0.0%
Registered On Other Band Crown Land	0	0	0	0	0.0%	0.0%	0.0%	0.0%
Registered On No Band Crown Land	7	0	0	7	0.3%	0.0%	0.0%	0.1%
Registered Off Reserve	1,669	696	380	2,745	60.4%	45.3%	43.7%	53.1%
Total Registered Population	2,764	1,536	870	5,170	100.0%	100.0%	100.0%	100.0%

Source: Indigenous and Northern Affairs Canada

Note: Ratios in total calculated by InterGroup Consultants Ltd.

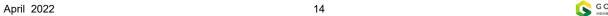






Table A-8: Persons who were eligible for Saskatchewan health insurance benefits

Community		Hea	Ith Cov	erage I	Report	(HCR)		HCR Region
Community	2015	2016	2017	2018	2019	2020	2021	nck kegion
Buffalo Narrows	1,421	1,443	1,428	1,374	1,369	1,426	1,379	Keewatin Yatthé
Clearwater River Dene Band Indian Reserve	661	716	733	765	796	806	830	Keewatin Yatthé
Dillon (for Buffalo River Dene Nation 193 [Peter Pond Lake 193])	958	986	994	995	1,022	1,022	1,027	Keewatin Yatthé
La Loche	3,270	3,302	3,308	3,176	3,270	3,359	3,289	Keewatin Yatthé
Turnor Lake	676	688	695	682	688	690	713	Keewatin Yatthé
TOTAL	6,986	7,135	7,158	6,992	7,145	7,303	7,238	

Source: eHealthSaskatchewan, Saskatchewan Health Coverage Reports

https://opendata.ehealthsask.ca/MicroStrategyPublic/asp/Main.aspx

Note:

The Saskatchewan Health Coverage Report is a count of persons who were eligible for Saskatchewan health insurance benefits as of June 30 of the year.

The Saskatchewan Health Coverage Report is not a population census and should not be used as such.

Coverage for an individual begins on the first day of the third month following their arrival to Saskatchewan. Residents with at least one day of coverage in the month of June are counted. Residents leaving the province remain eligible for coverage for this same period. In the case of death, people who had coverage any time in June are included. Coverage is available to residents temporarily living outside of the province (i.e. students, contract employees, etc.) For these cases, addresses from outside of Saskatchewan are acceptable. In the event that only the out-of-province address is available, the person is counted in the Out-of-Province category.

In previous years, individuals were distributed into residence codes based on the address hierarchy explained above. Reporting, starting in 2010, will now present distribution based on the community locations provided by PHRS (Person Health Registration System).

The correspondence address is the only address that is mandatory for collection in PHRS. In cases where the correspondence address is different from the residence, this may result in inaccuracies in the distribution.





Table A-9a: Proportion of Population who are migrants within 1-year and 5-years, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

Metric	·	LSA ^{(a,b,c}		Northe	rn Saskat (RSA) ^{(a,b,}	chewan		atchewan ⁽	(a,b)
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total - Mobility status 1 year ago - 25% sample data ^(e)	5,755	2,800	2,950	36,110	18,140	17,970	1,055,820	525,975	529,850
Non-movers	5,280	2,565	2,705	32,390	16,310	16,080	905,630	451,665	453,965
Movers	475	230	245	3,720	1,825	1,885	150,195	74,310	75,880
Non-migrants	345	180	170	2,415	1,160	1,260	89,005	43,990	45,015
Migrants	130	85	60	1,305	670	630	61,185	30,320	30,865
Internal migrants	150	55	70	1,275	660	620	49,930	24,855	25,075
Intraprovincial migrants	95	55	75	1,040	525	520	35,965	17,690	18,275
Interprovincial migrants	30	20	10	235	135	105	13,970	7,165	6,805
External migrants	-	-	-	25	15	15	11,255	5,465	5,790
Proportion ^(g)									
Non-movers	91.7%	91.6%	91.7%	89.7%	89.9%	89.5%	85.8%	85.9%	85.7%
Movers	8.3%	8.2%	8.3%	10.3%	10.1%	10.5%	14.2%	14.1%	14.3%
Non-migrants	6.0%	6.4%	5.8%	6.7%	6.4%	7.0%	8.4%	8.4%	8.5%
Migrants	2.3%	3.0%	2.0%	3.6%	3.7%	3.5%	5.8%	5.8%	5.8%
Internal migrants	2.6%	2.0%	2.4%	3.5%	3.6%	3.5%	4.7%	4.7%	4.7%
Intraprovincial migrants	1.7%	2.0%	2.5%	2.9%	2.9%	2.9%	3.4%	3.4%	3.4%
Interprovincial migrants	0.5%	0.7%	0.3%	0.7%	0.7%	0.6%	1.3%	1.4%	1.3%
External migrants	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	1.1%	1.0%	1.1%
Total - Mobility status 5 years ago - 25% sample data ^(f)	5,255	2,545	2,710	32,915	16,490	16,430	998,200	496,505	501,695
Non-movers	3,880	1,885	1,985	23,980	12,180	11,800	602,890	300,715	302,175
Movers	1,380	650	745	8,940	4,315	4,630	395,310	195,790	199,520
Non-migrants	975	460	510	5,700	2,760	2,935	201,450	99,955	101,495
Migrants	415	195	220	3,245	1,550	1,690	193,860	95,835	98,025
Internal migrants	410	190	240	3,130	1,490	1,645	147,360	72,815	74,540
Intraprovincial migrants	295	135	170	2,375	1,085	1,295	98,780	47,825	50,950
Interprovincial migrants	85	55	50	755	405	350	48,585	24,995	23,590
External migrants	20	20	20	115	65	50	46,500	23,015	23,485
Proportion ^(g)		•		•		•	•	•	•
Non-movers	73.8%	74.1%	73.2%	72.9%	73.9%	71.8%	60.4%	60.6%	60.2%
Movers	26.3%	25.5%	27.5%	27.2%	26.2%	28.2%	39.6%	39.4%	39.8%
Non-migrants	18.6%	18.1%	18.8%	17.3%	16.7%	17.9%	20.2%	20.1%	20.2%
Migrants	7.9%	7.7%	8.1%	9.9%	9.4%	10.3%	19.4%	19.3%	19.5%
Internal migrants	7.8%	7.5%	8.9%	9.5%	9.0%	10.0%	14.8%	14.7%	14.9%
Intraprovincial migrants	5.6%	5.3%	6.3%	7.2%	6.6%	7.9%	9.9%	9.6%	10.2%
Interprovincial migrants	1.6%	2.2%	1.8%	2.3%	2.5%	2.1%	4.9%	5.0%	4.7%
External migrants	0.4%	0.8%	0.7%	0.3%	0.4%	0.3%	4.7%	4.6%	4.7%
Source: Statistics Canada 2016 Census.									

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Descharme Lake, and Garson Lake.
- d) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.
- e) Refers to the status of a person with regard to the place of residence on the reference day May 10 2016 in relation to the place of residence on the same date one year earlier at the provincial level. Persons who have not moved are referred to as non-movers and persons who have moved from one residence to another are referred to as movers. Movers include non-migrants and migrants. Non-migrants are persons who did move but remained in the same city town township village or Indian reserve. Migrants include internal migrants who moved to a different city town township village or Indian reserve within Canada. External migrants include persons who lived outside Canada at the earlier reference date.
- f) Refers to the status of a person with regard to the place of residence on the reference day 10 May 2016 in relation to the place of residence on the same date five years earlier at the provincial level. Persons who have not moved are referred to as non-movers and persons who have moved from one residence to another are referred to as movers. Movers include non-migrants and migrants. Non-migrants are persons who did move but remained in the same city town township village or Indian reserve. Migrants include internal migrants who moved to a different city town township village or Indian reserve within Canada. External migrants include persons who lived outside Canada at the earlier reference date.
- g) Proportions of mobility status by groups calculated by InterGroup Consultants Ltd.
- LSA = local study area; RSA = regional study area.





Table A-9b: Proportion of Population who are migrants within 1-year and 5-years, for Local Study Area Communities, 2016

Community		1 year ago ^(a,b,c)			5 years ago ^(a,b,d))
Community	Total	Migrants	%	Total	Migrants	%
Birch Narrows Dene Nation	465	15	3.2%	420	55	13.1%
Black Point	40	10	25.0%	40	10	25.0%
Buffalo Narrows	1,040	45	4.3%	955	120	12.6%
Buffalo River Dene Nation 193	760	10	1.3%	710	55	7.7%
Clearwater River Dene 222	805	15	1.9%	730	50	6.8%
La Loche	2,315	25	1.1%	2,090	80	3.8%
Michel Village	60	0	0.0%	55	0	0.0%
St. George's Hill	125	0	0.0%	120	20	16.7%
Turnor Lake	145	10	6.9%	135	25	18.5%
LSA Total ^(e)	5,755	130	2.3%	5,255	415	7.9%

- c) Refers to the status of a person with regard to the place of residence on the reference day May 10 2016 in relation to the place of residence on the same date one year earlier at the provincial level. Persons who have not moved are referred to as non-movers and persons who have moved from one residence to another are referred to as movers. Movers include non-migrants and migrants. Non-migrants are persons who did move but remained in the same city town township village or Indian reserve. Migrants include internal migrants who moved to a different city town township village or Indian reserve within Canada. External migrants include persons who lived outside Canada at the earlier reference date.
- d) Refers to the status of a person with regard to the place of residence on the reference day May 10 2016 in relation to the place of residence on the same date five years earlier at the provincial level. Persons who have not moved are referred to as non-movers and persons who have moved from one residence to another are referred to as movers. Movers include non-migrants and migrants. Non-migrants are persons who did move but remained in the same city town township village or Indian reserve. Migrants include internal migrants who moved to a different city town township village or Indian reserve within Canada. External migrants include persons who lived outside Canada at the earlier reference date.
- e) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Descharme Lake, and Garson Lake. LSA = local study area.



a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.



Table A-10a: Population Projection for Saskatchewan Keewatin Yatthé Regional Health Authority for 2018-2049

				Proj	ection ^(a)				
Years	Low Growth	Medium Growth M1 ^(b)	Medium Growth M2 ^(b)	Medium Growth M3 ^(b)	Medium Growth M4 ^{(t}	Medium Growth M5 ^{(b}	High Growth	Slow- aging	Fast- aging
2018	11,139	11,139	11,139	11,139	11,139	11,139	11,139	11,139	11,139
2019	11,139	11,148	11,144	11,149	11,166	11,154	11,158	11,154	11,143
2020	11,132	11,154	11,147	11,154	11,189	11,166	11,177	11,167	11,141
2021	11,120	11,158	11,146	11,158	11,210	11,175	11,196	11,180	11,135
2022	11,103	11,159	11,143	11,158	11,229	11,183	11,215	11,192	11,126
2023	11,082	11,159	11,139	11,157	11,246	11,190	11,235	11,203	11,114
2024	11,057	11,156	11,132	11,153	11,260	11,194	11,253	11,212	11,098
2025	11,028	11,151	11,123	11,147	11,271	11,196	11,271	11,220	11,079
2026	10,998	11,145	11,114	11,140	11,282	11,198	11,290	11,228	11,060
2027	10,965	11,138	11,103	11,131	11,291	11,198	11,308	11,234	11,038
2028	10,929	11,129	11,091	11,121	11,298	11,197	11,326	11,241	11,014
2029	10,892	11,120	11,078	11,110	11,304	11,195	11,345	11,247	10,989
2030	10,855	11,111	11,065	11,099	11,310	11,194	11,364	11,254	10,964
2031	10,816	11,103	11,053	11,088	11,316	11,193	11,385	11,261	10,939
2032	10,778	11,095	11,041	11,077	11,322	11,193	11,407	11,270	10,913
2033	10,739	11,086	11,029	11,066	11,329	11,193	11,430	11,280	10,887
2034	10,700	11,079	11,018	11,055	11,335	11,194	11,455	11,291	10,861
2035	10,660	11,071	11,007	11,044	11,341	11,194	11,480	11,303	10,834
2036	10,619	11,064	10,996	11,033	11,347	11,195	11,506	11,316	10,806
2037	10,579	11,057	10,985	11,022	11,353	11,196	11,534	11,331	10,777
2038	10,537	11,049	10,975	11,011	11,358	11,196	11,562	11,347	10,747
2039	10,496	11,043	10,964	11,000	11,364	11,197	11,592	11,365	10,717
2040	10,454	11,037	10,955	10,990	11,370	11,199	11,624	11,386	10,685
2041	10,412	11,031	10,946	10,979	11,376	11,202	11,658	11,409	10,653
2042	10,369	11,026	10,936	10,968	11,382	11,205	11,692	11,434	10,619
2043	10,326	11,020	10,927	10,957	11,387	11,207	11,729	11,461	10,584
2044	10,280	11,012	10,916	10,944	11,391	11,208	11,764	11,487	10,546
2045	10,233	11,003	10,903	10,930	11,393	11,208	11,799	11,514	10,506
2046	10,184	10,993	10,890	10,913	11,393	11,206	11,834	11,540	10,463
2047	10,133	10,982	10,875	10,896	11,392	11,203	11,868	11,567	10,419
2048	10,082	10,969	10,858	10,877	11,389	11,199	11,902	11,593	10,374
2049	10,029	10,956	10,842	10,857	11,385	11,195	11,936	11,620	10,327
Average annual population change ^(c)	-0.34%	-0.05%	-0.09%	-0.08%	0.07%	0.02%	0.22%	0.14%	-0.24%
Cumulative population change ^(c)	-9.96%	-1.64%	-2.67%	-2.53%	2.21%	0.50%	7.16%	4.32%	-7.29%

Source: Statistics Canada, Custom projections for Health Regions in Canada (2018-2043). Note:

c) Average annual population change and cumulative population change calculated by InterGroup Consultants Ltd.



a) These projections use the same methodology, assumptions and scenarios as in the Population Projections for Canada (2018 to 2068), provinces and territories (2018 to 2043), adapted to Health Regions (a description of the methodology and assumptions of these projections can be found here: https://www150.statcan.gc.ca/n1/pub/91-620-x/91-620-x/2019001-eng.pdf.) The methods combine the use of historical data and the opinion of experts for each component of growth to develop future trajectories specific to each Health Regions. Generally, the same method has been used for all Health Regions. However, in Health Regions with small populations, where the counts of demographic events recorded annually are usually small, the past trends are often noisy, being very affected by random fluctuations. For this reason, some compromises were made in the less populated Health Regions (including Keewatin Yatthé), such as using the trends in both sex together instead of doing it for each sex separately, or keeping the age structure constant over time (for the projected changes in a given component of growth).

b) To account for the high uncertainty associated with internal migration projection, five assumptions are proposed, each based on a distinct reference period, and constituting the basis for a distinct scenario. Together, these assumptions demonstrate the high volatility of this component over time. Assumption M1, which can be considered an average scenario to some extent, is based on the longest period for which data are available for all provinces and territories (after the creation of Nunavut), from 1991/1992 to 2016/2017.67 Assumptions M2 to M5 reflect shorter intervals within the aforementioned period. Reference periods were selected so that each province and territory has at least one past period of relatively favourable net interprovincial migration, and another past period of relatively unfavourable net interprovincial migration.



Table A-10b: Population Projection for Saskatchewan for 2018-2043

Table A-10		Julation 1 10			Projec				
Years	Low Growth ^(b)	Medium Growth M1	Medium Growth M2	Medium Growth M3	Medium Growth M4	Medium Growth M5	High Growth ^(h)	Slow-aging	Fast-aging
2018 ^(a)	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162
2019	1,176	1,178	1,178	1,179	1,181	1,177	1,181	1,180	1,177
2020	1,191	1,195	1,195	1,198	1,200	1,194	1,200	1,199	1,192
2021	1,205	1,213	1,212	1,217	1,221	1,211	1,221	1,219	1,207
2022	1,219	1,231	1,230	1,236	1,242	1,228	1,243	1,240	1,222
2023	1,234	1,250	1,248	1,256	1,263	1,246	1,266	1,262	1,237
2024	1,247	1,268	1,266	1,277	1,285	1,264	1,289	1,284	1,252
2025	1,261	1,287	1,285	1,297	1,306	1,282	1,313	1,307	1,267
2026	1,274	1,306	1,303	1,317	1,328	1,300	1,338	1,330	1,282
2027	1,287	1,325	1,322	1,338	1,350	1,318	1,363	1,354	1,296
2028	1,300	1,343	1,340	1,358	1,372	1,336	1,389	1,378	1,310
2029	1,312	1,362	1,358	1,378	1,394	1,354	1,414	1,402	1,324
2030	1,324	1,380	1,376	1,398	1,416	1,372	1,441	1,427	1,337
2031	1,335	1,399	1,394	1,418	1,438	1,390	1,467	1,451	1,350
2032	1,346	1,417	1,412	1,438	1,460	1,407	1,493	1,475	1,363
2033	1,356	1,434	1,429	1,457	1,482	1,425	1,520	1,500	1,375
2034	1,366	1,452	1,446	1,476	1,503	1,442	1,546	1,524	1,387
2035	1,375	1,469	1,462	1,495	1,524	1,458	1,573	1,549	1,398
2036	1,384	1,486	1,479	1,514	1,545	1,475	1,600	1,573	1,409
2037	1,392	1,502	1,494	1,532	1,566	1,491	1,626	1,597	1,419
2038	1,400	1,518	1,510	1,550	1,586	1,507	1,652	1,622	1,429
2039	1,407	1,534	1,525	1,567	1,606	1,522	1,678	1,646	1,438
2040	1,414	1,549	1,539	1,584	1,626	1,537	1,704	1,669	1,446
2041	1,421	1,563	1,553	1,600	1,645	1,552	1,730	1,693	1,455
2042	1,426	1,578	1,567	1,616	1,664	1,566	1,755	1,716	1,462
2043	1,432	1,591	1,580	1,632	1,683	1,580	1,780	1,739	1,469
Average annual population change ^(k)	0.84%	1.26%	1.24%	1.37%	1.49%	1.24%	1.72%	1.62%	0.94%
Cumulative population change ^(k)	23.20%	36.92%	35.94%	40.41%	44.80%	35.93%	53.19%	49.63%	26.41%

Source: Statistics Canada. Table 17-10-0057-01 Projected population, by projection scenario, age and sex, as of July 1 (x 1,000). Note:



a) The base population for these projections is derived from the official preliminary postcensal estimates of the population for Canada, provinces and territories as of July 1, 2018. In all scenarios, the population is projected until 2043 for the provinces and territories, and until 2068 for Canada as a whole. For more detail on the assumptions and scenarios, please refer to the projection report (catalogue 91-520) and the technical report (catalogue 91-620). Because of rounding, counts within tables may differ from the totals.

b) The low-growth scenario contains the following assumptions at the Canada level: the total fertility rate reaches 1.40 children per woman in 2042/2043 and remains constant thereafter; life expectancy at birth reaches 85.6 years for males and 88.8 years for females in 2067/2068; interprovincial migration is based on the trends observed between 1991/1992 and 2016/2017; the immigration rate reaches 0.65% in

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2042/2043 and remains constant thereafter; the annual number of non-permanent residents reaches 1,080,910 in 2043 and remains constant thereafter; the net emigration rate reaches 0.18% in 2042/2043 and remains constant thereafter.

- c) The medium-growth (M1) scenario contains the following assumptions at the Canada level: the total fertility rate reaches 1.59 children per woman in 2042/2043 and remains constant thereafter; life expectancy at birth reaches 87.0 years for males and 89.0 years for females in 2067/2068; interprovincial migration is based on the trends observed between 1991/1992 and 2016/2017; the immigration rate reaches 0.83% in 2042/2043 and remains constant thereafter; the annual number of non-permanent residents reaches 1,397,060 in 2043 and remains constant thereafter; the net emigration rate reaches 0.15% in 2042/2043 and remains constant thereafter.
- d) The medium-growth (M2) scenario contains the following assumptions at the Canada level: the total fertility rate reaches 1.59 children per woman in 2042/2043 and remains constant thereafter; life expectancy at birth reaches 87.0 years for males and 89.0 years for females in 2067/2068; interprovincial migration is based on the trends observed between 1995/1996 and 2010/2011; the immigration rate reaches 0.83% in 2042/2043 and remains constant thereafter; the annual number of non-permanent residents reaches 1,397,060 in 2043 and remains constant thereafter; the net emigration rate reaches 0.15% in 2042/2043 and remains constant thereafter.
- e) The medium-growth (M3) scenario contains the following assumptions at the Canada level: the total fertility rate reaches 1.59 children per woman in 2042/2043 and remains constant thereafter; life expectancy at birth reaches 87.0 years for males and 89.0 years for females in 2067/2068; interprovincial migration is based on the trends observed between 2003/2004 and 2008/2009; the immigration rate reaches 0.83% in 2042/2043 and remains constant thereafter; the annual number of non-permanent residents reaches 1,397,060 in 2043 and remains constant thereafter; the net emigration rate reaches 0.15% in 2042/2043 and remains constant thereafter.
- f) The medium-growth (M4) scenario contains the following assumptions at the Canada level: the total fertility rate reaches 1.59 children per woman in 2042/2043 and remains constant thereafter; life expectancy at birth reaches 87.0 years for males and 89.0 years for females in 2067/2068; interprovincial migration is based on the trends observed between 2009/2010 and 2016/2017; the immigration rate reaches 0.83% in 2042/2043 and remains constant thereafter; the annual number of non-permanent residents reaches 1.397.060 in 2043 and remains constant thereafter; the net emigration rate reaches 0.15% in 2042/2043 and remains constant thereafter.
- g) The medium-growth (M5) scenario contains the following assumptions at the Canada level: the total fertility rate reaches 1.59 children per woman in 2042/2043 and remains constant thereafter; life expectancy at birth reaches 87.0 years for males and 89.0 years for females in 2067/2068; interprovincial migration is based on the trends observed between 2014/2015 and 2016/2017; the immigration rate reaches 0.83% in 2042/2043 and remains constant thereafter; the annual number of non-permanent residents reaches 1,397,060 in 2043 and remains constant thereafter; the net emigration rate reaches 0.15% in 2042/2043 and remains constant thereafter.
- h) The high-growth scenario contains the following assumptions at the Canada level: the total fertility rate reaches 1.79 children per woman in 2042/2043 and remains constant thereafter; life expectancy at birth reaches 88.0 years for males and 91.3 years for females in 2067/2068; interprovincial migration is based on the trends observed between 1991/1992 and 2016/2017; the immigration rate reaches 1.08% in 2042/2043 and remains constant thereafter; the annual number of non-permanent residents reaches 1,944,400 in 2043 and remains constant thereafter; the net emigration rate reaches 0.13% in 2042/2043 and remains constant thereafter.
- i) The slow-aging scenario contains the following assumptions at the Canada level: the total fertility rate reaches 1.79 children per woman in 2042/2043 and remains constant thereafter; life expectancy at birth reaches 85.6 years for males and 88.8 years for females in 2067/2068; interprovincial migration is based on the trends observed between 1991/1992 and 2016/2017; the immigration rate reaches 1.08% in 2042/2043 and remains constant thereafter; the annual number of non-permanent residents reaches 1,944,400 in 2043 and remains constant thereafter; the net emigration rate reaches 0.13% in 2042/2043 and remains constant thereafter.
- j) The fast-aging scenario contains the following assumptions at the Canada level: the total fertility rate reaches 1.40 children per woman in 2042/2043 and remains constant thereafter; life expectancy at birth reaches 88.0 years for males and 91.3 years for females in 2067/2068; interprovincial migration is based on the trends observed between 1991/1992 and 2016/2017; the immigration rate reaches 0.65% in 2042/2043 and remains constant thereafter; the annual number of non-permanent residents reaches 1,080,910 in 2043 and remains constant thereafter; the net emigration rate reaches 0.18% in 2042/2043 and remains constant thereafter.
- k) Average annual population change and cumulative population change calculated by InterGroup Consultants Ltd.

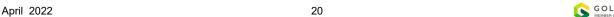






Table A-11: Labour Force Status Change, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 1986 to 2016

		Loc	al Stud	ly Area	(LSA)	(a,b,c)			Northe	rn Sasl	katchev	van (RS	(a,b,d)				Sask	catchewa	an ^(a,b)		
	1986	1991	1996	2001	2006	2011	2016	1986	1991	1996	2001	2006	2011	2016	1986	1991	1996	2001	2006	2011	2016
Total - Population aged 15 years and over ^(e)	2,500	2,565	2,805	3,095	3,605	3,735	4,045	15,500	16,360	19,035	20,105	22,365	24,795	25,295	751,090	738,680	748,135	755,520	766,230	812,505	857,295
In the labour force (e)	1,155	1,160	1,515	1,690	1,555	1,315	1,815	8,315	8,545	10,445	10,785	11,280	11,585	12,355	501,750	506,295	503,500	512,240	524,305	562,310	585,540
Employed (f)	765	820	1,075	1,105	1,165	1,060	1,320	6,345	6,630	8,330	8,180	9,005	9,520	9,420	461,515	470,475	467,285	479,735	494,900	529,100	544,095
Unemployed (g)	405	315	445	580	400	250	500	1,975	1,915	2,110	2,610	2,275	2,070	2,935	40,225	35,820	36,215	32,505	29,400	33,210	41,445
Not in the labour force ^{(h}	1,345	1,410	1,285	1,410	2,050	2,420	2,250	7,185	7,815	8,590	9,320	11,085	13,205	12,940	249,340	232,380	244,630	243,285	241,930	250,190	271,760
Participation rate (i)	46.2%	45.2%	54.0%	54.6%	43.1%	35.2%	44.9%	53.6%	52.2%	54.9%	53.6%	50.4%	46.7%	48.8%	66.8%	68.5%	67.3%	67.8%	68.4%	69.2%	68.3%
Employment rate (j)	30.6%	32.0%	38.3%	35.7%	32.3%	28.4%	32.6%	40.9%	40.5%	43.8%	40.7%	40.3%	38.4%	37.2%	61.4%	63.7%	62.5%	63.5%	64.6%	65.1%	63.5%
Unemployment rate (k)	35.1%	27.2%	29.4%	34.3%	25.7%	19.0%	27.5%	23.8%	22.4%	20.2%	24.2%	20.2%	17.9%	23.8%	8.0%	7.1%	7.2%	6.3%	5.6%	5.9%	7.1%

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available: for all years for Bear Creek, Black Point (except 2016), Descharme Lake, and Garson Lake; for 2011 for Birch Narrows Dene Nation Turnor Lake 193B and Turnor Lake.
- d) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.
- e) Refers to whether a person aged 15 years and over was employed unemployed or not in the labour force during the week of Sunday May 1 to Saturday May 7 2016.
- f) "Employed" refers to persons 15 years and over, excluding institutional residents who, during the week prior to Census Day: "(a) Did any work at all at a job or business, that is, paid work in the context of an employer-employee relationship, or self-employment. This also includes persons who did unpaid family work, which is defined as unpaid work contributing directly to the operation of a farm, business or professional practice owned and operated by a related member of the same household; or (b) Had a job but were not at work due to factors such as their own illness or disability, personal or family responsibilities, vacation or a labour dispute. This category excludes persons not at work because they were on layoff or between casual jobs, and those who did not then have a job (even if they had a job to start at a future date)." (Source: 2016 Census Dictionary).
- g) "Unemployed" refers to persons who, during the week of Sunday May 1 to Saturday May 7 2016, were without paid work or without self-employment work and were available for work and either: a) had actively looked for paid work in the past four weeks; or b) were on temporary lay-off and expected to return to their job; or c) had definite arrangements to start a new job in four weeks or less." (Source: 2016 Census Dictionary).
- h) "Not in the labour force" refers to persons who, during the week of Sunday May 1 to Saturday May 7 2016, were neither employed nor unemployed. It includes students, homemakers, retired workers, seasonal workers in an 'off season who were not looking for work, and persons who could not work because of a long-term illness or disability." (Source: 2016 Census Dictionary).
- i) The "Participation Rate" refers to the number of people in the labour force in the week of Sunday May 1 to Saturday May 7 2016, as a percentage of the population 15 years and over. (Source: 2016 Census Dictionary).
- j) The "Employment Rate" refers to the number of people employed in the week of Sunday May 1 to Saturday May 7 2016 as a percentage of the total population 15 years and over. (Source: 2016 Census Dictionary).
- k) The "Unemployment Rate" refers to the number of people unemployed in the week of Sunday May 1 to Saturday May 7 2016 expressed as a percentage of the population in the labour force. (Source: 2016 Census Dictionary).





Table A-12: Labour force survey (LFS) estimates for Census Division No. 17 and 18, and Saskatchewan, for 2015/2016 to 2019/2020

Metric		Census Divi	sion No. 17 ar	nd 18 ^(a)				Saskatchewan	(a)	
Wetric	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
Participation rate (b)	74.0%	74.6%	73.3%	71.0%	67.8%	69.5%	68.9%	68.3%	68.3%	67.6%
Employment rate (c)	65.8%	67.5%	67.8%	65.6%	62.0%	65.5%	64.5%	64.0%	64.3%	62.9%
Unemployment rate (d)	11.1%	9.6%	7.4%	7.3%	8.5%	5.7%	6.4%	6.3%	5.9%	7.0%

Source: Statistics Canada, Labour Force Survey, obtained from Bureau of Statistics of Saskatchewan.

d) The "Unemployment Rate" is the number of unemployed persons expressed as a percentage of the labour force. The unemployment rate for a particular group (age, sex and marital status) is the number unemployed in that group expressed as a percentage of the labour force for that group. Estimates are percentages, rounded to the nearest tenth.



a) Labour force survey (LFS) estimates with 2-year moving averages.

b) The "Participation Rate" is the number of labour force participants expressed as a percentage of the population 15 years of age and over. The participation rate for a particular group (age, sex and marital status) is the number of labour force participants in that group expressed as a percentage of the population for that group. Estimates are percentages, rounded to the nearest tenth

c) The "Employment Rate" (formerly the employment and population ratio) is the number of persons employed expressed as a percentage of the population 15 years of age and over. The employment rate for a particular group (age, sex and marital status) is the number employed in that group expressed as a percentage of the population for that group. Estimates are percentages, rounded to the nearest tenth.



Table A-13a: Labour Force Status, for Local Study Area, 1986 to 2016

										Local Study	Area (L	SA) ^(a,b,c)									
		1986		,	1991			1996			2001		2	2006		1	2011		:	2016	
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total - Population aged 15 years and over (e)	2,500	1,330	1,170	2,565	1,285	1,275	2,805	1,370	1,440	3,095	1,475	1,625	3,605	1,755	1,850	3,735	1,780	1,940	4,045	1,925	2,140
In the labour force ^(e)	1,155	775	380	1,160	705	455	1,515	840	675	1,690	920	775	1,555	830	730	1,315	655	655	1,815	905	905
Employed ^(f)	765	470	295	820	465	380	1,075	575	495	1,105	555	550	1,165	585	570	1,060	490	555	1,320	575	725
Unemployed (g)	405	320	85	315	235	85	445	275	170	580	355	215	400	235	150	250	160	85	500	320	190
Not in the labour force (h)	1,345	555	790	1,410	595	800	1,285	525	775	1,410	570	845	2,050	925	1,125	2,420	1,120	1,295	2,250	1,025	1,235
Participation rate (i)	46.2%	58.3%	32.5%	45.2%	54.9%	35.7%	54.0%	61.3%	46.9%	54.6%	62.4%	47.7%	43.1%	47.3%	39.5%	35.2%	36.8%	33.8%	44.9%	47.0%	42.3%
Employment rate ^(j)	30.6%	35.3%	25.2%	32.0%	36.2%	29.8%	38.3%	42.0%	34.4%	35.7%	37.6%	33.8%	32.3%	33.3%	30.8%	28.4%	27.5%	28.6%	32.6%	29.9%	33.9%
Unemployment rate (k)	35.1%	41.3%	22.4%	27.2%	33.3%	18.7%	29.4%	32.7%	25.2%	34.3%	38.6%	27.7%	25.7%	28.3%	20.5%	19.0%	24.4%	13.0%	27.5%	35.4%	21.0%

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with population specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo Narrows, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available: for all years for Bear Creek, Black Point (except 2016), Descharme Lake, and Garson Lake; for 2011 for Birch Narrows Dene Nation Turnor Lake
- d) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.
- e) Refers to whether a person aged 15 years and over was employed unemployed or not in the labour force during the week of Sunday May 1 to Saturday May 7 2016.
- f) "Employed" refers to persons 15 years and over, excluding institutional residents who, during the week prior to Census Day: "(a) Did any work at all at a job or business, that is, paid work in the context of an employer-employee relationship, or self-employment. This also includes persons who did unpaid family work, which is defined as unpaid work contributing directly to the operation of a farm, business or professional practice owned and operated by a related member of the same household; or (b) Had a job but were not at work due to factors such as their own illness or disability, personal or family responsibilities, vacation or a labour dispute. This category excludes persons not at work because they were on layoff or between casual jobs, and those who did not then have a job (even if they had a job to start at a future date)." (Source: 2016 Census Dictionary).
- g) "Unemployed" refers to persons who, during the week of Sunday May 7 2016, were without paid work or without self-employment work and either: a) had actively looked for paid work in the past four weeks; or b) were on temporary lay-off and expected to return to their job; or c) had definite arrangements to start a new job in four weeks or less." (Source: 2016 Census Dictionary).
- h) "Not in the labour force" refers to persons who, during the week of Sunday May 1 to Saturday May 7 2016, were neither employed nor unemployed. It includes students, homemakers, retired workers, seasonal workers in an 'off' season who were not looking for work, and persons who could not work because of a long-term illness or disability." (Source: 2016 Census Dictionary).
- i) The "Participation Rate" refers to the number of people in the labour force in the week of Sunday May 1 to Saturday May 7 2016, as a percentage of the population 15 years and over. (Source: 2016 Census Dictionary).
- j) The "Employment Rate" refers to the number of people employed in the week of Sunday May 1 to Saturday May 7 2016 as a percentage of the total population 15 years and over. (Source: 2016 Census Dictionary).
- k) The "Unemployment Rate" refers to the number of people unemployed in the week of Sunday May 1 to Saturday May 7 2016 expressed as a percentage of the population in the labour force. (Source: 2016 Census Dictionary).





Table A-13b: Labour Force Characteristics for Local Study Area Communities, 2016

											Lo	cal Study A	Area (LS	SA) ^{(a,b,c})												
Metric	Birch Na	arrows De	ne Nation	Buf	falo Na	rrows	Buffalo F	River Dene	Nation 193	Clearw	ater River	Dene 222	ı	La Loc	he	Mic	chel Vil	llage	St. (George	's Hill	Т	urnor L	ake		LSA To	tal
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total Population 15 Years and Over by Labour Force Activity (d)	315	150	165	765	360	400	545	270	275	570	280	290	1,585	735	850	50	20	25	100	50	50	95	35	55	4,025	1,900	2,110
In the Labour Force ^(d)	165	90	75	475	220	260	260	135	120	270	140	130	525	270	255	30	15	15	35	25	15	45	20	25	1,805	915	895
Employed ^(e)	115	50	60	415	175	240	175	85	90	150	60	90	380	175	205	20	0	15	30	15	10	25	15	10	1,310	575	720
Unemployed ^(f)	55	35	15	65	40	20	85	55	35	120	75	45	145	90	50	10	10	10	10	10	0	15	10	10	505	325	185
Not in the Labour Force ^(g)	150	60	85	285	140	145	290	135	150	300	145	155	1,060	470	590	20	0	10	60	30	35	55	15	30	2,220	995	1,200
Participation Rate ^(h)	52.4%	60.0%	45.5%	62.1%	61.1%	65.0%	47.7%	50.0%	43.6%	47.4%	50.0%	44.8%	33.1%	36.7%	30.0%	60.0%	75.0%	60.0%	35.0%	50.0%	30.0%	47.4%	57.1%	45.5%	44.8%	48.2%	42.4%
Employment Rate ⁽ⁱ⁾	36.5%	33.3%	36.4%	54.2%	48.6%	60.0%	32.1%	31.5%	32.7%	26.3%	21.4%	31.0%	24.0%	23.8%	24.1%	40.0%	0.0%	60.0%	30.0%	30.0%	20.0%	26.3%	42.9%	18.2%	32.5%	30.3%	34.1%
Unemployment Rate (i)	33.3%	38.9%	20.0%	13.7%	18.2%	7.7%	32.7%	40.7%	29.2%	44.4%	53.6%	34.6%	27.6%	33.3%	19.6%	33.3%	66.7%	66.7%	28.6%	40.0%	0.0%	33.3%	50.0%	40.0%	28.0%	35.5%	20.7%

Source: Statistics Canada 2016 Census.

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.
- d) Refers to whether a person aged 15 years and over was employed unemployed or not in the labour force during the week of Sunday May 1 to Saturday May 7 2016.
- e) "Employed" refers to persons 15 years and over, excluding institutional residents who, during the week prior to Census Day: "(a) Did any work at all at a job or business, that is, paid work in the context of an employer-employee relationship, or self-employment. This also includes persons who did unpaid family work, which is defined as unpaid work contributing directly to the operation of a farm, business or professional practice owned and operated by a related member of the same household; or (b) Had a job but were not at work due to factors such as their own illness or disability, personal or family responsibilities, vacation or a labour dispute. This category excludes persons not at work because they were on layoff or between casual jobs, and those who did not then have a job (even if they had a job to start at a future date)." (Source: 2016 Census Dictionary).
- f) "Unemployed" refers to persons who, during the week of Sunday May 1 to Saturday May 7 2016, were without paid work or without self-employment work and either: a) had actively looked for paid work in the past four weeks; or b) were on temporary lay-off and expected to return to their job; or c) had definite arrangements to start a new job in four weeks or less." (Source: 2016 Census Dictionary).
- g) "Not in the labour force" refers to persons who, during the week of Sunday May 1 to Saturday May 7 2016, were neither employed nor unemployed. It includes students, homemakers, retired workers, seasonal workers in an 'off' season who were not looking for work, and persons who could not work because of a long-term illness or disability." (Source: 2016 Census Dictionary).
- h) The "Participation Rate" refers to the number of people in the labour force in the week of Sunday May 1 to Saturday May 7 2016, as a percentage of the population 15 years and over. (Source: 2016 Census Dictionary).
- i) The "Employment Rate" refers to the number of people employed in the week of Sunday May 1 to Saturday May 7 2016 as a percentage of the total population 15 years and over. (Source: 2016 Census Dictionary).
 j) The "Unemployment Rate" refers to the number of people unemployed in the week of Sunday May 1 to Saturday May 7 2016 expressed as a percentage of the population in the labour force. (Source: 2016 Census Dictionary).

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Table A-14a: Labour Force Characteristics by Age Groups, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

	Local S	tudy Area	(LSA) (a,b,c)	Northern	Saskatchewan	(RSA) (a,b,d)	Sas	skatchewai	า ^(a,b)
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total Population 15 Years and Over by Labour Force Activity (e)	4,025	1,900	2,110	25,295	12,610	12,685	857,300	424,260	433,035
In the Labour Force ^(e)	1,805	915	895	12,360	6,540	5,820	585,535	311,105	274,430
Employed ^(f)	1,310	575	720	9,415	4,665	4,755	544,090	286,330	257,760
Unemployed (g)	505	325	185	2,935	1,875	1,060	41,445	24,775	16,665
Not in the Labour Force ^(h)	2,220	995	1,200	12,940	6,070	6,870	271,760	113,155	158,605
Participation Rate (i)									
Total Population 15 Years and Over	44.8%	48.2%	42.4%	48.9%	51.9%	45.9%	68.3%	73.3%	63.4%
15 to 24 years	24.4%	27.4%	19.2%	29.8%	32.7%	26.6%	62.7%	64.0%	61.3%
25 to 34 years	53.7%	56.6%	49.5%	56.2%	62.1%	50.7%	84.7%	90.1%	79.3%
35 to 44 years	61.4%	66.1%	50.0%	65.9%	68.8%	62.9%	87.5%	91.9%	83.2%
45 to 54 years	62.1%	62.9%	58.4%	66.6%	69.3%	64.2%	86.5%	89.3%	83.8%
55 to 64 years	44.0%	48.7%	50.0%	56.3%	60.4%	52.3%	70.8%	76.5%	65.2%
65 years and over	25.0%	20.5%	25.7%	17.3%	20.2%	14.4%	22.1%	29.4%	15.8%
Employment Rate (i)									
Total Population 15 Years and Over	32.5%	30.3%	34.1%	37.2%	37.0%	37.5%	63.5%	67.5%	59.5%
15 to 24 years	11.7%	10.4%	16.2%	17.7%	17.7%	17.9%	54.0%	54.3%	53.7%
25 to 34 years	36.2%	34.2%	37.1%	38.5%	39.6%	37.5%	77.8%	82.5%	73.0%
35 to 44 years	46.5%	49.2%	39.7%	52.3%	51.0%	53.4%	82.4%	85.8%	79.0%
45 to 54 years	53.1%	43.5%	51.7%	56.2%	55.6%	57.1%	82.3%	83.9%	80.7%
55 to 64 years	37.3%	25.6%	36.1%	49.3%	49.5%	49.0%	67.4%	71.6%	63.2%
65 years and over	12.5%	15.4%	8.6%	15.5%	17.9%	12.7%	21.2%	28.0%	15.3%
Unemployment Rate ^(k)									
Total Population 15 Years and Over	28.0%	35.5%	20.7%	23.7%	28.7%	18.2%	7.1%	8.0%	6.1%
15 to 24 years	54.0%	62.1%	42.1%	40.2%	46.3%	32.3%	13.8%	15.1%	12.3%
25 to 34 years	33.7%	44.2%	27.1%	31.4%	36.2%	26.0%	8.2%	8.5%	7.9%
35 to 44 years	23.1%	35.9%	17.6%	20.6%	25.8%	15.1%	5.9%	6.6%	5.0%
45 to 54 years	20.0%	23.1%	11.5%	15.6%	20.1%	11.4%	4.9%	6.0%	3.7%
55 to 64 years	6.1%	10.5%	0.0%	12.8%	16.9%	7.1%	4.9%	6.4%	3.2%
65 years and over	11.1%	75.0%	0.0%	10.6%	9.4%	9.1%	4.2%	4.7%	3.4%

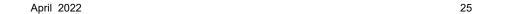






Table A-14a: Labour Force Characteristics by Age Groups, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

	Local S	tudy Area	(LSA) (a,b,c)	Northern S	Saskatchewan	(RSA) (a,b,d)	Sas	katchewar	1 ^(a,b)
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Not in the Labour Force Ratio ^(j,l)									
Total Population 15 Years and Over	55.2%	52.4%	56.9%	51.2%	48.1%	54.2%	31.7%	26.7%	36.6%
15 to 24 years	74.6%	70.8%	77.8%	70.2%	67.3%	73.2%	37.3%	36.0%	38.7%
25 to 34 years	46.3%	46.1%	50.5%	43.9%	38.1%	49.3%	15.3%	9.9%	20.7%
35 to 44 years	40.2%	32.2%	48.5%	34.1%	31.3%	37.1%	12.5%	8.1%	16.8%
45 to 54 years	37.9%	35.5%	40.4%	33.5%	30.7%	35.8%	13.5%	10.7%	16.2%
55 to 64 years	57.3%	53.8%	58.3%	43.5%	39.6%	47.7%	29.2%	23.5%	34.7%
65 years and over	83.3%	82.1%	71.4%	82.9%	79.8%	86.0%	77.9%	70.7%	84.2%

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.
- d) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.
- e) Refers to whether a person aged 15 years and over was employed unemployed or not in the labour force during the week of Sunday May 1 to Saturday May 7 2016.
- f) "Employed" refers to persons 15 years and over, excluding institutional residents who, during the week prior to Census Day: "(a) Did any work at all at a job or business, that is, paid work in the context of an employer-employee relationship, or self-employment. This also includes persons who did unpaid family work, which is defined as unpaid work contributing directly to the operation of a farm, business or professional practice owned and operated by a related member of the same household; or (b) Had a job but were not at work due to factors such as their own illness or disability, personal or family responsibilities, vacation or a labour dispute. This category excludes persons not at work because they were on layoff or between casual jobs, and those who did not then have a job (even if they had a job to start at a future date)." (Source: 2016 Census Dictionary).
- g) "Unemployed" refers to persons who, during the week of Sunday May 1 to Saturday May 7 2016, were without paid work or without self-employment work and were available for work and either: a) had actively looked for paid work in the past four weeks; or b) were on temporary lay-off and expected to return to their job; or c) had definite arrangements to start a new job in four weeks or less." (Source: 2016 Census Dictionary).
- h) "Not in the labour force" refers to persons who, during the week of Sunday May 1 to Saturday May 7 2016, were neither employed nor unemployed. It includes students, homemakers, retired workers, seasonal workers in an 'off' season who were not looking for work, and persons who could not work because of a long-term illness or disability." (Source: 2016 Census Dictionary).
- i) The "Participation Rate" refers to the number of people in the labour force in the week of Sunday May 1 to Saturday May 7 2016, as a percentage of the population 15 years and over. (Source: 2016 Census Dictionary).
- j) The "Employment Rate" refers to the number of people employed in the week of Sunday May 1 to Saturday May 7 2016 as a percentage of the total population 15 years and over. (Source: 2016 Census Dictionary).
- k) The unemployment rate refers to the number of people unemployed in the week of Sunday 1 May to Saturday 7 May 2016 expressed as a percentage of the population in the labour force (Statistics Canada 2017b).
- I) Not in the labour force ratios calculated by InterGroup Consultants Ltd.
- LSA = local study area; RSA = regional study area.





Table A-14b: Labour Force Characteristics by Age Groups for Local Study Area Communities, 2016

	Birch Na	rows Dene	Nation (a,b)	Buffa	alo Nar	ows ^(a,b)	Buffalo Riv	er Dene N	ation 193 ^(a,b)	Clearwat	er River De	ene 222 ^(a,b)	La	Loche ⁽	(a,b)	Mich	nel Villa	age ^(a,b)	St. G	eorge's	s Hill ^(a,b)	Tur	nor Lal	ke ^(a,b)		LSA ^{(a,b}	,c)
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male F	Female	Total	Male	Femal
Total Population 15 Years and Over by Labour Force Activity (d)	315	150	165	765	360	400	545	270	275	570	280	290	1,585	735	850	50	20	25	100	50	50	95	35	55	4,025	1,900	2,110
In the Labour Force (d)	165	90	75	475	220	260	260	135	120	270	140	130	525	270	255	30	15	15	35	25	15	45	20	25	1,805	915	895
Employed (e)	115	50	60	415	175	240	175	85	90	150	60	90	380	175	205	20	-	15	30	15	10	25	15	10	1,310	575	720
Unemployed ^(f)	55	35	15	65	40	20	85	55	35	120	75	45	145	90	50	10	10	10	10	10	-	15	10	10	505	325	185
Not in the Labour Force ^(g)	150	60	85	285	140	145	290	135	150	300	145	155	1,060	470	590	20	-	10	60	30	35	55	15	30	2,220	995	1,200
Participation Rate ^(h)																											
Total Population 15 Years and Over	52.4%	60.0%	45.5%	62.1%	61.1%	65.0%	47.7%	50.0%	43.6%	47.4%	50.0%	44.8%	33.1%	36.7%	30.0%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	44.8%	48.2%	42.4%
15 to 24 years	31.2%	44.4%	28.6%	34.6%	28.6%	45.5%	19.2%	23.1%	23.1%	27.8%	29.4%	15.8%	19.1%	22.9%	14.6%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	24.4%	27.4%	19.2%
25 to 34 years	68.4%	77.8%	54.5%	71.4%	69.2%	78.6%	57.7%	63.6%	57.1%	64.0%	58.3%	61.5%	38.6%	44.8%	36.6%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	53.7%	56.6%	49.5%
35 to 44 years	87.5%	75.0%	75.0%	75.0%	88.9%	72.7%	66.7%	85.7%	57.1%	66.7%	72.7%	54.5%	50.9%	58.3%	41.9%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	61.4%	66.1%	50.0%
45 to 54 years	55.6%	66.7%	50.0%	83.8%	84.6%	80.0%	65.2%	66.7%	58.3%	64.3%	50.0%	71.4%	43.4%	47.6%	39.4%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	62.1%	62.9%	58.4%
55 to 64 years	60.0%	66.7%	66.7%	64.7%	60.0%	83.3%	45.5%	50.0%	40.0%	44.4%	50.0%	60.0%	27.6%	28.6%	26.7%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	44.0%	48.7%	50.0%
65 years and over	0.0%	0.0%	0.0%	38.5%	42.9%	41.7%	22.2%	0.0%	0.0%	33.3%	0.0%	66.7%	20.0%	16.7%	22.2%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	25.0%	20.5%	25.7%
Employment Rate (i)																											
Total Population 15 Years and Over	36.5%	33.3%	36.4%	54.2%	48.6%	60.0%	32.1%	31.5%	32.7%	26.3%	21.4%	31.0%	24.0%	23.8%	24.1%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	32.5%	30.3%	34.1%
15 to 24 years	18.8%	22.2%	28.6%	15.4%	0.0%	36.4%	7.7%	15.4%	15.4%	5.6%	11.8%	10.5%	10.1%	10.4%	9.8%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	11.7%	10.4%	16.2%
25 to 34 years	42.1%	55.6%	36.4%	57.1%	53.8%	64.3%	30.8%	27.3%	42.9%	36.0%	25.0%	46.2%	27.1%	27.6%	26.8%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	36.2%	34.2%	37.1%
35 to 44 years	50.0%	75.0%	50.0%	75.0%	77.8%	63.6%	40.0%	57.1%	42.9%	38.1%	36.4%	36.4%	40.0%	45.8%	35.5%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	46.5%	49.2%	39.7%
45 to 54 years	44.4%	0.0%	50.0%	81.1%	76.9%	80.0%	52.2%	50.0%	58.3%	42.9%	25.0%	42.9%	34.0%	33.3%	33.3%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	53.1%	43.5%	51.7%
55 to 64 years	60.0%	0.0%	66.7%	58.8%	50.0%	66.7%	27.3%	33.3%	40.0%	44.4%	0.0%	40.0%	20.7%	21.4%	20.0%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	37.3%	25.6%	36.1%
65 years and over	0.0%	0.0%	0.0%	34.6%	28.6%	25.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	12.5%	15.4%	8.6%
Unemployment Rate (i)																											
Total Population 15 Years and Over	33.3%	38.9%	20.0%	13.7%	18.2%	7.7%	32.7%	40.7%	29.2%	44.4%	53.6%	34.6%	27.6%	33.3%	19.6%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	28.0%	35.5%	20.7%
15 to 24 years	60.0%	50.0%	0.0%	44.4%	75.0%	40.0%	60.0%	66.7%	66.7%	70.0%	100.0%	66.7%	47.1%	54.5%	33.3%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	54.0%	62.1%	42.1%
25 to 34 years	30.8%	42.9%	33.3%	25.0%	22.2%	27.3%	46.7%	57.1%	25.0%	43.8%	71.4%	25.0%	33.3%	38.5%	26.7%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	33.7%	44.2%	27.1%
35 to 44 years	28.6%	66.7%	0.0%	0.0%	0.0%	0.0%	30.0%	33.3%	50.0%	35.7%	50.0%	33.3%	21.4%	28.6%	15.4%	n/d	n;/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	23.1%	35.9%	17.6%
45 to 54 years	40.0%	0.0%	66.7%	0.0%	18.2%	0.0%	20.0%	25.0%	0.0%	44.4%	50.0%	40.0%	21.7%	30.0%	15.4%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	20.0%	23.1%	11.5%
55 to 64 years	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	50.0%	0.0%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	6.1%	10.5%	0.0%
65 years and over	0.0%	0.0%	0.0%	0.0%	66.7%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	11.1%	75.0%	0.0%
Not in the Labour Force Ratio																											
Total Population 15 Years and Over	47.6%	40.0%	51.5%	37.3%	38.9%	36.3%	53.2%	50.0%	54.5%	52.6%	51.8%	53.4%	66.9%	63.9%	69.4%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	55.2%	52.4%	56.9%
15 to 24 years	62.5%	55.6%	71.4%	65.4%	71.4%	63.6%	76.9%	69.2%	76.9%	72.2%	70.6%	78.9%	80.9%	77.1%	85.4%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	74.6%	70.8%	77.8%
25 to 34 years	36.8%	22.2%	45.5%	28.6%	30.8%	28.6%	38.5%	36.4%	42.9%	36.0%	41.7%	38.5%	61.4%	55.2%	65.9%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	46.3%	46.1%	50.5%
35 to 44 years	25.0%	50.0%	50.0%	15.0%	0.0%	27.3%	40.0%	28.6%	42.9%	42.9%	27.3%	45.5%	49.1%	41.7%	58.1%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	40.2%	32.2%	48.5%
45 to 54 years	33.3%	66.7%	33.3%	18.9%	15.4%	20.0%	34.8%	33.3%	41.7%	35.7%	37.5%	28.6%	56.6%	52.4%	60.6%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	37.9%	35.5%	40.4%
55 to 64 years	60.0%	66.7%	66.7%	35.3%	40.0%	33.3%	63.6%	50.0%	80.0%	44.4%	50.0%	40.0%	72.4%	71.4%	73.3%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	57.3%	53.8%	58.3%
65 years and over	100.0%	100.0%	100.0%	57.7%	50.0%	66.7%	77.8%	60.0%	66.7%	116.7%	125.0%	66.7%	100.0%	91.7%	100.0%	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	83.3%	82.1%	71.4%

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a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.

d) Refers to whether a person aged 15 years and over was employed unemployed or not in the labour force during the week of Sunday May 1 to Saturday May 7 2016.

e) "Employed" refers to persons 15 years and over, excluding institutional residents who, during the week prior to Census Day: "(a) Did any work at all at a job or business, that is, paid work in the context of an employer-employee relationship, or self-employment. This also includes persons who did unpaid family work, which is defined as unpaid work contributing directly to the operation of a farm, business or professional practice owned and operated by a related member of the same household; or (b) Had a job but were not at work due to factors such as their own illness or disability, personal or family responsibilities, vacation or a labour dispute. This category excludes persons not at work because they were on layoff or between casual jobs, and those who did not then have a job (even if they had a job to start at a future date)." (Source: 2016 Census Dictionary).

f) "Unemployed" refers to persons who, during the week of Sunday May 1 to Saturday May 7 2016, were without paid work or without self-employment work and either: a) had actively looked for paid work in the past four weeks; or b) were on temporary lay-off and expected to return to their job; or c) had definite arrangements to start a new job in four weeks or less." (Source: 2016 Census Dictionary).

g) "Not in the labour force" refers to persons who, during the week of Sunday May 1 to Saturday May 7 2016, were neither employed nor unemployed. It includes students, homemakers, retired workers, seasonal workers in an 'off' season who were not looking for work, and persons who could not work because of a long-term illness or disability." (Source: 2016 Census Dictionary).

h) The "Participation Rate" refers to the number of people in the labour force in the week of Sunday May 1 to Saturday May 7 2016, as a percentage of the population 15 years and over. (Source: 2016 Census Dictionary).

i) The "Employment Rate" refers to the number of people employed in the week of Sunday May 1 to Saturday May 7 2016 as a percentage of the total population 15 years and over. (Source: 2016 Census Dictionary).

j) The "Unemployment Rate" refers to the number of people unemployed in the week of Sunday May 1 to Saturday May 7 2016 expressed as a percentage of the population in the labour force. (Source: 2016 Census Dictionary).



Table A-15: Full time and Part time Workers, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

Metric	Local St	udy Area	(LSA) (a,b,c)		n Saskat RSA) ^{(a,b,}		Sask	atchewa	an ^(a,b)
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Fotal - Work activity during the reference year for the population aged 15 years and over private households - 25% sample data ^(e)	/er in 4,015	1,905	2,110	25,295	12,610	12,685	857,295	424,265	433,03
Did not work ^(f)	2,255	1,025	1,225	13,490	6,460	7,030	242,835	100,140	142,70
Worked	1,765	900	880	11,805	6,150	5,655	614,465	324,125	290,33
Worked FULL time (9)	1,510	750	750	9,800	5,260	4,540	479,940	277,490	202,45
Worked FULL time 40+ weeks	1,000	420	575	6,710	3,275	3,435	394,230	226,780	167,45
Worked FULL time not all year	500	310	170	3,095	1,985	1,110	85,720	50,710	35,000
Worked PART time (h)	270	130	150	2,005	885	1,115	134,515	46,635	87,88
Worked PART time 40+ weeks	75	30	45	695	265	425	64,720	19,830	44,89
Worked PART time not all year	185	100	85	1,300	625	685	69,800	26,800	42,98
Proportion of Full and Part Time									
Worked full time	85.6%	83.3%	85.2%	83.0%	85.5%	80.3%	78.1%	85.6%	69.7%
Worked FULL time 40+ weeks	56.7%	46.7%	65.3%	56.8%	53.3%	60.7%	64.2%	70.0%	57.7%
Worked FULL time not all year	28.3%	34.4%	19.3%	26.2%	32.3%	19.6%	14.0%	15.6%	12.1%
Worked part time	15.3%	14.4%	17.0%	17.0%	14.4%	19.7%	21.9%	14.4%	30.3%
Worked PART time 40+ weeks	4.2%	3.3%	5.1%	5.9%	4.3%	7.5%	10.5%	6.1%	15.5%
Worked PART time not all year	10.5%	11.1%	9.7%	11.0%	10.2%	12.1%	11.4%	8.3%	14.8%



a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.

d) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.

e) Refers to the number of weeks in which a person worked for pay or in self-employment in 2015 at all jobs held even if only for a few hours and whether these weeks were mostly full time (30 hours or more per week) or mostly part time (less than 30 hours per week).

f) Includes persons aged 15 years and over who never worked persons who worked prior to 2015 persons who worked in 2016 but not in 2015.

g) Full time is 30 hours or more per week.

h) Part time is less than 30 hours per week.



Table A-16: Labour Force Characteristics by Educational Attainment, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

				dy Area (LSA) ^(a,b,c)	•					(atchewan (RSA) (a					Saska	atchewan ^(a,b)		
Metric	Total - Population aged 15 years and over	No certificate, diploma or degree	Secondary (high) school diploma or equivalency certificate	Apprenticeship or trades certificate or diploma	College,		Total - Population aged 15 years and over	No certificate, diploma or degree	Secondary (high) school diploma or equivalency certificate	Apprenticeship or trades certificate or diploma	College, CEGEP or certificate or diploma below bachelor level	University certificate, diploma or degree at bachelor level or above	Total - Population aged 15 years and over	No certificate, diploma or degree	Secondary (high) school diploma or equivalency certificate	Apprenticeship or trades certificate or diploma	College, CEGEP or certificate or diploma below bachelor level	University certificate, diploma or degree at bachelor level or above
Total Population 15 Years and Over by Labour Force Activity ^(e)	4,015	2,255	670	425	420	225	25,295	12,865	5,200	2,080	3,290	1,860	857,300	177,210	261,205	89,440	174,965	154,480
In the Labour Force ^(e)	1,795	615	345	280	360	195	12,355	3,990	2,895	1,415	2,445	1,610	585,535	73,960	187,530	67,280	130,800	125,960
Employed ^(f)	1,300	360	265	180	290	210	9,420	2,435	2,215	1,140	2,095	1,545	544,095	63,675	172,750	62,570	124,335	120,765
Unemployed (g)	500	250	100	85	65	0	2,935	1,560	685	280	350	65	41,445	10,290	14,785	4,705	6,470	5,200
Not in the Labour Force ^(h)	2,220	1,645	325	145	90	10	12,935	8,875	2,305	665	845	250	271,760	103,245	73,675	22,160	44,165	28,515
Participation Rate (i)	44.7%	27.3%	51.5%	65.9%	85.7%	86.7%	48.8%	31.0%	55.7%	68.0%	74.3%	86.6%	68.3%	41.7%	71.8%	75.2%	74.8%	81.5%
Employment Rate ^(j)	32.4%	16.0%	39.6%	42.4%	69.0%	93.3%	37.2%	18.9%	42.6%	54.8%	63.7%	83.1%	63.5%	35.9%	66.1%	70.0%	71.1%	78.2%
Unemployment Rate	27.9%	40.7%	29.0%	30.4%	18.1%	0.0%	23.8%	39.1%	23.7%	19.8%	14.3%	4.0%	7.1%	13.9%	7.9%	7.0%	4.9%	4.1%

Source: Statistics Canada 2016 Census.

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases, 10. Totals may not add-up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population of data can be due to poor data quality or to other technical reasons.
- c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.
- d) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.
- e) Refers to whether a person aged 15 years and over was employed unemployed or not in the labour force during the week of Sunday May 1 to Saturday May 7 2016.
- f) "Employed" refers to persons 15 years and over, excluding institutional residents who, during the week prior to Census Day: "(a) Did any work at all at a job or business, that is, paid work in the context of an employer-employee relationship, or self-employment. This also includes persons who did unpaid family work, which is defined as unpaid work contributing directly to the operation of a farm, business or professional practice owned and operated by a related member of the same household; or (b) Had a job but were not at work due to factors such as their own illness or disability, personal or family responsibilities, vacation or a labour dispute. This category excludes persons not at work because they were on layoff or between casual jobs, and those who did not then have a job (even if they had a job to start at a future date)." (Source: 2016 Census Dictionary).
- g) "Unemployed" refers to persons who, during the week of Sunday May 1 to Saturday May 7 2016, were without self-employment work and either: a) had actively looked for paid work in the past four weeks; or b) were on temporary lay-off and expected to return to their job; or c) had definite arrangements to start a new job in four weeks or less." (Source: 2016 Census Dictionary).
- h) "Not in the labour force" refers to persons who, during the week of Sunday May 1 to Saturday May 7 2016, were neither employed nor unemployed. It includes students, homemakers, retired workers, seasonal workers in an 'off' season who were not looking for work, and persons who could not work because of a long-term illness or disability." (Source: 2016 Census Dictionary).
- i) The "Participation Rate" refers to the number of people in the labour force in the week of Sunday May 1 to Saturday May 7 2016, as a percentage of the population 15 years and over. (Source: 2016 Census Dictionary).
- j) The "Employment Rate" refers to the number of people employed in the week of Sunday May 1 to Saturday May 7 2016 as a percentage of the total population 15 years and over. (Source: 2016 Census Dictionary).
- k) The "Unemployment Rate" refers to the number of people unemployed in the week of Sunday May 1 to Saturday May 7 2016 expressed as a percentage of the population in the labour force. (Source: 2016 Census Dictionary).



Table A-17a: Employment by Industry Sector, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

				Em	nploymen	it						Perce	ntage of E	mployme	nt by Secto	or			Di	stribution of E	mployment I	by Sector and	Sex ^(h)	
Metric	Local St	udy Are	a (LSA) ^(a,b,c)		rn Saska (RSA) ^{(a,b}		Sasi	katchewa	an ^(a,b)	Local Stu	ıdy Area ((LSA) ^(a,b,c)	Northe	ern Saskat (RSA) ^{(a,b,c}		Sask	atchewa	an ^(a,b)	Local Study A	Area (LSA) ^(a,b,c)		askatchewan A) ^(a,b,d)		tchewan (a,b)
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Male	Female	Male	Female	Male	Female
Total labour force population aged 15 years and over by Industry - NAICS ^(e)	1,815	905	905	12,360	6,540	5,820	585,535	311,110	274,430	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c
Industry - not applicable ^(f)	205	115	75	1,570	910	655	10,225	5,200	5,020	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/d	n/c	n/c
All industry categories ^(g)	1,605	785	820	10,790	5,630	5,160	575,310	305,905	269,410	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	48.9%	51.1%	52.2%	47.8%	53.2%	46.8%
Agriculture; forestry; fishing and hunting (NAICS 11)	70	60	10	240	220	20	51,255	36,820	14,440	4.4%	7.6%	1.2%	2.2%	3.9%	0.4%	8.9%	12.0%	5.4%	85.7%	14.3%	91.7%	8.3%	71.8%	28.2%
Mining; quarrying; and oil and gas extractions (NAICS 21)	110	105	0	1,165	1,025	145	23,070	20,040	3,025	6.9%	13.4%	0.0%	10.8%	18.2%	2.8%	4.0%	6.6%	1.1%	100.0%	0.0%	87.6%	12.4%	86.9%	13.1%
Construction (NAICS 23)	165	140	10	800	735	70	49,310	43,460	5,850	10.3%	17.8%	1.2%	7.4%	13.1%	1.4%	8.6%	14.2%	2.2%	93.3%	6.7%	91.3%	8.7%	88.1%	11.9%
Manufacturing (NAICS 31-33)	0	10	0	150	120	30	26,710	21,000	5,710	0.0%	1.3%	0.0%	1.4%	2.1%	0.6%	4.6%	6.9%	2.1%	100.0%	0.0%	80.0%	20.0%	78.6%	21.4%
Retail Trade (NAICS 44-45)	135	65	90	1,015	455	555	63,360	30,185	33,180	8.4%	8.3%	11.0%	9.4%	8.1%	10.8%	11.0%	9.9%	12.3%	41.9%	58.1%	45.0%	55.0%	47.6%	52.4%
Transportation and Warehousing (NAICS 48-49)	55	50	15	445	325	120	24,755	19,385	5,370	3.4%	6.4%	1.8%	4.1%	5.8%	2.3%	4.3%	6.3%	2.0%	76.9%	23.1%	73.0%	27.0%	78.3%	21.7%
Educational Services (NAICS 61)	345	85	235	1,895	530	1,365	45,360	13,670	31,690	21.5%	10.8%	28.7%	17.6%	9.4%	26.5%	7.9%	4.5%	11.8%	26.6%	73.4%	28.0%	72.0%	30.1%	69.9%
Health Care and Social Assistance (NAICS 62)	240	35	195	1,660	290	1,370	72,625	11,285	61,335	15.0%	4.5%	23.8%	15.4%	5.2%	26.6%	12.6%	3.7%	22.8%	15.2%	84.8%	17.5%	82.5%	15.5%	84.5%
Accommodation and Food Services (NAICS 72)	55	20	45	585	270	310	37,785	14,295	23,490	3.4%	2.5%	5.5%	5.4%	4.8%	6.0%	6.6%	4.7%	8.7%	30.8%	69.2%	46.6%	53.4%	37.8%	62.2%
Other Services (Except Public Administration) (NAICS 81)	20	40	0	250	135	115	25,680	12,590	13,090	1.2%	5.1%	0.0%	2.3%	2.4%	2.2%	4.5%	4.1%	4.9%	100.0%	0.0%	54.0%	46.0%	49.0%	51.0%
Public Administration (NAICS 91)	310	180	140	1,520	955	570	38,180	19,640	18,535	19.3%	22.9%	17.1%	14.1%	17.0%	11.0%	6.6%	6.4%	6.9%	56.3%	43.8%	62.6%	37.4%	51.4%	48.6%
Other industry categories not included above (NAICS 22, 31-33, 41, 51, 52, 53, 54, 55, 56, 71)	75	70	40	1,105	630	475	123,445	69,200	54,230	4.7%	8.9%	4.9%	10.2%	11.2%	9.2%	21.5%	22.6%	20.1%	63.6%	36.4%	57.0%	43.0%	56.1%	43.9%

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a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases 10. Totals may not add up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Descharme Lake, and Garson Lake.

d) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.

e) Includes the experienced labour force which refers to persons aged 15 years and over who during the Census were employed and the unemployed who had last worked for pay or in self-employment prior to the Census.

f) Includes unemployed persons aged 15 years and over who have never worked for pay or in self-employment or who had last worked prior to January 1, 2015.

g) Refers to the general nature of the business carried out in the establishment where the person worked. The data are produced according to the NAICS 2012.

h) Percentages of employment by sector and distribution of employment by sector and sex calculated by InterGroup Consultants Ltd.

LSA = local study area; RSA = regional study area; NAICS = North American Industry Classification System; n/c = not calculated.



Table A-17b: Employment by Industry Sector for Local Study Area Communities, 2016

Industry Sector	Birc	n Narrov Nation	ws Dene (a,b)	Bla	ck Po	int ^(a,b)	Buffa	lo Nar	rows ^(a,b)		lo River tion 193			arwater R ene 222 ^{(a}		Lal	_oche	(a,b)	Mich	el Villa	ige (a,b)	St. Ge	orge's	s Hill ^(a,b)	Turr	nor La	ake ^(a,b)		LSA ^{(a,l}	o,c)
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male F	emale	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total labour force population aged 15 years and over by Industry - NAICS $^{\rm (d)}$	165	90	80	10	0	0	475	220	260	260	135	125	270	140	130	525	270	255	30	15	15	40	20	15	40	15	25	1,815	905	905
Industry - not applicable (e)	10	0	0	0	0	0	15	10	0	30	20	10	55	35	20	75	40	35	0	0	0	10	0	0	10	10	10	205	115	75
All industry categories ^(f)	160	85	75	10	0	0	460	205	255	230	120	110	210	100	110	455	230	225	25	10	15	30	20	15	25	15	15	1,605	785	820
Agriculture; forestry; fishing and hunting (NAICS 11)	10	10	0	0	0	0	30	25	0	20	15	10	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	70	60	10
Mining; quarrying; and oil and gas extractions (NAICS 21)	10	10	0	0	0	0	25	25	0	15	15	0	15	10	0	35	35	0-	0	0	0	0	0	0	10	10	0	110	105	0
Construction (NAICS 23)	10	15	0	0	0	0	25	25	0	25	25	0	40	35	0	45	40	10	10	0	0	10	0	0	0	0	0	165	140	10
Manufacturing (NAICS 31-33)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	10	0
Retail Trade (NAICS 44-45)	15	10	10	0	0	0	30	10	25	15	10	10	20	10	15	55	25	30	0	0	0	0	0	0	0	0	0	135	65	90
Transportation and Warehousing (NAICS 48-49)	0	10	0	0	0	0	25	10	15	15	10	0	0	0	0	15	10	0	0	0	0	0	0	0	0	10	0	55	50	15
Educational Services (NAICS 61)	35	10	25	10	0	0	85	20	65	45	10	35	45	10	35	115	35	75	10	0	0	0	0	0	0	0	0	345	85	235
Health Care and Social Assistance (NAICS 62)	20	0	15	0	0	0	85	0	80	25	10	20	30	10	25	70	15	55	0	0	0	0	0	0	10	0	0	240	35	195
Accommodation and Food Services (NAICS 72)	10	10	10	0	0	0	25	10	15	0	0	0	0	0	10	10	0	10	0	0	0	10	0	0	0	0	0	55	20	45
Other Services (Except Public Administration) (NAICS 81)	0	0	0	0	0	0	0	10	0	0	0	0	0	10	0	10	10	0	10	10	0	0	0	0	0	0	0	20	40	0
Public Administration (NAICS 91)	35	30	10	0	0	0	110	55	55	40	25	15	35	15	15	70	35	35	10	10	10	10	10	0	0	0	0	310	180	140
Other industry categories not included above (NAICS 22, 31-33, 41, 51, 52, 53, 54, 55, 56, 71)	0	0	0	0	0	0	25	20	10	10	10	0	20	10	30	20	30	0	0	0	0	0	0	0	0	0	0	75	70	40



a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases 10. Totals may not add up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Descharme Lake, and Garson Lake.

d) Includes the experienced labour force which refers to persons aged 15 years and over who during the Census were employed and the unemployed who had last worked for pay or in self-employment prior to the Census.

e) Includes unemployed persons aged 15 years and over who have never worked for pay or in self-employment or who had last worked prior to January 1, 2015.

f) Refers to the general nature of the business carried out in the establishment where the person worked. The data are produced according to the North American Industry Classification System (NAICS) 2012.

LSA = local study area; NAICS = North American Industry Classification System.



Table A-18a: Employment by Industry Sectors, for Local Study Area, 2001 to 2016

						Employ	ment ^{(a,}	b,c)								Pe	rcentage	of Employ	yment by	Sector (a,	o,c,d)			
Industry Sector		2001			2006	6		2011	1		2016	6		2001			2006			2011			2016	
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
otal labour force population aged 15 years and over by Industry	1685	905	770	1555	825	720	1305	660	650	1815	905	905	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c
Industry - Not applicable	300	180	130	225	130	80	145	80	50	205	115	75	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c	n/c
All industry categories	1375	740	640	1325	690	660	1165	565	595	1605	785	820	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
11 Agriculture, forestry, fishing and hunting	110	70	10	35	35	10	20	20	0	70	60	10	8.0%	9.5%	1.6%	2.6%	5.1%	1.5%	1.7%	3.5%	0.0%	4.4%	7.6%	1.2%
21 Mining, quarrying, oil and gas extraction	35	30	10	55	70	0	130	110	20	110	105	0	2.5%	4.1%	1.6%	4.2%	10.1%	0.0%	11.2%	19.5%	3.4%	6.9%	13.4%	0.0%
22 Utilities	10	40	0	10	0	0	0	0	0	0	0	0	0.7%	5.4%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
23 Construction	115	120	0	120	110	10	60	45	0	165	140	10	8.4%	16.2%	0.0%	9.1%	15.9%	1.5%	5.2%	8.0%	0.0%	10.3%	17.8%	1.2%
31-33 Manufacturing	85	50	0	25	20	15	0	0	0	0	10	0	6.2%	6.8%	0.0%	1.9%	2.9%	2.3%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%
41 Wholesale trade	0	10	0	20	20	10	0	0	0	0	0	0	0.0%	1.4%	0.0%	1.5%	2.9%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
44-45 Retail trade	140	80	70	115	50	60	120	50	60	135	65	90	10.2%	10.8%	10.9%	8.7%	7.2%	9.1%	10.3%	8.8%	10.1%	8.4%	8.3%	11.0%
48-49 Transportation and warehousing	80	45	10	65	40	30	50	20	10	55	50	15	5.8%	6.1%	1.6%	4.9%	5.8%	4.5%	4.3%	3.5%	1.7%	3.4%	6.4%	1.8%
51 Information and cultural industries	10	0	0	20	10	0	0	0	0	0	0	10	0.7%	0.0%	0.0%	1.5%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%
52 Finance and insurance	15	0	10	30	10	20	0	0	0	0	0	0	1.1%	0.0%	1.6%	2.3%	1.4%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
53 Real estate and rental and leasing	30	20	10	10	0	0	0	0	10	10	0	10	2.2%	2.7%	1.6%	0.8%	0.0%	0.0%	0.0%	0.0%	1.7%	0.6%	0.0%	1.2%
54 Professional, scientific and technical services	0	0	0	10	20	0	0	0	0	0	10	0	0.0%	0.0%	0.0%	0.8%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%
55 Management of companies and enterprises	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
56 Administrative and support, waste management and remediation services	10	10	10	30	30	0	10	0	0	55	40	20	0.7%	1.4%	1.6%	2.3%	4.3%	0.0%	0.9%	0.0%	0.0%	3.4%	5.1%	2.4%
61 Educational services	265	75	180	220	75	150	215	65	150	345	85	235	19.3%	10.1%	28.1%	16.6%	10.9%	22.7%	18.5%	11.5%	25.2%	21.5%	10.8%	28.7%
62 Health care and social assistance	170	30	130	225	30	195	150	10	130	240	35	195	12.4%	4.1%	20.3%	17.0%	4.3%	29.5%	12.9%	1.8%	21.8%	15.0%	4.5%	23.8%
71 Arts, entertainment and recreation	0	10	0	10	0	0	10	0	0	10	10	0	0.0%	1.4%	0.0%	0.8%	0.0%	0.0%	0.9%	0.0%	0.0%	0.6%	1.3%	0.0%
72 Accommodation and food services	65	15	15	55	20	35	35	0	35	55	20	45	4.7%	2.0%	2.3%	4.2%	2.9%	5.3%	3.0%	0.0%	5.9%	3.4%	2.5%	5.5%
81 Other services (except public administration)	25	20	40	40	25	20	0	0	0	20	40	0	1.8%	2.7%	6.3%	3.0%	3.6%	3.0%	0.0%	0.0%	0.0%	1.2%	5.1%	0.0%
91 Public administration	275	160	105	235	140	90	335	160	165	310	180	140	20.0%	21.6%	16.4%	17.7%	20.3%	13.6%	28.8%	28.3%	27.7%	19.3%	22.9%	17.1%

n/c = not calculated.

April 2022

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b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) The LSA includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake 193B), Black Point, Descharme Lake, and Garson Lake.

d) Percentages of employment by sector calculated by InterGroup Consultants Ltd.



Table A-18b: Employment by Industry Sectors for Local Study Area Communities, 2001 to 2016

Industry Costs	Bire	ch Narrows	Dene Natio	n ^(a,b,c)	E	Buffalo Na	arrows ^{(a,b}	o,c)	Buf	falo River De	ne Nation 19	3 ^(a,b,c)	Clea	arwater Riv	er Dene 222	2 ^(a,b,c)		La Loc	che ^(a,b,c)	
Industry Sector	2001	2006	2011	2016	2001	2006	2011	2016	2001	2006	2011	2016	2001	2006	2011	2016	2001	2006	2011	2016
Total labour force population aged 15 years and over by Industry	80	60	n/d	165	505	520	420	475	220	230	235	260	205	155	165	270	570	550	470	525
Industry - Not applicable	0	0	n/d	10	25	25	10	15	30	50	35	30	40	50	15	55	195	90	85	75
All industry categories	75	55	n/d	160	475	495	415	460	190	185	200	230	165	100	150	210	375	455	385	455
11 Agriculture, forestry, fishing and hunting	10	0	n/d	10	40	15	0	30	10	10	10	20	0	0	0	10	20	10	10	0
21 Mining, quarrying, oil and gas extraction	0	0	n/d	10	15	25	55	25	0	0	20	15	10	0	15	15	10	30	40	35
22 Utilities	10	0	n/d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0
23 Construction	10	0	n/d	10	35	35	10	25	15	20	10	25	10	15	15	40	35	50	25	45
31-33 Manufacturing	0	0	n/d	0	15	15	0	0	30	10	0	0	10	0	0	0	10	0	0	0
41 Wholesale trade	0	10	n/d	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44-45 Retail trade	10	0	n/d	15	55	30	30	30	10	15	30	15	25	10	15	20	40	60	45	55
48-49 Transportation and warehousing	10	0	n/d	0	30	35	25	25	10	0	10	15	0	0	0	0	10	10	15	15
51 Information and cultural industries	0	0	n/d	0	10	10	0	0	0	0	0	0	0	0	0	0	0	10	0	0
52 Finance and insurance	0	0	n/d	0	15	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53 Real estate and rental and leasing	0	0	n/d	0	10	0	0	0	0	0	0	0	10	10	0	10	10	0	0	0
54 Professional, scientific and technical services	0	0	n/d	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55 Management of companies and enterprises	0	0	n/d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56 Administrative and support, waste management and remediation services	0	10	n/d	0	10	0	0	15	0	0	0	10	0	0	0	10	0	10	10	20
61 Educational services	15	20	n/d	35	60	35	40	85	35	20	30	45	30	25	45	45	100	110	100	115
62 Health care and social assistance	0	10	n/d	20	60	100	55	85	20	20	20	25	25	20	15	30	55	75	60	70
71 Arts, entertainment and recreation	0	0	n/d	0	0	0	0	10	0	0	0	0	0	0	0	0	0	10	10	0
72 Accommodation and food services	0	0	n/d	10	20	15	25	25	10	10	0	0	10	10	0	0	25	20	10	10
81 Other services (except public administration)	0	0	n/d	0	10	30	0	0	0	0	0	0	0	0	0	0	15	10	0	10
91 Public administration	25	15	n/d	35	90	95	170	110	45	45	50	40	50	15	30	35	45	55	75	70



a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases 10. Totals may not add up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

n/d = no data available



Table A-19a: Personal Income, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan (2015)

			Lo	cal Stud	ly Area (LSA) ^{(a,b,c}	,d,e)					North	ern Sask	atchewa	ın (RSA)	(a,b,c,d,f)						Saska	tchewan	(a,b,c,d)			
Personal Income		Total		Indig	enous id	dentity	Non-Inc	digenous	identity		Total		Indige	enous id	lentity	Non-Ind	igenous	identity		Total		Indig	enous id	entity	Non-Inc	digenous	identity
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Average Total Income in 2015 Among Recipients (g,h)	\$30,810	\$30,718	\$30,910	\$28,009	\$27,735	\$28,257	\$68,440	\$64,923	\$71,183	\$31,971	\$34,485	\$29,519	\$25,961	\$26,070	\$25,859	\$60,580	\$70,208	\$49,175	\$49,409	\$58,791	\$40,184	\$32,976	\$35,768	\$30,523	\$51,838	\$61,973	\$41,704
Total Number of Individuals 15 Years and Older with Income	3,390	1,580	1,810	3,160	1,455	1,695	240	120	130	22,760	11,235	11,525	18,815	9,100	9,715	3,950	2,140	1,810	822,540	407,835	414,705	105,925	49,535	56,390	716,620	358,305	358,315
Under \$10,000	970	525	360	960	520	350	-	-	-	7,070	4,050	3,020	6,750	3,910	2,840	325	145	180	106,475	46,815	59,665	27,765	14,945	12,820	78,715	31,875	46,845
\$10,000 to \$19,999	705	280	355	690	265	355	-	-	-	4,435	1,790	2,640	3,975	1,600	2,375	455	190	265	117,515	46,740	70,780	19,560	7,935	11,630	97,955	38,805	59,150
\$20,000 to \$29,999	475	135	305	460	125	295	-	-	-	2,860	1,160	1,700	2,440	980	1,460	420	180	240	108,430	42,550	65,880	14,615	5,420	9,190	93,815	37,130	56,685
\$30,000 to \$39,999	300	85	180	285	85	180	-	-	-	2,035	825	1,215	1,675	665	1,010	365	160	200	95,735	41,515	54,220	11,650	4,535	7,115	84,090	36,980	47,105
\$40,000 to \$49,999	230	70	130	220	65	130	-	-	-	1,495	615	875	1,125	435	685	370	180	185	88,575	41,635	46,940	8,880	3,500	5,380	79,700	38,135	41,565
\$50,000 to \$59,999	150	70	65	135	60	55	-	-	-	1,050	465	580	710	300	405	345	165	170	70,625	37,265	33,360	6,320	2,955	3,365	64,310	34,315	29,995
\$60,000 to \$69,999	140	65	60	90	45	50	-	-	-	870	485	380	530	260	270	335	225	115	53,855	30,935	22,920	4,520	2,365	2,155	49,335	28,570	20,765
\$70,000 to \$79,999	120	50	65	105	50	50	-	-	-	605	315	295	360	170	190	245	145	100	41,680	24,930	16,745	3,360	1,775	1,585	38,320	23,150	15,165
\$80,000 to \$99,999 ⁽ⁱ⁾	160	95	95	100	45	35	-	-	-	1,055	570	495	585	280	310	475	280	195	60,370	37,025	23,345	4,660	2,670	1,985	55,710	34,360	21,355
\$100,000 and over	140	85	50	95	65	30	-	-	-	1,285	960	325	670	495	175	615	460	150	79,280	58,415	20,860	4,605	3,440	1,170	74,670	54,980	19,690

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases 10. Totals may not add up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Income variables do not account for inflation.
- d) Personal income variables were derived from 25% sample data. However, on Indian Reserves and in remote communities, attempts are made to obtain data from 100% of the population.
- e) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available: for Bear Creek, Black Point, Descharme Lake, Garson Lake, Michel Village, St. George's Hill, and Turnor Lake; by income breakdown for male and female groups for Birch Narrows Dene Nation Turnor Lake; by income breakdown for Non-Indigenous identity income recipients.
- f) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.
- g) Total income (i.e. personal income) refers to the total money income received during the calendar year prior to the Census year. Sources of income are: wages and salaries, net farm income; net non-farm income from unincorporated business and/or professional practice; child benefits; Old Age Security pension and Guaranteed Income Supplement; benefits from Canada Pension Plan or Quebec Pension Plan; benefits from Employment Insurance; other income from government sources; dividends, interest on bonds, deposits and savings certificates and other investment income; retirement pensions, superannuation and annuities, including those from RRSPs and RRIFs; and other money income. Not included in all Census years as total income: income tax refunds, lump sum insurance policy settlements, capital gains or losses, receipts from the sale of property or belongings, loan repayments, property tax rebates or refunds of pension contributions.
- h) LSA average total income in 2015 among recipients is calculated based on the weighted average of Number of employment income recipients and Average employment income of the Indian Reserves, villages and hamlets
- i) The 2015 data sets group \$80,000 to \$99,999 as \$80,000 to \$89,999 and \$90,000 to \$99,999. These categories have been collapsed in the table.
- LSA = local study area; RSA = regional study area; n/d = no data available.





Table A-19b: Personal Income, for Local Study Area Communities (2015)

								Loca	l Study Area (LSA) (a,b,c,d,e)								
Personal Income	Birch N	larrows Den	e Nation	В	uffalo Narro	ws	Buffalo	River Dene Na	ation 193	Clearw	ater River D	ene 222		La Loche			LSA Total	
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Average Total Income in 2015 Among Recipients (f,g)	\$26,702	\$28,922	\$24,744	\$43,901	\$43,758	\$44,020	\$25,238	\$26,269	\$24,228	\$24,473	\$25,187	\$23,820	\$29,030	\$28,058	\$29,846	\$30,810	\$30,718	\$30,910
Total Number of Individuals 15 Years and Older with Income	285	135	155	725	330	395	485	240	245	490	230	255	1,405	645	760	3,390	1,580	1,810
Under \$10,000	85	-	-	120	65	55	195	105	90	215	120	95	355	235	120	970	525	360
\$10,000 to \$19,999	70	-	-	145	80	70	80	25	50	85	25	60	325	150	175	705	280	355
\$20,000 to \$29,999	40	-	-	70	15	50	65	35	35	60	30	35	240	55	185	475	135	305
\$30,000 to \$39,999	30	-	-	40	15	30	40	15	25	40	15	20	150	40	105	300	85	180
\$40,000 to \$49,999	15	-	-	65	20	40	20	10	-	25	10	15	105	30	75	230	70	130
\$50,000 to \$59,999	10	-	-	30	15	15	20	10	10	25	10	10	65	35	30	150	70	65
\$60,000 to \$69,999	10	-	-	65	30	30	15	10	-	10	-	10	40	25	20	140	65	60
\$70,000 to \$79,999	10	-	-	55	25	35	10	-	-	10	10	10	35	15	20	120	50	65
\$80,000 to \$99,999 ^(h)	-	-	-	75	35	45	20	20	20	20	10	20	45	30	10	160	95	95
\$100,000 and over	10	-	-	55	30	25	15	15	-	15	10	10	45	30	15	140	85	50

Source: Statistics Canada 2016 Census.

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases 10. Totals may not add up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Income variables do not account for inflation.
- d) Personal income variables were derived from 25% sample data. However, on Indian Reserves and in remote communities, attempts are made to obtain data from 100% of the population.
- e) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available: for Bear Creek, Black Point, Descharme Lake, Garson Lake, Michel Village, St. George's Hill, and Turnor Lake; by income breakdown for male and female groups for Birch Narrows Dene Nation Turnor Lake 193B; and by income breakdown for Non-Indigenous identity income recipients.
- f) Total income (i.e. personal income) refers to the total money income received during the calendar year prior to the Census year. Sources of income are: wages and salaries, net farm income; net non-farm income from unincorporated business and/or professional practice; child benefits; Old Age Security pension and Guaranteed Income Supplement; benefits from Canada Pension Plan or Quebec Pension Plan; benefits from Employment Insurance; other income from government sources; dividends, interest on bonds, deposits and savings certificates and other investment income; retirement pensions, superannuation and annuities, including those from RRSPs and RRIFs; and other money income. Not included in all Census years as total income: income tax refunds, lump sum insurance policy settlements, capital gains or losses, receipts from the sale of property or belongings, loan repayments, property tax rebates or refunds of pension contributions.
- g) LSA average total income in 2015 among recipients is calculated based on the weighted average of Number of employment income recipients and Average employment income of the Indian Reserves, villages and hamlets.
- h) The 2015 data sets group \$80,000 to \$99,999 as \$80,000 to \$89,999 and \$90,000 to \$99,999. These categories have been collapsed in the table.
- LSA = local study area; n/d = no data available due to data suppression.





Table A-20a: Household Income, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan (2015)

	L	ocal Study Area	(LSA) (a,b,c,d,e)	Norti	nern Saskatchew	/an (RSA) ^(a,b,c,d,f)		Saskatchewa	an ^(a,b,c,d)
Household Income	Total	Indigenous identity	Non-Indigenous identity	Total	Indigenous identity	Non-Indigenous identity	Total	Indigenous identity	Non-Indigenous identity
Average Income in 2015 for Private Households (Before Taxes) ^(g,h)	\$64,906	\$62,750	\$89,361	\$71,111	\$63,370	\$106,767	\$93,942	\$75,155	\$97,253
Total Number of Private Households with Income in 2015 ⁽ⁱ⁾	1,600	1,490	105	10,230	8,410	1,825	432,625	64,830	367,790
Under \$5,000	65	70	10	460	455	10	7,020	2,375	4,640
\$5,000 to \$9,999	60	60	0	315	310	10	4,585	1,630	2,955
\$10,000 to \$14,999	85	85	10	400	375	25	7,725	2,135	5,590
\$15,000 to \$19,999	130	135	0	780	735	45	17,985	3,820	14,170
\$20,000 to \$29,999 ^(j)	170	160	0	1,145	1,045	95	33,620	6,230	27,395
\$30,000 to \$39,999 ^(j)	200	180	0	955	850	100	35,345	6,380	28,970
\$40,000 to \$49,999 ^(j)	135	125	10	845	730	125	33,595	5,870	27,720
\$50,000 to \$59,999	100	95	10	715	600	115	31,285	4,585	26,700
\$60,000 to \$69,999	100	75	0	610	460	150	30,150	4,290	25,860
\$70,000 to \$79,999	115	95	10	515	425	95	27,360	3,630	23,730
\$80,000 to \$89,999	70	50	0	475	360	115	25,860	3,495	22,365
\$90,000 to \$99,999	85	65	20	425	290	135	23,115	2,900	20,215
\$100,000 to \$124,999	120	100	20	870	640	230	48,580	6,055	42,525
\$125,000 to \$149,999	80	75	10	605	390	215	34,875	4,145	30,725
\$150,000 and over ^(j)	165	110	15	1,115	745	370	71,525	7,280	64,245



a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases 10. Totals may not add up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Income variables do not account for inflation.

d) Household income variables were derived from 25% sample data. However, on Indian Reserves and in remote communities, attempts are made to obtain data from 100% of the population.

e) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, Garson Lake, Michel Village, St. George's Hill, and Turnor Lake.

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Appendix A Socio-economic Statistical Data



- f) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.
- g) Income refers to Total Income (i.e. household income). Total income is the total money income received during the calendar year prior to the Census year. Sources of income are: wages and salaries, net farm income; net non-farm income from unincorporated business and/or professional practice; child benefits; Old Age Security pension and Guaranteed Income Supplement; benefits from Canada Pension Plan or Quebec Pension Plan; benefits from Employment Insurance; other income from government sources; dividends, interest on bonds, deposits and savings certificates and other investment income; retirement pensions, superannuation and annuities, including those from RRSPs and RRIFs; and other money income. Not included in all Census years as total income: income tax refunds, lump sum inheritance payments, gambling revenue, lump sum insurance policy settlements, capital gains or losses, receipts from the sale of property or belongings, loan repayments, property tax rebates or refunds of pension contributions.
- h) LSA average income in 2015 for private households is calculated based on the weighted average of Number and Average income of private households of the Indian Reserves, villages and hamlets.
- i) Private household refers to a person or a group of persons (other than foreign residents) who occupy the same dwelling and do not have a usual place of residence elsewhere in Canada. It may consist of a family group (census family) with or without other persons, of two or more families sharing a dwelling, of a group of unrelated persons, or of one person living alone. Household members who are temporarily absent on Census Day (e.g., temporary residents elsewhere) are considered as part of their usual household. For census purposes, every person is a member of one and only one household. Unless otherwise specified, all data in household reports are for private households only.
- j) 2015 data sets grouped include: \$20,000 to \$29,999 as \$20,000 to \$24,999 and \$25,000 to \$29,999. These categories have been collapsed in the table; \$30,000 to \$39,999 as \$30,000 to \$34,999 and \$35,000 to \$39,999. These categories have been collapsed in the table; \$40,000 to \$49,999 as \$40,000 to \$44,999 and \$45,000 to \$49,999. These categories have been collapsed in the table; \$150,000 and over as \$150,000 to \$199,999 and \$200,000 and over. These categories have been collapsed in the table.





Table A-20b: Household Income, for Local Study Area Communities (2015)

			Local Stud	dy Area (LSA)	(a,b,c,d,e)	
Household Income	Birch Narrow s Dene Nation	Buffalo Narrow s	Buffalo River Dene Nation 193	Clearwater River Dene 222	La Loche	LSA Total
Average Income in 2015 for Private Households (Before Ta	xes) \$58	,296 \$79 8	,63 \$52,534	\$63,786	\$62,03 6	\$64,906
Total Number of Private Households with Income in 2015 (h)	130	400	230	185	655	1,600
Under \$5,000	10	-	30	15	10	65
\$5,000 to \$9,999	10	10	20	10	10	60
\$10,000 to \$14,999	10	15	10	15	35	85
\$15,000 to \$19,999	10	50	15	10	45	130
\$20,000 to \$29,999 ⁽ⁱ⁾	25	25	25	10	85	170
\$30,000 to \$39,999 ⁽ⁱ⁾	25	30	25	25	95	200
\$40,000 to \$49,999 ⁽ⁱ⁾	10	30	20	10	65	135
\$50,000 to \$59,999	10	10	15	15	50	100
\$60,000 to \$69,999	10	30	10	10	40	100
\$70,000 to \$79,999	10	35	15	15	40	115
\$80,000 to \$89,999	10	15	0	10	35	70
\$90,000 to \$99,999	10	25	10	15	25	85
\$100,000 to \$124,999	10	55	10	0	45	120
\$125,000 to \$149,999	10	15	15	10	30	80
\$150,000 and over ⁽ⁱ⁾	20	65	20	20	40	165

- a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases 10. Totals may not add up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population of less than 40 persons, only the total population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Income variables do not account for inflation.
- d) Household income variables were derived from 25% sample data. However, on Indian Reserves and in remote communities, attempts are made to obtain data from 100% of the population.
- e) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, Garson Lake, Michel Village, St. George's Hill, and Turnor Lake.
- f) Income refers to Total Income (i.e. household income). Total income is the total money income received during the calendar year prior to the Census year. Sources of income are: wages and salaries, net farm income; net non-farm income from unincorporated business and/or professional practice; child benefits; Old Age Security pension and Guaranteed Income Supplement; benefits from Canada Pension Plan or Quebec Pension Plan; benefits from Employment Insurance; other income from government sources; dividends, interest on bonds, deposits and savings certificates and other investment income; retirement pensions, superannuation and annuities, including those from RRSPs and RRIFs; and other money income. Not included in all Census years as total income: income tax refunds, lump sum inheritance payments, gambling revenue, lump sum insurance policy settlements, capital gains or losses, receipts from the sale of property or belongings, loan repayments, property tax rebates or refunds of pension contributions.
- g) LSA average income in 2015 for private households is calculated based on the weighted average of Number and Average income of private households of the Indian Reserves, villages and hamlets.
- h) Private household refers to a person or a group of persons (other than foreign residents) who occupy the same dwelling and do not have a usual place of residence elsewhere in Canada. It may consist of a family group (census family) with or without other persons, of two or more families sharing a dwelling, of a group of unrelated persons, or of one person living alone. Household members who are temporarily absent on Census Day (e.g., temporary residents elsewhere) are considered as part of their usual household. For census purposes, every person is a member of one and only one household. Unless otherwise specified, all data in household reports are for private households only.
- i) 2015 data sets grouped include: \$20,000 to \$29,999 as \$20,000 to \$24,999 and \$25,000 to \$29,999. These categories have been collapsed in the table; \$30,000 to \$39,999 as \$30,000 to \$34,999 and \$35,000 to \$39,999. These categories have been collapsed in the table; \$40,000 to \$49,999 as \$40,000 to \$44,999 and \$45,000 to \$49,999. These categories have been collapsed in the table; \$150,000 and over as \$150,000 to \$199,999 and \$200,000 and over. These categories have been collapsed in the table.





Table A-21a: Total Income Sources, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan (2015)

				Loc	al Study	Area (LSA) ^(c,d)						Norther	n Sask	atchewan (RSA) ^(e)							Saska	tchewan			
Income Sources		Tota	ı	Indi	genous	identity	Non-l	ndigenou	s identity		Tota	I	Indig	jenous	identity	Non-l	ndigenou	ıs identity		Tota	I	Indig	genous	identity	Non-lı	ndigenou	s identity
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Employment Income (a)	67%	75%	60%	63%	72%	56%	92%	85%	91%	72%	79%	64%	68%	77%	59%	81%	82%	78%	73%	77%	68%	74%	82%	66%	73%	77%	69%
Government Transfer Payments (b)	31%	21%	40%	36%	24%	44%	6%	3%	0%	22%	14%	30%	29%	19%	37%	8%	6%	10%	11%	7%	15%	20%	12%	28%	10%	7%	14%
Other	2%	3%	0%	1%	4%	0%	2%	12%	9%	6%	7%	6%	4%	4%	4%	12%	12%	12%	16%	16%	17%	7%	7%	6%	17%	16%	18%

a) Employment income - All income received as wages salaries and commissions from paid employment and net self-employment income from farm or non-farm unincorporated business and/or professional practice during the reference period. For the 2016 Census the reference period is the calendar year 2015 for all income variables.

b) Government transfers - All cash benefits received from federal provincial territorial or municipal governments during the reference period. It includes: Old Age Security pension Guaranteed Income Supplement Allowance or Allowance for the Survivor; Retirement disability and survivor benefits from Canada Pension Plan and Québec Pension Plan; Benefits from Employment Insurance and Québec parental insurance plan; Child benefits from federal and provincial programs; Social assistance benefits; Workers' compensation benefits; Working income tax benefit; Goods and services tax credit and harmonized sales tax credit; Other income from government sources. For the 2016 Census the reference period is the calendar year 2015 for all income variables.

c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, Garson Lake, Michel Village, St. George's Hill, and Turnor Lake.

d) LSA income source proportions in 2015 are calculated based on the weighted average of Number of income recipients and Income source proportions of the Indian Reserves, villages and hamlets.

e) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.

LSA = local study area; RSA = regional study area.



Table A-21b: Total Income Sources, for Local Study Area Communities (2015)

								Local S	Study Area (L	-SA) ^(c,d)								
Income Sources	Birch Na	arrows C	Dene Nation	Buff	alo N	arrows	Buffalo F	River Den	e Nation 193	Clearwa	ater Rive	r Dene 222	L	_a Loc	he	L	SA To	otal
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Employment Income (a)	67%	77%	56%	78%	82%	76%	70%	75%	65%	68%	75%	61%	56%	70%	45%	67%	75%	60%
Government Transfer Payments (b)	29%	19%	37%	17%	14%	20%	28%	22%	35%	29%	20%	37%	41%	25%	53%	31%	21%	40%
Other	5%	4%	7%	5%	4%	5%	2%	3%	0%	4%	5%	2%	3%	5%	2%	2%	3%	0%

- a) Employment income All income received as wages salaries and commissions from paid employment and net self-employment income from farm or non-farm unincorporated business and/or professional practice during the reference period. For the 2016 Census the reference period is the calendar year 2015 for all income variables.
- b) Government transfers All cash benefits received from federal provincial territorial or municipal governments during the reference period. It includes: Old Age Security pension Guaranteed Income Supplement Allowance or Allowance for the Survivor; Retirement disability and survivor benefits from Canada Pension Plan and Québec Pension Plan; Benefits from Employment Insurance and Québec parental insurance plan; Child benefits from federal and provincial programs; Social assistance benefits; Workers' compensation benefits; Working income tax benefit; Goods and services tax credit and harmonized sales tax credit; Other income from government sources. For the 2016 Census the reference period is the calendar year 2015 for all income variables.
- c) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, Garson Lake, Michel Village, St. George's Hill, and Turnor Lake.
- d) LSA income source proportions in 2015 are calculated based on the weighted average of Number of income recipients and Income source proportions of the Indian Reserves, villages and hamlets.

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LSA = local study area.





Table A-22a: Educational Attainment for the population 15 years of age and older, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

									E	ducatio	onal At	tainmer	nt for t	he pop	oulation	15 ye	ars o	of age a	and old	er													Proporti	ons by	Educat	tional At	ainmer	nt			
Educational			Loca	al Stud	ly Are	a (LSA)	(a,b,c,d)				No	rthern	Saska	tchewa	an (RSA	(a,b,c,	,e)					Saska	tchewa	ın ^(a,b,c)							Local S	Study A	rea (LS <i>A</i>	()				VI			
Educational Attainment		Tota	ı		ndiger ident		Noi	n-Indig identi			Total			digenc identit			Indige denti	enous ty		Total		Indige	enous i	dentity		-Indigeridentity			Total		Indig	enous	identity	No	n-Indige identi			Norther katche		Sa	skatchewan
	Total	Male	Female	Total	Male	Female	e Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male Female
Total Population 15 and Over by Highest Certificate, Diploma or Degree ^(f)		1,905	2,115	3,785	1,780	2,005	225	120	120	25,295	12,605	12,685	21,245	10,415	10,825	4,0552	2,190	1,860	857,29	5424,26	5433,03	0117,32	555,640	61,685	739,970	368,620	371,34	5 100.0%	100.0%	100.0%	100.0%	6100.0%	6 100.0%	100.0%	% 100.0%	6 100.0%	100.0%	100.0%	6100.0%	100.0%	100.0% 100.0%
Less than High School Certificate	2,255	1,170	1,105	2,235	1,140	1,070	35	35	0	12,865	6,945	5,925	12,210	6,520	5,690	655	425	230	177,20	96,680	80,530	45,655	24,255	21,395	131,555	72,425	59,130	56.3%	60.3%	52.2%	58.7%	63.9%	54.7%	12.5%	24.1%	0.0%	50.8%	55.1%	46.7%	20.7%	22.8% 18.6%
High School Certificate or Equivalent ^(g)	675	240	420	625	220	425	45	35	20	5,200	2,245	2,955	4,280	1,755	2,525	920	490	425	261,20	133,73	127,48	33,065	15,185	17,880	228,145	118,545	109,600	16.9%	12.4%	19.9%	16.4%	12.3%	21.7%	16.1%	24.1%	15.4%	20.6%	17.8%	23.3%	30.5%	31.5% 29.4%
Apprenticeship or Trades Certificate or Diploma	420	275	150	420	270	140	10	20	10	2,080	1,500	585	1,575	1,100	475	510	400	105	89,440	64,100	25,340	11,270	7,675	3,590	78,175	56,425	21,755	10.5%	14.2%	7.1%	11.0%	15.1%	7.2%	3.6%	13.8%	7.7%	8.2%	11.9%	4.6%	10.4%	15.1% 5.9%
Post-Secondary Non- University Certificate or Diploma ^(h)	380	150	235	350	135	200	55	10	15	2,815	1,180	1,630	1,950	780	1,170	865	400	465	146,76	51,240	95,525	15,900	5,135	10,760	130,870	46,100	84,765	9.5%	7.7%	11.1%	9.2%	7.6%	10.2%	19.6%	6.9%	11.5%	11.1%	9.4%	12.8%	17.1%	12.1% 22.1%
University Certificate or Diploma Below the Bachelor's Level	60	30	55	65	10	55	10	0	0	480	110	365	345	70	270	130	40	90	28,195	10,785	17,405	2,495	685	1,815	25,695	10,100	15,595	1.5%	1.5%	2.6%	1.7%	0.6%	2.8%	3.6%	0.0%	0.0%	1.9%	0.9%	2.9%	3.3%	2.5% 4.0%
University Degree at Bachelor Level or Above	215	75	150	115	10	65	125	45	85	1,860	630	1,230	885	195	690	980	435	540	154,47	67,725	86,745	8,945	2,700	6,245	145,530	65,030	80,500	5.4%	3.9%	7.1%	3.0%	0.6%	3.3%	44.6%	31.0%	65.4%	7.4%	5.0%	9.7%	18.0%	16.0% 20.0%

Source: Statistics Canada 2016 Census.

- a) Statistics Canada data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5 and in some cases, 10. Totals may not add up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Educational attainment data for 2016 were derived from 30% data. However, on Indian reserves and in remote communities, Statistics Canada attempts to obtain data from 100% of the population.
- d) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.
- e) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.
- f) "Highest certificate, diploma or degree" refers to the highest certificate, diploma or degree the individual has completed based primarily on time spent" in-class." For high school graduates, a university education is considered to be a higher level of education than a trade. Although some trades requirements may take as long or longer to complete than a given college or university program, the majority of time acquiring trade certification may be on-the-job, as opposed to being in a classroom.
- g) "High school certificate or equivalent" includes persons who have graduated from a secondary school or equivalent. Excludes persons with a postsecondary certificate, diploma or degree.
- h) "Postsecondary non-university certificate or diploma" includes non-degree-granting institutions such as community colleges, CEGEPs, private business colleges and technical institutes.
- LSA = local study area; RSA = regional study area; CEGEP = Collège d'enseignement général et professionnel.





Table A-22b: Educational Attainment for the population 15 years of age and older, for Local Study Area Communities, 2016

											Local S	Study Area ((LSA) ^{(a}	a,b,c,d)													
Educational Attainment	Birch N	larrows [Dene Nation	Buf	falo N	arrows	Buffalo	River Den	e Nation 193	Clearw	ater Rive	er Dene 222	L	La Loc	he	Mic	chel Vil	lage	St. C	George	e's Hill	Τι	ırnor L	Lake		LSA To	otal
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male I	emale	Total	Male	Female	Total	Male	Female	Tota	Il Male	Female
Total Population 15 and Over by Highest Certificate, Diploma or Degree (e)	315	150	165	760	360	405	550	270	275	570	280	290	1,585	735	850	45	20	25	105	50	50	95	40	55	4,025	5 1,905	2,115
Less than High School Certificate	135	75	65	245	155	95	300	160	140	370	205	170	1,065	505	560	20	10	10	70	35	35	50	25	30	2,255	5 1,170	1,105
High School Certificate or Equivalent ^(f)	70	25	45	145	50	95	55	20	35	95	35	65	255	100	150	15	0	10	20	0	10	20	10	10	675	240	420
Apprenticeship or Trades Certificate or Diploma	40	30	10	125	70	55	105	70	35	35	25	15	90	60	25	15	10	0	0	10	0	10	0	10	420	275	150
Post-Secondary Non-University Certificate or Diploma (g)	40	10	30	130	55	75	45	20	25	35	15	20	105	40	65	nd	n/d	n/d	10	10	10	15	0	10	380	150	235
University Certificate or Diploma Below the Bachelor's Level	0	10	0	30	0	35	10	10	10	10	0	0	10	0	10	n/d	n/d	n/d	0	0	0	0	10	0	60	30	55
University Degree at Bachelor Level or Above	20	10	15	85	25	55	30	0	25	15	10	15	65	20	40	n/d	n/d	n/d	0	10	0	0	0	0	215	75	150

- a) Statistics Canada data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5 and in some cases, 10. Totals may not add up due to rounding.
- b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.
- c) Educational attainment data for 2016 were derived from 30% data. However, on Indian reserves and in remote communities, Statistics Canada attempts to obtain data from 100% of the population.
- d) Local Study Area includes Bear Creek, Birch Narrows Dene Nation (Turnor Lake 193B), Black Point, Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, Garson Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Bear Creek, Black Point, Descharme Lake, and Garson Lake.
- e) "Highest certificate, diploma or degree" refers to the highest certificate, diploma or degree the individual has completed based primarily on time spent" in-class." For high school graduates, a university education is considered to be a higher level of education than a trade. Although some trades requirements may take as long or longer to eomplete than a given college or university program, the majority of time acquiring trade certification may be on-the-job, as opposed to being in a classroom.
- f) "High school certificate or equivalent" includes persons who have graduated from a secondary school or equivalent. Excludes persons with a postsecondary certificate, diploma or degree.
- g) "Postsecondary non-university certificate or diploma" includes non-degree-granting institutions such as community colleges, CEGEPs, private business colleges and technical institutes.

LSA = local study area; CEGEP = Collège d'enseignement général et professionnel; n/d = no data available.





Table A-23a: Labour Force Characteristics by Highest certificate, diploma or degree, for Local Study Area, Northern Saskatchewan (Regional Study Area), and Saskatchewan, 2016

		Local Study Area (I					skatchewan (RS	SA) (a,b,d)		Sas	katchewan ^(a,b)		
Educational Attainment	Population aged 15 years and over ^(e)	Not in the Labour Force	In the labour force	Employed	Unemployed	Population aged 15 years and over ^(e)	In the labour force	Employed	Unemployed	Population aged 15 years and over ^(e)	In the labour force	Employed	Unemployed
Total - Highest certificate, diploma or degree (f)	4,015	2,220	1,795	1,300	500	25,295	12,355	9,420	2,935	857,300	585,535	544,095	41,445
No certificate, diploma or degree	2,255	1,640	615	360	250	12,865	3,990	2,435	1,560	177,210	73,960	63,675	10,290
Secondary (high) school diploma or equivalency certificate	670	325	345	265	100	5,200	2,895	2,215	685	261,205	187,530	172,750	14,785
Apprenticeship or trades certificate or diploma	425	145	280	180	85	2,080	1,415	1,140	280	89,440	67,280	62,570	4,705
College, CEGEP or other non-university certificate or diploma	370	70	300	235	55	2,815	2,100	1,785	315	146,770	111,365	105,860	5,505
University certificate or diploma below bachelor level	50	(10)	60	55	10	475	345	310	35	28,195	19,435	18,475	965
University Degree	225	30	195	210	-	1,860	1,610	1,545	65	154,480	125,960	120,765	5,200

Source: Number of Positions (Payroll) from NexGen Energy Rook I Feasibility Study Spreadsheet.

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a) Data have been subjected to a confidentiality procedure known as random rounding whereby values are rounded either up or down to a multiple of 5, and in some cases 10. Totals may not add up due to rounding.

b) In addition to random rounding, area and data suppression has been adopted to further protect the confidentiality of individual respondents' personal information. Area and data suppression results in the deletion of all information for geographic areas with populations below a specified size. For example, areas with a population of less than 40 persons are suppressed. If the community searched has a population counts will be available. Suppression of data can be due to poor data quality or to other technical reasons.

c) Local Study Area includes Birch Narrows Dene Nation (Turnor Lake 193B), Buffalo Narrows, Buffalo River Dene Nation 193, Clearwater River Dene 222, Descharme Lake, La Loche, Michel Village, St. George's Hill, and Turnor Lake. However, data is not available for Descharme Lake.

d) Northern Saskatchewan (Regional Study Area) is defined as Census Division No.18.

e) Refers to whether a person aged 15 years and over was employed, unemployed or not in the labour force during the week of Sunday, May 1 to Saturday, May 7, 2016.

f) Users are advised to consult data quality comments for 'Highest certificate diploma or degree ' available in the Education Reference Guide Census of Population 2016 Catalogue no. 98-500-X2016013.

LSA = local study area; RSA = regional study area; CEGEP = Collège d'enseignement général et professionnel.



Table 18A- 23b: Construction On-Site Labour, Annual Peak

Construction On Site	Year -4	Year -3	Year -2	Year -1
Surface construction	101	63	138	3
Underground: shaft sinking – contactor	88	129	64	0
Underground: lateral development / construction – contractor	0	0	78	88
Process plant / paste plant	0	0	1	59
Integrated execution team	18	40	49	28
Visitors, contractors, and consultants	10	12	17	17
Total	216	243	348	248

Source: Stantec 2021, Table 10-16 and Table 10-18.

Table A-24: Number of Labour Positions in Payroll at Peak Year

	Estimated Level of Education	Total Labour Positions
	Number of Labour Positions in Payroll	
1	On The Job Training	26
2	Trade	140
3	Trade / Diploma / On The Job Training	4
4	Trade / Diploma	2
5	Diploma	24
6	Diploma / On The Job Training	245
7	University	43
8	University / Diploma	2
	Total	486
	Grouping of the Number of Labour Positions in Payroll	
1	Diploma / On The Job Training	295
2	Trades	146
3	University	45
	Total	486

Source: Number of positions (payroll) with estimated level of education are based on the data provided by NexGen Energy Ltd. as Rook I Project Feasibility Study Workbook (Halliday 2021a, 2021b; Oakes 2021).

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Table A-25: Detailed Labour Positions at Peak Year with Estimated Level of Education

Role	On-site	Payroll	Estimated Level of Education
Mine Labour Profile - Peak Year			
Mine Management			
Mine Superintendent	1	1	University
UG Mine General Supervisor	1	2	Diploma / On The Job Training
Mine Clerk	1	2	Diploma / On The Job Training
Training Coordinator	2	4	Diploma / On The Job Training
Safety Officer	2	4	Diploma
Subtotal Mine Management	7	13	
Technical Services			
Mine Technical Services Manager	1	1	University
Senior Mine Engineer	3	6	University
Mine Engineer	2	4	University
Mine Technician and Surveyor	4	8	Diploma / On The Job Training
Automation Technician	4	8	Diploma / On The Job Training
Ventilation and Radiation Technician	4	8	Diploma / On The Job Training
Senior Mine Geologist	1	2	University
Geologist	2	4	University
Geological Technician	3	6	Diploma / On The Job Training
Subtotal Technical Services	24	47	
Mine Operations			
Shift Supervisor	6	12	Diploma / On The Job Training
Development Miner	6	12	Diploma / On The Job Training
Bolter	8	16	Diploma / On The Job Training
LHD Operator	13	26	Diploma / On The Job Training
Shotcrete Operator	6	12	Diploma / On The Job Training
Service Miner	5	10	Diploma / On The Job Training
Trainee / Supply Delivery	4	8	On The Job Training
Production Driller	8	16	Diploma / On The Job Training
Cablebolt Driller	4	8	Diploma / On The Job Training
Blasting Operator	4	8	Diploma / On The Job Training
Construction Miner	8	16	Diploma / On The Job Training
Skip / Cage Tender	2	4	Diploma / On The Job Training
Batch Plant Operator	4	8	Diploma / On The Job Training
Paste Backfill Deposition Crew	4	8	Diploma / On The Job Training
Hoist Operator	2	4	Diploma / On The Job Training
Rock Breaker Operator	2	4	Diploma / On The Job Training
Grader Operator	1	2	Diploma / On The Job Training
UG Truck Operator	2	4	Diploma / On The Job Training
Surface Truck Operator	6	12	Diploma / On The Job Training
Surface Labourer	1	2	On The Job Training





Table A-25: Detailed Labour Positions at Peak Year with Estimated Level of Education

Role	On-site	Payroll	Estimated Level of Education
Subtotal Mine Operations	96	192	
Mine Maintenance			
Maintenance Supervisor	1	2	Trade
Maintenance Planner	1	2	Diploma
Maintenance Clerk	1	2	Diploma / On The Job Training
Mechanical Leader	1	2	Trade
Electrical Leader	1	2	Trade
Mechanic	22	44	Trade
Hoist Mechanic	1	2	Trade
Electrician	4	8	Trade
Drill Repair	1	2	Trade
Maintenance Shop Labourers	4	8	On The Job Training
Warehouse Operator	3	6	Diploma / On The Job Training
Subtotal Mine Maintenance	40	80	
Mine Labour Positions, Total	167	332	
Process Plant / Paste Plant Labour Profile - Peak Year			
Process Operations			
Superintendent Process Plant	1	1	University
General Supervisor, Process Plant	1	2	University
Shift Supervisor, Process Plant	3	6	University
Control Room Operator	4	8	Diploma / On The Job Training
Grinding Operator			
Processing / Milling Operator II	2	4	Trade
Labourer	2	4	On The Job Training
Leaching and CCD Operator			
Processing / Milling Operator II	2	4	Trade
Labourer	2	4	On The Job Training
SX Operator			
Processing / Milling Operator III	2	4	Trade
Processing / Milling Operator I	2	4	Trade
Gypsum Precipitation Operator			
Processing / Milling Operator II	2	4	Trade
YC Precipitation and Calcining Operator			
Processing / Milling Operator III	2	4	Trade
Processing / Milling Operator I	2	4	Trade
Product Handling Operator			
Processing / Milling Operator II	2	4	Trade
Effluent Treatment Operator			
Effluent Treatment Plant Operator	1	2	Trade / Diploma
Processing / Milling Operator I	2	4	Trade





Table A-25: Detailed Labour Positions at Peak Year with Estimated Level of Education

Role	On-site	Payroll	Estimated Level of Education
Subtotal – Process Operations	32	63	
Acid Plant			
Acid Plant Operator			
Processing / Milling Operator III	1	2	Trade
Processing / Milling Operator I	2	4	Trade
Subtotal – Process Acid Plant	3	6	
Process Maintenance			
Mill Maintenance General Supervisor			
General Supervisor, Maintenance	1	2	Trade
Mechanical Engineer	1	2	University
Maintenance Planner / Scheduler			
Maintenance Planner	1	2	Diploma / On The Job Training
Maintenance Clerk	1	2	Diploma / On The Job Training
Mechanical Supervisor			
Shift Supervisor, Maintenance	1	2	Trade
Electrician Supervisor			
Shift Supervisor, Maintenance	1	2	Trade
Electrician			
Electrician / Instrumentation Technician	2	4	Trade
Instrumentation Technician			
Electrician / Instrumentation Technician	2	4	Trade
Millwright			
Millwright / Welder	4	8	Trade
Mill Pipefitter / Welder			
Millwright / Welder	2	4	Trade
Mill Machinist			
Maintenance Mechanic III	1	2	Trade
Subtotal – Process Maintenance	17	34	
Process Technical Services			
Senior Metallurgist	1	1	University
Metallurgist	2	3	University
Laboratory Supervisor	1	2	University / Diploma
Lab Technician	4	8	Diploma
Subtotal – Process Technical Services	8	14	
Paste Plant			
Paste Plant Operator			
Processing / Milling Operator III	2	4	Trade
Processing / Milling Operator I	2	4	Trade
Subtotal – Paste Plant	4	8	
Detailed Process Plant / Paste Plant Labour Profile, Total	64	125	





Table A-25: Detailed Labour Positions at Peak Year with Estimated Level of Education

Role	On-site	Payroll	Estimated Level of Education
G&A Labour Profile ^(a)			
Management and Administration			
General Manager	1	1	University
Administrative Assistant	1	1	Diploma / On The Job Training
Health and Safety			
Superintendent, Health, Safety, and Radiation Protection	1	1	University
Emergency Response Team (ERT) Captain	1	1	Diploma
Radiation Protection Officer	1	1	University
Radiation Protection Specialist	1	1	University
Radiation Technician	3	3	Diploma
Environment			
Superintendent, Environment, and Permitting	1	1	University
Environmental Coordinator	1	1	University
Environmental Technician	2	2	Diploma
Procurement and Logistics			
Buyer	1	1	Diploma
Contracts Lead	1	1	Diploma
Accounting			
Accounts Payable (AP) Clerk	1	1	Diploma / On The Job Training
Site Controller	1	1	University
Finance Clerk	1	1	Diploma
IT and Communications			
IT / Communications Technician	1	1	Diploma
Surface Support and Maintenance			
Superintendent, Maintenance	1	1	University
Flight / Logistics (Travel) Coordinator	1	1	Diploma / On The Job Training
Site Services Supervisor	1	1	Trade / Diploma / On The Job Training
Warehouse Supervisor	1	1	Trade / Diploma / On The Job Training
Warehouse Technician	2	2	Trade / Diploma / On The Job Training
Human Resources (HR)			
Superintendent, HR	1	1	University
HR Coordinator	1	1	University
Security			
Security Supervisor	1	1	Diploma / On The Job Training
Security Officer	1	1	Diploma / On The Job Training
G&A Labour Positions, Total	29	29	
TOTAL	260 ^(b)	486	

Source: Stantec 2021, Table 10-19, Table 10-21, and Table 10-22.



a) General and administration labour on-site labour numbers in Table 10-22 of the Feasibility Study are assumed equal to payroll.

b) The 260 people are expected to be on site at any one time at peak employment. Most personnel will work a two-week-in, two-week-out rotation, on a fly-in and fly-out basis. Some of the senior staff will work a rotation of four days on site, and three days off site, without a cross shift.



Table A-26: Estimated Direct Payments to Government for a Typical Operating Year

Government Level	Payment to Government	Estimated Payment in Typical Operating Year (\$ millions [2020])
	Resource Surcharge	\$32.6
	Basic Royalty	\$46.2
Saskatchewan	Profit Royalty	\$127.7
Government	Corporate Income Tax	\$80.9
	Personal Income Tax	\$1.1
	Saskatchewan Government Total	\$288.5
	Corporate Income Tax	\$101.1
Federal Government	Personal Income Tax	\$2.8
	Federal Government Total	\$103.9
Total	Saskatchewan and Federal Government Totals	\$392.4

Estimates of federal and provincial personal income taxes were calculated based on median effective tax rates reported by Statistics Canada.



