Social Cultural, Economic, Health, and Indigenous Peoples Baseline Studies

Preliminary Report for Engagement

Wabigoon Lake Ojibway Nation – Ignace Area

InterGroup
CONSULTANTS

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GLOSSARY AND ABBREVIATIONS

Term	Details
CEGEP	Collège d'enseignement général et professionnel
COPS	Canadian Occupational Projection System
CPI	Consumer price index
GB	Gigabytes
GBA+	Gender-based Analysis Plus
GDP	Gross Domestic Product
HST	Harmonized sales tax
IAAC	Impact Assessment Agency of Canada
IAWG	Ignace Area Working Group
Indigenous identity	'Indigenous identity' includes persons who are First Nations (North American Indian), Métis, or Inuk (Inuit) and/or those who are Registered or Treaty Indians (that is 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.
Indigenous Knowledge	Indigenous Knowledge is an evolving, complex, and sophisticated system of knowledge drawing on millennia of wisdom and experience. It is an evolving knowledge system that ranges in diversity from governance, ecology, biology, ecosystems, harvesting, science, and other aspects. It constantly grows and expands with the experience of new generations. Other definitions of Indigenous Knowledge may be presented by Indigenous communities or other organizations.
Kenora Census Division	A Census Division is the general term for provincially legislated areas and are a geographic area between the province/territory level and the municipality level. Throughout the report the Kenora District Census Division is referred to as the Kenora Census Division.
kg	Kilogram
L	Litre

GLOSSARY AND ABBREVIATIONS CONTINUED

Term	Details
Local Study Area	The Local Study Area refers to the communities/areas that are most likely to experience future direct, indirect, and induced impacts of the Project, and considers those locations where people can commute to the Revell Site and/or the Centre of Expertise within an hour drive. The selection of spatial boundaries was informed by local residents through the Ignace Area Working Group, key person interviews, and workshops. The Local Study Area for the economic components includes the Township of Ignace, City of Dryden, Municipality of Machin, Municipality of Sioux Lookout, Local Services Board of Wabigoon, Local Services Board of Melgund (includes the unincorporated communities Dyment and Borups Corners), and Dinorwic. The Local Study Area includes Indigenous peoples that reside in the communities of the Local Study Area but is not representative of any specific Indigenous community or nation.
LSB	Local Service Board
mbps	Megabyte per second
NAICS	North American Industry Classification System
NTAB	Northwest Training and Adjustment Board
NWMO	Nuclear Waste Management Organization
OMPF	Ontario Municipal Partnership Fund
PACE	Patricia Area Community Endeavors
Regional Study Area	The Regional Study Area for the economic components is the Kenora Census Division. The Kenora Census Division is an administrative boundary where there may be more concentrated or discernible impacts from the Project in comparison to geographies outside of the Kenora Census Division. The Kenora Census Division includes people living in municipalities, unincorporated communities, and Indigenous reserves and settlements. This includes Indigenous people living both on- and off-reserve. The Regional Study Area may be further expanded for different components where relevant. Comparable statistics for Ontario and Canada are provided as available to provide context and comparisons for Regional Study Area information.

GLOSSARY AND ABBREVIATIONS CONTINUED

Term	Details
SEPH	Survey of Employment, Payrolls, and Hours
SHSM	Specialist High Skills Major
The Project	The Adaptive Phased Management Project
Unincorporated area	An unincorporated area is a geographic region in Canada that does not form part of a municipality or Indian reserve. In Ontario, unincorporated areas are found in the Northern Ontario region. Communities within unincorporated areas may have some services provided or administered by a Local Services Board.
WLON	Wabigoon Lake Ojibway Nation

TABLE OF CONTENTS

APPENDICES

LIST OF TABLES

LIST OF FIGURES

1.0 INTRODUCTION

2.0 SOCIAL CULTURAL

3.0 ECONOMY

3.1 OVERVIEW AND APPROACH

An examination of existing and potential future economic conditions in the Local and Regional Study Areas is required to support the impact assessment for the Adaptive Phased Management Project (the "Project"). The scope of the Baseline Studies has been designed to satisfy regulatory requirements under the *Impact Assessment Act* and the Tailored Guidelines template (IAA 2020a), including Gender-based Analysis Plus ("GBA+") and sustainability considerations. The Baseline Studies are designed to provide sufficient detail to understand current and reasonably foreseeable potential future conditions that may be affected by the Project. Approaches to GBA+ and sustainability are discussed in **Section 1.0**. The Baseline Studies document the current state and relevant historical context for each economic component. Potential foreseeable future conditions without the Project are also examined. Finally, the Baseline Studies incorporate relevant community knowledge, information from the Ignace Area Working Group ("IAWG"), workshops, key person interviews and perspectives from diverse groups within the communities where available. Indigenous Knowledge as defined by the Impact Assessment Agency of Canada ("IAAC")[1] (2023) has not been included in this section as the NWMO is working with Indigenous communities as per their Indigenous Knowledge policy (**Section 1.5.6.4**), and information of this type will be collected in collaboration with Indigenous communities in other baseline studies at an appropriate time. However, where data are publicly available for Indigenous peoples residing in the Local Study Area and Regional Study Area, this information is presented.

Table 3.1-1 summarizes the components included in the economic pillar of the Baseline Studies and provides the rationale for including each component, based on the Tailored Guidelines template (IAA 2020a) and the IAAC's guidance *Analyzing Health, Social, and Economic Effects Under the Impact Assessment Act* (IAA 2020b).

[1] The IAAC (2023) defines Indigenous Knowledge as "a holistic system embedded in the various cultures of different Indigenous peoples. For the purposes of (an) assessment processes under the IAA, generally, Indigenous Knowledge is understood as a body of knowledge built up by a group of Indigenous people through generations of living in close contact with the land. Indigenous Knowledge is cumulative and dynamic. It builds upon the historic experiences of a people and adapts to social, economic, environmental, spiritual, and political change."

Table 3.1-1: Components Included in Economic Conditions

Economic Component	Rationale for Inclusion
Employment **(Section 3.2)**	The Tailored Guidelines template and the IAAC's guidance[1] require description of employment rates, labour force characteristics, and wages.
Labour Force Skills and Training **(Section 3.3)**	The Tailored Guidelines template and the IAAC's guidance[1] require reporting on the prevalence and availability of skilled and unskilled labour, and availability of training opportunities relevant to the Project.
Economic Base **(Section 3.4)**	The Tailored Guidelines template and the IAAC's guidance[1] require reporting on the presence of businesses that may provide supplies and services to the Project, and sectors that may be indirectly impacted.
Government Finances **(Section 3.5)**	The Tailored Guidelines template and the IAAC's guidance[1] require a description of government spending on services, goods, and infrastructure.
Income, Property Values, and Cost of Living **(Section 3.6)**	The Tailored Guidelines template and the IAAC's guidance[1] require reporting on salaries and income, spending on housing (both owned and rented), energy, food, and fuel.

Notes:

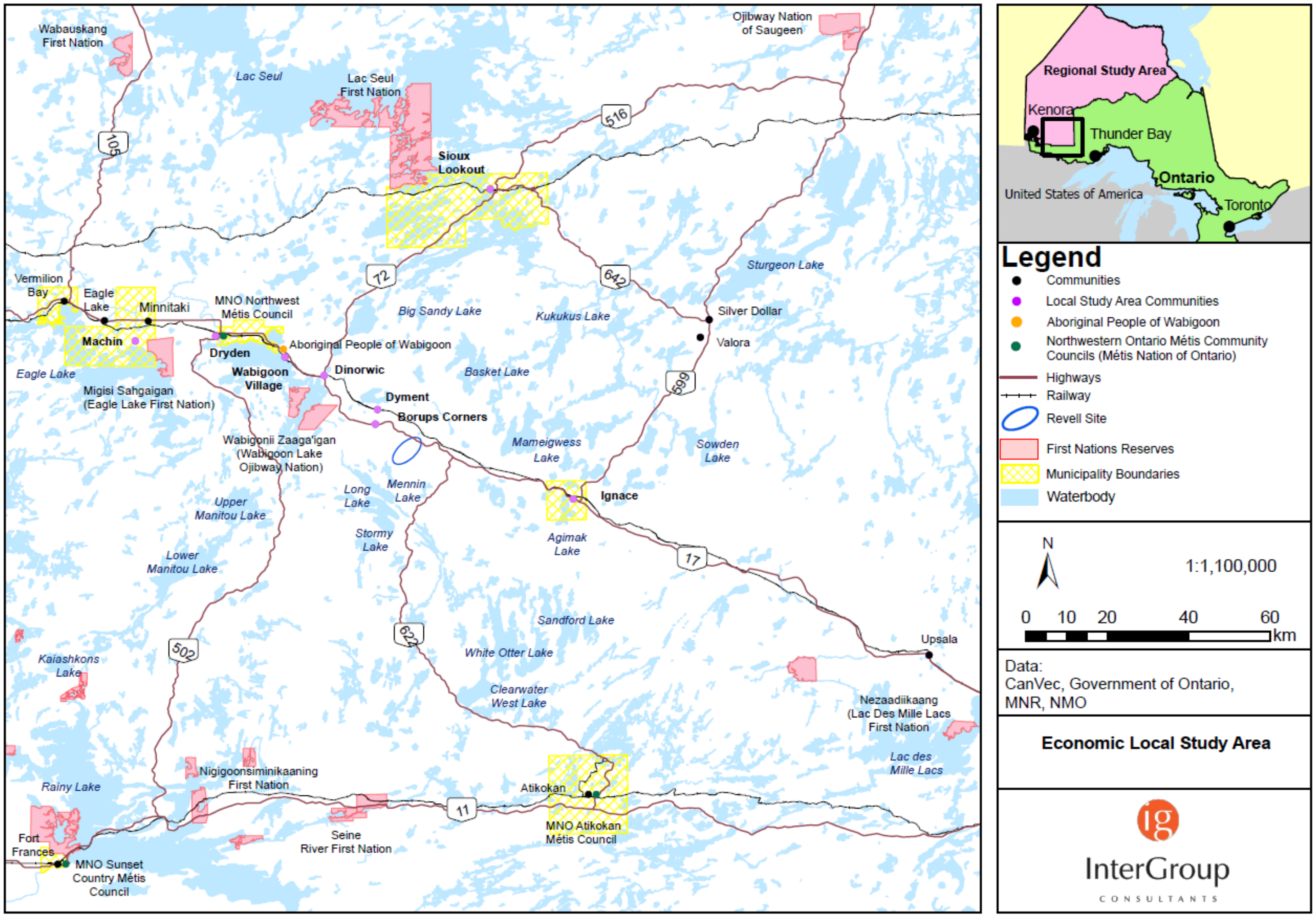
1. IAAC guidance includes *Analyzing Health, Social, and Economic Effects Under the Impact Assessment Act*.

3.1.1 Spatial and Temporal Boundaries

3.1.1.1 Spatial Boundaries

Spatial boundaries for economic conditions were selected to reflect the geographic areas where economic impacts from the Project are likely to be detectable and measurable. The economic pillar includes a Local Study Area and a Regional Study Area. Economic impacts extending beyond the Local Study Area and Regional Study Area are likely to be diffused. **Section 1.0** describes the approach to selecting spatial boundaries. **Figure 3.1-1** provides a map of the Local Study Area and **Figure 3.1-2** provides a map of the Regional Study Area for the economic pillar.

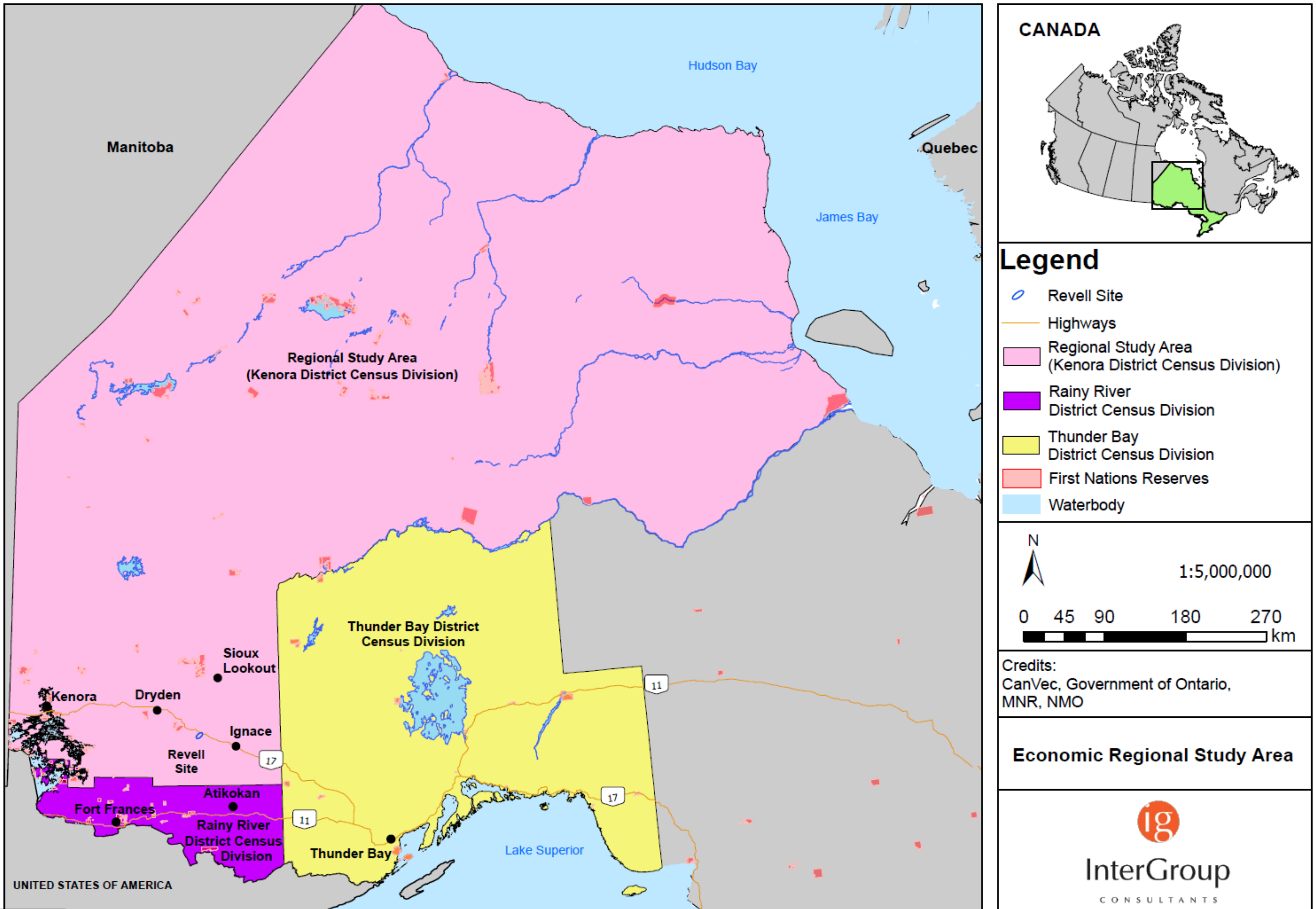
Figure 3.1-1: Economic Local Study Area[1,2]



Note:

1. Local Services Board of Wabigoon is a designated place according to Statistics Canada, but residents refer to the community as Wabigoon or Wabigoon Village.
2. The unincorporated communities Dyment and Borups Corners are part of the Local Services Board of Melgund.

Figure 3.1-2: Economic Regional Study Area



3.1.1.1.1 Local Study Area

The Local Study Area for the economic components includes:

- Township of Ignace ("Ignace");
- City of Dryden ("Dryden");
- Municipality of Machin ("Machin");
- Municipality of Sioux Lookout ("Sioux Lookout"); and
- Local Services Boards ("LSBs") and unincorporated communities, to the extent information is available:
    - LSB of Wabigoon ("LSB of Wabigoon" or "Wabigoon Village");[2]
    - LSB of Melgund (includes the unincorporated communities Dyment and Borups Corners) ("LSB of Melgund" or "Melgund");[3] and
    - Dinorwic.

The Local Study Area includes Indigenous peoples who reside in the communities of the Local Study Area but is not representative of any specific Indigenous community or nation.

The Local Study Area refers to the communities/areas that are most likely to experience future direct, indirect, and induced impacts of the Project, and considers those locations where people can commute to the Revell Site and/or the Centre of Expertise within an hour drive. The selection of spatial boundaries was informed by local residents through the IAWG, key person interviews, and workshops.[4]

Where detailed Statistics Canada data for the LSBs and unincorporated communities are not available, general characteristics may be captured through broader Statistics Canada data for the Kenora Unorganized Census Subdivision and key person interviews.

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[2] Statistics Canada identifies the Local Services Board of Wabigoon as a designated place, but residents refer to the community as Wabigoon or Wabigoon Village. In the report, the naming convention of the Local Services Board of Wabigoon will only be used when speaking to Statistics Canada data or when referring to the Local Services Board as an organization. When not referring to the Local Services Board organization or Statistics Canada data, the report will use the name of the community used by Local Study Area residents ("Wabigoon Village") (NWO Baseline Studies Key Person Interview Program 2022-2023).

[3] In the report the naming convention of the Local Services Board of Melgund will only be used when referring to the Local Services Board as an organization (Local Services Board of Melgund). When not referring to the Local Services Board organization, the report will use the name of the community used by Local Study Area residents ("Melgund") (NWO Baseline Studies Key Person Interview Program 2022-2023).

[4] The Local Economy Workshop (2021), IAWG meeting #3 (IAWG August 19, 2021), IAWG meeting #4 (IAWG October 06, 2021), and IAWG meeting #5 (IAWG December 2, 2021) provided feedback to revise the Local Study Area spatial boundaries to include Sioux Lookout.

3.1.1.1.2 Regional Study Area

The Regional Study Area for the economic components is the Kenora District Census Division ("Kenora Census Division"). The Kenora Census Division includes people living in municipalities, unincorporated communities, and Indigenous reserves and settlements.[5] This includes Indigenous people living both on- and off-reserve. The Regional Study Area provides context and comparison information for the Local Study Area and may experience more discernible regional-level impacts in comparison to areas outside of the Kenora Census Division. The selection of spatial boundaries for the Regional Study Area was informed by local residents through the IAWG, key person interviews, workshops, and a consideration of administrative boundaries and data availability.[6]

Where appropriate, additional contextual information from other areas is provided. For example:

- **Section 3.3** includes information on workforce development organization in Northern Ontario and postsecondary institutions in Northern Ontario and Winnipeg that may be accessed by residents of the Local Study Area and Regional Study Area.
- **Section 3.4 and Section 3.6** includes the Northwestern Ontario Economic Region (Kenora, Rainy River, and Thunder Bay Census Divisions) as the Regional Study Area as economic impacts may extend beyond the Kenora Census Division.
- **Section 3.6** provides information for some indicators for the City of Thunder Bay, Ontario, and Canada to provide context and comparisons to the Regional Study Area or where information is not available at the Regional Study Area level.

It is acknowledged that some economic impacts could occur beyond the Regional Study Area; however, the boundaries were selected consistent with the approach described in **Section 1.5.3** with consideration of both administrative and technical boundaries.

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[5] The Kenora Census Division includes people living in municipalities, unincorporated communities, Indigenous reserves and settlements, and the surrounding areas. This includes Indigenous people living both on- and off-reserve. Indigenous communities can consist of one or multiple reserve parcels. The reserve parcels or settlements does reflect the names of the communities used by people from the communities and only reflect the names used by the Government of Canada. The reserve parcels and settlements which are included in the Kenora Census Division include: Whitefish Bay 32A, Whitefish Bay 33A, Eagle Lake 27, Slate Falls, Fort Alban (Part) 67, Attawapiskat 91A, Marten Falls 65, Fort Hope 64, Cat Lake 63C, Osnaburgh 63B, Lac Seul 28, Wabigoon Lake 27, English River 21, Weagamow Lake 87, Northwest Angle 33B, Wabaseemoong, Sabaskong Bay 35D, Shoal Lake 34B2, Lake of the Woods 37, Kenora 38B, Poplar Hill, Shoal Lake 39A, Rat Portage 38A, Deer Lake, Sandy Lake 88, Kitchenuhmaykoosib Aaki 84, Sachigo Lake 1, Pikangikum 14, Fort Severn 89, Webequie, North Spirit Lake, Lansdowne House, Shoal Lake (Part) 40, Whitefish Bay 34A, Wabauskang 21, Wunnumin 1, Summer Beaver, Wapekeka 2, The Dalles 38C, Peawanuck, Neskantaga, Bearskin Lake, Kasabonika Lake, Muskrat Dam Lake, Kingfisher Lake 1, Wawakapewin, and Kee-Way-Win (Statistics Canada 2022a). The Indigenous settlements or reserves are not always inhabited on a full-time basis by members of the reserves due to various reasons, but the land is used at the discretion of the community and its members.

[6] The Local Economy Workshop (2021), IAWG meeting #3 (IAWG August 19, 2021), and IAWG meeting #5 (IAWG December 2, 2021) provided feedback and confirmation on the Regional Study Area spatial boundaries.

3.1.1.2 Temporal Boundaries

Section 1.0 describes the approach to selecting temporal boundaries. Temporal boundaries for employment, labour force skills and training, economic base, and income, property values, and cost of living include data back to 2006, and are limited by the availability and continuity of data. However, there are instances where temporal boundaries are restricted to current use (for example, current business and industry operating in the region, cost of living, and housing costs). The temporal boundaries for government finances are established based on the availability of data, with an upper limit of approximately ten years of history.

Forward looking temporal boundaries for the labour force projections without the Project are defined as:

- Near-term: 2024 to 2032 (which aligns with the site preparation stages of the Project);
- Mid-term: 2033 to 2042 (which aligns with the construction phase of the Project); and
- Long-Term: 2043 and beyond (which covers operations, monitoring, and decommissioning of the Project).

Baseline labour force projections are focused on the near- and mid-term time horizons. Sample years are used to help illustrate the range of near-term and mid-term projections:

- Sample year 2028 aligns with the mid point of the near-term temporal bound;
- Sample year 2033 aligns with the start of the mid-term horizon; and
- Sample year 2042 aligns with the end of the mid-term horizon.

Sample year projections are based on historical trendlines from the last three, five, and ten years (Lightcast n.d.b). The further out the long-term projection horizon, errors may accumulate as projection errors tend to increase for most methods and models (Chatfield 2001), so near and mid-term time horizons are the focus of the discussion.

3.1.2 Data Collection

The characterization of the baseline environment relies on both primary and secondary data sources. Data collection began with a review of existing literature and databases from a variety of public sources. Primary data collection was undertaken in the form of the IAWG, workshops, and key person interviews.

3.1.2.1 Secondary Data Collection

The review of literature and databases included the following sources:

- Statistical data sources, for example, Statistics Canada Census of Population, Labour Force Survey, National Travel Survey, Canadian Income Survey, Housing Price Index, Lightcast, and Manifold Data Mining Inc.
- Federal, provincial, and municipal government reports and data (e.g., Government of Ontario and Ministry of Municipal Affairs and Housing).

- Regional reports including community profiles, business gap analysis studies, strategic plans, and official plans.
- Ignace Area Community Studies, including the Economic Development Study (HSAL et al. 2022a), Housing Study (HSAL et al. 2022b), Labour Baseline (HSAL et al. 2022c), and Workforce Development Study (InterGroup and HSAL et al. 2022).
- Publicly available reports and profiles.
- Online sources (e.g., community websites).

3.1.2.1.1 Limitations of Secondary Data Collection

Statistics Canada

Statistics Canada enumerates Ignace, Dryden, Machin, Sioux Lookout, and the LSB of Wabigoon. Statistics Canada does not enumerate the LSB of Melgund (Dyment or Borups Corners) or Dinorwic. Statistics Canada indicators for the Local Study Area typically include Ignace, Dryden, Machin, Sioux Lookout, and the LSB of Wabigoon and do not include the LSB of Melgund or Dinorwic.

Statistics Canada Census of Population data contributed to developing an understanding of the Local Study Area and Regional Study Area for employment, educational attainment, economic base, and income, cost of living, and property values, and how they have changed over time. Data should be interpreted with caution because of issues of comparability across years, confidentiality, data quality, and response error. Limitations relative to specific indicators are provided as notes to tables and figures. In 2011, a shift occurred in how the Census was administered, with a National Household Survey replacing the long-form census. One of the key differences was a change from a mandatory to an optional response requirement. This resulted in reduced survey response rates and variability of response rates at lower geographic levels. As a result, trends over time should be interpreted with caution.

The Census of Population suppresses data for confidentiality or data quality. Data suppression for confidentiality reasons is meant to prevent the disclosure of data that could be used to identify individuals, particularly in small communities. Data suppression due to data quality is done for a variety of reasons, including incompletely enumerated communities. The Census of Population also relies on a random rounding procedure, where actual values are randomly rounded up or down to the nearest integer of five to enhance confidentiality. This can impact very small populations but is not believed to have a material impact on the Local Study Area reporting.

The 2006, 2011, and 2016 Census disaggregate information by sex and the 2021 Census disaggregates information by gender. The sex variable (male and female) in census years prior to 2021 and the two-category gender variable (men+ and women+) in the 2021 Census may be included in figures that display trends across time. Although sex and gender refer to two different concepts, the introduction of the two-category gender variable is not expected to have a significant impact on data analysis and historical comparability, given the small size of the transgender and non-binary populations. The 2021 Census reports that the transgender population (0.19% of Canada's population) and non-binary population (0.14% of Canada's population) in Canada is small (Statistics Canada 2023e). Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses. In these cases, individuals in the category "non-binary persons" are distributed into the other two gender categories (men+ and women+) and are denoted by the "+" symbol (Statistics Canada 2022a). When analyzing trends across time (2006, 2011, 2016, and 2021 Census) the terms sex or gender are used, along with male and female. When analyzing trends prior to the 2021 Census (2006, 2011, and/or 2016 Census) the term sex is used, along with male and female. When analyzing only 2021 Census data, the term gender is used, along with men+ and women+ in figures or men and women in the analysis. Footnotes expand on the explanation, where relevant, within sections.

Statistics Canada defines 'Indigenous identity' to include persons who are First Nations (North American Indian), Métis, or Inuk (Inuit) and/or those who are Registered or Treaty Indians (that is 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 (Statistics Canada 2022a). Indigenous identity refers to whether a person identified with the Indigenous peoples of Canada and should be interpreted as such when referring to Statistics Canada data throughout the report.

It is acknowledged that baseline conditions will continue to evolve and an artificial data cut off was implemented in order to draft this report (see **Section 1.5.5.3.1** for further detail).

Lightcast and Manifold Data Mining Inc.

Lightcast datasets incorporate labour market data from several sources including from the Survey of Employment, Payrolls and Hours ("SEPH"), the Labour Force Survey, Canadian Business Counts, the Census of Population, Canadian Occupational Projection System ("COPS") and Postsecondary Student Information System. Lightcast also reports information on job postings. Historical data are available from 2001 to 2022. Forecasts are available to 2028. Jobs by Industry are used directly from the Canadian Business Counts with no modifications. Industry job counts and earnings are derived from the SEPH. Data from the Census and Canadian Business Counts are combined with the SEPH data to fill in details for jobs in agriculture, fishing, and trapping; private household services; religious organizations; and military personnel of defense services. The Census and Canadian Business Counts data are also used to disaggregate SEPH data to the Census Subdivision level by industry.

Manifold Data Mining Inc. ("Manifold") data sources for household spending, dwelling characteristics, and education include the Survey of Household Spending, the Census of Population, other Statistics Canada surveys, Royal LePage's Quarterly Survey of Canadian Housing Price, Canadian Mortgage and Housing Corporation, Cleanlist, municipal building permits statistics and trends, and the Numeris Return-to-Sample survey. Information from surveys conducted by Agriculture Canada, Egg Farmers of Canada, Health Canada, Citizenship and Immigration Canada, Canada Post Corporation, and publications from credit bureaus are also used. Manifold provides historical data from 2001 to 2022 and projections up to 10 years into the future.

Financial Information Returns

Financial information returns are a standardized reporting of a municipality's financial activities for a fiscal year (Government of Ontario 2022a). The Ministry of Municipal Affairs and Housing financial information return data has been collected by the Government of Ontario since 1978. Data are posted on the site regularly, thus at any given point in time, data may be missing or incomplete. In addition, previously posted data (including prior years) may be updated. The Government of Ontario's financial information return dataset is designed to include many automatic calculations, including formulas which carry forward data from one schedule to another. To further assist a municipality with completing their financial information return, over 1,400 data verification checks are built into the template. Once submitted, a municipality's financial information return is reviewed and compared with the audited financial statements to ensure consistency.

3.1.2.2 Labour Force Modelling

Labour force projections are sourced from Lightcast. Labour force projections for jobs by industry and occupation are modelled using data from the 2016 Census of Population. The modelling uses an average of three linear regressions of historical job counts: three, five, and ten years into the past. All projections are adjusted to reconcile with higher regional level totals, that is, the aggregate Census Divisions are adjusted to reconcile with provincial totals, and aggregate Census Subdivisions are adjusted to reconcile to Census Division totals.

Lightcast forecasts the number of jobs by industry and occupation. The methodology for the projections of jobs by industry and occupation is as follows:

- **Jobs by Industry** – Base job projections were prepared using a regression methodology. The annual growth rates produced in the forecasts are adjusted by industry for Class of Worker 1[7] (i.e., employees) to the projections produced by the COPS. This method was used to prepare industry job count projections for 2021 to 2028.
- **Jobs by Occupation** – Base occupation projections were prepared using a regression methodology. Occupational data was projected 10 years but adjusted to the COPS growth rates (Class of Worker 1), and then adjusted to industry totals (Classes of Worker 1 and 2) (Lightcast n.d.b). Data from the Labour Force Survey and Census were used to determine self-employee counts by industry, but no earnings data are available for self-employed individuals.

Forecasts for 2033 and 2042 were estimated using the average annual growth rate between 2021 and 2028 from the projections completed by Lightcast. Gender or sex breakdowns were estimated using ratios from the 2016 and 2021 Census of Population (HSAL et al. 2022c).

[7] Class of worker 1 refers to employees and Class of Worker 2 refers to self-employed people.

The projections were reviewed and tested for reasonableness. The projections were compared with projected annual growth rates by industry from the COPS (Lightcast n.d.a). The reasonableness of the sample years used for the projections were reviewed through IAWG meetings and workshops (IAWG August 19; 2021, IAWG December 2, 2021; IAWG February 24, 2022; IAWG March 3, 2022; IAWG April 7, 2022; Local Economy Workshop 2021).

3.1.2.2.1 Limitations of Labour Force Modelling

The labour force modelling was completed by Lightcast using an average of multiple regressions at the Census Division and the Census Subdivision levels. The forecasts at the Census Subdivision level are ensured to be able to be reconcile with the Census Division level forecast. The labour force projections were reviewed at IAWG meetings to test the reasonableness of the projections (IAWG February 24, 2022; IAWG March 22, 2023). Limitations for labour force projections include that the modelling is completed by Lightcast using their own regressions and modelling parameters and does not reconcile to COPS. However, the projections are similar to occupational and industry projections completed by COPS. The accuracy and reasonableness of projections was compared to the projections completed by COPS and did not identify any notable differences compared to national trends from 2021 to 2033.

Jobs by occupation projections are not easily tied to business registers and businesses. Occupational classes are collected from individuals and are more prone to error. Lightcast uses data from the Labour Force Survey and Census to derive jobs by occupation projections which are adjusted to SEPH totals so occupation job counts and earnings match industry job counts and earnings. Lightcast adjust projections to SEPH totals due to the higher margin of error of data collections for occupational classes. As a result, comparisons can be made between jobs by industry and occupational classes.

Another limitation is Lightcast projections are only completed for 2021 to 2028. The average annual growth rate from the initial 2021 to 2028 projections are assumed to be maintained for the remainder of the forecast from 2028 to 2042 (HSAL et al. 2022c). The projections use the most recently available data sets but implement current modeling assumptions based on recent trends. For example, the projections for occupations use 2016 Census data but incorporate current parameters and assumptions for projections completed in 2023. This assumes that the historical observed trends in employment remain consistent throughout the projection period. In other words, the trends which occurred from 2013 to 2023 are forecasted to continue 20 years into the future without accounting for the cumulative changes which do not recognize capacity constraints, governmental funding and initiatives, and newly emerging trends throughout the forecast period.

Lightcast uses the most recently available information to complete projections. The 2016 Census of Population was used for the industry and occupational classes' projections as Statistics Canada is in the process of releasing detailed tabulations throughout 2023 for the 2021 Census of Population. This means that the jobs by occupation projections do not reflect more recent trends that emerged between 2016 and 2021, including the effects of the COVID-19 pandemic on employment outcomes. Lightcast projections report some occupations and industry categories as having less than 10 jobs. Any instance where Lightcast reported less than 10 jobs, Hardy Stevenson and Associates, and Avaanz input 5 jobs. This may skew the numbers slightly for smaller communities (e.g., Machin), but does not have a material impact on forecasting.

Lightcast does not explicitly forecast jobs by industry or occupation by gender or sex. Hardy Stevenson and Associates and Avaanz uses the gender or sex ratio from the 2021 Census for the employment indicator and the 2016 Census for occupational classes indicator and maintains the same ratio throughout the forecast. This results in the forecasts to not reflect the observed trends in gender composition of jobs by industry or occupation.

3.1.2.3 Primary Data Collection

Primary data are used to support the inclusion of community knowledge and local perspectives, confirm the reasonableness and relevance of secondary information, and qualitatively fill gaps in literature review, including information on GBA+ and sustainability considerations. Primary data collection was undertaken through 16 IAWG meetings (as of August 2023), workshops (including a Local Economy Workshop), key person interviews, along with other primary data to characterize factors related to the cost-of living in the Local Study Area. **Section 1.0** provides additional information on primary data collection in the Baseline Studies, including for the IAWG, workshops, and key person interviews.

3.1.2.3.1 Limitations to Primary Data Collection

Limitations for the IAWG, workshops, and key person interviews include that the information reflects the lived experiences and perspectives of the participants. This information could not always be validated through triangulation of data sources but is still considered as valid. In some instances, individuals or organizations were invited to participate in these processes and declined – thus primary data could not be readily collected. An informed consent process was used with all participants, and the option to not respond to questions or redact sensitive information was offered.

Limitations on food price and gasoline price data include that data reflect snapshots at specific points in time, the small sample size of the data collected, and market fluctuations (such as economic supply chain constraints) that may have an impact on price.

Limitations of property values include that data collection does not capture private sales and reflect snapshots at specific points in time.

3.2 EMPLOYMENT

3.2.1 Overview and Approach

Employment is a primary indicator of economic well-being, and a significant contributor to individual health (see **Section 4.2** Social Determinants of Heath). This section summarizes current and historical employment conditions in the Local Study Area and examines employment and wage trends in the Regional Study Area and at the provincial level, for context. Wage trends are sourced from Lightcast Data Mining and are only available at the Census Division and provincial level.

Employment is described using employment, unemployment, and participation rates, as defined by Statistics Canada (2022). These metrics are reported in both the Census of Population and the Labour Force Survey, though each source provides different views on geography and time. GBA+ considerations are discussed using disaggregated data for sex, age, and Indigenous identity where available and of sufficient robustness. The employment analysis reflects learnings from the IAWG, the community studies (**Section 1.0**), and other primary data collection processes. Additional information on GBA+ is provided in **Section 1.0**. Sustainability is considered through historical trends and linkages to health (**Section 4.0**) and social-cultural (**Section 2.2**) components.

A description of wages applicable to the local and Regional Study Areas is provided based on published wage rates for municipal and unionized workforces and information obtained through primary data collection. Wage ranges are described by sector, aligning as much as possible with a description of employment by industry sector (**Section 3.4.3**). A description of employment services, where residents seek job postings, and barriers to employment are also discussed.

The future Impact Assessment will provide details on Project employment opportunities in the Local and Regional Study Area, including for Indigenous communities. Information on the spatial boundaries, temporal boundaries, and data collection for employment is provided in **Section 3.1**.

The Regional Study Area for employment is the Kenora Census Division and is sometimes extended to provide additional context or comparison. The Regional Study Area is inclusive of Indigenous communities and reserves. Comparable statistics for Ontario are summarized as available to provide context. The Local Study Area for employment includes the Township of Ignace, City of Dryden, Municipality of Machin, Municipality of Sioux Lookout, and, to the extent information is available, the LSB of Wabigoon, the LSB of Melgund (Dyment and Borups Corners) and the unincorporated community of Dinorwic. The Local Study Area spatial boundaries for employment are based on the understanding that individuals will be willing to travel approximately an hour (each way) for lucrative employment opportunities. However, it is understood that willingness to travel will vary by individual and the quality of the employment opportunity.

The temporal boundaries for employment across the Local Study Area consider trends from the 2006 Census through to 2021, as available, however, data sources are unlikely to be uniform like Statistics Canada and may be constrained to the more recent past.

3.2.2 Labour Force Characteristics

Labour force is a foundational concept in describing the labour economy. Statistics Canada defines the labour force as the portion of the working age population (those aged 15 years old and over) who identify as able and available to work (Statistics Canada 2017).

Individuals can occupy one of three statuses in the labour market: employed (full-time or part-time), unemployed, or not in the labour force. Those not in the labour force can include people who are permanently unable to work, retired, full-time students, and discouraged workers.

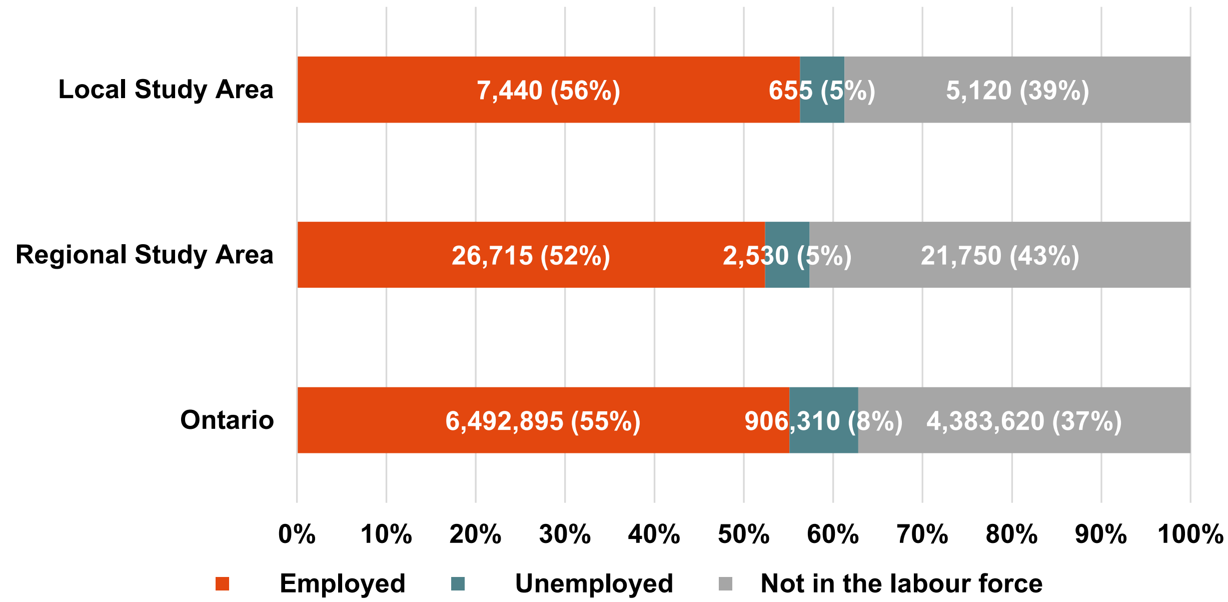
- **Participation rate** is the proportion of people working (employed) or able and available to work (unemployed), from the entire working age population (15 years old and over) (Statistics Canada 2022a).
- **Employment rate** is the number of people employed as a percentage of the working age population (15 years and over), in the specified reference week (Statistics Canada 2022a). Conceptually, the employment rate is the proportion of people working out of all people who could theoretically work.
- **Unemployment rate** refers to the number of people unemployed, expressed as a percentage of the labour force, in the specified reference week (Statistics Canada 2022a). Conceptually, the unemployment rate represents the proportion of people who want to work but do not have work. The definition of unemployment rate relies on the definition of the Labour Force, which includes people who are working (employed) and those who are not working, but able and available to work (unemployed).

3.2.2.1 Labour Force Status

The 2021 labour force for the Local Study Area is 8,090 people, with the largest concentrations in Dryden (3,605 people, or 45%), Sioux Lookout (3,325 people, or 41%), and Ignace (500 people, or 6%)[8]. In 2021, the Local Study Area labour force (8,090 people) represented about 28% of the Regional Study Area labour force (29,245 people). **Figure 3.2-1** shows the total population employed and unemployed (i.e., in the labour force) and not in the labour force for the Local Study Area, Regional Study Area (i.e., Kenora Census Division), and Ontario, in 2021.

[8] The Local Study Area includes Ignace, Dryden, LSB of Wabigoon, Machin, Sioux Lookout, LSB of Melgund (Dyment and Borups Corners) and the unincorporated community of Dinorwic. However, data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

Figure 3.2-1: Labour Force Ages 15 Years and Older in the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Notes:

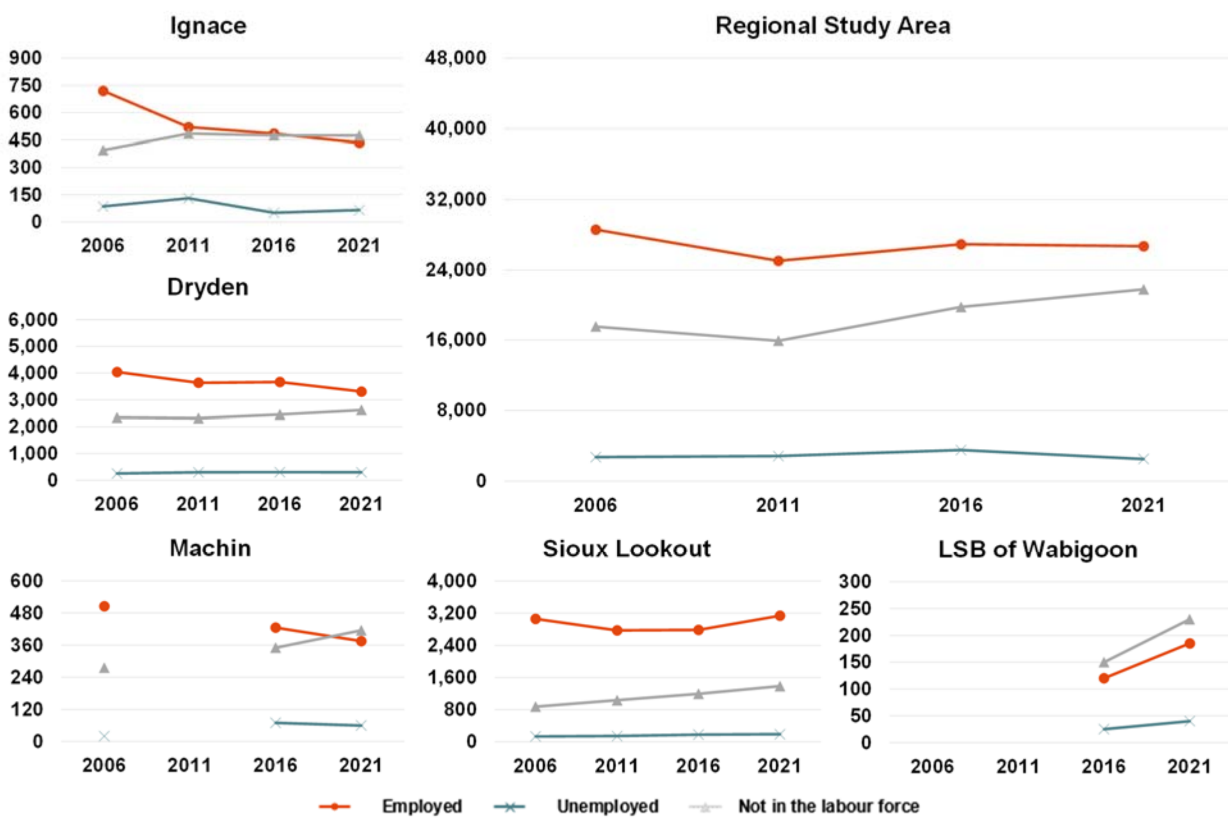
1. Data were not available for the LSB of Melgund and Dinorwic for 2021.

In 2021, the number of people in the labour force relative to the number of people not in the labour force varies across the Local Study Area, Regional Study Area, and Ontario:

- In the Regional Study Area, 26,935 people are employed, 2,530 are unemployed, and 21,750 are not in the labour force in 2021. Of the population who are 15 years and older, 57% are in the labour force.
- In the Local Study Area, 7,440 people are employed, 655 are unemployed, and 5,120 are not in the labour force in 2021. Of the population who are 15 years and older, 61% are in the labour force.
- In the Ontario, 6,492,895 people are employed, 906,310 are unemployed, and 4,383,620 are not in the labour force in 2021. Of the population who are 15 years and older, 63% are in the labour force.

Figure 3.2-2 shows the change in the number of people employed, unemployed, or not in the labour force for the Regional Study Area and Local Study Area communities from 2006 to 2021.

Figure 3.2-2: Labour Force Status in the Local Study Area Communities and Regional Study Area, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2022a. Statistics Canada 2011 NHS. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

From 2006 to 2021, there was a decrease in the number of people who are employed and an increase in the number of people who are in not in the labour force in the Regional Study Area and all Local Study Area communities except Sioux Lookout. Notable trends in labour force status in the Regional Study Area and Local Study Area communities include:

- In the Regional Study Area, the number of people employed decreased from 28,595 in 2006 to 26,715 in 2021. Similarly, there was a decrease in the number of people unemployed from 2,745 in 2006 to 2,530 in 2021. These decreases were offset by the number of people who are not in the labour force which increased from 17,520 in 2006 to 21,750 in 2021.

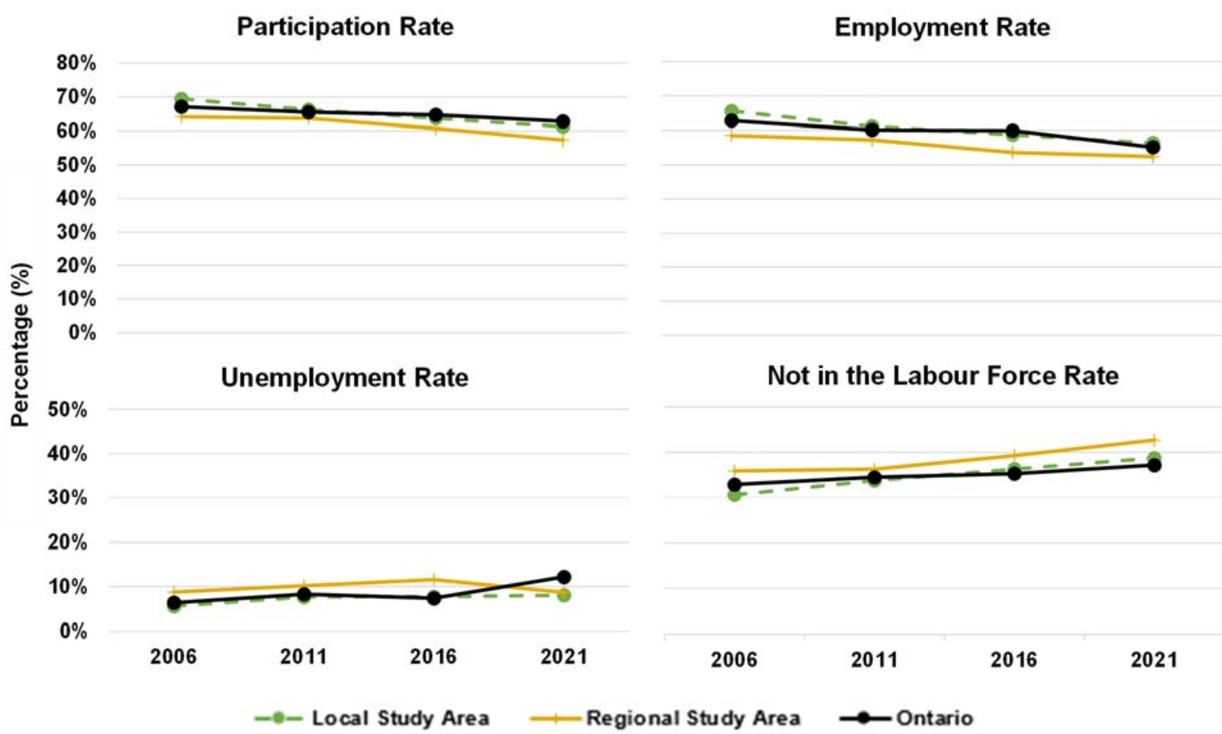
- In Ignace, the number of employed people decreased from 720 in 2006 to 435 in 2021. There was also a slight decrease in the number of unemployed people from 85 in 2006 to 65 in 2021. The number of people who are not in the labour force increased from 395 in 2006 to 475 in 2011 and has remained consistent since (475 in 2021).
- In Dryden, the number of employed people decreased materially from 4,040 in 2006 to 3,305 in 2021. The number of unemployed people increased slightly from 255 in 2006 to 300 in 2011 and has remained constant around 300 people since 2011. The number of people not in the labour force remained around 2,340 people in 2006 and 2011 before increasing to 2,615 by 2021.
- In Machin, the number of employed people decreased from 505 in 2006 to 375 in 2021. The decrease in the number of employed people was offset by an increase in the number of unemployed people from 20 in 2006 to 60 in 2021 and an increase in the number of people not in the labour force from 275 in 2006 to 415 in 2021.
- Sioux Lookout experienced an increase in the number of employed people (from 3,040 in 2006 to 3,140 in 2021), unemployed people (135 in 2006 to 190 in 2021), and people not in the labour force (875 in 2006 to 1,385 in 2021).
- The LSB of Wabigoon experienced an increase in the number of employed people (from 120 in 2016 to 185 in 2021), unemployed people (25 in 2016 to 40 in 2021), and people not in the labour force (150 in 2016 to 230 in 2021).

The increase in the number of people not in the labour force in each Local Study Area community is due in part to an aging population (See **Section 2.2.3.1**) and an increasing proportion of seniors (i.e., 65 years and older). Between 2006 and 2008, a change in the scope of operations at Domtar and the closure of the Resolute Forest Products location in Ignace resulted in reductions to the workforce in the Local Study Area communities. This contraction of operations and closure of a mill at major regional employers may have contributed to the increase in the number of people unemployed in Ignace and decreases to the number of people employed in Ignace, Dryden, Machin, and Sioux Lookout in 2011 (NWO Community and Baseline Studies Key Person Interview Program 2022).

The seasonal operations of outfitters, camps, and the Ministry of Natural Resources and Forestry result in an increase in employment in the Local Study Area communities. For example, the Ministry of Natural Resources and Forestry has seasonal employment can more than double during the summer months and throughout the fire season (NWO Baseline Studies Key Person Interview Program 2022-2023).

Figure 3.2-3 shows the participation rate, employment rate, unemployment rate, and the percentage of people not in the labour force for the Local Study Area, the Regional Study Area and Ontario from 2006 to 2021.

Figure 3.2-3: Labour Force Characteristics in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

The labour force characteristics of the Local Study Area have been similar to the Regional Study Area and Ontario since 2006. The only notable difference is that the Local Study Area experienced a smaller increase in the unemployment rate than Ontario, while the Regional Study Area had a slight decrease to the unemployment rate in 2021. The proportion of people not in the labour force has increased in the Local Study Area, Regional Study Area, and Ontario since 2006. Notable trends in the Local Study Area, Regional Study Area, and Ontario include:

- In the Local Study Area, the participation rate decreased from 69.4% in 2006 to 61.2% in 2021. Similarly, the employment rate decreased from 58.5% in 2006 to 52.4% in 2021. Since 2006, the unemployment rate has remained the lowest compared to the Regional Study Area and Ontario but increased from 5.6% in 2006 to 8.1% in 2021.

- In the Regional Study Area, the participation rate decreased from 64.1% in 2006 to 57.3% in 2021. Similarly, the employment rate decreased from 58.5% in 2006 to 52.4% in 2021. The unemployment rate increased from 8.8% in 2006 to 11.6% in 2016 but returned to 8.7% in 2021.
- In Ontario, the participation rate decreased from 67.1% in 2006 to 62.8% in 2021. Similarly, the employment rate also decreased from 62.8% in 2006 to 55.1% in 2021. The unemployment rate has increased materially since 2006 from 6.4% to 12.2% in 2021. This represents the largest increase to the unemployment rate and the highest unemployment rate in 2021 compared to the Local and Regional Study Areas.

The declining participation rate across all regions reflects an aging population with many retirements since 2006 and stagnant population growth, which is consistent with national trends (Cross 2021). Most of Canada's projected labour force growth is due to an increase in the number of immigrants in the labour force. However, the growth in the labour force from immigration in the past has been minimal in the Regional Study Area where less than 5% of the population identifies as a visible minority (See **Section 2.2.3.2**) or came to the Regional Study Area as an immigrant prior to 2021 (Statistics Canada 2023). The majority of growth from immigration is forecast to be in metropolitan areas (e.g., Toronto, Montreal). The decrease in the participation rate could worsen labour shortages in smaller municipalities due to the lack of in-migration, but vacant positions from retirements pose opportunities for the younger population to capitalize on (Cross 2021). Further details on the participation rate, employment rate, and unemployment rates for the Local Study Area communities are offered in **Section 3.2.2.2**, **Section 3.2.2.3**, and **Section 3.2.2.4**, respectively.

3.2.2.1.1 Challenges to Youth Employment

The Government of Canada defines youth as residents who are between the ages of 15 and 29 years old (Canadian Heritage 2021). "The term 'youth' generally refers to those in the stage of life from adolescence to early adulthood" (Canadian Heritage 2021) and this transition period from childhood to adulthood typically brings greater opportunity for "economic independence, political involvement, and participation in community life" (United Nations 2020). Youth represent an important labour force within the region as an age group that has the ability to contribute to community vibrancy and leadership into the future. "Youth who are not (engaged) in education, employment, or training are more likely to experience social and economic exclusion" (United Nations 2020).

Youth across Canada face a variety of challenges in finding employment, including "lack of access to technology, professional networks, and career development opportunities. Youth that come from low-income or marginalized communities are disproportionately impacted by these barriers" (Canadian Heritage 2021). Within the Local Study Area, some of these challenges are exacerbated by conditions such as poor internet connectivity, affordability, lack of access to a vehicle, and lack of public transportation options within and between communities (NWO Community and Baseline Studies Key Person Interview Program 2022).

Table 3.2-1 shows the participation, employment, and unemployment rates for people aged 15 to 24 in the Local and Regional Study Areas.[9] Youth generally experience lower rates of employment than other Canadians, in part because many are attending school on a full-time basis.

Table 3.2-1: Labour Force Rates for People Aged 15 to 24 Years Old in the Local Study Area and Regional Study Area, 2016[1]

	Participation Rate		**Not in the Labour Force Rate**		**Employment Rate**		**Unemployment Rate**	
	Ages 15-24	Overall Rates	Ages 15-24	Overall Rates	Ages 15-24	Overall Rates	Ages 15-24	Overall Rates
Ignace	48.1%	53.5%	51.9%	46.5%	44.4%	48.0%	15.4%	9.3%
Dryden	75.1%	61.8%	24.9%	38.2%	61.1%	57.0%	18.7%	7.7%
Machin	60.4%	71.2%	39.6%	28.8%	53.0%	66.9%	11.1%	6.1%
Sioux Lookout	65.2%	58.3%	34.8%	41.7%	56.5%	50.6%	13.3%	14.3%
LSB of Wabigoon	-	50.0%	-	50.0%	-	40.0%	-	16.7%
Local Study Area	67.2%	64.6%	32.8%	35.4%	56.6%	59.6%	15.7%	7.7%
Regional Study Area	51.7%	60.7%	48.3%	39.3%	40.4%	53.6%	21.8%	11.6%

Source: Statistics Canada 2017. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for the youth population in the LSB of Wabigoon are not available.

In the Local Study Area, participation rates for people between the ages of 15 to 24 are higher than the overall population participation rate. However, employment rates for people between the ages of 15 to 24 are slightly lower in the Local Study Area and unemployment rates are materially higher compared to the overall population. In the Regional Study Area, participation and employment rates for people between the ages of 15 to 24 are lower than the overall population. The unemployment rate for people between the ages of 15 to 24 is materially higher than the overall population in the Regional Study Area. Key observations of the labour force rates in the Local Study Area communities, Local Study Area, and Regional Study Area include:

[9] Although youth are defined as those between the ages of 15 and 29 years old, Statistics Canada breaks out labour force characteristics in different age cohorts.

Participation rates:

- Participation rates for people between the ages of 15 to 24 are higher in the Local Study Area (67.2%) compared to the Regional Study Area (51.7%). Participation rates are higher for people between the ages of 15 to 24 than the overall rates in the Local Study Area.
- Among the Local Study Area communities, participation rates for people between the ages of 15 to 24 are highest in Dryden (75.1%). In Dryden and Machin, participation rates are higher for people between the ages of 15 to 24 compared to the overall rates. The participation rate for people between the ages of 15 to 24 is lowest in Ignace (48.1%).
- The proportion of people between the ages of 15 to 24 not in the labour force are materially higher in the Regional Study Area (48.3%) compared to the Local Study Area (32.8%).
- Among the Local Study Area communities, the proportion of people between the ages of 15 to 24 not in the labour force are highest in Ignace (51.9%). The proportion of people between the ages of 15 to 24 who are not in the labour force are higher compared to population 15 years and older in Ignace and Sioux Lookout. The proportion of the population 15 years and older who are not in the labour force is highest in the LSB of Wabigoon in 2016.
- People between the ages of 15 to 24 in Ignace have lower participation and employment rates compared to other communities in the Local Study Area, but similar rates to people between the ages of 15 to 24 in the Regional Study Area.

Employment rates:

- Employment rates for people between the ages of 15 to 24 are materially higher in the Local Study Area (56.6%) compared to the Regional Study Area (40.4%). Unemployment rates for people between the ages of 15 to 24 are higher in the Regional Study Area (21.8%) compared to the Local Study Area (15.7%).
- Employment rates for people between the ages of 15 to 24 are highest in Dryden (61.1%) and Machin (56.5%). Employment rates are also higher for for people between the ages of 15 to 24 compared to the overall rates in Dryden and Machin. Employment rates for people between the ages of 15 to 24 are lowest in Ignace (44.4%).

Unemployment rates:

- Unemployment rates for people between the ages of 15 to 24 are highest in Dryden (18.7%). Machin is the only community where unemployment rates for people between the ages of 15 to 24 are lower than the overall unemployment rate. Unemployment rates for people between the ages of 15 to 24 are lowest in Sioux Lookout (11.1%) and Machin (13.3%).

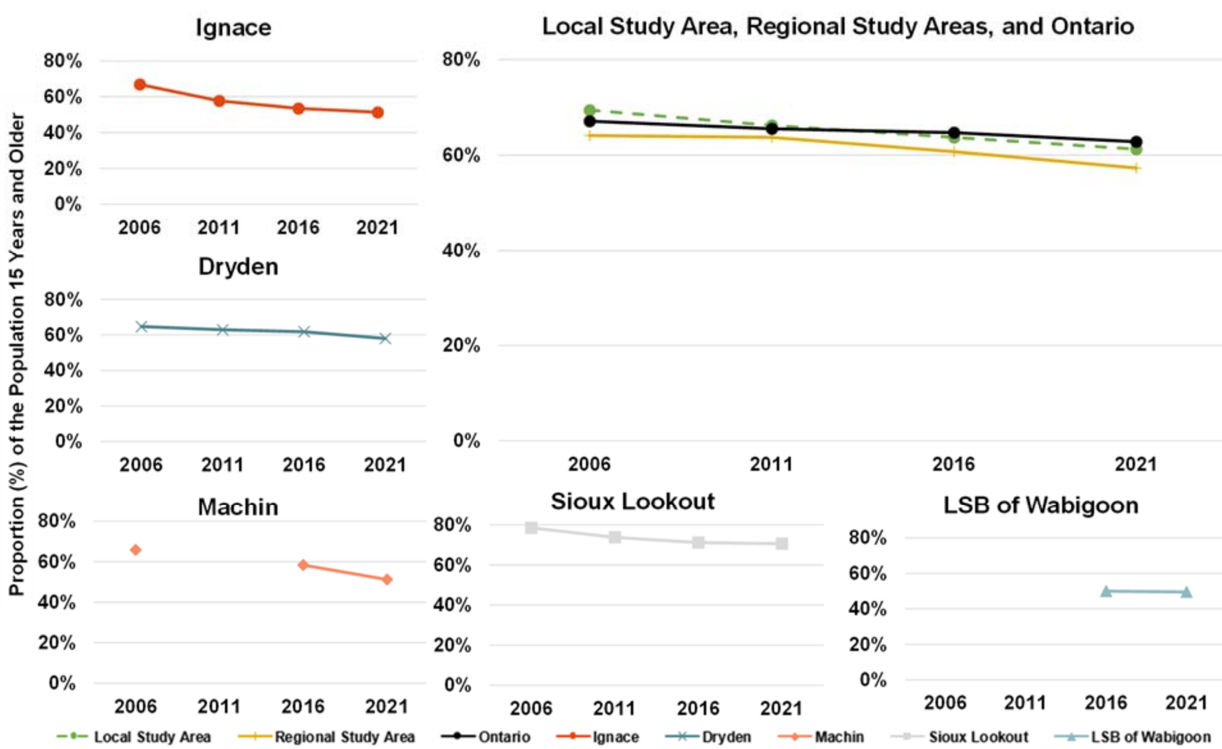
Although unemployment rates are generally similar across the board, the rate at which for people between the ages of 15 to 24 are not in the labour force (i.e., the opposite of the participation rate) is materially higher for Ignace and the Regional Study Area compared to other communities in the Local Study Area. Participation rates are generally lower for for people between the ages of 15 to 24 (See **Section 3.2.2.2.2**). This may be due to youths only working during the summer months, as they are more likely to be attending school full-time (See

Section 3.4.4). It was noted during the Economy Workshop that employment in Ignace can be seasonal, as there are more opportunities in the summer with camps up and running and more visitors (Local Economy Workshop 2021; NWO Baseline Studies Key Person Interview Program 2022-2023). Lower participation rates may also be attributed to a lack of willingness to work in entry level positions and physically demanding occupations, such as working at a restaurant or at Resolute Forest Products. There are frequent vacancies in these jobs, which could be attributed to low wages and the physical nature of the positions (NWO Community and Baseline Studies Key Person Interview Program 2022; NWO Baseline Studies Key Person Interview Program 2022-2023).

3.2.2.2 Participation Rate

The participation rate represents the proportion of the population who are 15 years and older, and are either employed or unemployed (e.g., actively seeking employment or have a job lined up). **Figure 3.2-4** shows the participation rates for the population in the Local Study Area communities, Local Study Area, Regional Study Area, and Ontario, from 2006 to 2021.

Figure 3.2-4: Participation Rates in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

Participation rates have decreased in each region and Local Study Area community since 2006. In 2006, the Local Study Area had the highest participation rate (69.4%) compared to the Regional Study Area (64.1%) and Ontario (67.1%). In 2021, Ontario had the highest participation rate (62.8%) compared to the Local Study Area (61.2%) and Ontario (62.8%). Notable trends in the Local Study Area community's participation rates are as follows:

- In 2006, Ignace had the second highest participation rate (66.9%) among Local Study Area communities. However, in 2021, the participation rate in Ignace (51.3%) was near the lowest participation rate among Local Study Area communities.
- The participation rate in Dryden decreased from 64.7% in 2006 to 58.0% in 2021. In 2021, Dryden had the second highest participation rate among Local Study Area communities.

- The participation rate in Machin decreased materially from 65.8% in 2006 to 51.2% in 2021. In 2021, the participation rate in Machin is the second lowest among Local Study Area communities.
- The participation rate in Sioux Lookout decreased from 78.5% in 2006 to 70.6% in 2021. The participation rate in Sioux Lookout has remained the highest among all Local Study Area communities since 2006.
- The participation rate in the LSB of Wabigoon decreased slightly from 50.0% in 2016 to 49.5% in 2006. The participation rate in the LSB of Wabigoon has been the lowest among Local Study Area communities in both 2016 and 2021.

In Ignace, a key driver of the decline in labour force participation since 2006 is an aging and declining population (See **Section 2.1.1 Population**). Despite the declining population, there has been a relatively constant number of individuals not in the labour force since 2011 (around 475 people). In 2021, Ignace, Machin, and LSB of Wabigoon each had participation rates around 50%, compared to around 60% in the Local Study Area, Regional Study Area, Ontario, and Dryden. Although Machin has not experienced a decrease in population similar to Ignace, the aging demographic of both communities are closely linked to their lower participation rate (**Section 2.2.2** and **Section 3.2.2.2.2**). Ignace's labour force has been reliant on the mining and forestry industries, which has made the community susceptible to cyclical downturns in these industries (NWO Community and Baseline Studies Key Person Interview Program 2022).

3.2.2.2.1 Labour Force Participation by Sex

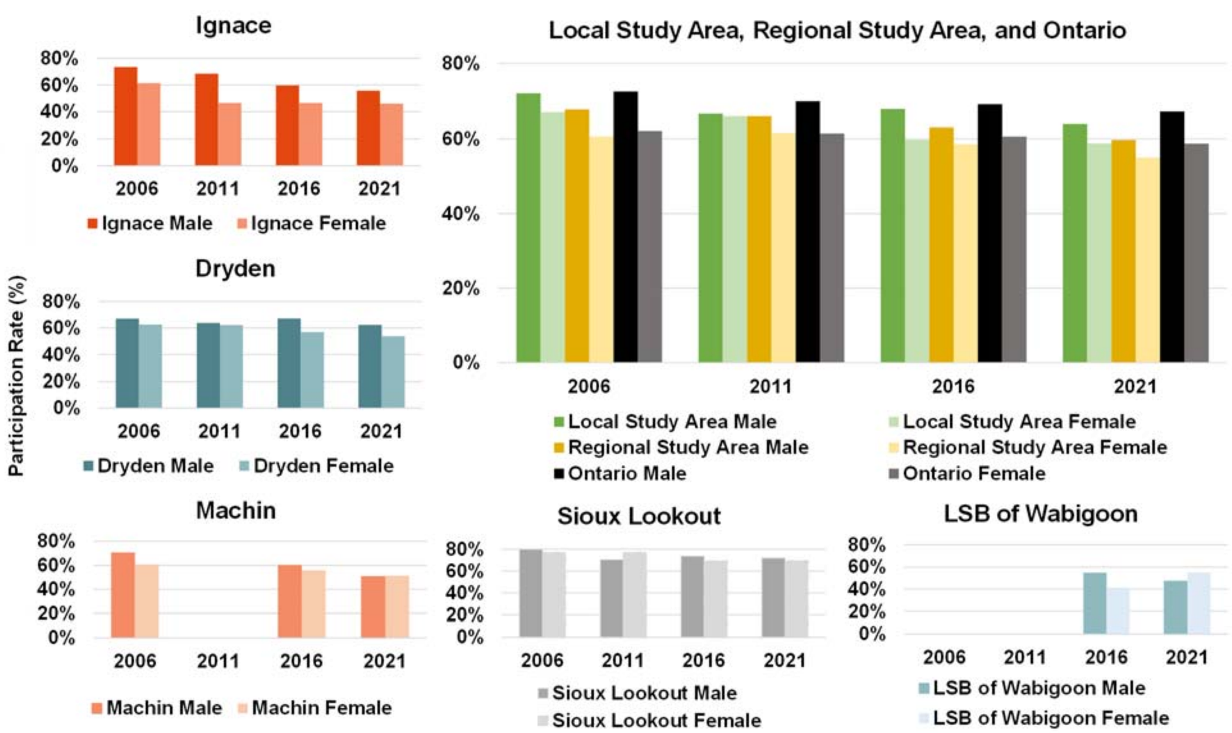
Figure 3.2-5 shows the change in participation rate for males and females from 2006 to 2021.[10] In 2021 Statistics Canada began to report on gender identity in the Census of Population, as opposed to sex-assigned at birth in previous censuses. Gender identity is an individual's personal

[10] The 2006, 2011, and 2016 Census disaggregate by sex and the 2021 Census disaggregates by gender. The sex variable (male and female) in census years prior to 2021 and the two-category gender variable (men+ and women+) in the 2021 Census are included together in **Figure 3.2-5**. Although sex and gender refer to two different concepts, the introduction of gender is not expected to have a significant impact on data analysis and historical comparability, given the small size of the transgender and non-binary populations. Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses provided. In these cases, individuals in the category "non-binary persons" are distributed into the other two gender categories (men+ and women+) and are denoted by the "+" symbol (Statistics Canada 2022a).

Gender refers to an individual's personal and social identity as a man, woman, or non-binary person (a person who is not exclusively a man or a woman). Gender includes the following concepts: (1) gender identity, which refers to the gender that a person feels internally and individually; (2) gender expression, which refers to the way a person presents their gender, regardless of their gender identity, through body language, aesthetic choices, or accessories (e.g., clothes, hairstyle, and makeup), which may have traditionally been associated with a specific gender. A person's gender may differ from their sex at birth, and from what is indicated on their current identification or legal documents, such as their birth certificate, passport, or driver's license. A person's gender may change over time. Some people may not identify with a specific gender (Statistics Canada 2022a).

and social identity as a man, woman, or non-binary person (Statistics Canada 2022a).[11] Gender identity is reported as Men+ (i.e., cisgender men, transgender men, and some non-binary persons) and Women+ (i.e., cisgender women, transgender women, and some non-binary persons).

Figure 3.2-5: Participation Rate by Sex or Gender in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for all years for the LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

Since 2006, participation rates have been similar in the Local Study Area and Ontario. Males have generally had a higher participation rate than females since 2006 in each of the Local Study Area, Regional Study Area, and Ontario. The participation rate for males and females in the Regional Study Area are slightly lower compared to males and females in the Local Study Area

[11] A cisgender person is an individual whose gender identity is the same as their sex-assigned at birth. A transgender person is an individual whose gender does not correspond to their sex assigned at birth. A non-binary person is an individual who is not exclusively a man or woman (e.g., fluid, Two-Spirit).

and Ontario. Trends in participation rates for males and females in the Local Study Area communities are as follows:

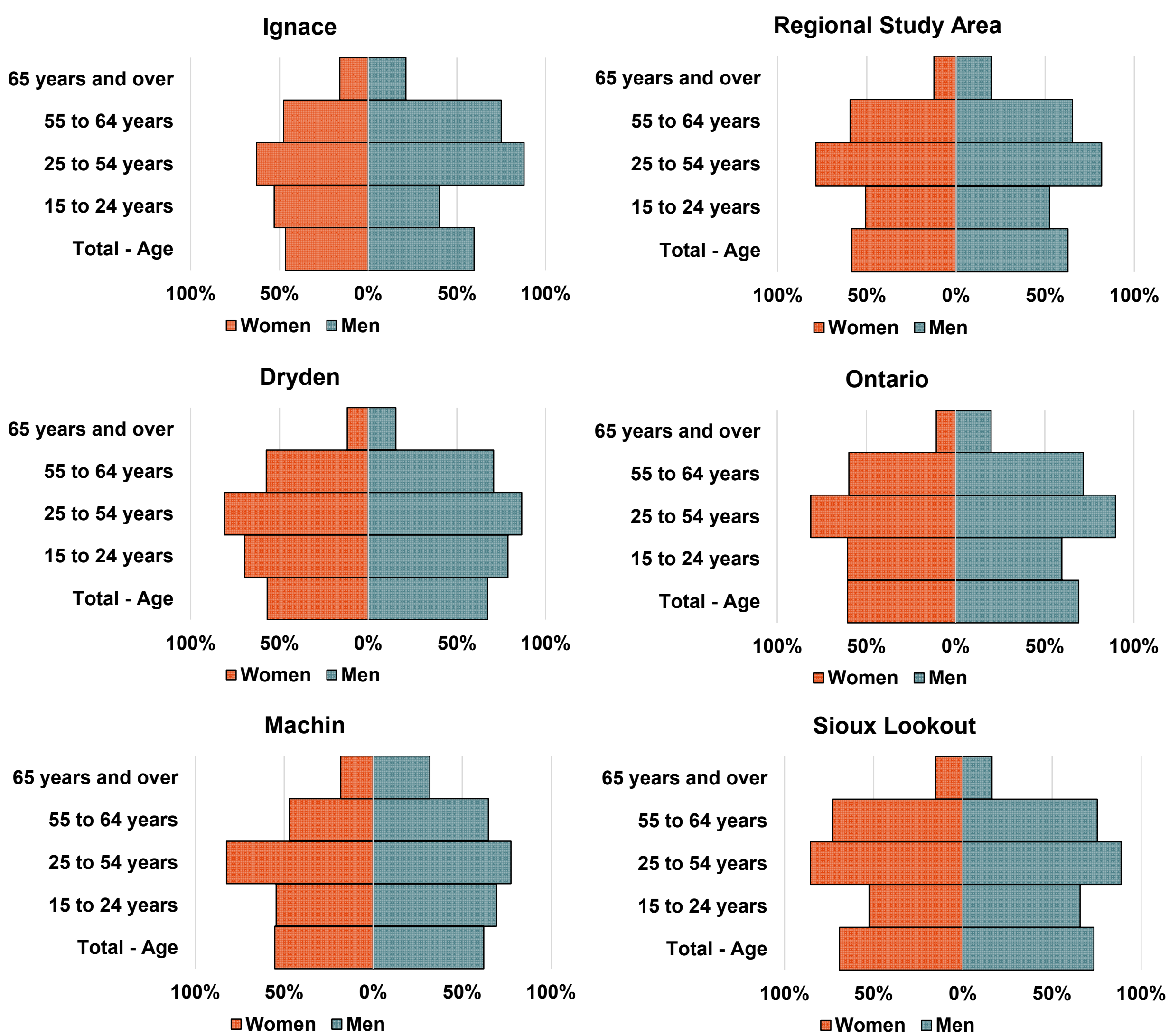
- In 2021, the gap in participation rates between males and females are most pronounced in the Local Study Area, Ontario, Ignace, and Dryden; ranging between five percentage points in the Local Study Area to ten percentage points in Ignace. The gap between the participation rate for males and females is smaller in the Regional Study Area and Sioux Lookout, ranging between one percentage point in Sioux Lookout to five percentage points in the Regional Study Area.
- The LSB of Wabigoon females had a participation rate of 55.0% compared to 47.1% for males in 2021. Similarly, Machin females had a participation rate of 51.3% compared to 50.5% for males in 2021. Since 2006, Sioux Lookout in 2011 was the only other community to have a higher participation rate for females (77.1%) than males (70.3%).

Between 2006 and 2011, there was a material decline in the Ignace labour force for both males and females. The decline in the participation rate for males (73.4% in 2006 to 68.4% in 2011) was attributed in part to downturns in the forestry sector and the resulting out-migration of part of the working age population The participation rate for females declined from 61.4% in 2006 to 46.5% in 2011, although no specific driver for this decline was identified. The decline may be related to an aging population, a decline in employment in the forestry sector, or a variety of other complex socio-economic factors. The effects of the economic downturn in forestry also had a material impact on employment and unemployment rates (see **Section 3.2.2.3 and Section 3.2.2.4**), whereas the spin-off of this downturn likely slowed down economic growth in other sectors.

3.2.2.2.2 Age and Labour Force Participation

Figure 3.2-6 shows the 2016 participation rates disaggregated by age cohort for the Regional Study Area, Ontario, and Local Study Area communities. Labour force participation was generally similar across age cohorts between the Regional Study Area and Ontario.

Figure 3.2-6: Participation Rate by Age Cohorts and Sex in Local Study Area Communities, the Regional Study Area, and Ontario, 2016[1]



Source: Statistics Canada 2017. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Wabigoon, LSB of Melgund and Dinorwic for 2016.

In 2016, participation rates were generally higher across age cohorts in Ontario for both males and females compared to the Regional Study Area. Other notable highlights of the participation rates for age cohorts are as follows:

- The participation rates are generally higher for the 25 to 54 age cohort, followed by the 55 to 64 age cohort, and are lowest for the 65+ cohort.
- For the 15 to 24 age cohort, participation rates vary among the Local Study Area communities and the Regional Study Area but are generally similar for the 65+ age cohort.
- For the 25 to 54 age cohort, participation rates for males were generally between 80% to 90% for all Local Study Area communities and the Regional Study Area. The participation rate for females in Ignace (62.9%) was materially lower compared to the other Local Study Area communities which were all around 80%.
- For the 55 to 64 age cohort, participation rates were between 65% to 75% for males and 45% and 60% for females, excluding females in Sioux Lookout which had a participation rate of 72.9%.
- Participation rates were generally lower in Ignace and Machin compared to Sioux Lookout and Dryden. Ignace has a participation rate of 53.5% for the working age population, which was the lowest amongst Local Study Area communities in 2016. The lower participation rate in Ignace is due to lower rates for the 15 to 24 age cohort for both males and females and the 25 to 54 age cohort for females. The lower participation rate in Machin is partially due to a lower participation rate for the 25 to 54 age cohort for males.

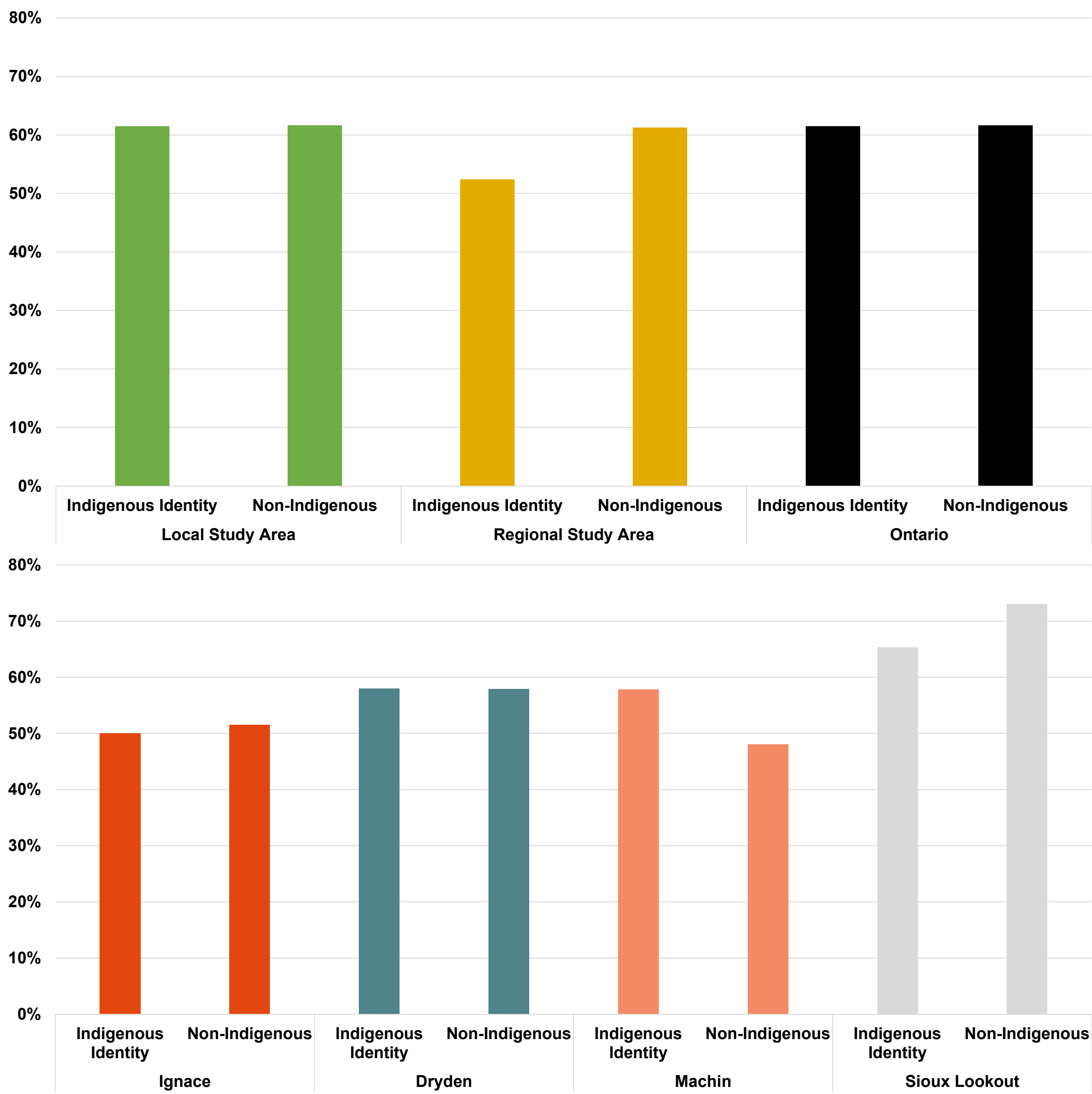
Participation rates peak between 25 and 54 years old because many individuals enter the workforce after completing their education and training between 20 and 30 years old. On the other hand, participation rates generally decline after 55 years old as people approach retirement.

3.2.2.2.3 Indigenous Peoples Labour Force Participation

Indigenous people include those who identify as First Nation (North American Indian), Métis, or Inuit, and/or those who reported as a Treaty Indian or Registered Indian and/or have membership in a First Nation or Indian Band (Statistics Canada 2022a). Over 15% of the population identifies as Indigenous in each Local Study Area community as of 2021 (see Section 2.2.2). Limitations associated with disaggregated Indigenous identity data are provided in Section 3.1.2.1.1.

Figure 3.2-7 shows the participation rate for the portion of the population who identify as Indigenous, and the remaining portion who do not identify as Indigenous for the Local Study Area, the Regional Study Area, and Ontario. The information is aggregated and reflects Indigenous people from a variety of communities. The figures are not representative of any individual Indigenous community.

Figure 3.2-7: Participation Rate by Indigenous and Non-Indigenous Identity in the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2023f. See **Appendix 3B Supplemental Data**.

Notes:

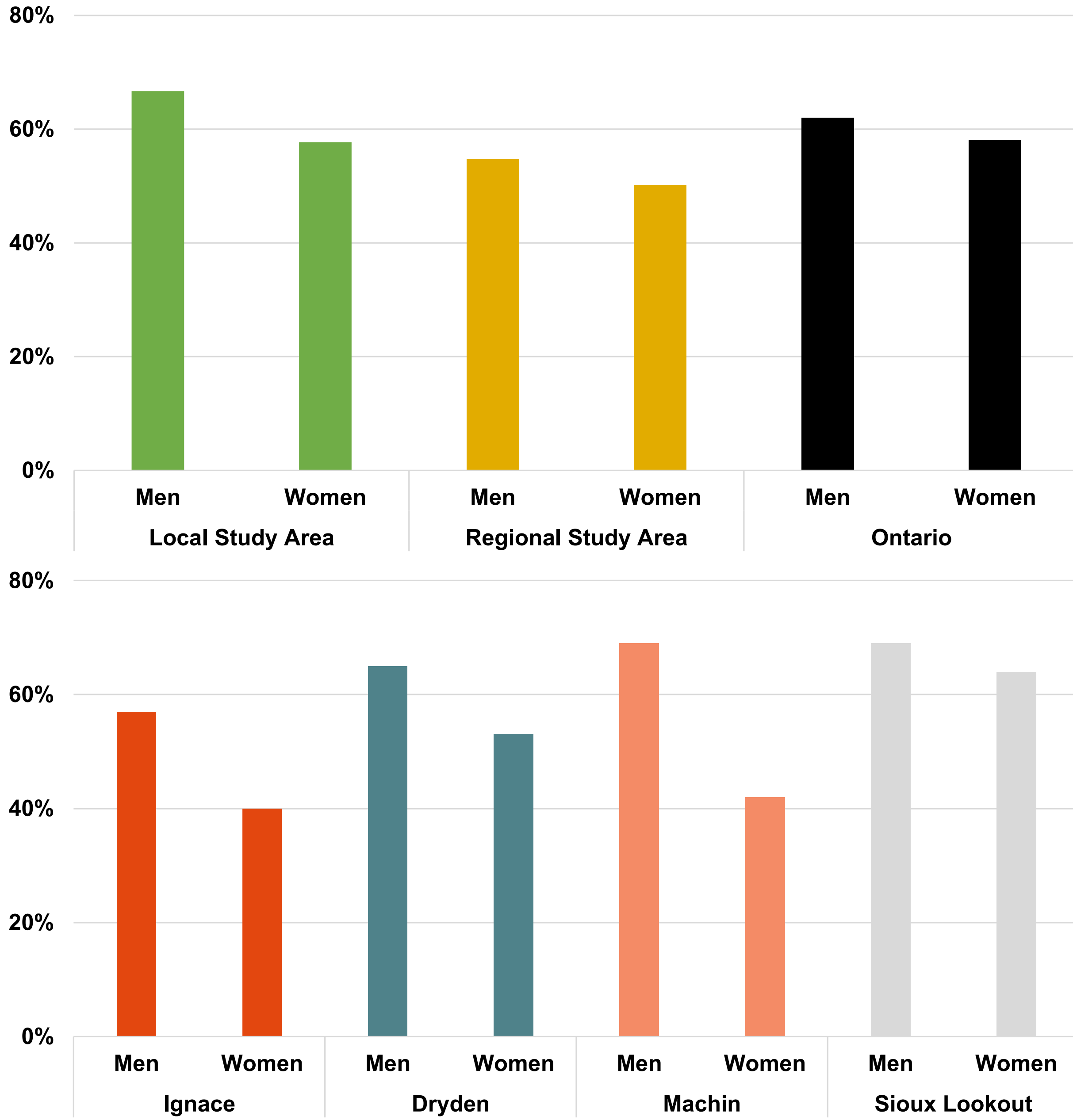
1. Data were not available for the LSB of LSB of Wabigoon, LSB of Melgund, and Dinorwic for 2021.

Participation rates are similar for Indigenous peoples and non-Indigenous peoples in the Local Study Area and Ontario. In the Regional Study Area, participation rates for Indigenous peoples are lower than non-Indigenous peoples and lower than Indigenous peoples in the Local Study Area and Ontario. Key observations on participation rates for Indigenous and non-Indigenous peoples in the Local Study Area communities for 2021 are as follows:

- In Ignace, the participation rate for Indigenous peoples (50.0%) is similar to the participation rates for non-Indigenous peoples (51.5%).
- In Dryden, the participation rate for Indigenous peoples (58.0%) is similar to the participation rate for non-Indigenous peoples (57.9%).
- In Machin, the participation rate for Indigenous peoples (57.8%) is higher than non-Indigenous peoples (48.0%). Machin is the only community in the Local Study Area where Indigenous peoples have a higher participation rate than non-Indigenous peoples.
- Sioux Lookout has the highest participation rates for Indigenous peoples (65.3%) and non-Indigenous peoples (73.0%) among all Local Study Area communities, the Regional Study Area, and Ontario.

Figure 3.2-8 shows the participation rate for Indigenous peoples disaggregated by gender for the Local Study Area, Regional Study Area, Ontario, and Local Study Area communities, in 2021.

Figure 3.2-8: Participation Rate by Indigenous Identity and Gender in the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2023f. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Wabigoon, LSB of Melgund and Dinorwic for 2021.

Participation rates are similar for Indigenous men and women in the Local Study Area and Ontario but are slightly lower in the Regional Study Area. Among the Local Study Area, Regional Study Area, and Ontario, participation rates for Indigenous men are highest in the Local Study Area (66.7%) and participation rates for Indigenous women are highest in the Local Study Area (57.7%) and Ontario (58.0%). Notable observations of participation rates for Indigenous men and women in the Local Study Area communities in 2021 include:

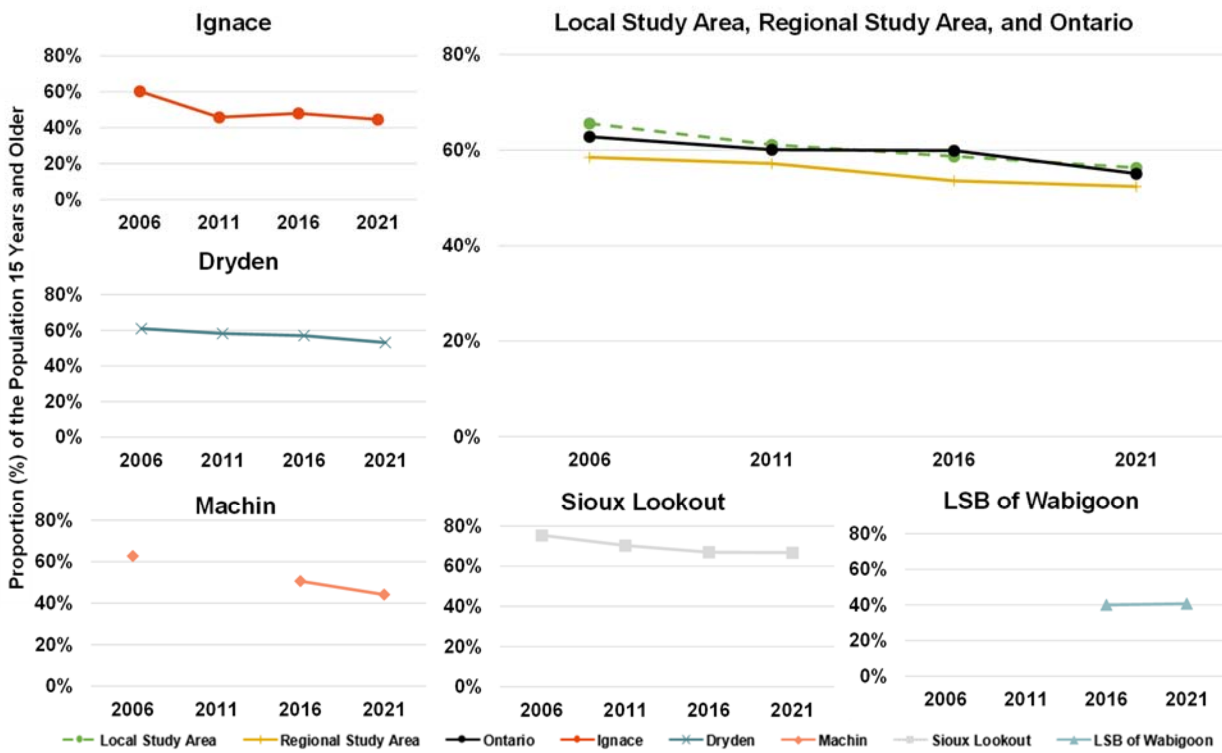
- Indigenous women in each community had lower participation rates than Indigenous men. Indigenous women have lower participation rates compared to Indigenous men, ranging from a 27 percentage point difference in Machin to a 5 percentage point difference in Sioux Lookout.
- Indigenous men have the highest participation rate in Sioux Lookout and Machin (approximately 69.0%) amongst the Local Study Area communities. Indigenous women have the highest participation rate in Sioux Lookout (64.0%) amongst the Local Study Area communities.
- Indigenous men have the lowest participation rate in Ignace (57.0%) amongst the Local Study Area communities and Indigenous women have the lowest participation rate in Ignace (40.0%) amongst the Local Study Area communities.

Participation rates for Indigenous peoples are generally lower than non-Indigenous peoples (See **Figure 3.2-7**). Further, participation rates for Indigenous women are materially lower than Indigenous men in the Local Study Area. Participation rates are generally lower for older communities with a large portion of seniors but can also be due to the household role of an individual. Other factors can include a lack of opportunities due to lower education levels and barriers to employment (See **Section 2.3.2 and Section 3.2.3.4**). In Machin, the materially lower participation rate for Indigenous women compared to Indigenous men could be attributed to the large proportion of Indigenous women who have not obtained a high school diploma or degree (See **Section 3.3.2.3.2**).

3.2.2.3 Employment Rate

Figure 3.2-9 shows the 2021 employment rates in the Local and Regional Study Areas and for each community in the Local Study Area.

Figure 3.2-9: Employment Rates in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for all years for the LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

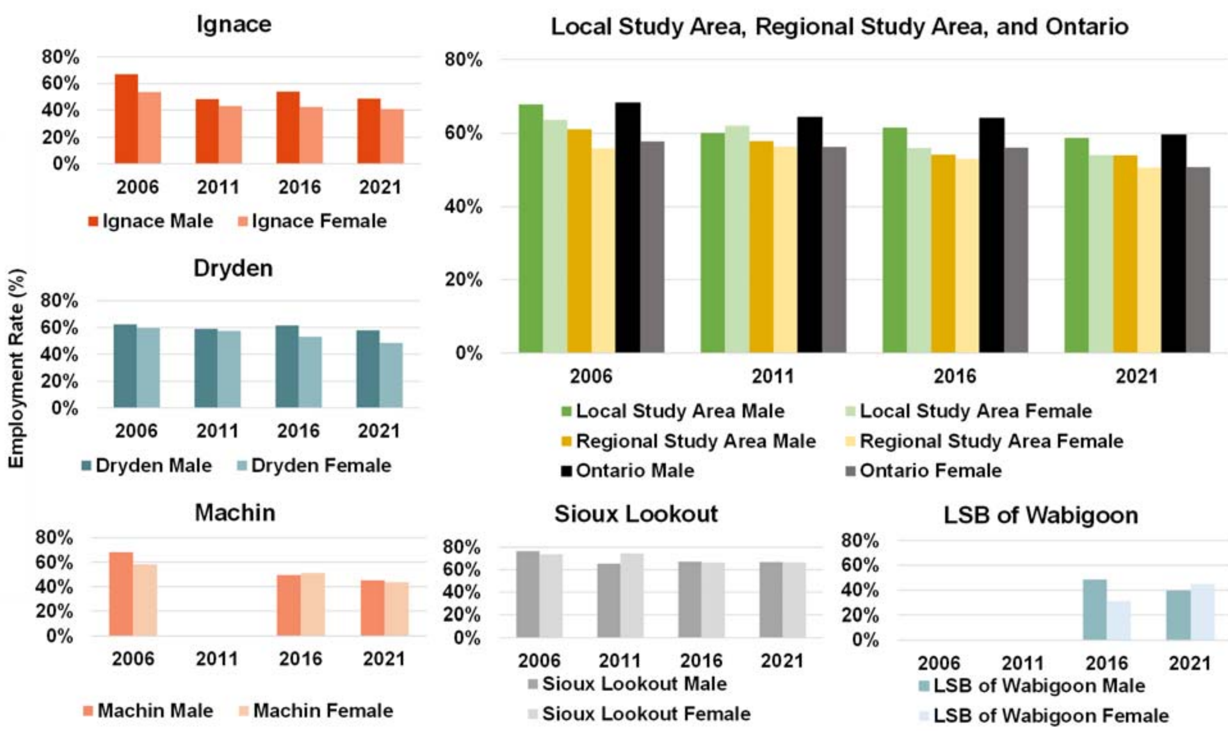
Employment rates have decreased in the Local Study Area, Regional Study Area, and Ontario since 2006. Employment rates decreased in all Local Study Area communities from 2006 to 2021, with the most notable declines in Ignace (from 60.3% to 44.6%) and Machin (from 62.7% to 44.1%). Other trends in employment rates in the Local Study Area include:

- Sioux Lookout had the highest employment rate among Local Study Area communities over this period (75.3% in 2006 to 66.7% in 2021).
- The employment rate for the LSB of Wabigoon has been around 40% since 2016.
- The employment rate in Dryden has shown a similar trend to the employment rates in the Regional Study Area and Ontario decreasing slightly from around 60% in 2006 to 55% by 2021.

3.2.2.3.1 Employment by Sex

Figure 3.2-10 shows employment rates by sex for the Local Study Area, Regional Study Area, and Ontario for 2006 to 2021.

Figure 3.2-10: Employment Rate by Sex or Gender in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for all years for the LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

Employment rates decreased from 2006 to 2021 for both men and women among Local Study Area communities. Similar to participation rates, employment rates for men have generally been higher than employment rates for women, but the gap is marginal and appears to be converging over time. Notable trends in employment rates for men and women are as follows:

- In 2006, among the Local Study Area, Regional Study Area, and Ontario, employment rates were highest for men in Ontario (68.1%), and women in the Local Study Area (63.5%). By 2021, employment rates remained highest for men in Ontario (59.6%) and women in the Local Study Area (54.0%).

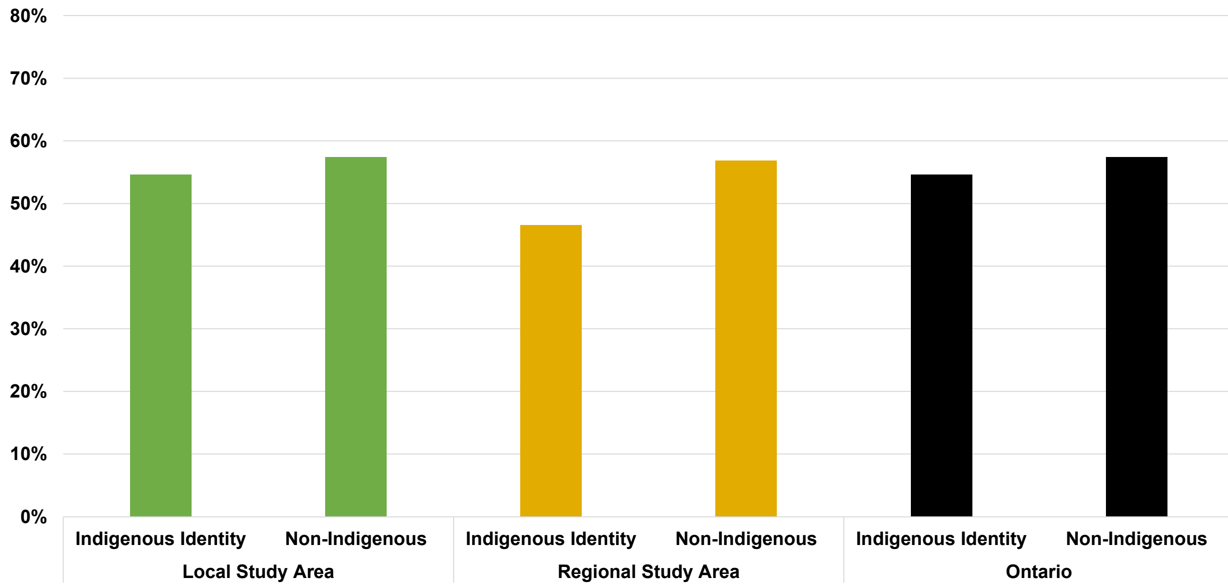
- The Regional Study Area had the lowest employment rates for both men and women from 2006 to 2021 compared to the Local Study Area and Ontario.
- In Ignace, the employment rate for women decreased from 53.5% in 2006 to 40.8% in 2021. Similarly, the employment rate for men decreased from 66.9% in 2006 to 48.5% in 2021. From 2006 to 2011 the employment rate declined materially for men from 66.9% to 48.2%.
- Employment rates have been highest in Sioux Lookout compared to other Local Study Area communities since 2006. In 2006, the employment rate was 76.6% for men and 73.8% for women; however decreased by 2021 to 66.9% and 66.5% for women by 2021. Between 2006 and 2011, the employment rate for women in Sioux Lookout increased from 73.8% in 2006 to 74.4% in 2011, while the employment rate for men decreased from 76.6% to 65.4%. This was one of the few instances where a Local Study Area community had a higher employment rate for women compared to men.
- In 2021, the employment rate for women in the LSB of Wabigoon was 45.0% compared to 39.2% for men. The employment rate for men in the LSB of Wabigoon decreased materially from 48.4% in 2016 to 39.2% in 2021 and the employment rate for women increased materially from 31.0% in 2016 to 45.0% in 2021.
- Employment rates for both men and women have declined materially in Ignace and Machin since 2006. In 2021, employment rates are below 50% for both men and women in each of Ignace, Machin, and the LSB of Wabigoon. Dryden women also had an employment rate below 50% in 2021, which is near the employment rate for women in Ontario.

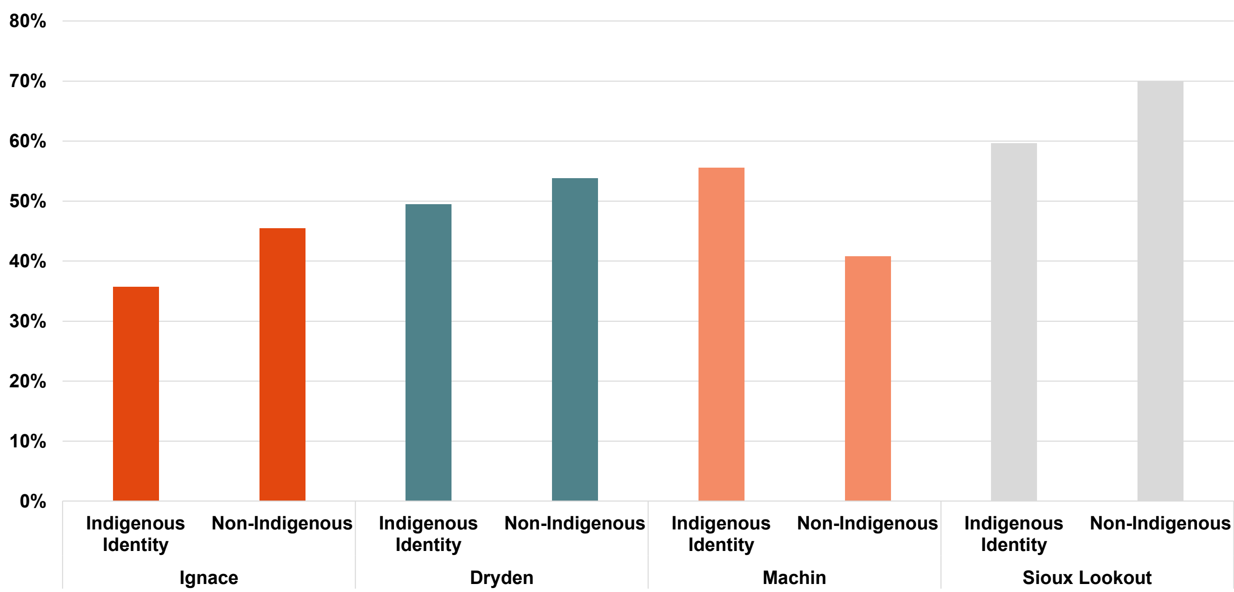
The material decreases in the employment rate for Ignace men in 2011 was due to a decrease in the population, an increase in the number of unemployed people (see **Section 3.2.2.4.1**), and a slight increase in the number of people not in the labour force (see **Section 3.2.2.1**). The reason for this sudden drop in employment has been linked to the downturn in forestry operations between 2005 and 2015 (NWO Community and Baseline Studies Key Person Interview Program 2022). See **Section 3.4.4** for more information on the forestry sector. Across all Local Study Area communities, the Regional Study Area, and Ontario there was a slight decrease in the employment rate in 2021. This is likely due to the COVID-19 pandemic and the resulting transition to working remotely and social distancing in workplaces (Statistics Canada 2023a; NWO Community and Baseline Studies Key Person Interview Program 2022). Industries which could not make the transition to working remotely or had to reduce their workforce are likely the drivers to the lower employment rate in 2021 compared to 2016.

3.2.2.3.2 Indigenous Peoples and Employment

Figure 3.2-11 shows the employment rate for the Indigenous population and the non-Indigenous population for the Local Study Area, Regional Study Area, Ontario, and Local Study Area communities, in 2021. Limitations associated with disaggregated Indigenous identity data are provided in **Section 3.1.2.1.1**.

Figure 3.2-11: Employment Rate by Indigenous and Non-Indigenous Identity in the Local Study Area, Regional Study Area, and Ontario, 2021[1]





Source: Statistics Canada 2023f. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Melgund, LSB of LSB of Wabigoon, and Dinorwic for 2021.

The employment rate for Indigenous peoples is lower than the rate for non-Indigenous peoples in the Local Study Area, Regional Study Area, Ontario, Ignace, Dryden, and Sioux Lookout. The employment rate in Machin was higher for Indigenous peoples than for non-Indigenous peoples. Key observations of employment for Indigenous and non-Indigenous peoples in the Local Study Area, Regional Study Area, and Ontario are as follows:

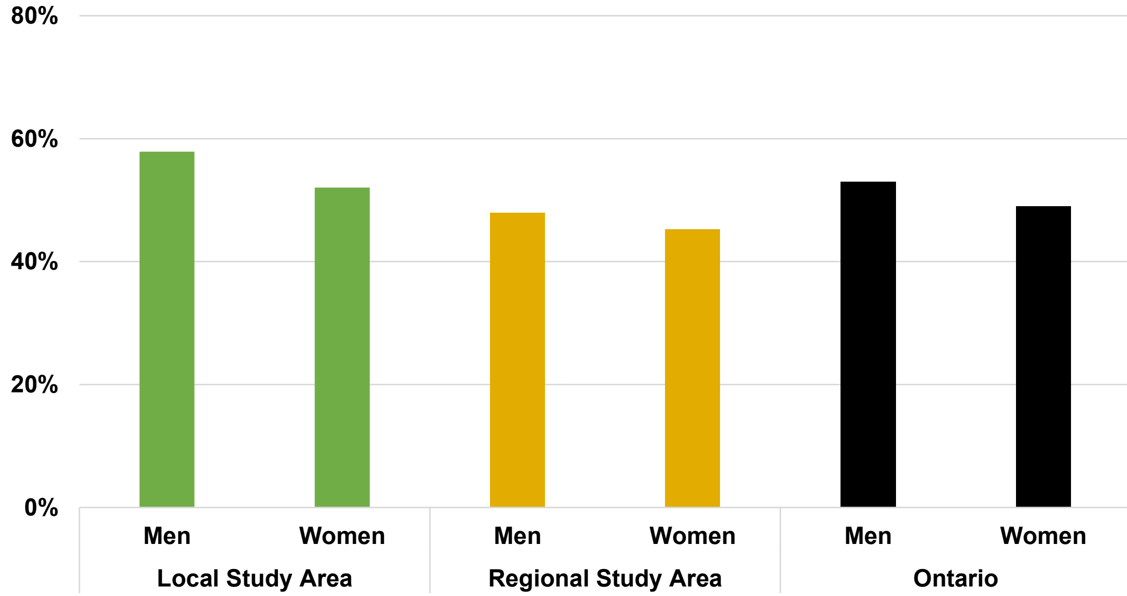
- The employment rate for Indigenous peoples in the Local Study Area (54.7%) is similar to the employment rate for Indigenous peoples in Ontario (54.7%) but higher than the employment rate for Indigenous peoples in the Regional Study Area (46.6%).
- The employment rate for non-Indigenous peoples is approximately 57.5% for the Local Study Area, Regional Study Area, and Ontario. The employment rate for non-Indigenous peoples in the Regional Study Area is materially higher than the employment rate for Indigenous peoples in the Regional Study Area.

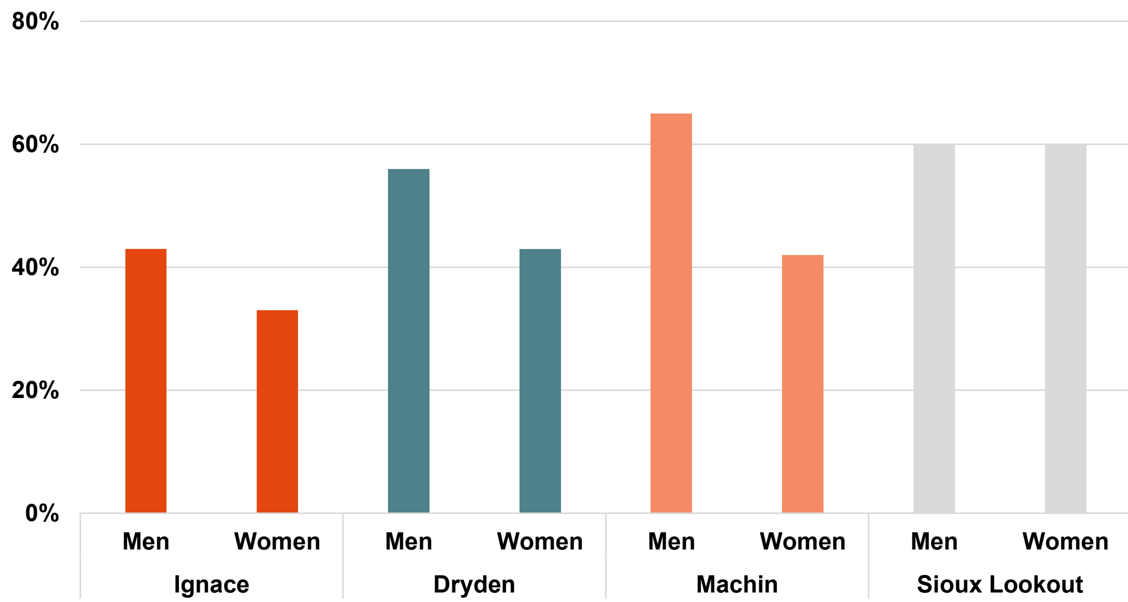
Key observations on employment rates among Local Study Area communities include:

- The employment rate for Indigenous peoples in Ignace (35.7%) is materially lower than the employment rate for Indigenous peoples in the Local Study Area as a whole (54.7%).
- The employment rate for Indigenous peoples is highest in Sioux Lookout (59.6%) among the Local Study Area communities.
- The employment rate for non-Indigenous peoples is highest in Sioux Lookout (70.0%) and lowest in Ignace (45.5%) and Machin (40.8%).

Figure 3.2-12 shows the employment rate for Indigenous peoples disaggregated by gender for the Local Study Area, Regional Study Area, Ontario, and the Local Study Area communities, in 2021.

Figure 3.2-12: Employment Rate for Indigenous Peoples by Gender in the Local Study Area, Regional Study Area, and Ontario, 2021[1]





Source: Statistics Canada 2023f. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Melgund, LSB of LSB of Wabigoon, and Dinorwic for 2021.

Indigenous women in most communities had lower employment rates than Indigenous men, excluding Sioux Lookout where it was similar. The employment rates for Indigenous men and women in the Local Study Area (57.9% for men and 52.1% for women) are higher than the employment rates for Indigenous men and women in the Regional Study Area (47.9% for men and 45.3% for women) and Ontario (53.0% for men and 49.0% for women).

Notable highlights of the employment rates for Indigenous men and women among Local Study Area communities include:

- The employment rate for Indigenous men was highest in Machin (65.0%) and lowest in Ignace (43.0%). The employment rate for Indigenous women was highest in Sioux Lookout (60.0%) and lowest in Ignace (33.0%).
- Sioux Lookout was the only Local Study Area communities where Indigenous men (60.0%) and women (60.0%) had similar employment rates.
- In Ignace (43.0% men and 33.0% women), Dryden (56.0% men and 43.0% women), and Machin (65.0% men and 42.0% women) there were material differences in the employment rates between Indigenous men and women.

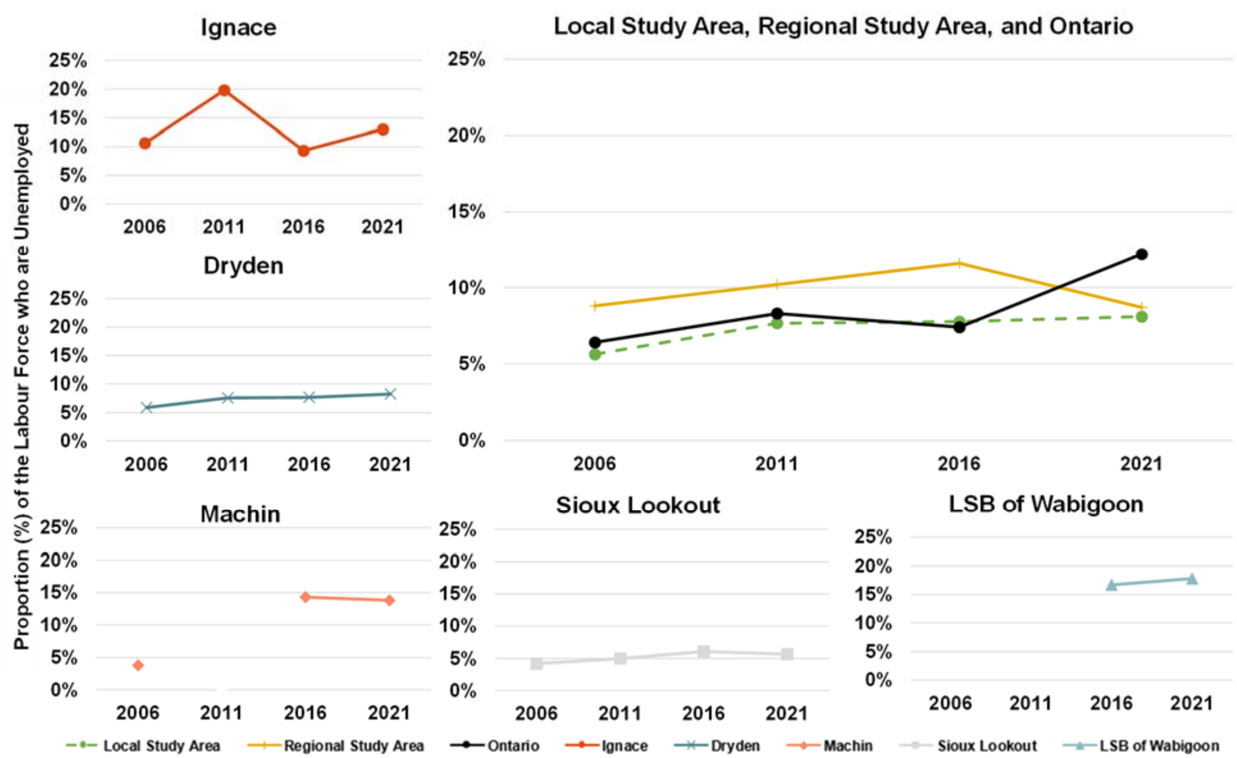
The low employment rate for Indigenous women in Ignace and Machin, which is consistent with a higher unemployment rate (**Section 3.2.2.4.3**), may be due to the large proportion (approximately 60%) of the working age population of Indigenous women not in the labour force. The large number of Indigenous women who are not employed could be attributed to a high proportion without a high school diploma or degree (See **Section 3.3.2.5**). Other reasons for the low employment rate among Indigenous women may related to barriers in obtaining employment or the inability to find a job which meets the lowest wage a person is willing to accept at a new position (see **Section 3.2.3.1**).

3.2.2.4 Unemployment Rate

Unemployment can be influenced by a number of factors including access to childcare, the requirement of personal transportation to commute to work, lack of education, cultural influences, mental health and substance dependencies, social anxiety from extended periods of unemployment (Pohlan 2019), seasonal employment variations, and an individual's lowest wage they are willing to accept (NWO Community and Baseline Studies Key Person Interview Program 2022; NWO Baseline Studies Key Person Interview Program 2022-2023). Unemployment rate refers to the number of people unemployed, expressed as a percentage of the labour force, in the specified reference week (Statistics Canada 2022a).

Figure 3.2-13 shows the unemployment rate for the Local Study Area, Regional Study Area, Ontario, and the Local Study Area communities from 2006 to 2021. Given the small population and labour force in some Local Study Area communities, unemployment rates can be subject to large swings due to random rounding and, therefore, changes should be interpreted with caution.

Figure 3.2-13: Unemployment Rates in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

The unemployment rate has increased in each region, excluding the Regional Study Area, since 2006. The unemployment rate in the Regional Study Area increased from 8.8% in 2006 to 11.6% in 2016 before decreasing to 8.7% by 2021. Notable observations of the unemployment rate for the Local Study Area, Regional Study Area, and Ontario include:

- From 2006 to 2016 the Local Study Area and Ontario had similar unemployment rates, which were lower than the Regional Study Area.
- The Regional Study Area had the highest unemployment rate from 2006 to 2016 amongst the Regional Study Area, Local Study Area, and Ontario.
- In 2021, Ontario had the highest unemployment rate (12.2%), and the Local Study Area had the lowest unemployment rate (8.1%) amongst the Local Study Area, Regional Study Area, and Ontario. The reason behind Ontario having the highest unemployment rate is likely due

to the COVID-19 pandemic and the inability of a large proportion of businesses to transition working remotely or maintain social distancing in the workplace (Statistics Canada 2023a; NWO Baseline Studies Key Person Interview Program 2022-2023).

The trends in the unemployment rate for Local Study Area communities are as follows:

- In 2006, amongst the Local Study Area communities, Ignace had the highest unemployment rate (10.6%) and Machin had the lowest unemployment rate (3.8%). By 2021, the LSB of Wabigoon had the highest unemployment rate (17.8%) and Sioux Lookout had the lowest unemployment rate (5.7%) among Local Study Area communities.
- The unemployment rate in Ignace has remained higher than in the Local Study Area. In 2011, the unemployment rate in Ignace increased materially to 19.8%, which was the highest unemployment rate among Local Study Area communities from 2006 to 2021. The unemployment rate has increased in each Local Study Area community since 2006.
- Since 2006, unemployment rates have remained lower in Sioux Lookout (4.2% in 2006 to 5.7% in 2021) and Dryden (5.9% in 2006 to 8.3% in 2021) compared to the other Local Study Area communities. Sioux Lookout has had the lowest unemployment rate, excluding 2006 where it had the second lowest unemployment rate (4.2%).
- In 2006, Machin had the lowest unemployment rate among Local Study Area communities but had the second highest unemployment rate in 2016 (14.3%) and 2021 (13.8%).
- The LSB of Wabigoon had the highest unemployment rate in both 2016 (16.7%) and 2021 (17.8%).

There was a material increase in the unemployment rate in Ignace in 2011, though that declined in 2021. A downturn in forestry operations between 2006 and 2008 may have contributed to the higher unemployment rate in 2011 (NWO Community and Baseline Studies Key Person Interview Program 2022). The large increase to unemployment (and decline in labour force participants) from 2006 to 2011 is partially attributed to downturns in the forestry industry from 2000 to 2008. The Bowater Mill in Ignace closed in 2006. Between 2005 and 2008, Domtar mill in Dryden changed its operating scope to strictly pulp operations and shut down two paper machines (Pulp and Paper Canada 2006; Northern Ontario Business 2008; NWO Community and Baseline Studies Key Person Interview Program 2022). The Bowater Mill in Ignace later changed its name to Resolute Forest Products in 2011 before reopening in 2015 (Resolute Forest Products 2022). This is sometimes referred to as cyclical unemployment, which is the change in the number of unemployed people over a business cycle, and prominent in industries which are limited by government regulations and subject to the change in prices of primary resources (e.g., gold, oil) and fluctuating exchange rates (Johnson and Kneebone 1993).

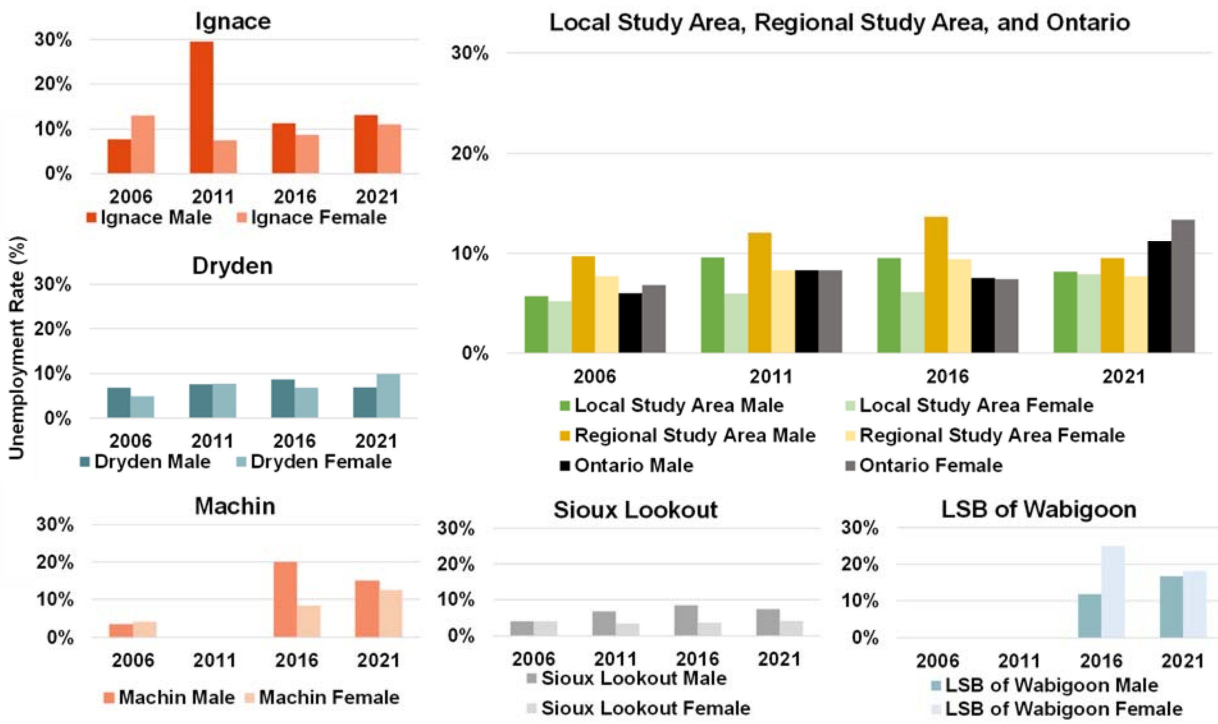
Although unemployment rates are above 10% in most Local Study Area communities in 2021, there is an abundance of vacant positions, particularly in the skilled trades and entry-level positions across all sectors (NWO Community and Baseline Studies Key Person Interview Program 2022; NWO Baseline Studies Key Person Interview Program 2022-2023). The higher levels of unemployment in 2021 are likely the result of the COVID-19 pandemic. Unemployment associated with the time required for job searching and matching is referred to frictional unemployment. Some of the current unemployment is likely related to job matching as businesses were returning to pre-covid operations still in 2021 (Osberg and Lin 2000). The current level of unemployment may also be attributed to structural unemployment (Osberg and Lin 2000), which occurs when people are unwilling to accept a job at the provided wage or there are no available jobs in their desired occupation (NWO Community and Baseline Studies Key Person Interview Program 2022).

The COVID-19 pandemic also likely contributed to the increase in unemployment rate in the Local Study Area communities in 2021. Key person interview participants noted the current labour shortage began in 2020 after the onset of the pandemic (NWO Community and Baseline Studies Key Person Interview Program 2022; NWO Baseline Studies Key Person Interview Program 2022-2023). Some of the challenges of labour shortages in the Northwest could be attributed to challenges with labour matching (i.e., finding qualified individuals for the requirements of a vacant position) as some companies are resourcing from out of province, and in some instances from other countries, for skilled trades and labourers in the mining and forestry sectors (NWO Community and Baseline Studies Key Person Interview Program 2022). The need to procure people from out of province and out of the country is not unique to the natural resource sectors, with there being similar challenges to recruit physicians and doctors in Northwest Ontario communities (NWO Community and Baseline Studies Key Person Interview Program 2022). There are many available workers to address the challenges of resourcing for skilled tradespeople and professionals, but these people likely do not possess the required levels of education and training. Unemployment related to not having the required training and educational qualifications is typical of structural unemployment (Osberg and Lin 2000). It was noted in key person interviews that some employers in the Local Study Area offer on-the-job training, but the jobs remain vacant which is also typical of structural unemployment (NWO Community and Baseline Studies Key Person Interview Program 2022; NWO Baseline Studies Key Person Interview Program 2022-2023).

3.2.2.4.1 Unemployment by Sex

Figure 3.2-14 shows the change in unemployment rates for males and females in the Local Study Area, Regional Study Area, Ontario, and Local Study Area communities, from 2006 to 2021.

Figure 3.2-14: Unemployment Rate by Sex or Gender in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

The unemployment rates for males were higher than the unemployment rates for females from 2006 to 2021 for the Local and Regional Study Areas, but, in Ontario, females had higher unemployment rates in 2006 and 2021. Notable trends in the unemployment rates for males and females in the Local Study Area, Regional Study Area, and Ontario are as follows:

- In 2021, the highest unemployment rate for males was 12.2% in Ontario and the lowest was 8.2% in the Local Study Area. The highest unemployment rate for females was 11.2% in Ontario and the lowest was 7.7% in the Regional Study Area.
- In the Local Study Area, the unemployment rate for males increased from 5.7% in 2006 to 8.2% in 2021 and for females increased from 5.2% in 2006 to 7.9% in 2021. The unemployment rate for males increased to 9.6% in 2011 and stagnant until decreasing to 8.2% in 2021. The unemployment rate for females increased slightly to 6.0% in 2011 and was stagnant until increasing to 7.9% by 2021.

- In the Regional Study Area, the unemployment rate for males increased from 9.7% in 2006 to 13.7% in 2016 before decreasing to 9.5% in 2021. Similarly, the unemployment rate for females increased from 7.7% in 2006 to 9.4% in 2016 before decreasing back to 7.7% by 2021.

Among the Local Study Area communities, males have generally had higher unemployment rates than women, excluding the LSB of Wabigoon. Other notable trends in unemployment rates among Local Study Area communities are as follows:

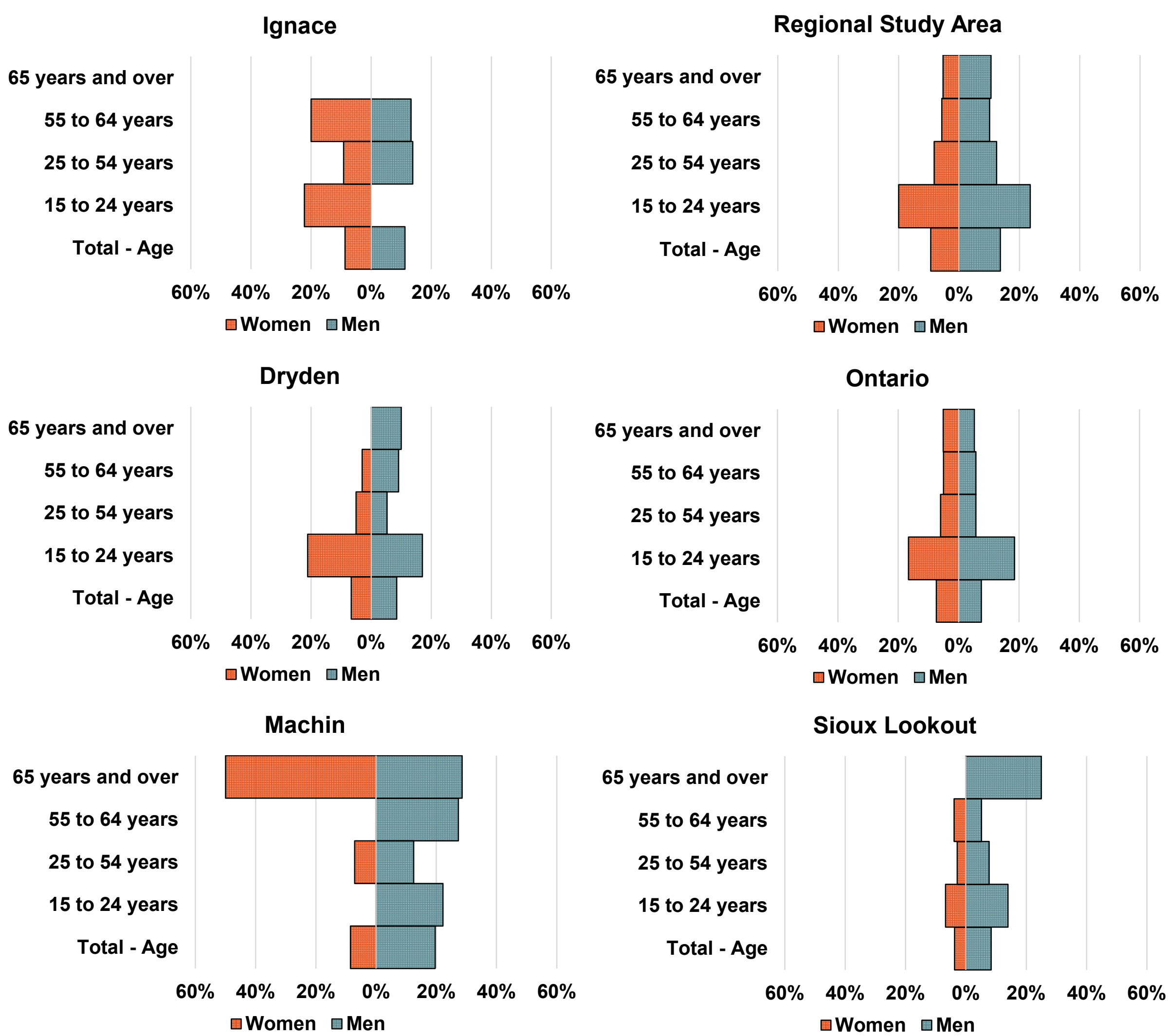
- In 2021, among Local Study Area communities, the highest unemployment rate for males was 16.7% in the LSB of Wabigoon and the lowest was 7.3% in Sioux Lookout. The highest unemployment rate for females was 18.2% in the LSB of Wabigoon and the lowest was 5.7% in Sioux Lookout.
- In Ignace, the unemployment rate for males increased from 7.7% in 2006 to 29.5% in 2011 before decreasing to 11.3% in 2016. Among the Local Study Area communities, the unemployment rate for Ignace males in 2011 (29.5%), was the highest for males or females over the entire timeframe. The unemployment rate for females decreased from 12.9% in 2006 to 7.5% in 2011 and gradually increased to 11.1% by 2021.
- In Dryden and Sioux Lookout, unemployment rates for both males and females have generally been lower than other Local Study Area communities.
- In Machin, unemployment rates for males were quite low in 2006 at 3.4% but increased to 20.0% in 2016 before decreasing to 14.9% in 2021. For females, the unemployment rate steadily increased from 4.2% in 2006 to 12.5% in 2021.
- In the LSB of Wabigoon, the unemployment rate for females was the highest among Local Study Area communities in both 2016 (25.0%) and 2021 (18.2%). In 2016, the unemployment rate for males was 11.8%, which was similar to males in Ignace and Machin, but increased to 16.7% in 2021.

Increases in unemployment in Machin during 2016 coincided with the closing of two popular local restaurants (See **Section 3.4.2**). The first instance was a restaurant and store which burned down and was commonly referred to as the “million-dollar corner” given how popular it was. The other restaurant closed prior to the pandemic (NWO Community and Baseline Studies Key Person Interview Program 2022). Since then, employment in these industries has decreased materially (see **Section 3.4.3**).

3.2.2.4.2 Age and Unemployment

Figure 3.2-15 shows the 2016 unemployment rates disaggregated into age cohorts for the Regional Study Area, Ontario, and Local Study Area communities. The unemployment rates are generally higher for the 15 to 24 age cohort compared to other age cohorts.

Figure 3.2-15: Unemployment Rate by Age Cohorts and Sex in the Local Study Area Communities, Regional Study Area, Ontario, 2016[1]



Source: Statistics Canada 2017. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Wabigoon, LSB of Melgund, and Dinorwic for 2016.

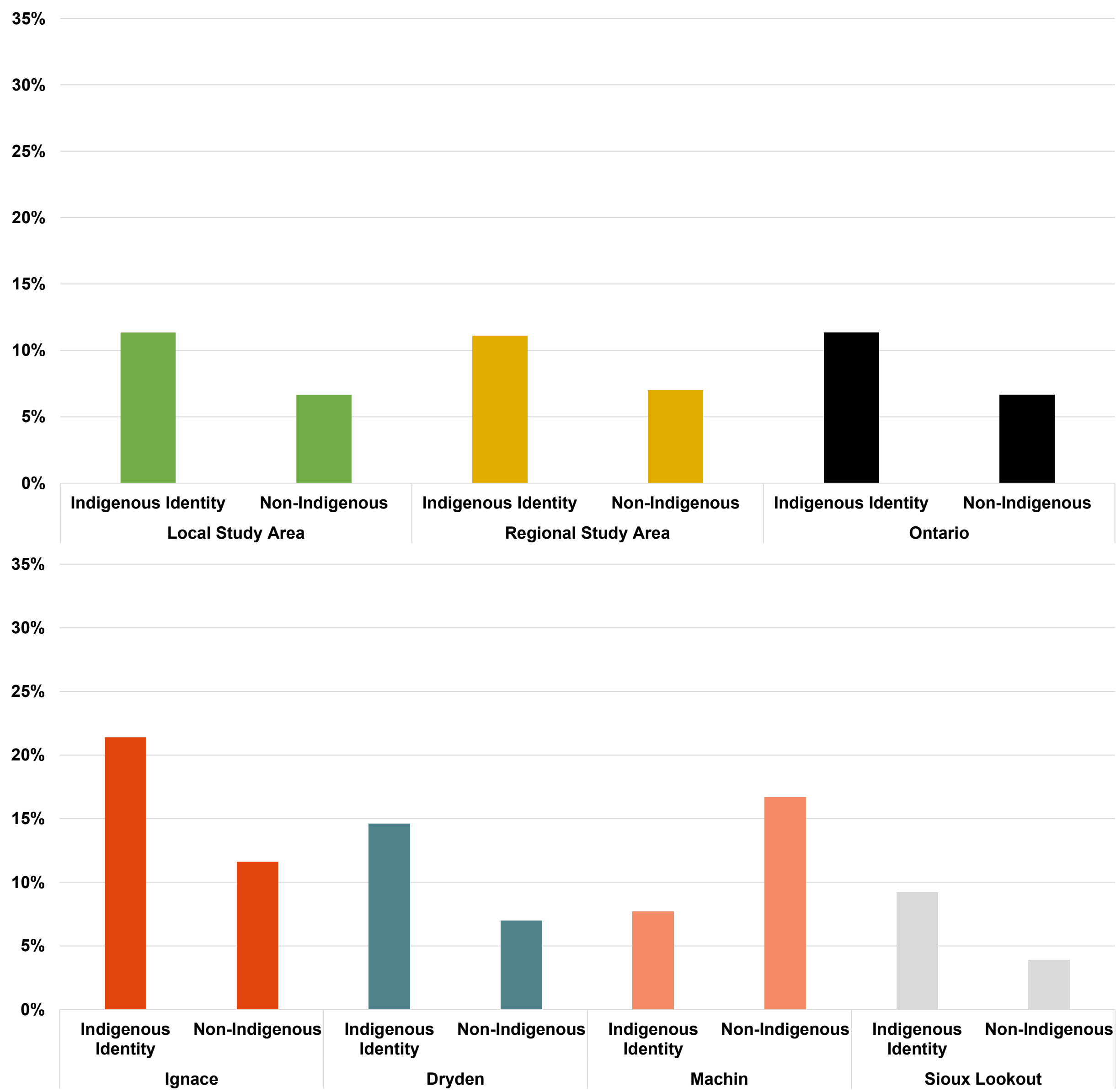
In the Regional Study Area and Ontario, unemployment rates are highest for the 15 to 24 age cohort and generally similar for the other age cohorts. Notable unemployment rates by age cohorts for the Local Study Area communities are as follows:

- Unemployment rates are generally higher in Ignace and Machin across all age cohorts, excluding the 15 to 24 years old cohort where Dryden has the highest unemployment rate for both males and females.
- For the 65 years and older age cohort, Sioux Lookout males and Machin males and females have materially higher unemployment rates compared to the other communities.
- For the 65 years and older age cohort, Ignace males and females have a 0% unemployment. This could reflect random rounding on small sample sizes or because people are either employed or retired and therefore not in the labour force.

3.2.2.4.3 Indigenous Peoples and Unemployment

Figure 3.2-16 shows the unemployment rate for Indigenous peoples and non-Indigenous peoples in the Local Study Area, Regional Study Area, and Ontario, in 2021. Limitations associated with disaggregated Indigenous identity data are provided in **Section 3.1.2.1.1**.

Figure 3.2-16: Unemployment Rate by Indigenous and Non-Indigenous Identity in the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2023f. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Wabigoon, LSB of Melgund and Dinorwic for 2021.

The unemployment rates for Indigenous peoples are higher than for non-Indigenous peoples in all areas except Machin. Among the Local and Regional Study Areas and Ontario, the gap in unemployment rates between Indigenous peoples and non-Indigenous peoples ranges from 4.1 percentage points in the Regional Study Area to 4.7 percentage points in the Local Study Area and Ontario. Notable differences between the unemployment rates for Indigenous peoples and non-Indigenous peoples among the Local Study Area communities include:[12]

- The unemployment rate for Indigenous peoples was highest in Ignace (21.4%) and lowest in Machin (7.7%). The unemployment rate for non-Indigenous peoples was highest in Machin (16.7%) and lowest in Sioux Lookout (3.9%).
- The gap between unemployment rates for Indigenous peoples and non-Indigenous peoples was highest in Ignace at approximately 9.8 percentage points and lowest in Sioux Lookout at approximately 5.3 percentage points.
- In Dryden, unemployment rates are higher for Indigenous peoples (14.6%) compared to non-Indigenous peoples (7.0%). However, participation rates in Dryden are similar for Indigenous peoples (58.0%) and non-Indigenous peoples (57.9%). Together these indicate that, proportionally, more of the Indigenous population 15 years and older was in the labour force, but also unemployed. More information on participation rates and for those in the labour force for Indigenous peoples is provided in **Section 3.2.2.2.3** and **Appendix 3B Supplemental Data**.

Employment is a social determinant of health (See **Section 4.2**) as it has a causal relationship to an individual's income. Financial insecurity can result in negative impacts on mental health, nutrition, and well-being (Social Determinants of Health 2017). Lower high school completion and postsecondary attainment rates (see **Section 3.3.2**) may contribute to the unemployment rates of Indigenous peoples in the Local and Regional Study Areas. In the Local Study Area, a higher proportion of the Indigenous population have not obtained a high school certificate or equivalent (34%) compared to the non-Indigenous population (16%) (see **Section 3.3.2.5**). Key person interview participants noted that Local Study Area residents who have not obtained a high school certificate or equivalent face challenges in obtaining employment (NWO Baseline Studies Key Person Interview Program 2022-2023).

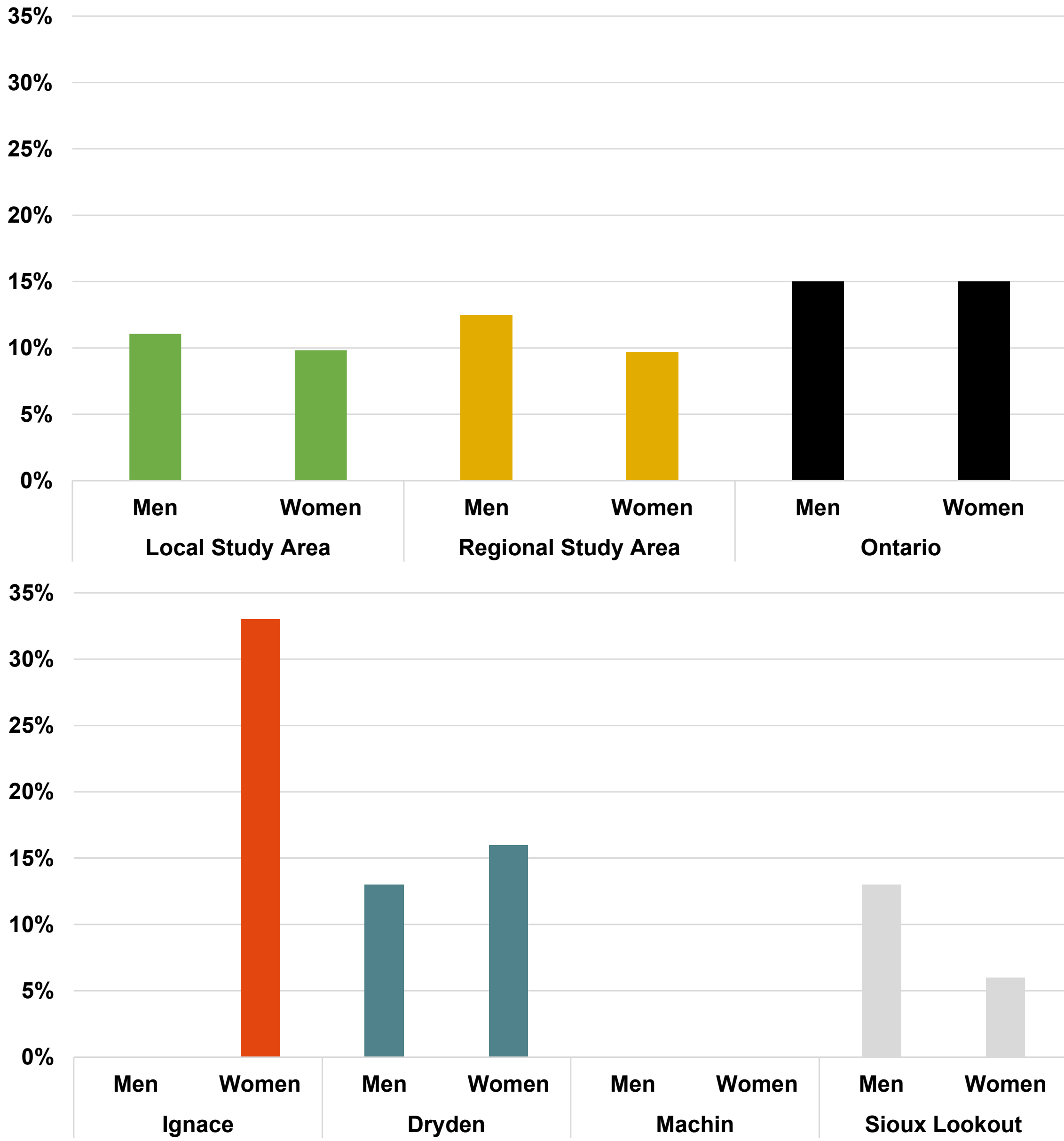
Indigenous peoples with higher levels of education generally have higher incomes and lower unemployment rates (Bougie et al. 2013). There are also issues with biased recruitment and selection practices for Indigenous peoples and systemic barriers such as racism, discrimination, and negative stereotypes that can be discouraging for Indigenous peoples to accept jobs at certain organizations (Social Determinants of Health 2017). Colonialism has also had lasting effects which can be linked to lower levels of education and literacy. Although local employment service offices (see **Section 3.2.3.1**) offer services to assist individuals trying to improve their

[12] Unemployment rates for Indigenous peoples in smaller communities should be interpreted with caution due to random rounding. Random rounding for a small population group can materially affect data. For example, Machin had an unemployment rate of 9.5% (10 Indigenous peoples) but that would change materially if the actual observed amount was closer to 5 or 20 people.

basic life skills or seek training, other barriers an individual may face can affect their willingness to seek these services.

Figure 3.2-17 shows the unemployment rate for Indigenous peoples disaggregated by gender for the Local Study Area, Regional Study Area, Ontario, and Local Study Area communities, in 2021. The Indigenous population and the number of unemployed men and women is small in Ignace and Machin. Data are not discussed further for these two communities due to the small population sizes and the influence of random rounding on the data.

Figure 3.2-17: Unemployment Rate by Indigenous Identity and Gender in the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2023f. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of LSB of Wabigoon, LSB of Melgund, and Dinorwic for 2021.

The unemployment rate for Indigenous men is highest in Ontario (15.0%), followed by the Regional Study Area (12.5%) and the Local Study Area (11.1%). The unemployment rate for Indigenous women is highest in Ontario (15.0%), while rates for the Local Study Area (9.8%) and the Regional Study Area (9.7%) are similar.

The unemployment rate for Indigenous men is lower than for women in Dryden (13.0% for men and 16.0% for women) and the unemployment rate for Indigenous men is higher than for women in Sioux Lookout (13.0% for men and 6.0% for women).

3.2.3 Employment Trends and Wage Distribution

3.2.3.1 Employment and Wage Trends

Table 3.2-2 shows the average annual number of jobs by industry for the Local Study Area and the Regional Study Area for 2011, 2016, and 2020. Average annual jobs are inclusive of both full- and part-time jobs and are counted equally. Jobs do not include self-employed workers. By treating full- and part-time jobs equally this could result in a shift in jobs if multiple part-time jobs replace a full-time job. The selected industries are consistent with those discussed throughout **Section 3.4.2**. The industries presented are ones which have historically provided a large proportion of jobs in the Local Study Area.

Table 3.2-2: Average Annual Jobs by Industry in the Local Study Area and Regional Study Area, 2011, 2016, and 2020[1]

	Local Study Area			Regional Study Area		
	2011	2016	2020	2011	2016	2020
Agriculture, forestry, fishing, and hunting	201	339	239	371	587	401
Mining, quarrying, and oil and gas extraction	<10	81	80	1,363	1,976	2,236
Construction	299	317	333	1,175	1,284	1,345
Manufacturing	510	460	337	846	922	826
Retail trade	1,112	1,314	1,324	2,741	3,076	2,954
Transportation and warehousing	513	804	716	923	1,340	1,169
Educational services	845	885	1,034	1,944	2,744	2,938
Health care and social assistance	1,879	2,073	2,420	4,573	5,269	5,876
Accommodation and food services	892	1,150	798	1,989	2,497	1,631
Public administration	1,019	1,114	1,270	4,350	6,147	7,692
Industry Total	**8,386**	**9,818**	**9,694**	**23,499**	**29,285**	**30,097**

Source: Estimates prepared by Lightcast 2022.3 based on, Survey of Employment, Payrolls, and Hours for 2011, 2016, and 2020, Input Output Symmetric Tables for 2011, 2016, and 2020, Census of Population for 2011 and 2016, and the Labour Force Survey: for 2011, 2016, and 2020. Lightcast 2023a. Retrieved June 12, 2023. See **Appendix 3B Supplemental Data**.

Notes:

1. Lightcast uses an input-output model with several sources to calculate the average annual number of jobs.

The five largest industries in terms of jobs in the Local Study Area were health care and social assistance, retail trade, public administration, educational services, and accommodation and food services in 2020. This is similar to the largest industries in terms of jobs in the Regional Study Area where the main difference was that mining, quarrying, and oil and gas extraction in 2020 has a higher number and proportion of jobs regionally. The number of jobs increased between 2011 and 2020 for all industries, excluding manufacturing and accommodation and food services for both the Local and Regional Study Areas. Other observations of growth in jobs include:

- The number of jobs for the mining, quarrying, and oil and gas extraction industries increased materially for the Local Study Area (less than 10 in 2011 to 80 in 2020) and the Regional Study Area (1,363 in 2011 to 2,236 in 2020) from 2011 to 2020.
- The number of jobs for the healthcare and social assistance industry increased materially for the Local Study Area (1,879 in 2011 to 2,420 in 2020) and the Regional Study Area (4,573 in

2011 to 5,876 in 2020) from 2011 to 2020. In both regions this represented about a 29% increase in jobs between 2011 and 2020. The increase in jobs in the healthcare and social assistance industry between 2016 and 2020 in the Local and Regional Study Areas are likely in response to the Covid-19 pandemic.

- The number of jobs for the educational services industry increased materially for the Local Study Area (845 in 2011 to 1,034 in 2020) and the Regional Study Area (1,944 in 2011 to 2,938 in 2020) from 2011 to 2020. In the Local Study Area, this represented a 23% increase in jobs compared to a 51% increase in jobs in the Regional Study Area.

Between 2016 and 2020 there were notable decreases in the number of jobs in the agriculture, forestry, fishing, and hunting industries and in the accommodation and food services industries for both the Local and Regional Study Area.

- In the Local Study Area, the number of jobs in the agriculture, forestry, fishing, and hunting industries decreased by 32% from 587 in 2016 to 401 in 2020. Similarly, the number of jobs in the accommodation and food services industry decreased by 31% from 1,150 in 2016 to 798 in 2020.
- In the Regional Study Area, the number of jobs in the agriculture, forestry, fishing, and hunting industries decreased by 29% from 339 in 2016 to 239 in 2020. Similarly, the number of jobs in the accommodation and food services industry decreased by 35% from 2,497 in 2016 to 1,631 in 2020.

The decrease in the number of jobs between 2016 and 2020 for the accommodations and food services and agricultural, forestry, fishing, and hunting industries is attributed to the Covid-19 pandemic where businesses were forced to reduce staff to maintain social distancing for the accommodations and food services industry and border closures and travel restrictions limited the number of people who could go to camps and outfitters. The closure of borders and travel restrictions resulted in most outfitters and camps to close operations between 2020 and 2022 (NWO Baseline Studies Key Person Interview Program 2022-2023).

Table 3.2-3 shows the average annual wages by industry for the Local Study Area for 2011, 2016, and 2020. The industries presented are ones which have historically provided a large proportion of jobs in the Local Study Area and are likely to be impacted by a large influx of people if the Project is sited in the Wabigoon Lake Ojibway Nation – Ignace area (“WLON-Ignace area”). The industries presented are ones which have historically provided a large proportion of the jobs in the Local Study Area.

Table 3.2-3: Average Annual Wages by Industry in the Local Study Area and Regional Study Area, 2011, 2016, and 2020[1]

	Local Study Area			Regional Study Area		
	2011	2016	2020	2011	2016	2020
Agriculture, forestry, fishing and hunting	$53,491	$61,582	$68,449	$43,613	$59,005	$64,533
Mining, quarrying, and oil and gas extraction	$72,802	$100,057	$109,138	$78,676	$93,541	$104,443
Construction	$41,618	$44,073	$48,078	$41,236	$42,200	$45,598
Manufacturing	$67,612	$75,146	$69,819	$61,036	$68,213	$67,726
Retail trade	$22,850	$23,887	$26,001	$22,023	$23,514	$25,777
Transportation and warehousing	$54,867	$47,330	$54,292	$49,237	$46,148	$52,322
Educational services	$46,521	$46,708	$52,232	$45,493	$46,606	$51,672
Health care and social assistance	$41,941	$44,076	$48,977	$40,496	$43,337	$48,975
Accommodation and food services	$17,722	$19,279	$22,212	$17,451	$19,503	$23,003
Public administration	$48,169	$53,295	$63,554	$41,548	$41,418	$49,270
Industry Average	**$39,965**	**$41,528**	**$47,116**	**$39,570**	**$43,060**	**$49,941**

Source: Estimates prepared by Lightcast 2022.3 based on, Survey of Employment, Payrolls, and Hours for 2011, 2016, and 2020, Input Output Symmetric Tables for 2011, 2016, and 2020, Census of Population for 2011 and 2016, and the Labour Force Survey: for 2011, 2016, and 2020. Lightcast 2023a. Retrieved June 12, 2023. See **Appendix 3B Supplemental Data**.

Notes:

1. Lightcast uses an input-output model with several sources to calculate the average annual wages.
2. Data include both full- and part-time jobs. As such, sectors which typically have a larger number of part-time jobs could skew the average annual wages downwards than if they were averages to full-time equivalents.

In the Local Study Area, the average annual wage among all industries in 2011 was about $40,000 and increased by 18% to $47,100 by 2020. In the Regional Study Area, the average annual wage among all industries in 2011 was about $39,600 and increased by 26% to about $49,900 by 2020. Notable observations among the industries in the Local Study Area include:

- Mining, quarrying, and oil and gas extraction had the highest average annual wage, which increased by 50% from $72,800 in 2011 to $109,100 in 2020. This represented the largest total and percentage wage increase among industries in the Local Study Area.
- Accommodation and food services had the lowest average wage, which increased by 25% from $17,700 in 2011 to $22,200 in 2020.
- Transportation and warehousing industry average annual wages decreased slightly from 2011 to 2020.
- Manufacturing industry average annual wages remained relatively constant from 2011 to 2020. The average wage for manufacturing increased by 3% from $67,600 in 2011 to $69,800 in 2020.
- Of the five largest industries, only retail trade and accommodation and food services average annual wages were below the average across all industries.

Notable observations among the industries in the Regional Study Area include:

- Mining, quarrying, and oil and gas extraction had the highest average annual wage, which increased by 33% from $78,700 in 2011 to $104,400 in 2020.
- Accommodation and food services had the lowest average annual wage, which increased by 32% from $17,500 in 2011 to $23,000 in 2020.
- Agriculture, forestry, fishing, and hunting industries had the largest rate of increase in the average annual wage by 48% from $43,600 in 2011 to $64,500 in 2020.
- Transportation and warehousing industry had the lowest rate of increase in the average annual wage by 6% from $49,200 in 2011 to $52,300 in 2020.
- Of the five largest industries, only educational services and mining, quarrying, and oil and gas extraction have a higher average annual wage than the average across all industries.

The average annual wage across all industries is slightly higher in the Regional Study Area compared to the Local Study Area. However, within the Local Study Area the average annual wages for the five largest industries are generally higher compared to the Regional Study Area. Some industries which have higher average annual wages have a larger concentration of men employed (see **Figure 3.4-5**). For example, men's employment in the manufacturing sector represented 87% of total employment. The large proportion of men in higher paying sectors may contribute to income disparities among men and women in the Local Study Area and Regional Study Area. More information on personal and household incomes are discussed in **Section 3.6.2.** More information on industries is discussed in **Section 3.4.2.**

3.2.3.2 Wages of Unionized Workers for the Regional Study Area

Union hiring halls help employers fulfill their needs for organized labour. They help ensure that the labour force has the skill and qualifications required by the employer. Within the Regional Study Area, there are a limited number of union hiring halls. Hiring halls representing key sectors around the Regional Study Area include:

- International Brotherhood of Electrical Workers (IBEW) – Thunder Bay/Sudbury/Winnipeg;
- United Brotherhood of Carpenters and Joiners of America (UBCJA) – Sudbury;
- Cement Masons and Plasters Union – Winnipeg; and
- United Steelworkers – Winnipeg

The ranges of posted wages for unions in Thunder Bay from 2021 to 2023 included:

- International Brotherhood of Electrical Workers (IBEW) – In 2023, electricians ranged between $31.56/hr. to $58.94/hr. for apprentices, $72.63/hr. for journeymen, and $86.23/hr. for foremen (IBEW n.d.).
- United Brotherhood of Carpenters and Joiners of America (UBCJA) – In 2021, carpenters hourly wages ranged between $18.43/hr. to $36.86/hr. for apprentices and $40.96/hr. for journeymen. Acoustic/Drywall hourly wages range between $22.53/hr. to $34.82/hr. for apprentices and $40.96/hr. for journeymen. Caulkers hourly wages range between $16.68/hr. to $28.35/hr. for apprentices and $33.35/hr. for journeymen. Resilient floor workers hourly wages range between $15.80/hr. to $35.55/hr. for apprentices and $39.50/hr. for journeymen (UBCJLA 2019).
- Cement Masons and Plasters Union – In 2021, hourly wages ranged between $22.18/hr. to $31.42/hr. for apprentices and $36.96/hr. for journeymen (CFLRA 2019).

There are no hiring halls within the Local Study Area. Youths identified that a local union to assist with job matching would help address some of the challenges they face with entering the workforce with limited working experience (Youth Workshop 2022).

Other unionized workforces in the Local Study Area and Regional Study Area include:

- Northwestern Health Unit; and
- North West Local Health Integration Network.

The ranges of wages for the Northwestern Health Unit and North West Local Health Integration Network for 2021, 2022, and 2023 are:

North West Local Health Integration Network – In 2021, waitlist planners started at $30.12 and ranged up to $33.87 after three years. For community care coordinators, wages started at $36.50 and ranged up to $46.80 after 9 years. For nurse practitioners, wages started at $56.76 and ranged up to $67.72 after 6 years (North West Local Health Integration Network 2019).

- Northwestern Health Unit – In 2022, registered nurses (RN) and public health nurses (PHN) started at $35.27 and ranged up to $49.38 after 15 years. For program specialists, wages started at $37.46 and ranged up to $51.63 after 15 years. In 2023, registered nurses (RN) and public health nurses (PHN) start are $35.98 and range up to $50.37 after 15 years. For program specialists, wages start at $38.21 and range up to $52.66 after 15 years (Northwestern Health Unit 2022).

3.2.3.3 Employment Services

Within the Local Study Area there are employment service offices in Ignace, Dryden, and Sioux Lookout to help individuals who are seeking employment. Employment services offices in the Local Study Area include Crossroads Employment Services in Ignace, Northwest Employment Works in Dryden, Sioux-Hudson Employment Services in Sioux Lookout, and the Sioux Lookout Area Aboriginal Management Board. Services are available for people who require help with job searching, up-skilling, or updating resumes and cover letters. People who are most likely to experience barriers to employment include youth, Indigenous peoples, seniors, people with disabilities or limited abilities, and new Canadians (GBA+ Workshop 2023). Information tracked at the employment service office includes demographics of individuals, anyone who enters or exits a program, employment during intake and exit, and the number of workshops attended (NWO Baseline Studies Key Person Interview Program 2022-2023).

In addition to employment service office job boards, people in the Local Study Area often obtain jobs through online job boards, Facebook, Kijiji, word of mouth, community bulletin boards with job postings, and jobs mentioned on the CKDR radio station (NWO Baseline Studies Key Person Interview Program 2022-2023).

Table 3.2-4 shows the number of accessed services for job seekers at Employment Ontario employment service offices in the Regional Study Area for the 2019, 2020, and 2021 fiscal years.

Table 3.2-4: Employment Services Accessed in the Regional Study Area, 2019/20 to 2021/22[1]

Employment Service	2019/20	2020/21	2021/22
Assisted Employment Services	657	357	374
Unassisted Employment Services	2,842	1,352	2,101
Literacy and Basic Skills	591	360	403
Apprenticeship Training	284	317	362

Source: NTAB 2022, 2023. See **Appendix 3B Supplemental Data**.

Notes:

1. Data is for Employment Ontario Employment Service offices.

There was a material decrease in the number of people seeking assisted employment services from 2019/20 to 2021/22. This is likely attributed to the COVID-19 pandemic, but the unassisted employment services have still not reached the 2019/20 level of uptake. Literacy and basic skills are now the second most sought after service in 2021/22. Apprenticeship training is becoming increasingly popular, as it has increased in uptake each year since 2019/20.

Among the Local Study Area communities, some Employment Ontario services are not available at certain employment service offices, and people must travel to Dryden or Thunder Bay to access the services. For example, the office in Ignace cannot provide service for employers seeking to obtain funding from the Canada Ontario Job Grant which is used to subsidize training for employees and potential employees (NWO Community and Baseline Studies Key Person Interview Program 2022; NWO Baseline Studies Key Person Interview Program 2022-2023). Similarly, the employment service office in Dryden does not offer student career services; and youths must travel to Thunder Bay for these services. Although the Dryden office does not offer student career advisory services, they do offer employer services and job matching.

There is a strong sense of collaboration between social service providers, adult education, and employment service offices in the region (NWO Baseline Studies Key Person Interview Program 2022-2023). In Dryden, the employment service office is in constant contact with several organizations including the Bridges Adult Learning Centre, Community Living Dryden, Dryden Native and Friendship Centre, Métis Nation, and the Keewatin Patricia District School Board (KPDSB). The collaboration between educators and service providers are important for addressing the labour shortage and other constraints on the economy such as the housing shortage and supports for vulnerable populations (NWO Baseline Studies Key Person Interview Program 2022-2023). (See **Section 2.2.4**).

3.2.3.4 Barriers to Employment

Barriers to employment can include individuals who lack job experience, are transitioning back to work after an extended period, or lack life skills and self-reliance. Barriers noted in key person interviews include absence of a high school diploma or certificate, struggles with housing, lack of transportation, quality of education, work experience, life skills, and mental health and substance use (NWO Baseline Studies Key Person Interview Program 2022-2023; GBA+ Workshop 2023). People who are most likely to experience barriers to employment include youth, Indigenous peoples, seniors, people with disabilities or limited abilities, and new Canadians (GBA+ Workshop 2023).

There are a large number of job vacancies for restaurant and service-related positions. In Dryden, there are sometimes as many as 150 available jobs on the job boards (NWO Baseline Studies Key Person Interview Program 2022-2023). There is also a lack of skilled trades, medical professionals, and a growing need for more teachers, particularly in more remote areas. The vast availability of jobs suggest that it is a job seekers market (NWO Baseline Studies Key Person Interview Program 2022-2023).

Some barriers to employment relate to a lack of skills, education, or experience. Other barriers can be related to home care obligations, access to affordable and appropriate child care, limited access to a vehicle, access to affordable living accommodations, underrepresentation in upper-level positions, hiring and retention challenges related to hostile workplace cultures, and social stigmas (Health Focus Groups 2023; GBA+ Workshop 2023). Many of these barriers are applicable to women, visible minorities, persons with disabilities, and Indigenous peoples (Government of Canada 2022). These barriers can pose challenges for somebody trying to find a suitable job and, in some circumstances, lead to a reluctance to seek work in certain industries or occupations. In the Local Study Area, historical factors which pose a barrier to employment include diversity and inclusion, medical factors, working remotely, family circumstances, unfamiliarity by employers of Indigenous ceremonial and cultural practices (GBA+ Workshop 2023).

Although there has been an increase in the uptake of apprenticeship applications at employment service offices, the proportion of people who have an apprenticeship as their highest level of education has declined over the Local Study Area communities, the Regional Study Area, and Ontario, since 2006 (See **Section 3.3.4**). It was noted in key person interviews that this could be attributed to parents not wanting their children to do the same type of work they did, which is physically demanding and mentally taxing. They want them to do something better than work as a labourer and to have a less stressful office work type of employment (NWO Community and Baseline Studies Key Person Interview Program 2022).

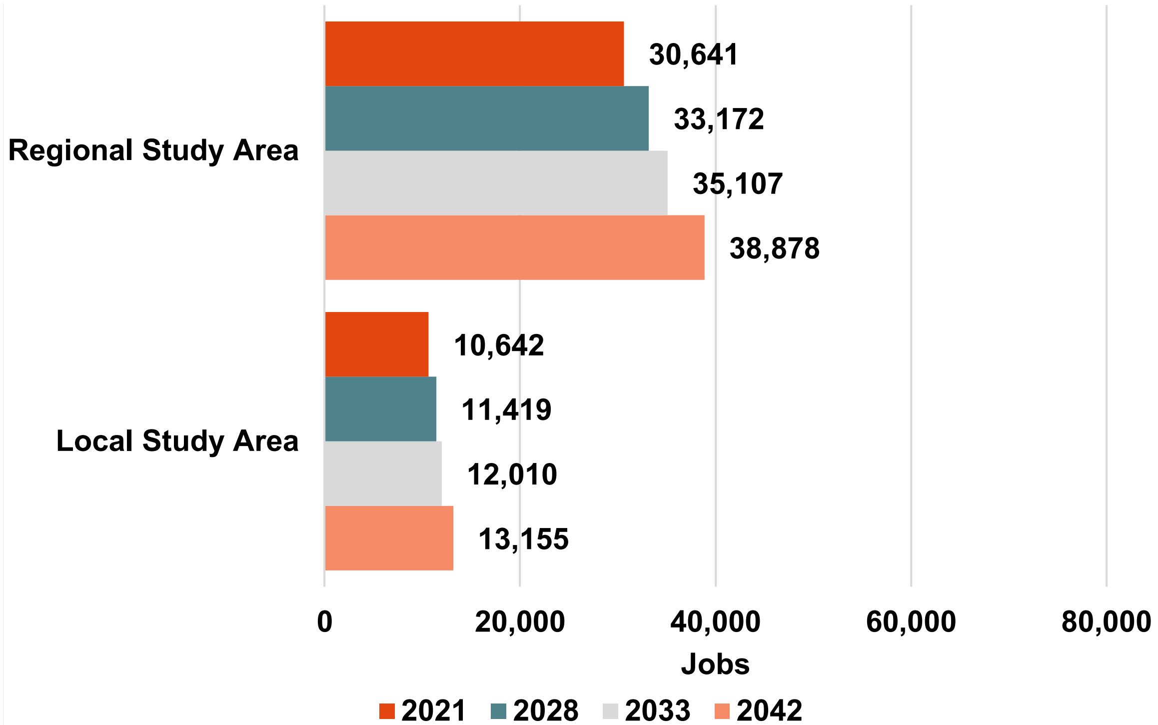
3.2.4 Labour Force Projections

Labour force modelling was prepared using an average of multiple regressions by the Census Division and the Census Subdivision levels as described in **Section 3.1.2.2**. The modelling projections were based on historic trends and are not premised on the Project occurring.

3.2.4.1 Near- and Mid-Term Projected Job Growth

Figure 3.2-18 shows the near- and mid-term job projections for the Local Study Area and the Regional Study Area between 2021 and 2042.

Figure 3.2-18: Near- and Mid-Term Job Growth in the Local Study Area and Regional Study Area, 2021 to 2042[1,2]



Source: Lightcast 2023a. Retrieved April 28, 2023; HSAL et al. 2022c; Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

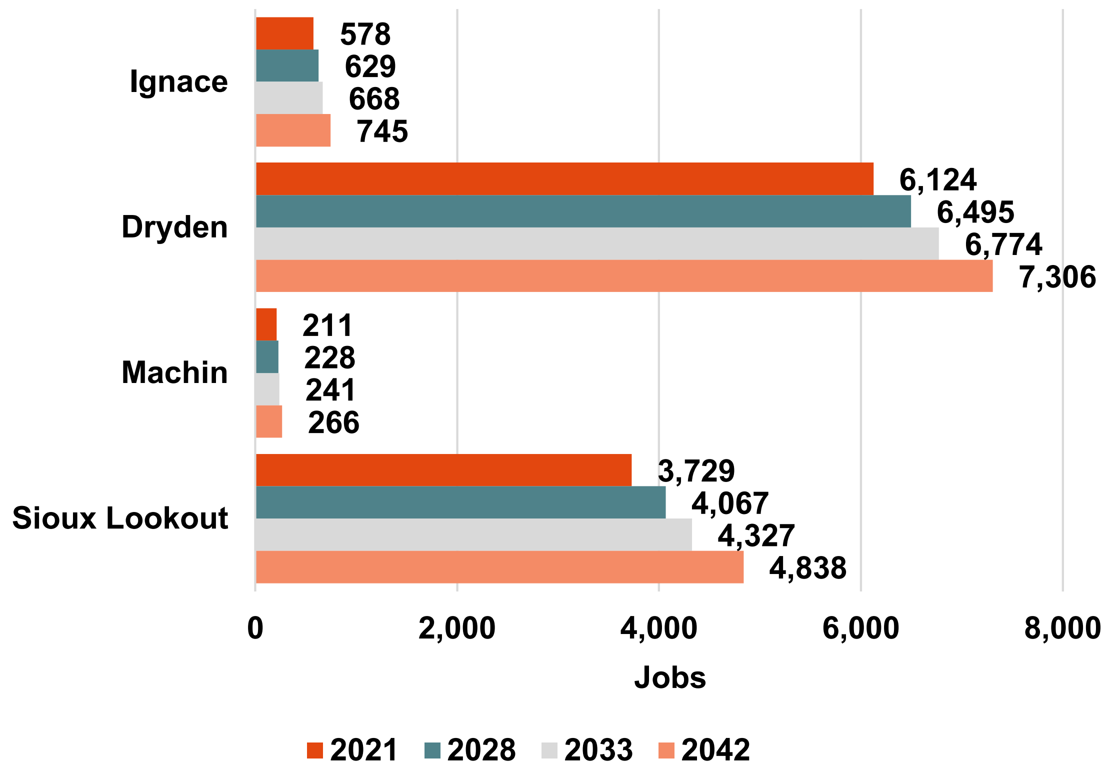
Notes:

1. Projections for 2033 and 2042 were estimated using a compound annual growth rate between 2021 and 2028 projections.
2. Data were not available for the Local Study Area communities for LSB of Wabigoon, LSB of Melgund, and Dinorwic.

Between 2021 and 2042, jobs in the Regional Study Area are expected to grow by 26.9%, from approximately 30,600 jobs in 2021 to 38,900 jobs by 2042. In the Local Study Area, jobs are expected to grow by 23.6%, from approximately 10,600 jobs in 2021 to 13,200 jobs by 2042.

Figure 3.2-19 shows the near- and mid-term job projections for the Local Study Area communities between 2021 and 2042.

Figure 3.2-19: Near- and Mid-Term Job Growth in the Local Study Area Communities, 2021 to 2042[1,2]



Source: Lightcast 2023a. Retrieved April 28, 2023; HSAL et al. 2022c; Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Notes:

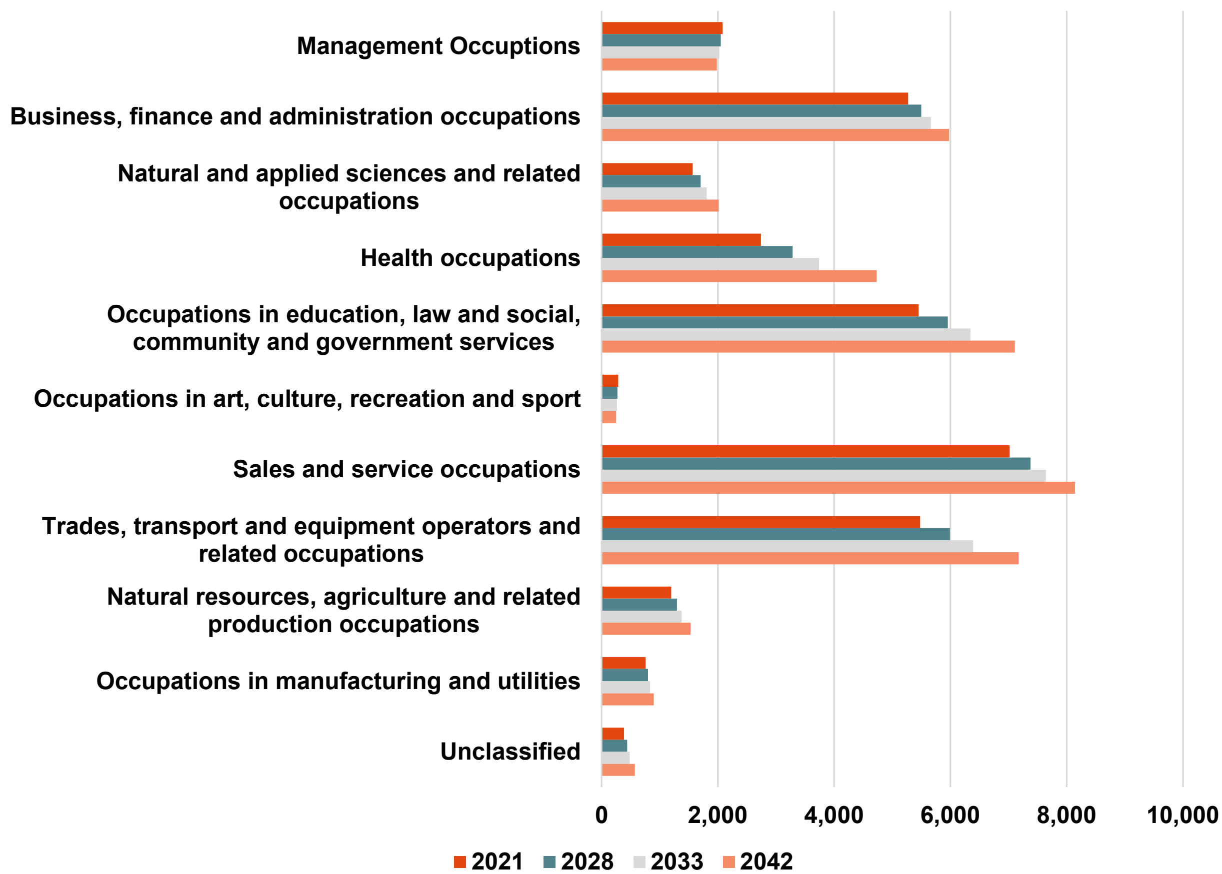
1. Projections for 2033 and 2042 were estimated using a compound annual growth rate between 2021 and 2028 projections.
2. Data were not available for the Local Study Area communities for LSB of Wabigoon, LSB of Melgund, and Dinorwic.

Between 2021 and 2042, jobs in the Local Study Area are forecast to grow by 23.6% from approximately 10,600 in 2021 to 13,200 by 2042. Dryden and Sioux Lookout account for 91.2% of the job growth over this period. Dryden and Sioux Lookout are service hubs in the Local Study Area with larger populations and labour bases, making them well-positioned to capture growth in the area.

3.2.4.2 Near- and Mid-Term Projected Jobs by Occupational Category

Figure 3.2-20 sets out the near and mid-term projected jobs by occupational category in the Regional Study Area.

Figure 3.2-20: Near- and Mid-Term Projected Jobs by Occupational Category in the Regional Study Area, 2021 to 2042[1]



Source: Lightcast 2023a. Retrieved April 28, 2023; HSAL et al. 2022c; Statistics Canada 2017. See **Appendix 3B Supplemental Data**.

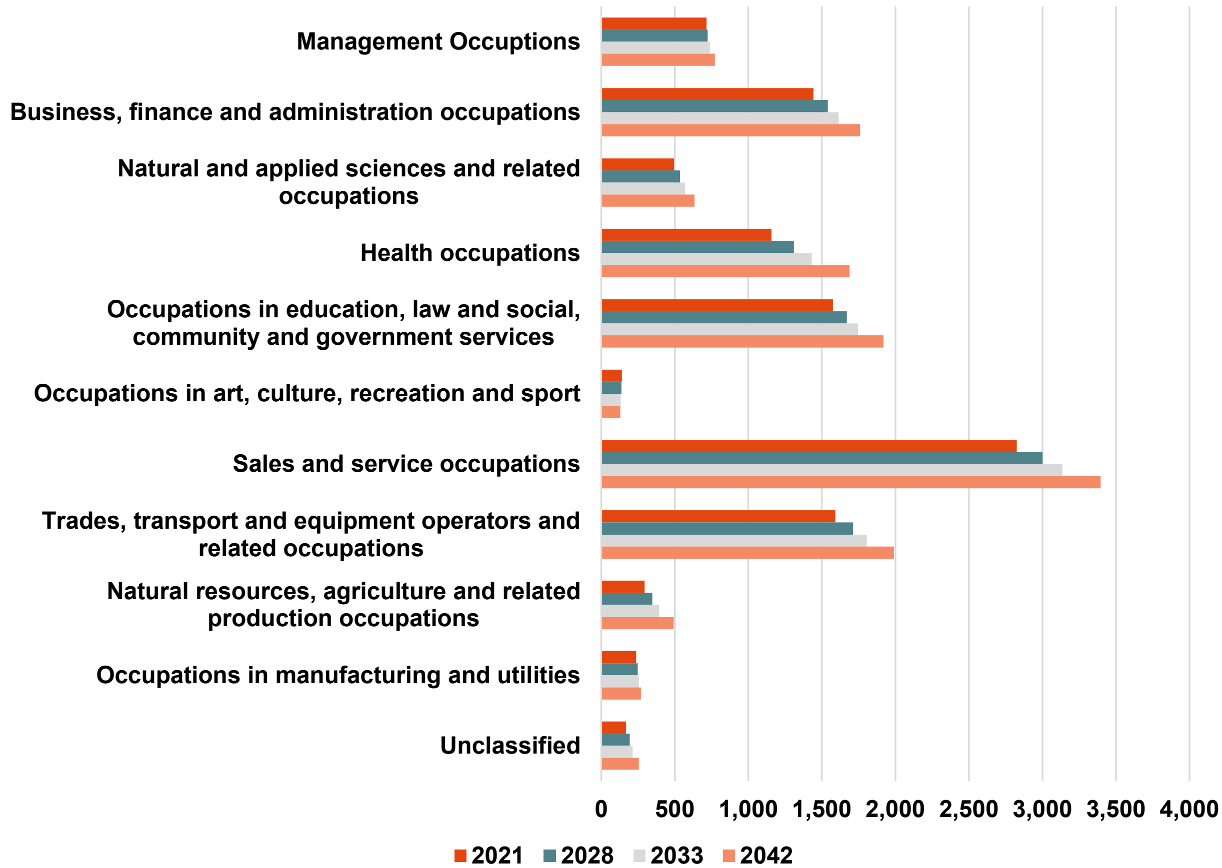
Notes:

1. Projections for 2033 and 2042 were estimated using a compound annual growth rate between 2021 and 2028 projections.

In 2021, the top three occupations were sales and service occupations (7,020); business, finance, and administration occupations (5,273); and trades, transport, and equipment operators and related occupations (5,479). The bottom three occupations in 2021 included occupations in art, culture, recreation, and sport (289); manufacturing and utilities related occupations (757); and natural resources, agriculture, and related production occupations (1,196). By 2042, the top and bottom ranking occupations are the same. The occupations in art, culture, recreation, and sport (from 289 in 2021 to 252 in 2042) and management occupations (2,082 in 2021 to 1,985 in 2042) are the only two categories forecast to decrease in the number of jobs by 2042.

Figure 3.2-21 shows the near- and mid-term projected total jobs by occupational category in the Local Study Area from 2021 to 2042.

Figure 3.2-21: Near and Mid-Term Projected Jobs by Occupational Category in the Local Study Area, 2021 to 2042[1,2]



Source: Lightcast 2023a. Retrieved April 28, 2023; HSAL et al. 2022c; Statistics Canada 2017. See **Appendix 3B Supplemental Data**.

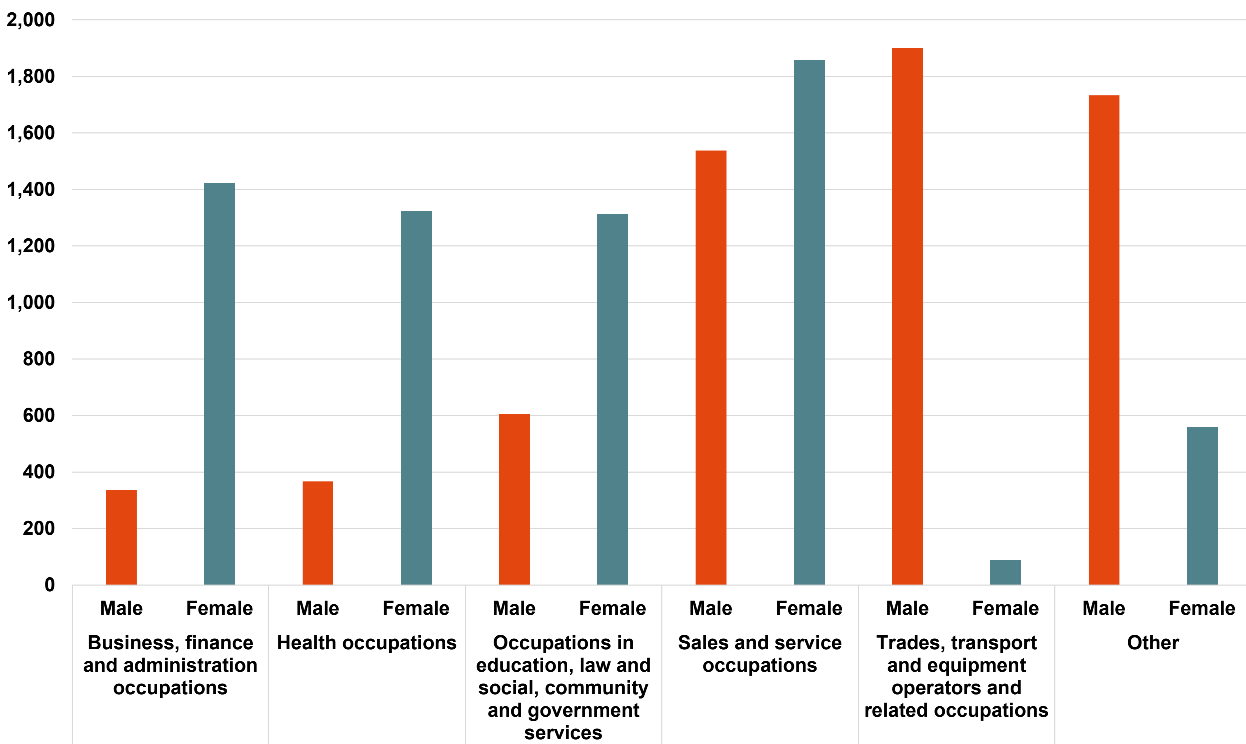
Notes:

1. Projections for 2033 and 2042 were estimated using a compound annual growth rate between 2021 and 2028 projections.
2. Data were not available for the Local Study Area communities for LSB of Wabigoon, LSB of Melgund, and Dinorwic.

In 2021, the top occupations in the Local Study Area were sales and service occupations (2,824); trades, transport and equipment operators and related occupations (1,592); and occupations in education, law and social, community and government services (1,575). Occupations with the lowest number of jobs in 2021 included occupations in art, culture, recreation, and sport (140); manufacturing and utilities occupations (238); and natural resources, agriculture, and related production occupations (294). In 2042, the top and bottom ranking occupations are the same. Occupations in art, culture, recreation, and sport ranking is the only category which is forecast to decrease from 2021 (140) to 2042 (129).

Figure 3.2-22 shows the mid-term projected total jobs by occupational category and sex in the Local Study Area for 2042.

Figure 3.2-22: Mid-Term Projected Jobs by Occupation and Sex in the Local Study Area, 2042[1]



Source: Lightcast 2023b. Retrieved April 28, 2023; HSAL et al. 2022c; Statistics Canada 2017. See **Appendix 3B Supplemental Data**.

Notes:

1. Projections for 2042 were estimated using a compound annual growth rate between 2021 and 2028 projections. Gender breakdown is derived using the 2016 Census of Population "Occupation - Broad Category - National Occupational Classification" data.

Females are projected to account for a large portion of jobs in four of the top five occupational categories by 2042. Some other highlights for the forecasted top five occupational categories by sex for the Local Study Area are as follows:

- Sales and service occupations are forecast to have 1,858 jobs held by females compared to 1,537 by men.
- Trades, transport, and equipment operators and related occupations are forecast to have 89 jobs held by females compared to 1,901 by males.
- Occupations in education, law and social, community and government services are forecast to have 1,313 jobs held by females compared to 605 by males.
- Business, finance, and administration occupations are forecast to have 1,424 jobs held by females compared to 336 by men.
- Over 70% of health-related occupations are forecast to be held by females and, of the remaining occupations, over 70% are forecast to be held by men.

The labour force projections require an approximately 1% average annual growth between 2021 and 2042 to reach the 2042 number of jobs. The 1% average annual growth is similar to a high growth scenario modelled for Canada (Cross 2021). The Local Study Area labour force has an increasing proportion of people obtaining a postsecondary education (see **Section 3.3.1.2**) and industry-specific training and education in some of the largest occupational categories (see **Section 3.3.1.3**). However, additional efforts will be required to attract and retain residents to the Local Study Area communities to reach these projections as the labour force is aging (See **Section 3.2.2.2**) and the population has generally been stagnant over the past decade (See **Section 2.2**).

3.2.5 Summary of Employment

The labour force in the Regional Study Area and Local Study Area communities are generally declining, excluding Sioux Lookout and the LSB of Wabigoon. This is largely due to an increase in the number of individuals who are not in the labour force, as the labour force is aging with an increasing proportion of seniors. This has resulted in a decline in participation rates across all Local Study Area communities. However, this is not unique to the Local Study Area, as a similar trend can be observed for the Regional Study Area, Ontario, and even Canada (Cross 2021).

Participation and employment rates are generally higher for both men and women in Sioux Lookout and Dryden, and lowest in Ignace, Machin, and the LSB of Wabigoon. This could be attributed to the limited variety of employment opportunities available in Ignace and Machin and the need for transportation to work outside of these communities. This may also be attributed to the seasonal nature of industries such as forest fire suppression and outfitters and camps, where there are employment opportunities for additional fire fighters and helpers and cleaners at camps. Participation rates are generally lower for youths and highest for the population between the ages of 25 to 54 years old.

Unemployment rates have generally increased in each region since 2006, excluding women in Sioux Lookout who have maintained an unemployment rate below 5%. Unemployment rates are highest in Ignace, Machin, and the LSB of Wabigoon. Unemployment rates in Ignace and Machin peaked in 2011 and 2016, respectively. For Ignace, this has been attributed to the closure of Resolute Forest Products from 2006 to 2015 and the large number of lay offs at Domtar Inc. in

2008 after their second paper machine was shut down. The unemployment rate in Machin increased in 2016 due to the permanent closure of a popular restaurant and store, with no new store or restaurant filling its role as the local hot spot for food. Unemployment rates by age cohorts vary by community but there is generally a higher level of unemployment for the 15 to 24 age cohort.

The participation rates for Indigenous peoples in the Local Study Area are similar compared to non-Indigenous peoples and the employment rates for Indigenous peoples in the Local Study Area are lower compared to non-Indigenous peoples. As a result, unemployment rates are generally materially higher for Indigenous peoples in the Local Study Area. This disparity between Indigenous and non-Indigenous peoples may be attributed to the barriers to employment that Indigenous peoples face. Indigenous peoples generally have lower levels of postsecondary attainment and a lower proportion have a high school diploma or degree. Other barriers to employment include a lack of literacy skills, systemic discrimination, lack of access to childcare, social isolation, and an individual’s lowest wage they are willing to accept. Most of these barriers are not unique to Indigenous peoples, but Indigenous people can be subject to discrimination and problematic workplace cultures.

The labour force is projected to increase by approximately 25% in the Local and Regional Study Areas between 2021 and 2042. Most of this growth will be in occupations related to health services; sales and services; business, finance, and administration; and trades and transport. To achieve this level of growth in the number of jobs, efforts will be required to attract and retain more workers as population growth has been generally stagnant over the last decade and the labour force is aging with many retirements annually.

3.3 LABOUR FORCE SKILLS AND TRAINING

3.3.1 Overview and Approach

Labour force skills reflect the degree of education and experience that help qualify an individual for employment. The Ontario College of Trades categorizes skill levels into two groups:

- Skilled labour is defined as a person having completed a diploma, degree, or higher level of post secondary education, or a skilled trade that has been designated as compulsory under the Ontario skilled trades and apprenticeship system (Ontario College of Trades 2020). According to the National Occupational Classification, skilled labour is classified as TEER categories 0, 1, 2, or 3 for education, training, experience, and responsibility qualifications (Statistics Canada 2022c). The TEER categories related to skilled labour include management, completion of a postsecondary education, occupations with supervisory experience, or several years of experience in unskilled labour positions.
- Unskilled labour is defined as an individual who has not completed secondary school, only completed secondary school, or trained in a trade for which certification is not legally required to practice in Ontario (Ontario College of Trades 2020). Unskilled labour is classified as TEER categories 4 or 5, and generally includes people without a high school certificate or equivalent, or a secondary education. However, it is now recognized that with enough experience or on-the-job training a person may be considered a skilled labourer (Statistics Canada 2022c).

Quantitative indicators reviewed in this section include:

- Educational attainment of the workforce population ages 15 years and older.
- Major fields of study for the working age population of 15 years and older. The population between the ages of 25 to 64 years old are also described.

Educational attainment and major fields of study statistics are disaggregated by sex (or gender for 2021 data), age, and Indigenous identity, where available and of sufficient robustness.

GBA+ considerations will be addressed by comparing educational attainment of different sub-populations with the broader population, and examining opportunities and barriers that may affect educational attainment for different groups.

Secondary and postsecondary training opportunities and programming levels are described. Education and training program opportunities are organized to align with the Classification of Instructional Programs and skilled trades in Ontario. Educational attainment and major field of study are described, including trend analysis as data are available.

The Regional Study Area for labour force skills and training includes the Kenora Census Division and other Census Divisions where relevant. Comparable statistics for Ontario will be provided as available to provide context. For the summary of educational institutes, the Regional Study Area is extended across Northern Ontario and includes Winnipeg given the limited number of colleges, universities, and programs in Northwestern Ontario. Winnipeg is included given the wide variety of colleges and universities and the similar driving distance to Winnipeg or Thunder Bay from

Local Study Area communities. The Local Study Area for labour force skills and training includes the Township of Ignace, City of Dryden, Municipality of Machin, Municipality of Sioux Lookout, and, to the extent information is available, the LSB of Wabigoon, the LSB of Melgund (Dyment and Borups Corners), and the unincorporated community of Dinorwic.

Temporal boundaries for labour force skills and training across the Local Study Area extend to the 2006 Census as available, to provide consistency with the employment and income analysis.

Information on the spatial boundaries, temporal boundaries, and data collection for labour force skills and training is provided in **Section 3.1**.

3.3.2 Educational Programming

3.3.2.1 Secondary Education

Within the Local Study Area there are four high schools, one in Ignace, one in Dryden, and two in Sioux Lookout. All of the schools offer the courses that are required in the Ontario core curriculum, including English, science, math, Canadian history, and physical education (Government of Ontario 2022b).

In 2022, Ignace Public School had 160 students, with less than 60 enrolled in grades 9 through 12 (NWO Community and Baseline Studies Key Person Interview Program 2022). With 14 teaching staff, Ignace Public School has a low teacher-to-student ratio which allows more personalized lesson plans and one-on-one teaching to the students. For example, Ignace Public School was able to offer a customized lesson plan for a student who required a specialized math pre-requisite for a trade they intended to pursue after high school (NWO Community and Baseline Studies Key Person Interview Program 2022). Business classes are not currently offered due to low student uptake of these classes but could be made available with sufficient interest by students. More programs are beginning to be offered virtually which could help expand the range of courses available for courses where only a few students are interested (NWO Community and Baseline Studies Key Person Interview Program 2022).

For the 2021-22 school year, Dryden High School had approximately 575 students enrolled, and Sioux North High School had approximately 545 students (Government of Ontario 2023a). Pelican Falls First Nation High School in Sioux Lookout had about 180 students enrolled in 2019 (Bonello 2019). Pelican Falls First Nation High School serves 23 communities and includes boarding homes for students from reserves across Ontario (Keewaytinook Okimakanak Board of Education 2016).

Ignace Public School, Dryden High School, and Sioux North High School offers all the compulsory courses required by the Ministry of Education, and a range of optional courses which are provided based on student demand. Also offered are co-op programs, focused learning on a specific economic sector through the Specialist High Skills Major (SHSM) Programs, the Ontario Youth Apprenticeship Program, and dual credit courses which can be used towards both the Ontario Secondary Diploma and an eligible post-secondary certificate or diploma.

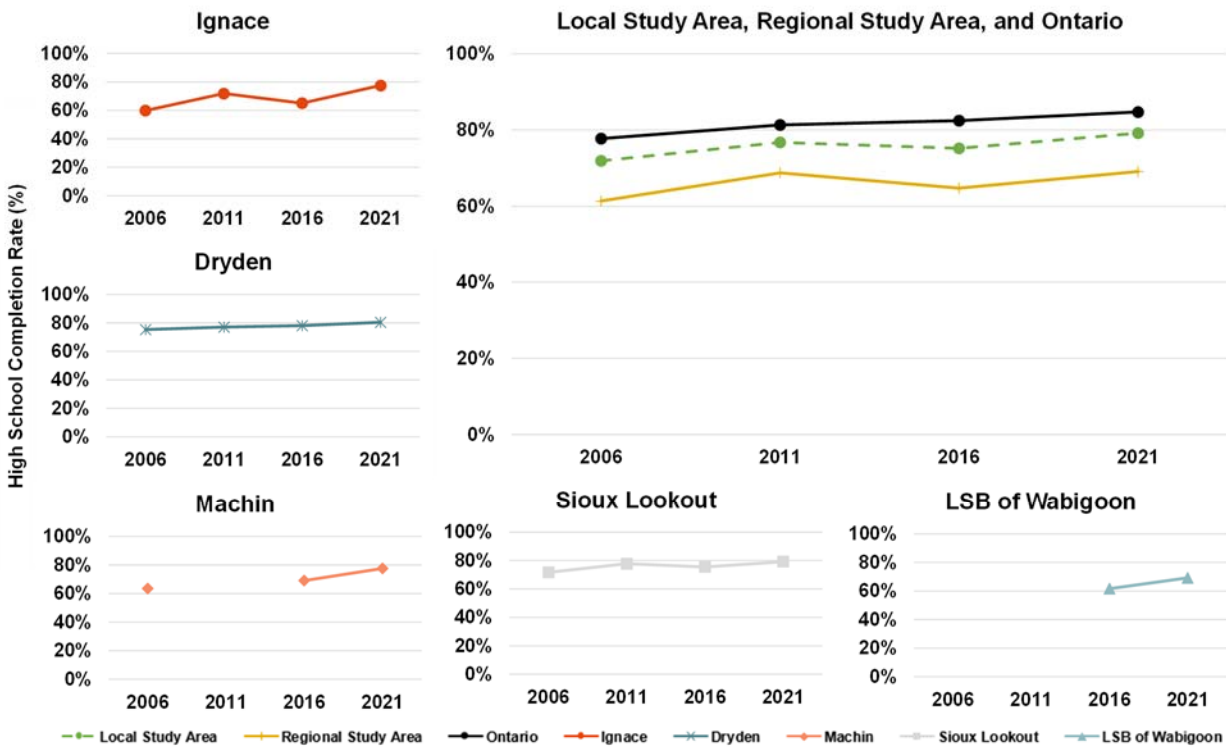
Dual credit programs help support potentially ‘at-risk’ students, including those without clear plans after high school. Dual credit programs increase awareness of different college and apprenticeship pathways. Students receive assistance while making education and career planning decisions and learn skills which will help them in obtaining a job.

A SHSM Program is a bundle of credits which allows students to complete occupation-specific courses in preparation for a postsecondary program. For example, the automotive SHSM Program has a requirement of two courses and two co-op credits (NWO Community and Baseline Studies Key Person Interview Program 2022). The Ontario Youth Apprenticeship Program is a specialized program to explore skilled trades and generally starts in grade 11 or 12 through the co-op education program. The Ontario Youth Apprenticeship Program is similar to the SHSM Programs, except it has a focus on completing an apprenticeship, whereas the SHSM Programs are applicable to apprenticeship training, or preparation for college, university, or the workplace. The Ontario Youth Apprenticeship Program, SHSM Programs, and the co-op programs all have work components which allow students to gain workforce experience while obtaining their secondary diploma. Each of the programs has different offerings based on the proximity of the school to businesses, availability of qualified teachers, and community demand. For example, Red Lake has a mining SHSM Program (NWO Community and Baseline Studies Key Person Interview Program 2022). In 2022, Dryden High School offered five SHSM Programs: automotive, manufacturing, health and wellness, construction, and business (NWO Community and Baseline Studies Key Person Interview Program 2022). In 2022, the SHSM courses and other occupation-specific courses offered at Ignace Public School included health and wellness, transportation, construction, welding, mechanics, and technical design.

Within the Local Study Area, Seven Generations Education Institute offers adult education in Ignace, Dryden, and Sioux Lookout for people looking to obtain or upgrade their Ontario Secondary School Diploma. The adult education programming allows students to prepare for a workplace, college, or university, and includes opportunities to earn credits through co-op or dual credit courses (Seven Generations n.d.).

Figure 3.3-1 shows the high school completion rate (i.e., the proportion of the population 15 years and older who have completed a high school certificate or equivalent) for the Local Study Area, Regional Study Area, Ontario, and Local Study Area communities for 2006 through 2021.

Figure 3.3-1: High School Completion Rate in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

The high school completion rate has increased in the Local and Regional Study Areas, Ontario, and all Local Study Area communities since 2006. High school completion in the Local Study Area increased from 71.9% in 2006 to 79.2% in 2021. High school completion has historically been lower in the Regional Study Area compared to the Local Study Area but increased from 61.4% in 2006 to 69.1% in 2021. Both the Local Study Area and the Regional Study Area have lower high school completion rates than Ontario as a whole. The high school completion rate for Ontario was 84.7% in 2021. Trends observed in high school completion for Local Study Area communities include:

- In 2006, Ignace had the lowest rate of high school completion at 59.8% but increased to 77.4% by 2021.

- In 2021, Ignace, Dryden, Machin, and Sioux Lookout each have a high school completion rate around 80%.
- The high school completion rate in the LSB of Wabigoon increased materially from 61.7% in 2016 to 69.2% in 2021 but has remained the lowest rate among Local Study Area communities.

It was noted during key person interviews that individuals without a high school certificate face barriers to obtaining employment (NWO Baseline Studies Key Person Interview Program 2022-2023). In the past, not having a high school certificate or equivalent was not as much of a barrier to employment as it is today. For example, when the Mattabi mine was open in the 1980s, an individual could work at the mine without any formal education or completion of high school (IAWG March 22, 2023). In Canada, the gap between unemployment rates for younger Canadians with higher and lower levels of education widened between 1971 and 2005. The growth in unemployment rates for Canadians over that period was notably higher for people without a high school certificate or equivalent compared to other levels of education (Berger and Parkin 2009).

3.3.2.2 Postsecondary Education

Postsecondary educational attainment refers to the completion of an apprenticeship or trades certificate or diploma, college, Collège d'enseignement général et professionnel ("CEGEP") or other non-university certificate or diploma, and university certificates, diplomas, or degrees (Statistics Canada 2022a). Higher levels of education have a notable impact on wages. People with a postsecondary education tend to have higher wages compared to people with a high school certificate or lower. The wage premium is the difference in average wages between various levels of education. The wage premium is not as notable as it was in the past, but Canadians still earn more on average if they have a postsecondary education (Cross 2021).

Postsecondary institutes in the Local Study Area include Confederation College (satellite campuses in Dryden and Sioux Lookout; main campus in Thunder Bay), Seven Generations Education Institute, and Sioux Lookout Mining Centre of Excellence. There are limited program options available at institutions in the Local Study Area which presents a challenge for residents in obtaining a postsecondary education. The main campuses for Confederation College and Lakehead University are located in Thunder Bay, just outside the Regional Study Area, and offer a comprehensive selection of programs. In Northeastern Ontario, there are several institutions which offer programming related to mining, geology, environmental sciences, and other STEM-related (science, technology, engineering, and math) programs. The driving distance from Local Study Area communities to Winnipeg is similar to Thunder Bay, and there are a number of major postsecondary educational institutes in Winnipeg.

Table 3.3-1 summarizes the types of certificate and diplomas offered at some Northern Ontario-based and Winnipeg universities and colleges as of 2022.

Table 3.3-1: College and University Programs in Northern Ontario and Winnipeg, 2023

College and University Institutions	Location of Institution	Duration and Types of Programs	Programs Offered
Lakehead University	Thunder Bay	Bachelor and graduate level programming	Offers undergraduate and graduate programs in arts, education, health, business, environmental science, and STEM (Lakehead University n.d.a). Mining-related program offerings include a four-year undergraduate and graduate program in geology (Lakehead University n.d.b).
Confederation College of Applied Arts and Technology	Main campus is in Thunder Bay. Satellite campuses in Dryden and Sioux Lookout.	Programs are typically one to three-year certificates or diplomas.	Offers programs in business, community services, health, hospitality, aviation, engineering technology, natural resources, and skilled trades programs (Confederation College n.d.).
Seven Generations Education Institute	Kenora, Sioux Lookout, and Fort Frances.	Programs are typically one to three-year Ontario College certificates/ diplomas. Some programs are bachelor-level programming and require four years.	Offers programs in business, community service, health, arts, skilled trades, and salon and spa through partnerships with Lakehead University and various colleges in Ontario (Seven Generations n.d.).
Northern Ontario School of Medicine	Thunder Bay	Graduate level programming	Offers a four-year Doctor of Medicine (MD), master's of medical studies (MMS), and a dietetic internship program (NOSM n.d.).
University of Manitoba	Winnipeg, MB	Bachelor and graduate level programming	Offers undergraduate and graduate diplomas in arts, agriculture, art, environmental science, social work, social science, education, health, management, science, Indigenous studies, engineering, and architecture (U of M n.d.a; U of M n.d.b).

Table 3.3-1 Continued: College and University Programs in Northern Ontario and Winnipeg, 2023

College and University Institutions	Location of Institution	Duration and Types of Programs	Programs Offered
University of Winnipeg	Winnipeg, MB	Bachelor and graduate level programming	Offers undergraduate and graduate diplomas in arts, social science, environmental science, education, health, management, science, Indigenous studies, engineering, and architecture (U of W n.d.a; U of W n.d.b). Also offers joint programs with Red River College Polytech including applied environmental science and business administration (U of W n.d.c).
Red River College Polytechnic	Winnipeg, MB	Programs are typically one to three-year certificates or diplomas.	Offers programs in business, engineering and construction technology, skilled trades, health, education, culinary, community services, computer and information systems technology, and transportation technology (RRC n.d.)
University of St. Boniface	Winnipeg, MB	Bachelor and graduate level programming	Offers programs in business, education, health, arts, science, engineering, social works, and translation (University of St. Boniface n.d.a). Graduate programs are offered in education and Canadian and intercultural studies (University of St. Boniface n.d.b).
Cambrian College	Sudbury	Programs are typically one to three-year certificates or diplomas; or one to two-year graduate certificate programs.	Offers programs in skilled trades, engineering technology, health, arts, community services, law, business, and environmental studies (Cambrian College n.d.).

Table 3.3-1 Continued: College and University Programs in Northern Ontario and Winnipeg, 2023

College and University Institutions	Location of Institution	Duration and Types of Programs	Programs Offered
Laurentian University	Sudbury	Programs are typically one to four-year certificates or diplomas; and one to two-year graduate certificate programs.	Offers undergraduate and graduate diplomas in arts, education, health, management, science, engineering, and architecture. Some programming is offered in French (Laurentian University n.d.a). Mining-related programming includes a four-year undergraduate mining engineering program (with optional co-op component) and a geology, mineral deposits, and Precambrian geology program (Laurentian University n.d.b).
Collège Boréal d'arts Appliqués et de Technologie	A francophone college with campuses in Sudbury, Hearst, Kapuskasing, Timmins, and Nipissing.	Programs are typically one to three-year certificates or diplomas.	Offers programs in agriculture, commerce, education, community services, natural resources, engineering technology, health, and skilled trades (Collège Boréal n.d.a). Mining-related programs include prospecting and mining exploration techniques, construction engineering technology (civil and mining), and construction technician in mining and civil (Collège Boréal n.d.b; Collège Boréal n.d.c).
Northern College of Applied Arts and Technology	Campuses in Ontario include Haileybury, Timmins, Kirkland Lake, and Moosonee.	Programs are typically one to three-year certificates or diplomas.	Offers undergraduate programs in business, community services, health, veterinary science, welding engineering technology, and engineering technology (Northern College n.d.a). Mining-related program offerings include a mineral exploration techniques and mining engineering technician. Also offers training certificates in mining-related occupations including diamond driller assistant common core, underground hard rock miner common core, and surface miner common core (Northern College n.d.b).

There are a limited number of postsecondary institutions and course offerings in the Local Study Area, but interview participants noted there is some flexibility to meet community and employer needs (NWO Community and Baseline Studies Key Person Interview Program 2022). For example, in Sioux Lookout, Confederation College worked with the Aboriginal Management Board and Sioux Lookout Meno Ya Win Health Centre to deliver a program on culturally appropriate and language supported services. Confederation College has offered welding courses at Dryden High School through a collaboration with Domtar (NWO Community and Baseline Studies Key Person Interview Program 2022).

There are no postsecondary institutions located in Ignace and no universities available in any Local Study Area communities. The nearest universities are Lakehead University in Thunder Bay and universities in Winnipeg which are generally more than a three-hour drive for the Local Study Area communities. For example, Lakehead University is closer to Ignace than any university in Winnipeg, but in Dryden it takes residents roughly the same time to drive to the University of Manitoba or Lakehead University.

The Sioux Lookout Mining Centre of Excellence is a part of the Sioux Lookout Friendship Accord and Economic Development Corporation, which offers tuition-free and barrier-free entry-level training for Indigenous and non-Indigenous individuals for occupations that are in-demand in Northwestern Ontario. The Mining Centre works closely with the Northern College and Haileybury School of Mines for the delivery of programs which are targeted to support the mining industry in Northwestern Ontario (NWO Community and Baseline Studies Key Person Interview Program 2022). The Sioux Lookout Mining Centre of Excellence offers ten different programs that include courses in mineral processing (i.e., separating valuable minerals from rocks), underground mining, surface diamond drilling, and heavy equipment operations. The program started in 2022 and 137 participants were expected to complete the program, of which 51% are women (NWO Community and Baseline Studies Key Person Interview Program 2022).

Seven Generations offers postsecondary programs at their satellite campus in Sioux Lookout. The programs offered at the campus are focused on the health services field but also offer programming for a bachelor of arts and human resourcing (Seven Generations n.d.). Seven Generations also offers postsecondary programs at their main campus in Fort Frances and satellite campus in Kenora (NWO Baseline Studies Key Person Interview Program 2022-2023).

Confederation College occasionally offers customized training and courses at the Dryden and Sioux Lookout campuses, and can provide in-community (e.g., within Ignace) training if there is sufficient demand (NWO Community and Baseline Studies Key Person Interview Program 2022).

A summary of college-level programming available in the Local Study Area as of 2022 is provided in **Table 3.3-2**.

Table 3.3-2: College Programs in the Local Study Area, 2023

Institutions	Location of Institution	Duration of Programs	Description of Programs
Confederation College	Dryden and Sioux Lookout	Programs are typically one to three-year certificates or diplomas.	Offers programs in business, community services, health, and hospitality (Confederation College n.d.). Has the ability to provide in-demand off-the-shelf or custom training in-community and on campus (NWO Community and Baseline Studies Key Person Interview Program 2022).
Keewaytinook Centre of Excellence	Dryden	One day to multiple day programming	Offers certification for water and wastewater plant operators in distribution and treatment systems. Additional courses on water sources and characteristics, meter reading and servicing and water storage are offered (Keewaytinook Centre of Excellence n.d.)
Seven Generations Education Institute	Sioux Lookout	Programs are typically one to three-year Ontario College certificates/ diplomas. Some programs are bachelor level programing and require four years.	Offers programs in business, community service, health, and arts through partnerships with Lakehead University and various colleges in Ontario (Seven Generations n.d.).

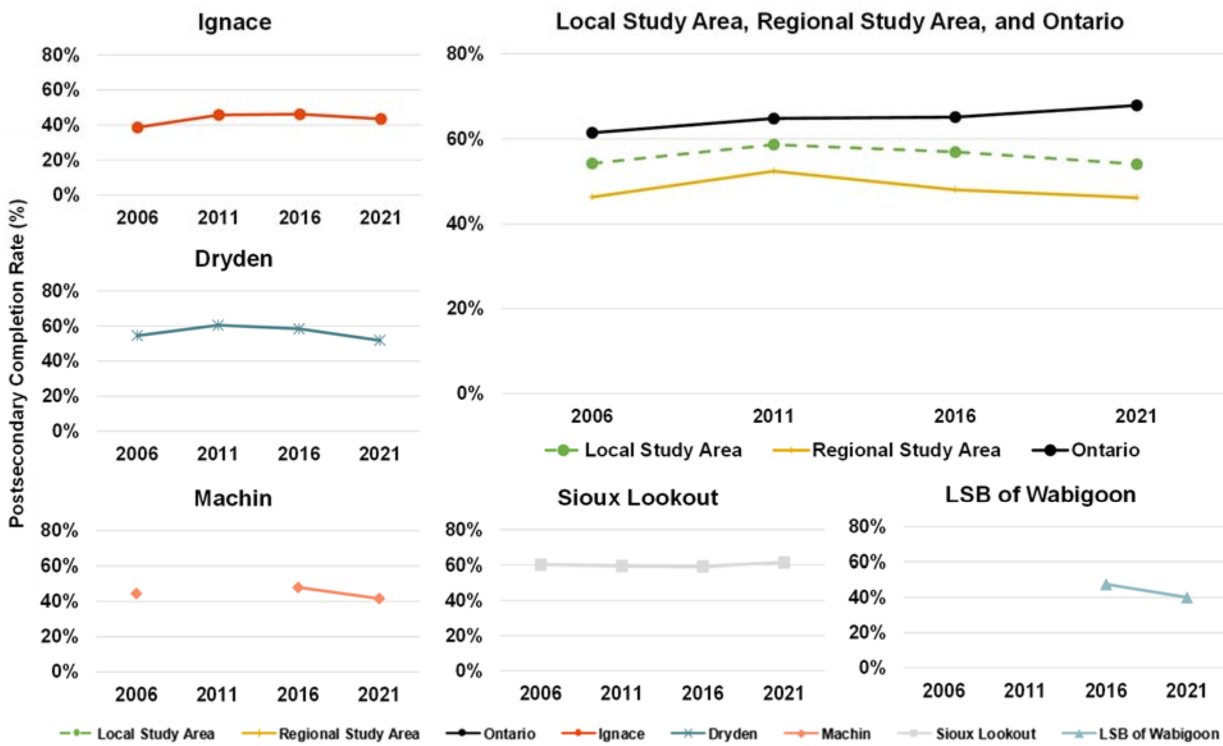
Table 3.3-2 Continued: College Programs in the Local Study Area, 2023

Institutions	Location of Institution	Duration of Programs	Description of Programs
Contact North	Dryden and Sioux Lookout	Programs are typically one to three-year Ontario College certificates/ diplomas. Some programs are bachelor level programing and require four years.	Offers on-line secondary and postsecondary courses, certificates, diplomas, and degrees in a wide variety of professions from colleges and universities across Ontario (Contact North 2023).
Sioux Lookout Mining Centre of Excellence	Sioux Lookout Some programs are offered in other communities and mines based on current partnerships and availability.	Programs are typically three months to one year.	Offers programs in entry-level mining positions, truck driving, and entry-level skilled trades training (Sioux Lookout Mining Centre of Excellence n.d.). Also offers online programs for support and culinary workers supporting mining camps. One of the programs has a work placement at a mining camp.

Some interview participants raised concerns about the long commutes and the limited availability of course options in the Local Study Area (NWO Community and Baseline Studies Key Person Interview Program 2022). The lack of nearby educational institutes and limited variety of programs within the Local Study Area contributes to youths leaving their home communities and not returning. People from all Local Study Area communities described challenges in retaining youth due to a lack of relevant employment and training opportunities for their desired profession (NWO Community and Baseline Studies Key Person Interview Program 2022).

Figure 3.3-2 shows the postsecondary completion rate (i.e., the proportion of the population between 25 and 64 years old who have completed postsecondary education) in the Local Study Area, Regional Study Area, and Local Study Area communities.

Figure 3.3-2: Postsecondary Completion Rate in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

The postsecondary completion rate remained relatively flat between 2006 and 2021 for both the Local Study Area (about 54%) and the Regional Study Area (about 46%). The postsecondary completion rate for Ontario increased from 61.4% in 2006 to 67.8% in 2021. The postsecondary completion rate is lower in all Local Study Area communities than in Ontario as a whole. Notable trends in postsecondary completion among Local Study Area communities are as follows:

- In 2021, among Local Study Area communities, Sioux Lookout had the highest proportion of the population with a postsecondary education (61.5%) and the LSB of Wabigoon had the lowest (40.0%).
- Ignace had a notable increase in the postsecondary completion rate from 38.6% in 2006 to 43.4% in 2021.

- The postsecondary completion rate for Sioux Lookout was relatively stable from 2006 through 2021 at about 61%. The postsecondary completion rate decreased for Dryden, Machin, and LSB of Wabigoon, from 2006 through 2021. The largest decrease was in the LSB of Wabigoon (from 47.5% in 2016 to 40.0% in 2021). Postsecondary completion decreased slightly in Dryden from 54.5% in 2006 to 51.8% in 2021 and in Machin from 44.5% in 2006 to 41.7% in 2021.

Lower postsecondary completion rates can be attributed in part to the lack of educational institutions in the Regional Study Area, stress from being away from home, limited transportation options, financial constraints from having to live close to campus, and difficulty retaining youth after the completion of their education (IAWG March 03, 2022; NWO Community and Baseline Studies Key Person Interview Program 2022; NWO Baseline Studies Key Person Interview Program 2022-2023). Local Study Area representatives noted some students return after completing an engineering degree but leave after they have gained a few years of experience. One key person interview highlighted that the real challenge is maintaining regular contact with youths who leave for postsecondary education or training to attract them back to the community (NWO Community and Baseline Studies Key Person Interview Program 2022).

The declining postsecondary completion rate in Dryden and Machin is partly attributed to a large proportion of seniors with a postsecondary education being replaced with a smaller proportion of youths with a postsecondary education. In both communities, in 2016 the proportion of seniors with a postsecondary education represents over 20% of the population with a postsecondary education (See **Section 3.3.2.3.1**).

Table 3.3-3 shows the number of graduates at Northern Ontario universities and colleges for 2006, 2011, 2016, and 2021. This includes all people who received a diploma, degree, or certificate, including people from outside of Ontario and Canada.

Table 3.3-3: Postsecondary Graduates at Northern Ontario Schools, 2006, 2011, 2016, and 2021[1,2]

College or University	2006	2011	2016	2021
Cambrian College	1,569	1,818	2,779	2,590
Laurentian University	1,815	2,302	2,408	2,643
Lakehead University	2,164	2,478	2,015	2,937
Confederation College	1,146	1,351	1,401	1,002
Collège Boréal d'arts Appliqués et de Technologie	558	623	671	533
Northern College of Applied Arts and Technology	570	794	579	832
Seven Generations Education Institute	35	45	69	50
Northern Ontario School of Medicine	0	56	64	64
Total	**7,857**	**9,467**	**9,986**	**10,651**

Source: Estimates prepared by Manifold 2023a based on data from institutions, governmental sources, and student surveys. Retrieved May 30, 2023. See **Appendix 3B Supplemental Data**.

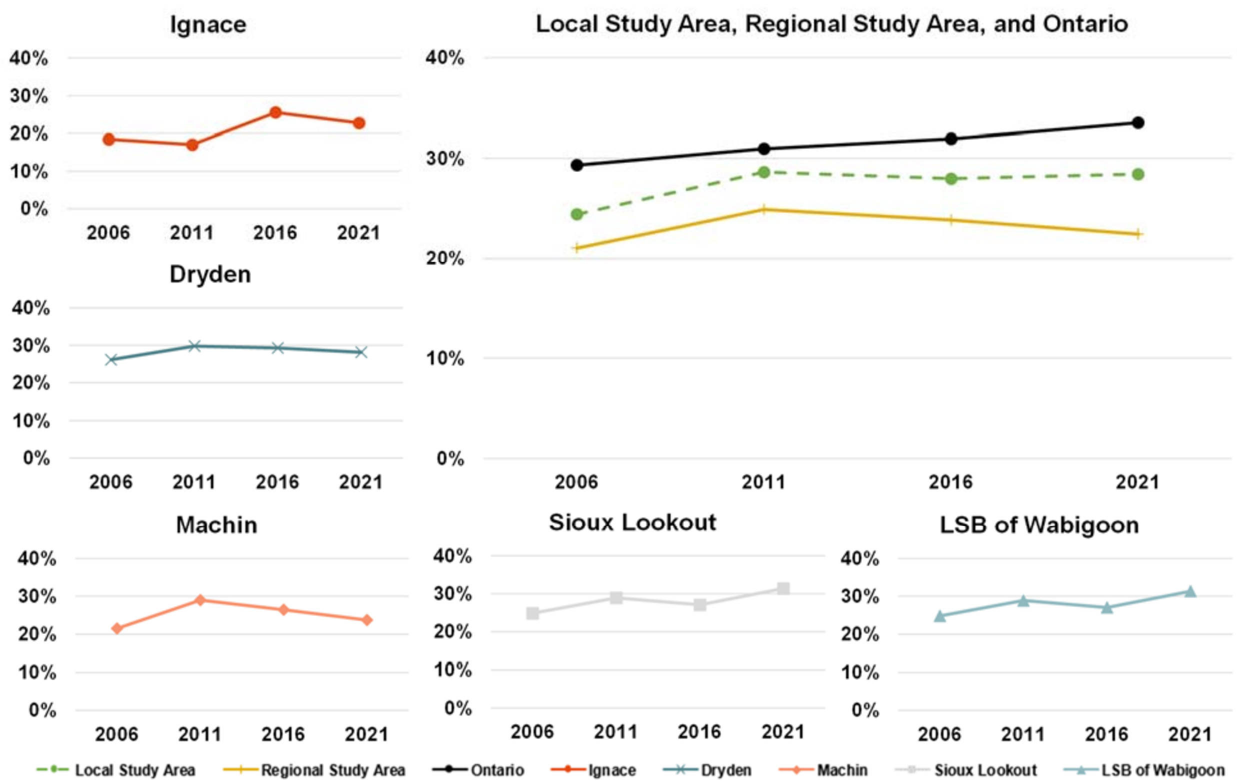
Notes:

1. The Northern Ontario School of Medicine was founded in 2005 and there were no completions in 2006 as most programs are four years.
2. The table includes all reported graduations including people from another province or country.

The number of graduates at Northern Ontario colleges and universities increased from 2016 to 2021 despite a decrease in postsecondary completion rates from 2016 to 2021 for the population between the ages of 25 to 64 years old in some Local Study Area communities (see **Figure 3.3-1**). Although graduations at Ontario postsecondary schools also reflects graduates from people living outside the Regional and Local Study Areas, interview participants noted that after people graduate from a postsecondary school, they usually do not return to the Local Study Area given the lack of available opportunities (IAWG October 06, 2021; NWO Community and Baseline Studies Key Person Interview Program 2022).

Figure 3.3-3 compares the proportion of people with STEM-related qualifications for the population 15 years and older in the Local Study Area, Regional Study Area, and Ontario for 2006, 2011, 2016, and 2021. STEM-related qualifications are defined to include postsecondary completions for: social and behavioural sciences and law; physical and life sciences and technologies; mathematics, computer, and information sciences; architecture, engineering, and related technologies; agriculture, natural resources, and conservation; and health and related fields educational programs. This is consistent with how STEM-related qualifications are defined in the Workforce Development Community Study (InterGroup and HSAL et. al 2022). With more businesses and organizations looking to modernize there will be an increasing demand for people with STEM-related backgrounds (Government of Canada 2021b).

Figure 3.3-3: Proportion of the Population who have STEM-related Qualifications in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1,2]



Source: Estimates prepared by Manifold 2023b based on Statistics Canada 2007, 2012, 2017, and 2022a. Manifold 2023b. See **Appendix 3B Supplemental Data**.

Notes:

1. Modelling for the number of completions by major field of study and the population 15 years and older were completed by Manifold.
2. Data were not available for the LSB of Melgund and Dinorwic.

The proportion of the Local Study Area population with STEM-related qualifications increased from 24.4% in 2006 to 28.4% in 2021. The proportion of the population with STEM-related qualifications remained relatively flat between 2006 and 2021 for the Regional Study Area (about 23%). The proportion of the Ontario population with STEM-related qualifications increased from 29.3% in 2006 to 33.5% in 2021 which is a similar to the increase in the Local Study Area. Notable trends in STEM-related postsecondary completion among Local Study Area communities include:

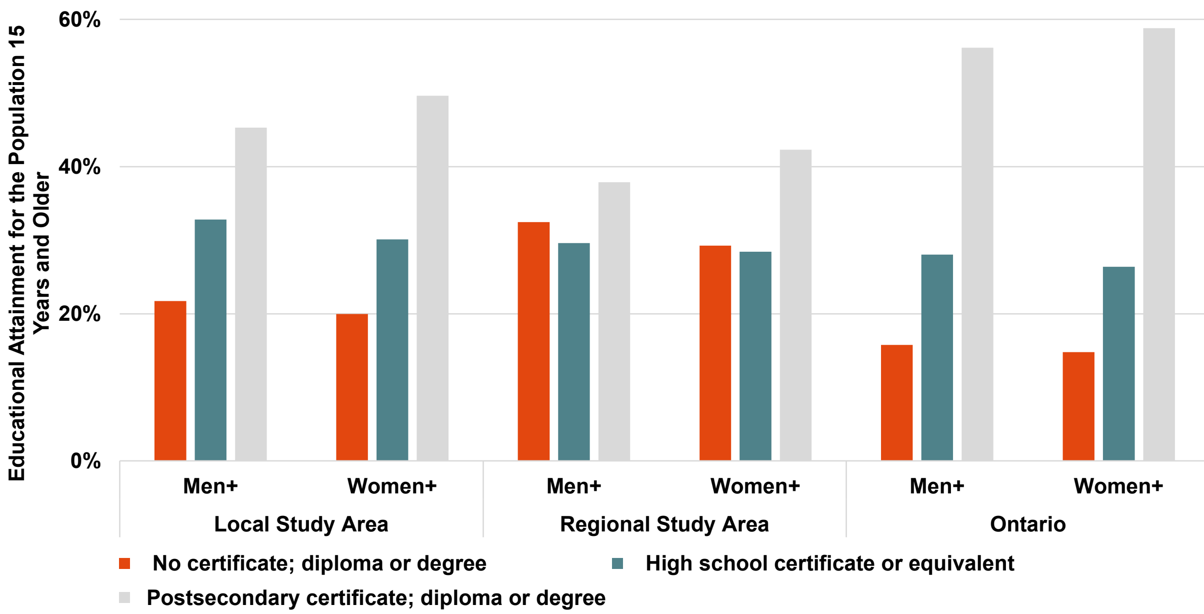
- The proportion of the population with STEM-related qualifications increased slightly for each of the Local Study Area communities between 2006 and 2021.
- In 2021, among Local Study Area communities, Sioux Lookout had the highest proportion of the population with STEM-related qualifications (31.4%) and the LSB of Wabigoon had the lowest (20.3%).
- The LSB of Wabigoon had a notable increase in the proportion of the population with STEM-related qualifications from 8.5% in 2006 to 20.3% in 2021.
- In Machin, the proportion of the population with STEM-related qualifications decreased from 29.0% in 2011 to 23.7% in 2021 but remained higher than the proportion in 2006 (21.5%).
- The proportion of the population with STEM-related qualifications decreased slightly in Dryden from 29.8% in 2011 to 28.2% in 2021 and in Ignace from 25.5% in 2016 to 22.7% in 2021.

3.3.2.3 Educational Attainment by Gender

Educational attainment is the highest level of education an individual possesses. Obtaining postsecondary education allows people to be eligible for a wider variety of jobs. Through exposure to a wider spectrum of occupations, people can gain diverse experience and on-the-job training. This may lead to more senior roles with higher wages later in life. Higher levels of education are typically correlated with higher incomes in Canada (Statistics Canada 2017).

Figure 3.3-4 shows the educational attainment for the population aged 15 years and older for the Local Study Area, Regional Study Area, and Ontario disaggregated by gender in 2021.

Figure 3.3-4: Educational Attainment by Gender in the Local Study Area, Regional Study Area, and Ontario, 2021



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Melgund and Dinorwic for 2021.

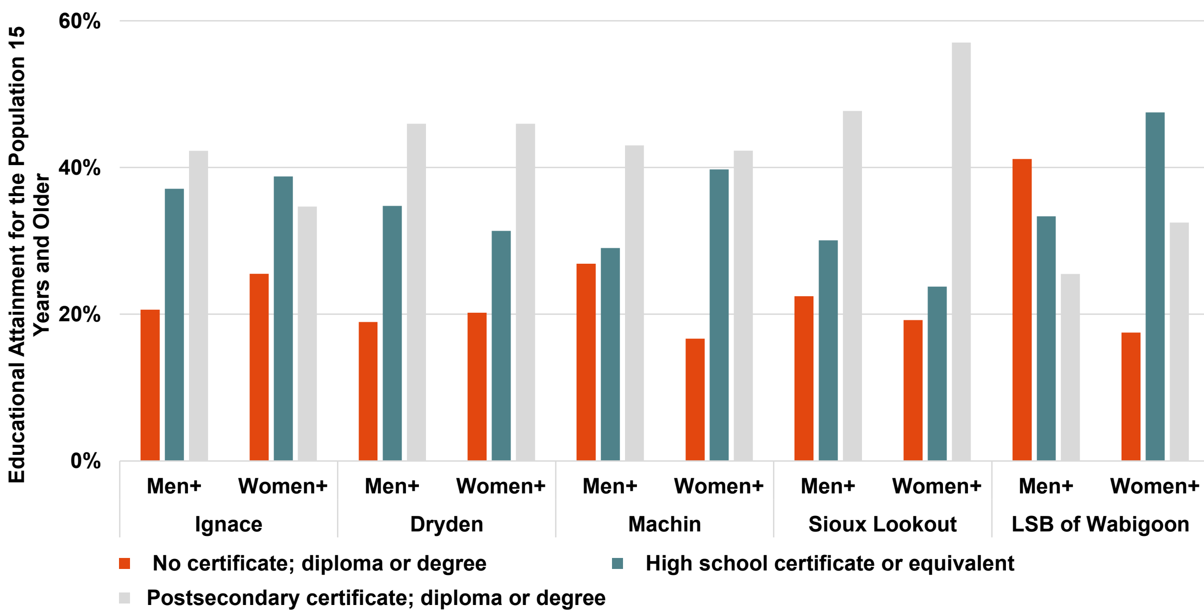
The largest proportion of the population has a postsecondary education as their highest level of education for both men and women in the Local Study Area, Regional Study Area, and Ontario. A higher proportion of men and women in Ontario have completed postsecondary education compared to the Local and Regional Study Areas. Further details on the breakdown of postsecondary attainment are provided in **Section 3.3.2.3**. Other notable highlights are as follows:

- In all three regions, a higher proportion of women have a postsecondary education compared to men. In the Local Study Area, 49.6% of women have obtained a postsecondary education compared to 42.3% for women in the Regional Study Area, and 58.8% of women in Ontario.
- In the Local Study Area, 45.3% of men have obtained a postsecondary education compared to 37.9% of men in the Regional Study Area, and 56.2% of men in Ontario.

The lower rate of postsecondary educational attainment in the Local Study Area and Regional Study Area as compared to Ontario is primarily due to a lack of educational facilities and availability of jobs in northern communities (NWO Community and Baseline Studies Key Person Interview Program 2022). It has been noted that one of the common barriers to employment in the Local Study Area is related to not having obtained a high school certificate or equivalent (NWO Community and Baseline Studies Key Person Interview Program 2022).

Figure 3.3-5 shows the educational attainment for the population aged 15 years and older for Local Study Area communities disaggregated by gender in 2021.

Figure 3.3-5: Educational Attainment by Gender in the Local Study Area Communities, 2021



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Notes: Data were not available for the LSB of Melgund and Dinorwic for 2021.

Key observations on educational attainment within Local Study Area communities include:

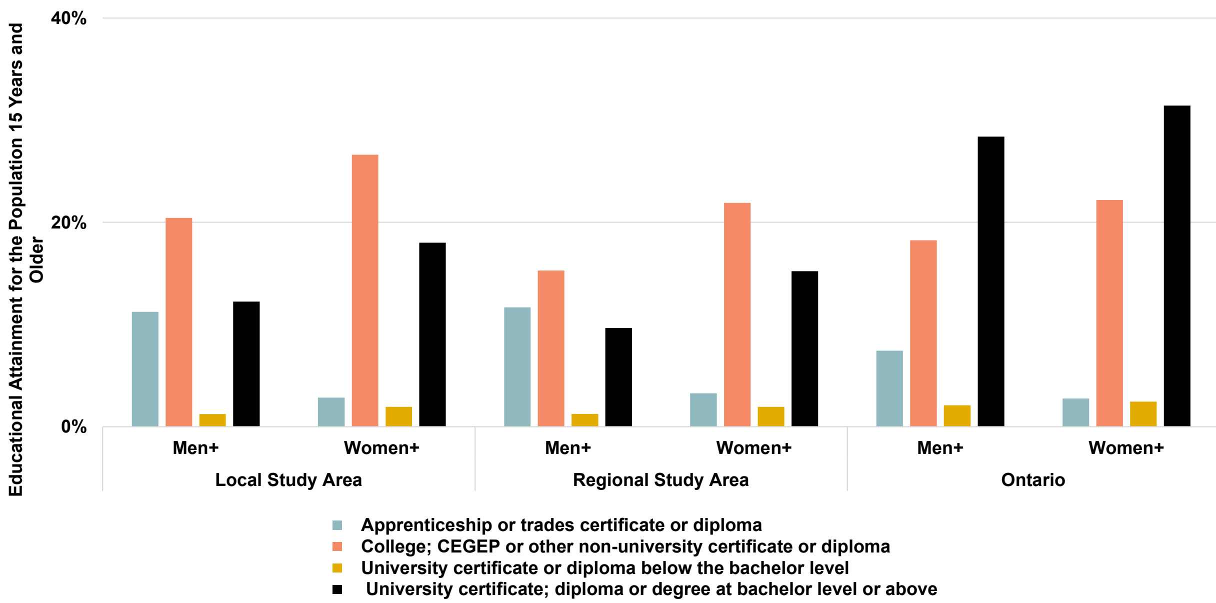
- Among Local Study Area communities, Sioux Lookout has the highest proportion of women with a postsecondary education at 57.0% and the highest proportion for men at 47.7%. Postsecondary educational attainment is lowest among Local Study Area communities in the LSB of Wabigoon with 25.5% of men and 32.5% of women having a postsecondary education.
- Ignace is the only community where a materially higher proportion of men have obtained a postsecondary education compared to women. With 42.3% of men have a postsecondary education compared to 34.7% of women.

- In Dryden, 46% of both men and women have a postsecondary education which is the second highest among Local Study Area communities. In Dryden, only 18.9% of men do not have a high school or equivalent which is the lowest among Local Study Area communities.
- In Machin, about 43% of men and women have a postsecondary education but 39.7% of women have a high school certificate or equivalent as their highest level of education compared to 29.0% for men.
- In LSB of Wabigoon, 41.2% of men do not have a high school certificate or equivalent which is materially higher than any other Local Study Area community.
- In the LSB of Wabigoon, the proportion of men between 25 and 64 years old who do not have a high school certificate or equivalent is somewhat higher than the average for the total population over the age of 15 (26.5%). Similarly, the proportion of women who have a postsecondary education is 53.8%.

Figure 3.3-6 shows the proportion of postsecondary educational attainment for the population aged 15 years and older for the Local Study Area, Regional Study Area, and Ontario, disaggregated by gender in 2021. The classification of postsecondary programs is disaggregated into four categories:

- An apprenticeship or trades certificate or diploma;
- A college, CEGEP, or other non-university certificate or diploma;
- A university certificate or diploma below the bachelor level; and
- A university certificate or diploma at or above the bachelor level: this includes a bachelor's degree, a master's degree, a doctorate, or a degree in medicine, dentistry, veterinary medicine, or optometry.

Figure 3.3-6: Postsecondary Educational Attainment by Gender in the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Notes:

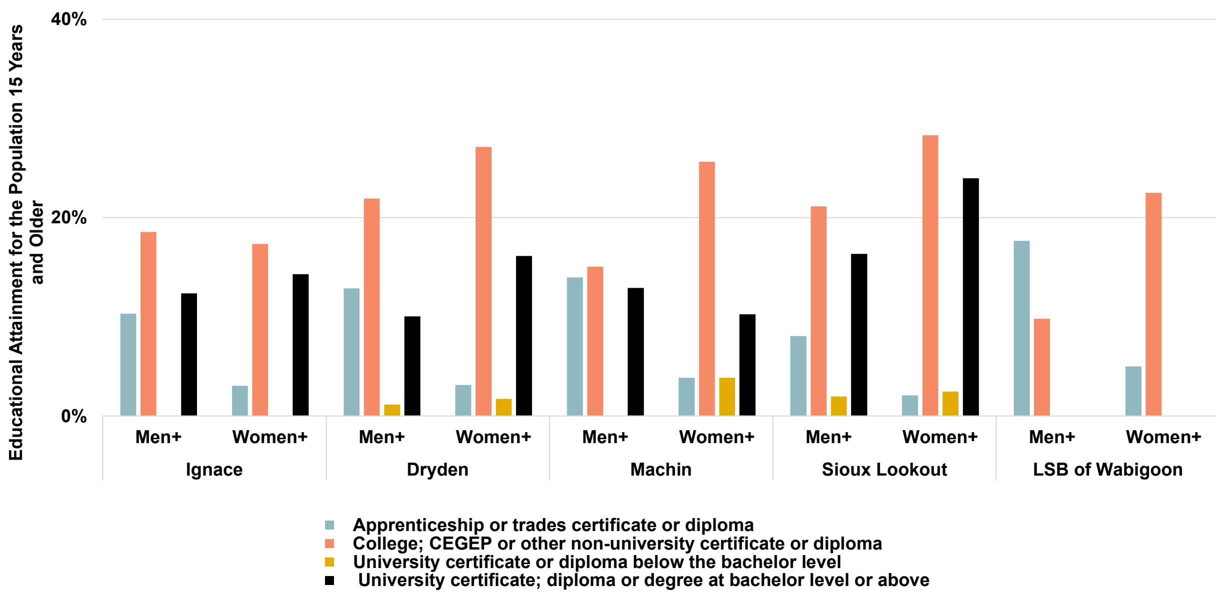
1. Data were not available for the LSB of Melgund and Dinorwic for 2021.

Within the Local and Regional Study Areas, a college certificate or diploma is the most common type of postsecondary education completed. By comparison, the most common postsecondary qualification in Ontario as a whole is a university education at or above the bachelor level. In each region, a higher proportion of women have a college or university education compared to men, but a higher proportion of men have an apprenticeship or trades certificate or diploma compared to women. Other notable highlights of postsecondary educational attainment are as follows:

- The Local Study Area has the highest proportion of the population with a college, CEGEP or other non-university certificate of diploma for men (20.4%) and women (26.6%).
- The Regional Study Area has the highest proportion of the population with an apprenticeship or trades certificate for men (11.7%) and women (3.3%).
- The proportion of the population in Ontario with a university education at or above the bachelor level is materially higher for both men (28.4%) and women (31.4%) compared to the Local and Regional Study Areas.

Figure 3.3-7 shows the proportion of postsecondary educational attainment for the population aged 15 years and older for the Local Study Area communities, disaggregated by gender in 2021. Similar to **Figure 3.3-6**, postsecondary educational attainment is disaggregated into trades or apprenticeship, college or equivalent, a university degree below the bachelor level, and a university degree at or above the bachelor level.

Figure 3.3-7: Postsecondary Educational Attainment by Gender in the Local Study Area Communities, 2021[1]



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Melgund and Dinorwic for 2021.

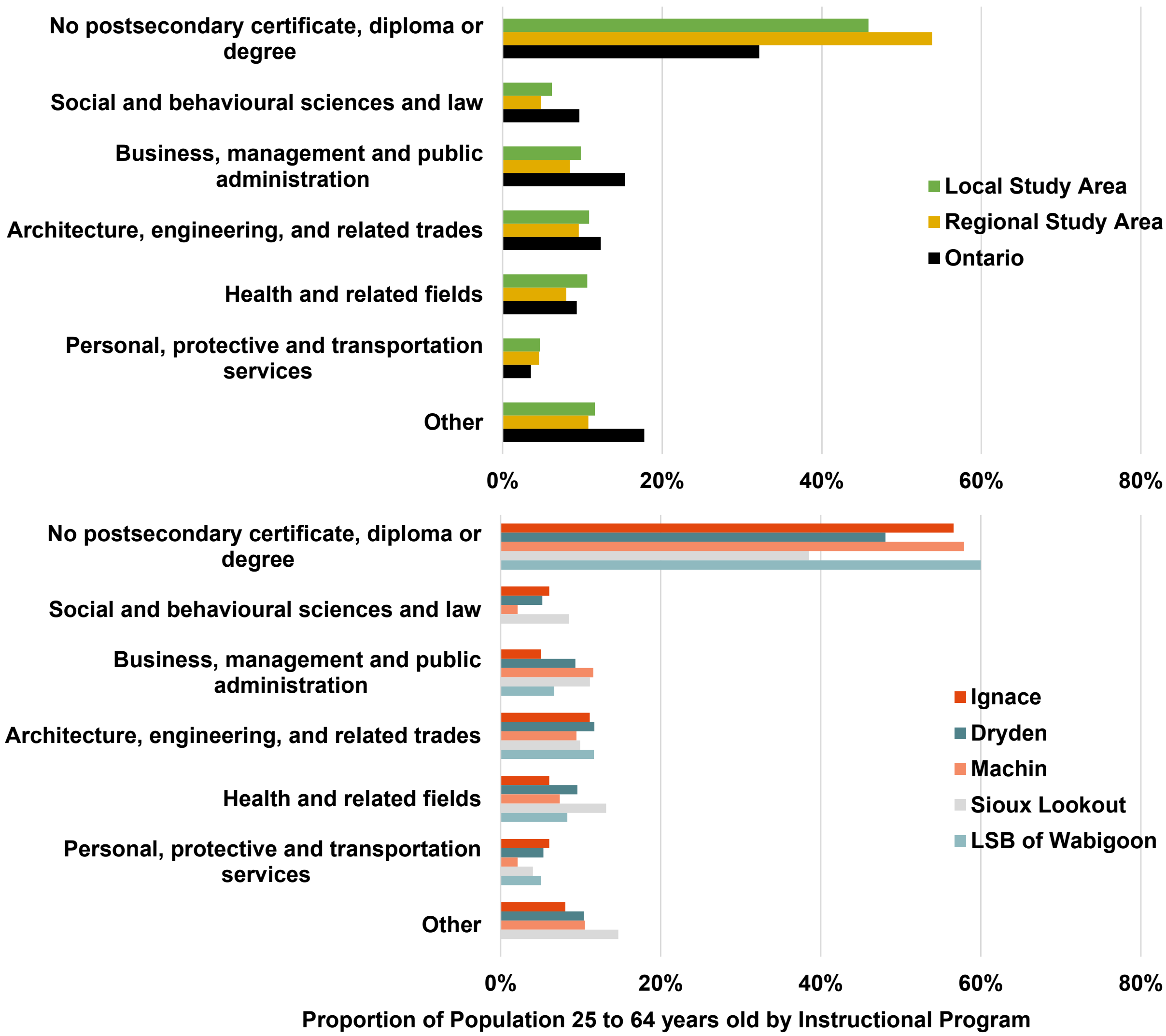
For each Local Study Area community, a larger proportion of men have an apprenticeship or trades certificate or diploma compared to women but, generally, a larger proportion of women have a college education or university education at or above the bachelor level compared to men. Other notable highlights of postsecondary educational attainment among the Local Study Area communities are as follows:

- Among Local Study Area communities, the LSB of Wabigoon has the largest proportion of men (17.6%) and women (5.0%) with an apprenticeship or trades certificate or diploma.
- Dryden men (21.9%) and Sioux Lookout women (28.3%) have the largest proportion of population with a college, CEGEP or other non-university certificate of diploma. This could be attributed to Confederation College having a satellite campus in both Dryden and Sioux lookout.

- Sioux Lookout has the highest proportion of the population with a university education at or above the bachelor level for both men (16.3%) and women (24.0%).
- Ignace is the only community with a larger proportion of men (18.6%) having a college education compared to women (17.3%). Similarly, Machin is the only community with a larger proportion of men (12.9%) having a university education at or above the bachelor level compared to women (10.3%).

Figure 3.3-8 shows the breakdown of postsecondary educational programs completed by people between 25 and 64 years old for the Local Study Area, Regional Study Area, Ontario, and Local Study Area communities in 2021.

Figure 3.3-8: Completion of Postsecondary Educational Programs in the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Melgund and Dinorwic for 2021.

The largest proportion of the population between 25 and 64 years old have not completed a postsecondary educational program in the Local Study Area, Regional Study Area, and Ontario.

Among the Local Study Area, Regional Study Area, and Ontario, the most common postsecondary fields of study are business management and public administration; architecture, engineering, and related trades; or health and related fields. Other notable highlights of completion of postsecondary educational programs include:

- Among the Local Study Area, Regional Study Area, and Ontario, the largest proportion of the population who completed an educational program in health and related fields in the Local Study Area (10.6%) and the lowest proportion is in the Regional Study Area (8.0%).
- Ontario has the largest proportion of the population who completed a business, management, and public administration program (15.3%) and who completed an architecture, engineering, and related trades program (12.3%).

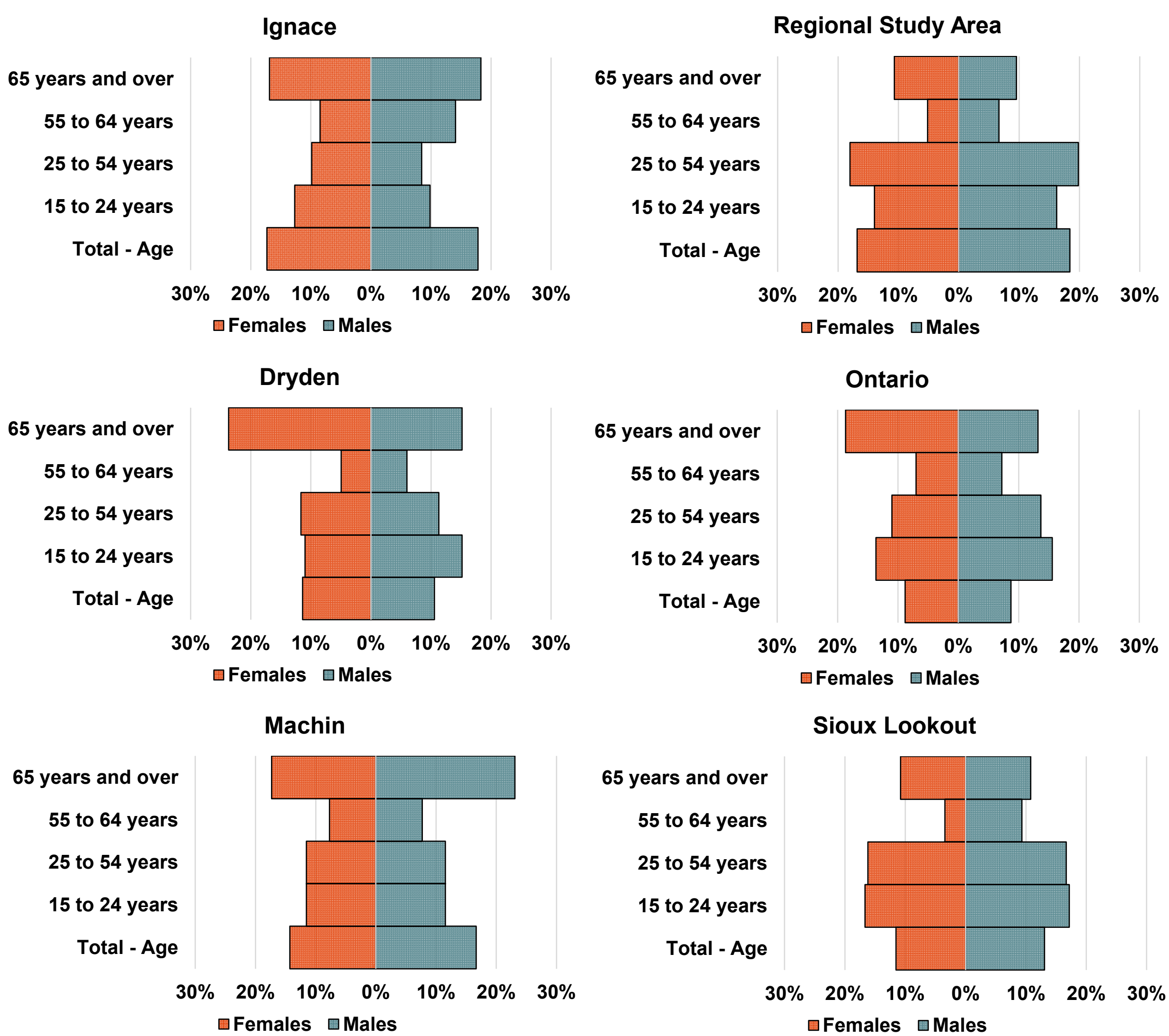
Among the Local Study Area communities, the largest proportion of the population have not completed a postsecondary educational program; the highest proportion is in the LSB of Wabigoon (60.0%) and the lowest proportion is in Sioux Lookout (38.5%). Other notable trends in the completion of postsecondary educational programs are as follows:

- Among all Local Study Area communities, Sioux Lookout has the largest proportion of the population who have completed a health and related fields (13.2%) educational program and a social and behavioural sciences and law educational program (8.5%).
- A large proportion of the population in each Local Study Area community has completed an architecture, engineering, and related fields educational program, with Dryden (11.7%) and the LSB of Wabigoon (11.7%) having the largest proportion. The lowest proportion is in Machin (9.5%).
- Machin has the largest proportion of the population who completed a business, management, and public administration educational program (11.6%) and Ignace has the lowest proportion (5.1%).

3.3.2.4 Educational Attainment and Age

Examining the relationship between educational attainment and age provides insight into the evolving trends in educational attainment across age cohorts. Interview participants noted that when the Mattabi mine was operating there was less of a need for a high school education, as you could go work for the mine without any prior formal education (IAWG March 22, 2023). More recently, the lack of a high school education has been identified as a potential barrier to employment. **Figure 3.3-9** shows the educational attainment of no high school or equivalent disaggregated into age cohorts for the Regional Study Area, Ontario, and Local Study Area communities, for 2016.

Figure 3.3-9: No High School Certificate or Equivalent by Age Cohorts and Sex in the Local Study Area Communities, Regional Study Area, Ontario, 2016[1]



Source: Statistics Canada 2017. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Wabigoon, LSB of Melgund and Dinorwic for 2016.

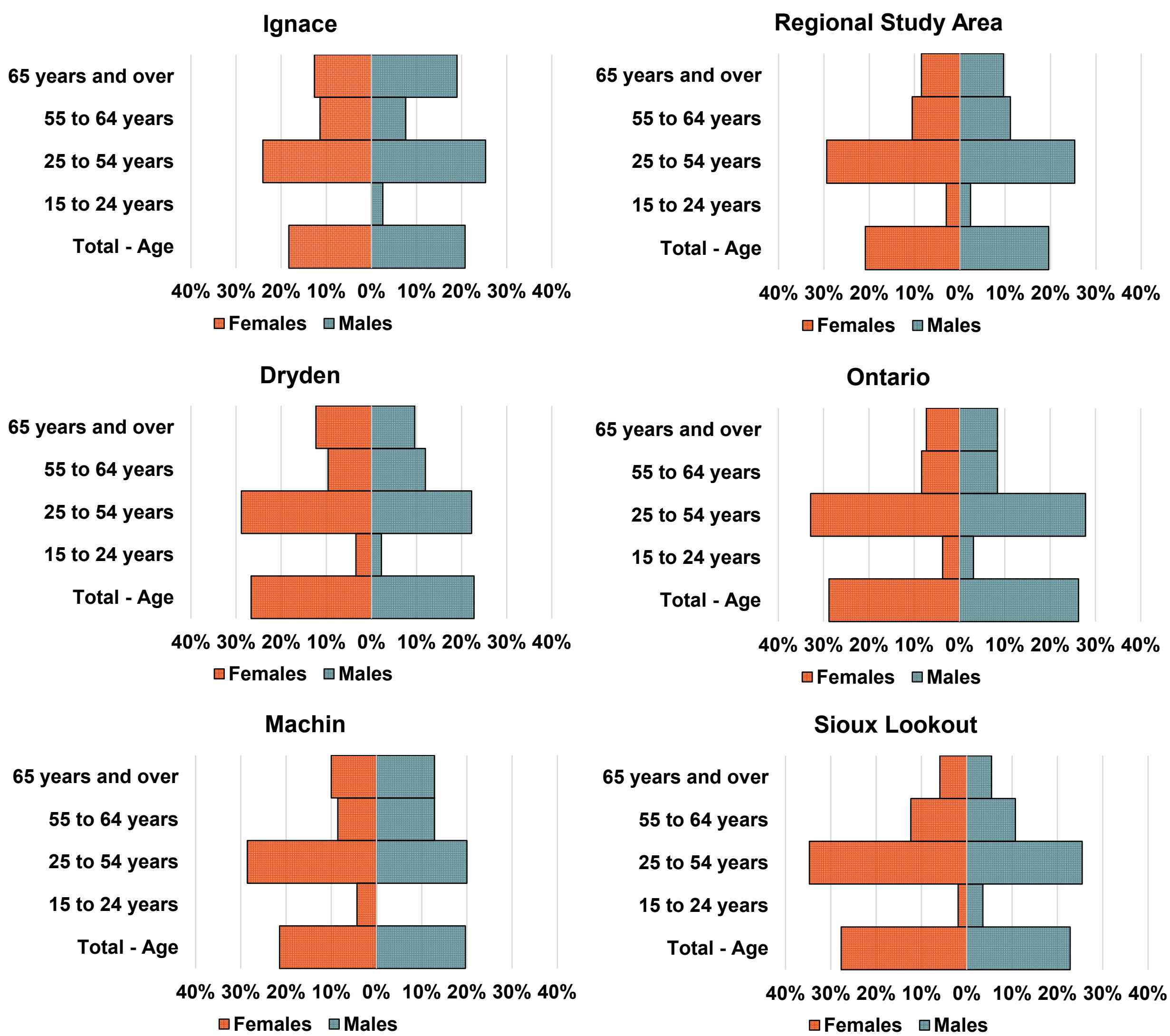
A large proportion of the population in the 65 and older age cohort do not have a high school certificate or equivalent in the Regional Study Area (9.6% for males and 10.7% for females) and

Ontario (13.2% for males and 18.7% for females). Within the Regional Study Area, a large proportion of the population in the 25 to 54 age cohort do not have a high school certificate or equivalent (19.8% for males and 18.0% for females). Notable highlights of the population without a high school certificate or equivalent disaggregated by age cohorts in the Local Study Area communities are as follows:

- A large proportion of the population in the 65 years and older age cohort do not have a high school certificate or equivalent in each of the Local Study Area communities. The largest proportion without a high school certificate or equivalent for males among the Local Study Area communities is in Machin (23.1%). The largest proportion for females without a high school certificate or equivalent is in Dryden (23.7%).
- In Ignace, for the 55 to 64 age cohort, a large proportion do not have a high school certificate or equivalent for both males (14.1%) and females (8.5%).

Figure 3.3-10 shows the postsecondary educational attainment disaggregated into age cohorts for the Regional Study Area, Ontario, and Local Study Area communities, for 2016.

Figure 3.3-10: Postsecondary Educational Attainment by Age Cohorts and Sex in the Local Study Area Communities, Regional Study Area, Ontario, 2016[1]



Source: Statistics Canada 2017. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Wabigoon, LSB of Melgund, and Dinorwic for 2016.

Postsecondary educational attainment for the 55 to 64 and 65 years and older age cohorts are similar between the Regional Study Area and Ontario. Postsecondary educational attainment for the 25 to 54 age cohort is slightly higher for both men and women in Ontario (27.8% for males and 32.9% for females) compared to the Regional Study Area (25.3% for males and 29.4% for females). Notable highlights of the postsecondary education attainment by age cohorts in the Local Study Area communities are as follows:

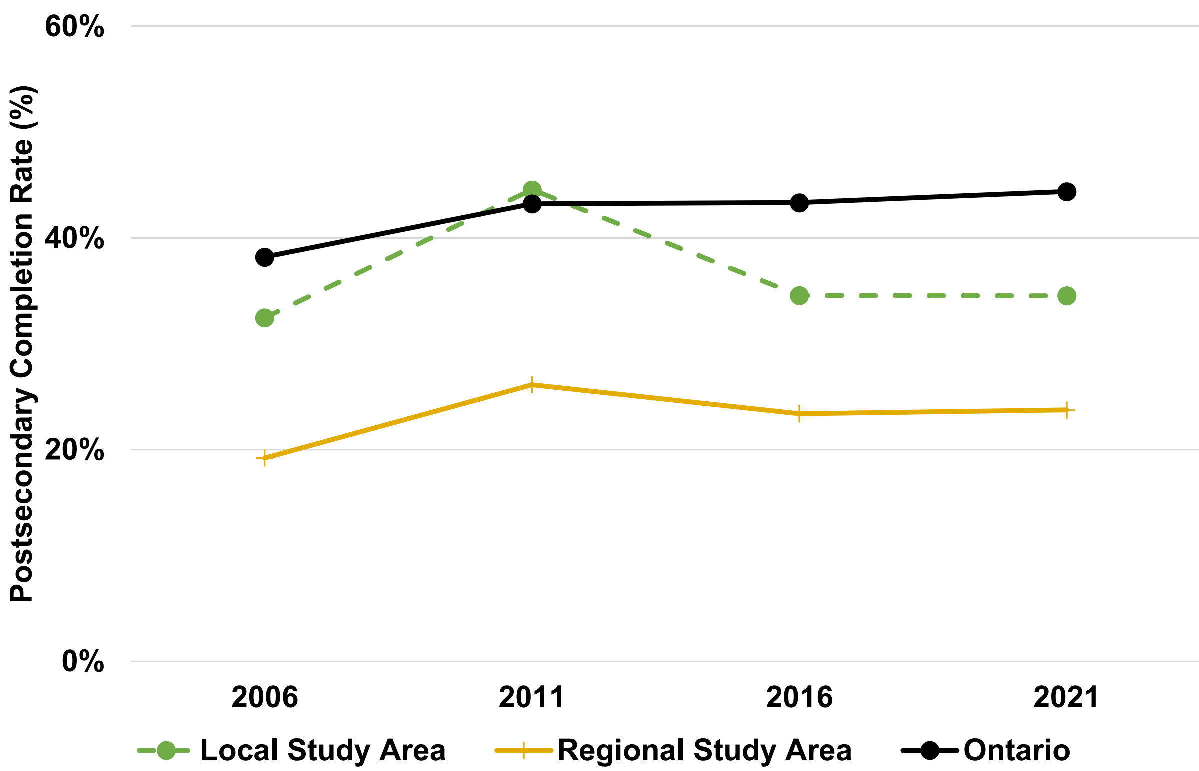
- For the 25 to 54 age cohort, postsecondary educational attainment is highest in Sioux Lookout for both males (25.5%) and females (34.8%). Postsecondary educational attainment for the 25 to 54 age cohort is lowest for males in Machin (20.0%) and females in Ignace (24.1%).
- For the 65 years and older age cohort, postsecondary educational attainment is highest in Ignace for both males (19.0%) and females (12.7%).
- The 65 years and older age cohort in Ignace has a large proportion with a postsecondary education and a large proportion without a high school certificate or equivalent as their highest level of education.

Postsecondary educational attainment will generally report a small proportion for the 15 to 24 age cohort given they are likely still in school. For the older age cohorts, having a large proportion of the population with a postsecondary education suggests future vacancies could be made available for higher level positions if they are still employed. This could pose as an opportunity for people early in their careers to advance to more senior roles as more vacancies are made available.

3.3.2.5 Indigenous Educational Attainment

Figure 3.3-11 shows the proportion of the population 15 years and older who identify as Indigenous and have completed postsecondary education for the Local Study Area, Regional Study Area, and Ontario from 2006 to 2021. Data on Ignace and Machin were not available prior to 2016, and thus only included in 2016 in the Local Study Area. Although, this only accounts for a small portion of the decrease between 2011 and 2021. Limitations associated with disaggregated Indigenous identity data are provided in **Section 3.1.2.1.1**.

Figure 3.3-11: Postsecondary Educational Attainment of Indigenous Peoples in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, and 2023f. See **Appendix 3B Supplemental Data**.

Notes:

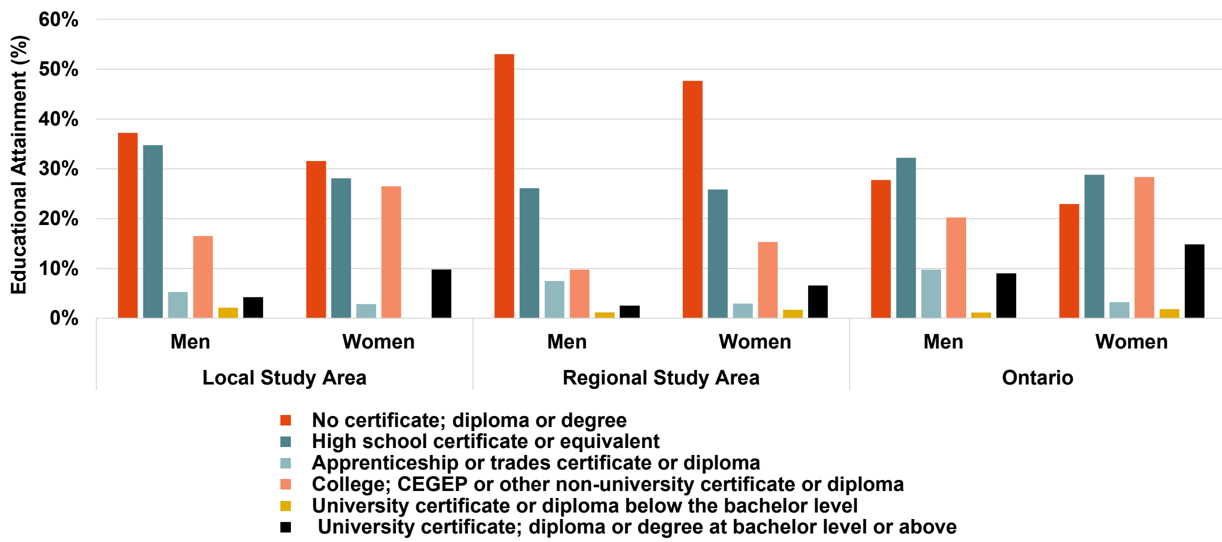
1. Data for Local Study Area communities were not available for all years for Ignace (2006 and 2011) and Machin (2006 and 2011). Data were not available for the LSB of Melgund, LSB of Wabigoon, and Dinorwic for 2006 to 2021.

The postsecondary completion rate for Indigenous peoples in 2021 was higher in Ontario as a whole (44.4%) compared to the Local Study Area (34.6%) and the Regional Study Area (23.8%). Other notable trends in postsecondary educational attainment include:

- The proportion of the Indigenous population with a postsecondary education was similar from 2006 (32.5%) to 2021 (34.6%) in the Local Study Area.
- The proportion of the Indigenous population with a postsecondary education increased from 19.2% in 2006 to 23.8% in 2021 in the Regional Study Area.

Figure 3.3-12 shows the highest level of educational attainment of the population 15 years and older who identify as Indigenous in the Local Study Area, Regional Study Area, and Ontario disaggregated by gender for 2021.

Figure 3.3-12: Highest Educational Attainment of Indigenous Peoples by Gender in the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2023f. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Melgund, LSB of Wabigoon, and Dinorwic for 2021.

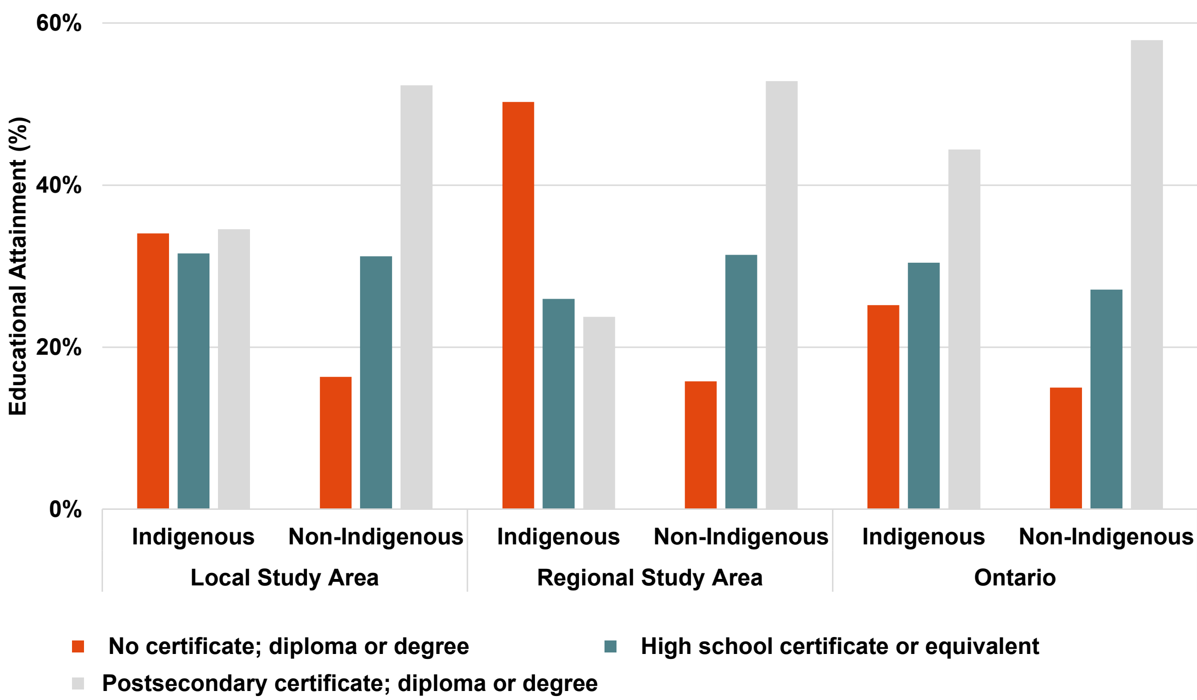
A larger proportion of Indigenous women have completed a secondary or postsecondary education compared to Indigenous men in the Local Study Area, Regional Study Area, and Ontario. Other notable highlights include:

- The proportion of Indigenous peoples who have not obtained a high school certificate, diploma, or degree was highest in the Regional Study Area for both men (53.0%) and women (47.6%).
- Apprenticeship or trades certificates or diplomas attainment was highest in Ontario for Indigenous men (9.7%) and women (3.2%), followed by the Regional Study Area for Indigenous men (7.5%) and women (2.9%).
- College certificate or diploma attainment rates for Indigenous men (16.5%) and women (26.5%) in the Local Study Area are slightly lower than for Ontario (Indigenous men 20.2%; and women 28.4%).

- University degree attainment rates where somewhat lower in the Local Study Area for Indigenous men (4.2%) and women (9.8%) than in Ontario (Indigenous men 9.0%; and women 14.8%).

Figure 3.3-13 shows the highest level of educational attainment of the population 15 years and older for the Indigenous population and the non-Indigenous population for the Local Study Area, Regional Study Area, and Ontario in 2021.

Figure 3.3-13: Highest Level of Educational Attainment of Indigenous Peoples and Non-Indigenous in the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2023f. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Melgund, LSB of Wabigoon, and Dinorwic for 2021.

A larger proportion of the non-Indigenous population has completed a postsecondary education compared to the Indigenous population in the Local Study Area, Regional Study Area and Ontario. Notable highlights of educational attainment among Indigenous and non-Indigenous peoples include:

- In the Local Study Area, 34.6% of the Indigenous population has obtained a postsecondary education compared to 52.3% of the non-Indigenous population.
- In the Local Study Area, 34.1% of the Indigenous population have not obtained a high school or equivalent compared to 16.4% for the non-Indigenous population.
- In the Regional Study Area, 50.3% of the Indigenous population have not obtained a high school certificate or equivalent compared to 15.8% for the non-Indigenous population.

Within the Regional Study Area, approximately 50% of the Indigenous population has not completed a high school certificate or equivalent. The reasons behind this are complex and a full understanding would require engagement and discussion with Indigenous communities. One possible contributing factor is the remoteness of northern Indigenous communities and challenges associated with completing high school for communities which do not have a high school within or near the community. There are also youths who do not return after leaving their community to attend high school or obtain a postsecondary education (GBA+ Workshop 2023). Other challenges include recruiting and retaining teachers, infrastructure and capital needs for First Nation schools, and a lack of funding (Social Determinants of Health 2017; Indigenous Corporate Training 2023). Challenges Indigenous peoples face off-reserve include racism, transportation limitations, and challenges recruiting and retaining tutors (GBA+ Workshop 2023; Indigenous Corporate Training 2023).

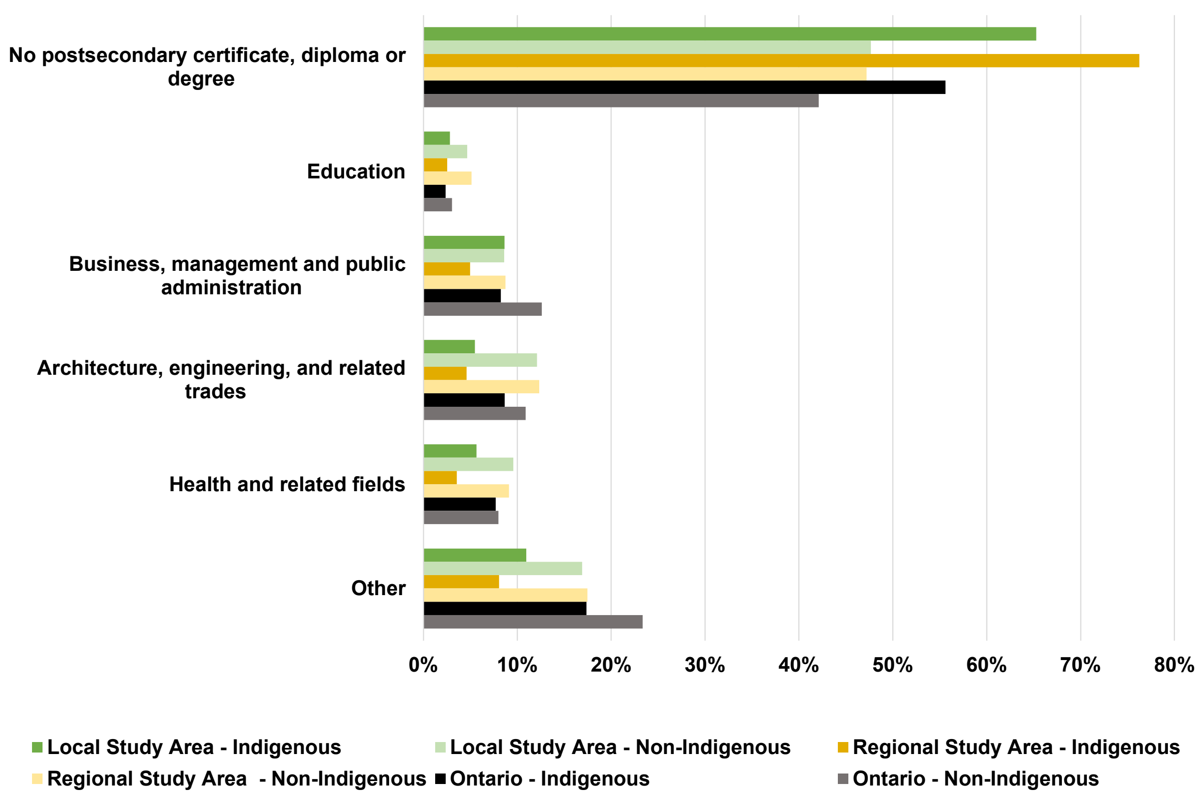
Educational attainment does not capture other forms of education or training such as informal education or on-the-job training. Informal education is the knowledge a person gains through life experiences. This cannot be easily measured but can be reflected in an individual's ability to perform simple life tasks such as managing time and finances. Other forms of informal education include self-directed reading, watching how-to videos, or attending seminars. One limitation of obtaining informal education through these means is that an individual is more likely to encounter misleading information (Passion in Education 2019; Globale 2020). Another form of informal education is specialized educational programs for an identified group (e.g., adult education, fitness programs, software learning). These programs can be offered for literacy, learning basic life skills, and other basic skills or jobs. Delivery methods can include individualized instruction and distance learning. One limitation of this type of informal education is that programs are tailored to the students' schedules and availability which may lead to an irregular schedule and ineffective learning (Globale 2020).

Through on-the-job training, employees can learn practical skills and knowledge to perform their job through teaching, mentorship, and collaboration with other employees. This is a hands-on approach which can be a cost-effective measure for onboarding new employees (Waters 2022). Some business and industry knowledge must be learned through on-the-job training and can be tailored to the business or employee. On-the-job training has the benefits of encouraging collaboration which can improve productivity, job satisfaction, and employee retention (Waters 2022).

Although there is a large proportion of Indigenous peoples who have not completed a high school certificate or equivalent, this does not capture the informal education obtained in everyday life, job training, training programs or certificates required for employment, and Indigenous knowledge which may reflect their community culture, language, values, or governance (Government of Canada 2022). Indigenous land-based education is a form of education that uses an Indigenous and environmentally focused approach which recognizes the importance of the physical, mental, and spiritual connection to the land for Indigenous cultures (Cherpako 2019).

Figure 3.3-14 shows the breakdown of postsecondary educational programs completed by Indigenous and non-Indigenous peoples for the population aged 15 years and older for the Local Study Area, Regional Study Area, and Ontario, in 2021.

Figure 3.3-14: Completion of Postsecondary Educational Programs by Indigenous Peoples in the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2023f. See **Appendix 3B Supplemental Data**.

Notes:

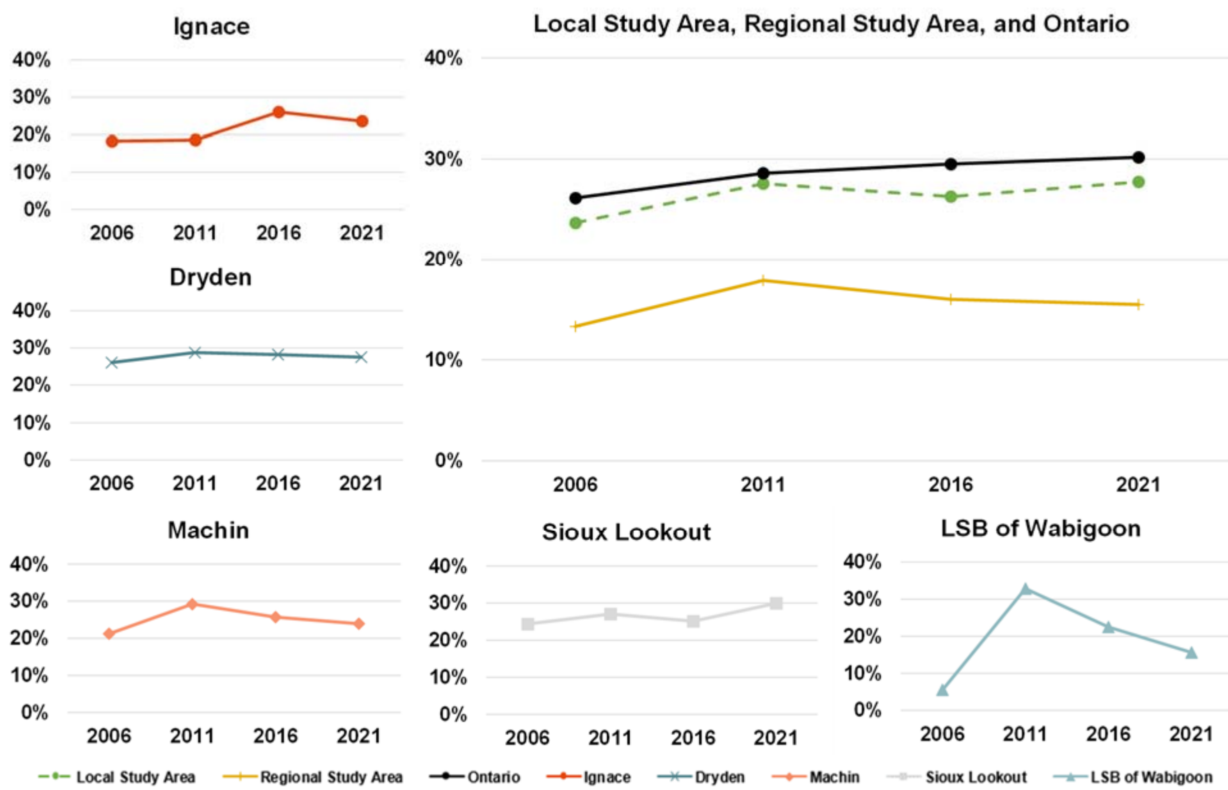
1. Data were not available for the LSB of Melgund, LSB of Wabigoon, and Dinorwic for 2021.

Among the Local Study Area, Regional Study Area, and Ontario, the largest proportion of the population 15 years and older have not completed a postsecondary educational program for both Indigenous and non-Indigenous peoples. In each area, the proportion of the Indigenous population who have not completed a postsecondary educational program is materially higher compared to non-Indigenous peoples. Notable highlights of completion of postsecondary educational programs are as follows:

- The largest proportion of the population for both Indigenous and non-Indigenous peoples have completed a business, management, and public administration; architecture, engineering, and related trades; or health and related services educational program.
- For the business, management, and public administration educational programs, the largest proportion of the Indigenous population who completed a program is in the Local Study Area (8.9%), which is similar to the non-Indigenous population (8.6%).
- For the architecture, engineering, and related trades programs, the largest proportion of the Indigenous population who completed a program is in Ontario as a whole (8.7%) and the lowest proportion was in the Regional Study Area (4.6%). In both regions, the proportion of the non-Indigenous population who completed a program is materially higher than the Indigenous population (10.9% in Ontario and 12.4% in the Regional Study Area for the non-Indigenous population).
- For the health and related services programs, the largest proportion of the Indigenous population who completed a program is in Ontario as a whole (7.7%) and the lowest proportion was in the Regional Study Area (3.6%). The proportion of the non-Indigenous population in the Local Study Area (9.6%) who completed a program in materially higher than the Indigenous population (5.6%).

Figure 3.3-15 compares the proportion of Indigenous peoples with STEM-related qualifications for the population 15 years and older in the Local Study Area, Regional Study Area, and Ontario for 2006, 2011, 2016, and 2021. STEM-related qualifications are defined as postsecondary completions for: social and behavioural sciences and law; physical and life sciences and technologies; mathematics, computer, and information sciences; architecture, engineering, and related technologies; agriculture, natural resources, and conservation; and health and related fields educational programs.

Figure 3.3-15: Proportion of the Indigenous Population who have STEM-related Qualifications in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1,2]



Source: Estimates prepared by Manifold 2023b based on Statistics Canada 2007, 2012, 2017, and 2022a. Manifold 2023b. See **Appendix 3B Supplemental Data**.

Notes:

1. Modelling for the number of completions by major field of study and the population 15 years and older were completed by Manifold.
2. Data were not available for the LSB of Melgund and Dinorwic.

The proportion of the Indigenous population with STEM-related qualifications in the Local Study Area increased from 23.7% in 2006 to 27.7% in 2021. The proportion of the Indigenous population with STEM-related qualifications remained relatively flat between 2006 and 2021 for the Regional Study Area (about 14%). The proportion of the Ontario Indigenous population with STEM-related qualifications increased from 26.1% in 2006 to 30.2% in 2021 which is similar to the increase in the Local Study Area.

A notable trend among the Local Study Area communities include that the proportion of the Indigenous population with STEM-related qualification increased slightly for each of the Local Study Area communities between 2006 and 2021. In 2021, among Local Study Area communities, Sioux Lookout had the highest proportion of the Indigenous population with STEM-related qualifications (30.0%) and the LSB of Wabigoon had the lowest (15.6%).

3.3.3 Industry-led Training Opportunities and Programs

A number of employers in the Local Study Area conduct their own industry-related training to ensure their staff have the necessary qualifications for their jobs (NWO Community and Baseline Studies Key Person Interview Program 2022). For example, Domtar offers co-op opportunities with the Dryden High School for programs including steam engineering, operations, and accounting. Domtar also conducts a two-and-a-half-day Conservation Camp program for Grade 9 students which teaches students about water, soils, trapping, harvesting, seeding, and the Ministry of Natural Resources and Forestry. The program has a sizable uptake by students who benefit from credit towards a year-end science assignment (NWO Community and Baseline Studies Key Person Interview Program 2022).

Within the Local Study Area there are employment service offices in Ignace and Dryden, and Seven Generations has a campus in Sioux Lookout which offers employment training courses. Although Ignace has an employment service office which is funded by Employment Ontario, the services offered are limited and some clients must be referred to the Dryden or Thunder Bay offices for certain services (NWO Community and Baseline Studies Key Person Interview Program 2022).

Table 3.3-4 summarizes a variety of workforce development organizations in the Local Study Area and across Northern Ontario.

Table 3.3-4: Workforce Development Organizations in the Local Study Area and Northern Ontario, 2023

Institutions	Description of Institution and Services Offered
Local Study Area	
Contact North	Locations in both Sioux Lookout and Dryden. Offers online secondary and postsecondary courses, certificates, diplomas, and degrees in a wide variety of professions from colleges and universities across Ontario.
Northwest Employment Works	Offers employment services such as job matching, job postings, apprenticeship matching, and support for individuals seeking to end social assistance and re-enter the workforce.
Seven Generations Education Institute	Is an Indigenous-led institution which has several locations across Northwestern Ontario for adult education, including Ignace. Seven Generations has a Sioux Lookout campus which offers training for employment for individuals and businesses, the Apatisiwin Employment and Training program, and the Azhemiinigoziwin program which focuses on developing life skills, Indigenous teachings, education, and job preparation for women.

Table 3.3-4 Continued: Workforce Development Organizations in the Local Study Area and Northern Ontario, 2023

Institutions	Description of Institution and Services Offered
Local Study Area	
Patricia Area Community Endeavors (“PACE”)	Offers lending services to businesses and entrepreneurs if they have been declined by the bank. PACE also offers counselling services and a business incubator program. The business incubator program has three offices that can be used for up to 12 months by clients.
Crossroads Employment and Training	Located in Ignace. Provides counselling and assistance with resumes for job seekers but are constrained by provincial funding.
Keewaytinook Centre of Excellence	Located in Dryden. Offers certification and courses for water and wastewater plant operators in distribution and treatment systems.
Northern Ontario	
Northern Centre for Advanced Technology	Located in Sudbury. Offers labour training and development programs, services, and resources to optimize productivity and safety of workers in skilled labour industries. They offer common core programs for basic mill and mining operations, simulation training for operators of mining equipment, and customized training requested by employers.
Northern Community Development Services	Located in Fort Frances. Offers employment services such as job search, career guidance, specialized services for both the unemployed and employed, skill-building workshops, assistance with resumes, and placements.
YES Employment Services	Located in Thunder Bay. Offers employment services such as job matching, job and training postings, career counseling, and education and re-training options through the Better Jobs Ontario program. Also offers support for youths (i.e., 15 to 29 years old) through the Youth Job Connection program which delivers pre-employment training, work placements, and mentorship and job coaching throughout the program.

Table 3.3-4 Continued: Workforce Development Organizations in the Local Study Area and Northern Ontario, 2023

Institutions	Description of Institution and Services Offered
Northern Ontario	
Workforce Inc.	Located in Thunder Bay. Has job postings available for the public and provides supports for employers to assist with resourcing skilled trades, labour, and professionals to address labour demands.
Thunder Bay Community Economic Development Commission	Located in Thunder Bay, the Community Economic Development Commission engages in projects and programs that will contribute to economic development. The Thunder Bay Community Economic Development Commission also provides entrepreneurial support including business consultation services, guidance with business start-ups, assistance with obtaining funding, and referral services.
Northwestern Ontario Innovation Centre	Is a non-profit organization which offers programs designed to promote job growth by supporting entrepreneurs and companies grow their business. The programs offered focus on starting a business, developing a clientele, resources for office space, obtaining funding, and programs for youth entrepreneurs.
Professional Association of Residents of Ontario	Professional Association of Residents of Ontario is the official representative voice for doctors-in-training in Ontario. Professional Association of Residents of Ontario's priority is to advocate on behalf of its members, addressing professional and educational concerns to optimize training and the well-being of Ontario's newest doctors.
The Northwest Training and Adjustment Board ("NTAB")	Does not provide any training themselves but facilitates the connections and processes to develop the workforce with local and regional employers. NTAB also has a thorough understanding of the local and regional labour forces through research and community engagement.
Shooniyaa Wa-Biitong	Is a training and employment centre mandated by the Chiefs of Treaty No.3 to promote employment development and deliver training to First Nation communities and their members within the Treaty No.3 area and Treaty No.3 members outside of the Treaty No.3 area. The programs offered include training, an employment training program, a self-employment program, and youth programs which assist with defining career goals, education and employment goals, and entrepreneurship.

3.3.3.1 Apprenticeship and Skilled Trades

During an apprenticeship, students learn a skilled trade through on the job training and are paid for their work. In addition to the practical job experience, apprenticeships have an educational component where students learn from instructors who know the trade. This education generally takes place on a college campus or in a union training centre. For most trades, a person will work for about a year and then complete course work for eight to twelve weeks, either part-time or full-time. The duration of an apprenticeship varies depending on the trade, but usually takes between two to five years to complete (Government of Ontario 2022b).

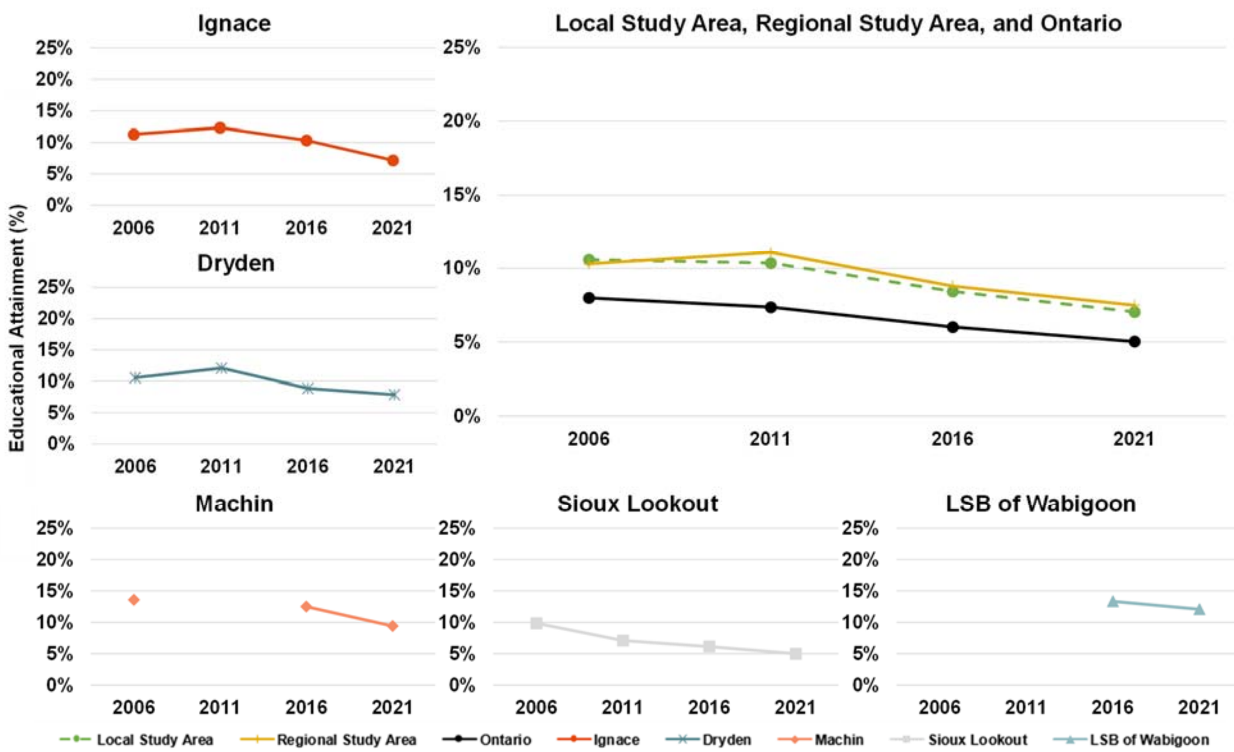
Several interview participants noted there are not enough contractors, and certain trades (e.g., electricians and plumbers) are scarce in Ignace and other Local Study Area communities. Given the current demand for skilled trades and local contractors for new housing development and home renovations, there is an excess demand for skilled trades and contractors in the Local Study Area (NWO Community and Baseline Studies Key Person Interview Program 2022).

Within the Regional Study Area, most apprenticeship courses can be taken at the Confederation College Thunder Bay campus but some trades, such a plumbing, are not offered and require residents to complete the course work in Winnipeg or another institution in Northern Ontario. Many trades, such as plumbing, require students to go to college in Northeast and Southern Ontario. The distance contributes to most students having to pay for living expenses away from home in addition to tuition (NWO Baseline Studies Key Person Interview Program 2022-2023). Within the Local Study Area, there are no apprenticeship courses offered at the Dryden or Sioux Lookout Confederation College satellite campuses. The need to travel to Thunder Bay, Winnipeg, or another community for apprenticeship courses could pose a barrier for some individuals.

In addition to the course work, students must find employers to provide work to obtain their hours towards completing each level of their apprenticeship. Some interview participants said it can be a challenge to find employers who are willing to take on apprentices unless they have some family or friend connection. This is partly due to a lack of ticketed skilled trades professionals looking to take on an apprentice and a lack of certain trade professionals in the area to engage for certain trades (e.g., carpenters, plumbers).

Figure 3.3-16 shows the proportion of the population 15 years and older with an apprenticeship or trades certificate or diploma for the Local Study Area, Regional Study Area, Ontario, and Local Study Area communities from 2006 to 2021.

Figure 3.3-16: Proportion of Population with Apprenticeship or Trades Certificate in the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

The proportion of the population with an apprenticeship or trades certificate or diploma has decreased in all regions and Local Study Area communities since 2006. A higher proportion of the population has an apprenticeship or trades certificate or diploma in both the Local and Regional Study Areas compared to Ontario as a whole. However, the proportion of the population with an apprenticeship or trades certificate or diploma decreased in both the Local Study Area (from 10.6% in 2006 to 7.0% in 2021) and the Regional Study Area (from 10.3% in 2006 to 7.5% in 2021).

Notable trends in the attainment of an apprenticeship or trades certificate or diploma among Local Study Area communities are as follows:

- The proportion of individuals who have obtained an apprenticeship or trades certificate or diploma was highest in Machin at 13.6% in 2006 but decreased to 9.4% by 2021.
- The LSB of Wabigoon has the highest proportion of residents with an apprenticeship or trades certificate or diploma among Local Study Area communities at 12.1% in 2021 which decreased from 13.3% in 2016.
- Sioux Lookout has the lowest proportion of the population with an apprenticeship or trades certificate or diploma at 5.0% in 2021 which decreased from 9.8% in 2006.
- The proportion of the population with an apprenticeship or trades certificate or diploma was 7.2% in Ignace and 7.9% in Dryden, both of which declined slightly since 2006.

One of the largest challenges is attracting people into the skilled trades. Some of the primary reasons include distance to educational institutions, employers' willingness to take on apprentices, and financial costs associated with tuition, travel costs, and living accommodations while away (NWO Baseline Studies Key Person Interview Program 2022-2023). One interview participant noted that it has been discussed among residents in the Local Study Area that if a trade school was available to accommodate multiple trades in the region, it would be at capacity (NWO Baseline Studies Key Person Interview Program 2022-2023). Another interview participant noted that in some instances parents do not encourage their children to pursue a skilled trade and prefer their children obtain other education and training (NWO Community and Baseline Studies Key Person Interview Program 2022).

When the Mattabi mine was operating, Mattabi would encourage people to go to school and provide work experience to obtain their apprenticeship hours. Local employers in the forestry sector who take on apprentices noted it was something they previously engaged in more frequently and would consider doing again (NWO Community and Baseline Studies Key Person Interview Program 2022). Another measure to increase apprenticeships suggested by some interview participants would be to offer a sponsorship program that pays for tuition if students complete the required courses and work hours (NWO Community and Baseline Studies Key Person Interview Program 2022). It was also noted that the current apprenticeship system and processes must be reviewed to improve affordability and accessibility for youths in Northern Ontario (NWO Baseline Studies Key Person Interview Program 2022-2023). Currently, the grant and loan programs available do not align with cost of living expenses and the financial burden of loans adds to the barriers for those who are interested in attending university or entering a trade program (NWO Baseline Studies Key Person Interview Program 2022-2023).

Recent efforts made by Keewatin Patricia District School Board for the Ontario Youth Apprenticeship Program included hiring Upriver Media Inc. to make a video series highlighting alumni from the Keewatin Patricia District School Board schools working in skilled trades. Other programs include Women in Trades and Indigenous Students in Trades, where a girls-only welding course with a female Red Seal welder was held and a video series with all Indigenous female leads were shared with students (NWO Community and Baseline Studies Key Person Interview Program 2022).

3.3.3.2 Entrepreneurship

Entrepreneurship can generate economic empowerment and can begin at any age. New small businesses play a pivotal role in competition in emerging sectors and are critical for economic development and innovative capacity (Ribeiro-Soriano 2017). In 2016, small businesses accounted for 41.9% of Gross Domestic Product ("GDP") generated by the private sector (Government of Canada 2020). As of 2019, small businesses (i.e., businesses with 1 to 99 paid employees) employed 68.8% of the total private labour force, and, between 2014 and 2019, small businesses were responsible for 35.8% of the net growth in employment across Canada (Government of Canada 2020). Small- and medium-sized businesses contributed to 85% of net job creation in the first two years of recovery following the 1981, 1990, and 2008 recessions (MDB Insight 2011). This demonstrates the importance of encouraging entrepreneurship for local economic sustainability.

Table 3.3-5 summarizes organizations that provide entrepreneurial supports in the Local Study Area and Northern Ontario.

Table 3.3-5: Entrepreneurial Organization in the Local Study Area and Regional Study Area, 2023

Organization	Location	Services Offered
Patricia Area Community Endeavors	Dryden	PACE provides business counselling and support, loans, non-profit funding, mentorship, and a small business incubator program (PACE n.d.a). The Small Business Incubator program provides subsidized office space for up to 12 months to a small business owner. This also presents an opportunity for small business owners to engage in skill development and business training that is designed to accelerate their business (PACE n.d.b).
Futurepreneur Canada	Available online	Non-profit organization which supports business owners in the age range of 18-39 years old. Provides financing, mentoring, and supports including online resources and pre-launch coaching (Futurepreneur n.d.).
FedNor - Federal Economic Development Initiative for Northern Ontario	Northern Ontario, available online	FedNor is the Government of Canada's economic development organization for Northern Ontario. The organization provides support for businesses including financing and business services (FedNor 2021).
Shooniyaa Wa-Biitong	Kenora and Fort Frances	Is a training and employment centre mandated by the Chiefs of Treaty No.3 to promote employment development and deliver training to Indigenous peoples (Shooniyaa Wa-Biitong n.d.). Shooniyaa Wa-Biitong also offers a self-employment program which is designed to help support entrepreneurs with a small business start-up.
Northwest Business Centre	Kenora	The Northwest Business Centre offers one-on-one consultation services including business planning, start-ups, and program and funding options (Northwest Business Centre n.d.a). The Starter Company Plus program is designed to create sustainable jobs through the provision of a $5,000 grant for entrepreneurs looking to start, expand, or buy a small business. Entrepreneurs will also receive training to complete a business plan and one-on-one guidance (Northwest Business Centre n.d.b).

Table 3.3-5 Continued: Entrepreneurial Organization in the Local Study Area and Regional Study Area, 2023

Organization	Location	Services Offered
Summer Company	Thunder Bay	The Summer Company Program is for young entrepreneurs aged 15-29 years old who are returning to school in the fall. Provides up to a $3,000 grant to help start a business and will also provide business coaching and mentoring from local community business leaders (Thunder Bay CEDC n.d.).
Northern Ontario Angels	Sudbury	Northern Ontario Angels is an organization where northern Ontario entrepreneurs can look to grow their capital and help entrepreneurs find investors to help the entrepreneurs grow (NOA n.d.).
Northwestern Ontario Innovation Centre	Kenora and Thunder Bay	Offers an innovator membership which provides business advice and supports including market research, market development, market export, product development, and accessing capital (NWO Innovation n.d.a). Also provides supports for finding customers, physical resources, such as office space, obtaining funding, and product development. The Youth Effect Program is for youths between the ages of 18 and 29 who are matched with a local business to gain experiential learning and training (NWO Innovation n.d.b). The BizKids Camp is for youths between the ages of 9 and 12 who generate a business idea with the guidance of counselors and run their business during the last day of the camp (NWO Innovation n.d.b). The TechKids Program provides youths with the opportunity to learn about game and app development, robotics, web development, 3D printing, and different careers in technology (NWO Innovation n.d.b). A Trailblazer Program, which is geared towards early-stage startups, helps identify the market and validate the business idea (NWO Innovation n.d.c). The Costarter Program is an accelerator program which is an intensive crash course in creating a business for entrepreneurs in the early stages of their business venture (NWO Innovation n.d.d).

There are no organizations specifically providing supports to entrepreneurs in Ignace, but the Ignace and Area Business Association holds public monthly meetings to facilitate business development discussions and networking. PACE also offers services remotely to Ignace and other communities in the Local Study Area, with the nearest office being in Dryden (NWO Community and Baseline Studies Key Person Interview Program 2022). Ignace, Dryden, Machin, and Sioux Lookout each have set goals to support local businesses and entrepreneurs (Millier Dickinson Blais 2015; Machin 2017; Ignace 2019; Sioux Lookout 2019). Sioux Lookout's Community Improvement Plan discusses lobbying public and private sectors to invest and support local entrepreneurs.

The youth workshop and key person interviews indicated there is not a strong sense of youth entrepreneurship in the Local Study Area. Some participants noted entrepreneurship is more often pursued either in the later stages of youth after completing a postsecondary education, or as part of adulthood (Youth Workshop 2022; NWO Community and Baseline Studies Key Person Interview Program 2022).

3.3.4 Summary of Labour Force Skills and Training

Within the Local Study Area there are four high schools. In the Local Study Area, postsecondary educational institutes include: two Confederation College satellite campuses located in Dryden and Sioux Lookout, the Sioux Lookout Mining Centre of Excellence, and Seven Generations Educational Institute with satellite campuses located in Dryden and Sioux Lookout. The Regional Study Area for postsecondary educational institutions extends to Winnipeg and Northern Ontario and includes several universities and colleges with a wide variety of programs.

The educational attainment of the Local and Regional Study Areas and Local Study Area communities has improved since 2006. There are more people who complete a high school or equivalent or postsecondary education as their highest level of education. There is a lower proportion of the population with a high school or equivalent or postsecondary education as their highest level of education compared to the Local Study Area and Ontario. This is due to a large proportion of Indigenous peoples who do not have a high school or equivalent compared to non-Indigenous peoples. When only examining non-Indigenous peoples, educational attainment is similar between the Local Study Area, Regional Study Area, and Ontario.

Within the Local Study Area communities, educational attainment of a postsecondary education is highest in Sioux Lookout and Dryden and lowest in Ignace and the LSB of Wabigoon. For Ignace, this is partially attributed to a large proportion of the population who are seniors without a high school or equivalent.

For the Local Study Area, Regional Study Area, Ontario, and all Local Study Area communities, of the population who have completed a postsecondary education, a large proportion have completed a program in business, management, and public administration; architecture, engineering, and related trades; or health and related fields. These trends are consistent for both Indigenous and non-Indigenous peoples.

Within the Local Study Area and Regional Study Area there are many entrepreneurial support organizations and workforce development organizations for access to training opportunities and programs. Some of the workforce development organizations offer training opportunities and programs for the skilled trades. The educational attainment of skilled trades has decreased for each of the Local Study Area communities, the Regional Study Area, and Ontario. The lack of available and willing skilled tradespeople with a ticket to take on an apprentice could be attributed to this decline, but there are likely several factors contributing to the overall decrease in uptake of skilled trades. Interview participants from the Local Study Area and Regional Study Area indicated some of the primary reasons include distance to educational institutions, lack of employers willing to take on apprentices, and financial costs associated with tuition, travel costs, and living accommodations while away (NWO Baseline Studies Key Person Interview Program 2022-2023). Currently, the grant and loan programs available do not align with cost of living expenses and the financial burden of loans adds to the barriers for those who are interested in attending university or entering a trade program (IAWG March 03, 2022; NWO Baseline Studies Key Person Interview Program 2022-2023).

Key person interviews and the youth workshop identified the lack of local education and training institutions as a barrier to employment for youths. There are no universities within the Local Study Area, and training for skilled trades and other employment often requires travel within or beyond the Local Study Area. As there is no guarantee of employment within their chosen field, many youths do not return to their home communities after pursuing postsecondary education (NWO Community and Baseline Studies Key Person Interview Program 2022). Youth also have concerns about the financial burden associated with postsecondary education, as tuition costs continue to rise and entry level position salaries are often insufficient to pay off any associate loans or debts (Canadian Heritage 2021; NWO Community and Baseline Studies Key Person Interview Program 2022).

3.4 ECONOMIC BASE

3.4.1 Overview and Approach

Economic base refers to the key industries and sectors that generate income and jobs in a community or region. A strong and diverse economic base can help provide stability and resiliency to a community or regional economy. This section describes and quantifies the contribution of major industries to the local and regional economy. Major employers and local businesses that provide goods and services relevant to the Project are also described.

Quantitative indicators reviewed in this section include:

- Employment by sector as defined by North American Industry Classification System for the labour force ages 15 years and older;
- Output and wages by industry are described for the Regional Study Area; and
- Gross Domestic Product, by industry is summarized for Ontario but are not available at the Census Division or Census Subdivision level.

Employment is classified by industry sector according to the North American Industry Classification System (“NAICS”) which is used by statistical agencies in Canada, United States, and Mexico. The classification of employment by industry sectors relates to the general type of work carried out by a business where a person works (Statistics Canada 2022a). Employment by industry statistics are disaggregated by sex (or gender for 2021 data), age, and Indigenous identity, where available and of sufficient robustness. Sustainability is considered through a review of historical trends and industry diversity.

A local business inventory was developed that summarizes businesses involved in primary industries (e.g., mining and forestry), businesses which provide essential services to the local population and visitors (e.g., food services, accommodations, construction), and businesses which provide tourist related services in the Local Study Area. The business inventory relies on information from local business development associations, chambers of commerce, town, municipal, and Indigenous business directories.

An inventory of local business development associations and chambers of commerce is presented for Ignace, Dryden, the Municipality of Machin, Sioux Lookout, and other regional associations relevant to the Local Study Area. GBA+ and sustainability considerations are described qualitatively, relying on primary data collected through key person interviews.

Employment by sector is summarized in detail for the mining, forestry, health care and social assistance, and tourism sectors. Mining and forestry have historically been important industries to Local Study Area communities. The healthcare and social assistance industry represents the largest share of employment in the Local Study Area. Tourism has become increasingly important to the economies of Local Study Area communities and was identified as an important sector in community strategic plans, key person interviews, and working groups.

Tourism activity is documented and quantified based on the prevalence of visits to the region using the Travel Survey of Residents of Canada, for details on visits to region, purpose of trip, type of accommodation, and expenditures. Qualitative aspects of tourism in the region, such as description of outfitters and lodges, and trail-keeping organizations is provided in **Section 2.0 Social Cultural.**

The future Impact Assessment will provide details on business opportunities related to the Project in the Local and Regional Study Areas, including for Indigenous communities and Indigenous-owned businesses.

The Regional Study Area for economic base includes the Kenora, Rainy River, and Thunder Bay District Census Divisions. Comparable statistics for Ontario are provided as available to provide context. The Local Study Area for economic base includes the Township of Ignace, City of Dryden, Municipality of Machin, the Municipality of Sioux Lookout, and, to the extent information is available, the LSB of Wabigoon, the LSB of Melgund (Dyment and Borups Corners), and the unincorporated community of Dinorwic.

Travel and tourism data is available for Tourism Region 13c, which is spatially analogous to the Northwestern Ontario Economic Region and the Regional study area. Tourism regions are defined by Ontario's Ministry of Tourism, Culture and Sport Industries.

Temporal boundaries for the economic base extend to the 2006 Census, as available, to provide consistency with the employment and income analysis. For tourism, the National Travel Survey is not comparable to previous surveys (e.g., Travel Survey of Residents of Canada 2005-2017) and only extends back to 2018.

Temporal boundaries for the inventory of local businesses, and business development associations, are restricted to the businesses and industries operating in the region as of the time of writing this report in 2023 or the most current publicly available information.

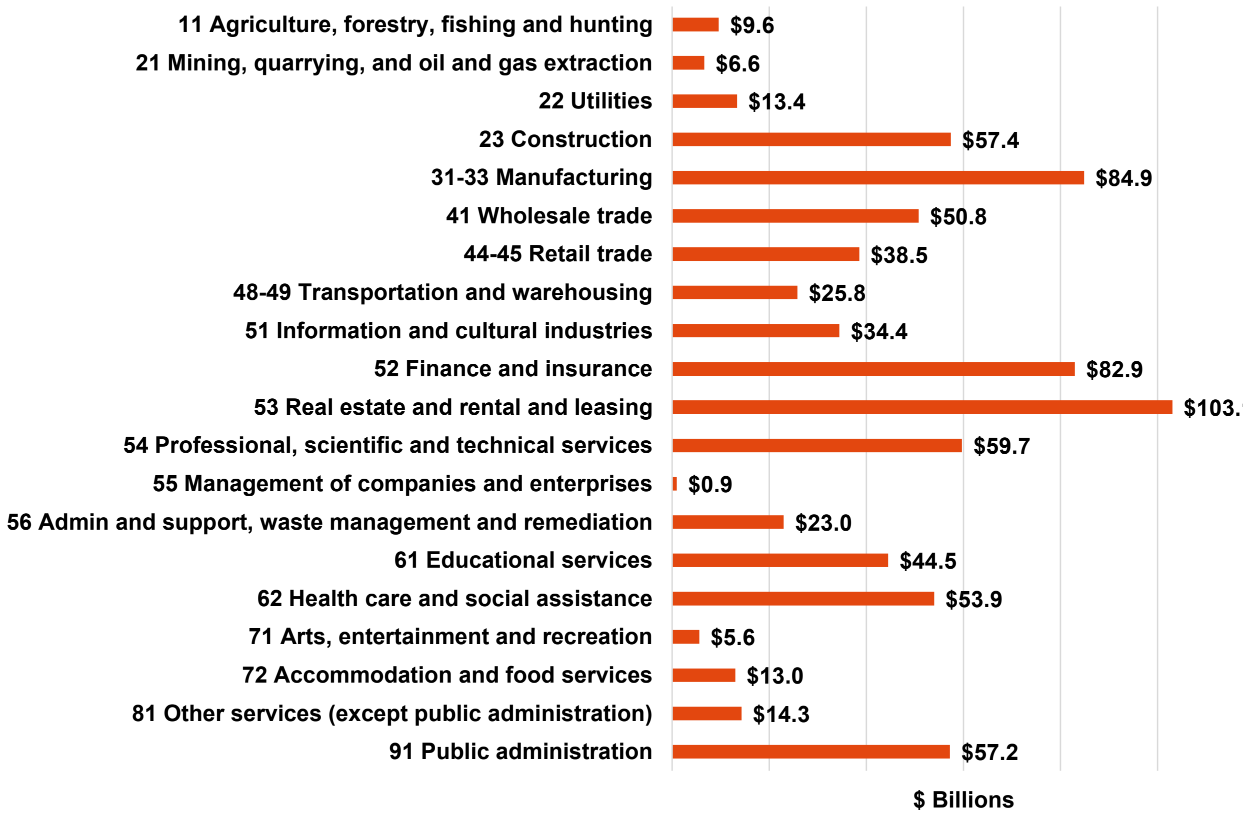
Information on the spatial boundaries, temporal boundaries, and data collection for economic base is provided in **Section 3.1**.

3.4.2 Industry

Understanding economic activity by industry can provide insight into the health of different sectors of the economy. Analyzing trends in employment and other economic indicators across different industries can identify areas of growth or decline and help inform policy decisions and investments.

Figure 3.4-1 shows the GDP by industry for Ontario in 2022.

Figure 3.4-1: GDP ($ Billions) by Industry for Ontario, 2022[1]



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

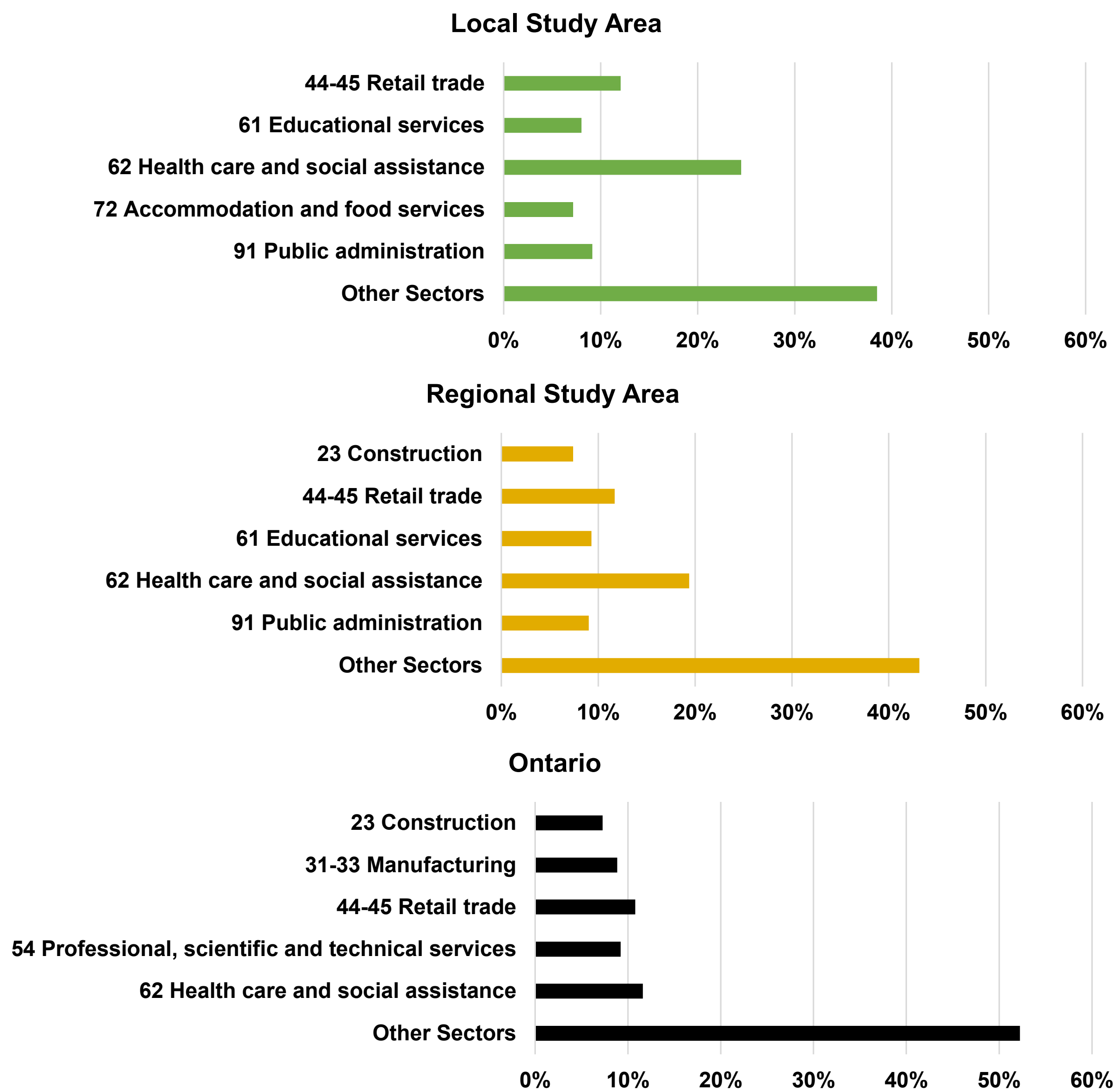
Notes:

1. Data for GDP are not available for the Regional Study Area or Local Study Area.

In Ontario, the industries which contribute the most to GDP are real estate, rental, and leasing ($103.1 billion), manufacturing ($84.9 billion), and finance and insurance ($82.9 billion). The three industries which have the smallest direct contribution to GDP are management of companies and enterprises ($0.9 billion), arts, entertainment, and recreation ($5.6 billion), and mining, quarrying, and oil and gas extraction ($6.6 billion).

Figure 3.4-2 shows the proportion of employment in the top five industries for the Local Study Area, Regional Study Area, and Ontario in 2021.

Figure 3.4-2 Employment by Industry for the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Melgund and Dinorwic for 2021.

The health care and social assistance and retail trade sectors are among the largest employers in all of the regions. For the Local and Regional Study Areas, employment in the largest five industries represents over 60% of the labour force, compared to about 50% for Ontario. Notable highlights in the share of employment by industry for the Local Study Area, Regional Study Area, and Ontario are as follows:

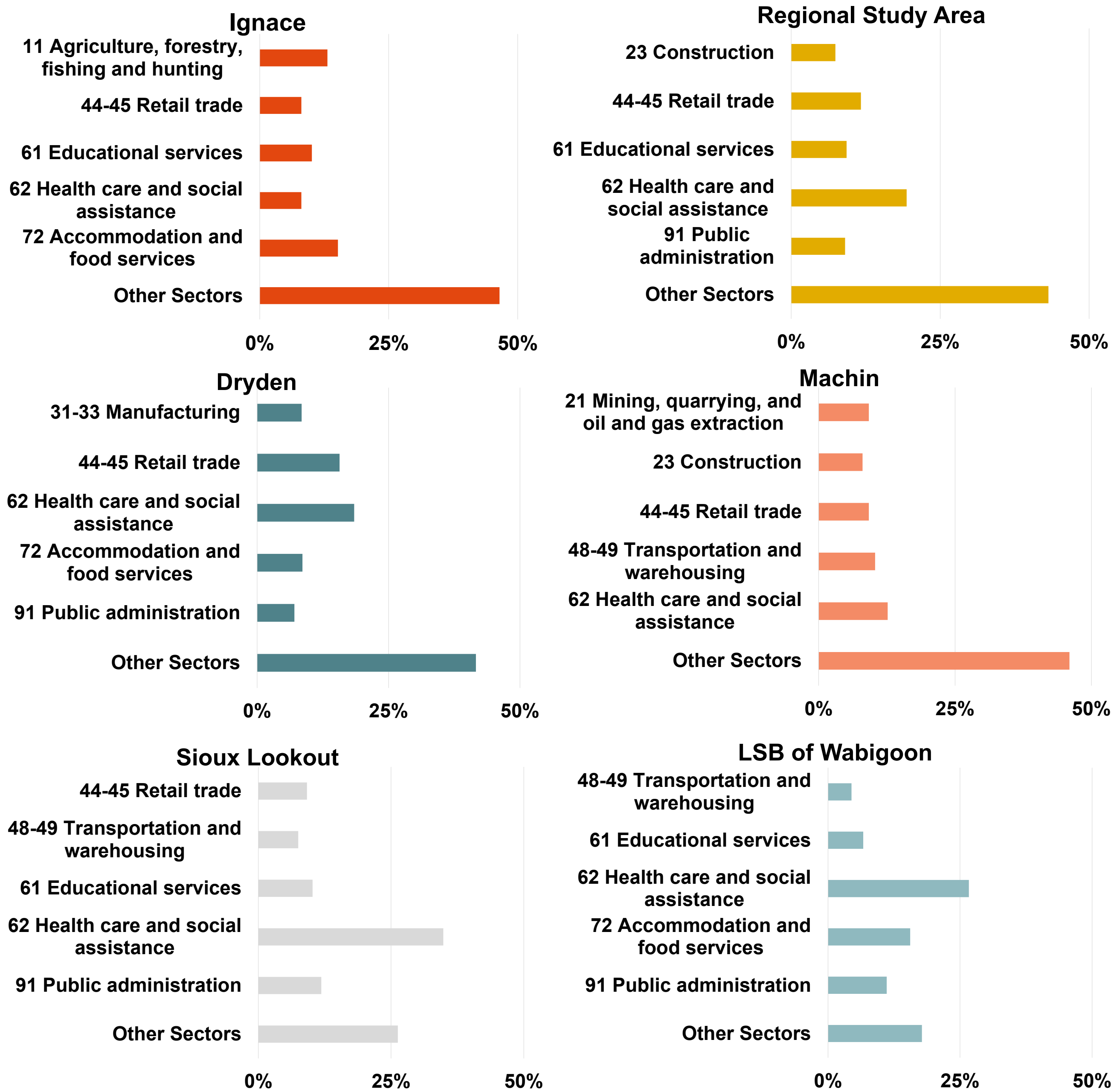
- The healthcare and social assistance industry represent the largest share of employment in the Local Study Area (24.5%), Regional Study Area (19.4%), and Ontario (11.6%) in 2021.
- Retail trade represents the second largest share of employment in the Local Study Area (12.1%), Regional Study Area (11.7%), and Ontario (10.8%) in 2021
- In the Local Study Area, public administration (9.1%) represents the third largest share of employment in 2021.
- In the Regional Study Area, educational services (9.3%) represent the third largest share of employment in 2021.
- In Ontario, professional, scientific, and technical services (9.2%) represent the third largest share of employment in 2021.

A key person interview identified that the main economic drivers in Northwest Ontario are regional offices, mining, forestry, pulp and paper sawmills, and healthcare (NWO Community and Baseline Studies Key Person Interview Program 2022).

In the Local Study Area, some of the largest local employers are involved in forestry (see **Section 3.4.4**) but many of the jobs are included in transportation and warehousing, and manufacturing industries. This is because many positions with pulp and paper mills require employees to drive trucks or work on a production line. Many industries in the Local and Regional Study Areas struggle to acquire skilled labour to fill available positions. During key person interviews, several mining and forestry firms in the Local Study Area noted that recruiting for skilled trades positions was difficult and they have brought in labourers from Manitoba and Quebec (NWO Community and Baseline Studies Key Person Interview Program 2022). There is also difficulty recruiting non-skilled labour positions, as people are not as willing to engage in physically demanding labour despite the high wages. Key person interviews noted there is competition in recruiting both skilled and unskilled labourers (NWO Community and Baseline Studies Key Person Interview Program 2022).

Figure 3.4-3 shows the proportion of employment in the top five industries for the Local Study Area communities and the Regional Study Area in 2021.

Figure 3.4-3: Employment by Industry for the Local Study Area Communities and Regional Study Area, 2021[1]



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Melgund and Dinorwic for 2021.

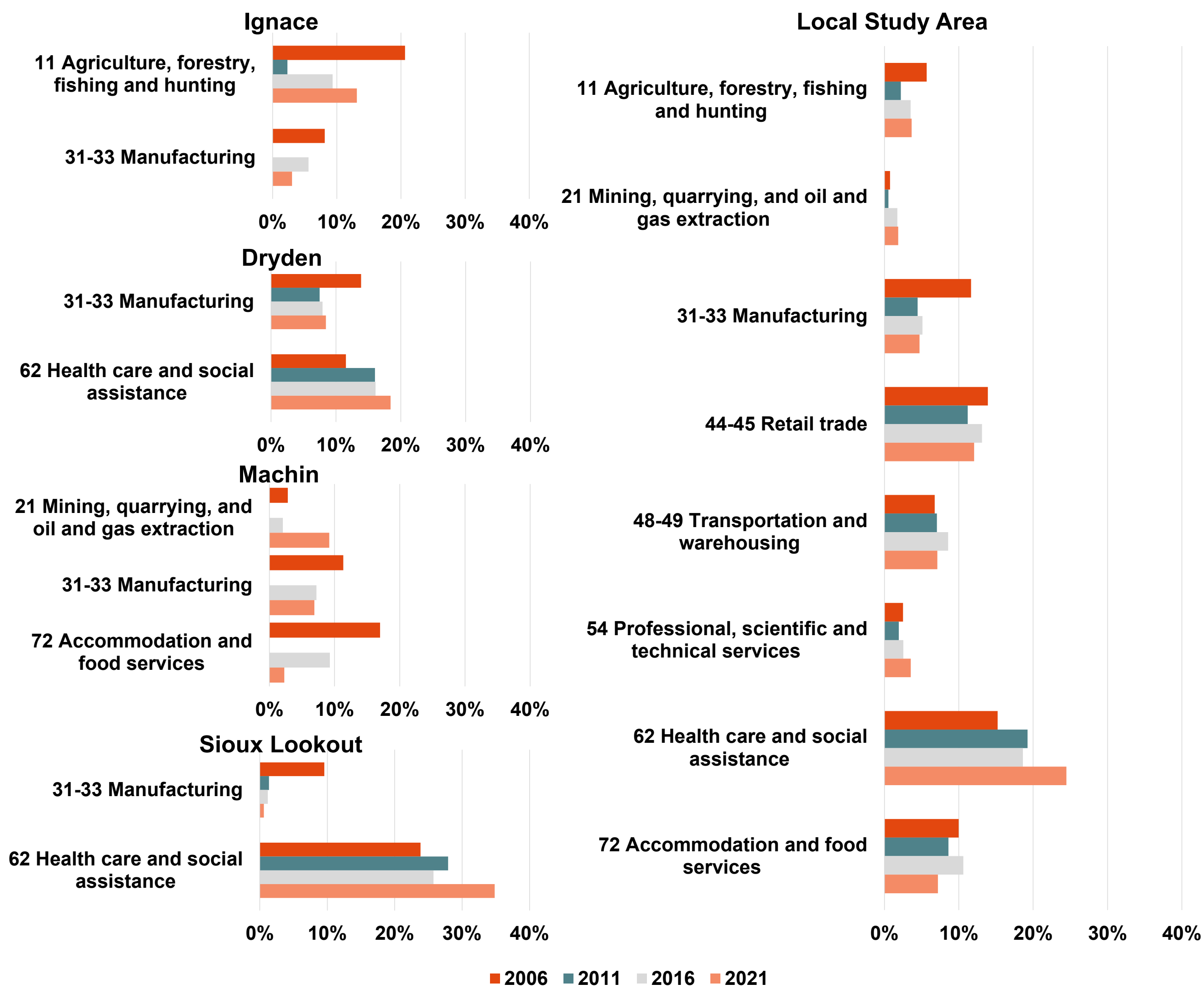
In each of the Local Study Area communities, the share of employment in the health care and social assistance and retail trade sectors represents one of the top five industries the respective labour forces are employed in. Employment in the largest five industries represents over 50% of the labour force in all of the Local Study Area communities. Notable highlights in the share of employment by industry for the Local Study Area communities are as follows:

- Health care and social assistance represent the largest share of employment in the Regional Study Area (19.4%), Dryden (18.4%), Machin (12.6%), Sioux Lookout (34.8%), and the LSB of Wabigoon (26.7%) in 2021. The proportion of employment in the health and social assistance sector in Sioux Lookout is the largest across all the Local Study Area communities. Ignace is the only community where the healthcare and social assistance industry does not represent the industry with the largest share of employment.
- In Ignace, the accommodation and food services (15.2%) industry represent the largest share of employment in 2021. Ignace is the only Local Study Area community where the agriculture, forestry, fishing, and hunting industry is one of the top five largest share of employment in 2021. The agriculture, forestry, fishing, and hunting (13.1%) industry represents the second largest share of employment followed by the educational service (10.1%) industry.
- In Dryden, retail trade (15.7%) and accommodation and food services (8.6%) represent the second and third largest share of employment in 2021, respectively.
- In Machin, transportation and warehousing (10.3%) and retail trade (9.2%) represent the second and third largest share of employment in 2021, respectively.
- In Sioux Lookout, public administration (11.9%) and educational services (10.2%) represent the second and third largest share of employment in 2021, respectively.
- In the LSB of Wabigoon, accommodation and food services (15.6%) and retail trade (11.1%) represent the second and third largest share of employment in 2021, respectively.

Dryden is a unique community given it has a substantial number of people living in the unincorporated areas surrounding Dryden (Noga 2021), which although captured in the Regional Study Area do not reflect their proximity to Dryden itself. This fringe population for Dryden, as described in **Section 2.2.2.2** is not included in Census employment data but represented a meaningful proportion of the local workforce including employees at major employers such as Domtar, Dryden Regional Heath Centre, Kenora District Services Board, Keewatin Patricia District School Board, City of Dryden, Ministry of Natural Resources and Forestry). Additionally, people who work and live in Dryden seasonally would not necessarily be counted.

Figure 3.4-4 shows the proportion of employment by industries for the Local Study Area and notable trends in Local Study Area communities, from 2006 to 2021. The selected industries correspond to sectors which are economic drivers and relevant to the major employers in the Local Study Area. Forestry operations are captured by the agriculture, forestry, fishing, and hunting; manufacturing; and transportation and warehousing industries, and mining operations are captured by mining, quarrying, and oil and gas extraction; and professional, scientific, and technical services industries.

Figure 3.4-4: Trends in Employment by Industry for the Local Study Area, Ignace, Dryden, Machin, and Sioux Lookout, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

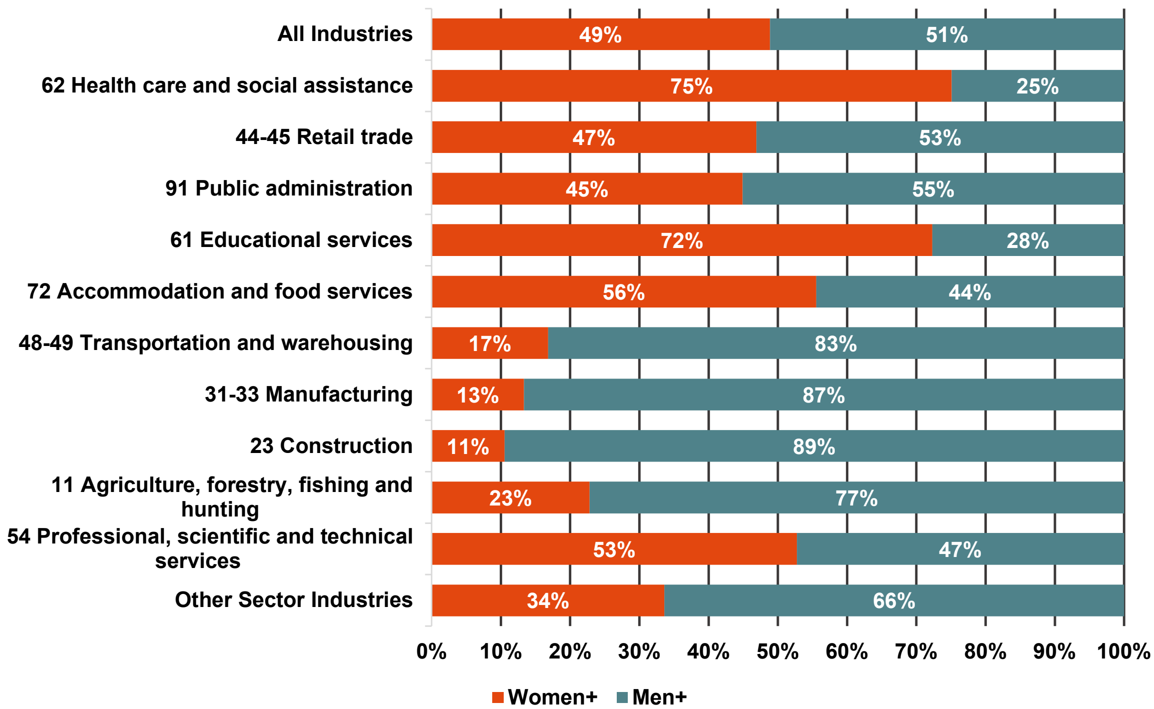
1. Data for Local Study Area communities were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

There was a material increase in the share of employment in the Local Study Area in the healthcare and social assistance industry from 15.2% in 2006 to 24.5% in 2021. There was also a material decrease in the share of employment in the manufacturing industry in the Local Study Area from 11.6% in 2006 to 4.7% in 2021. Jobs at pulp and paper mills involving working on a production line are classified as manufacturing industry jobs. Paper machines at Domtar were shut down in 2005 and 2008 which contributed to the decline in the manufacturing sector over this period (Northern Ontario Business 2008; NWO Community and Baseline Studies Key Person Interview Program 2022). Notable trends in employment in the Local Study Area communities reflect some of the trends observed in the Local Study Area:

- The share of employment in the manufacturing industry declined in Ignace, Dryden, Machin, and Sioux Lookout. The largest decline occurred in Sioux Lookout where in 2006 it represented 9.6% of employment but represents only 0.5% in 2021.
- In Ignace, there was a large decrease in the share of employment in the agriculture, forestry, fishing, and hunting industry from 20.6% in 2006 to 2.3% in 2011, but has since recovered to 13.1% in 2021. The decline in the share of employment from 2006 to 2011 has been attributed to the contraction of the forestry industry through the closure of paper machines around 2008 and the closure of Resolute Forest Products in 2006 (Resolute Forest Products 2022; NWO Community and Baseline Studies Key Person Interview Program 2022). The increase since 2011 is likely related to two of the largest private sector employers in Ignace being involved in forestry (See **Section 3.4.3**).
- The increase in the share of employment in the healthcare and social assistance industry for the Local Study Area is driven by material increases of employment in the industry in Sioux Lookout from 23.8% in 2006 to 34.8% in 2021 and in Dryden from 11.5% in 2006 to 18.4% in 2021.
- In Machin, there was a material decline in the share of employment in the accommodation and food service industry from 17.0% in 2006 to 2.3% in 2021. This is primarily attributed to a popular restaurant and convenience store that burned down and another which shut down over the previous several years (NWO Community and Baseline Studies Key Person Interview Program 2022). Another notable trend in Machin is the increase in the share of employment in the mining, quarrying, and oil and gas extraction industry from 2.8% in 2006 to 9.2% in 2021.

Figure 3.4-5 shows the distribution of employment by industry and gender in the Local Study Area in 2021. The figure shows the employment distribution by gender for the top 10 largest industries, for all industries, and the other industries which are not plotted. The top 10 largest industries are plotted in descending order by number of employees.

Figure 3.4-5: Distribution of Employment by Industry and Gender in the Local Study Area, 2021[1]



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Melgund and Dinorwic for 2021.

In the Local Study Area, total employment is relatively evenly distributed between men and woman across all industries. However, the gender distribution within individual sectors is less balanced. Women represent over 70% of employment in the educational services (72%) and health care and social assistance (75%). Men represent over 70% of employment in the transportation and warehousing (83%), manufacturing (87%), construction (89%), and agriculture, forestry, fishing, and hunting (77%) industries. The five largest industries in the Local Study Area in 2021 are as follows:

1. Health care and social assistance (75% women);
2. Retail trade (53% men);
3. Public administration (55% men);
4. Educational services (72% women); and
5. Accommodation and food services (56% women).

There is considerable variation in the representation of men and women in some of the industries within the Local Study Area. Women represent a large proportion of employment in health care and social assistance and educational services. Health care and caregiving is sometimes perceived as feminine given the high proportion of women working in the sector (Davidson et al. 2022). Men in nursing sometimes face discrimination from patients and staff due to assumptions that women are better suited for these types of jobs (Davidson et al. 2022). Men in the education sector sometimes experience similar stereotypes.

Mining, forestry, manufacturing, and construction have typically employed many more men than women. A number of initiatives have been undertaken to increase the participation of women in these industries. Initiatives in the Local Study Area include women-only welding classes at local high schools and a video series of Indigenous women working in different trades (NWO Community and Baseline Studies Key Person Interview Program 2022). There has been a 92% increase in the representation of women in mining, quarrying, and oil and gas extraction from 2006 to 2021 (from 255 to 490 women) (see **Appendix 3B**).

Women make up nearly half of the students at the Sioux Lookout Mining Centre of Excellence and 48% of the Treasury Metals workforce (NWO Community and Baseline Studies Key Person Interview Program 2022). Forestry companies in the area generally have less than 30% of staff who are women but are trying to increase their representation (NWO Community and Baseline Studies Key Person Interview Program 2022).

Table 3.4-1 show the number of businesses, jobs, average number of jobs, total wages, and revenues by industry for the Regional Study Area in 2020. Only businesses which have at least one employee are reported, which excludes people who are self-employed but have no employees. For example, many people in the real estate, rental, and lease industry have a business with no employees. Average annual jobs are inclusive of both full- and pat-time jobs and are counted equally. Jobs do not include self-employed workers. By treating full- and part-time jobs equally this could result in a shift in jobs if multiple part-time jobs replace a full-time job. The industries presented are ones which have historically provided a large proportion of jobs in the Local Study Area and are likely to be impacted by a large influx of people if the Project is sited in the WLON-Ignace area.

Table 3.4-1: Business Characteristics ($Millions) by Industry in the Regional Study Area, 2020[1,2,3]

	Businesses	Jobs	Average Number of Jobs	Wages	Revenues
Agriculture, forestry, fishing, and hunting	257	2,117	8	$77.5M	$588.0M
Mining, quarrying, and oil and gas extraction	43	3,695	86	$359.9M	$3,040.9M
Construction	834	6,773	8	$339.0M	$1,600.6M
Manufacturing	178	4,126	23	$253.9M	$2,796.8M
Retail trade	964	12,069	13	$308.3M	$845.4M
Transportation and warehousing	349	4,853	14	$260.1M	$1,059.9M
Educational services	96	9,770	102	$554.7M	$1,059.5M
Health care and social assistance	798	21,708	27	$1,032.2M	$2,283.9M
Accommodation and food services	671	6,609	10	$130.0M	$509.7M
Public administration	136	15,254	112	$866.6M	$3,713.8M

Source: Canadian Business Patterns December 2020, retrieved using Lightcast 2022.3. Estimates prepared by Lightcast 2022.3 based on, Survey of Employment, Payrolls, and Hours for 2011, 2016, and 2020, Input Output Symmetric Tables for 2011, 2016, and 2020, Census of Population for 2011 and 2016, and the Labour Force Survey: for 2011, 2016, and 2020. Lightcast 2023b and 2023c. Retrieved June 12, 2023. See **Appendix 3B Supplemental Data**.

Notes:

1. Calculations and modelling of wages and sales were completed by using an input-output model. Number of businesses were sourced from the Canadian Business Patterns. InterGroup calculated the average number of jobs by taking the number of jobs per businesses.
2. Revenues are calculated as a measure from production. For margin industries (e.g., retail trade, wholesale trade) revenues are calculated as revenues less cost of goods sold.
3. Revenues for public industries (e.g., educational services, health case and social assistance, and public administration) reflects sources of revenue for the industry such as grants or public funding.
4. **Table 3.4-1** does not include self-employed persons. The Canadian Business Patterns Survey reports self-employed persons as a business with an indeterminate number of employees and is not included in the table as it would increase the number of businesses and not the number of jobs. This would distort the calculation of the average number of jobs per business. The Canadian Business Patterns Survey only reports businesses that are incorporated and have a minimum of $30,000 in revenue. The Survey of Employment, Payrolls, and Hours, the Input Output Symmetric Tables, the Census of Population, and the Labour Force Survey do not report self-employed persons in the industry calculations for total jobs, wages, or revenues due to challenges associated with the tracking and reporting of earnings and income of self-employed persons.

In 2020, the five largest industries in the Regional Study Area by number of jobs were health care and social assistance, public administration, retail trade, educational services, and construction. Notable observations of business characteristics by industry include:

- Public administration had the largest number of revenues ($3,713.8 million) and average number of jobs (112) among all industries in 2020. Despite having one of the largest number of jobs, public administration had less than 150 businesses.
- The number of businesses by industry ranges from 43 for mining, quarrying, oil and gas extraction industry to 964 for retail trade.

Table 3.4-2 shows the number of businesses, jobs, average number of jobs, total wages, and revenues by industry for the Local Study Area in 2020. Only businesses which have at least one employee are reported, which excludes people who are self-employed but have no employees. Average annual jobs are inclusive of both full- and part-time jobs and are counted equally. Jobs do not include self-employed workers. The industries presented are ones which have historically provided a large proportion of jobs in the Local Study Area and are likely to be impacted by a large influx of people if the Project is sited in the WLON-Ignace area.

Table 3.4-2: Business Characteristics ($Millions) by Industry in the Local Study Area, 2020[1,2,3,4]

	Businesses	Jobs	Average Number of Jobs	Wages	Revenues
Agriculture, forestry, fishing and hunting	31	700	8	$16.4M	$99.0M
Mining, quarrying, and oil and gas extraction	1	47	79	$8.7M	$44.0M
Construction	69	211	7	$16.0M	$75.5M
Manufacturing	7	1,290	48	$23.5M	$253.3M
Retail trade	96	1,633	15	$34.4M	$93.5M
Transportation and warehousing	44	702	18	$38.9M	$166.3M
Educational services	12	702	86	$54.0	$103.1M
Health care and social assistance	71	1,595	35	$118.5M	$262.2M
Accommodation and food services	79	1,145	12	$17.7M	$73.2M
Public administration	8	1,089	156	$80.7M	$335.4M

Source: Canadian Business Patterns December 2020, retrieved using Lightcast 2022.3. Estimates prepared by Lightcast 2022.3 based on, Survey of Employment, Payrolls, and Hours for 2011, 2016, and 2020, Input Output Symmetric Tables for 2011, 2016, and 2020, Census of Population for 2011 and 2016, and the Labour Force Survey: for 2011, 2016, and 2020. Lightcast 2023b and 2023c. Retrieved June 12, 2023. See **Appendix 3B Supplemental Data**.

Notes:

1. Calculations and modelling of wages and sales were completed by using an input-output model. Number of businesses were sourced from the Canadian Business Patterns. InterGroup calculated the average number of jobs by taking the number of jobs per businesses.
2. Revenues are calculated as a measure from production. For margin industries (e.g., retail trade, wholesale trade) revenues are calculated as revenues less cost of goods sold.
3. Revenues for public industries (e.g., educational services, health case and social assistance, and public administration) reflects sources of revenue for the industry such as grants or public funding.
4. **Table 3.4-2** does not include self-employed persons. The Canadian Business Patterns Survey reports self-employed persons as a business with an indeterminate number of employees and is not included in the table as it would increase the number of businesses and not the number of jobs. This would distort the calculation of the average number of jobs per business. The Canadian Business Patterns Survey only reports businesses that are incorporated and have a minimum of $30,000 in revenue. The Survey of Employment, Payrolls, and Hours, the Input Output Symmetric Tables, the Census of Population, and the Labour Force Survey do not report self-employed persons in the industry calculations for total jobs, wages, or revenues due to challenges associated with the tracking and reporting of earnings and income of self-employed persons.

In 2020, the five largest industries in the Local Study Area by number of jobs were retail trade, health care and social assistance, manufacturing, accommodation and food services, and public administration. Notable observations of business characteristics by industry include:

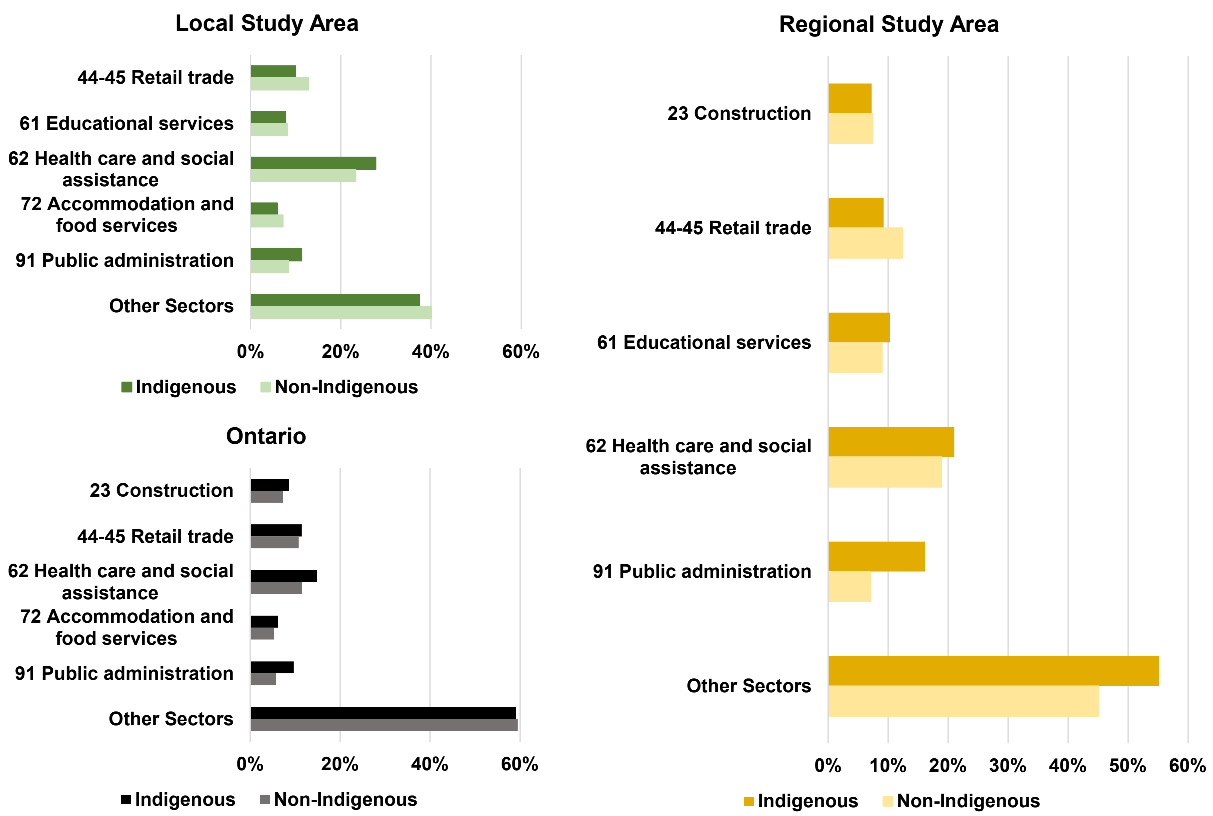
- Public administration had the largest number of revenues ($335.4 million) and average number of jobs (156) among all industries in 2020. Despite having one of the largest number of jobs, public administration had less than 10 businesses.
- The number of businesses by industry ranges from one business for mining, quarrying, and oil and gas extraction to 96 for retail trade.

The largest industries by number of jobs, average number of employees, and total output are similar between the Local and Regional Study Area. There are also similarities in average annual wages by industry which are discussed in **Section 3.2.3.**

3.4.2.1 Indigenous Peoples

Figure 3.4-6 shows the distribution of employment by industry for Indigenous peoples and non-Indigenous peoples in the Local Study Area, Regional Study Area, and Ontario, in 2021. Employment in the five largest industry sectors represents over 60% of the employment of Indigenous peoples in the Local Study Area, Regional Study Area, and Ontario. Limitations associated with disaggregated Indigenous identity data are provided in **Section 3.1.2.1.1**.

Figure 3.4-6: Employment by Industry of Indigenous and non-Indigenous Peoples for the Local Study Area, Regional Study Area, and Ontario, 2021[1]



Source: Statistics Canada 2023f. See **Appendix 3B Supplemental Data**.

Notes:

1. Data were not available for the LSB of Wabigoon, LSB of Melgund, and Dinorwic for 2021.

Employment in the healthcare and social assistance industry represents the largest share of employment of Indigenous peoples in the Local Study Area (27.8%), Regional Study Area (21.0%), and Ontario (14.8%) in 2021. The share of Indigenous peoples employed in the healthcare and social assistance industry is larger than the share of non-Indigenous peoples for each region. There is only a slight variation between employment by industry of Indigenous peoples within the Local and Regional Study Areas and Ontario in 2021:

- Public administration is an important contributor to employment of Indigenous peoples for the Local Study Area (11.3%), Regional Study Area (16.2%), and Ontario (9.7%). A greater proportion of Indigenous peoples are employed in public administration than non-Indigenous peoples.
- Employment in retail trade represents one of the largest shares of Indigenous employment in the Local Study Area (10.0%), Regional Study Area (9.2%), and Ontario (11.4%). The

proportion of employment in retail trade for Indigenous peoples is slightly lower than the share of non-Indigenous peoples employed.

- In the Local Study Area, educational services (7.8%) represents one of the largest shares of employment of Indigenous peoples. This is slightly lower than the proportion of non-Indigenous peoples (8.2%) employed in the sector There is also a notable proportion of Indigenous peoples employed in the accommodation and food services industry in the Local Study Area (5.9%).
- In the Regional Study Area, there is a notable proportion of Indigenous peoples employed in the educational services (10.4%) and construction (7.3%) industries. The share of employment of Indigenous peoples is similar to the share of employment of non-Indigenous peoples for each sector.
- In Ontario, the top five largest shares of employment by industry for Indigenous peoples are similar to both the Local and Regional Study Areas.

Dryden and Sioux Lookout are local service hubs and may have a number of non-residents visiting or working for periods throughout the year. Dryden, also has a large number of people living in the fringes of the City who primarily work in Dryden but may not be reflected in employment statistics in Dryden (NWO Baseline Studies Key Person Interview Program 2022-2023).

For the Local and Regional Study Area, the industries with the largest share of employment for the total population are the same for the Indigenous population (See **Figure 3.4.6**). One of the major barriers to employment for Indigenous peoples in the Local and Regional Study Areas is the lack of a high school certificate. The Truth and Reconciliation Commission's final report stated it is the responsibility of employers to ensure Indigenous peoples have equitable access to jobs, training, and educational programs (Truth and Reconciliation Commission of Canada 2015) (See **Section 3.3.3** and **Section 3.2.3.4**).

3.4.2.2 Tourism

Tourism plays an important role in the local and regional economies in Northwest Ontario. Tourism has been identified as an important economic driver for the Local Study Area communities. Ignace, Dryden, Machin, and Sioux Lookout each have strategic goals related to improving tourism and the beautification of the community (Millier Dickinson Blais 2015; Machin 2017; Ignace 2019; Sioux Lookout 2022).

Section 3.4.5 discusses economic development planning and goals, with most Local Study Area communities having a priority to promote tourism. In Northwest Ontario, sports and recreation (e.g., tournaments, fishing derbies, hiking), community events (more information is found in Section 2.3.5), Indigenous-related community and sporting events (e.g., local Pow Wows and hockey tournaments), fishing, hunting, and outfitters are key drivers of visits to the region and economic activity (NWO Community and Baseline Studies Key Person Interview Program 2022).

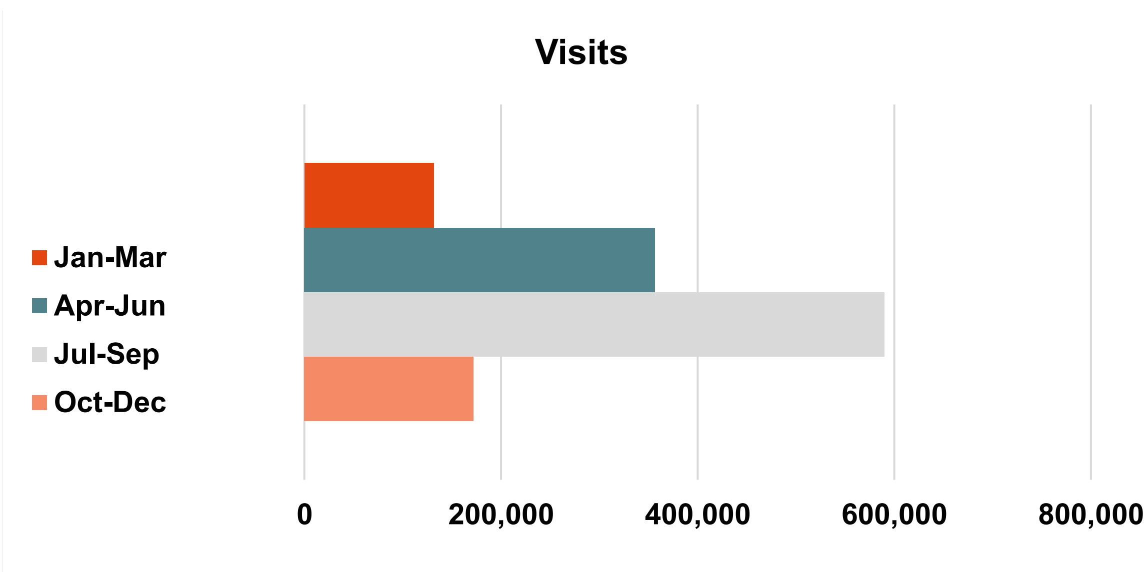
The Ministry of Tourism, Culture and Sport collects tourism data for Ontario Tourism Region 13c which coincides with the Northwest Ontario – Regional Study Area. The National Travel Survey reports on visits to Region 13c and the expenditures incurred during the trip. Also reported are the duration, occasion, and accommodations used during the trip. The survey reports on

Canadian, domestic, and international traveler visits to Region 13c. A visit is classified as travelling to another census subdivision, excluding flight layovers. For travelers from the United States, information on the number of trips is not reported due to lack of reliable data, but the Ministry of Tourism, Culture and Sport has begun reporting on the expenditures of U.S travelers.

Given the data does not include information on trip details of United States residents, the number of visits to Tourism Region 13c is slightly understated. Within the Local Study Area, a large majority of outfitter clientele are from the United States, with some outfitters estimating over 95% of their clientele are coming from the United States (NWO Baseline Studies Key Person Interview Program 2022-2023). Most outfitters in the Northwest charge in USD$ given such a large proportion of their clientele are from the United States. During the COVID-19 pandemic, many outfitters were not open for operations due to their clientele being unable to cross the border (NWO Baseline Studies Key Person Interview Program 2022-2023).

Figure 3.4-7 shows the number of trips by Canadians and international travellers (excluding the United States) to Northwest Ontario in 2019, by quarter. Not included are trips where people are travelling to their primary residence or travelling by air with a layover in an airport in Northwest Ontario.[13]

Figure 3.4-7: Visits to Northwest Ontario by Quarter, 2019[1]



Source: Statistics Canada National Travel Survey 2019. See **Appendix 3B Supplemental Data**.

Notes:

1. Computations were completed by The Ontario Ministry of Tourism, Culture and Sport.

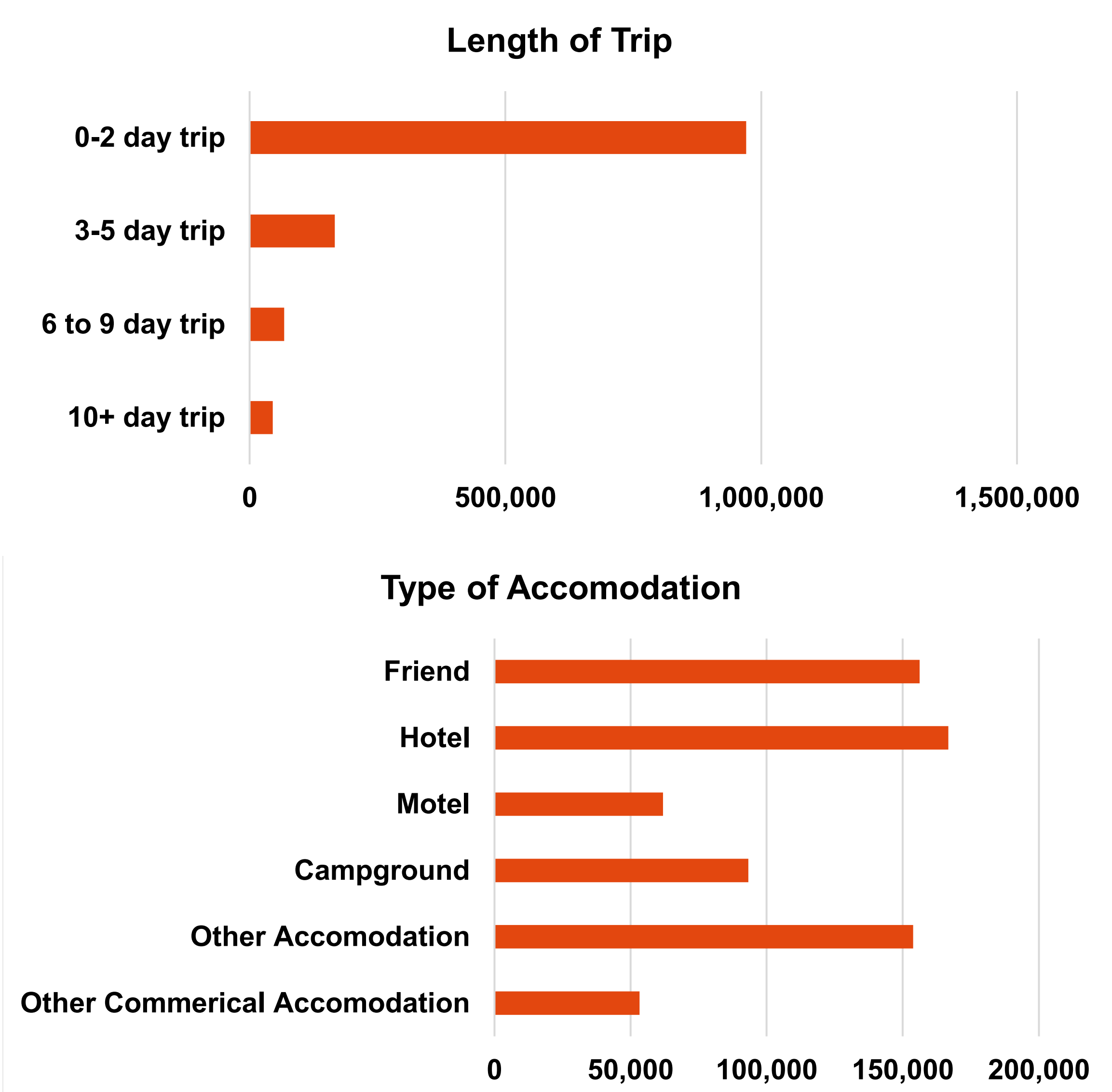
[13] The two classifications of trips not considered a visit are origin and air. Origin refers to travel to a primary address or within the same census division as their home address. A trip by air refers to travel by air where only a layover takes place in a certain tourism region.

In 2019 there were a total of approximately 1.25 million trips to Northwest Ontario, with most trips taking place in the summer months (quarter 3) from July to September (0.59 million). The fewest number of trips occurred during the winter from January to March (0.13 million). The large difference in trips between the first and third quarter is attributed to most outfitters closing in November after the hunting season is completed and not starting again until the spring. Similarly, fishing operations generally pick up in the spring after the lakes have thawed (NWO Baseline Studies Key Person Interview Program 2022-2023).

Figure 3.4-8 shows the duration of trips to Northwest Ontario and the accommodation used during their trip. Most trips to the Northwest were 0 to 2-day trips and the most common forms of accommodations were hotels, a friend’s place, and other accommodations.[14]

[14] Other accommodations include unpaid accommodations such as visits to a personal cabin.

Figure 3.4-8: Summary of Trips to Northwest Ontario, 2019[1]



Source: Statistics Canada National Travel Survey 2019. See **Appendix 3B Supplemental Data**.

Notes:

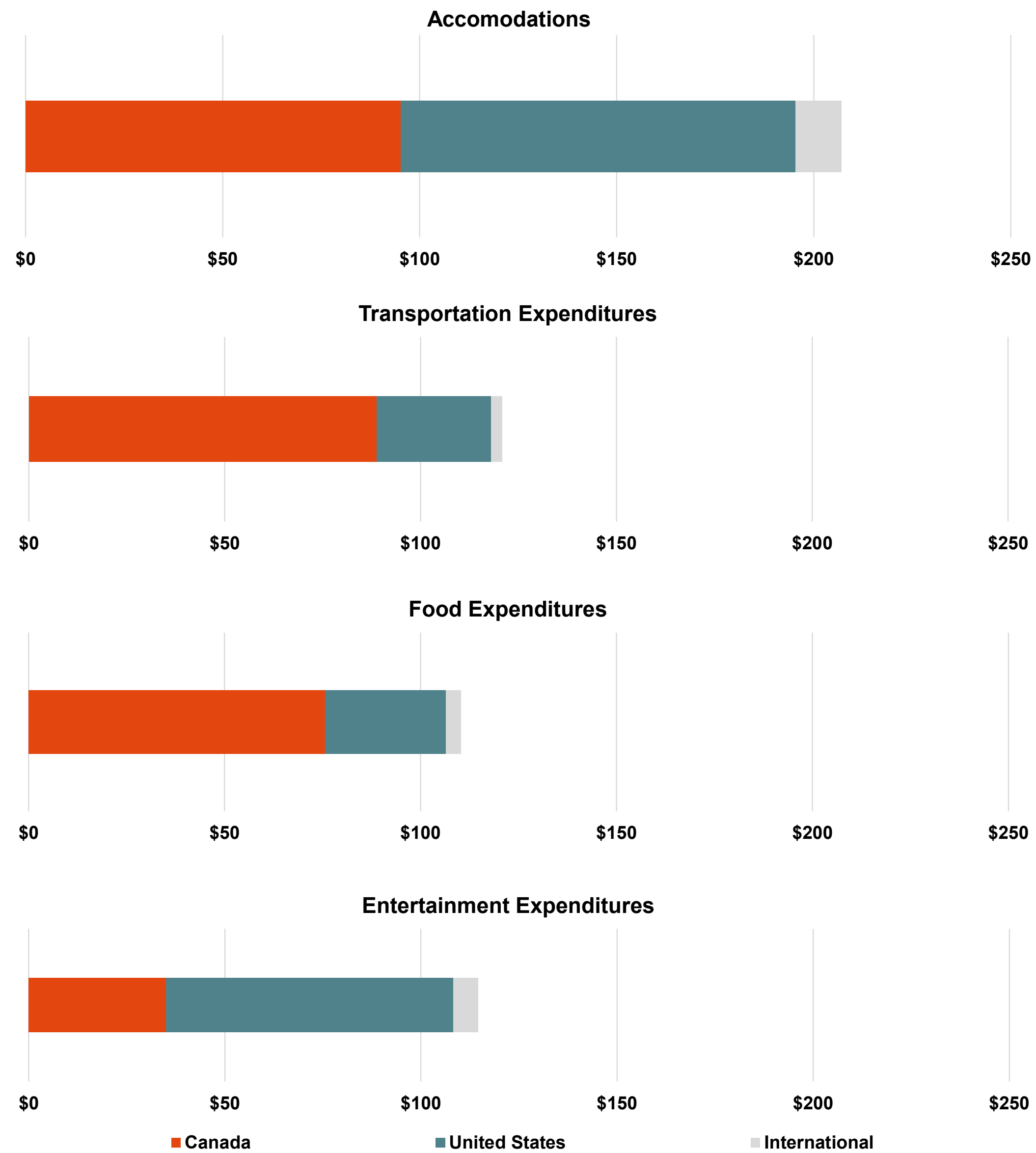
1. Computations were completed by The Ontario Ministry of Tourism, Culture and Sport.

In 2019, approximately 971,000 visits were 0 to 2-day trips and 166,000 visits were three to five-day trips. When visiting, people were most likely to stay at a hotel (167,000 visits), a friend's place (156,000 visits), or other accommodation (154,000 visits).

Understanding the length of visits and the types of accommodations provides insight on the nature of the visits. For example, shorter trips or staying with friends may result in lower expenditures on accommodations and restaurants or entertainment venues.

Figure 3.4-9 shows the breakdown of expenditures of visits to Northwest Ontario by Canadians, Americans, and international visitors. Total expenditures of all visits to the Northwest were approximately $552.8 million, visits by Canadians totaled $294.7 million, and visits by Americans totaled $233.4 million.

Figure 3.4-9: Expenditures ($ Millions) of Trips to Northwest Ontario for Canadians, Americans, and International Travelers, 2019[1]



Source: Statistics Canada National Travel Survey 2019. See **Appendix 3B Supplemental Data**.

Notes:

1. Computations were completed by The Ontario Ministry of Tourism, Culture and Sport.

In 2019, total spending on visits to the Northwest was $552.8 million. Expenditures for Canadians and Americans visiting the Northwest are similar for accommodation expenses but vary considerably for each of the other spending categories:

- Americans spent a larger amount compared to Canadians on expenditures related to accommodations and entertainment, recreation, leisure, and retail. All American visits to the Northwest totaled to approximately $100.1 million in expenses related to accommodations and $73.2 million in expenses related to entertainment, recreation, leisure, and retail. The expenses related to leisure and entertainment were over double the spending by Canadians ($35.0 million).
- Canadians spent over double what Americans did on expenses related to transportation ($88.8 million) and food ($75.6 million).

Tourism in the Northwest is centered around the natural environment with some of the biggest attractions include sports, culture, and recreational tourism and fishing and hunting. A majority of the clientele of outfitters and camps are from the United States, with many camps closing down in 2020 and 2021 during the pandemic due to travel restrictions (NWO Baseline Studies Key Person Interview Program 2022-2023). The data on expenditures confirms the importance of American travelers to the Northwest given the large amount of spending related to accommodations and entertainment, recreation, leisure, and retail. It is important for outfitters, camps, and other tourist organizations to build the domestic market given the current reliance on American customers and the effects border closures can have on the industry (NWO Baseline Studies Key Person Interview Program 2022-2023).

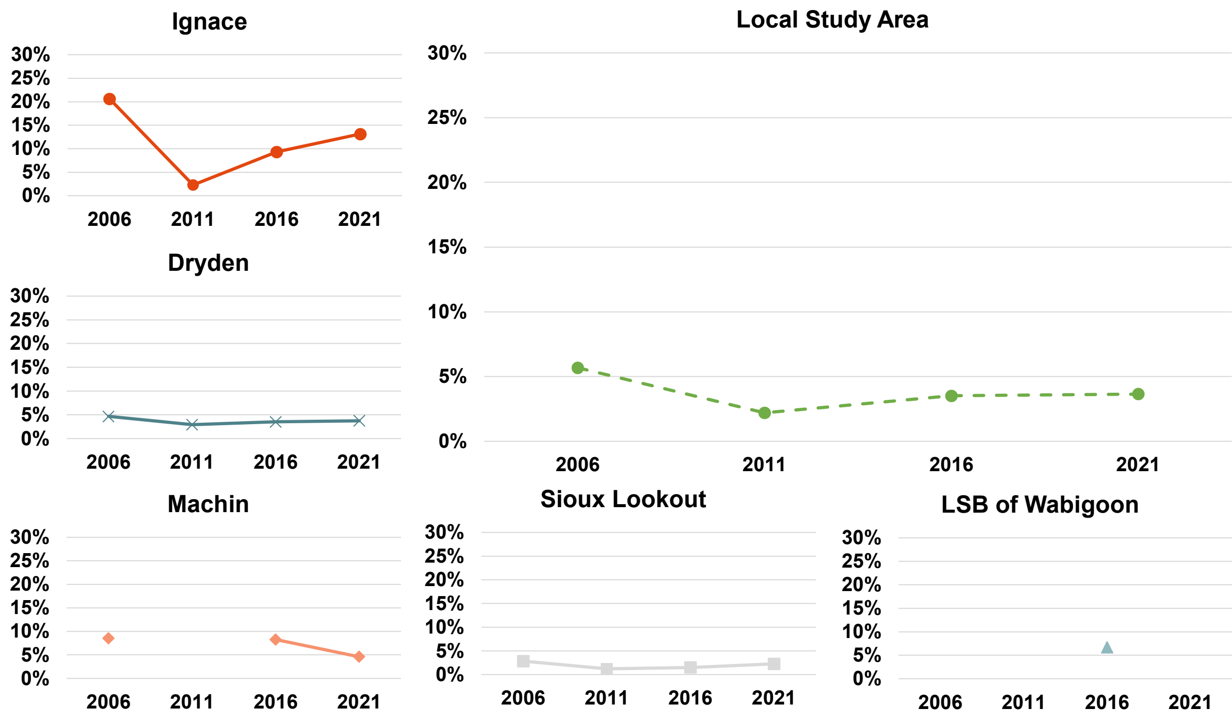
3.4.2.3 Forestry

Forestry operations are some of the largest private sector employers in the Local Study Area (see **Section 3.4.4**). Key person interviews noted that forestry companies are employing youths right out of high school. These jobs are typically financially attractive compared to other employment opportunities available to recent high school graduates (NWO Community and Baseline Studies Key Person Interview Program 2022). One of the forestry companies noted that the average salary is between $80,000 to $100,000 a year. Forestry has also had an impact on employment (See **Section 3.3.4**) in the Local Study Area, with operations downsizing at Domtar between 2005 and 2008 and Resolute Forest Products closing from 2006 to 2015 having notable impacts to employment (Northern Ontario Business 2008; NWO Community and Baseline Studies Key Person Interview Program 2022; Resolute Forest Products 2022). In 2023, Domtar announced they sold the Dryden pulp mill to First Quality Enterprises Inc. First Quality intends to continue business operations consistent with past practices with commitments to the employees and surrounding community (Domtar 2023).

The four primary forestry companies in the Local Study Area are Domtar, Resolute Forest Product, Ricci’s Trucking, and Raleigh Falls Ltd. Ricci’s Trucking and Raleigh Falls are harvesting and hauling contractors, whereas the other forestry businesses are pulp and stud mills who hire contractors for the harvesting and hauling (NWO Community and Baseline Studies Key Person Interview Program 2022). Prior to 2008, Domtar was also involved in paper making, but in 2005 and 2008 it shut down its paper machines and has since been a 100% pulp mill (NWO Community and Baseline Studies Key Person Interview Program 2022). See **Section 2.4** for more information on forestry operations.

Figure 3.4-10 shows the proportion of employment in agriculture, forestry, fishing, and hunting in the Local Study Area and Local Study Area communities, from 2006 to 2021.

Figure 3.4-10: Employment by Agriculture, Forestry, Fishing, and Hunting for the Local Study Area and Local Study Area Communities, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

Employment in agriculture, forestry, fishing, and hunting captures the harvesting and hauling forestry operations but also includes agriculture and commercial fishing and hunting (including trapping and managing commercial game preserves) operations. Trends and employment proportions for the industry should be interpreted with caution when attributing it to the forestry sector as it also includes changes in operations of agriculture, hunting, and fishing operations.

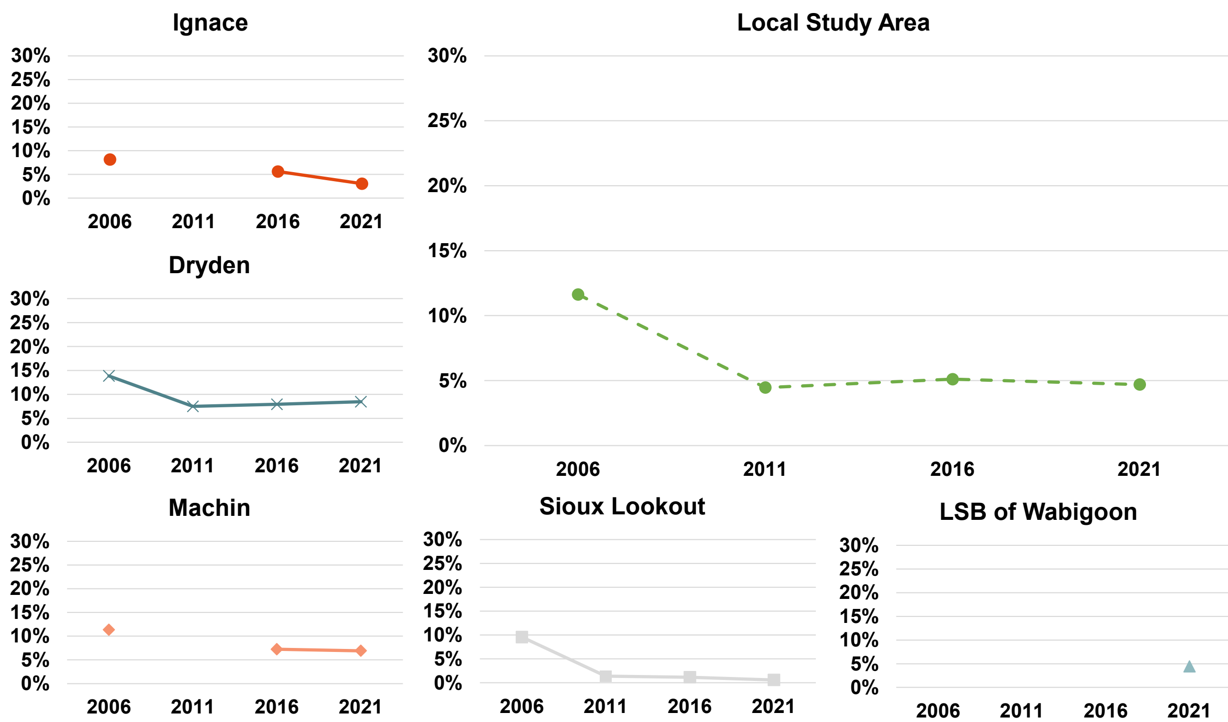
Employment in the agriculture, forestry, fishing, and hunting sector has decreased in the Local Study Area from 5.7% in 2006 to 3.6% in 2021. Although there has been an overall decrease in the agriculture, forestry, fishing, and hunting sector in the Local Study Area, employment has increased from 2.2% in 2011 to 3.6% in 2021. Notable trends in the agriculture, forestry, fishing, and hunting sector among the Local Study Area communities are as follows:

- In 2006, the agriculture, forestry, fishing, and hunting sector represented 20.6% of employment in Ignace but decreased materially to 2.3% in 2011 before increasing to 13.1% in 2021.
- Employment in the agriculture, forestry, fishing, and hunting sector has generally been highest in Ignace, and lowest in Sioux Lookout since 2006.
- Employment in the agriculture, forestry, fishing, and hunting sector in Machin represented 8.5% of employment in 2006 but decreased from 8.2% in 2016 to 4.6% in 2021.

Overall employment in the agriculture, forestry, fishing, and hunting sector has decreased since 2006 but has generally increased since 2011. Despite the decrease in employment in the agriculture, forestry, fishing, and hunting sector, the forestry sector still plays a crucial role in employment and economic activity in the region.

Forestry is not the only sector which is captured in the agriculture, forestry, fishing, and hunting NAICS industry so trends and employment proportions should be interpreted with caution when attributing them to the forestry sector. Although Resolute Forest Product shut down in 2006 and Domtar contracted operations in 2008, some of the change in employment from 2006 to 2011 could have occurred in agriculture, fishing, or hunting. Some of the local employers in forestry run a mill which is considered a production line and are captured in the manufacturing industry. **Figure 3.4-11** shows the proportion of employment in manufacturing for the Local Study Area and Local Study Area communities, from 2006 to 2021.

Figure 3.4-11: Employment by Manufacturing for the Local Study Area and Local Study Area Communities, 2006 to 2021[1]



Source: Statistics Canada Census 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

Manufacturing is likely to capture other production line-oriented businesses which would not be associated with the forestry sector. This will overstate the proportion of employment in manufacturing but the change between 2006 and 2011 is likely reflective of changes to operations at Domtar and Resolute Forest Products over the same timeframe.

Since 2006, there has been a decrease in employment in manufacturing in the Local Study Area (11.6% in 2006 to 4.7% in 2021) and the Local Study Area communities. Notable trends in employment in manufacturing for the Local Study Area communities are as follows:

- Employment in manufacturing was highest in each of the Local Study Area communities in 2006 but has not changed much since 2011.
- In 2006, employment in manufacturing was highest in Dryden (13.9%) and lowest in Ignace (8.1%). By 2021, employment in manufacturing was highest in Dryden (8.5%) and lowest in Sioux Lookout (0.6%).

- Employment in manufacturing in Ignace decreased from 8.1% in 2006 to 0% in 2011 but has increased slightly to 3.0% by 2021.
- Employment in manufacturing decreased materially in Sioux Lookout from 9.6% in 2006 to 0.6% in 2021.

The large decrease in employment in manufacturing from 2006 to 2011 has been attributed to the closing of paper machines at Domtar and the resulting large decrease in staff, from as many as 650 employees to 400 (Northern Ontario Business 2008; NWO Community and Baseline Studies Key Person Interview Program 2022). Although employment in forestry and manufacturing is not as high as it once was in the early 2000s, the forestry sector still employs a substantial number of people and plays a vital role in the local economies of the Local Study Area communities.

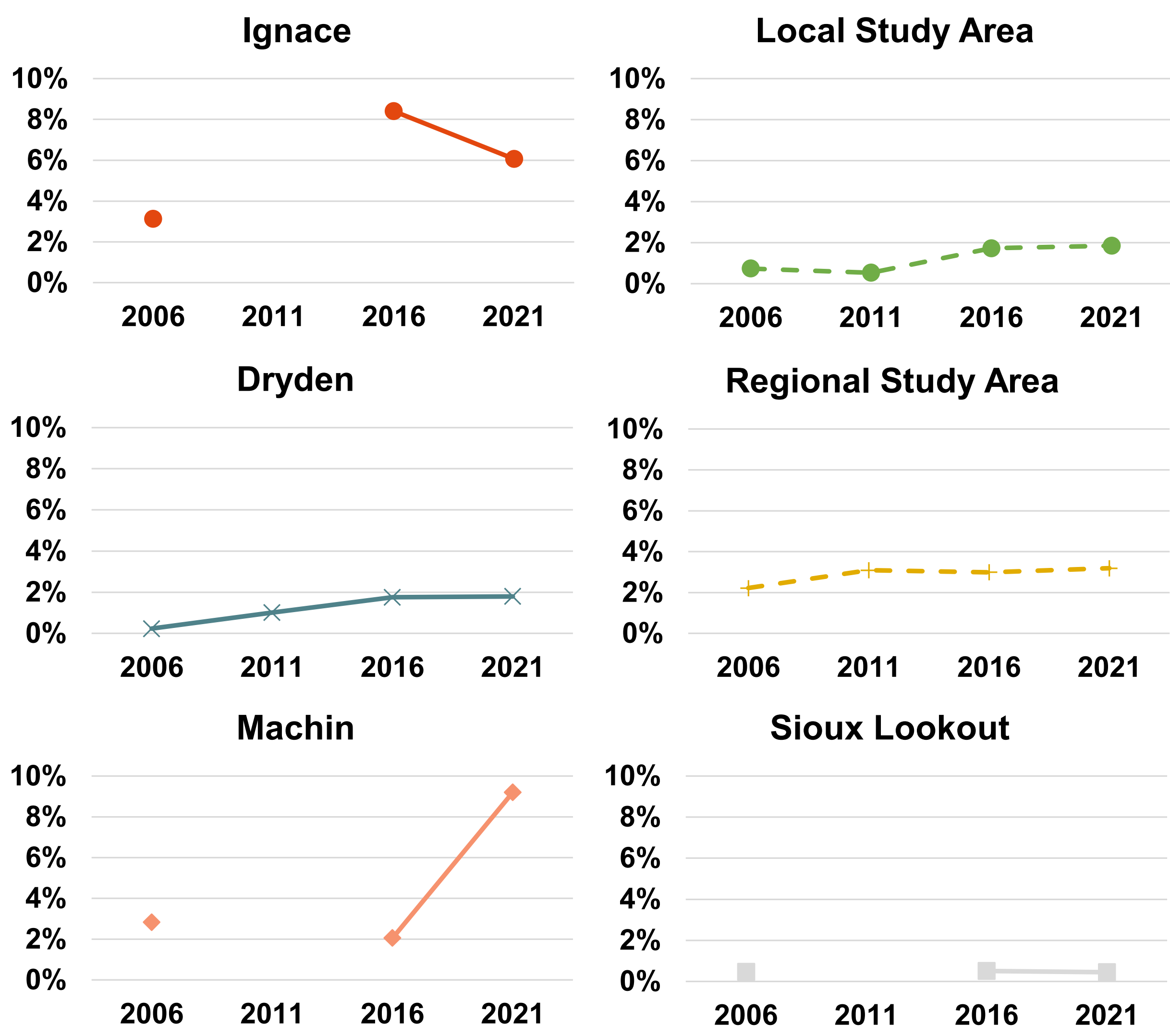
3.4.2.4 Mining

Mining is an important industry in Northwest Ontario. Historically, communities in the Local Study Area have had a large number of people engaged in mining operations. There were many residents from Ignace and other Local Study Area communities working at the Mattabi mines in the 1980’s. Since the mine closed, the population and labour force in communities such as Ignace declined materially (See **Section 2.2**). With mining investments in Ontario increasing, it is expected that more people will work on mines with the addition of miners migrating to the Local Study Area (NWO Community and Baseline Studies Key Person Interview Program 2022).

Mining activities are regulated under the *Mineral Industry Environmental Protection Regulations, 1996*. Within the Regional Study Area as of 2022, there were five active mines, which included Musselwhite Mine, Rainy River Mine, Red Lake Mine, Williams Mine, and Lac des Iles Mine (Ontario Mining Association 2022). Mines in the Northwest mine a variety of precious metals including gold, silver, platinum group elements and many others (Ontario Mining Association 2022). There are no active mines in the Local Study Area, but Treasury Metals is completing an Environmental Impact Assessment for the Goliath Gold Complex which will be located just west of Dryden. A pre-feasibility summary for the prospective mine indicates an expected mine life of 13 years (Newswire 2023). See **Section 2.4** for more information on commercial mining. There are numerous aggregate sites and quarries in the Local Study Area. Within a 10 km radius there are seven aggregate pits around Ignace, one aggregate pit around Dryden, two quarries and five aggregate pits around Machin, 12 aggregate pits around Sioux Lookout, one quarry and two aggregate pits around the LSB of Wabigoon, two quarries around the LSB of Melgund, and one aggregate pit around Dinorwic (Government of Ontario 2023c).

Figure 3.4-12 shows the proportion of employment in mining, quarrying, oil and gas extraction in the Regional Study Area and Local Study Area communities, from 2006 to 2021. In addition to mining, the NAICS industry includes quarrying and oil and gas extraction. These sectors are not expected to have a material effect on employment by industry for the Local Study Area or Regional Study Area, but are likely to be slightly higher than strictly employment in local mining.

Figure 3.4-12: Employment by Mining, Quarrying, and Oil and Gas Extraction for the Local Study Area and Regional Study Area, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021. There was no employment in the mining sector for residents of the LSB of Wabigoon in 2016 or 2021.

Employment in the mining, quarrying, and oil and gas extraction sector has increased in both the Local Study Area (0.7% in 2006 to 1.9% in 2021) and Regional Study Area (2.2% in 2006 to

3.2% in 2021). Notable trends in the mining, quarrying, and oil and gas extraction industry among the Local Study Area communities are as follows:

- Employment in the mining, quarrying, oil, and gas extraction industry varies considerably among the Local Study Area communities.
- The proportion of people employed in the mining, quarrying, oil, and gas extraction industry were highest in Ignace (3.1% in 2006 to 6.1% in 2021) and Machin (2.8% in 2006 to 9.2% in 2021). Employment in the mining, quarrying, and oil and gas extraction industry represents a small proportion of employed people in Dryden (1.8% in 2021) and Sioux Lookout (0.5% in 2021).
- Employment in the mining, quarrying, oil, and gas extraction industry was reported as 0% in Ignace in 2011. This is likely partially attributed to the voluntary aspect of the 2011 NHS.

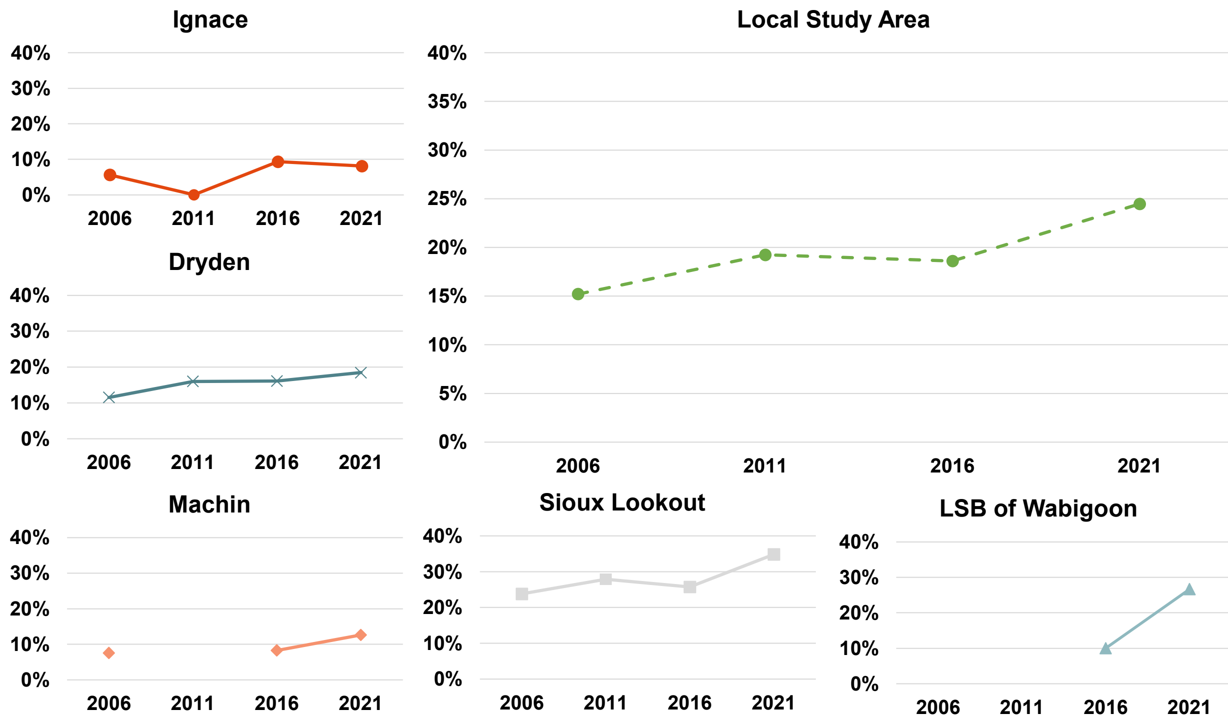
In 2021, Ontario produced over $11.1 billion worth of minerals which accounted for 20% of Canada's total mineral production (Government of Ontario 2023a). Recently, Ontario released its Critical Mineral Strategy which is a five-year plan to increase investment in mining through smoothing out the regulatory process to get mines built more efficiently (Government of Ontario 2022b). Many key person interviews identified an anticipated increase in mining activity in the Local Study Area with the Goliath Gold Complex and an increase in lithium mining (NWO Community and Baseline Studies Key Person Interview Program 2022). The expected increase in mining activity in the region places increased importance on engaging the labour force to consider pursuing a career in mining-related professions. With an abundance of educational and training programs in Northern Ontario and the Sioux Lookout Mining Centre of Excellence in the Local Study Area, the labour force has the resources available to participate in a lucrative industry (See **Section 3.3.3.2**).

3.4.2.5 Health Care and Social Assistance

Health care and social assistance is a vital industry to every local economy. In each of the Local Study Area, Regional Study Area, and Ontario, the healthcare and social assistance industry represent the largest share of employment (See **Figure 3.4-2**). Employers involved in the healthcare and social assistance industry are also some of the largest employers (See **Section 3.4.4**) and include: Mary Berglund Community Health Centre (Ignace), Dryden Regional Health Centre, Kenora District Services Board (regional office in Dryden), Dryden Native Friendship Centre, Tikinagan Child & Family Services (Sioux Lookout), Sioux Lookout First Nation Health Authority, and Sioux Lookout Meno-Ya-win Health Centre.

Figure 3.4-13 shows the proportion of employment in healthcare and social assistance industry in the Local Study Area, from 2006 to 2021.

Figure 3.4-13: Employment by Health Care and Social Assistance for the Local Study Area, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities were not available for all years for LSB of Wabigoon (2006 and 2011) and Machin (2011). Data were not available for the LSB of Melgund and Dinorwic for 2006 to 2021.

Employment in the healthcare and social assistance sector has increased in the Local Study Area from 15.2% in 2006 to 24.5% in 2021. This represented the largest increase in employment share and number of people employed in a sector over this timeframe. Notable trends in the healthcare and social assistance industry among the Local Study Area communities are as follows:

- Employment in the healthcare and social assistance industry increased materially in Dryden, Sioux Lookout, and the LSB of Wabigoon.
- The proportion of people employed in the healthcare and social assistance industry was highest in Sioux Lookout (23.8% in 2006 to 34.8% in 2021).
- The proportion of people employed in the healthcare and social assistance industry increased materially in both Dryden (11.5% in 2006 to 18.4% in 2021) and the LSB of Wabigoon (10.0% in 2006 to 26.7% in 2021).

- The proportion of people employed in the healthcare and social assistance industry was lowest in Ignace (5.6% in 2006 to 8.1% in 2021).
- Sioux Lookout has a substantial proportion of the population engaged in the healthcare and social assistance industry given it is a service hub for northern communities with the presence of the Sioux Lookout Meno Ya Win Health Centre, Sioux Lookout First Nations Health Authority, four tribal councils, and the Pelican Falls First Nation High School. Both health centres provide services to people in Sioux Lookout and the surrounding areas (NWO Community and Baseline Studies Key Person Interview Program 2022; NWO Baseline Studies Key Person Interview Program 2022-2023).

Dryden is also a regional service hub for many goods and services (See **Section 3.4.3**) with the presence of several key health and social service providers which include Dryden Regional Health Centre, Kenora District Services Board (regional office in Dryden), and Dryden Native Friendship Centre.

3.4.3 Local Business

This section summarizes local businesses that have relevance if the Project were sited in the WLON-Ignace area. Local businesses that might provide goods and services to meet community needs in addition to meeting the needs of potential future major projects include: food, accommodations, tourism, construction, mining, geology, forestry, and utility businesses. Also summarized are Indigenous-owned businesses as reported by the Government of Canada Indigenous Business Directory.

Local businesses play an important role in supporting the economy. A wide variety of goods and services are needed to support and attract people into a community. Without basic services such as food and accommodations, residents must travel to nearby towns or regions to get simple things such a groceries, gas, or something to eat at a restaurant. Many of the local businesses in the Local Study Area are classified as small- (i.e., between 1-99 employees) or medium-sized (i.e., between 100-499 employees) businesses. Small- and medium-sized enterprises (SMEs) are significant contributors to Canada’s economy, and, in 2021, small businesses made up 98.1% of all employer businesses in Canada (Statistics Canada 2022d). Also, in 2021, SMEs employed nearly 85% (or 13.7 million) of the total labour force in Canada. Small businesses contribute to approximately 40% of the national GDP in Canada and play an important role in economic growth, recovery, and long-term stability of the Canadian economy (CanadianSME 2023).

Residents of Dyment, Borups Corners, and the community of Dinorwic noted that a lack of local businesses means they must travel to the Wabigoon Village for basic goods such as snacks, liquor, and gas, or travel to Dryden for any larger shopping trips (NWO Community and Baseline Studies Key Person Interview Program 2022). Many of the Local Study Area communities have outfitters and camps operating within or around the communities, which are discussed in **Section 2.4**.

3.4.3.1 Local Business in Ignace

Table 3.4-3 summarizes a list of food, accommodations, tourism, construction, mining, geology, forestry, and utility businesses which operate in Ignace.[15]

Table 3.4-3: Ignace Business Inventory

Industry	Business Inventory
Food services	Evergreen Produce (grocery store) Northwoods Motor Inn Restaurant (restaurant) Clooch's Tavern (restaurant) Robin's Express (fast food and bakery) The Burger Scoop – closed during winter (fast food) Subway (fast food)
Accommodations	Ignace White Otter Inn Lone Pine Inn Northwoods Motor Inn Westwood Motel
Tourism	List of outfitters and camps are described in **Section 2.5.7**
Construction	G. Routhier Contracting Ltd. (contractor) Ignace Carpentry (contractor) K & M Construction (contractor) Mr. Fix It (contractor) RJ's Home Improvements (contractor) Rene Nadeau Construction (contractor) Rog's Renovations and Woodworking (contractor) Sunset Carpentry (contractor) Woods Welding – Mike Woods (welding services) Ignace Public Works (municipal building management services)
Mining, forestry, geology, and utilities	Ricci's Trucking Inc. and Raleigh Falls Timber (forestry) Resolute Forest Products (forestry) Nuclear Waste Management Organization (mining/geology) Brad's Water Treatment (utilities) Northwest Sewage (utilities)

Source: Ignace Business Directory n.d. Accessed April 21, 2023. Township of Ignace n.d. Accessed August 10, 2023.

Ignace has a limited selection of food services with only one grocery store and a few traditional restaurants. Most construction businesses are focused on general contracting services. In key

[15] An inventory of businesses is compiled using the most up to date sources but may not reflect the current list of businesses as new businesses continue to open shop within a community or are closed or relocated to another community.

person interviews, it was noted there is large demand for contracting services within the community. A lack of plumbing and electrical services presents a barrier for contractors and residents, as the nearest contractors for these services are in Dryden (NWO Community and Baseline Studies Key Person Interview Program 2022). Within Ignace there are outfitters and camps which would be classified as tourism-related businesses.

There are no Indigenous-owned businesses in Ignace which are registered with the federal Indigenous business directory (Government of Canada n.d.). Ignace currently contracts Northern Waterworks which are headquartered in Red Lake to oversee the water and sewer distribution system in Ignace (Township of Ignace n.d.). Ignace does not have any building management related services but has the Ignace Public works oversee the building management services of municipal buildings. Workshop participants also noted there is no larger grocery store (e.g., Walmart, Superstore), hardware store, and lack of a variety of retail stores. This required residents to drive an hour to go purchase items such as paint or make larger shopping trips for clothes or groceries (Social Cultural and Health Workshop 2021).

3.4.3.2 Local Business in Dryden

Table 3.4-4 summarizes a list of food, accommodations, tourism, construction, mining, geology, forestry, and utility businesses which operate in Dryden.

Table 3.4-4: Dryden Business Inventory

Industry	Dryden Business Inventory
Food services (grocery)	AgriTech North (grocery store) No Frills (grocery store) M&M Food Market (grocery store) Safeway (grocery store) Shoppers Drug Mart (grocery store) Walmart (grocery store) 807 Food Co-op (grocery store) Cloverbelt Country Meats (meat/fish market) Huber’s Bavarian Meats (meat/fish market) Milkwell Farms (meat/fish market) Bulk Zone (food store) Kano Reid (food store)

Table 3.4-4 Continued: Dryden Business Inventory

Industry	Dryden Business Inventory
Food services (restaurant)	B&B Roadhouse Bar and Grill (restaurant) Ho Ho's (restaurant) Hong Kong House (restaurant) Masala Restaurant (restaurant) Mulligan's Restaurant (restaurant) Pizza Hut (restaurant) Springwater Café (restaurant) The PI (restaurant) The Riverview Lodge (restaurant) Timber Lanes (restaurant) Twin Towers (restaurant) A&W (fast food) The Chip Box (fast food) Crooked Arrow Catering (food truck & catering) Dairy Queen (fast food) Domino's Pizza (fast food) Husky Restaurant (restaurant) Just G's (fast food) Kano Reid (limited-service restaurant) Kathy's Catering (food catering) KFC (fast food) McDonald's (fast food) Subway (fast food) Tim Hortons (fast food) Your Choice Catering (food catering) Street Food & Royal Catering (food truck & catering)
Accommodations	Best Western Plus Dryden Hotel & Conference Centre Holiday Inn Chalet Inn Motel Comfort Inn Evening Star Motel Hide Away Holiday Inn Express Dryden Kowality Motor Inn Patricia Inn The Riverview Lodge Timberland Motel Town & Country Motel

Table 3.4-4 Continued: Dryden Business Inventory

Industry	Dryden Business Inventory
Tourism	Aaron Park List of outfitters and camps are described in **Section 2.5.7**
Construction (residential construction)	Dale Woods Contracting Horst Lang Construction Lakeview Contracting McKay Construction Renew Construction Rostek Contracting
Construction (heavy equipment construction)	SunTrac Contracting and Rentals Rostek R B Construction Wildwood Contracting Steven Blair Contracting Allan Hutchison Contracting LTD Kupper Contracting Miller Northwest LTD Allan Marion General Contracting Cory Henderson Contracting EMCON Dryden

Table 3.4-4 Continued: Dryden Business Inventory

Industry	Dryden Business Inventory
Construction (specialized services)	First General (general repairs) Service Master (general repairs) Fedorchuk Masonry (masonry/concrete) Jason Anderson Concrete (masonry/concrete) Basic Machining (welding) D J's Propeller & Skeg Repair & Aluminum Welding (welding) Brisson Electric Feduik Electric Hoover Electric (electric) KPE Electrical Kusnick Electric (electric) M.C. Lough Electric Inc. RTL Electric (electric) REZ Electric (electric) Copperite Plumbing and Heating (plumbing/HVAC) Energy Tech Services (plumbing/HVAC) Fediuk's Plumbing & Heating (plumbing/HVAC) Graf's Plumbing (plumbing/HVAC) Lakeland Plumbing & Heating Lyle's Plumbing Superior Plumbing + Heating (plumbing/HVAC) iPaint (painting) Northern Moonworks (tile/flooring/renovations) Sunset Granite (finishing) Horst Lang Construction (architectural services) All-City Landscaping (landscape architectural services) Ground Effex Landscaping (landscape architectural services) Wildwood Contracting (landscape architectural services) United Rentals (equipment rentals) Basic Machining (machine shop) Solomon & Sons Ltd. (machine shop) Dryden Building Inspections – City of Dryden (building management services)

Table 3.4-4 Continued: Dryden Business Inventory

Industry	Dryden Business Inventory
Mining, forestry, geology, and utilities	Tamarac Nurseries (forestry) Dryden Forest Management Company (forestry) Ricci's Trucking Inc. and Raleigh Falls Timber (forestry) Nuclear Waste Management Organization (mining/geology) Mastrangelo Fuels (utilities) City of Dryden (utilities) Morgan Fuels (utilities) Superior Propane (utilities)

Source: Explorer Solutions 2022; NWO Community and Baseline Studies Key Person Interview Program 2022.

Dryden has many businesses to support Local Study Area residents and visitors for shopping, food services, accommodations, and construction. Some of the businesses listed are located in the fringe area around the City, and not within municipal boundaries (NWO Baseline Studies Key Person Interview Program 2022-2023). During key person interviews, Dryden was commonly referred to as the local hub for businesses and services in the Local Study Area (NWO Community and Baseline Studies Key Person Interview Program 2022; NWO Baseline Studies Key Person Interview Program 2022-2023). Within Dryden there is a wide variety of construction and skilled trades-related businesses. Dryden has contractors which are typically located in most Local Study Area communities but also has specialized skilled trades and construction companies such as plumbers, electricians, and heavy-duty construction. Although there are many contractors and a variety of specialized services in Dryden, it was noted that there is a shortage of skilled trades for anything including plumbers, electricians, welders, and pipefitters (Local Economy Workshop 2021; NWO Community and Baseline Studies Key Person Interview Program 2022).

AgriTech North is an Indigenous-owned grocery store registered with the federal Indigenous business directory (Government of Canada n.d.). The City of Dryden has trained internal staff who oversee the water and sewer treatment and distribution (NWO Baseline Studies Key Person Interview Program 2022-2023). Dryden also conducts its own building management services but will contract out some specialized work (e.g., plumbing, electrical) or larger jobs (NWO Baseline Studies Key Person Interview Program 2022-2023).

3.4.3.3 Local Business in Machin

Table 3.4-5 summarizes a list of food, accommodations, tourism, construction, mining, geology, forestry, and utility businesses which operate in Machin.

Table 3.4-5: Machin Business Inventory

Industry	Machin Business Inventory
Food services	Bayview Bar and Motel (restaurant) Bobby's Bites at Bobby's Corner (restaurant) Jiggers Pub (restaurant) Quackers Diner (restaurant) Nowhere Craft Chocolate and Coffee Roastery (bakery) Co-op, Vermillion Bay Food Store (grocery)
Accommodations	Bayview Bar and Motel Northside Motel Pine Grove Motel
Tourism	Borealis Sled Dog Adventures List of outfitters and camps are described in **Section 2.5.7**
Construction	Bruyere's Bobcat Services Jim's Electrical Services North Country Plumbing
Mining, forestry, geology, and utilities	NA

Source: Machin Business Directory n.d.

Machin has a number of outfitters and lodges but a limited number of businesses in the food service and accommodation industries. There are a number of food services with more traditional restaurants in Machin compared to more fast-food businesses. For construction there are only a few contractors, but there is some variety in general contracting, electrical, and plumbing. Although there are no mining, forestry, geology, or utility companies operating in Machin, a notable proportion of residents live in Machin and work at the mines (See **Section 3.4.2**).

There are no Indigenous-owned businesses in Machin which are registered with the federal Indigenous business directory (Government of Canada n.d.). Machin owns and operates the Vermillion Bay Water Treatment Plant (Machin 2019). Machin does not have any building management related contractors within the municipality.

3.4.3.4 Local Business in Sioux Lookout

Table 3.4-6 summarizes a list of food, accommodations, tourism, construction, mining, geology, forestry, utility, and transportation businesses which operate in Sioux Lookout.

Table 3.4-6: Sioux Lookout Business Inventory

Industry	Sioux Lookout Business Inventory
Food services	The Hazel Tree/Sugar Shack Food Truck (fast food) The Red Brick Café (fast food) Dairy Queen Grill & Chill (fast food) Forest Bar and Grill (restaurant) Wellington Centre (restaurant) Chicken Chef (fast food) Tim Hortons (fast food) Sioux Lookout Golf & Curing Club (restaurant) Good News Books (restaurant) Fresh Market Foods (grocery) Giant Tiger (grocery) Drayton Cash and Carry (fast food) Fifth Avenue Bar & Grill (restaurant) Pelican Lake Sandwiches (fast food)
Accommodations	Laketime B & B Wellington Centre Sunset Inn & Suites Great Northwest Bed & Breakfast Lamplighter Motel Forest Inn & Conference Centre Sioux Lookout Inn & Suites
Tourism	Sioux Hudson Entertainment Series Northern Lights Community Theatre Abram Lake Park/Lincoln Park List of outfitters and camps are described in **Section 2.5.7**

Table 3.4-6 Continued: Sioux Lookout Business Inventory

Industry	Sioux Lookout Business Inventory
Construction	Rockshore Holding Inc. Perron Contracting Full Span Construction Finn Way General Contracting White Pines Development Details A. J. Positano Paving Nissley Construction J R Carpentry Fred J Cook Construction Sioux Lookout Public Works and Development Services
Mining, forestry, geology, utilities, and Transportation	Sioux Lookout Hydro (utilities) Morgan Fuels (utilities) Keay Contracting and Septic (utilities) CN Rail (transportation) VIA Rail (transportation) Sioux Lookout Municipal Airport (transportation) Hub Transit (transportation)

Source: Sioux Lookout Chamber of Commerce n.d. Yellowpages n.d.a, Yellowpages n.d.b, Sioux Lookout 2021.

Sioux Lookout is a hub for the north, connecting people across 29 northern First Nation communities to their health care and social assistance industries (Sioux Lookout n.d.b). Sioux Lookout has bus, rail, and flight transportation options for its residents and the vast number of people who come to visit the community from northern communities and even the United States (Sioux Lookout 2021). Sioux Lookout has a number of accommodation and food service-related businesses. Given the size and population of Sioux Lookout, there are not many construction companies. **Figure 3.4-3** shows over half the jobs in Sioux Lookout are in health care and social services, educational services, and public administration. Sioux Lookout's major employers are the public sector (e.g., hospitals), leading to a stable economy. Sioux Lookout has a few different tourism and entertainment related businesses which include two theatres. Although there are no mining, forestry, geology, or utilities businesses, Sioux Lookout is located near the Treasury Metals Goliath Complex which could begin operations in the near future.

Maawuhsuk Aatahsinnokamik Regional Distribution Centre Inc. is an Indigenous-owned transportation warehouse registered with the federal Indigenous business directory that rents warehouse and office space for First Nation communities. (Government of Canada n.d.). Sioux Lookout owns its water systems and wastewater treatment plant. The systems are operated by the public works department with contracted support services from Northern Waterworks (Sioux Lookout n.d.a). The Sioux Lookout facilities division is responsible for building management services of municipal buildings (Sioux Lookout n.d.a)

3.4.4 Major Employers

This section discusses the largest employers for each Local Study Area community and their number of employees, which may not all reside within the community the business is located in. For example, 88% of residents who live in Ignace also work in the community. Similarly, 89% of residents work and live in Dryden, 96% of residents work and live in Sioux Lookout, but only 31% of residents work and live in Machin, and 0% of residents work and live in the LSB of Wabigoon (Statistics Canada 2022a; See **Appendix 3B Supplemental Data**). Major employers in a community or region play an important role in the economy as they typically hire locally. They also may purchase goods and services locally or within the region which helps support businesses to stay open and pay their employees.

3.4.4.1 Major Employers in Ignace

Table 3.4-7 shows the top ten major private and public sector employers in Ignace and the approximate number of employees in 2018.

Table 3.4-7: Top 10 Major Employers in Ignace

Sector	Business	Approximate Number of Employees
Public Sector	Keewatin-Patricia District School Board	34
	Mary Berglund Community Health Centre	8 full-time; 18 part-time
	Ontario Provincial Police	14
	Ministry of Natural Resources	9
	Township of Ignace	18
Private Sector	Resolute Forest Products	41
	Ricci’s Trucking	24
	Northwood’s Motor Inn	21
	Canadian Pacific Railways	19
	Clooch’s Tavern	9 full-time; 2 part-time

Source: Township of Ignace 2018; Resolute Forest Product n.d.

3.4.4.2 Major Employers in Dryden

Table 3.4-8 shows the top ten major private and public sector employers in Dryden and the approximate number of employees in 2023.

Table 3.4-8: Top 10 Major Employers in Dryden

Sector	Business	Approximate Number of Employees
Public Sector	MNR District Fire Centre	225-250
	Kenora District Services Board	220 full-time; 80 part-time
	Keewatin-Patricia District School Board	200-225
	Dryden Regional Health Centre	200-225
	Provincial Government	175-200
Private Sector	Domtar Inc.	350 full-time; 35 part-time
	PRT Group	150 full-time; 15 part-time
	Walmart	125 full-time; 13 part-time
	Safeway	75 full-time; 8 part-time
	Canadian Tire	50 full-time; 5 part-time

Source: NWO Baseline Studies Key Person Interview Program 2022-2023.

3.4.4.3 Major Employers in Machin

In Machin, the largest employer is likely Temple Bay Lodge which employs around 60 people. There is also another outfitter starting up in 2023 which is anticipated to have approximately 10 employees (NWO Baseline Studies Key Person Interview Program 2022-2023). Most residents work seasonally with tourist outfitters in Machin or full-time in Dryden or Ear Falls for the sawmills or the transportation industry driving trucks. Two important employers were the Village Corner, which burned down several years ago, and Buster’s BBQ which shut down a few years ago. The Village Corner was referred to as the “Million Dollar Corner” because it was busy all the time (NWO Community and Baseline Studies Key Person Interview Program 2022). The Village Corner was important to the community as it was a convenience store, rest stop, and motel, and employed school-aged youths (NWO Community and Baseline Studies Key Person Interview Program 2022).

3.4.4.4 Major Employers in Sioux Lookout

Table 3.4-9 shows the top ten major private and public sector employers in Sioux Lookout and the approximate number of employees in 2021.

Table 3.4-9: Top 10 Major Employers in Sioux Lookout

Sector	Business	Approximate Number of Employees
Public Sector	Tikinagan Child & Family Services	690
	Sioux Lookout First Nation Health Authority	483
	Sioux Lookout Meno-Ya-win Health Centre	450
	Municipality of Sioux Lookout	140
	Keewatin-Patricia District School Board	118
Private Sector	Fresh Market Foods	130
	Canadian National Railway	102
	Wasaya Airways LP	56
	Bearskin Airlines	50
	Morgan Fuels	19

Source: Sioux Lookout 2021.

3.4.4.5 Major Employers in Unorganized Communities

There are no business directories for the LSB of Melgund or Dinorwic. The LSB of Melgund and LSB of Wabigoon are not able to monitor or track a local business directory (NWO Baseline Studies Key Person Interview Program 2022-2023). The LSB of Wabigoon has a convenience store, a motel, and RV Park (NWO Baseline Studies Key Person Interview Program 2022-2023; Bear Paw Landing 2023; Lang H., personal communication, June 27, 2023). More information on temporary accommodation in the surrounding region is discussed in **Section 2.4.8**.

3.4.5 Economic Development Planning

Economic development planning includes strategies, initiatives, and partnerships required to improve economic activity in a municipality. The Local Study Area communities each have their own economic development goals and aspirations but have common goals in attracting investments, residential development, collaborating with nearby communities, and promoting tourism to enhance economic development within the communities and the region.

Table 3.4-10 summarizes the current economic development goals for Local Study Area communities based on the temporal periods identified by each community.

Table 3.4-10: Economic Development Goals of Local Study Area Communities

Goals	**Ignace** (2019 to 2024)	**Dryden** (2022 to 2047)	**Sioux Lookout** (2019 to 2038)	**Machin** (2017 to 2022)
Attract investment	✓	✓	✓	✓
Beautification, revitalization, commercial development	✓	✓	✓	✓
Residential development	✓	✓	✓	
Promote tourism	✓	✓	✓	✓
Develop, attract, and retain well-trained workforce	✓	✓	✓	✓
Collaboration with businesses, organizations, and other communities	✓	✓	✓	✓

Table 3.4-10 Continued: Economic Development Goals of Local Study Area Communities

Goals	Ignace (2019 to 2024)	Dryden (2022 to 2047)	Sioux Lookout (2019 to 2038)	Machin (2017 to 2022)
Unique elements	Promote natural features of community and shop local program.	Regional food network; maximize airport related activities; downtown development; support senior services and housing; facilitate a more sustainable relationship between regional Indigenous communities; and support development of regional hospital, Confederation College, and regional cultural centre.	Maximize airport replated activities; promote community as health care hub; engage Indigenous groups or communities on relevant issues to Indigenous peoples; and support establishment of multimodal transportation system.	Infrastructure improvements; shop local program; and create a community economic development entity.

Source: Millier Dickinson Blais 2015; Machin 2017; TD Graham and Associates 2018; Ignace 2019; Sioux Lookout 2019; Quartek Group 2022; HSAL et al. 2022a; NWO Community and Baseline Studies Key Person Interview Program 2022; NWO Baseline Studies Key Person Interview Program 2022-2023.

The similar economic development goals pose an opportunity for municipal and business collaboration with the common goal of attracting businesses and investment, and to further develop the area as a regional tourism hub (HSAL et al. 2022a).

The unorganized communities of the LSB of Wabigoon, Dinorwic, and Borups Corners and Dyment (i.e., LSB of Melgund) only tax properties but do not manage any within the Local Services Board boundaries, excluding any properties owned by the Local Services Boards. Due to limited funding and the lack of full-time staff the goals of the unorganized communities are limited. For the LSB of Wabigoon, they have a goals of expanding street lighting to the back end of the community and a fully enclosed arena with a proper Zamboni (NWO Baseline Studies Key Person Interview Program 2022-2023). The LSB of Melgund has goals surrounding their community hall but are constrained by available funding and a limited tax base (NWO Baseline Studies Key Person Interview Program 2022-2023). Dinorwic is an unorganized community and although there is a strong sense of community, there is no formal community planning or goals. It was noted that if an outside organization such as the NWMO was involved in planning that people would likely be interested in getting involved (NWO Baseline Studies Key Person Interview Program 2022-2023).

Organizations involved in economic development planning in the Local Study Area include chambers of commerce, municipal governments, and private and non-profit organizations who facilitate planning, partnerships, and strategies for businesses and communities trying to improve economic activity and foster new relationships. **Table 3.4-11** summarizes the chambers of commerce and economic development associations in the Local and Regional Study Areas.

Table 3.4-11: Business Development Associations in the Local Study Area and Regional Study Area, 2023

Organizations and Chambers of Commerce	Description of Mandates and Services Offered
Local Study Area	
Ignace Area Business Association	Maintains a business directory to promote member businesses and hold networking events for their members.
Dryden District Chamber of Commerce	Maintains a business directory to promote member businesses, facilitates discussions between businesses and all levels of government to foster partnerships, and holds chamber events and workshops to promote networking and business development.
Sioux Lookout Chamber of Commerce	Maintains a business directory to promote member businesses, with the goal of promoting the growth of a tourism economy through strategic partnerships and the support of local businesses.
Patricia Area Community Endeavors	Offers lending services to businesses and entrepreneurs if they have been declined by the bank. PACE also offers counselling services and a business incubator program. The business incubator program has three offices that can be used for up to 12 months by clients.

Table 3.4-11 Continued: Business Development Associations in the Local Study Area and Regional Study Area, 2023

Organizations and Chambers of Commerce	Description of Mandates and Services Offered
Regional Study Area	
Kenora Chamber of Commerce	Maintains a business directory to promote member businesses, with the goal of promoting municipal, commercial, industrial, and agricultural progress. Another goal is to work for effective legislation and administration for the community and all levels of government.
Atikokan Chamber of Commerce	Maintains a business directory to promote member businesses and facilitates discussions between businesses, private citizens, and the community.
Thunder Bay Chamber of Commerce	Maintains a business directory to promote member businesses, facilitates discussions between businesses and the community to foster relationships, and holds events for professional development, training, and business development.
Indigenous Services Canada – Indigenous Business Directory	The Indigenous Business Directory is a directory which allows for the public to identify Indigenous businesses. A business is eligible if they have Indigenous persons who have at least 51% ownership and control (Government of Canada n.d.). Indigenous Services Canada is not a business association but provides services to all First Nations in the region with the nearest regional office in Fort William First Nation.
Workforce Inc.	Located in Thunder Bay. Has job postings available for the public and provides supports for employers to assist with resourcing skilled trades, labour, and professionals to address labour demands.
Thunder Bay Community Economic Development Commission	Located in Thunder Bay, the Community Economic Development Commission engages in projects and programs that will contribute to economic development. The Thunder Bay Community Economic Development Commission also provides entrepreneurial support including business consultation services, guidance with business start-ups, assistance with obtaining funding, and referral services.
Northwestern Ontario Innovation Centre	Is a non-profit organization which offers programs designed to promote job growth by supporting entrepreneurs and companies grow their business. The programs offered focus on starting the business, developing a clientele, resources for office space, obtaining funding, and programs for youth entrepreneurs.
The Northwest Training and Adjustment Board	Facilitates the connections and processes to develop the workforce with local and regional employers. NTAB also has a thorough understanding of the local and regional labour forces through research and community engagement.

Economic development is being driven by forestry and mining and is likely masking opportunities in other sectors given their prominence in the Northwest. These industries offer higher wages and are hiring youth coming out of high school which creates challenges in pursuing other economic development opportunities (NWO Community and Baseline Studies Key Person Interview Program 2022). Many of the Local Study Area communities also have a focus on supporting entrepreneurs, local businesses, and boosting the tourism industry to enhance local economic development.

Another economic development goal shared by the Local Study Area communities is to increase residential and commercial development to address the housing shortage in the Northwest (NWO Community and Baseline Studies Key Person Interview Program 2022). Ongoing collaboration between organizations, the Kenora District Services Board, and municipal government are taking place to address the housing shortage as it is partially due to challenges attracting developers, but also a shortage of skilled trades. The Kenora District Services Board has outlined priorities to address the housing shortage which include: increasing affordability, streamline construction development, expanding land use capabilities, increasing housing availability and quality, and supporting partnerships and collaboration (KDSB 2023). Organizations such as the chambers of commerce, NTAB, and PACE are working with governments to address the skilled trades labour shortage which is limiting economic development.

3.4.6 Summary of Economic Base

Employment by Industry Sectors

Employment by industry sectors in the Local Study Area are concentrated in the health care and social assistance, retail trade, public administration, accommodation and food services, and educational services industries. The proportion of employment of Indigenous peoples by industry sectors are similar to the total and non-Indigenous population within the Local Study Area, Regional Study Area, and Ontario.

In the Local Study Area, a large proportion of people are employed in tourism-related and supporting sectors (e.g., accommodation and food services), and each municipality has the common goal of promoting and developing the tourism sector. Other important industries to the Local Study Area are mining, forestry, and health care and social services. The number of people employed in the forestry-related industries notably decreased between 2006 and 2011 when there was a contraction of the industry but has slightly increased since then.[16] Historically, mining has played an important role in the economic development of the Local Study Area communities. Since 2006, employment in mining has increased slightly, but with a potential mine opening in the Local Study Area in the near future employment in this sector is likely to continue to increase. The healthcare and social assistance industry represents the largest proportion of employment in the Local Study Area and increased from 15% of employment in 2006 to 25% by 2021. The mining, forestry, health care and social services, and tourism sectors play an

[16] The forestry related industries include the NAICS agriculture, forestry, fishing, and hunting and manufacturing industries. Both industries capture other sectors and operations which would not be attributed to forestry. This could overstate the magnitude in changes in employment and employment in the industries which would be attributed to the forestry sector.

important role in the local and regional economies and are typically at the forefront of economic development planning.

Local Businesses and Major Employers

Within the Local Study Area, a large number of businesses are located in Dryden. In Ignace, Machin, and Sioux Lookout there are a limited number of accommodations, food services, and contractors within the communities. Although Dryden has a variety of contractors, it has still been noted that there is a shortage of skilled trades within the community and the Local Study Area which has been attributed to the absence of a local educational institution which offers programming in the skilled trades (NWO Community and Baseline Studies Key Person Interview Program 2022; NWO Baseline Studies Key Person Interview Program 2022-2023).

Major employers in the Local Study Area include hospitals and social service organizations (e.g., Kenora District Services Board), forestry operators, grocery stores, school boards, municipal governments, and the provincial government and related ministries. Sioux Lookout is a unique community among the Local Study Area communities given that its major employers are all in the public sector which results in a stable economy.

Economic Development Planning

Economic development planning in the Local Study Area communities prioritize the following common goals:

- Attracting investments;
- Beautification, revitalization, commercial development;
- Residential development;
- Promoting tourism;
- Develop, attract, and retain a well-trained workforce; and
- Collaboration with businesses, organizations, and other communities.

Given the role forestry and mining plays in the Regional Study Area, economic development also tends to have a focus on these industries given the investments and increased economic activity these industries can bring to the region. The main barriers to economic development in the Regional Study Area relate to the availability of skilled trades labour and the current regional housing shortage. These barriers pose challenges for economic development planning of the Local Study Area communities as it is difficult to improve economic activity without being able to attract new residents and businesses to the Local Study Area. It will be important for the municipal governments to continue to collaborate with each other, local businesses and organizations, regional Indigenous communities and organizations, and business development associations to improve labour market conditions. Through improved collaboration and strategic planning, governments can promote the attractiveness of visiting and relocating the Local Study Area while leveraging the natural environment as a foundational attraction for visitors to the region.

Diversified economies are generally considered more sustainable economies than those that depend on a small number of industries. Diversified economies are less vulnerable to market shocks or downturns affecting a single industry. In the past, Ignace and other Local Study Area communities had a large concentration of employment in forestry and mining. The Local Study Area economies experienced an economic downturn when these industries contracted.

Although there is still a notable amount of employment in the agriculture, forestry, fishing, and hunting sector in Local Study Area communities, there is a large concentration of employment in publicly-funded industries such as health care and social assistance, public administration, and educational services. Retail trade and accommodation and food services are also substantial employers in the Local Study Area. These industries are typically more insulated from market downturns but may still experience contractions due to population declines, budget cuts, or broader economic downturns. Each of the municipalities in the Local Study Area have economic development goals to promote and support tourism. A steady stream of spending in a local economy from tourism is an effective diversification strategy. This is because tourists spending power are generally unaffected by the current economic conditions in a community.

3.5 LOCAL GOVERNMENT FINANCES

3.5.1 Overview and Approach

This section examines revenue and expenditures related to operating and maintaining local government services and infrastructure. Local government sources of revenue may include property taxes, levies, service fees, and transfers. Local government expenditures may include:

- Protection services (police and fire departments);
- Transport (road construction and maintenance);
- Environmental Services (water, sewer, and garbage collections);
- Health Services (district health and ambulance service);
- Social Spending (housing, seniors' residences, etc.); and
- Recreational services (arena, pool, library, golf course, etc.).

Key person interviews are used to qualitatively describe the impact of local government finances on people and communities. Sustainability considerations are discussed including diversity of income sources, spending priorities, and intergenerational implications of local government finances including debt obligations.

Spatial boundaries for the Local Study Area for local government finances include the Township of Ignace, City of Dryden, Municipality of Machin, the Municipality of Sioux Lookout, and, where available, the LSB of Wabigoon, the LSB of Melgund (Dyment and Borups Corners), and the unincorporated community of Dinorwic.

Temporal boundaries for the review of local government finances are based on the most recent ten years of data where available (generally 2011 to 2020).

Additional information on the selection of spatial and temporal boundaries, and approaches to data collection for local government finances is provided in **Section 3.1**.

3.5.2 Municipal Structure, Local Services Boards, and Unincorporated Communities

3.5.2.1 Municipalities

The *Ontario Municipal Act* (2001) distinguishes between three types of municipalities: upper-tier municipalities, lower-tier municipalities, and single-tier municipalities. Each type of municipality has different legal powers and responsibilities. All municipalities in Northern Ontario are single-tier municipalities (MMAH 2022). Single-tier municipalities are also referred to as local municipalities. The single-tier municipalities in the Local Study Area are the Township of Ignace, the City of Dryden, the Municipality of Machin, and the Municipality of Sioux Lookout.

3.5.2.2 Local Service Boards

The majority of the geographic area of Northern Ontario is not part of an incorporated municipality (Government of Ontario 2020a). These unincorporated territories or areas are not municipalities. LSBs are established under the *Northern Services Boards Act* (1990). A LSB is a volunteer organization that has the authority to deliver approved powers or services to residents.

LSBs may be funded through user fees, levies, fundraising, operating grants, and/or Provincial and Federal program supports (Government of Ontario 2020a). Levies include the LSB levy and the provincial land tax collected on behalf of the LSB by the Ministry of Finance (Government of Ontario 2020a).

An LSB can be approved to deliver any of nine approved services, to residents within the board's geographical area:

1. Water supply;
2. Fire protection;
3. Garbage collection;
4. Sewage;
5. Street or area lighting;
6. Recreation;
7. Roads;
8. Public library service; and
9. Emergency telecommunications.

These boards are set up in rural areas where there is no municipal structure to deliver services. Area residents vote to determine an LSB's boundaries. Some LSBs choose to provide only one or two services while others can have up to the full nine services that are available under the *Northern Services Boards Act*.

The LSBs in the Local Study Area are the LSB of Melgund (includes Dyment and Borups Corners) and the LSB of Wabigoon. The LSB of Melgund provides recreation and garbage collection services. LSB of Wabigoon provides fire protection, street and area lighting, recreation, and emergency telecommunication (Government of Ontario 2022a).

3.5.2.3 Unincorporated Communities

Dinorwic is an unincorporated community in the Local Study Area and is not governed by a local municipal corporation or a LSB (Government of Ontario 2022a). Community services in unincorporated areas of Northern Ontario can be funded through a provincial land tax collected by the Province of Ontario (Government of Ontario 2022a). Services are minimal in unincorporated communities. Key person interviews with a resident of Dinorwic identified that fire protection is shared with the LSB of Wabigoon and the Ministry of Transportation of Ontario is responsible for provincial roads, including winter snow clearing (NWO Baseline Studies Key Person Interview Program 2022-2023).

3.5.3 Local Government Reporting Requirements, Revenues, Expenditures, Surplus/Deficit and Reserves and Accumulated Surplus

This section describes local government finances in the Local Study Area, including reporting requirements, revenues, expenditures, reserve funds, and accumulated surplus.

3.5.3.1 Municipal Reporting Requirements

Municipalities in Ontario are required under the *Ontario Municipal Act* (2001) to report budgets, audited financial statements and financial information returns to the Ministry of Municipal Affairs and Housing.

- Budgets are "forward looking" documents that report a municipality's planned revenue and the cost of public services for an annual or multi-year period. Budgeting can help municipalities to manage spending and identify revenue to support their long-term financial plans. The *Ontario Municipal Act* (2001) requires every Ontario municipality to prepare and approve a budget each year and outlines the regulations for a municipality's annual budget or multi-year budgeting process. Municipal budgets must be balanced, and municipalities must comply with Generally Accepted Accounting Principles set by the Public Sector Accounting Board (Government of Ontario 2022a). Municipalities may take slightly different approaches to approving their budget. All municipalities follow best practices that include (1) preliminary budget forecast, (2) a detailed budget preparation, including management and finance department review, (3) council budget discussion, and (4) budget approvals and adoption (Government of Ontario 2022a). Municipalities also collect public input or hold public meetings to gather feedback during the budget process. Municipalities have an option to draft and submit an annual budget or a multi-year budget. Ignace, Dryden, and Sioux Lookout follow an annual budgeting process for both its operating and capital budget (City of Dryden 2023; Municipality of Sioux Lookout 2020; Ignace 2019).
- Financial statements are "backward looking" documents and report on the actual resources used by municipalities and the full cost of the services delivered to the public in that year. The *Ontario Municipal Act* (2001) requires that municipalities prepare their financial statements using accrual accounting, in accordance with Public Sector Accounting Board standards. Audited financial statements must be published 60 days after the municipality has received them. Municipalities are required to submit their financial information returns annually to the Ministry of Municipal Affairs and Housing, which are posted publicly. Financial information returns provide a standardized reporting of a municipality's financial activities in the previous fiscal year (January to December) (MMAH 2021). The *Ontario Municipal Act* (2001) outlines how the Ministry of Municipal Affairs and Housing may also make regulations requiring a municipality to establish a reserve fund and make payments into the reserve fund, prohibit a municipality from changing the purpose for which the reserve fund is designated, and the conditions under which a municipality can borrow from the reserve fund. Reserve and reserve fund levels are typically monitored and reported on a regular basis, generally within the budgeting process. Municipal staff routinely assess the adequacy of the balance by reviewing the actual balance versus specific targets.

3.5.3.2 Local Services Board Reporting Requirements

LSBs are required under the *Northern Services Boards Act* (1990) to report on budgets and are encouraged to consult an accounting professional regarding the most effective bookkeeping system or process to use.

- Budgeting requirements defined under the *Northern Services Boards Act* (1990) include that the LSB must prepare and adopt annual estimates (operating budget) for the current fiscal year for submission to the Minister of Northern Development. The Ministry supplies the LSB with an instruction booklet and excel workbook to be used for budget submission.

- Bookkeeping and recordkeeping, defined under the *Northern Services Boards Act* (1990), encourages LSBs to consult an accounting professional regarding the most effective system or process to use in consideration of Generally Accepted Accounting Principles as well as a system that ensures easy transfer of information from the bookkeeping system to the financial reporting forms (excel budget workbook). The Ministry recommends that LSBs maintain financial records for a minimum of 7 years, where financial records are specific to a government program (funding program such as the Northern Heritage Fund) the records should be retained, and records should record minutes of meetings, by-laws, correspondence, financial records, and legal documents. The *Northern Services Boards Act* (1990) includes two provisions for financial audits (1) that an audit be performed by a public accountant on, at minimum, an annual basis or (2) that the Minister may, at any time, cause the accounts of a LSB to be audited. The LSB must send a copy of the annual audit report to the Minister. The LSB may also establish a by-law to set aside reserves from revenues as considered appropriate for expenditures in subsequent fiscal year(s).

3.5.3.3 Sources of Local Government Revenues

Municipal revenues typically include:

- **Property taxes** are a tax levy that property owners pay based on the assessed value of the property (residential and non-residential). Property taxes are typically calculated by multiplying the municipal property tax rate by the weighted assessed property value (MMAH 2021). Property taxes are the largest revenue source for the municipalities in the Local Study Area.
- **Payments in lieu of taxation** are payments made to compensate the municipal government for some or all of the property tax revenue lost due to a tax-exempt ownership or use of the real property (MMAH 2021).
- **Government transfers** are transfer payments, other than a grant or contribution, based on legislation or other arrangements (MMAH 2021). The Ontario Municipal Partnership Fund (“OMPF”) is the primary source of government transfer revenues for municipalities in the Local Study Area:
  - The OMPF is an unconditional grant from the Ontario Ministry of Finance and is distributed primarily to northern and rural municipalities. This funding provides financial aid to municipalities facing more challenging fiscal circumstances. Additionally, the funding is intended to support municipalities with a narrowly bounded property assessment. The OMPF is comprised of the following funding sources (Government of Ontario 2023b):
    - Assessment Equalization Grant provides funding to eligible municipalities with below average property assessment values.
    - Northern Communities Grant provides funding to all northern municipalities.
    - Rural Communities Grant provides funding to eligible municipalities based on the proportion of their population residing in rural areas/small communities.

  - Northern and Rural Fiscal Circumstances Grant is based on the relative economic circumstances of a municipality.
  - Transitional Assistance helps provide year-over-year consistency in the funding.
 - As a municipality grows in terms of population and the number of properties, the OMPF grant increases. As a municipality becomes more urban, as their economic circumstances improve, and as their assessed property values increase, the OMPF grant decreases (Government of Ontario 2023b).
 - Other examples of government transfers include the Ontario Cannabis Legalization Implementation Fund, The Safe Restart Agreement, and Evacuation Revenue.
- **Conditional grants** are monetary transfers to municipalities that are conditional and designated for a specific purpose. Conditional grants include transfers from the Federal and Provincial governments. Federal transfers include Canada conditional grants, Canada grants for tangible capital assets, and Canada Gas Tax funding. Provincial transfers include Ontario conditional grants, Ontario grants for tangible capital assets, and Provincial Gas Tax funding. The Canada Gas Tax and Provincial Gas Tax funding are permanent sources of annual funding to provinces and territories who provide this funding to their local municipalities to support local infrastructure priorities (Infrastructure Canada 2019).
- **Revenue from other municipalities** represents cash transfers across municipalities for shared capital projects (Financial Accountability Office of Ontario 2020).
- **User fees and service charges** are charges levied on residents for services provided (Financial Accountability Office of Ontario 2020). This includes water and wastewater charges, use of recreational facilities, and other services provided.
- **Licenses, permits, and rent** include revenues through license and permits, trailer revenue and permits, rent concessions, and franchises, and royalties (MMAH 2022).
- **Fines and penalties** include revenues through the Provincial Offences Act, penalties and interest on taxes and overdue accounts, and other fines (MMAH 2022).

Other revenues include investment income, interest earned on reserves and reserve funds, gain or loss on sale of land and capital assets, deferred revenue earned, donations, the sale of publications and equipment, and other revenues (e.g., NWMO contributions).

Local services board and unincorporated community funding:

- LSBs may be funded through user fees, levies, fundraising, operating grants, and/or Provincial and Federal program supports (Government of Ontario 2020a). Levies may include the LSB levy and the provincial land tax, collected by the Ministry of Finance on behalf of the LSB (Government of Ontario 2020a).
- Funding received by unincorporated areas of Northern Ontario is collected through a provincial land tax and the Province of Ontario collects the tax to help fund important community services on behalf of the unincorporated areas (Government of Ontario 2022a).

Table 3.5-1 summarizes sources of local government revenue for Ignace (2019), Dryden (2020), Machin (2020), Sioux Lookout (2020), the LSB of Wabigoon (2023), the LSB of Melgund

(2023), and Dinorwic (2023) (MMAH 2021; NWO Baseline Studies Key Person Interview Program 2022-2023). Ignace is currently in the process of reconciling its 2020 audited financial statements. It plans to release its 2020 audited financial statements towards the end of 2023.

Table 3.5-1: Sources of Local Government Revenues

Revenue Source	Ignace 2019	Dryden 2020	Machin 2020	Sioux Lookout 2020	LSB Wabigoon 2023	LSB Melgund 2023	Dinorwic 2023
Property taxes	✓	✓	✓	✓			
LSB levy or Provincial land tax					✓	✓	✓
Payments in lieu of taxation	✓	✓	✓	✓			
Government transfers	✓	✓	✓	✓			
Conditional grants	✓	✓	✓	✓			
Canada Gas Tax funding	✓	✓	✓	✓			
Provincial Gas Tax funding		✓	✓				
Revenue from other municipalities	✓		✓	✓			
User fees and service charges	✓	✓	✓	✓			
Licenses, permits, and rent	✓	✓	✓	✓			
Fines and penalties	✓	✓	✓	✓			
Other revenues	✓	✓	✓	✓	✓	✓	

Source: MMAH 2021; NWO Baseline Studies Key Person Interview Program 2022-2023.

Note: ✓ represents source of local government revenue.

Differences in **Table 3.5-1** indicate that Ignace in 2019 and Sioux Lookout in 2020 did not receive Provincial Gas Tax funding and Dryden in 2020 did not receive revenue from other municipalities.

The LSB of Wabigoon, LSB of Melgund, and Dinorwic received revenue from the LSB levy or the provincial land tax and/or other revenues.

Local Study Area communities may also apply for funding through the Northern Ontario Heritage Fund Corporation, such as the Community Enhancement Program, or the Federal Economic Development Agency for Northern Ontario, such as the Northern Ontario Development Program (NOHFC 2023; FedNor 2019). The Northern Ontario Heritage Fund Corporation's Community Enhancement Program is designed to help communities with infrastructure investments to upgrade or repair existing assets to improve community quality of life (NOHFC 2023). Through its Northern Ontario Development Program, the Federal Economic Development Agency for Northern Ontario invests in projects led by municipalities, First Nations, and other organizations and institutions that support community economic development, diversification, job creation, and to help communities become self-reliant (FedNor 2019). Additional information on economic development specific to the Local Study Area communities is provided in **Section 3.4**.

3.5.3.4 Sources of Local Government Expenses

Municipal expenses include (MMAH 2022):

- **General government expenses** for governance and administration, corporate management, and program supports.
- **Protection services expenses** for fire, police, court security, protective inspection and control, and emergency services.
- **Transportation expenses** for roads (paved, unpaved, and bridges and culverts), traffic operations, winter control, transit expenses (including for disabled and special needs), parking, street lighting, air transport, and facilities and vehicles.
- **Environmental services expenses** for water and wastewater, storm sewer, and solid waste.
- **Health services expenses** include public health services, ambulance services, and cemeteries.
- **Social and family services expenses** for general assistance, assistance to aged persons, and childcare.
- **Social housing expenses** include expenses for public housing.
- **Recreation and cultural services expenses** for parks, recreational and cultural programs and facilities, libraries, and museums.
- **Planning and development expenses** for planning and zoning, residential development, and commercial and industrial development.

Municipal expenses are typically categorized by (MMAH 2021):

- Salaries, wages, and employee benefits;
- Materials;
- Contracted services;
- Rents and financial expenses;
- External transfers;
- Interest on long term debt; and
- Amortization

For further information on municipal expense categorization see **Appendix 3B Supplemental Data.**

The LSB and unincorporated community expenses are **described in Section 3.5.2.**

Table 3.5-2 provides a summary of local government expenditures reported for Ignace (2019), Dryden (2020), Machin (2020), Sioux Lookout (2020), the LSB of Wabigoon (2023), the LSB of Melgund (2023), and Dinorwic (2023) (MMAH 2021; NWO Baseline Studies Key Person Interview Program 2022-2023).

Table 3.5-2: Categories of Local Government Expenditures

Expenditures	Ignace 2019	Dryden 2020	Machin 2020	Sioux Lookout 2020	LSB Wabigoon 2023	LSB Melgund 2023	Dinorwic 2023
General government							
Governance, corporate mgmt., & program support	✓	✓	✓	✓			
Protection services							
Fire	✓	✓	✓	✓	✓		✓
Police & emergency services	✓	✓	✓	✓			
Protective inspection & control	✓	✓	✓	✓			
Emergency telecom.					✓		
Transportation							
Roads and winter control	✓	✓	✓	✓			
Transit (incl. disabled needs) & parking		✓		✓			
Street lighting	✓	✓	✓	✓	✓		
Air transport	✓	✓	✓	✓			
Environmental							
Water services	✓	✓	✓	✓			
Wastewater services	✓	✓		✓			
Storm sewer services	✓	✓		✓			
Solid waste services	✓	✓	✓	✓		✓	
Health services							
Public health services, including ambulance	✓	✓	✓	✓			
Social and family services							
General assistance, assistance to aged persons, & childcare	✓	✓	✓	✓			
Social housing							
Public housing	✓	✓	✓	✓			
Recreation and cultural services							
Parks, programs, & facilities	✓	✓	✓	✓			
Libraries, museums, & cultural services	✓	✓		✓			
Recreation services					✓	✓	
Planning and Development							
Planning and development	✓	✓	✓	✓			

Source: MMAH 2021; NWO Baseline Studies Key Person Interview Program 2022-2023.
Note: ✓ represents categories of local government expenditure.

Table 3.5-2 indicates Ignace, Dryden, Machin, and Sioux Lookout have expenditures across all nine local government expenditures categories. The LSB of Melgund provides recreation and garbage collection services, The LSB of Wabigoon provides fire services, street and area lighting, recreation, and emergency telecommunication (MMAH 2021; NWO Baseline Studies Key Person Interview Program 2022-2023). Services are minimal in Dinorwic. Key person interviews identified that fire protection is shared with the LSB of Wabigoon and the Ministry of Transportation of Ontario is responsible for provincial roads, including winter snow clearing (NWO Baseline Studies Key Person Interview Program 2022-2023).

3.5.3.5 Local Government Surplus or Deficits

In a local government budget, the annual calculation for the surplus or deficit of the previous year shows whether the planned revenues for the previous year were enough to cover the planned expenses. Any differences are carried forward into the budget year period as revenue (surplus) or an expense (deficit) (Government of Ontario 2022a).

The surplus or deficit for a local government is an indicator of its financial health and indicates whether its revenues cover its expenditures. Successive years of deficits can indicate sustainability challenges for local government finances. Intergenerational equity is an important part of real financial sustainability (Association of Municipalities of Ontario 2018). Intergenerational equity implications include the need for appropriate fiscal planning so that the generation of people who benefit from the local government and its assets are also the ones paying for it (Association of Municipalities of Ontario 2018; Johal et al 2019). A key principle of financial sustainability is the need to share local government cost burdens equitably between generations (Association of Municipalities of Ontario 2018; Johal et al 2019).

Section 3.5.3.1 describes how *the Ontario Municipal Act* (2001) requires every Ontario municipality to prepare and approve a budget each year and outlines the regulations for a municipality's annual or multi-year budgeting process. Municipal budgets must be balanced. Requirements to prepare and approve a balanced budget contribute to the sustainability and financial health of a municipality. If a surplus occurs at the end of a fiscal year, a municipality can transfer the amount to the accumulated surplus or to a reserve fund for future use, including operating related reserves or for capital-related initiatives (Government of Ontario 2001). If a deficit occurs at end of fiscal year, a municipality may draw down the accumulated surplus from prior years or the deficit could be funded by the appropriate reserves (Government of Ontario 2001).

3.5.3.6 Local Government Reserve Funds and Accumulated Surplus

Ignace, Dryden, Machin, and Sioux Lookout have reserve funds and accumulated surpluses that support expected future spending. Understanding a municipality's reserve funds and accumulated surplus helps provide context on the funding available for expected future expenses, its intergenerational equity, and financial sustainability. **Section 3.5.3.1** summarizes certain provisions of the *Ontario Municipal Act* (2001) including that the Ministry of Municipal Affairs and Housing may make regulations requiring a municipality to establish a reserve fund and make payments to a reserve fund. Reserve fund levels are typically monitored and reported on a regular basis, generally within the budgeting process, and municipal staff routinely assess the adequacy of the balance by reviewing the actual balance versus specific targets. The requirements of the Ministry of Municipal Affairs and Housing and the routine assessment and adequacy checks on municipal reserves contributes to the sustainability and financial health of a municipality's reserve funds. Ontario financial information returns categorize reserve funds for a municipality as (MMAH 2021):

- **Obligatory reserve funds** include funds earmarked for specific purposes and committed for future spending that municipalities are obligated to provide, either by contract or law, which includes agreements with other levels of government or spending on capital projects funded through development charges.
- **Discretionary reserve funds** include funds set aside by municipalities to fund discretionary services and other expected future expenses, such as spending on capital projects, replacement of equipment, and employee benefits.
- **Reserves** include reserve funds available for budget stabilization after accounting for reserve funds that have been earmarked for specific purposes.

A municipality's accumulated surplus is what remains after the revenues have been used to meet the expenses from prior years (Government of Ontario 2021). These remaining funds are available to provide services for future expenses (MMAH 2021). If a surplus occurs at the end of a fiscal year, a municipality can transfer the amount to accumulated surplus for future use (Government of Ontario 2001). If a deficit occurs at the end of a fiscal year, a municipality may use the accumulated surplus as a funding source from prior years (Government of Ontario 2001).

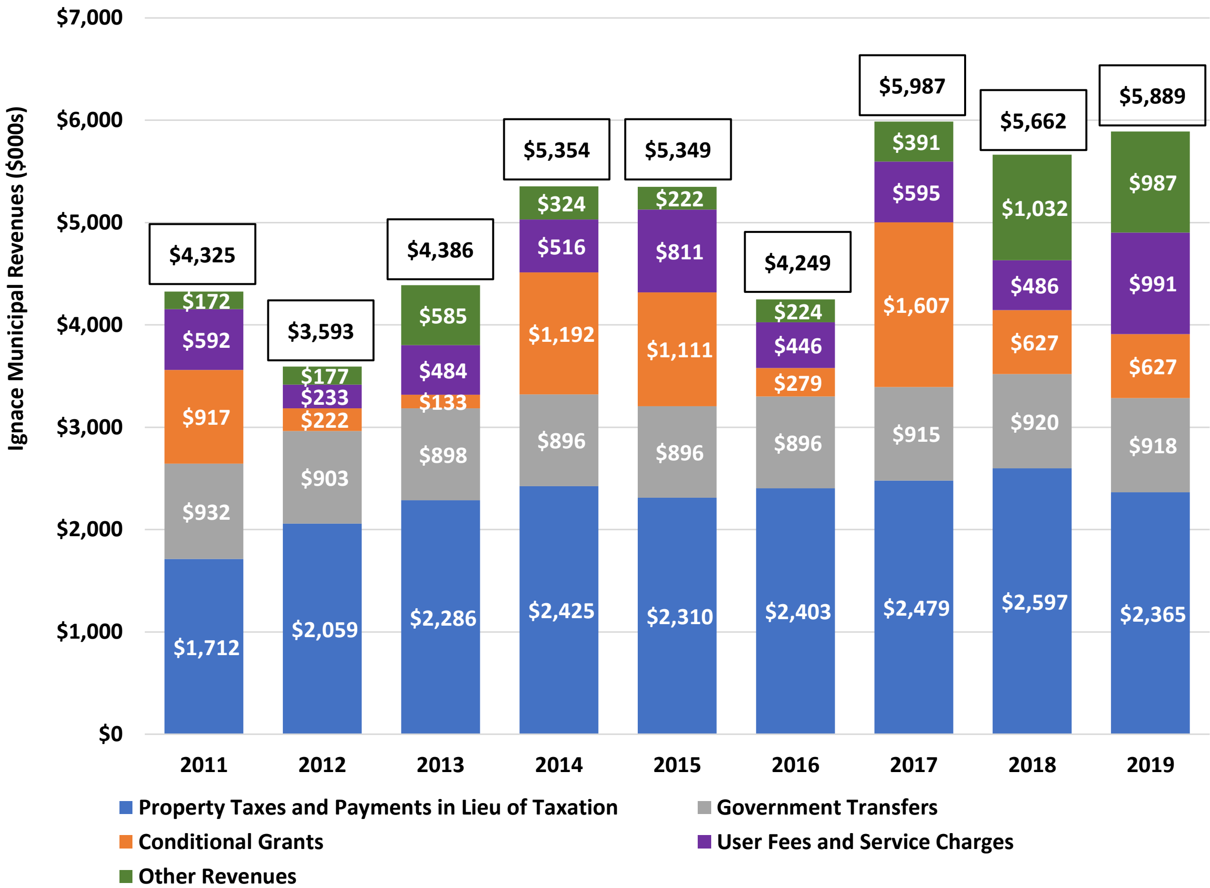
The *Northern Services Boards Act* (1990) identifies that LSBs may establish a by-law to set aside reserves from revenues as considered appropriate for expenditures in subsequent fiscal year(s). The LSB of Wabigoon and the LSB of Melgund provided that they are allowed to have a reserve fund, but it is typically a small fund used for emergencies (NWO Baseline Studies Key Person Interview Program 2022-2023). The unincorporated community of Dinorwic does not have a reserve fund (NWO Baseline Studies Key Person Interview Program 2022-2023).

3.5.3.7 Ignace Municipal Finances

3.5.3.7.1 Revenues

Ignace municipal revenues are summarized in **Figure 3.5-1** for 2011 to 2019 (MMAH 2021).

Figure 3.5-1: Ignace Municipal Revenues ($000s), 2011 to 2019



Source: MMAH 2021.

Notes

1. Other revenues include revenue from other municipalities, revenue from licenses, permits, and rent, revenue from fines and penalties, and other revenues (investment income, gain/loss on sale of land and capital assets, donations, interest earned on revenues and reserve funds, and/or the NWMO).
2. Revenue from government transfers include the OMPF.
3. Conditional grants included Ontario conditional grants, Ontario Grants for Tangible Capital Assets, Canada Grants for Tangible Capital Assets, Canada conditional grants, and/or deferred revenue earned (Canada Gas Tax). Canada Gas Tax from 2013 to 2016 included transportation services (paved roads) and from 2018 to 2019 general government and environmental services (water and wastewater distribution and transmission). No Canada Gas Tax in 2011, 2012, and 2017.
4. Revenue from licence, permits, and rent came from trailer revenue and permits.
5. Revenue from fines and penalties came from penalties and interest on taxes.

Ignace municipal revenues were $4.3 million in 2011 and by 2019 revenues were $5.9 million or an increase of approximately 37.2% (MMAH 2021). The variation in revenues from 2011 through 2019 was primarily due to changes in conditional grants, user fees and service charges, other revenues, and an increase to property taxes and payments in lieu of taxation. Government transfers have been consistent over the timeframe. In 2019, property taxes and payments in lieu of taxation were the largest revenue sources for Ignace (40.2% of total revenues), followed by user fees and service charges (16.8%), other revenues (16.8%), government transfers (15.6%), and conditional grants (10.6%). Observations in **Figure 3.5-1** include:

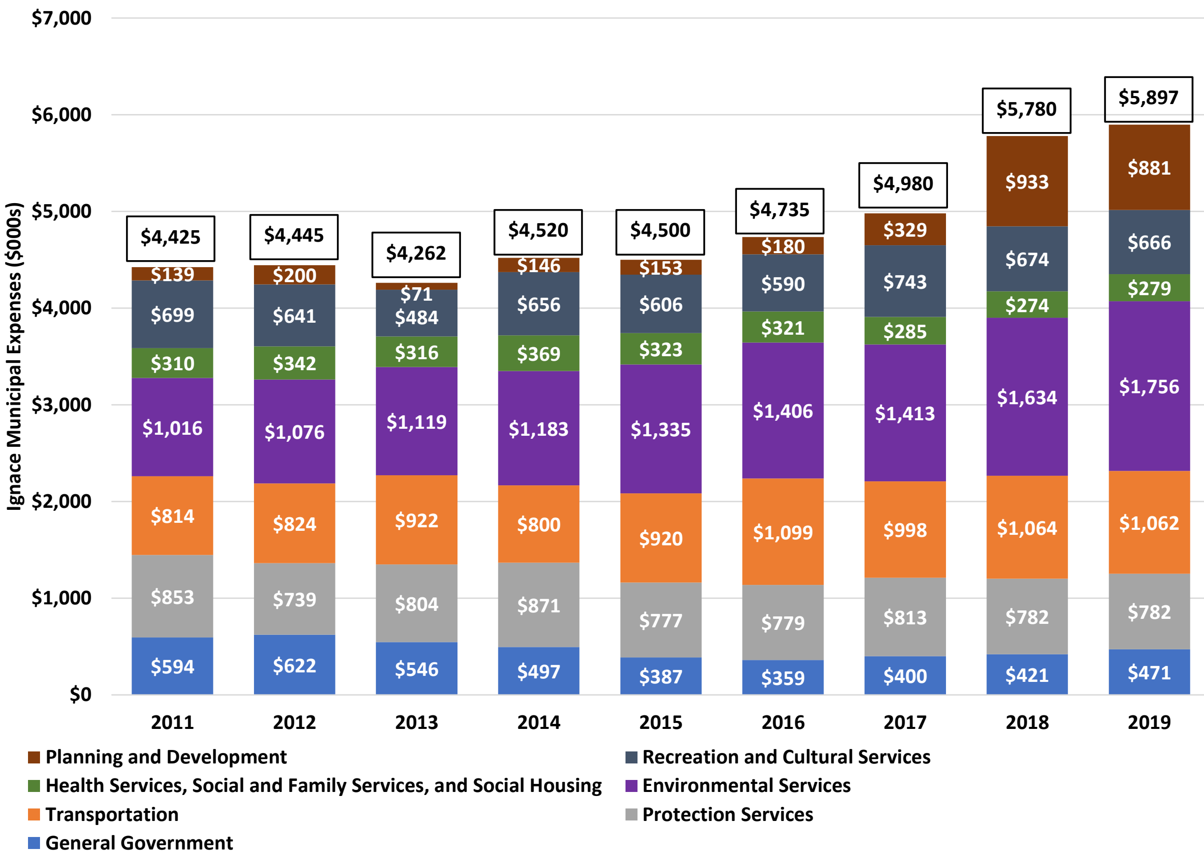
- Property taxes and payments in lieu of taxation increased from 2011 ($1.7 million) to 2018 ($2.6 million) by approximately 52.9%, however property taxes decreased from 2018 to 2019 ($2.4 million) by approximately 7.7%. The decrease in property tax revenue in 2019 was a result of write-offs on properties and the removal of these properties from the tax base (NWO Community and Baseline Studies Key Person Interview Program 2022).
- Conditional grants saw a large increase in 2017 compared to other years reported primarily due to an Ontario grant for tangible capital assets of $1.1 million for paved roads and for water treatment and distribution (MMAH 2021). Conditional grants also included Canada Gas Tax funding, which ranged from $70,000 in 2014 to $150,000 in 2019 (MMAH 2021).
- The increase to total revenues in 2019 compared to 2018 was primarily due to an increase to user fees and service charges for water and wastewater rates of approximately 20% (NWO Community and Baseline Studies Key Person Interview Program 2022). The Township began a water utility metering program where the majority of its customers were metered in 2019 along with the introduction of an infrastructure fee. Prior to 2019, the majority of customers were on a flat rate (NWO Community and Baseline Studies Key Person Interview Program 2022).
- The increase to other revenues in 2018 and 2019 was primarily the result of NWMO contributions. NWMO contributions from 2013 to 2019 ranged from $100,000 to $900,000 (MMAH 2021). The Township has used the NWMO contributions to reimburse for expenses related to participating in the Project, including salaries and benefits, administrative costs, youth and Indigenous engagement, community studies, legal fees, consulting fees, investments in community well being and education skills, and taxes and utilities.

Further details on revenues sources are provided in **Appendix 3B Supplemental Data**. Information on municipal reporting requirements, including budgeting and financial statements, under the *Ontario Municipal Act* (2001) are included in **Section 3.5.2**.

3.5.3.7.2 Expenditures

Ignace municipal expenses are summarized in **Figure 3.5-2** for 2011 to 2019 (MMAH 2021).

Figure 3.5-2: Ignace Municipal Expenses ($000s), 2011 to 2019



Source: MMAH 2021.

Ignace municipal expenses were consistent from 2011 to 2015 and increased each year from 2016 to 2019, from $4.7 million in 2016 to $5.9 million in 2019 or 25.5% (MMAH 2021). The increase in expenses from 2016 to 2019 is primarily the result of an increase in environmental services and planning and development expenses beginning in 2018. All other expenses were generally consistent over the timeframe. In 2019, the largest expenses for Ignace include environmental services (29.8% of total expenses), followed by transportation expenses (18.0%) and planning and development (14.9%). Observations in **Figure 3.5-2** include:

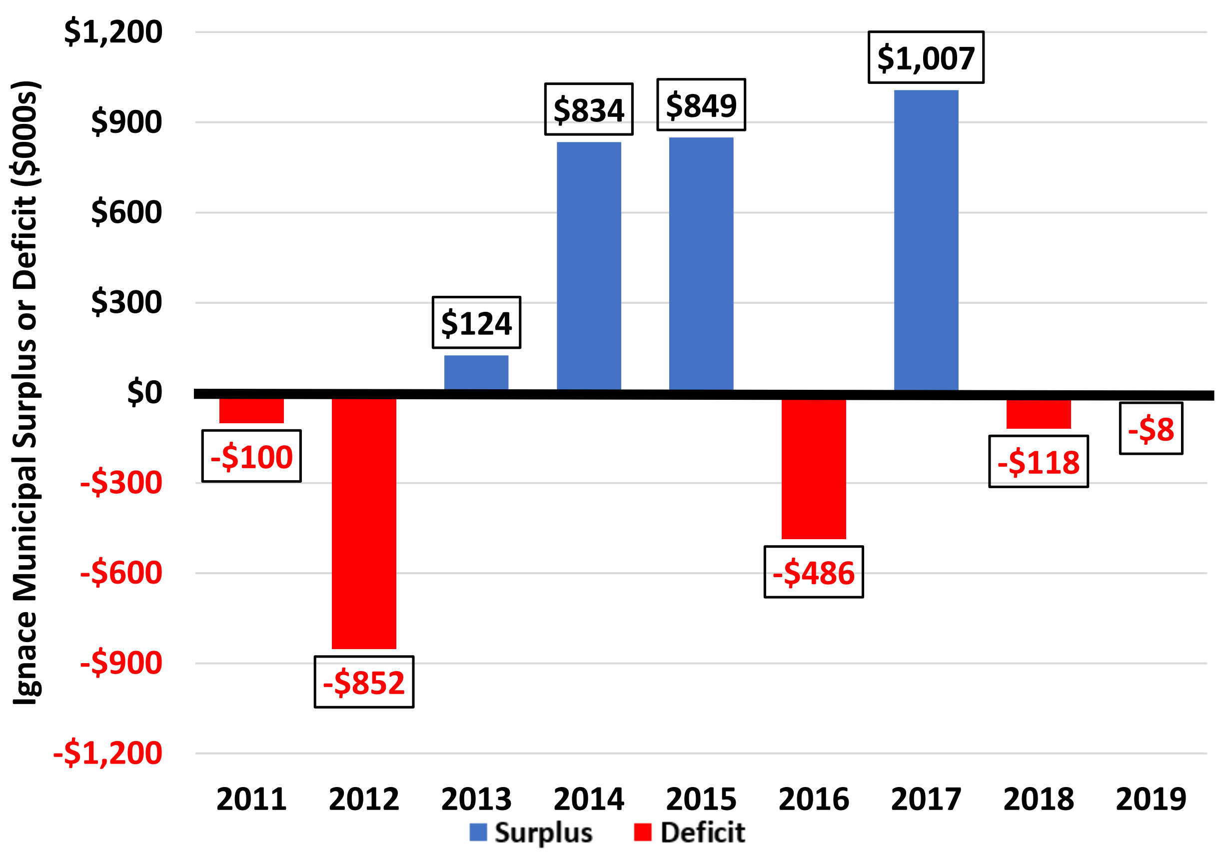
- Environmental service expenses increased in 2018 when compared to previous years due to an increase to water treatment and wastewater treatment and disposal expenditures.
- Planning and development expenses increased in 2018 compared to 2016 and 2017 because of increased expenses for planning and zoning.

Increases in planning and development expenses and environmental service expenses are due in part to economic development expenditures and for the water utility meter installation program (NWO Community and Baseline Studies Key Person Interview Program 2022). The wastewater plant is nearing the end of its 50 year life and will require upgrades to accommodate population growth (NWO Community and Baseline Studies Key Person Interview Program 2022). IAWG members stated that residents of unincorporated communities may use Ignace's municipal services, such as parks, public buildings, and waste disposal, but do not pay municipal taxes to support the services, which may put an additional burden on the municipal services provided by Ignace (IAWG October 06, 2021). Further details on municipal expenditures are provided in **Appendix 3B Supplemental Data**.

3.5.3.7.3 Surplus or Deficits

Ignace's annual surplus or deficits are summarized in **Figure 3.5-3** for 2011 to 2019 (MMAH 2021). Understanding the surplus or deficit for a municipality is an indicator of its financial health and helps provide context on whether a municipality's revenues cover its expenditures.

Figure 3.5-3: Ignace Municipal Surplus or Deficit ($000s), 2011 to 2019



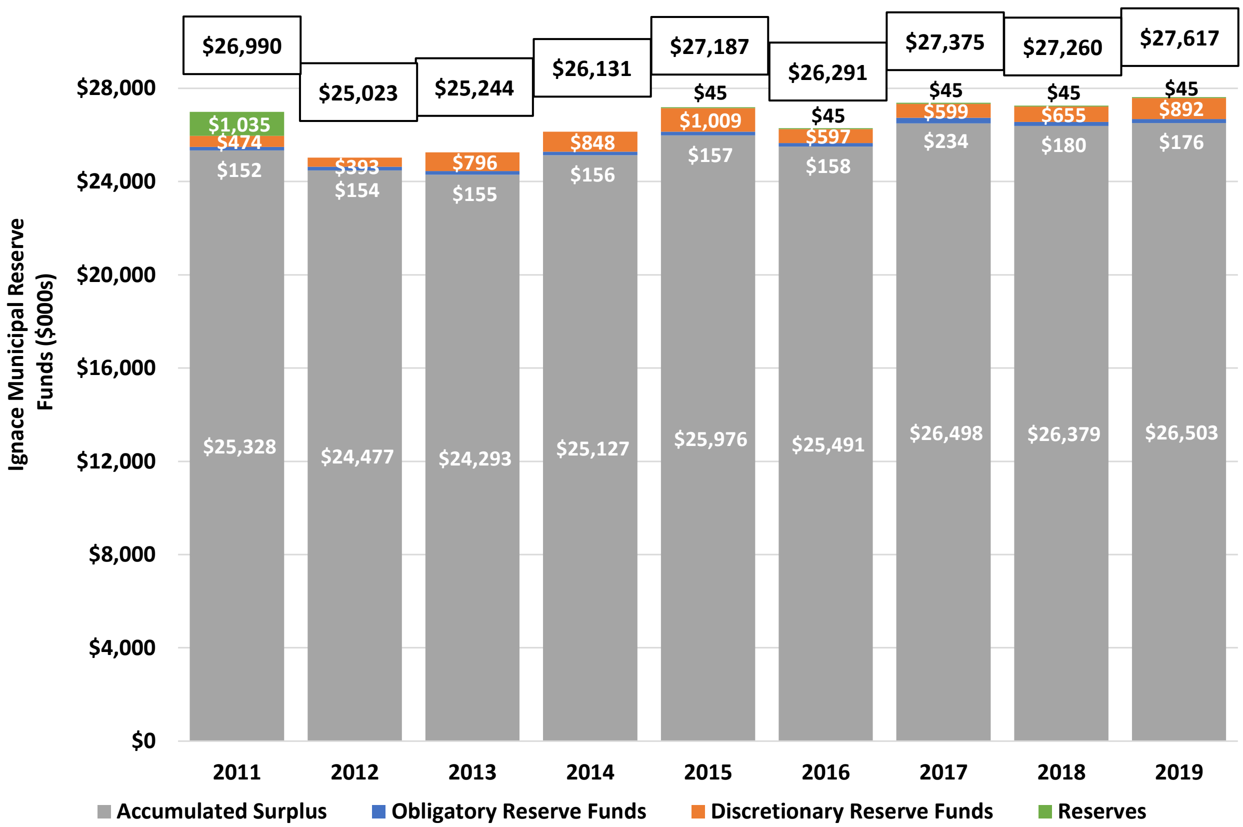
Source: MMAH 2021.

Ignace had deficits in 2011 ($100,000), 2012 ($852,000), 2016 ($486,000), 2018 ($118,000), and 2019 ($8,000) and surpluses in 2013 ($124,000), 2014 ($834,000), 2015 (849,000), and 2017 ($1,007,000). The surplus in 2017 was primarily a result of an increase to conditional grants. When considering the financial health and intergenerational equity of a municipality, Ignace's surplus or deficit has varied from 2011 to 2019 but in aggregate the surpluses have exceeded the deficits.

3.5.3.7.4 Reserve Funds and Accumulated Surplus

Ignace municipal reserve funds and accumulated surplus are summarized in **Figure 3.5-4** for 2011 to 2019 (MMAH 2021). Understanding a municipality's reserve funds and accumulated surplus helps provide context on the funding available for expected future expenses and financial sustainability.

Figure 3.5-4: Ignace Municipal Reserve Funds and Accumulated Surplus ($000s), 2011 to 2019



Source: MMAH 2021.

From 2012 to 2019, Ignace reserve funds and accumulated surplus have ranged from a low of $25.0 million in 2012 to a high of $27.6 million in 2019 (MMAH 2021). The change in reserves and accumulated surplus from 2012 to 2019 was primarily a result of changes to the accumulated surplus. Observations in **Figure 3.5-4**:

- The accumulated surplus has been used as a funding source to address deficits (for example, the accumulated surplus decreased in 2012, 2016, and 2018 where deficits occurred). The accumulated surplus increased from 2011 ($25.3 million) to 2019 ($26.5 million) (MMAH 2021).
- The obligatory reserve funds include Ontario Community Infrastructure Funding and is earmarked for certain infrastructure projects, such as for roads, water and wastewater, and

conservation projects (NWO Community and Baseline Studies Key Person Interview Program 2022).

- Discretionary reserves are set aside for public works, equipment, and infrastructure projects (NWO Community and Baseline Studies Key Person Interview Program 2022).
- The reserves fund in 2011 exceeded $1.0 million and was used in 2012 for budget stabilization (NWO Community and Baseline Studies Key Person Interview Program 2022).

In regard to the financial health and sustainability of Ignace's collective reserve funds and accumulated surplus, since 2011 Ignace has consistently had reserve funds and an accumulated surplus in excess of $25 million to help plan for and support expected future expenses.

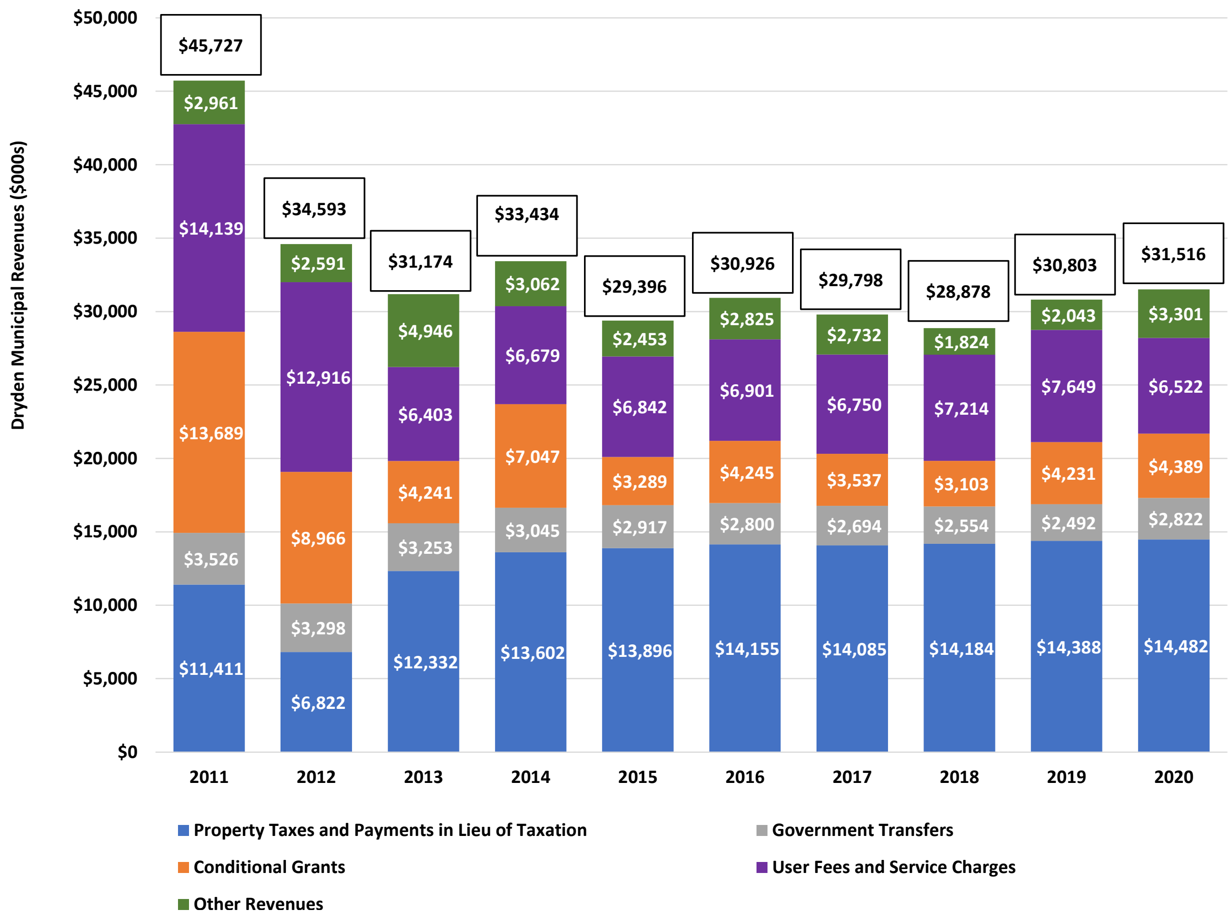
Further details on Ignace's financial information returns, including reserves and accumulated surplus, are also provided in **Appendix 3B Supplemental Data**.

3.5.3.8 Dryden Municipal Finances

3.5.3.8.1 Revenues

Dryden municipal revenues are summarized in **Figure 3.5-5** for 2011 to 2020 (MMAH 2021).

Figure 3.5-5: Dryden Municipal Revenues ($000s), 2011 to 2020



Source: MMAH 2021.

Notes

1. Other revenues include revenue from other municipalities, revenue from licenses, permits, and rent, revenue from fines and penalties, and other revenues (investment income, interest earned on reserves and reserve funds, gain/loss on sale of land and capital assets, donations, library, recycling, fire and police, Save Ontario Energy, the Dryden Municipal Telephone Service, NWMO contributions, and/or miscellaneous).
2. Revenue from government transfers include the OMPF from 2011 to 2020, the Ontario Cannabis Legalization Implementation Fund in 2019, and the Safe Restart Agreement and public transit funding in 2020.
3. Conditional grants included Ontario conditional grants, Ontario Grants for Tangible Capital Assets, Canada conditional grants, Canada Grants for Tangible Capital Assets, deferred revenue earned (Provincial Gas Tax), and/or deferred revenue earned (Canada Gas Tax). Provincial Gas Tax funding included transit operating expenses from 2013 to 2020. Canada Gas Tax funding included transportation services and recreation facilities from 2017 to 2020 and environmental services from 2011 to 2020.
4. Revenue from licence, permits, and rent include licences and permits and rents, concessions and franchises.
5. Revenue from fines and penalties include Provincial Offences Act, other fines, and penalties and interest on taxes.

Dryden municipal revenues varied from $28.9 million in 2018 to $45.7 million in 2011 (MMAH 2021). However, from 2013 to 2020 the total of revenue sources typically had similar variation across the timeframe. Among revenues from 2013 to 2020, variation was seen in conditional grants, user fees and service charges, and other revenues. The difference in revenues for 2011 and 2012, compared to 2013 to 2020, was primarily a difference in user fees and service charges and conditional grants. In 2020, the largest revenue source for Dryden was property taxes and payments in lieu of taxation (46.0% of total revenues), followed by user fees and service charges (20.7%), conditional grants (13.9%), other revenues (10.5%), and government transfers (9.0%). Observations in **Figure 3.5-5** include:

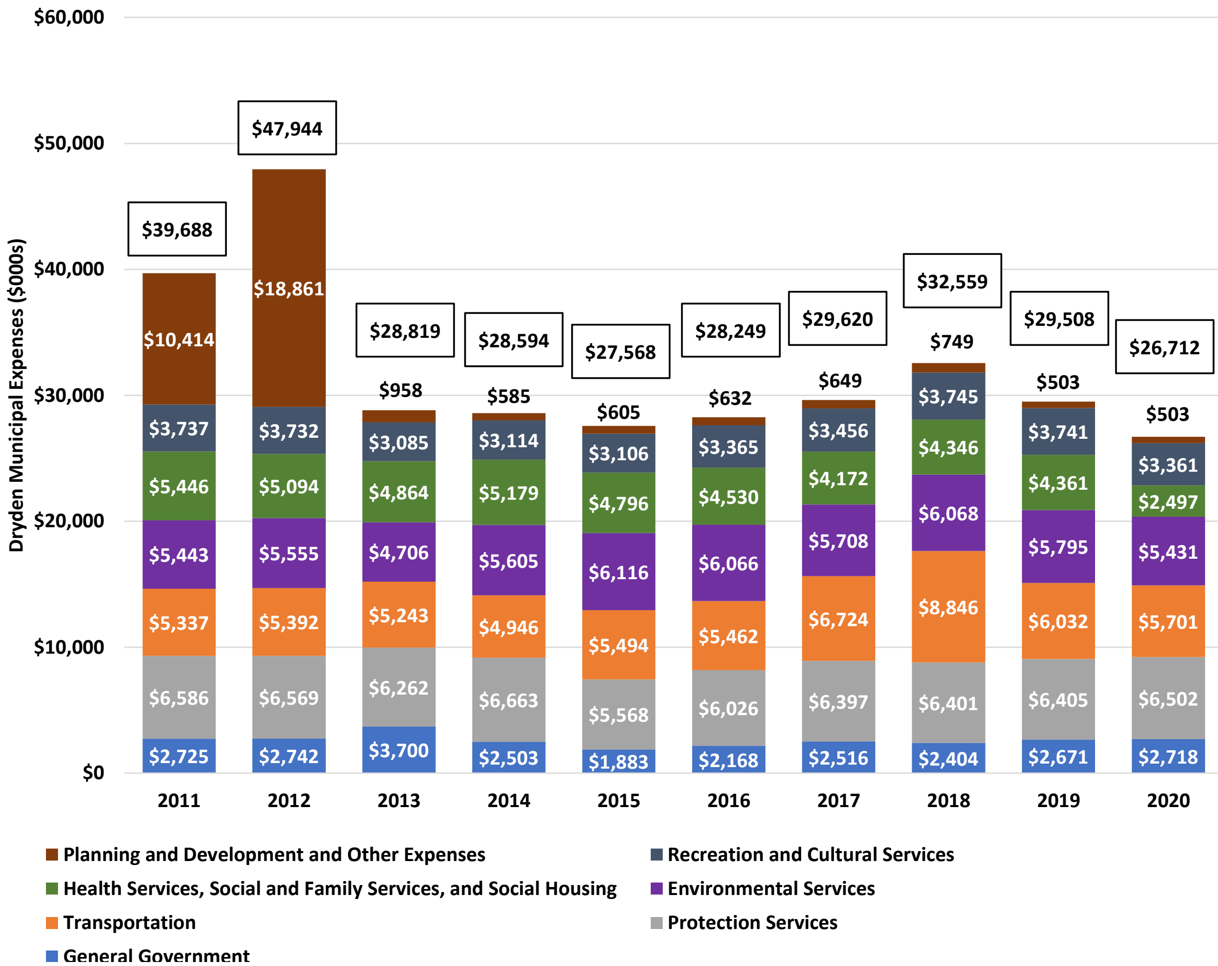
- The change in conditional grants from 2013 to 2020 was primarily the result of change to the grant amounts for Ontario grants for tangible capital assets for paved roads and/or water and wastewater treatment and for Ontario conditional grants for social and family services. Canada Gas Tax funding over this timeframe included transportation services and recreation facilities (2017 to 2020) and environmental services (2011 to 2020). The total funding from the Canada Gas Tax ranged from $82,000 in 2015 to $854,000 in 2017 (MMAH 2021). Provincial Gas Tax funding included transit operating expenses from 2013 to 2020 and ranged from $31,000 in 2018 to $48,000 in 2019.
- User fees and service charge revenue from 2013 to 2020 is primarily from environmental services (water and wastewater rate revenues), however environmental service revenues were consistent over this time frame. The change in user fees and service charge revenues were primarily a result of changes to air transportation revenues and recreation facilities revenues which, in particular, saw a decrease from 2019 to 2020 (a combined decrease from $1.4 million in 2019 to $0.7 million in 2020 or 50.0%) due to the COVID-19 pandemic traffic restrictions and facility closures (NWO Baseline Studies Key Person Interview Program 2022-2023). The additional user fees and service charge revenues seen in 2011 and 2012, when compared to 2013 to 2020, were associated with the Dryden Municipal Telephone Service (including $7.5 million in 2011 and $6.3 million in 2012), which was sold at the end of 2012 to Bell Canada (NWO Baseline Studies Key Person Interview Program 2022-2023). Additionally, in 2020, the City of Dryden transferred childcare services to the Kenora District Services Board and user fees associated with that service ceased (NWO Baseline Studies Key Person Interview Program 2022-2023).
- The change in government transfers from 2011 ($3.5 million) to 2020 ($2.8 million) was the result of annual minor reductions in OMPF funding. There was a slight increase in government transfers from 2019 ($2.5 million) to 2020 ($2.8 million) related to the COVID-19 pandemic for the Safe Restart Agreement and public transit funding (NWO Baseline Studies Key Person Interview Program 2022-2023).
- The change to other revenues from 2011 to 2020 was primarily the result of change in the gain/loss on sale of land and capital assets and change in miscellaneous revenues. Other revenue also included NWMO contributions which ranged from $40,000 to $140,000 from 2018 to 2020.

Further details on revenues sources are provided in **Appendix 3B Supplemental Data**. Information on municipal reporting requirements, including budgeting and financial statements, under the *Ontario Municipal Act* (2001) are included in **Section 3.5.2**.

3.5.3.8.2 Expenditures

Dryden municipal expenses are summarized in **Figure 3.5-6** for 2011 to 2020 (MMAH 2021).

Figure 3.5-6: Dryden Municipal Expenses ($000s), 2011 to 2020



Source: MMAH 2021.

Dryden municipal expenses were largely consistent from 2013 to 2017, increased in 2018, and then decreased in 2019 and 2020. This resulted in an increase from 2013 of $28.2 million to 2018 of $32.6 million, or 15.6%, and a decrease from 2018 to 2020 of $26.7 million, or -18.1%. In 2020, the largest expenses for Dryden include protection services (24.3% of total expenses), followed by transportation expenses (21.3%) and environmental services (20.3%). Among the Local Study Area communities Dryden, proportionally, has the highest protection services expenditures. Observations in **Figure 3.5-6** include:

- The increase in 2018 expenses is primarily the result of an increase in transportation expenses (i.e., paved road expenses).
- The additional expenses in 2011 and 2012, when compared to 2013 to 2020, were associated with the Dryden Municipal Telephone Service, including $9.6 million in 2011 and $17.6

million in 2012. Bell Canada purchased the Dryden Municipal Telephone Service in 2012 and Bell continues to use the brand name for landline and internet service (DMTS 2023).

- General government, protection services, environmental services, health services, social and family services, social housing, and recreation and cultural services generally had consistent expenditures from 2011 to 2020. Health services, social and family services, and social housing saw a reduction from 2019 ($4.4 million) to 2020 ($2.5 million) associated with the transfer of childcare services to the Kenora District Services Board. It is noted that the decrease in protection services from 2014 ($6.7 million) to 2015 ($5.6 million) was the result of cost savings associated with contracting out police dispatching services (NWO Baseline Studies Key Person Interview Program 2022-2023). Protection services as of 2020 ($6.5 million) are similar to 2014.

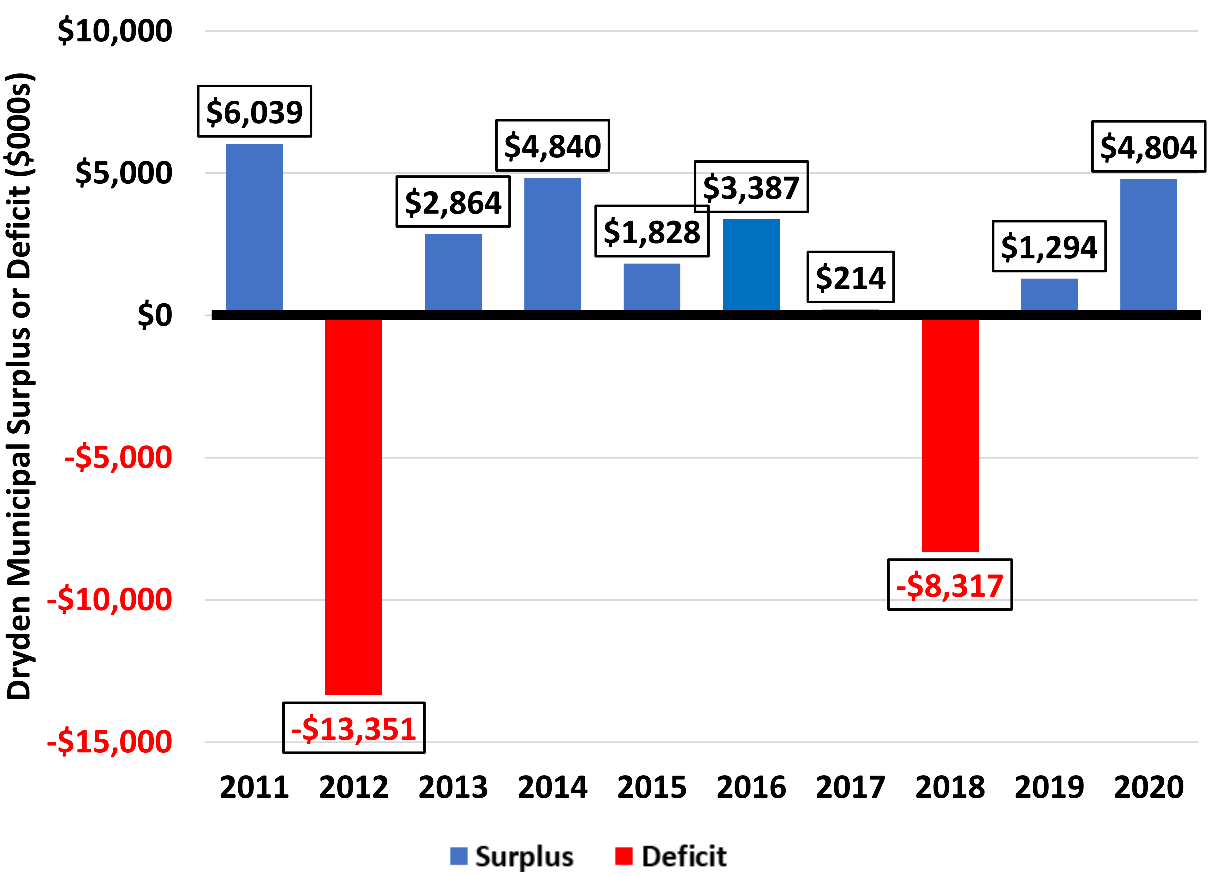
Ignace Area Working Group members provided that residents of unincorporated communities may use Dryden's municipal services, such as parks, public buildings, and the landfill, but do not pay municipal taxes to support the services, which may put an additional burden on the municipal services provided by Dryden (IAWG October 06, 2021). The Northern Policy Institute estimates that the unincorporated population surrounding Dryden, as of 2016, is approximately 3,600 (Noga 2021).

Further details on municipal expenditures are provided in **Appendix 3B Supplemental Data**.

3.5.3.8.3 Surplus or Deficits

Dryden's annual surplus or deficits are summarized in **Figure 3.5-7** for 2011 to 2020 (MMAH 2021). Understanding the surplus or deficit for a municipality is an indicator of its financial health and helps provide context on whether a municipality's revenues cover its expenditures.

Figure 3.5-7: Dryden Municipal Surplus or Deficit ($000s), 2011 to 2020



Source: MMAH 2021.

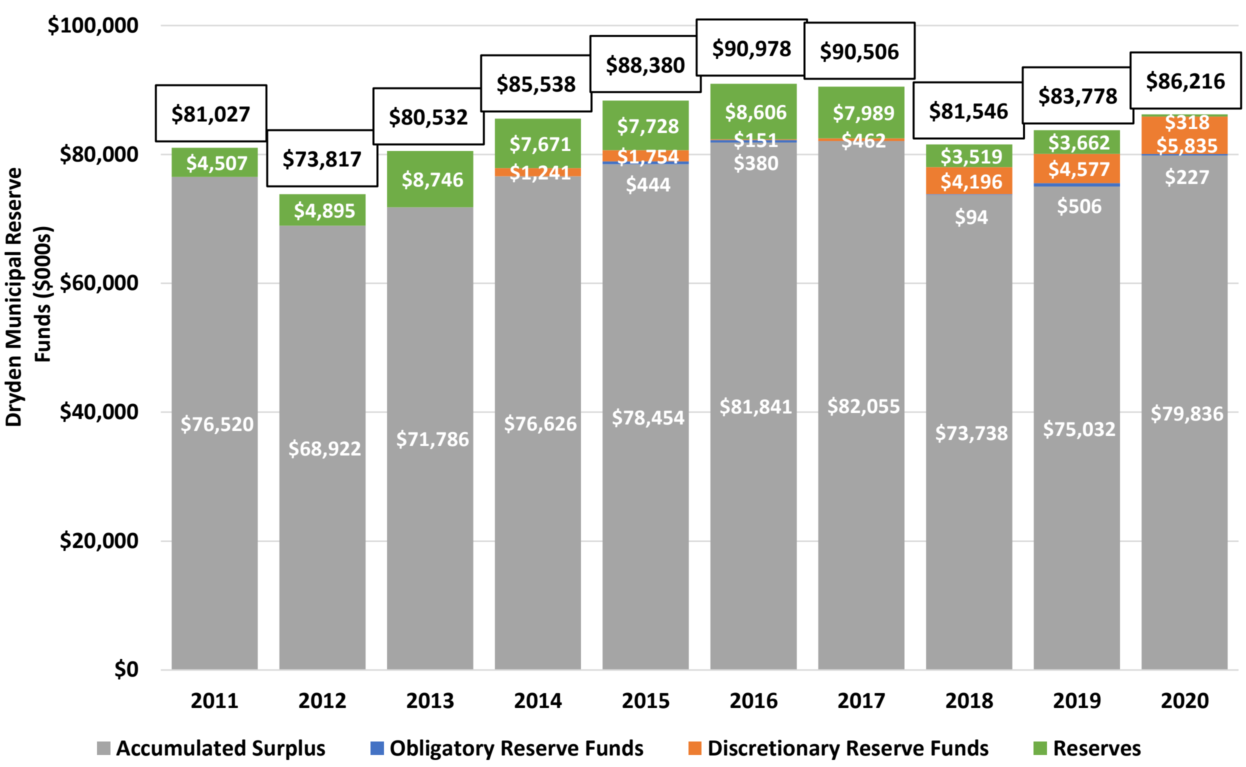
Dryden had a surplus in 2011 ($6.0 million), 2013 ($2.9 million), 2014 ($4.8 million), 2015 ($1.8 million), 2016 ($3.4 million), 2017 ($0.2 million), 2019 ($1.3 million), and 2020 ($4.8 million). In 2012 Dryden had a deficit of $13.4 million and in 2018 Dryden had a deficit of $8.3 million. The deficit in 2018 is primarily the result of an increase in transportation expenses (an increase of over $2.1 million compared to other years) and Public Sector Accounting Board adjustments of -$4.6 million.

When considering the financial health and intergenerational equity of a municipality, Dryden's surplus or deficit has varied from 2011 to 2020 but in aggregate the surpluses have exceeded the deficits.

3.5.3.8.4 Reserve Funds and Accumulated Surplus

Dryden municipal reserve funds and accumulated surplus are summarized in **Figure 3.5-8** for 2011 to 2020 (MMAH 2021). Understanding a municipality's reserve funds and accumulated surplus helps provide context on the funding available for expected future expenses and financial sustainability.

Figure 3.5-8: Dryden Municipal Reserve Funds and Accumulated Surplus ($000s), 2011 to 2020



Source: MMAH 2021.

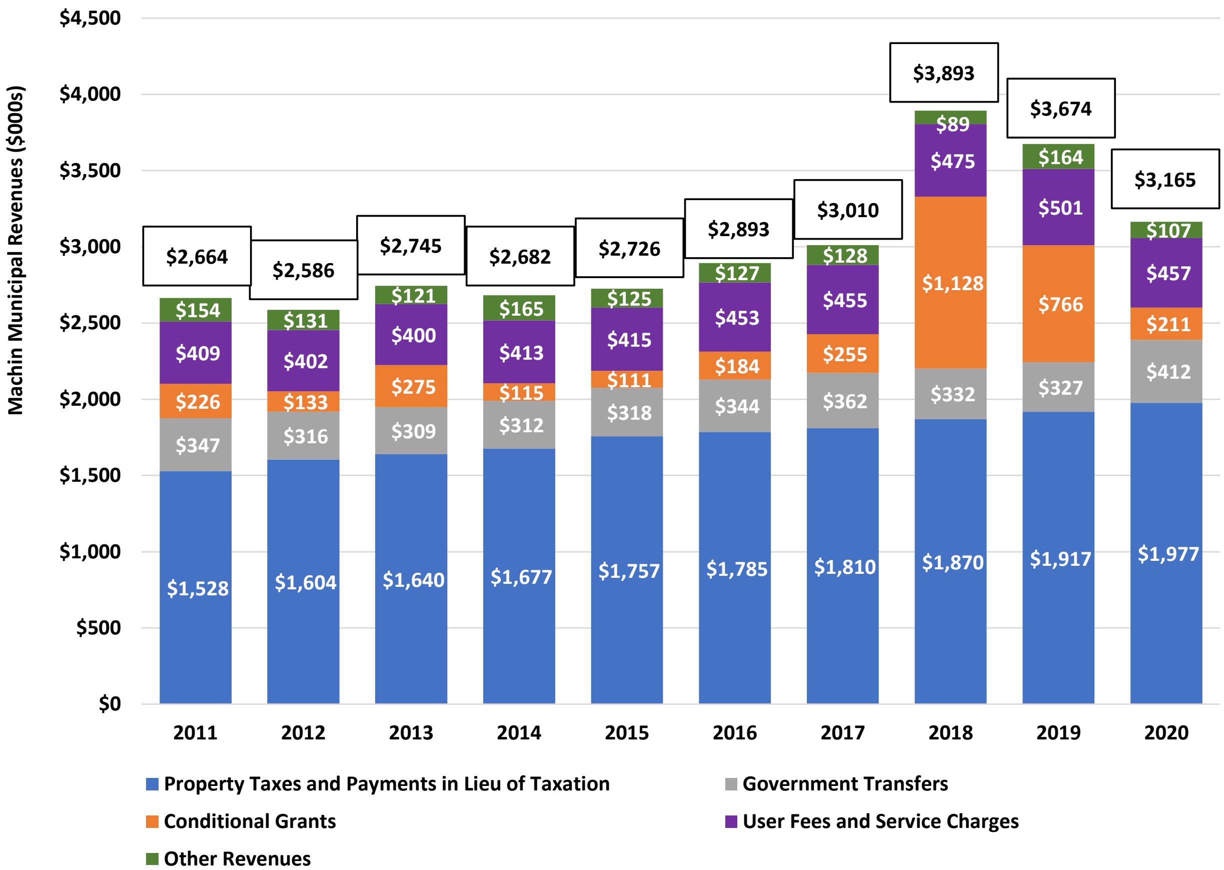
Dryden reserve funds and accumulated surplus have ranged from a low of $73.8 million in 2012 to a high of $91.0 million in 2016. The change in reserves and accumulated surplus is a result of changes to the discretionary reserve fund, the reserve funds, and accumulated surplus. The accumulated surplus has been used as a funding source to address deficits (for example, the accumulated surplus decreased in 2012 and 2018). Accumulated surplus consistently increased from 2012 to 2017 and from 2018 to 2020 (MMAH 2021). Regarding the financial health and sustainability of Dryden's collective reserve funds and accumulated surplus, since 2013 Dryden has consistently had reserve funds and an accumulated surplus in excess of $80 million to appropriately plan for and support expected future expenses. Further details on Dryden's financial information returns, including reserves and accumulated surplus, are also provided in **Appendix 3B Supplemental Data**.

3.5.3.9 Machin Municipal Finances

3.5.3.9.1 Revenues

Machin municipal revenues are summarized in **Figure 3.5-9** for 2011 to 2020 (MMAH 2021).

Figure 3.5-9: Machin Municipal Revenues ($000s), 2011 to 2020



Source: MMAH 2021.

Notes

1. Other revenues include revenue from other municipalities, revenue from licenses, permits, and rent, revenue from fines and penalties, and other revenues (investment income, donations, miscellaneous, sale of water, and/or gain/loss on sale of land and capital assets).
2. Revenue from government transfers include the OMPF from 2011 to 2019 and the Ontario Cannabis Legalization Implementation Fund in 2019.
3. Conditional grants included Ontario conditional grants, Ontario Grants for Tangible Capital Assets and Canada Grants for Tangible Capital Assets, deferred revenue earned (Provincial Gas Tax) and/or deferred revenue earned (Canada Gas Tax). Provincial Gas Tax fund included transit operating expenses and the Canada Gas Tax fund included environmental services (water treatment).
4. Revenue from licence, permits, and rent included licences, permits, and rents, concessions, and franchises.
5. Revenue from fines and penalties include penalties and interest on taxes.

Machin municipal revenues varied from $2.6 million in 2012 to $3.9 million in 2018 (MMAH 2021). In 2020, the largest revenue source for Machin was property taxes and payments in lieu of taxation (62.5% of total revenues), followed by user fees and service charges (14.4%), government transfers (13.0%), conditional grants (6.7%), and other revenues (3.4%). Observations in **Figure 3.5-9** include:

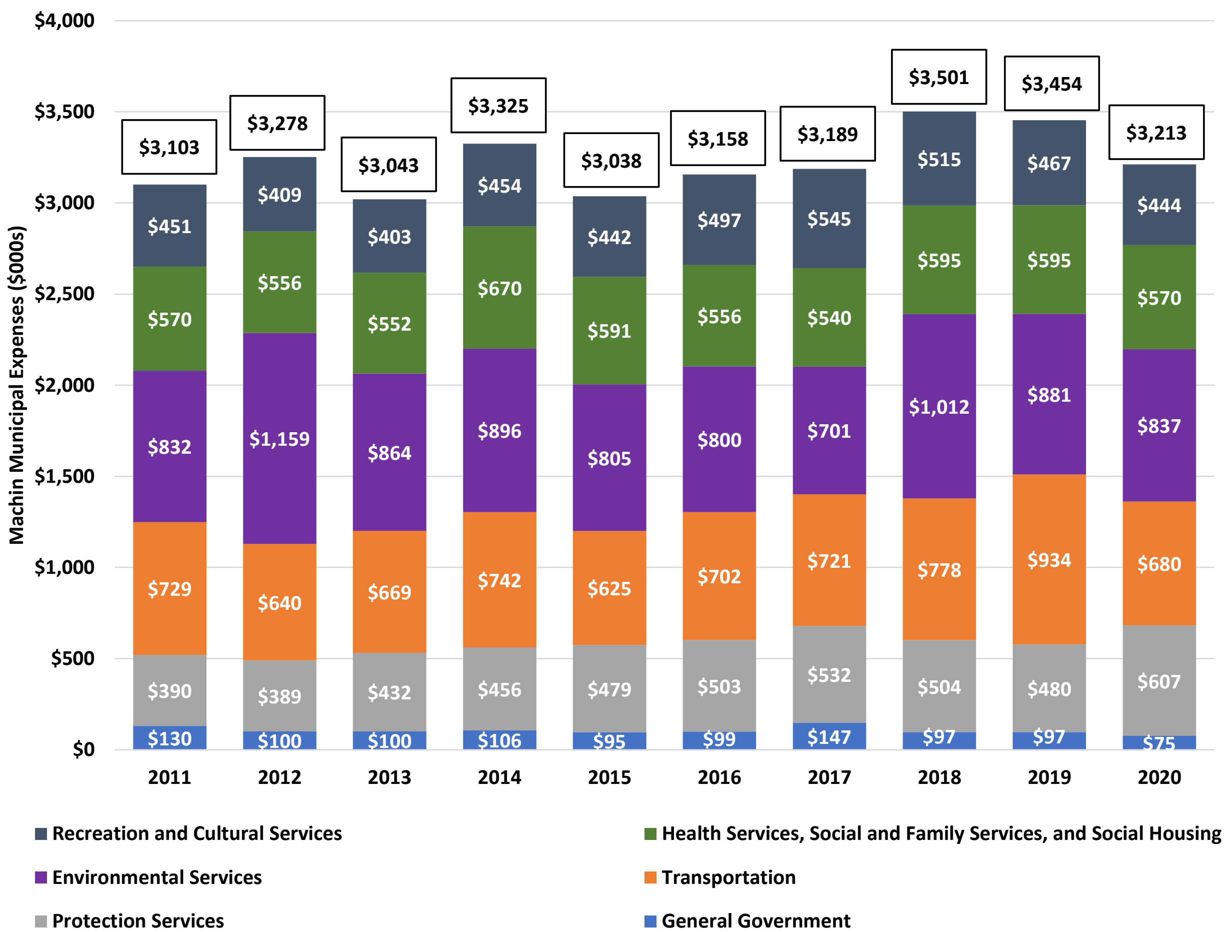
- Revenues were generally consistent from 2011 to 2017 and saw an increase in 2018 and 2019. The increase in 2018 and 2019 is primarily the result of an increase to conditional grants. Property taxes and payments in lieu of taxation, government transfers (i.e., Ontario Municipal Partnership Fund), user fees and service charges, and other revenues were similar for 2011 to 2020.
- The increase to conditional grants in 2018 is primarily due to an Ontario grant for tangible capital assets of $934,000 for paved roads, which included the completion of Townline Road (NWO Baseline Studies Key Person Interview Program 2022-2023). The increase to conditional grants in 2019 was primarily due to an Ontario conditional grant of $362,000 for general government and an Ontario grant for tangible capital assets of $312,000 for paved roads, including disaster funding to replace roads and culverts from the 2019 flood (NWO Baseline Studies Key Person Interview Program 2022-2023). Canada Gas Tax funding from 2011 to 2020 was used for water treatment and varied from $54,000 in 2015 to $60,000 in 2011, 2012, 2013, and 2018. Provincial Gas Tax funding from 2011 to 2019 was minimal and ranged between $7,000 to $9,000. There was no Provincial Gas Tax funding in 2020.

Further details on revenue sources are provided in **Appendix 3B Supplemental Data**. Information on municipal reporting requirements, including budgeting and financial statements, under the *Ontario Municipal Act* (2001) are included in **Section 3.5.2**.

3.5.3.9.2 Expenditures

Machin municipal expenses are summarized in **Figure 3.5-10** for 2011 to 2020 (MMAH 2021).

Figure 3.5-10: Machin Municipal Expenses ($000s), 2011 to 2020[1]



Source: MMAH 2021.

Notes:
1. The Municipality of Machin planning and development expenses were minimal from 2011 to 2020 and are not provided in the figure.

Machin municipal expenses were generally consistent from 2011 to 2017 and in 2020 and saw an increase in 2018 and 2019. Overall, expenses increased from 2011 to 2018 from approximately $3.1 million in 2011 to $3.5 million in 2018, or 12.9% (MMAH 2021). In 2020, the largest expenses for Machin include environmental services (26.1% of total expenses), followed by transportation expenses (21.2%) and protection services (18.9%). Observations in **Figure 3.5-10** include:

- The increase in 2018 expenses is largely the result of an increase in environmental services, which was primarily the result of ongoing maintenance and expenses for the water treatment plant. Machin completed upgrades to the water treatment plant in 2018, including moving to a computerized operating system (NWO Baseline Studies Key Person Interview Program 2022-2023).

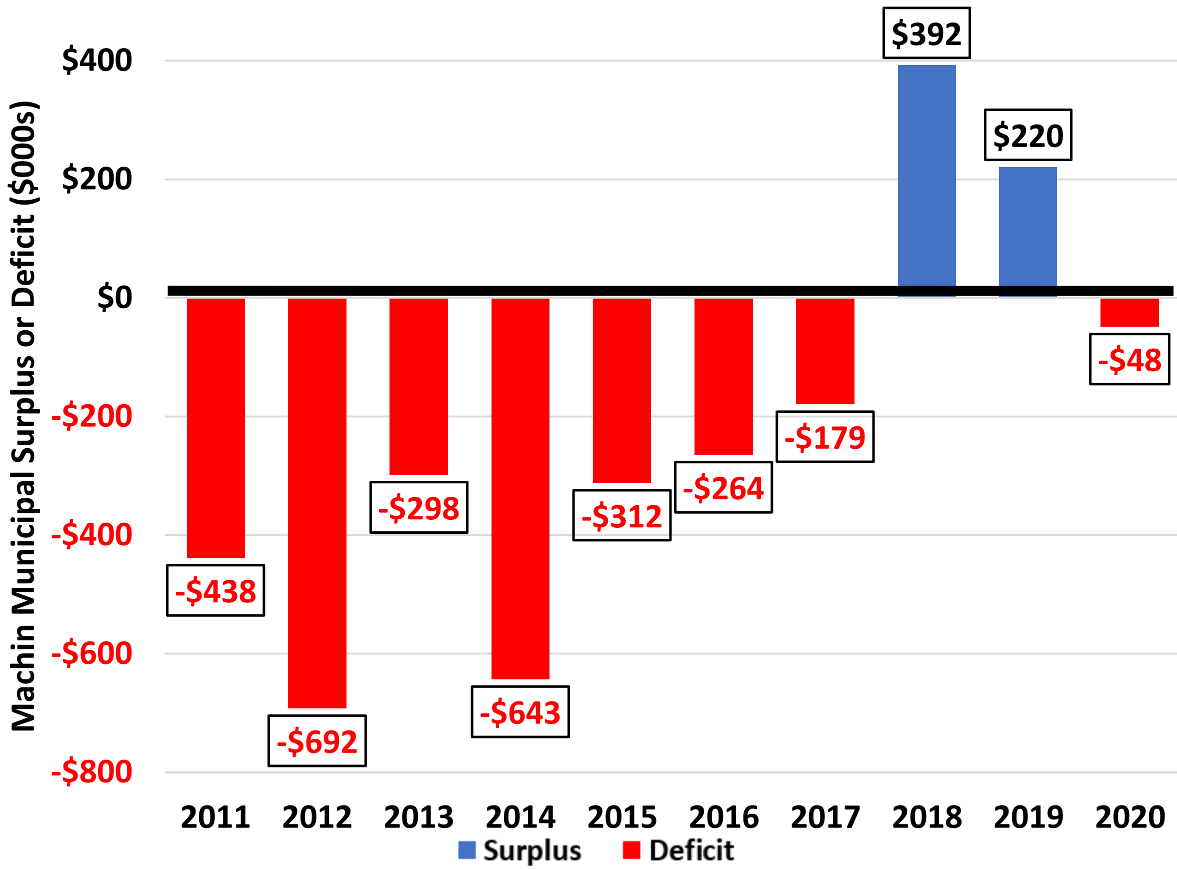
- The increase in 2019 expenses is primarily the result of an increase to transportation expenses (unpaved road expenses).
- General government, protection services, health services, social and family services, and social housing, and recreation and cultural services generally had consistent expenditures from 2011 to 2020.

The Municipality of Machin has stated that they have a very limited budget, including that upgrades and maintenance of infrastructure often rely on grants, of which they have a hard time acquiring (NWO Community and Baseline Studies Key Person Interview Program 2022). For example, the water treatment plant is only operating at 18% and the municipal sewer system is not sustainable or cost efficient, both require maintenance and/or upgrades (NWO Community and Baseline Studies Key Person Interview Program 2022). Further details on municipal expenditures are provided in **Appendix 3B Supplemental Data**.

3.5.3.9.3 Surplus or Deficits

Machin's annual surplus or deficits are summarized in **Figure 3.5-11** for 2011 to 2020 (MMAH 2021). Understanding the surplus or deficit for a municipality is an indicator of its financial health and helps provide context on whether a municipality's revenues cover its expenditures.

Figure 3.5-11: Machin Municipal Surplus or Deficit ($000s), 2011 to 2020



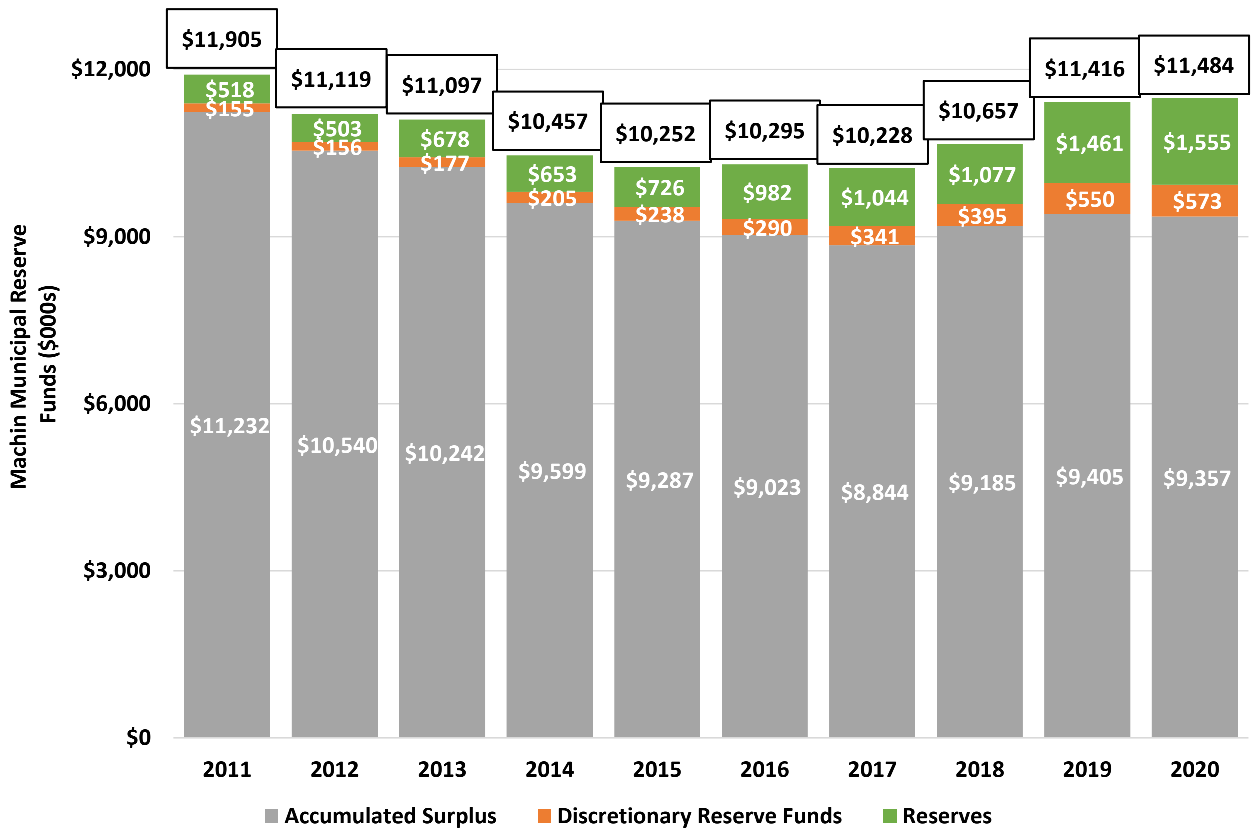
Source: MMAH 2021.

Machin had a surplus in 2018 ($392,000) and 2019 ($220,000) and a deficit in 2011 ($438,000), 2012 ($692,000), 2013 ($298,000), 2014 ($643,000), 2015 ($312,000), 2016 ($264,000), 2017 ($179,000), and 2020 ($48,000). When considering the financial health and intergenerational equity of a municipality, Machin's surplus or deficit has varied from 2011 to 2020 and in aggregate the deficits have exceeded the surplus. Annual deficits have been addressed by drawing down the accumulated surplus (NWO Baseline Studies Key Person Interview Program 2022-2023).

3.5.3.9.4 Reserve Funds and Accumulated Surplus

Machin municipal reserve funds and accumulated surplus are summarized in **Figure 3.5-12** for 2011 to 2020 (MMAH 2021). Understanding a municipality's reserve funds and accumulated surplus helps provide context on the funding available for expected future expenses and financial sustainability.

Figure 3.5-12: Machin Municipal Reserve Funds and Accumulated Surplus ($000s), 2011 to 2020



Source: MMAH 2021.

Machin reserve funds and accumulated surplus decreased from 2011 to 2017 and increased from 2017 to 2019. The decrease from 2011 to 2017 is a result of a decrease in accumulated surplus to fund deficits associated to those years (MMAH 2021). Similarly, the increase in reserves and accumulated surplus (2017 to 2019) is primarily a result of an increase associated to the annual surplus seen in 2018 and 2019 and transferred to accumulated surplus (MMAH 2021). The change in the reserve funds was primarily a result of changes to reserves, as well as minimal increases to discretionary reserves. Machin did not have obligatory reserve funds from 2011 to 2020. Machin identified that the reserves fund has been set aside for general emergencies (NWO Baseline Studies Key Person Interview Program 2022-2023).

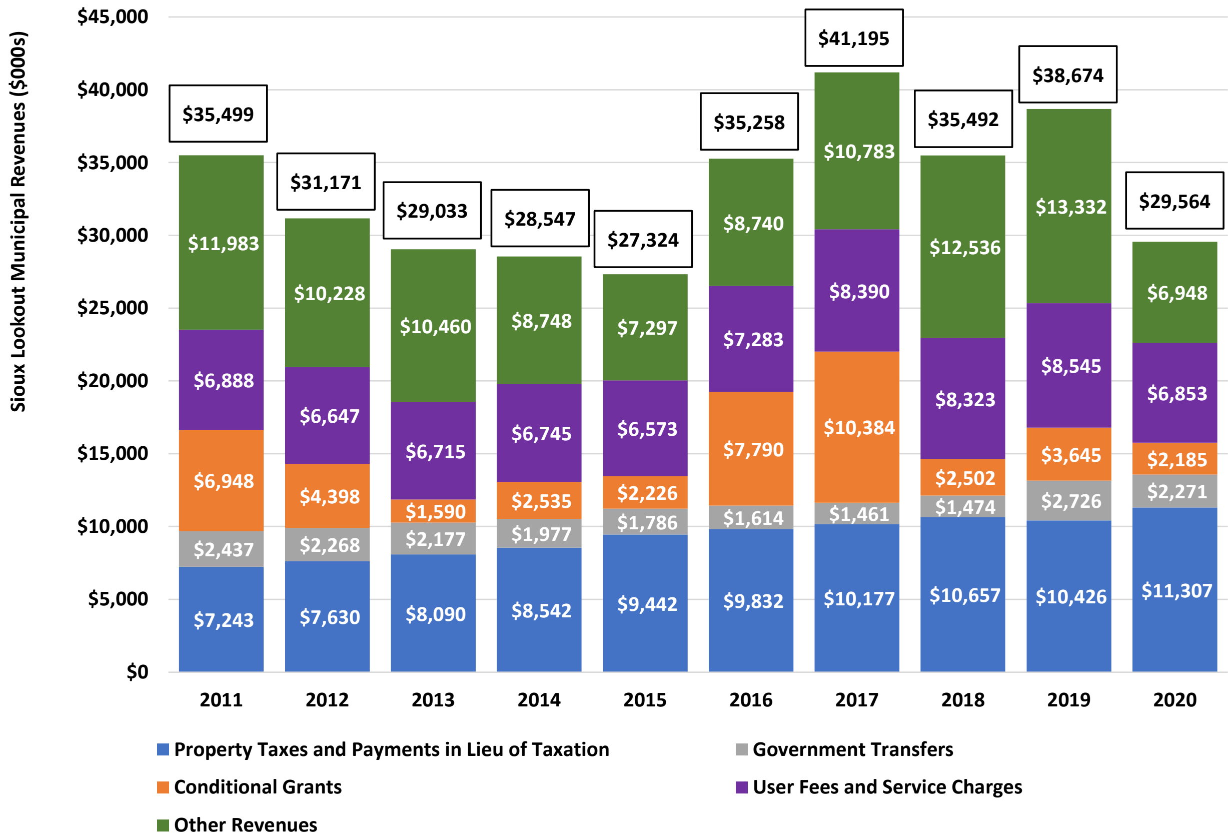
Regarding the financial health and sustainability of Machin’s collective reserve funds and accumulated surplus, Machin consistently decreased its collective reserves and accumulated surplus from 2011 to 2017 to fund its annual deficits. The change in Machin’s reserves and accumulated surplus from 2011 to 2020 is an indication of the Municipality’s financial health and sustainability as the Municipality has the ability, when needed, to fund deficits and, as of 2018 and 2019, is experiencing an annual surplus to help fund its reserves and accumulated surplus to support future expenses. Further details on Machin’s financial information returns, including reserves and accumulated surplus, are also provided in **Appendix 3B Supplemental Data**.

3.5.3.10 Sioux Lookout Municipal Finances

3.5.3.10.1 Revenues

Sioux Lookout municipal revenues are summarized in **Figure 3.5-13** for 2011 to 2020 (MMAH 2021).

Figure 3.5-13: Sioux Lookout Municipal Revenues ($000s), 2011 to 2020



Source: MMAH 2021.

Notes

1. Other revenues include revenue from other municipalities, revenue from licenses, permits, and rent, revenue from fines and penalties, and other revenues (investment income, gain/loss on sale of land and capital assets, donations, sale of publications and equipment, Government business enterprise (i.e., dividends), prior year surplus revenue, and/or interest earned on reserves and reserve funds.
2. Revenue from government transfers include the OMPF from 2011 to 2020, the Ontario Cannabis Legalization Implementation Fund and Evacuation Revenue in 2019, and the Safe Restart Agreement in 2020.
3. Conditional grants included Ontario conditional grants and Canada Grants for Tangible Capital Assets, deferred revenue earned (Canada Gas Tax), Canada conditional grants, Ontario Grants for Tangible Capital Assets. Canada Gas Tax funding included transportation services.
4. Revenue from licence, permits, and rent included licences, permits and rents, concessions, and franchises.
5. Revenue from fines and penalties included other fines and penalties and interest on taxes.

Sioux Lookout municipal revenues varied from a low of $27.3 million in 2015 to a high of $41.2 million in 2017. The change in revenue across years is primarily a result of change in conditional grants, user fees and service charges, and other revenues. Property taxes and payments in lieu of taxation has increased slightly over this time frame and government transfers (i.e., Ontario

Municipal Partnership Fund) have been consistent over this time frame. In 2020, the largest revenue source for Sioux Lookout was property taxes and payments in lieu of taxation (38.2% of total revenues), followed by other revenues (23.5%), user fees and service charges (23.2%), government transfers (7.7%), and conditional grants (7.4%). Observations in **Figure 3.4-13** include:

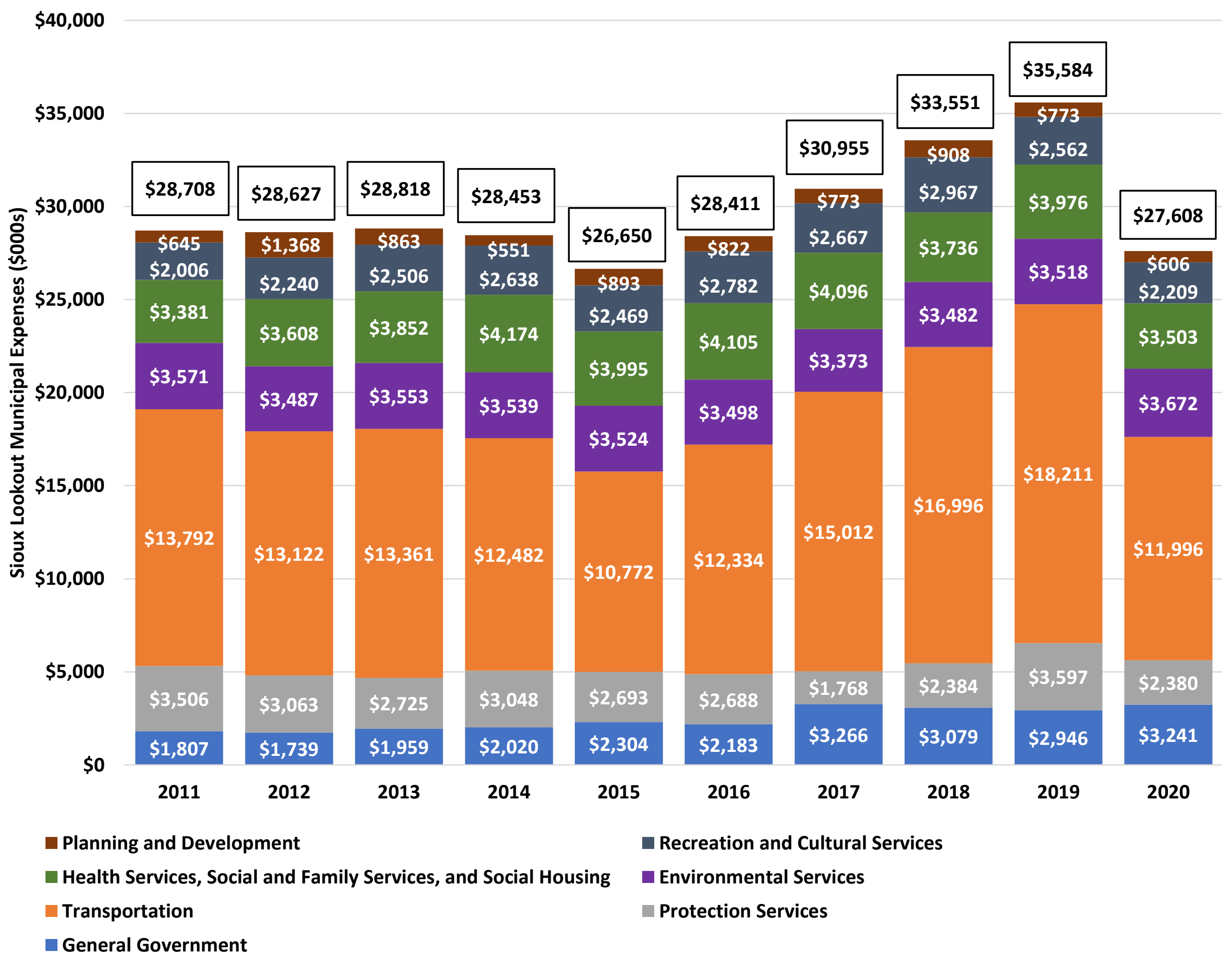
- Conditional grants in 2011 ($6.9 million), 2016 ($7.8 million), and 2017 ($10.4 million) were larger than other years reported and were primarily from Ontario and Canada grants for tangible capital assets and Ontario conditional grants. Conditional grants were for cultural services, planning and zoning, social and family services, childcare, and air transportation. Canada Gas Tax funding for 2011, 2012, and 2016 to 2020 was used for transportation services and ranged from $0.3 million in 2020 to $0.9 million in 2019. There was no Canada Gas Tax funding in 2013, 2014, and 2015 and no Provincial Gas Tax funding from 2011 to 2020.
- Revenues from user fees and service charges were consistent from 2011 to 2015, then increased from 2016 ($7.3 million) to 2019 ($8.5 million) and decreased in 2020 ($6.9 million). Revenue from user fees and service charges is primarily from environmental services (water and wastewater rate revenue) and air transportation revenues.
    - Environmental services revenue was generally consistent from 2016 to 2020.
    - In 2016, air transportation revenues were $2.9 million and increased to $3.9 million in 2019 (or 34.5%). In 2020, air transportation revenues were $2.3 million, this represents a decrease of 41.6% from 2019 to 2020. The decrease to air transportation revenues was largely a result of the COVID-19 pandemic (NWO Community and Baseline Studies Key Person Interview Program 2022). On top of providing service to Sioux Lookout residents, the Sioux Lookout airport provides air services and health care for First Nations north of Sioux Lookout (many of which went into lockdown during the COVID-19 pandemic), and as a result, the airport is typically very active (NWO Community and Baseline Studies Key Person Interview Program 2022). The COVID-19 pandemic resulted in lost revenues for the airport, including for air services, user fees for memberships (the facility was shut down temporarily), long term parking fees, short term parking fees, and other revenues (NWO Community and Baseline Studies Key Person Interview Program 2022).
- Changes in other revenues from 2011 to 2020 were from the change in sales of publications or equipment for air transportation (NWO Community and Baseline Studies Key Person Interview Program 2022).

Further details on revenues sources are provided in **Appendix 3B Supplemental Data**. Information on municipal reporting requirements, including budgeting and financial statements, under the *Ontario Municipal Act* (2001) are included in **Section 3.5.2**.

3.5.3.10.2 Expenditures

Sioux Lookout municipal expenses are summarized in **Figure 3.5-14** for 2011 to 2020 (MMAH 2021).

Figure 3.5-14: Sioux Lookout Municipal Expenses ($000s), 2011 to 2020



Source: MMAH 2021.

Sioux Lookout municipal expenses were largely consistent from 2011 to 2016, increased from 2016 to 2019, and then decreased from 2019 to 2020. This resulted in an increase from 2016 ($28.4 million) to 2019 ($35.6 million) of 25.4% and a decrease from 2019 ($35.6 million) to 2020 ($27.6 million) of -22.5% (MMAH 2021). In 2020, the largest expenses for Sioux Lookout include transportation expenses (43.5% of total expenses), followed by environmental services (13.3%) and health services, social and family services, and social housing (12.7%).

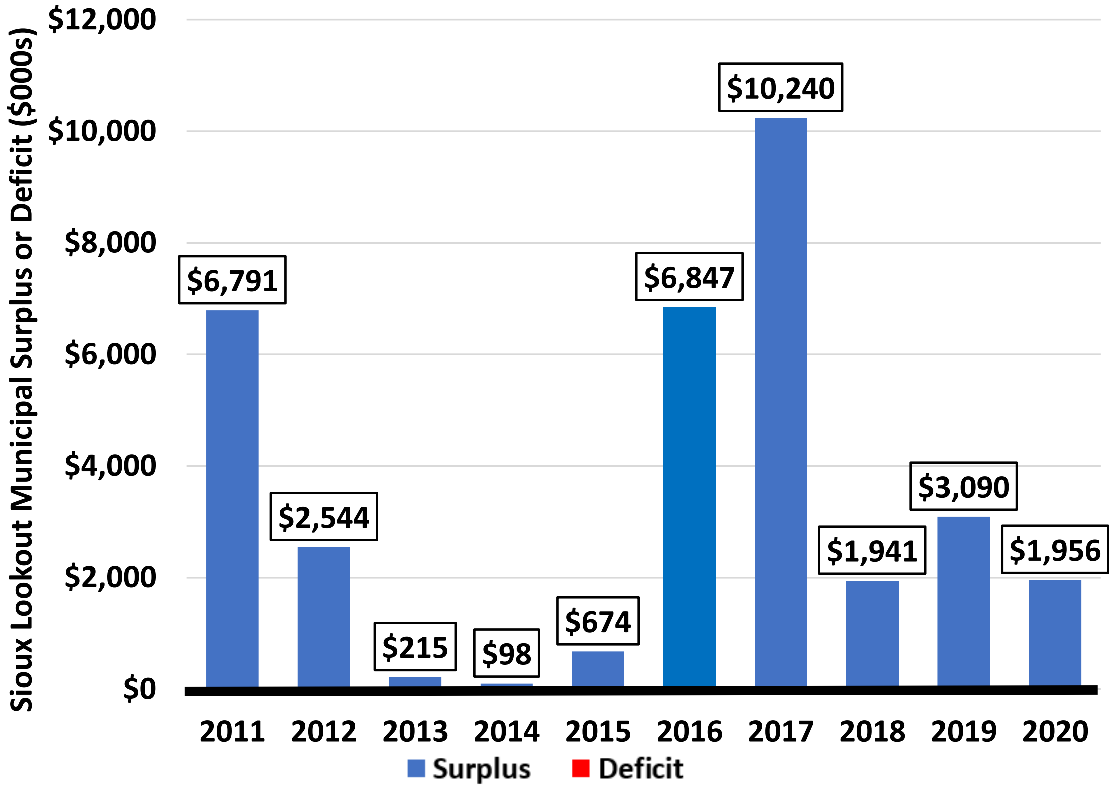
The change in expenses from 2016 to 2020 is primarily a result of changes in transportation expenses, which were $12.3 million in 2016, increased to $18.2 million in 2019, and then decreased to $12.0 million in 2020. The change in transportation expenses from 2016 to 2020 were primarily due to change in air transportation expenses for airport renovations and expansion (NWO Community and Baseline Studies Key Person Interview Program 2022). Airport renovations and expansion were completed in 2018, and portions of ongoing associated debt are decreasing and being paid off (NWO Community and Baseline Studies Key Person Interview Program 2022).

Further details on municipal expenditures are provided in **Appendix 3B Supplemental Data**.

3.5.3.10.3 Surplus or Deficits

Sioux Lookout's annual surplus is provided in **Figure 3.5-15** for 2011 to 2020 (MMAH 2021). Understanding the surplus or deficit for a municipality is an indicator of its financial health and helps provide context on whether a municipality's revenues cover its expenditures.

Figure 3.5-15: Sioux Lookout Municipal Surplus ($000s), 2016 to 2020



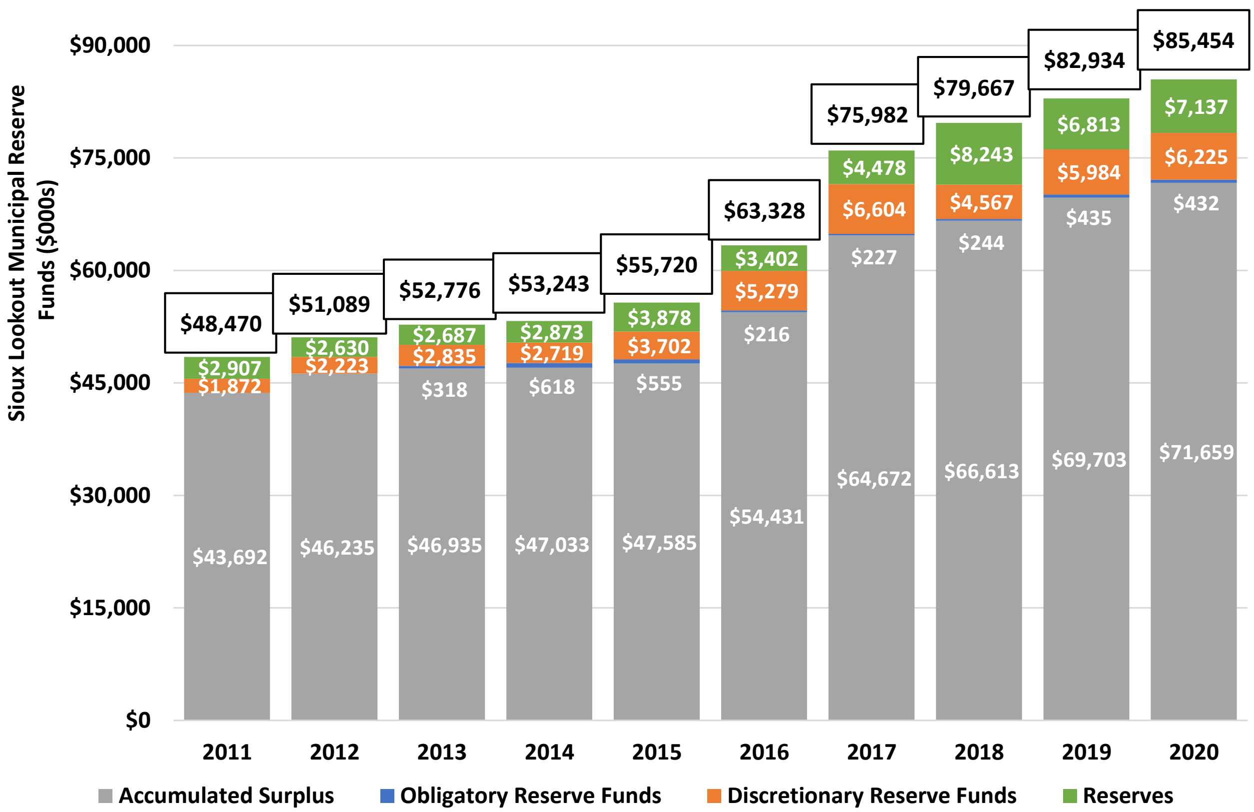
Source: MMAH 2021.

Sioux Lookout had a surplus each year from 2011 to 2020. The surplus ranged from a high of $10.2 million in 2017 to a low of $0.1 million in 2014. When considering the financial health and intergenerational equity of a municipality, Sioux Lookout has consistently had a surplus from 2011 to 2020.

3.5.3.10.4 Reserve Funds and Accumulated Surplus

Sioux Lookout municipal reserve funds and accumulated surplus are summarized in **Figure 3.5-16** for 2011 to 2020 (MMAH 2021). Understanding a municipality's reserve funds and accumulated surplus helps provide context on the funding available for expected future expenses and financial sustainability.

Figure 3.5-16: Sioux Lookout Municipal Reserve Funds and Accumulated Surplus ($000s), 2011 to 2020



Source: MMAH 2021.

Sioux Lookout reserve funds and accumulated surplus have increased each year from 2011 to 2020. The increase was a result of changes to its discretionary reserve funds, reserves, and the accumulated surplus. Sioux Lookout has a minimal balance to its obligatory reserve fund in comparison to discretionary reserve funds, reserves, and accumulated surplus.

- The accumulated surplus has consistently increased each year from 2011 to 2020, with a notable increase from 2015 through 2017, which aligns with the larger annual surplus seen in 2016 and 2017 (see **Figure 3.5-16**) (MMAH 2021).
- Sioux Lookout has earmarked discretionary reserve funds for airport improvements, land development, and other infrastructure.
- Sioux Lookout has earmarked reserves funds for landfill expenses, policing costs, utilities, and elections (NWO Community and Baseline Studies Key Person Interview Program 2022).

When Sioux Lookout incurs an annual surplus, council meets to discuss where best to place the surplus, which typically gets set aside for infrastructure or the airport in the event major renovations, maintenance, or upgrades are needed (NWO Community and Baseline Studies Key Person Interview Program 2022). The consistent increase in Sioux Lookout's reserves and accumulated surplus is an indication of its financial health and sustainability and may allow for the Municipality to better plan for and support expected future expenses. Further details on Sioux Lookout's financial information returns, including reserves and accumulated surplus, are provided in **Appendix 3B Supplemental Data**.

3.5.3.11 Local Services Board of Wabigoon Local Government Finances

The budgets and bookkeeping records for the LSB of Wabigoon are not publicly available. During key person interviews respondents noted (NWO Baseline Studies Key Person Interview Program 2022-2023):

- Funding is sourced from a LSB levy, the provincial land tax (collected on behalf of the LSB by the Ministry of Finance), and other sources of revenue. Other sources of revenue may include fundraising, charity contributions, and donations. The LSB of Wabigoon typically has a budget in the range of $145,000 to $150,000 per year. In recent years, the LSB has had success working with various partners, including the Federal government, Provincial government, Wabigoon Lake First Nation, and the NWMO, and has collected over $1 million for community services and upgrades.
- Expenses relate to the approved services provided by the LSB. The LSB of Wabigoon is approved to provide fire protection, street and area lighting, recreation, and emergency telecommunications. Fire protection services are shared with Dinorwic. The LSB is responsible for maintaining the fire hall, the memorial hall, and for clearing snow in parking lots and around fire hydrants. A portion of the funding collected from various partners, including the Federal government, Provincial government, Wabigoon Lake First Nation, and the NWMO, went towards building a pavilion for skating in the winter. Homeowners are responsible for water and wastewater service, and garbage and recycling drop off (generally in Dryden), among other services.
- Reserve funds are not typical of LSBs, however the LSB of Wabigoon is allowed to have one. In the past, the reserve fund has been used for larger projects, for example, the paving of the memorial hall parking. Currently, the reserve fund is a small fund for emergencies only and ranges between $20,000 and $50,000.

Information on LSB reporting requirements, including budgeting and bookkeeping, under the *Northern Services Boards Act* (1990) are included in **Section 3.5.2**.

3.5.3.12 Local Services Board of Melgund Local Government Finances

The budgets and bookkeeping records for the LSB of Melgund are not publicly available. Key person interview respondents note (NWO Baseline Studies Key Person Interview Program 2022-2023):

- Funding is sourced from an LSB levy, the provincial land tax (collected on behalf of the LSB by the Ministry of Finance), and other sources of revenue. Other sources of revenue may include fundraising and donations. In the past five years, the LSB has received donations from the NWMO.
- Expenses relate to the approved services provided by the LSB. The LSB of Melgund is approved to provide recreation and garbage collection services. Recycling is not provided by the LSB, and homeowners are responsible for recycling drop off (typically in Dryden). Homeowners are also responsible for water and wastewater service. The LSB has no fire hall

and no streetlights to maintain. Donations received from the NWMO in the previous five years have been used to upgrade the community hall.

- Reserve funds are not typical of LSBs, however the LSB of Melgund is allowed to have one. Currently, the balance of the reserve fund is minimal.

Information on LSB reporting requirements, including budgeting and bookkeeping, under the *Northern Services Boards Act* (1990) are included in **Section 3.5.2**.

3.5.3.13 Dinorwic Local Government Finances

Dinorwic does not have a budget or bookkeeping record (NWO Baseline Studies Key Person Interview Program 2022-2023). Key person interviews identified (NWO Baseline Studies Key Person Interview Program 2022-2023):

- Funding received by Dinorwic is collected through the provincial land tax (collected on behalf of Dinorwic by the Ministry of Finance) to help fund important community services.
- Expenses are minimal in unincorporated communities and the majority of services are the responsibility of the homeowner (including garbage and recycle, water service, and wastewater service). Key person interviews identified that fire protection is shared with the LSB of Wabigoon and the Ministry of Transportation of Ontario is responsible for provincial roads, including winter snow clearing. Homeowners may hire independent contractors to collect garbage and recycle.
- Dinorwic does not have a reserve fund (NWO Baseline Studies Key Person Interview Program 2022-2023).

3.5.4 Summary of Local Government Finances

Key observations based on the review of local government finances in the Local Study Area, including for Ignace, Dryden, Machin, Sioux Lookout, the LSB of Wabigoon, the LSB of Melgund, and Dinorwic include:

- The largest source of revenue for Ignace, Dryden, Machin, and Sioux Lookout is property taxes. In 2019 property taxes were 40.2% of Ignace's revenues and in 2020 were 46.0% of Dryden's revenues, 62.5% of Machin's revenues, and 38.2% of Sioux Lookout's revenues. The second largest source of revenue was typically user fees and service charges, which were 16.8% of Ignace's revenues, 20.7% of Dryden's revenues, 14.4% of Machin's revenues, and 23.2% of Sioux Lookout's revenues.
- The largest expenditures for Ignace, Dryden, Machin, and Sioux Lookout varied, however environmental service expenses and transportation expenses were generally the largest expenses. The largest source of expenditures for Ignace in 2019 and Machin in 2020 were environmental service expenses (29.8% and 26.1% of expenses respectively) followed by transportation expenses (18.0% and 21.2% of expenses respectively). Whereas the largest expenses for Dryden in 2020 were protection services (24.3% of expenses) followed by transportation expenses (21.3%). Environmental service expenses were also a large expense for Dryden (20.3% of total expenditures). The largest expenses for Sioux Lookout in 2020 were transportation expenses (43.5%) followed by environmental service expenses (13.3%). In particular, airport expenses made up the majority (approximately 80%) of transportation expenses for Sioux Lookout.
- The surplus or deficit for a local government is an indicator of its financial health and helps provide context on whether its revenues cover its expenditures. Intergenerational equity is an important part of real financial sustainability and includes the need for appropriate fiscal planning so that the generation of people who benefit from the local government and its assets are also the ones paying for it (Association of Municipalities of Ontario 2018; Johal et al 2019). A key principle of financial sustainability is the need to share local government cost burdens equitably between generations (Association of Municipalities of Ontario 2018; Johal et al 2019). An indicator to help understand the financial health of a local government is whether local government revenues are consistently covering planned expenses. In consideration of the financial health and intergenerational equity of a municipality, Sioux Lookout has consistently had a surplus from 2011 to 2020. Ignace (2011 to 2019) and Dryden (2011 to 2020) have had a surplus or deficit that varied over the timeframe, but in aggregate the surpluses have exceeded the deficits. Machin's surplus or deficit has varied from 2011 to 2020 and in aggregate the deficits have exceeded the surplus. Machin's annual deficits have been addressed by drawing down the accumulated surplus from prior years (NWO Baseline Studies Key Person Interview Program 2022-2023).
- Understanding a municipality's reserve funds and accumulated surplus helps provide context on the funding available for expected future expenses, its intergenerational equity, and financial sustainability. If a surplus occurs at the end of a fiscal year, a municipality can transfer the amount to accumulated surplus or to the appropriate reserve funds for future use (Government of Ontario 2001). If a deficit occurs at end of fiscal year, a municipality may use the accumulated surplus as a funding source from prior years or the deficit may be

funded by the appropriate reserves (Government of Ontario 2001). In consideration of the financial health and sustainability of a municipality, Sioux Lookout had a consistent increase to its collective reserves and accumulated surplus from 2011 ($48.5 million) to 2020 ($85.5 million), which coincides with its consistent annual surplus. Ignace and Dryden have both had consistent and stable reserves and accumulated surpluses, which coincide with how the municipality's surpluses, or deficits have varied over the time frame, but in aggregate the surpluses have exceeded the deficits. Since 2011 Ignace's reserve funds and accumulated surplus have been in excess of $25 million and since 2013 Dryden's reserve funds and accumulated surplus have been in excess of $80 million to help plan for and support expected future expenses. Machin consistently decreased its collective reserves and accumulated surplus from 2011 to 2017 to fund its annual deficits. The change in Machin's reserves and accumulated surplus from 2011 to 2020 is an indication of the Municipality's financial health and sustainability as the Municipality has the ability, when needed, to fund deficits and, as of 2018 and 2019, is experiencing an annual surplus to help fund its reserves and accumulated surplus to support future expenses.

- Funding for the LSB of Wabigoon and the LSB of Melgund was sourced from the LSB levy, the property land tax, and other sources of revenue. Expenses for the LSBs largely relate to the services they provide. Approved services for the LSB of Wabigoon include fire protection, street and area lighting, recreation, and emergency telecommunications. Approved services for the LSB of Melgund include recreation and garbage collection services.
- Dinorwic's primary source of funding is the provincial land tax. Expenses for Dinorwic are minimal as the majority of services are the responsibility of the homeowner, however key person interviews identified that fire protection is shared with the LSB of Wabigoon.

3.6 INCOME, PROPERTY VALUES, AND COST OF LIVING

3.6.1 Overview and Approach

Income, property values, and cost of living documents the economic status of individuals and families, by exploring personal, household, and family income, cost of living metrics, spending patterns, housing costs, and residential real estate values.

Personal and household income is derived from employment, government transfers, and other sources and is described on an individual, household, and family basis, by average, median, and by income range as reported by Statistics Canada. Personal income statistics are disaggregated by sex, age, and Indigenous identity, where available and of sufficient robustness.

Cost of living considers the cost to purchase typical consumer goods and services consistent with the quality of life enjoyed in contemporary average Canadian households. The examination of cost of living describes and estimates key components of cost of living in the Local Study Area and reports on the Consumer Price Index in the Regional Study Area. Local estimates for existing costs of food, shelter, and utility costs are reported. The analysis of food costs is based on a basket of goods, mirroring the Consumer Price Index basket as much as practical. Shelter costs include rent (Statistics Canada and based on advertised monthly rent, as available). Utility costs are based on utility tariffs for water and wastewater, electricity, natural gas, internet, and cellular phone, presented on a unit basis and on a monthly basis, as available, assuming average single family consumption levels. The examination of cost of living also includes a qualitative description of spending patterns for individuals and households, to describe the extent of local spending and the types of spending that are most likely to be made outside the Local Study Area. Property values are surveyed through Statistics Canada and local realtors.

The Regional Study Area includes the Northwestern Ontario Economic Region (Kenora, Rainy River, and Thunder Bay District Census Divisions). Comparable statistics for Ontario and Canada are provided as available to provide context and comparisons for Regional Study Area information. The Local Study Area includes the Township of Ignace, City of Dryden, Municipality of Machin, Municipality of Sioux Lookout, and, to the extent information is available, the LSB of Wabigoon (the “LSB of Wabigoon” or “Wabigoon Village”), the LSB of Melgund (the “LSB of Melgund” or “Melgund”) and the unincorporated community of Dinorwic. The LSB of Melgund includes the unincorporated communities of Dyment and Borups Corners. Statistics Canada enumerates Ignace, Dryden, Machin, Sioux Lookout, and the LSB of Wabigoon and Statistics Canada does not enumerate the LSB of Melgund (Dyment or Borups Corners) or Dinorwic. When referring to Statistics Canada, the name of the designated place (i.e., the LSB of Wabigoon) is used. In all other instances the community is referred to as the name community members use (i.e., Wabigoon Village or Melgund).

Income trends are described from 2005 through 2020 where available. Temporal boundaries for cost of living in the Regional Study Area extend from 2006 to 2021 where possible. Base prices for the Consumer Price Index are set to 2002 levels and are also expressed in today’s dollars. The Consumer Price Index basket composition evolves over time and is not adjusted. Food, housing costs, and shelter costs for the Local Study Area use the most recent published information and estimates available, with trends over time described where possible, along with inputs from primary data collection (key person interviews, the IAWG, workshops, and food basket collection). Further information on the spatial boundaries, temporal boundaries, and data collection for income, property values, and cost of living is provided in **Section 3.1**.

3.6.2 Income

Income is an important indicator of the economic health of people and communities. Income provides economic resources that shape choices about housing, education, childcare, food, and many other aspects of life (Population of Health Institute 2023). Income provides options for healthy lifestyle choices and is a social determinant of health, particularly as Canadians with higher incomes are often healthier than those with lower incomes (Public Health Agency of Canada 2022). Higher income and financial stability can allow access to better quality materials, such as food and shelter, and better, easier, or faster access to services (e.g., access to health services or education) (Bushnik et al. 2020).

Personal and household income is derived from employment income, government transfers and other sources of income. Income statistics are reported for the calendar year prior to the Census year (e.g., for the 2021 Census, the reference period is the calendar year 2020 for all income variables). Due to the small population size of Machin and the LSB of Wabigoon, income data may be suppressed to protect confidentiality. Statistics Canada does not report income data for the LSB of Melgund or Dinorwic. Average incomes for the Local Study Area are calculated based on the data available for each year. Income statistics are disaggregated by sex, age, and Indigenous identity where available.

The following income statistics are described:

- **Personal income** for the population aged 15 years and over refers to the total monetary receipts received during the calendar year prior to the Census year and before income taxes and deductions (Statistics Canada 2022a).[17]
- **Household income** refers to the total monetary receipts received at the household level during the calendar year prior to the Census year, and before income taxes and deductions. 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. A household 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. For census purposes, every person is a member of one and only one household (Statistics Canada 2022a).
- **Economic family income** refers to the total monetary receipts received for an economic family during the calendar year prior to the Census year, and before income taxes and

[17] Sources of income for personal income: 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; 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 Registered Retirement Savings Plans and Registered Retirement Income Funds; and other monetary receipts. Not included in all Census years as 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 (Statistics Canada 2022a).

deductions. Economic families include couple-only (no children) economic families, couple-with-children economic families, one-parent economic families, and persons not in an economic family. Persons not in economic family refers to those who live with people none of whom are related by blood, marriage, common-law, or adoption or foster; persons living alone are included in this category. Vulnerable populations in the Local Study Area may include one-parent economic families and person's living alone.

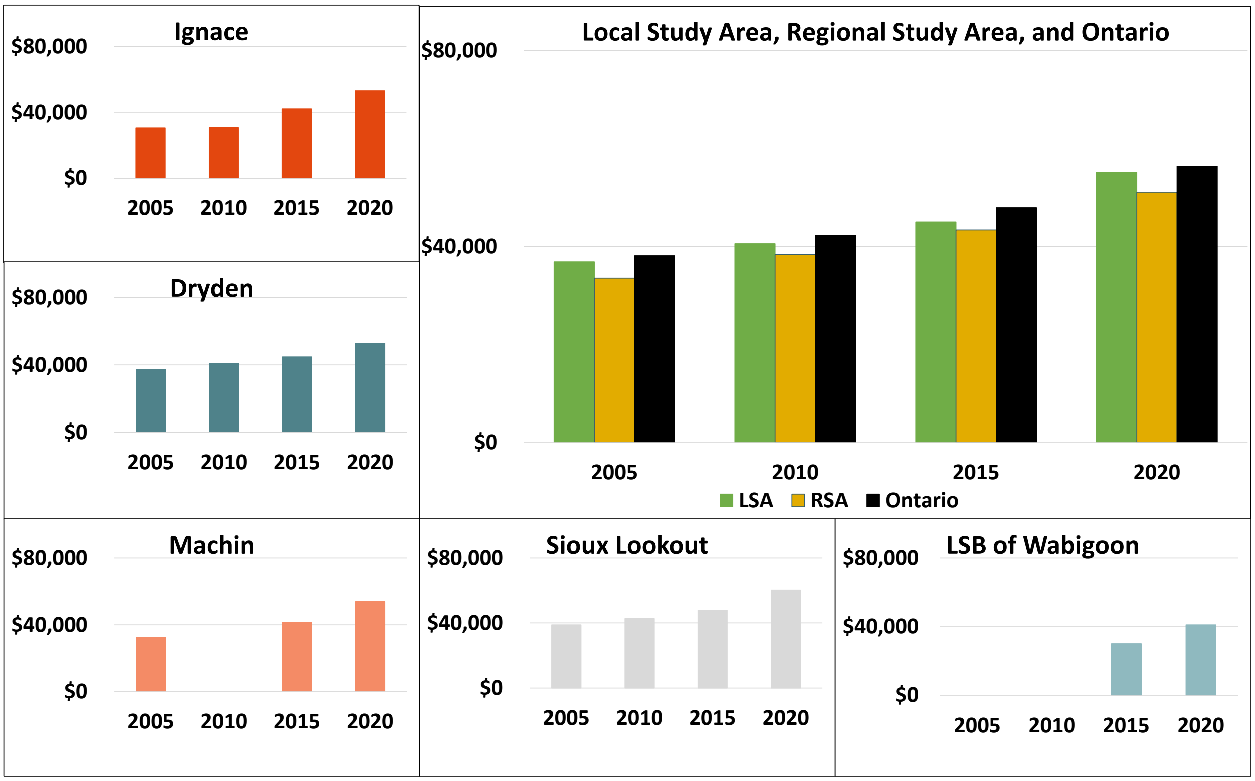
- **Sources of income** refers to employment income, government transfers, and other sources of income (Statistics Canada 2022a):
  - Employment income is all income received as wages, salaries, and commissions from paid employment and net self-employment income from farm or non-farm unincorporated business and/or professional practice during the reference period.
  - Government transfers include all cash benefits received from federal, provincial, territorial, or municipal governments during the Census reference period.[18]
  - Other income includes net self-employment income from farm or non-farm unincorporated business and/or professional practice, investment income, private retirement income, and other income from market sources during the reference period.

[18] Government transfers include: 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

3.6.2.1 Personal Income

Figure 3.6-1 presents the average of personal income for the Local Study Area, Regional Study Area, and Ontario for 2005, 2010, 2015, and 2020.

Figure 3.6-1: Average Personal Income for the Local Study Area, Regional Study Area, and Ontario, 2005 to 2020[1]



Source: Statistics Canada 2007, 2012, 2017, and 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities may be suppressed for confidentiality, including Machin for 2010 and the LSB of Wabigoon for 2005 and 2010.

Figure 3.6-1 shows that as of 2020, the average personal income for the Local Study Area was $55,100, which was 8.0% higher than the Regional Study Area ($51,100) and similar to Ontario as a whole ($56,400) (Statistics Canada 2022a). Average personal income increased from 2005 to 2020 for the Local Study Area, the Regional Study Area, and Ontario (Statistics Canada 2007; 2022a):

- The Local Study Area saw an average increase of 49.3% from 2005 ($36,900) to 2020 ($55,100);
- The Regional Study Area saw an increase of 52.5% from 2005 ($33,500) to 2020 ($51,100); and
- Ontario saw an increase of 48.0% from 2005 ($38,100) to 2020 ($56,400);

Observations among the Local Study Area communities include that the highest average personal income as of 2020 was in Sioux Lookout ($60,200), followed by Machin ($53,900), Ignace ($53,100), Dryden ($52,850), and the LSB of Wabigoon ($41,000). As a regional health centre, Sioux Lookout has a higher proportion of salaried medical workers, who typically have higher incomes (HSAL et al. 2022c). Based on the Northwestern Ontario Community and Baseline Studies Key Person Interview Program (2022), participants provided that skilled labour is often paid a higher salary, with incomes six figures and over being the norm. All Local Study Area communities experienced an increase in average personal income from 2005 to 2020, trends include (Statistics Canada 2007; 2022a):

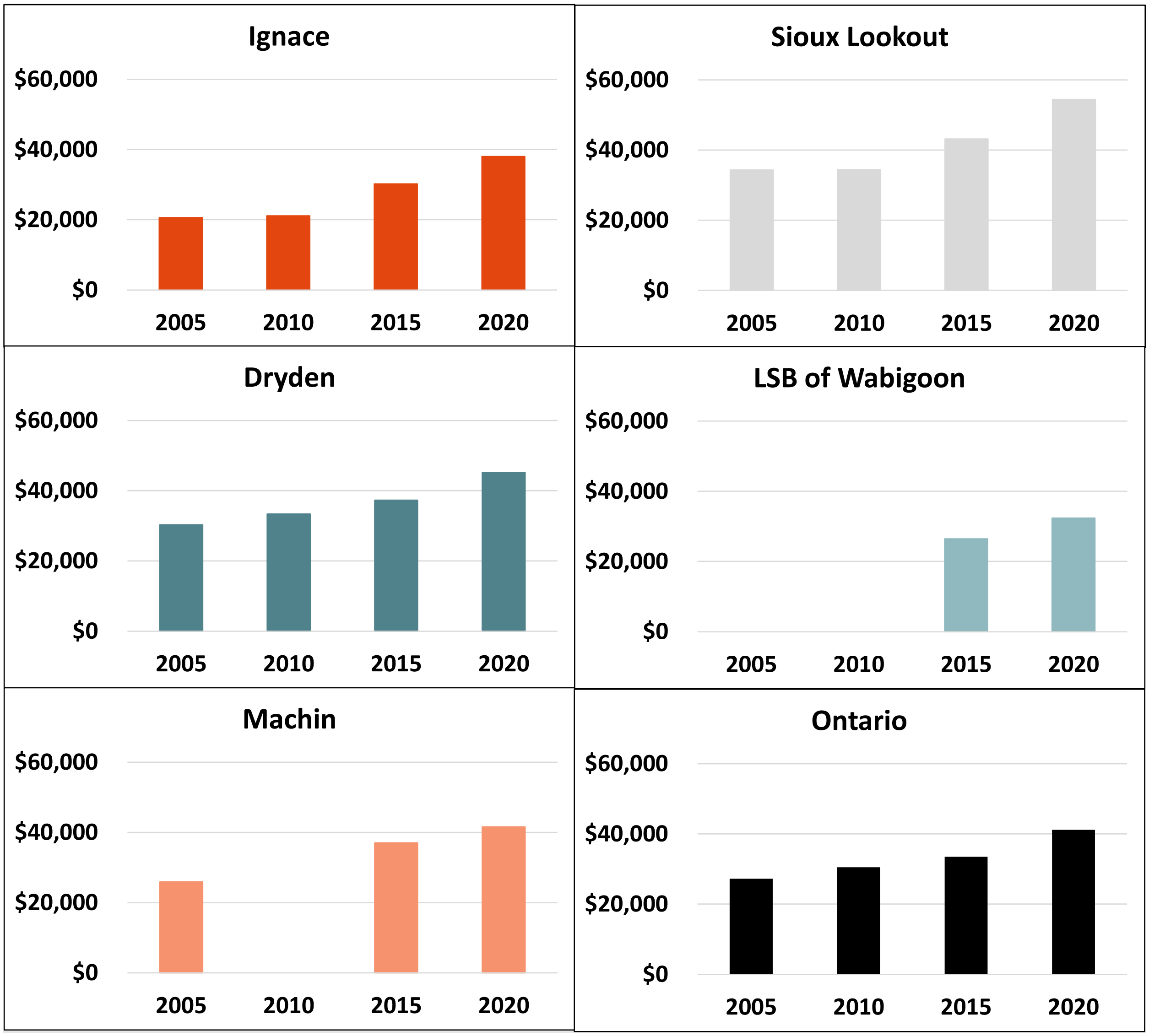
- Ignace experienced the highest proportional increase of 74.1% from 2005 ($30,500) to 2020 ($53,100);
- Dryden experienced the lowest proportional increase of 41.8% from 2005 ($37,300) to 2020 ($52,900).
- The LSB of Wabigoon saw an increase of 36.2% from 2015 ($30,100) to 2020 ($41,000).

Education (**Section 3.3**) and employment (**Section 3.2**) are drivers of income, as a higher education can result in higher skilled jobs and higher paying jobs.

Figure 3.6-2 presents the median of personal income for the Local Study Area communities and Ontario for 2005, 2010, 2015, and 2020.[19] The median personal income is the ‘middle’ income, amongst the group surveyed, meaning that half of the population had a higher income and half had a lower income.

[19] A median cannot be calculated for compiled Statistics Canada geographies, including for the Local Study Area and Regional Study Area.

Figure 3.6-2: Median Personal Income for Local Study Area Communities and Ontario, 2005 to 2020[1,2]



Source: Statistics Canada 2007, 2012, 2017, and 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. The Local Study Area and Regional Study Area median income could not be calculated.
2. Data may be suppressed for confidentiality, including Machin for 2010 and the LSB of Wabigoon for 2005 and 2010.

Figure 3.6-2 shows that the highest median personal income in 2020 was in Sioux Lookout ($54,400), followed by Dryden ($45,200), Machin ($41,600), Ignace ($38,000), and the LSB of Wabigoon ($32,400). All Local Study Area communities experienced an increase in median personal income from 2005 to 2020. Trends include (Statistics Canada 2007; 2022a):

- Ignace experienced the highest proportional increase of 84.5% from 2005 ($20,600) to 2020 ($38,000);
- Dryden experienced the lowest proportional increase of 49.2% from 2005 ($30,300) to 2020 ($45,200); and
- The LSB of Wabigoon saw an increase of 22.7% from 2015 ($26,400) to 2020 ($32,400);

Table 3.6-1 provides the ratio of average to median personal income for Local Study Area communities in 2020. The comparison and ratio of average to median income can provide an indication of the measure of income inequality, as a higher ratio means a higher income disparity (WLI 2022). Income inequality and income disparity helps provide context on GBA+ considerations. For instance, while the median remains the middle, or centre value, an average that appears above (or below) the median suggests that the income distribution is influenced by the presence of a greater number of higher (or lower) values that draw the average away from the median.

Table 3.6-1: Ratio of Average to Median Personal Income for the Local Study Area Communities and Ontario, 2020

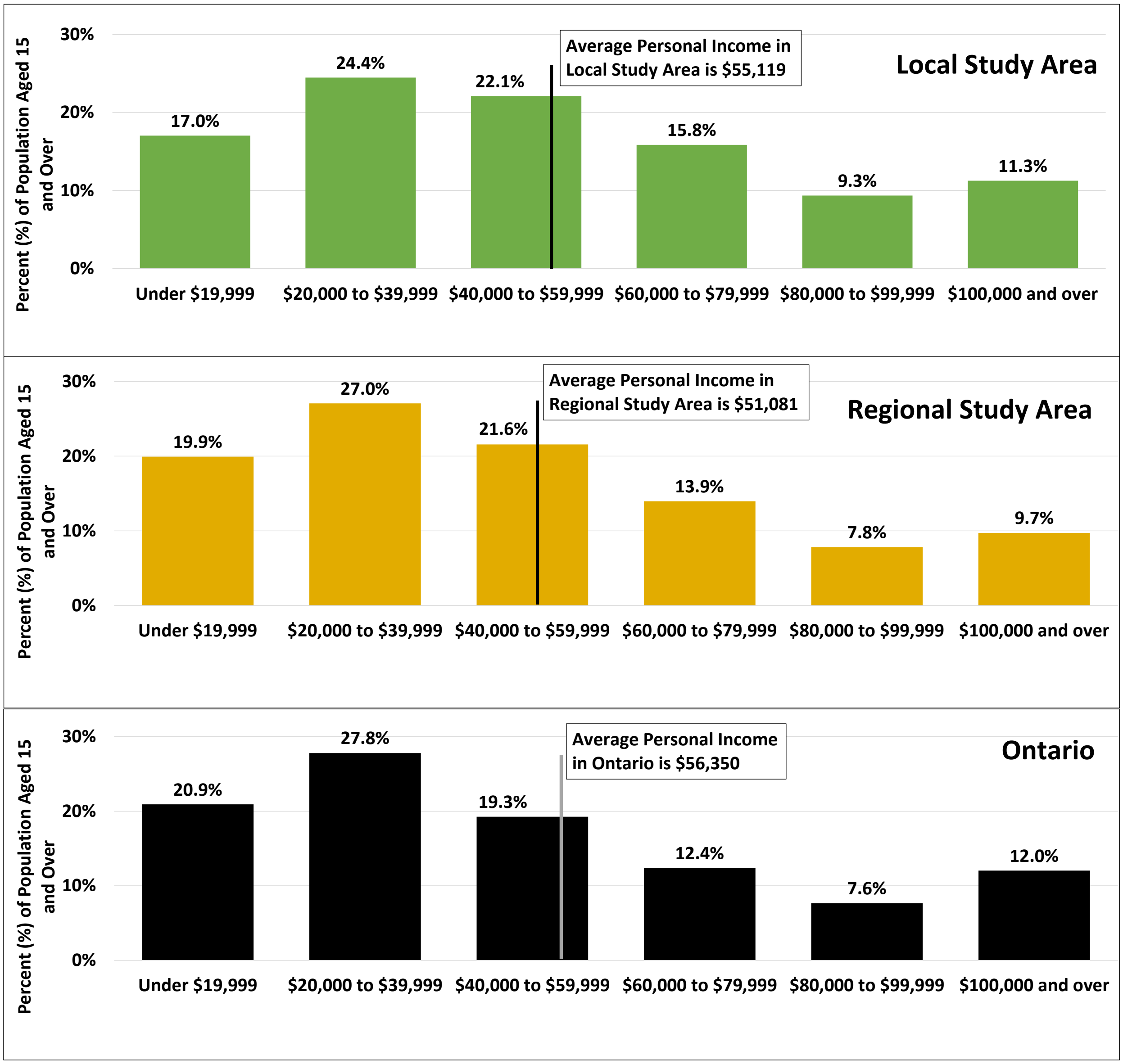
Location	Ratio of Average to Median Income
Ignace	1.40
Dryden	1.17
Machin	1.30
Sioux Lookout	1.11
LSB of Wabigoon	1.27
Ontario	1.37

Source: Statistics Canada 2022a.

Ratios of average to median personal income values from 2020 (**Table 3.6-1**) indicated average personal income levels were higher than median levels for all Local Study Area communities. This result is expected, as income distributions are positively skewed, meaning the range of possible income levels above the median is greater than below. This is consistent with the common perspective that, often, a few people may make materially more income than the typical person. The higher the average to median income ratio, the less symmetrical the income distribution. The ratio of average to median incomes for the population ranged from 1.11 in Sioux Lookout to a high of 1.40 in Ignace. The ratio of average to median personal income for Ignace (1.40) is similar to the province of Ontario (1.37), while all other Local Study Area communities have a ratio of average to median person income that is lower than the province of Ontario. Meaning average to median personal incomes for Dryden, Machin, Sioux Lookout, and the LSB of Wabigoon have a more similar distribution than the province as a whole.

Figure 3.6-3 presents the range ($) of personal income for the Local Study Area, Regional Study Area, and Ontario for 2020.

Figure 3.6-3: Personal Income Ranges for the Local Study Area, Regional Study Area, and Ontario, 2020



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

As of 2020, the average personal income for the Local Study Area was $55,100, which was 8.0% higher than the Regional Study Area ($51,100) and similar to Ontario as a whole ($56,400) (Statistics Canada 2022a). **Figure 3.6-3** shows that the Local Study Area, Regional Study Area, and Ontario had similar proportions of income range across the population. A large proportion of the population has an income of $39,999 and under, including 41.4% of the Local Study Area, 46.9% of the Regional Study Area, and 48.7% of Ontario (Statistics Canada 2022a). The Local Study Area had the largest proportion of the population with an income of $60,000 and over

(36.4%) compared to the Regional Study Area (31.4%) and Ontario (32.0%) (Statistics Canada 2022a).

Appendix 3B Supplemental Data provides information on trends across time by income range, including for the Local Study Area communities.

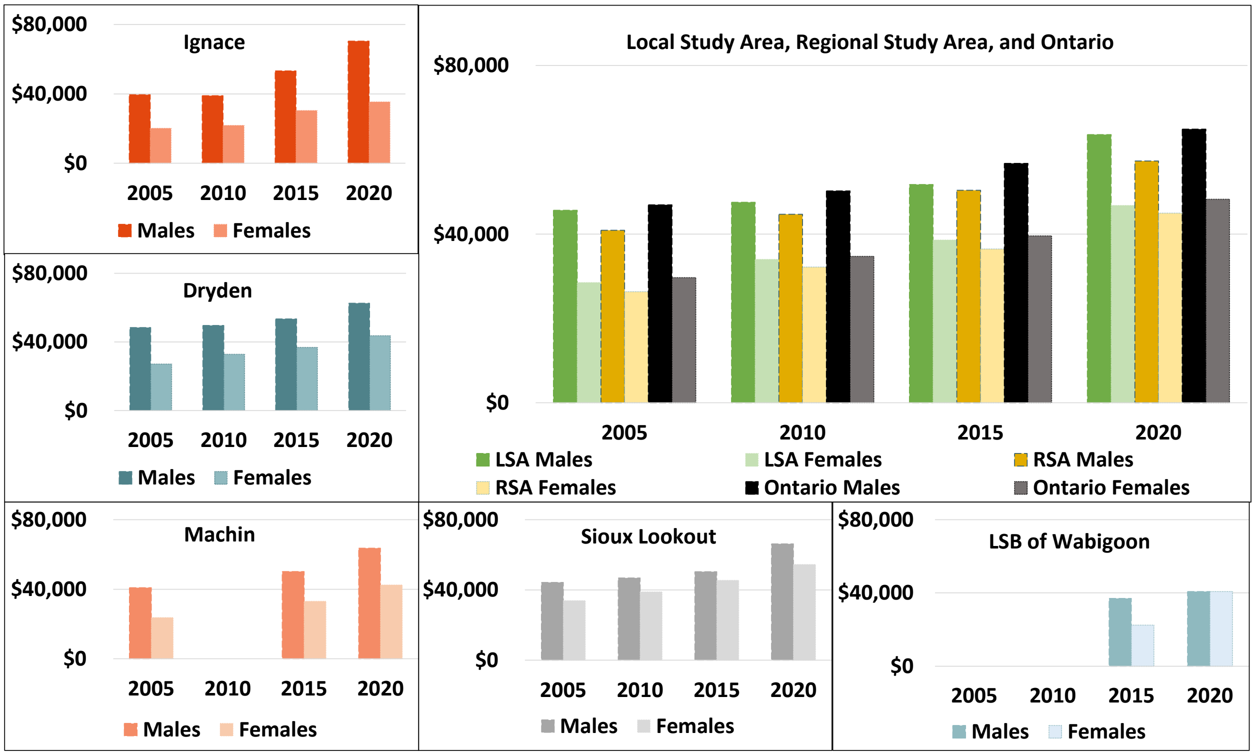
3.6.2.1.1Personal Income by Sex or Gender

Figure 3.6-4 presents the average personal income by sex or gender[20] for the Local Study Area, Regional Study Area, and Ontario for 2005, 2010, 2015, and 2020. The 2006, 2011, and 2016 Census disaggregates by sex and the 2021 Census disaggregates by gender. For further information on sex and gender see **Section 3.1.2.1.1**.

[20] The 2006, 2011, and 2016 Census disaggregate by sex and the 2021 Census disaggregates by gender. The sex variable (male and female) in census years prior to 2021 and the two-category gender variable (men+ and women+) in the 2021 Census are included together in **Figure 3.6-4**. Although sex and gender refer to two different concepts, the introduction of gender is not expected to have a significant impact on data analysis and historical comparability, given the small size of the transgender and non-binary populations. Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses provided. In these cases, individuals in the category “non-binary persons” are distributed into the other two gender categories (men+ and women+) and are denoted by the “+” symbol (Statistics Canada 2022a).

Gender refers to an individual's personal and social identity as a man, woman, or non-binary person (a person who is not exclusively a man or a woman). Gender includes the following concepts: (1) gender identity, which refers to the gender that a person feels internally and individually; (2) gender expression, which refers to the way a person presents their gender, regardless of their gender identity, through body language, aesthetic choices or accessories (e.g., clothes, hairstyle, and makeup), which may have traditionally been associated with a specific gender. A person's gender may differ from their sex at birth, and from what is indicated on their current identification or legal documents such as their birth certificate, passport, or driver's license. A person's gender may change over time. Some people may not identify with a specific gender (Statistics Canada 2022a).

Figure 3.6-4: Average Personal Income by Sex or Gender for the Local Study Area, Regional Study Area, and Ontario, 2005 to 2020[1,2]



Source: Statistics Canada 2007, 2012, 2017, and 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities may be suppressed for confidentiality, including Machin for 2010 and the LSB of Wabigoon for 2005 and 2010.
2. The 2006, 2011, and 2016 Census disaggregate by sex and the 2021 Census disaggregates by gender. The sex variable (male and female) in census years prior to 2021 and the two-category gender variable (men+ and women+) in the 2021 Census are included together in **Figure 3.6-4**. Although sex and gender refer to two different concepts, the introduction of gender is not expected to have a significant impact on data analysis and historical comparability, given the small size of the transgender and non-binary populations. Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses provided. In these cases, individuals in the category “non-binary persons” are distributed into the other two gender categories (men+ and women+) and are denoted by the “+” symbol.

Figure 3.6-4 shows that males have a higher average personal income than females. Both men and women experienced increases to average personal income from 2005 to 2020. Other observations include (Statistics Canada 2022a):

- In 2020, males ($63,600) in the Local Study Area had an average personal income that was 35.9% higher than females ($46,800).
- In 2020, males ($57,300) in the Regional Study Area had an average personal income that was 27.3% higher than females ($45,000).

- In 2020, males ($64,900) in Ontario had an average personal income that was 34.4% higher than females ($48,300).

Within the Local Study Area Communities, males also have a higher average personal income than females. Observations include (Statistics Canada 2022a):

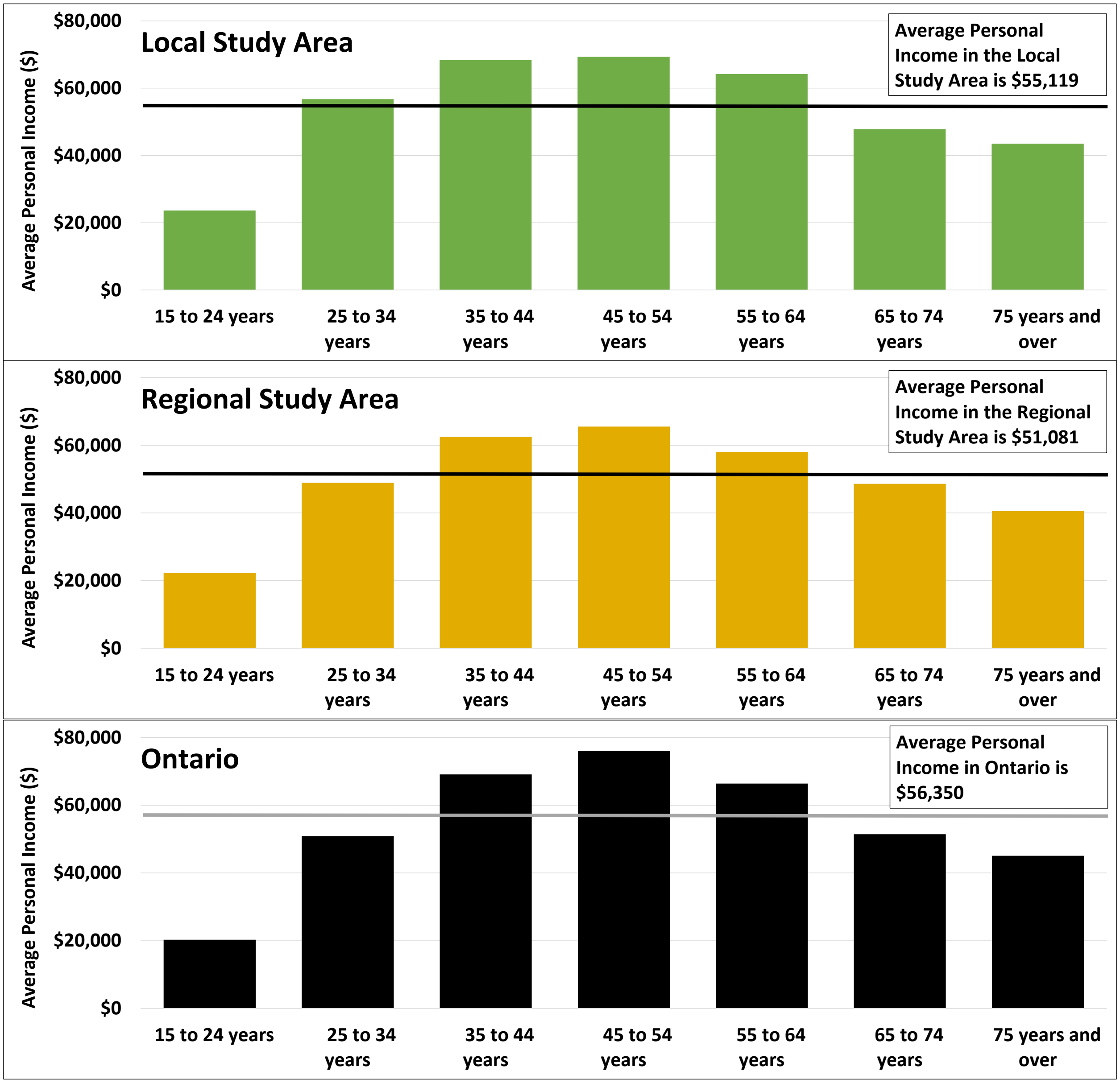
- In 2020, males in Ignace ($70,400) had the largest proportional difference in income compared to females ($35,400), where males had an average personal income that was 98.9% greater than females.
- In 2020, males ($40,800) and females ($40,800) in the LSB of Wabigoon had similar average personal income.

Key person interviews confirmed findings that men tend to make more than women within the Local Study Area (NWO Baseline Studies Key Person Interview Program 2022-2023). These trends are consistent with national findings on the gender pay gap in Canada, including that women make 89 cents for every dollar men make (Canadian Women’s Foundation 2022). The gender pay gap is larger for racialized women, Indigenous women, and women with disabilities (Canadian Women’s Foundation 2022). The gender pay gap persists throughout employment, from a young age and into senior years (Canadian Women’s Foundation 2022). Pay inequity is important to understand because earnings are a key determinant of economic well-being in Canada.

3.6.2.1.2 Personal Income by Age

Figure 3.6-5 presents the average personal income by age for the Local Study Area, Regional Study Area, and Ontario for 2020.

Figure 3.6-5: Average Personal Income by Age for the Local Study Area, Regional Study Area, and Ontario, 2020



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Figure 3.6-5 shows that the Local Study Area, Regional Study Area, and Ontario had a similar trend in the distribution of average personal income by age in 2020. In particular, the age range with the highest average personal income tends to be ages 35 to 64 for the Local Study Area, Regional Study Area, and Ontario. Other observations include (Statistics Canada 2022a):

- In 2020, the age range with the highest average personal income is 45 to 54 year olds in the Local Study Area ($69,400), Regional Study Area ($65,600), and Ontario ($76,000).

- In 2020, the age range with the lowest average personal income is 15 to 24 year olds in the Local Study Area ($23,600), Regional Study Area ($22,300), and Ontario ($20,300).
- A notable increase in average personal income is experienced from the 15 to 24 age range to the 25 to 34 age range. The increase in income signifies that career advancement typically occurs during this period and may be bolstered by various factors, including skill development, educational attainment, and work experience (Haan 2023; Statistics Canada 2023c).
- A notable decrease in average personal income is experienced from the 45 to 54 age range to the 65 and over age range and coincides with the typical start of retirement (Statistics Canada 2023c).

Education (**Section 3.3**) and employment (**Section 3.2**) are drivers of income, as a higher education can result in higher skilled jobs and higher paying jobs. Age is also a factor, as an individual ages they typically develop and advance their skill set and gain work experience, which can lead to higher average income (Haan 2023; Statistics Canada 2023c). Participants of the key person interview program identified that gained work experience and skilled labour may result in a higher personal income (NWO Community and Baseline Studies Key Person Interview Program 2022).

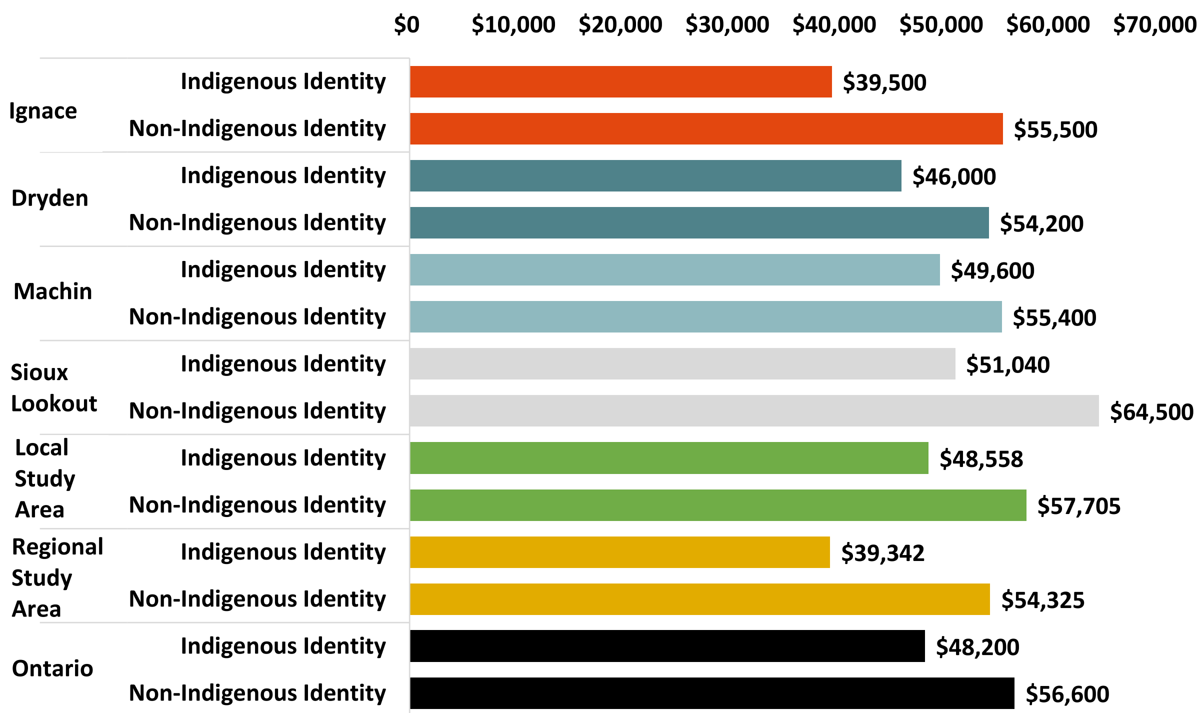
Appendix 3B Supplemental Data provides information on average personal income by age and gender for the Local Study Area, Regional Study Area, and Ontario. In 2020, across all age ranges for the Local Study Area, Regional Study Area, and Ontario men have a higher average personal income than women. For additional information on personal income by sex or gender see **Section 3.6.2.1.1**.

Appendix 3B Supplemental Data provides information on average personal income by age for the Local Study Area communities. Of note, similar income trends by age were seen across the Local Study Area communities as displayed in **Figure 3.6-5**. Those aged 15 to 24 had the lowest average personal income compared to all other age ranges reported for all Local Study Area communities. Further, the highest average personal income for the Local Study Area communities is between the ages of 35 to 64, including for 45 to 54 year olds in Dryden ($70,800), Machin ($80,000), and the LSB of Wabigoon ($60,00), for 35 to 44 year olds in Sioux Lookout ($75,000) and 55 to 64 year olds in Ignace ($88,000).

3.6.2.1.3 Personal Income by Indigenous Identity

Figure 3.6-6 presents the average personal income by Indigenous identity for the Local Study Area, Regional Study Area, and Ontario for 2020. Limitations associated with disaggregated Indigenous identity data are provided in **Section 3.1.2.1.1**.

Figure 3.6-6: Average Personal Income by Indigenous Identity for the Local Study Area, Regional Study Area, and Ontario, 2020[1,2]



Source: Statistics Canada 2023f. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities may be suppressed for confidentiality, including the LSB of Wabigoon for 2020.
2. 'Indigenous identity' includes persons who are First Nations (North American Indian), Métis, or Inuk (Inuit) and/or those who are Registered or Treaty Indians (that is 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.

Figure 3.6-6 shows that, across the Local Study Area communities, the Regional Study Area, and Ontario, Indigenous people have lower average personal income than non-Indigenous people. Observations include (Statistics Canada 2023f):

- As of 2020, the Local Study Area and Ontario had a similar proportional difference between Indigenous and non-Indigenous average personal income, including that those in the Local Study Area who are non-Indigenous have an income that is 18.8% higher (or an income that is $9,200 higher) than those who identify as Indigenous. A similar proportion was apparent in Ontario at 17.4% higher, or an income that is $8,400 higher for those who are non-Indigenous. The Regional Study Area had a larger proportional difference, where those who are non-Indigenous have an income that is 38.1% higher (or an income that is $15,000 higher) than those who identify as Indigenous.

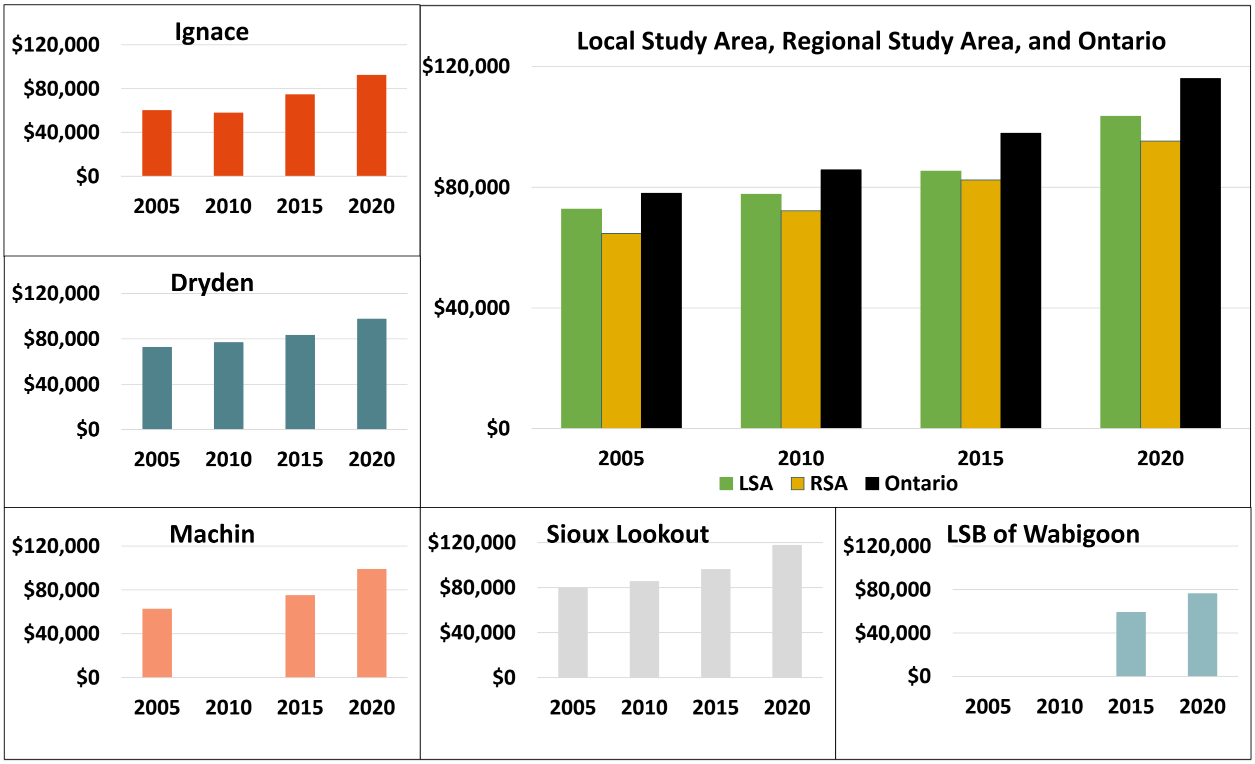
- As of 2020, incomes ranged from 11.7% higher for those who identify as non-Indigenous in Machin (average non-Indigenous identity income is $5,800 higher than Indigenous identity income) to 40.5% higher in Ignace (average non-Indigenous identity income is $16,000 higher than Indigenous identity income). Similar trends were observed for the Local Study Area communities in 2015 (Statistics Canada 2017).

The income gap between Indigenous and non-Indigenous people is consistent with other recent studies, such as Raphael et al. (2020), who reported that the average income of Indigenous people was lower than non-Indigenous people in Canada, regardless of place of residence. The same study noted Indigenous people living off-reserve typically earned higher incomes than Indigenous people living on-reserve (Raphael et al. 2020). A study completed by the Organization for Economic Cooperation and Development found Indigenous income is lower than non-Indigenous income in Canada, particularly for those on-reserve, and was the result of a range of factors including lack of access to markets and capital (OECD 2023). Statistics Canada reported that barriers to educational and economic opportunities have perpetuated the experiences of poverty and the income gap between Indigenous and non-Indigenous populations in Canada (Statistics Canada 2023c).

3.6.2.2 Household Income

Household income is the combined income from all sources of all members of a household aged 15 years and older. Households refer to a person or a group of persons who occupy the same dwelling and do not have a usual place of residence elsewhere in Canada (Statistics Canada 2022a). 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. Vulnerable populations in the Local study Area may include one-parent families and persons living alone, for further information on one-parent families and persons living alone see **Section 3.6.2.3**. **Figure 3.6-7** provides the average household income for the Local Study Area, Regional Study Area, and Ontario from 2005 to 2020.

Figure 3.6-7: Average Household Income for the Local Study Area, Regional Study Area, and Ontario, 2005 to 2020[1]



Source: Statistics Canada 2007, 2012, 2017, and 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities may be suppressed for confidentiality, including Machin for 2010 and the LSB of Wabigoon for 2005 and 2010.

Figure 3.6-7 shows that as of 2020, the average household income for the Local Study Area was $103,500, which was 8.6% higher than the Regional Study Area ($95,300) and 10.8% lower than Ontario as a whole ($116,000) (Statistics Canada 2022a). Household income increased in the Local Study Area, the Regional Study Area, and Ontario from 2005 to 2020. Observations include (Statistics Canada 2007; 2022a):

- The Local Study Area saw an increase of 42.2% from 2005 ($72,800) to 2020 ($103,500);
- The Regional Study Area saw an increase of 47.5% from 2005 ($64,600) to 2020 ($95,300);
- Ontario saw an increase of 48.7% from 2005 ($78,000) to 2020 ($116,000);

Among the Local Study Area communities Sioux Lookout had the highest average household income as of 2020 ($117,700), followed by Machin ($98,800), Dryden ($97,500), Ignace ($92,000), and the LSB of Wabigoon ($76,000). Notable trends across time for the Local Study Area communities include (Statistics Canada 2007; 2022a):

- Machin had the highest proportional increase of 58.1% from 2005 ($62,500) to 2020 ($98,800);

- Dryden had the lowest proportional increase of 34.7% from 2005 ($72,400) to 2020 ($97,500); and
- The LSB of Wabigoon saw an increase of 29.0% from 2015 ($58,900) to 2020 ($76,000);

In 2020, average Indigenous household[21] income in the Local Study Area was $106,000[22] which is similar to the total average household income of $103,500 (including both Indigenous and non-Indigenous households in the Local Study Area) (Statistics Canada 2023f). Indigenous household income varied among the Local Study Area communities (Statistics Canada 2023f):

- Average Indigenous household income was lower in Ignace and Sioux Lookout in comparison to the total average household income. Ignace had an average Indigenous household income of $82,000 and a total average household income of $92,000 and Sioux Lookout had an average Indigenous household income of $113,200 and a total average household income of $117,700;
- Dryden saw an average Indigenous household income ($99,400) that was similar to the total average household income ($97,500); and
- Machin saw an average Indigenous household income ($112,000) that was higher than the total average household income ($98,800).

Appendix 3B Supplemental Data provides further details on average household income.

The Province of Ontario's economic outlook and fiscal review indicates household income growth is projected to remain relatively strong, supported by employment growth in 2023, 2024, and 2025 (Province of Ontario 2022). Ontario as a whole may see increases of 3.5% in 2023, 3.8% in 2024, and 4.1% in 2025 (Province of Ontario 2022). Consumer spending is projected to slow as high inflation and interest rates temper demand and nominal household consumption is projected to grow 11.5% in 2022 and slow to an average of 4.6% from 2023 to 2025 (Province of Ontario 2022).

Figure 3.6-8 presents the median of household income for the Local Study Area communities and Ontario for 2005, 2010, 2015, and 2020.[23] The median household income is the 'middle' income, amongst the group surveyed, meaning that half of the households had a higher income and half had a lower income.

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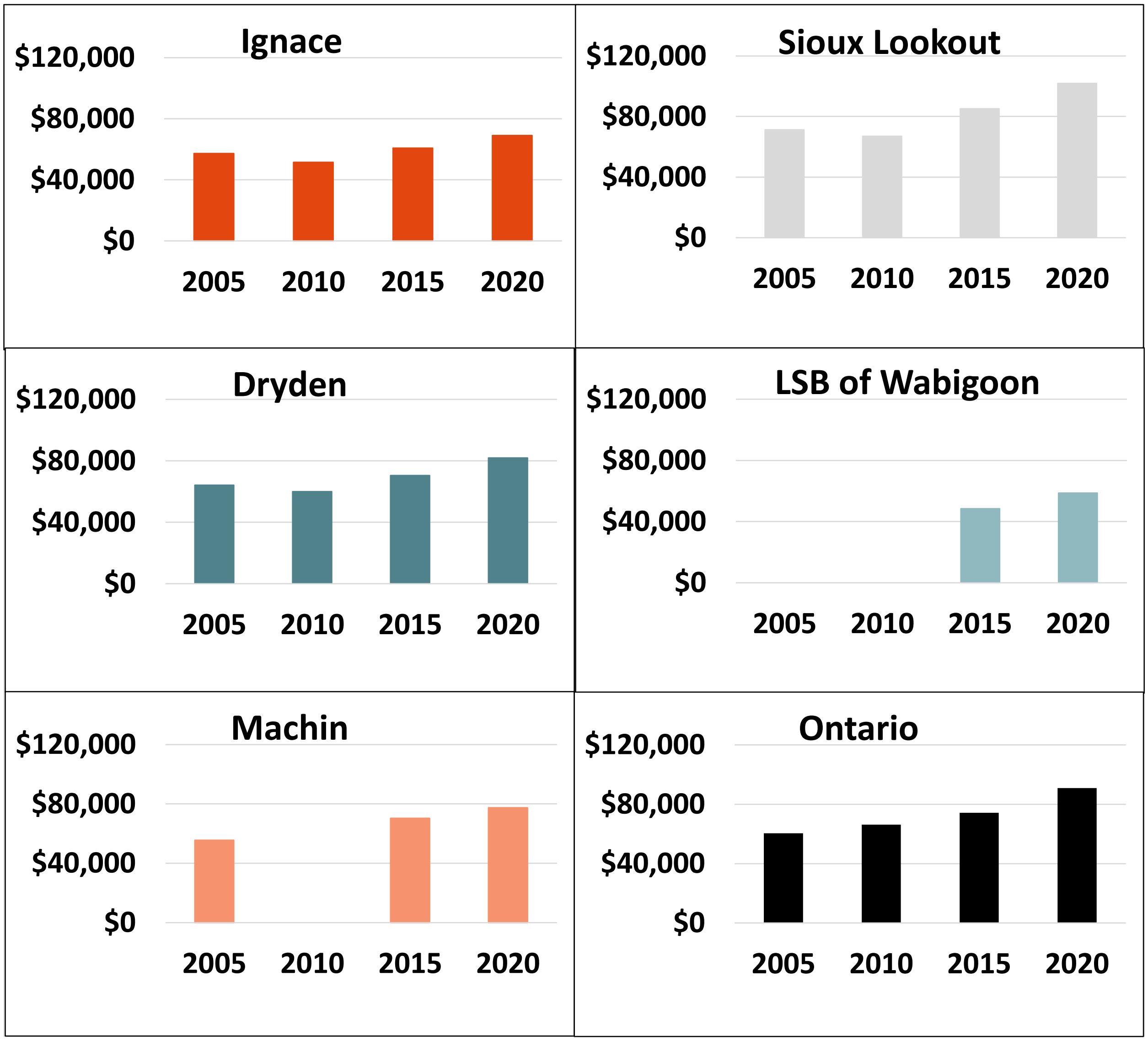
[21] An Indigenous household is either a non-family household in which at least 50% of household members self-identified as Indigenous or a family household that meets at least one of two criteria: (i) at least one married spouse, common-law partner, or lone parent self-identified as Indigenous; or (ii) at least 50% of household members self-identified as Indigenous (Statistics Canada 2023f).

[22] Data for the LSB of Wabigoon has been suppressed for confidentiality for 2020. Average Indigenous household income should be interpreted with caution due to random rounding.

[23] A median cannot be calculated for compiled Statistics Canada geographies, including for the Local Study Area and Regional Study Area.

Figure 3.6-8: Median Household Income for Local Study Area Communities and Ontario, 2005 to 2020[1,2]



Source: Statistics Canada 2007, 2012, 2017, and 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. The Local Study Area and Regional Study Area median income could not be calculated.
2. Data may be suppressed for confidentiality, including Machin for 2010 and the LSB of Wabigoon for 2005 and 2010.

Figure 3.6-8 shows that, in 2020, Sioux Lookout ($102,000) had the highest median household income, followed by Dryden ($82,000), Machin ($77,500), Ignace ($69,000), and the LSB of Wabigoon ($58,800). All Local Study Area communities experienced an increase to median household income from 2005 to 2020. Notable trends include (Statistics Canada 2007; 2022a):

- Sioux Lookout had the highest proportional increase of 43.1% from 2005 ($71,300) to 2020 ($102,000); and
- Ignace had the lowest proportional increase of 20.4% from 2005 ($57,300) to 2020 ($69,000).

Median Indigenous household income varied among Local Study Area communities in 2020 (Statistics Canada 2023f):[24]

- Median Indigenous household income in Ignace ($63,600) and Sioux Lookout ($97,000) was lower than the total median household income (including both Indigenous and non-Indigenous households). Ignace had a median Indigenous household income of $63,600 and a total average household income of $81,000 and Sioux Lookout had an average Indigenous household income of $113,200 and a total average household income of $117,700;
- Dryden saw a median Indigenous household income ($84,000) that was similar to the total median household income ($82,000); and
- Machin saw a median Indigenous household income ($103,000) that was higher than the total median household income ($78,000).

Statistics Canada reports low-income status for private households (Statistics Canada 2022a).[25] A household is considered low income if its income is below 50% of the median after tax household income (Statistics Canada 2022a). As of 2020, approximately 10.4% of Local Study Area households, 15.0% of Regional Study Area households, and 10.1% of Ontario households were considered low income. Among age groups, those aged 0 to 17 are more likely to be in a low-income household compared to those aged 18 to 64 and those 65 and older.

- In the Local Study Area 14.4% of 0- to 17-year-olds were in a low-income household, 9.2% of 18- to 64-year-olds, and 11.0% of 65 years and olds.
- In the Regional Study Area 22.3% of 0- to 17-year-olds were in a low-income household, 13.4% of 18- to 64-year-olds, and 12.3% of 65 years and older.
- In Ontario 11.5% of 0- to 17-year-olds were in a low-income household, 9.1% of 18- to 64-year-olds, and 12.1% of 65 years and older.

Local Study Area communities saw similar proportions of the total population in a low-income household compared to the Local Study Area, including in Ignace (13.2%), Dryden (10.1%), Machin (10.4%), and Sioux Lookout (8.0%). The LSB of Wabigoon (21.2%) had a higher

[24] Data for the LSB of Wabigoon has been suppressed for confidentiality for 2020. Median Indigenous household income should be interpreted with caution due to random rounding.

[25] Statistics Canada reports on the low-income measure after tax (LIM-AT) as a low-income indicator. LIM-AT refers to a fixed percentage (50%) of median-adjusted after-tax income of private households (Statistics Canada 2022a). The household after-tax income is adjusted by an equivalence scale to take economies of scale into account. This adjustment for different household sizes reflects the fact that a household's needs increase, but at a decreasing rate as the number of members increases. When the unadjusted after-tax income of household pertaining to a person falls below the threshold applicable to the person based on household size, the person is considered to be in low income according to LIM-AT (Statistics Canada 2022a).

proportion of its total population in a low-income household. Notable differences among age groups include (Statistics Canada 2022a):

- Within Ignace 24.0% of 0- to 17-year-olds were in a low-income household, compared to 14.4% of 0- to 17-year-olds in the Local Study Area.
- The LSB of Wabigoon saw higher proportions of those in a low-income household across all age groups compared to the Local Study Area, including 28.0% of 0- to 17-year-olds, 19.5% of 18- to 64-year-olds, and 20.0% of 65 years and over.

Low socio-economic status is a measure of an individual's combined economic and social status. Higher socio-economic status tends to be positively associated with better health (Baker 2014). Socio-economic status encompasses not only income, but educational attainment, financial security, and subjective perceptions of social status and social class (Cutter 1995). Within the Local Study Area those who may potentially be affected by low socio-economic status include seniors, youth and children, lone-parents, and Indigenous peoples (GBA+ Workshop 2023). Gender differences may also occur among these populations. Employment, education, transportation to access education and employment opportunities, availability and access to childcare, family supports, social supports, mental health and addictions, ageism, and racism may have an impact on an individual or households' socio-economic status and income (GBA+ Workshop 2023).

Individuals in the Local Study Area with a low socio-economic status and a lower income spend a larger proportion of their income on shelter costs, food, and clothes compared to those with a higher income (GBA+ Workshop 2023). Further, those with a lower income may have reduced purchasing power when prices rise (from a growing economy and/or inflation) that can result in shelter costs becoming unaffordable. A reduced purchasing power for those with a lower income can also influence disposable income and lead to food insecurity and a lack of means to afford other essential goods. If a lower income household is required to move to find affordable housing, the household might be subject to transportation challenges and may have to spend more time or money in order to access certain services and supports (GBA+ Workshop 2023).

A lower socio-economic status and lower income may also result in a lack of financial means to (1) seek education and training to improve their financial situation, (2) engage in recreational activities and access amenities which could improve their overall well-being, and (3) adjust to rising prices and rental costs from an expanding economy that may affect individuals with fixed income (e.g., those receiving social assistance, seniors who are retired, others), which may lead to challenges with food security and purchasing other essential goods. For further information on low-income households, see **Appendix 3B Supplemental Data**. Further information on income inequality is provided in **Section 2.3.6.**

Table 3.6-2 provides the ratio of average to median household income for the Local Study Area communities in 2020. The comparison and ratio of average to median income can provide an indication of the measure of income inequality, as a higher ratio means a higher income disparity (WLI 2022). For instance, while the median remains the middle, or centre, value, an average that appears above (or below) the median suggests that the income distribution is skewed by the presence of a greater number of higher (or lower) values that draw the average away from the median.

Table 3.6-2: Ratio of Average to Median Household Income for the Local Study Area Communities and Ontario, 2020

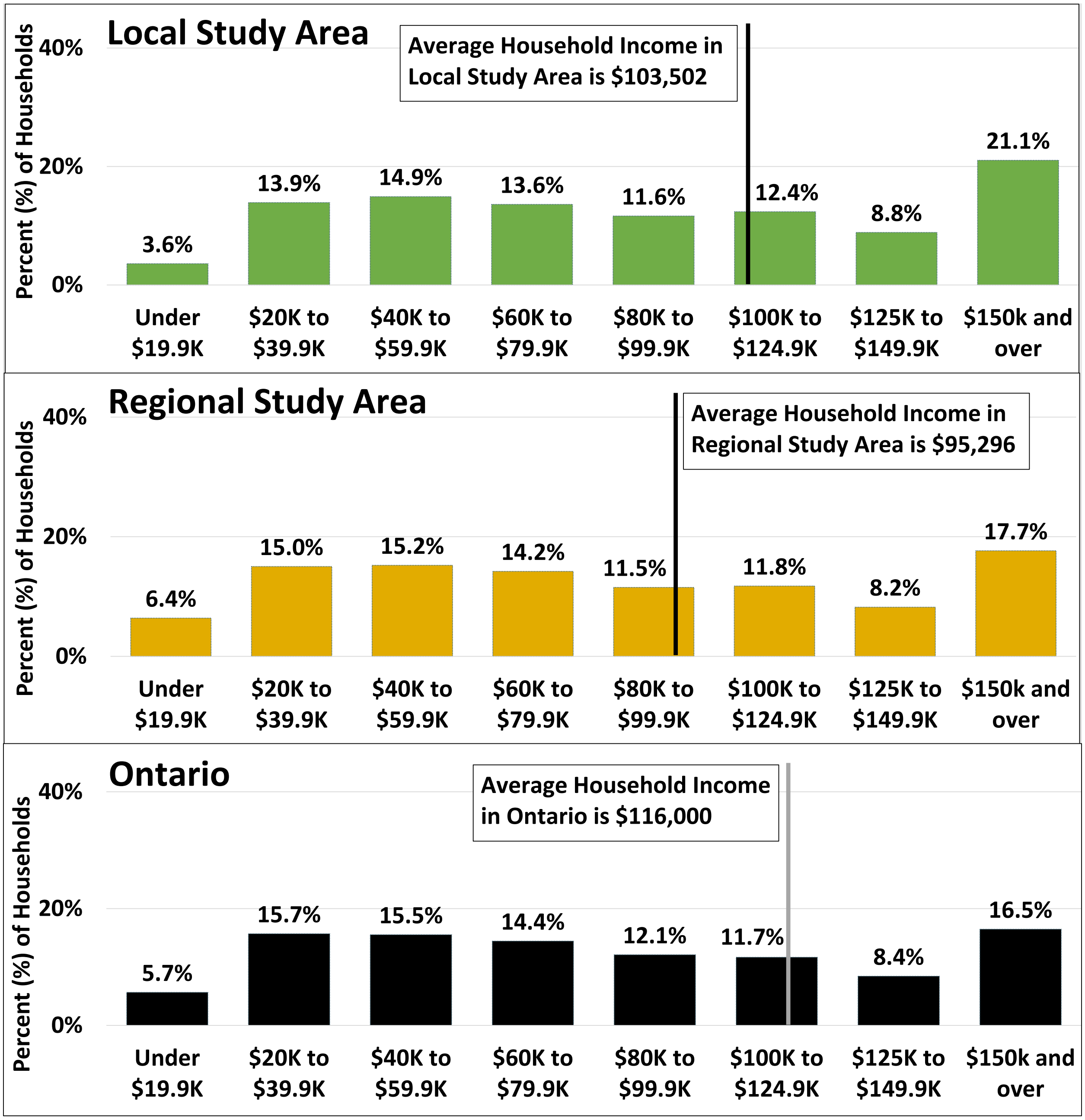
Location	Ratio of Average to Median Income
Ignace	1.33
Dryden	1.19
Machin	1.27
Sioux Lookout	1.15
LSB of Wabigoon	1.29
Ontario	1.27

Source: Statistics Canada 2022a.

Ratios of average to median household income values from 2020 (**Table 3.6-2**) indicated average household income levels were higher than median levels for all Local Study Area communities. This result is expected as income distributions are positively skewed, meaning the range of possible income levels above the median is greater than below. This is consistent with the common perspective that often a few people or households may make materially more income than the typical person or household. The higher the average to median income ratio, the more skewed or less symmetrical the income distribution. The ratio of average to median incomes for households ranged from 1.15 in Sioux Lookout to a high of 1.33 in Ignace.

Figure 3.6-9 presents the range ($) of household income for the Local Study Area, Regional Study Area, and Ontario for 2020.

Figure 3.6-9: Household Income Ranges for the Local Study Area, Regional Study Area, and Ontario, 2020[1]



Source: Statistics Canada 2022a. See **Appendix 3B Supplemental Data**.

Note:
1. ‘k’ represents $000s.

Figure 3.6-9 shows that the Local Study Area, Regional Study Area, and Ontario had similar proportions of income range across households. The proportion of households in a lower income range of $39,999 and under is 17.5% in the Local Study Area, 21.4% in the Regional Study Area, and 21.4% in Ontario. The income range with the largest proportion of households is $150,000 and over and includes 21.1% in the Local Study Area, 17.7% in the Regional Study Area, and 16.5% in Ontario. Similar trends were observed among the Local Study Area communities (**Appendix 3B Supplemental Data**).

3.6.2.3 Economic Family Income

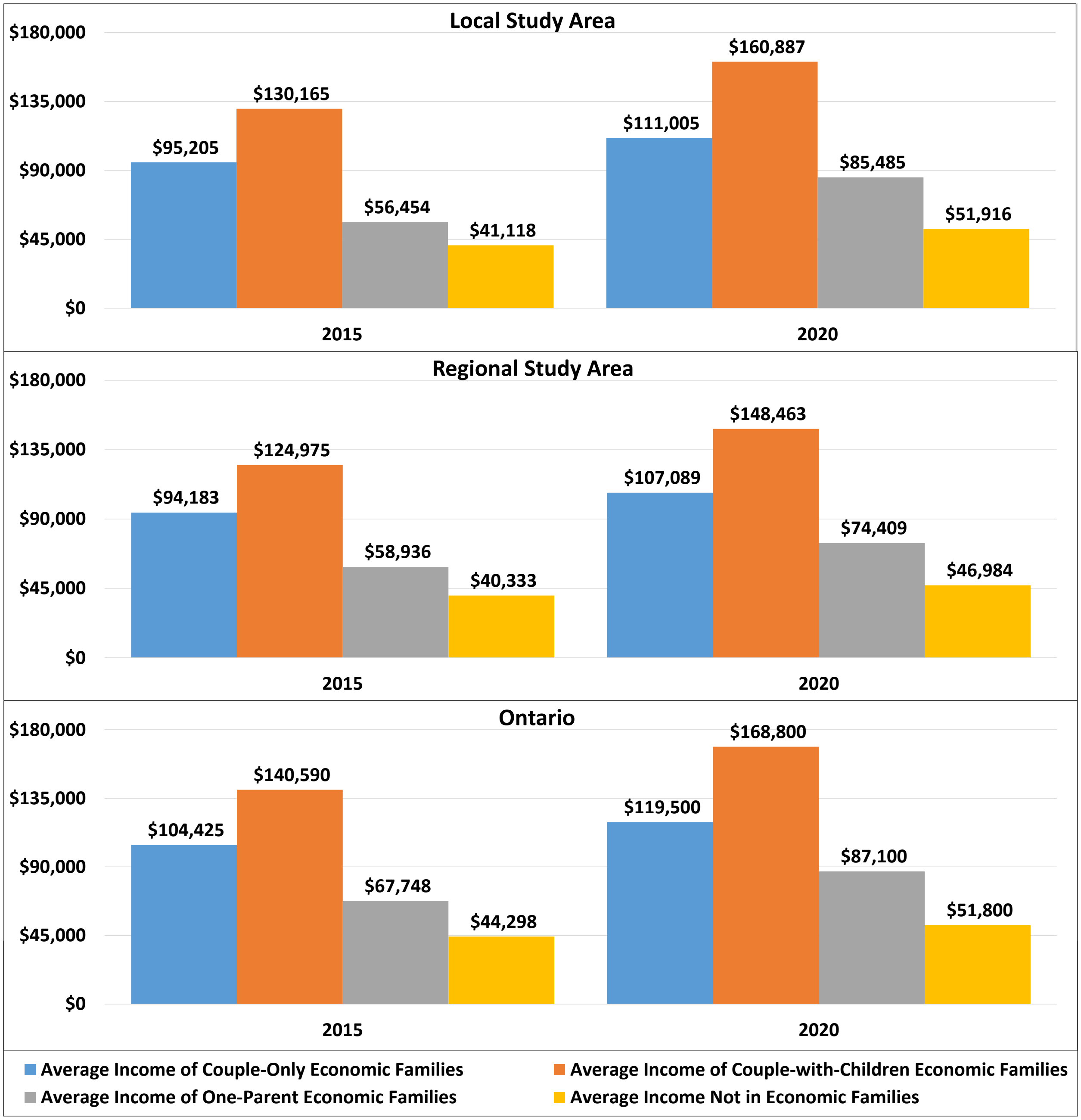
Economic family income is the combined income from all sources of all members of an economic family aged 15 years and older. Economic families include (Statistics Canada 2022a):

- Couple-only (no children) economic families;
- Couple-with-children economic families;
- One-parent economic families, and
- Persons not in economic family. Persons not in economic family refers to those who live with people none of whom are related by blood, marriage, common-law, or adoption or foster; persons living alone are included in this category.

Vulnerable populations in the Local study Area may include one-parent families and persons living alone. **Figure 3.6-10** provides the average economic family income for the Local Study Area, Regional Study Area, and Ontario for 2015 and 2020.[26]

[26] Economic family income is not disaggregated by couple only (no children), couple-with-children, one-parent, or persons not in economic family for 2005 and is not reported for 2010.

Figure 3.6-10: Average Economic Family Income by Economic Family Unit for the Local Study Area, Regional Study Area, and Ontario, 2015 and 2020



Source: Statistics Canada 2017 and 2022a. See **Appendix 3B Supplemental Data**.

Figure 3.6-10 shows that for both 2015 and 2020 couples with children had the highest average income, followed by couple-only economic families, one-parent economic families, and those who are not in an economic family (Statistics Canada 2017; 2022a). Similar trends were observed among the Local Study Area communities (**Appendix 3B Supplemental Data**).

- As of 2020, couple-with-children economic families in the Local Study Area had an income of $160,900, which is 8.4% higher than the Regional Study Area ($148,500) and 4.7% lower than Ontario as a whole ($168,800). The Local Study Area saw the largest proportional increase in income for couple-with-children economic families from 2015 to 2020 (23.6%), followed by Ontario (20.1%) and the Regional Study Area (18.8%).
- As of 2020, couple-only economic families in the Local Study Area had an income of $111,000, which is 3.6% higher than the Regional Study Area ($107,100) and 7.1% lower than Ontario as a whole ($119,500). The Local Study Area saw the largest proportional increase in income for couple-only economic families from 2015 to 2020 (16.6%), followed by Ontario (14.4%) and the Regional Study Area (13.7%).
- As of 2020, one-parent economic families in the Local Study Area had an income of $85,500, which is 14.9% higher than the Regional Study Area ($74,400) and 1.8% lower than Ontario as a whole ($87,100). The Local Study Area saw the largest proportional increase in income for one-parent economic families from 2015 to 2020 (51.4%), followed by Ontario (28.6%) and the Regional Study Area (26.3%).
- As of 2020, those not in an economic family in the Local Study Area had an income of $51,900, which is 10.4% higher than the Regional Study Area ($47,000) and similar to Ontario as a whole ($51,800). The Local Study Area saw the largest proportional increase in income for those not in an economic family from 2015 to 2020 (26.3%), followed by Ontario (16.9%) and the Regional Study Area (16.5%).

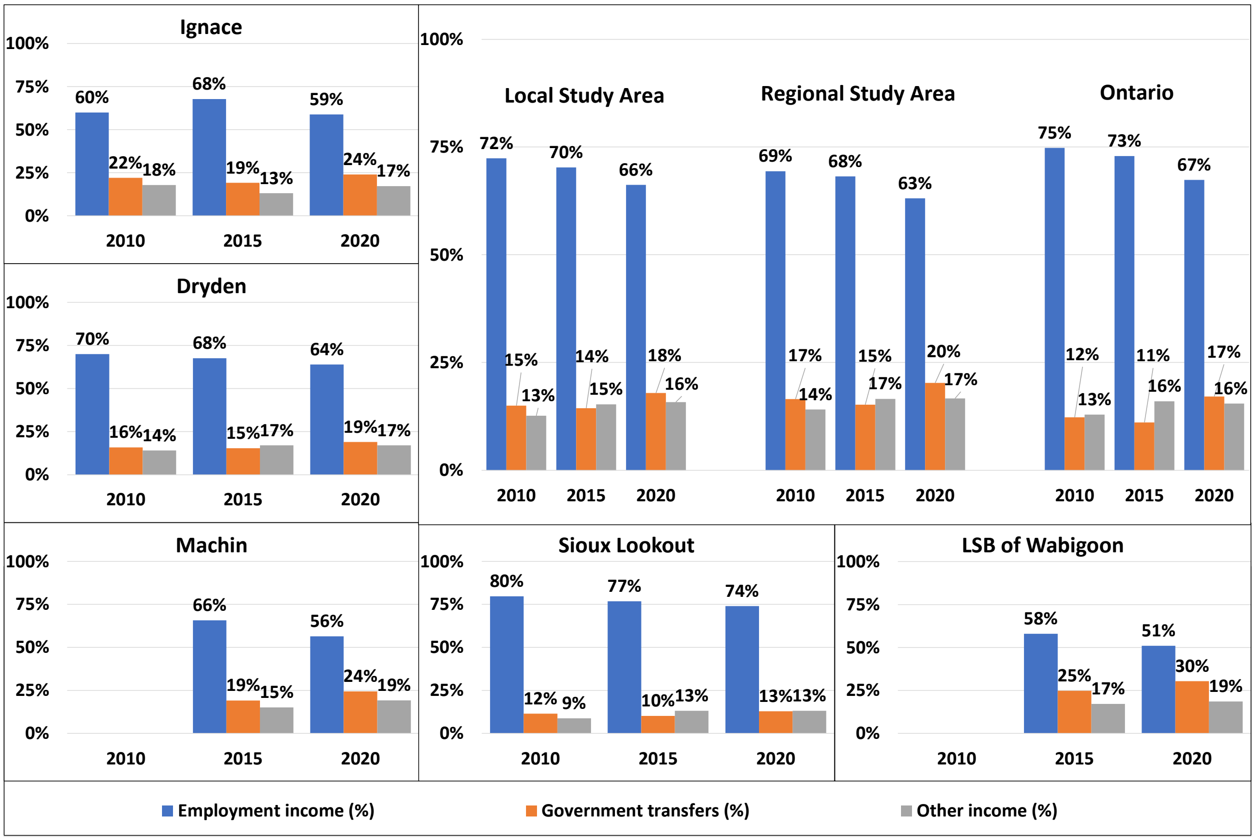
3.6.2.4 Income Sources

Sources of income are presented in three groups: employment income, government transfers, and other income (Statistics Canada 2022a).[27] **Figure 3.6-11** presents the sources of income for 2010, 2015, and 2020 for the population aged 15 years and over in private households in the Local Study Area, Regional Study Area, and Ontario.[28]

[27] Other income includes net self-employment income from farm or non-farm unincorporated business and/or professional practice, investment income, private retirement income, and other income from market sources during the reference period (Statistics Canada 2022a).

[28] Income sources for 2005 are not comparable to 2010, 2015, and 2020.

Figure 3.6-11: Income Sources for the Local Study Area, Regional Study Area, and Ontario, 2010 to 2020[1]



Source: Statistics Canada 2012, 2017, and 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities may be suppressed for confidentiality, including Machin and the LSB of Wabigoon for 2010.

Figure 3.6-11 shows that the proportions of income for the Local Study Area, Regional Study Area, and Ontario are similar:

- Employment income is the largest income source across the Local Study Area (72% in 2010 to 66% in 2020), Regional Study Area (69% in 2010 to 63% in 2020), and Ontario (75% in 2010 to 67% in 2020).
- From 2010 to 2020, employment income decreased across the Local Study Area, Regional Study Area, and Ontario, while government transfers and other sources of income increased. In particular, government transfers were consistent from 2010 to 2015 and saw an increase from 2015 to 2020.

Similar trends were observed across the Local Study Area communities. Sioux Lookout had the highest proportion of income from employment income (80% in 2010 to 74% in 2020), while the LSB of Wabigoon had the lowest proportion of income sourced from employment income (58% in 2015 to 51% in 2020). Government transfers were largely consistent from 2010 to 2015 and saw an increase in 2020. By 2020, government transfers were 24% of income in Ignace, 19% in Dryden, 24% in Machin, 13% in Sioux Lookout, and 30% in the LSB of Wabigoon.

The increase in government transfers in 2020 may be, in part, due to COVID-19 relief programs as well as increases to other government programs such as the Canada Child Benefit, Employment Insurance, Old Age Security, and the Canada Pension Plan (Statistics Canada 2023c). COVID-19 relief programs consist of the Canada Emergency Response Benefit, the Canada Recovery Benefit, and the Canada Emergency Student Benefit (Statistics Canada 2023c). In 2020, Statistics Canada (2023c) reported that, of the families that received COVID-19 relief support, the median amount in relief support received was $8,000 (Statistics Canada 2023c). Local Study Area communities similarly experienced an increase to government transfers as a result of COVID-19 relief support in 2020, including that COVID-19 relief support ranged from 2% of income in the LSB of Wabigoon to 5% in Ignace (Statistics Canada 2022a).

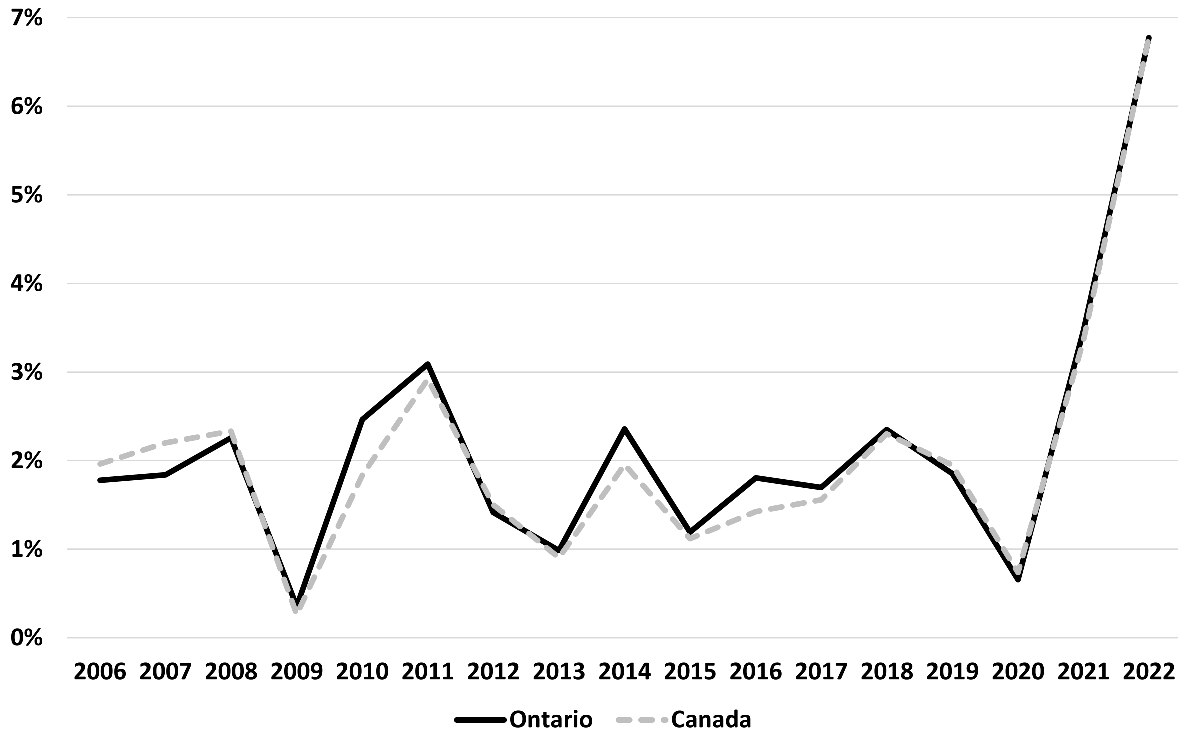
Similar trends across time were observed in males and females in the Local Study Area, Regional Study Area, and Ontario (see **Appendix 3B Supplemental Data**).

In 2020, similar proportions of income sources were observed for those who identify as Indigenous in the Local Study Area (see **Appendix 3B Supplemental Data**). In 2020, Statistics Canada reported that, in the Local Study Area, those who identify as Indigenous received 72% of income from employment income, 20% from government transfers, and 7% from other sources of income, while those who do not identify as Indigenous received 65% of income from employment income, 17% from government transfers, and 18% from other sources. Similar trends were observed in the Regional Study Area and Ontario.

3.6.3 Cost of Living

Cost of living refers to the cost to maintain a certain standard of living in a certain area and cover basic necessities (Statistics Canada 2023a). Cost of living is impacted by numerous factors and a quantitative indicator to help understand cost of living is the Consumer Price Index (CPI). The CPI measures price changes for the average Canadian consumer by comparing, through time, the cost of a fixed basket of goods and services (Statistics Canada 2023a). The CPI is widely used as an indicator of the change in the general level of consumer prices or the rate of inflation (Statistics Canada 2022a). Consumers can compare movements in the CPI to changes in their personal income to monitor and evaluate changes in their financial situation (Statistics Canada 2023a). The goods and services in the CPI basket are divided into eight major components of food; shelter; household operations, furnishings, and equipment; clothing and footwear; transportation; health and personal care; recreation, education and reading; and alcoholic beverages, tobacco products, and recreational cannabis (Statistics Canada 2023a). Statistics Canada publishes the CPI at the national level, for the ten provinces, and select major cities in Canada. Statistics Canada publishes the CPI for Ontario but does not publish the CPI for Northwestern Ontario or any of the individual communities in the Local Study Area. **Figure 3.6-12** summarizes the average annual change in the CPI for Ontario and Canada for 2006 to 2022.

Figure 3.6-12: Average Annual Change in the CPI for Ontario and Canada, 2006 to 2022



Source: Statistics Canada 2023a.

Figure 3.6-12 shows that the average annual change in the CPI in Ontario and Canada followed a similar trend from 2006 to 2022. The average annual change in the CPI in Ontario and Canada from 2006 to 2020 was 3% or less, however both Ontario and Canada saw a large increase in the CPI from 2020 to 2022. Over the previous five years, from 2018 to 2022, the change in Ontario's CPI on an annual average basis was small in 2018 (2.4%), 2019 (1.9%) and 2020 (0.7%), followed by a large increase in 2021 (3.5%) and 2022 (6.8%) (Statistics Canada 2023a). The average annual change from 2018 to 2022 in the CPI for Ontario is comparable to Canada as a whole, where the annual average change in the CPI was 2.3% in 2018, 1.9% in 2019, 0.7% in 2020, 3.4% in 2021, and 6.8% in 2022 (Statistics Canada 2023a). The change in the CPI in 2021 was largely attributed to the COVID-19 pandemic and associated challenges, including strained global supply chains, shipping bottlenecks, shortages of key goods, and higher prices for many internationally traded goods (Macklem 2022). Global inflationary pressures further stepped up in 2022. The change in the CPI in 2022 was a 40-year high (Statistics Canada 2023a). The Russian invasion of Ukraine in February 2022 drove up the price of commodities (particularly energy and agricultural goods) and created new disruptions to already strained global supply chains (Macklem 2022). Another driver of inflation in 2022 was the price of services (Statistics Canada 2023a). As economies began to fully re-open following the COVID-19 pandemic, pent up demand for services missed during the COVID-19 pandemic started driving up prices (for example, travel, recreation, restaurants, etc.). These global pressures and inflationary factors have impacted Canadians way of life, including in Ontario and for the communities in the Local Study Area, and the cost-of-living topics described in this section need to consider these inflationary pressures.

As global economic growth moderates and demand for commodities and other goods ease following the COVID-19 pandemic, supply chain bottlenecks are expected to decrease (Province of Ontario 2022). The future trajectory of the CPI in Ontario is highly uncertain and dependent on the path of the economy and central bank actions (Province of Ontario 2022). The Province of Ontario, for planning purposes, is projecting the CPI in Ontario to be 3.4% in 2023 and 2.3% in 2024, before converging to the Bank of Canada's target rate of 2.0% in 2025 (Province of Ontario 2022).

Section 3.6.3 Cost of Living describes spending patterns, a food basket, gasoline prices, shelter costs, and utility costs.

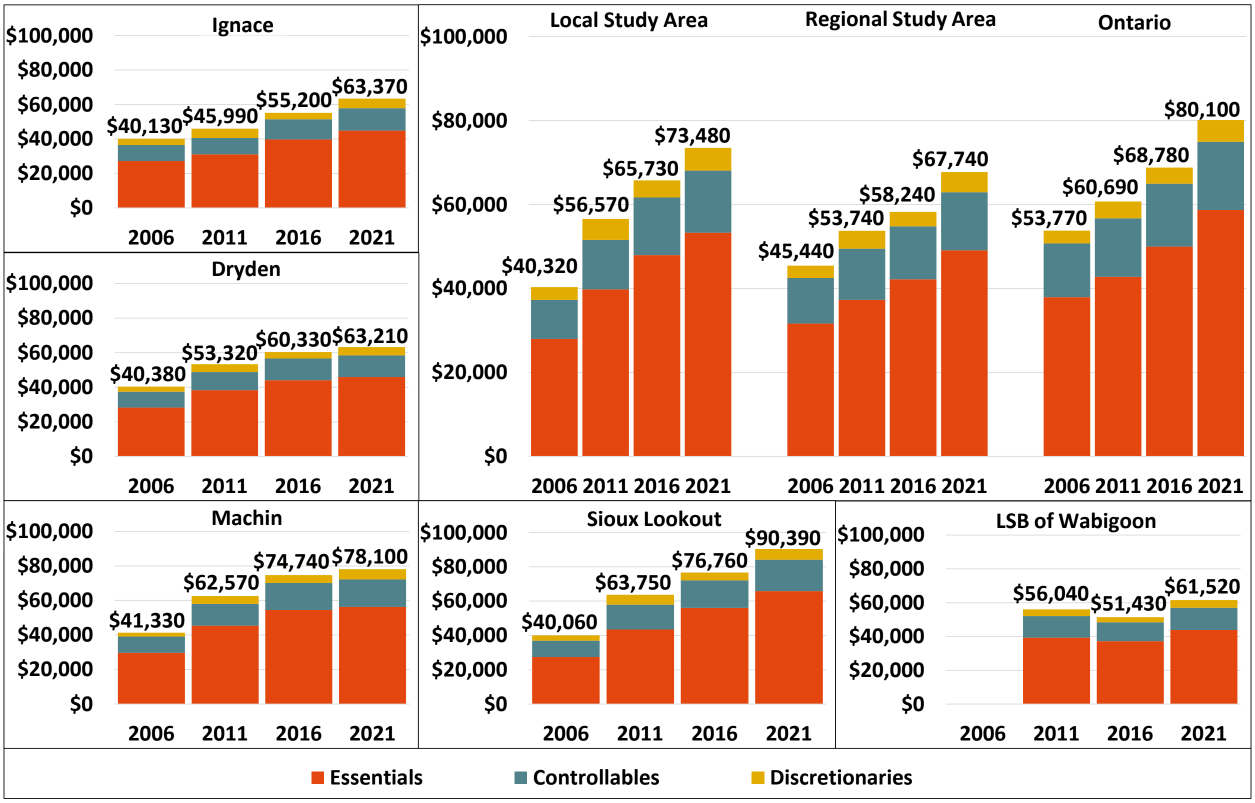
3.6.3.1 Spending Patterns

Figure 3.6-13 provides an assessment of average annual household spending patterns for the Local Study Area, Regional Study Area, and Ontario in 2006, 2011, 2016, and 2021. Understanding household spending patterns is important because it shows what residents are spending their money on and the businesses that may benefit from that spending. Average annual household spending patterns include essential, controllable, and discretionary expenses (Manifold 2023c retrieved May 30, 2023):[29]

- Essential expenses are required for basic needs and include food, principal shelter, home insurance, clothing, transportation, utilities, healthcare (including prescription drugs and health insurance premiums), and others.
- Controllable expenses are expenses that have an ability to be controlled or altered over the short term, are not necessarily a minimum requirement for basic needs, and include childcare, personal care, furnishings and equipment, telecom, pet expenses, education, reading materials, recreation, arts and antiques, and others.
- Discretionary expenses are non-essential expenses that are not mandatory for basic needs and include tobacco, alcohol, gardening supplies, games of chance (for example the lottery or gambling), miscellaneous expenses, and other expenses.

[29] Essential, controllable, and discretionary expenses do not include income taxes, RRSP contributions, pension contributions, contributions to charity, gifts, household cleaning supplies, home renovations, travel accommodations, and spending on other accommodations (for example utilities, mortgage, property taxes, and other costs for a vacation home) (Manifold 2023c retrieved May 30, 2023).

Figure 3.6-13: Average Annual Household Spending for the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1,2]



Source: Manifold 2023c retrieved May 30, 2023, Statistics Canada 2007, 2012, 2017, and 2022a. Household spending patterns were retrieved from Manifold who used their own models to create a database based on hundreds of inputs from the 2006, 2011, 2016, and 2021 Census to create the household spending pattern estimates. See **Appendix 3B Supplemental Data**.

Notes:

1. The Local Study Area includes Ignace, Dryden, Machin, Sioux Lookout, and the LSB of Wabigoon. The Local Study Area does not include the LSB of Melgund and Dinorwic. Data for the LSB of Wabigoon for 2006 has been suppressed for confidentiality and data quality.
2. The Regional Study Area includes the Kenora, Rainy River, and Thunder Bay District Census Divisions.

Figure 3.6-13 shows that, as of 2021, households in the Local Study Area spend on average $73,500 per year, which is 9% higher than the Regional Study Area ($67,700 per year). Essential expenses account for the majority of household spending at 73% of all spending in the Local Study Area (or $53,300 per year), Regional Study Area (or $49,100 per year), and Ontario ($58,700) followed by controllable expenses (20% for the Local Study Area, Regional Study Area, and Ontario), and discretionary expenses (7% for the Local Study Area, Regional Study Area, and Ontario).

Household spending consistently increased from 2006 to 2021 for the Local Study Area, Regional Study Area, and Ontario.

- Household spending in the Local Study Area increased on average 4.1% annually from 2006 ($40,300 per year) to 2021 ($73,500 per year).
- Household spending in the Regional Study Area increased on average 2.7% annually from 2006 ($45,500 per year) to 2021 ($67,700 per year).
- Household spending in Ontario increased on average 2.7% annually from 2006 ($53,800) to 2021 ($80,100).

Observations among the Local Study Area communities include that the community with the highest average annual housing spending in 2021 was Sioux Lookout ($90,400), followed by Machin ($78,100), Ignace ($63,400), Dryden ($63,200), and the LSB of Wabigoon ($61,500). The Local Study Area communities experienced an increase in average annual household spending from 2006 to 2021, trends include:

- From 2006 to 2021, average annual household spending among Local Study Area communities was the highest in Sioux Lookout. Household spending in Sioux Lookout increased on average 5.6% annually from 2006 ($40,100) to 2021 ($90,400).
- From 2006 to 2021, average annual household spending among Local Study Area communities was the lowest in Dryden. Household spending in Dryden increased on average 3.0% annually from 2006 ($40,400) to 2021 ($63,200).
- Household spending in the LSB of Wabigoon increased on average 0.9% annually from 2011 ($56,000) to 2021 ($61,500).

The change in the CPI in Ontario and Canada from 2006 to 2021 ranged from 0.3% to 3.5% annually (averaging 1.8% annually over this time frame) (**Section 3.6.3**). Since 2017 household spending across Canada has risen at a faster pace than inflation with the largest share of spending dedicated to shelter, transportation, and food (Statistics Canada 2021). Statistics Canada reports after tax income.[30] Household spending typically occurs after income has been taxed. As of 2020, the average after tax household income was $87,900 in the Local Study Area, $81,400 in the Regional Study Area, and $95,300 in Ontario, providing an indication that average household after tax income is greater than average household spending.[31]

Residents of the Local Study Area pair trips to Dryden and/or Thunder Bay to access services with shopping, including big box stores, that are not available in Ignace, Machin, Sioux Lookout, and the smaller communities in the Local Study Area (IAWG October 06, 2021). In particular, Local Study Area residents tend to go to Dryden to buy in bulk (e.g., toilet paper) as it is often cheaper to drive and buy it elsewhere (NWO Community and Baseline Studies Key Person Interview Program 2022). Residents of Ignace, Machin, and Sioux Lookout have commented that there is a lack of big box stores in the community and residents have to travel to Dryden to get access to bigger stores (NWO Community and Baseline Studies Key Person Interview Program 2022). Residents of Sioux Lookout and Ignace have noted that a lack of big box stores could prevent people from moving to the community (NWO Community and Baseline Studies Key Person Interview Program 2022). Ignace has experienced a loss in the availability of businesses

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[30] **Section 3.6.2** describes total income (before tax) for the Local Study Area, Regional Study Area, and Ontario.

[31] Average after tax household income is determined based on 2020 incomes and average household spending is based on 2021 household spending activity. Comparing 2020 to 2021 should be used with caution.

and other services over the past two decades, which has resulted in a reliance on businesses and services in other locations, such as Dryden (IAWG October 06, 2021).

Residents of Machin, Wabigoon Village, Melgund, and Dinorwic indicated they mainly shop in Dryden, but also go to Winnipeg and Thunder Bay for larger shopping trips (NWO Baseline Studies Key Person Interview Program 2022-2023). Residents of Ignace have commented that food costs at the local grocery store are more expensive than at bigger box stores in regional hubs or other larger centres (NWO Baseline Studies Key Person Interview Program 2022-2023; for further information see **Section 3.6.3.2**) Individuals who have to travel to Dryden to shop at bigger stores have commented that winter driving conditions can be terrible and dangerous, making it difficult, at times, to access the stores (NWO Baseline Studies Key Person Interview Program 2022-2023; Local Economy Workshop 2021). Residents in rural areas, including Wabigoon Village and Melgund, stated they are responsible for costs that people who are new to the area may not have accounted for, including costs for a water and wastewater system or having to buy and split wood for a wood burning stove (residents may heat homes through wood burning stove) and installation and maintenance costs for a water well, cistern, or septic system (there is no municipal water and wastewater service). Residents of Machin and Dinorwic commented that installing and maintaining a septic tank or field can be a large cost for homeowners in the community (NWO Baseline Studies Key Person Interview Program 2022-2023).

3.6.3.2 Food Basket

Food is an essential purchase for households. The CPI (**Section 3.6.3**) includes a basket of 8 major components, including food and non-alcoholic beverages. The CPI is published at the national level, provincial level, and for select major cities in Canada. The prices of food collected in the Local Study Area are to gain an understanding of food prices locally. The cost of food items is generally an indicator of cost of living and is closely scrutinized because of its strong correlation with social and economic effects (Statistics Canada 2021; 2023b). Health Canada and Statistics Canada collect a food basket of representative products to measure price changes in food and to monitor the cost and affordability of healthy eating (Health Canada n.d.; Statistics Canada 2021). A food basket may also be tracked to inform health and social policies and to educate on the relationship between poverty and food security (Health Canada n.d; AHS 2017).

Prices for a basket of food products were collected in January 2022, June 2022, and March 2023 in Ignace, Dryden, and Thunder Bay. The food prices were collected over three occurrences to understand seasonal variations of food and to understand the price of select products. Data in Thunder Bay was collected as a regional comparative. The data reflects the price of items in the food basket, but the food items were not purchased. Food prices were collected from the Ignace Shoprite Fine Foods (in-person), the Dryden Wal-Mart (online), and the Thunder Bay Wal-Mart (online).

The Statistics Canada CPI component food and non-alcoholic beverages consists of over 175 representative products that may change based on market availability (Statistics Canada 2023a). The food prices collected in the Local Study Area are based on the Statistics Canada representative products and include a list of 66 staple food items that were refined based on feedback from residents living in the Local Study Area (NWO Baseline Studies Key Person

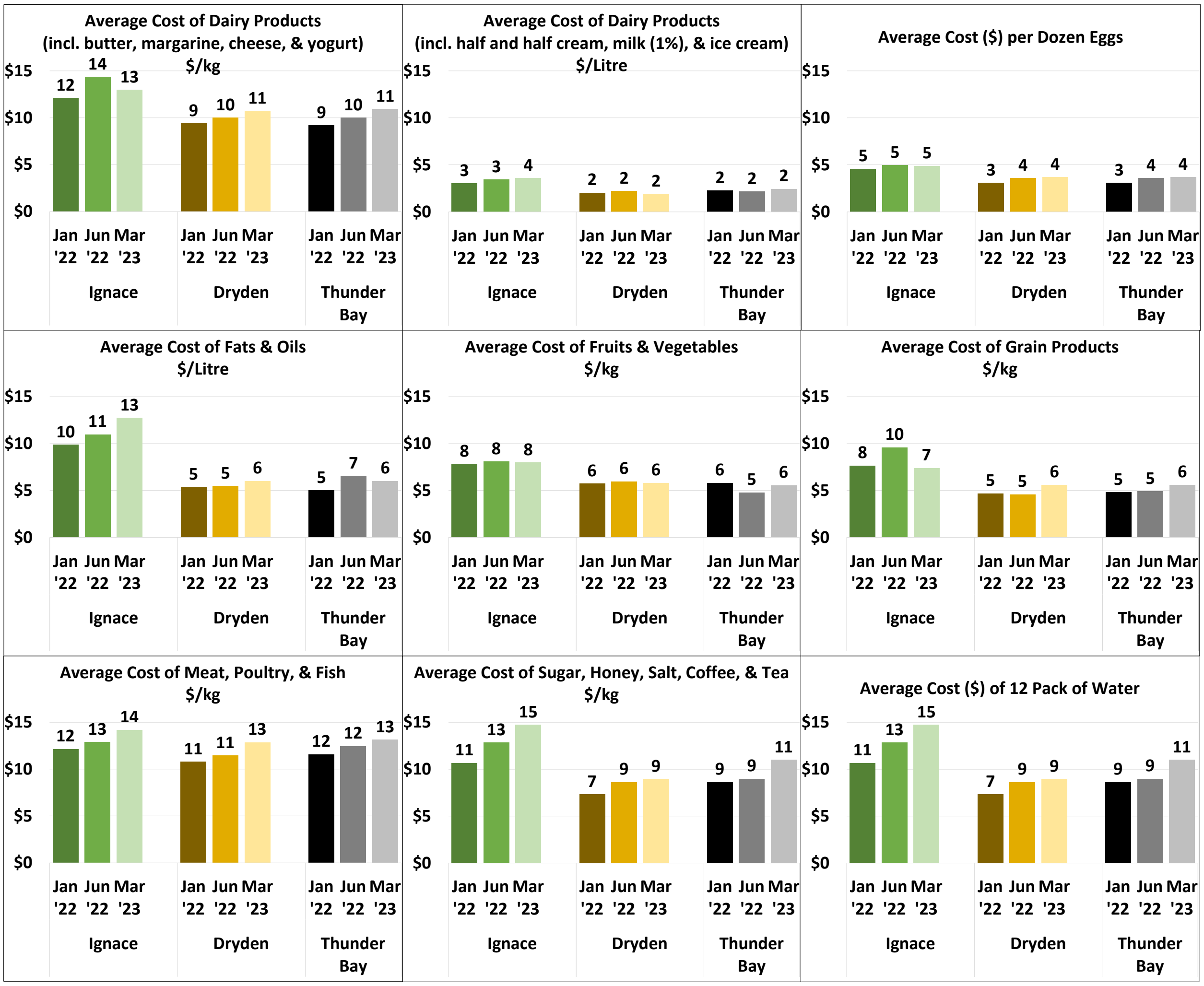
Interview Program 2022-2023). The food items were collected and grouped into the following categories:

- Baby food and infant formula;
- Dairy products;
- Eggs;
- Fats and oils;
- Fruits;
- Grain products
- Meat, poultry, and fish;
- Sugar, honey, and salt;
- Vegetables; and
- Water, coffee, and tea.

Unit prices (e.g., including $/kilogram [“kg”] and $/litre [“L”]) were collected and compared. The approach to the food basket survey is included in **Appendix 3A Detailed Methods** and provides details on consistency of products across multiple survey locations, approach on price points and purchasing amounts, consistency in unit sizes, and limitations.

Figure 3.6-14 provides the average food basket (based on a unit price) that was collected for Ignace, Dryden, and Thunder Bay in January 2022, June 2022, and March 2023. The data reflects the price of items in the food basket, but the food items were not purchased.

Figure 3.6-14: Average Cost (per Unit) of Food Products for Ignace, Dryden, and Thunder Bay, 2022 and 2023[1,2,3,4]



Source: Collected by InterGroup Consultants Ltd. in 2022 and 2023. See **Appendix 3B Supplemental Data**.

Notes:

1. The nine food categories are comprised of 66 food items, organized based on food group. Dairy products are divided into products per kilogram (including butter, margarine, cheddar cheese, mozzarella cheese, processed cheese slices, and yogurt) and per litre (including half and half cream, 1% milk, and ice cream), based on the product. For further information on the list of food items that comprise the food categories see **Appendix 3B Supplemental Data**.
2. Food prices in Ignace were collected on January 20, 2022, June 24, 2022, and March 23, 2023, from the Ignace Shoprite Fine Foods. Food prices were collected in-person.
3. Food prices in Dryden were collected on January 21, 2022, June 23, 2022, and March 23, 2023, from the Dryden Wal-Mart. Food prices were collected online.
4. Food prices in Thunder Bay were collected on January 21, 2022, June 24, 2022, and March 23, 2023, from the Thunder Bay Wal-Mart. Food prices were collected online.

Figure 3.6-14 indicates Ignace has a higher unit price across all food basket categories when compared to Dryden and Thunder Bay. Dryden and Thunder Bay had a larger variety of products to choose from compared to Ignace. For example, across all dates collected Ignace was out of stock of baby food and instant formula, and in March 2023 Ignace was out of stock of bananas, blueberries, pears, and strawberries. Dryden and Thunder Bay had these products in stock. Dryden and Thunder Bay food basket unit prices are comparable, particularly across dairy, eggs, fats and oils, grain products, and meat, poultry, and fish. Notable trends across the food basket categories include:

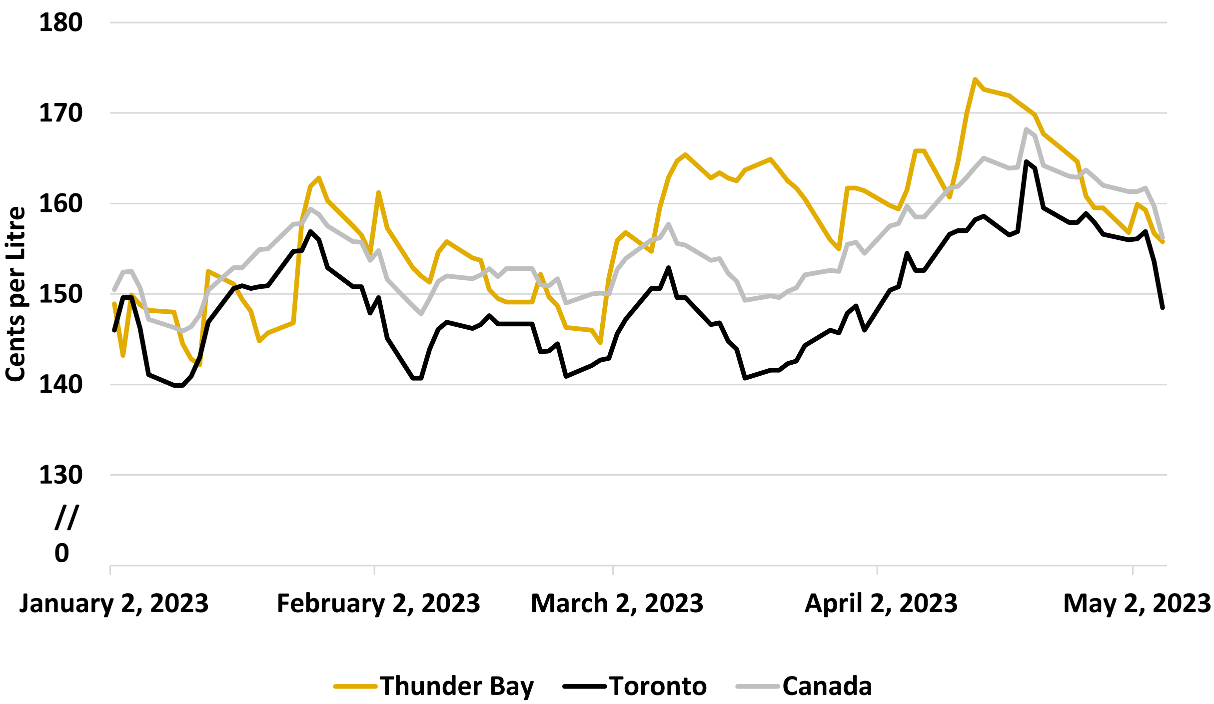
- The unit price (per kg) of grain products was approximately twice the amount in Ignace in June 2022 ($9.6/kg), when compared to Dryden ($4.6/kg) and Thunder Bay ($4.9/kg). By March 2023 the price of grain products in Ignace decreased 23% ($7.4/kg), while Dryden increased 22% ($5.6/kg) and Thunder Bay increased 14% ($5.6/kg).
- As of March 2023, the price of a dozen eggs in Ignace was 32% more ($4.9/dozen eggs) compared to Dryden and Thunder Bay ($3.7/dozen eggs).
- Fruits and vegetables saw minimal change from January 2022 to March 2023, including a change of 3% for Ignace ($7.8/kg to $8.0/kg), 2% for Dryden ($5.7/kg to $5.8/kg), and -3% for Thunder Bay ($5.8/kg to $5.6/kg).

The food basket unit prices collected in Ignace, Dryden, and Thunder Bay need to be considered in the context of the increase in food prices across Canada. Since late 2021, the price increases for food sold in grocery stores across Canada, measured on a year-over-year basis, have outpaced consumer inflation, growing faster than 10% in August, September, and October 2022 (Fradella 2022; Statistics Canada 2023a). Food prices have risen due to multiple factors that have put upward pressure on costs along the food supply chain. Since the onset of the COVID-19 pandemic, many factors have impacted prices at the grocery store, such as supply chain disruptions, labour shortages, changes in consumer purchasing patterns, poor weather in some agricultural growing regions, tariffs, higher input costs, and higher wages (Fradella 2022). Unlike past trends, many of these conditions and pressures have been occurring simultaneously or in a more pronounced manner, leading to broad-based increases in food prices (Fradella 2022; Statistics Canada 2023a).

3.6.3.3 Gasoline Prices

Natural Resources Canada tracks the daily average retail price for regular gasoline for major cities in Canada, including Thunder Bay. Natural Resources Canada and Statistics Canada do not track gasoline prices for the communities in the Local Study Area (NRCan 2023; Statistics Canada 2023b). **Figure 3.6-15** summarizes the daily average retail price of regular gasoline (cents/litre) for Thunder Bay, Toronto, and Ontario from January 2 to May 2, 2023.

Figure 3.6-15: Daily Average Retail Price of Regular Gasoline (cents/litre) for Thunder Bay, Toronto, and Ontario, January 2 to May 2, 2023[1]



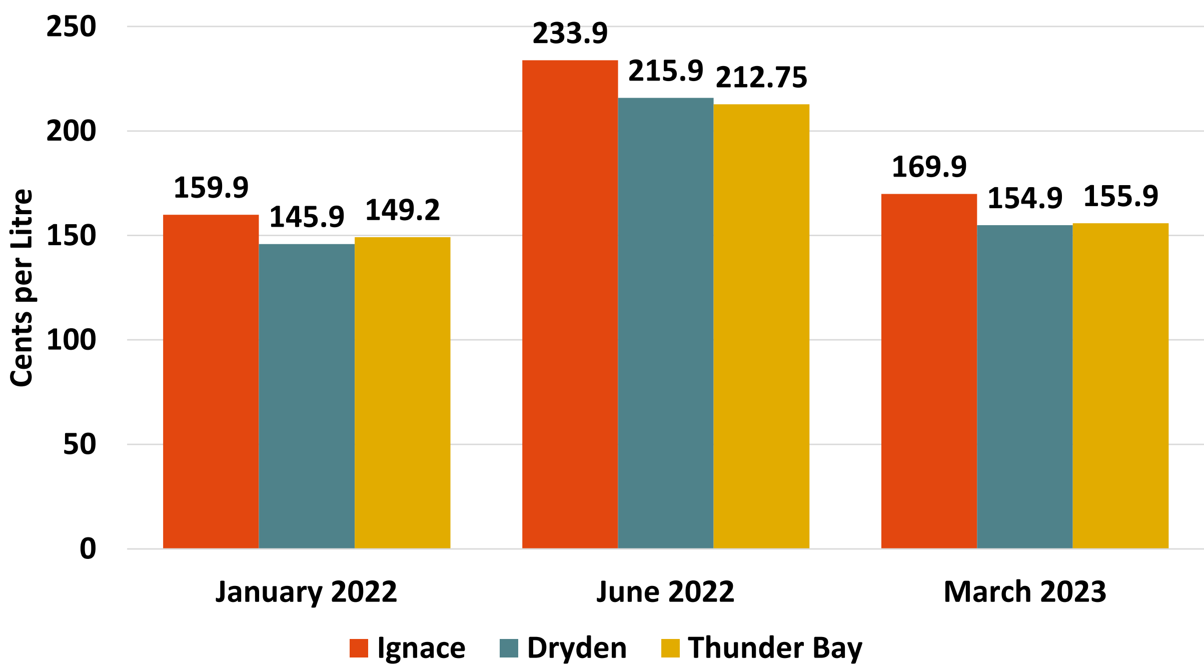
Source: NRCan 2023. See **Appendix 3B Supplemental Data**.

Note:
1. Prices include taxes.

Figure 3.6-15 indicates that, generally, Thunder Bay regular gasoline prices follow the trend of gasoline prices in Toronto and Canada. Further, gasoline prices in Thunder Bay are typically higher than gasoline prices in Toronto. From January 2, 2023, to May 2, 2023, the average price of gasoline in Thunder Bay was $157.2 cents/litre, which was similar to Canada as a whole (155.1 cents/litre) and 5.3% higher than Toronto (149.3 cents/litre).

As Natural Resources Canada and Statistics Canada do not collect gasoline prices for the Local Study Area communities, primary data collection was completed. The gasoline prices were collected three times throughout 2022 and 2023 (January 20, 2022, June 20, 2022, and March 23, 2023) to understand the variation in gasoline prices in Ignace, Dryden, and Thunder Bay (as a regional reference). A minimum of two gas stations were tracked in each location. **Figure 3.6-16** provides the average gasoline prices (regular unleaded) for Ignace, Dryden, and Thunder Bay for January 20, 2022, June 20, 2022, and March 23, 2023.

Figure 3.6-16: Average Price of Regular Gasoline (cents/litre) for Ignace, Dryden, and Thunder Bay, January 2022, June 2022, and March 2023[1,2,3]



Source: Collected by InterGroup Consultants Ltd. in 2022 and 2023. See **Appendix 3B Supplemental Data**.

Notes:

1. Ignace gasoline prices are the average of the gasoline prices collected at the Petro-Canada and Esso in Ignace.
2. Dryden gasoline prices are the average of the gasoline prices collected at the Petro-Canada and Husky in Dryden.
3. Thunder Bay gasoline prices are the average of the gasoline prices collected at a Petro-Canada and Esso in Thunder Bay.

Figure 3.6-16 summarizes that the gasoline prices in Ignace were higher than Dryden and Thunder Bay for all dates collected. Dryden and Thunder Bay gasoline prices were generally comparable. As of March 2023, the gasoline prices in Ignace (169.9 cents/litre) were 9.7% higher than Dryden (154.9 cents/litre) and 9.0% higher than Thunder Bay (155.9 cents/litre). Gasoline prices were also collected in Sioux Lookout and Machin during March 23, 2023.[32] The gasoline prices in Sioux Lookout (162.4 cents/litre) were lower than Ignace, but higher than Dryden and Thunder Bay. The gasoline prices in Machin (146.9 cents/litre) were the lowest among the communities collected.

[32] Machin gasoline prices were collected at PR Gas in Machin and Sioux Lookout gasoline prices were collected at the Esso and DJs Gas Bar in Sioux Lookout.

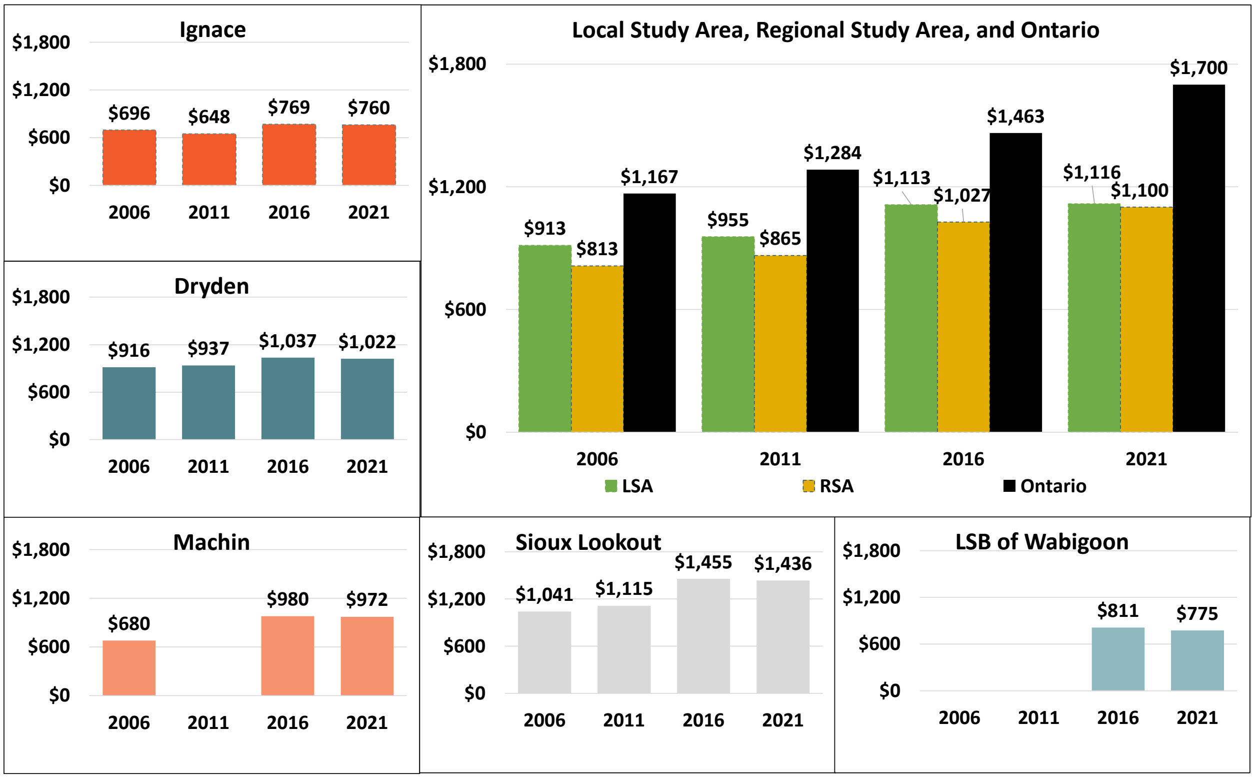
For Ignace, Dryden, and Thunder Bay, gasoline prices peaked in June 2022. Ignace, Dryden, and Thunder Bay all experienced a sharp increase in gasoline prices from January 20, 2022, to June 20, 2022 (from 42.6% to 48.0%) and a decline in gasoline prices from June 20, 2022, to March 23, 2023 (-26.7% to -28.3%). The primary driver of gasoline prices is the price of crude oil. High gasoline prices in the summer of 2022 were driven by a constrained crude oil supply after Russia was placed under sanctions for its invasion of Ukraine, as well as a general increase in demand during summer travel months along with the easing of COVID-19 pandemic restrictions (Al Mallees 2022).

3.6.3.4 Shelter Costs

3.6.3.4.1 Shelter Costs for Homeowners

Figure 3.6-17 provides the average monthly shelter costs for homeowners in the Local Study Area, Regional Study Area, and Ontario for 2006 to 2021. Shelter cost refers to the average monthly total of all shelter expenses paid for homeowners including mortgage payments, property taxes, condominium fees, electricity, heat, water, and other municipal services (Statistics Canada 2022a).

Figure 3.6-17: Average Monthly Shelter Costs for Homeowners, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, and 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities may be suppressed for confidentiality, including Machin (2011) and the LSB of Wabigoon (2006 and 2011).

Figure 3.6-17 shows that, as of 2021, the average monthly shelter costs for homeowners in the Local Study Area was $1,120, which was similar to the Regional Study Area ($1,100) and 34.1% lower than Ontario as a whole ($1,700) (Statistics Canada 2022a). The higher shelter costs in Ontario as a whole are largely a result of the higher cost of living in large urban centres (Government of Ontario 2020b). The Local Study Area, the Regional Study Area, and Ontario all experienced increases to the average monthly shelter costs for homeowners from 2006 to 2016. Homeowner shelter costs for the Local Study Area and the Regional Study Area were relatively flat from 2016 to 2021, while costs continued to increase at the provincial level (Statistics Canada 2007; 2017; 2022a):

- The Local Study Area saw an increase of 23.1% from 2006 ($910) to 2020 ($1,120);
- The Regional Study Area saw an increase of 37.0% from 2006 ($810) to 2021 ($1,100); and
- Ontario saw an increase of 45.3% from 2006 ($1,170) to 2021 ($1,700).

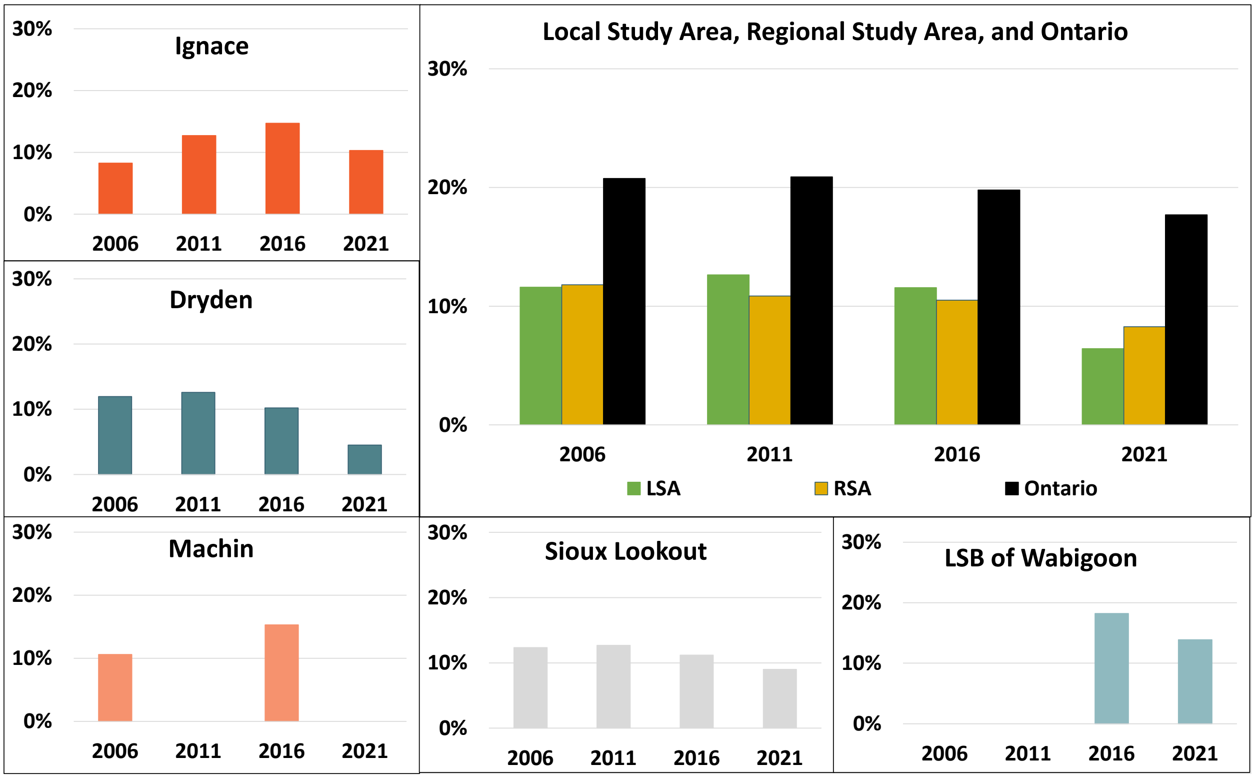
Among the Local Study Area communities, Sioux Lookout had the highest average monthly shelter costs for homeowners in 2021 ($1,440), followed by Dryden ($1,020), Machin ($970), the LSB of Wabigoon ($780), and Ignace ($760). All Local Study Area communities experienced an increase in average monthly shelter costs from 2006 to 2021, with prices consistent or decreasing slightly from 2016 to 2021. Notable trends include (Statistics Canada 2007; 2017; 2022a):

- Machin had the highest proportional increase to average monthly shelter costs for homeowners from 2006 to 2021 (increase of 42.9%);
- Ignace had the lowest proportional increase to average monthly shelter costs for homeowners from 2006 to 2021 (increase of 9.2%); and
- The LSB of Wabigoon had a slight decrease in average monthly shelter costs for homeowners from 2016 to 2021 (decrease of 4.4%).

In comparison to average monthly shelter costs for tenant dwellings (**Figure 3.6-19**), tenants in the Local Study Area ($980 in 2021), had lower average monthly shelter costs compared to the average monthly shelter costs for homeowners ($1,120 in 2021).

Figure 3.6-18 provides the percent of homeowners spending 30% or more of income on their shelter costs for the Local Study Area, Regional Study Area, and Ontario for 2005 to 2020. The shelter-cost-to-income ratio refers to the proportion of average household income which is spent on shelter costs (Statistics Canada 2022a).

Figure 3.6-18: Percent of Homeowners Spending 30% or More of Income on Shelter Costs, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, and 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities may be suppressed for confidentiality or data quality, including Machin (2011) and the LSB of Wabigoon (2006 and 2011).

Statistics Canada, the Canada Mortgage and Housing Corporation, and the Province of Ontario all define affordable housing. Affordable housing in Ontario is defined as shelter that does not exceed 30% of household income (Government of Ontario 2020b). The data in **Figure 3.6-18** indicates that, as of 2021, 6.4% of the Local Study Area, 8.3% of the Regional Study Area, and 17.7% of Ontario homeowners spend 30% or more of income on shelter costs. The Local Study Area, Regional Study Area, and Ontario have all seen a decrease in the percentage of homeowners spending 30% or more of income on shelter costs from 2006 to 2021 (Statistics Canada 2007; 2022a):

- The Local Study Area had a decrease from 11.6% in 2006 to 6.4% in 2021;
- The Regional Study Area had a decrease from 11.8% in 2006 to 8.3% in 2021; and
- Ontario had a decrease from 20.8% in 2006 to 17.7% in 2021. The higher shelter-costs-to-household income ratios for Ontario as a whole are largely a result of the higher cost of living in large urban centres (Government of Ontario 2020b).

Among Local Study Area communities, the LSB of Wabigoon (13.9%) had the highest proportion of homeowners spending 30% or more of income on shelter costs in 2021, followed by Ignace (10.3%), Sioux Lookout (9.0%), and Dryden (4.5%).[33] Notable trends from 2006 to 2021 include (Statistics Canada 2007; 2022a):

- A decrease to the shelter-costs-to-household income ratios for homeowners from 2006 to 2021 was seen in Dryden, Sioux Lookout, and the LSB of Wabigoon from 2016 to 2021;
- Ignace saw a slight increase from 8.2% in 2006 to 10.3% in 2021 and Machin saw an increase from 10.6% in 2006 to 15.3% in 2016.

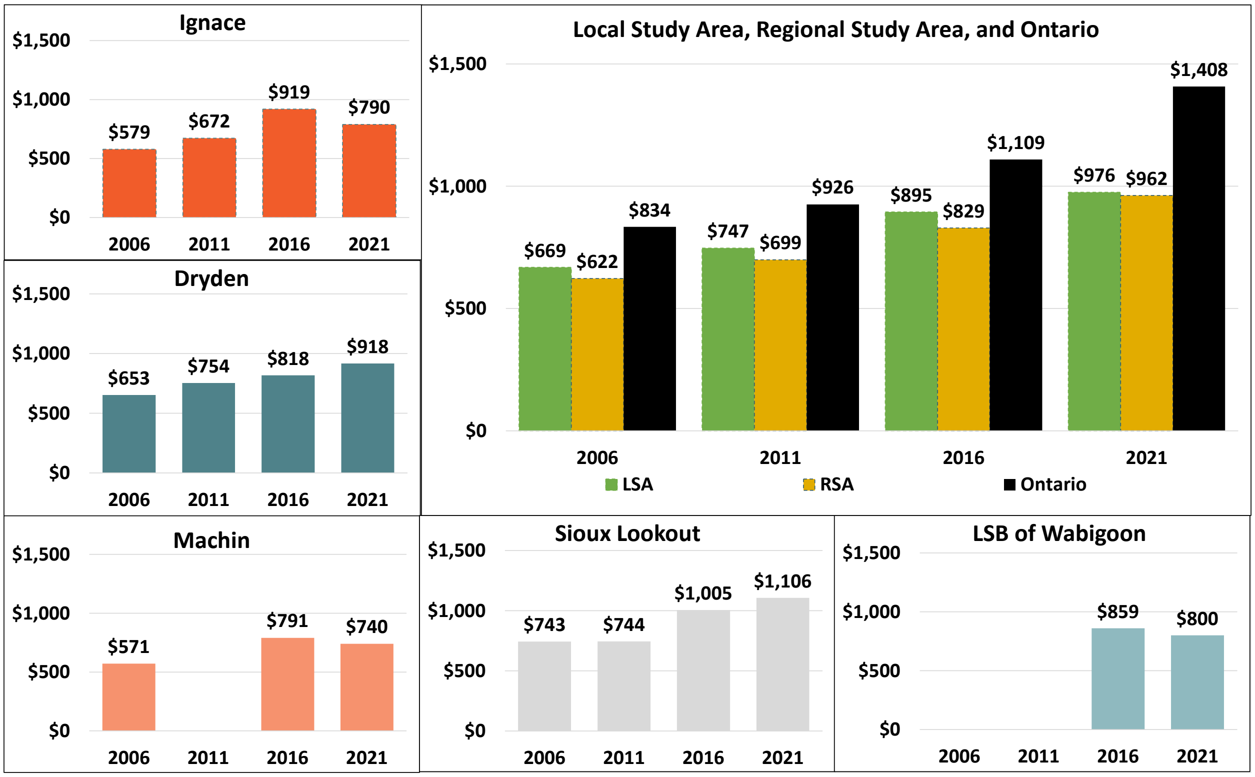
Overall, fewer homeowners in the Local Study Area spend 30% or more of their income on shelter costs compared to the Regional Study Area and Ontario as a whole in 2020. Households in the Local Study Area that do spend 30% or more of their income on housing may be due to an increase in the cost of living and lower household incomes (HSAL et al. 2022a; IAWG October 06, 2021; IAWG February 24, 2022). Interview participants noted smaller communities in the Local Study Area, such as Ignace and Machin, lack certain types of housing like condominiums and duplexes (NWO Baseline Studies Key Person Interview Program 2022-2023; HSAL et al. 2022a).

3.6.3.4.2 Shelter Costs for Tenant Households

Figure 3.6-19 provides the average monthly shelter costs for tenant households for the Local Study Area, Regional Study Area, and Ontario for 2006 to 2021. Shelter costs for tenant households include rent, electricity, heat, water, and other municipal services (Statistics Canada 2022a).

[33] Data for Machin in 2021 was suppressed for data quality.

Figure 3.6-19: Average Monthly Shelter Costs for Tenant Households, 2006 to 2021[1]



Source: Statistics Canada 2007, 2012, 2017, and 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities may be suppressed for confidentiality, including Machin (2011) and the LSB of Wabigoon (2006 and 2011).

Figure 3.6-19 shows that as of 2021, the average monthly shelter costs for tenant households for the Local Study Area was $980, which was similar to the Regional Study Area ($960) and 30.5% lower than Ontario as a whole ($1,410) (Statistics Canada 2022a). The higher shelter costs in Ontario as a whole are largely a result of the higher cost of living in large urban centres (Government of Ontario 2020b). The Local Study Area, the Regional Study Area, and Ontario all saw an increase to the average monthly shelter costs for tenant households from 2006 to 2021 (Statistics Canada 2007; 2022a):

- The Local Study Area saw an increase of 46.3% from 2006 ($670) to 2020 ($980);
- The Regional Study Area saw an increase of 54.8% from 2006 ($620) to 2021 ($960); and
- Ontario saw an increase of 69.9% from 2006 ($830) to 2021 ($1,410).

Among the Local Study Area communities, Sioux Lookout had the highest average monthly shelter costs for tenant households in 2021 ($1,110), followed by Dryden ($920), the LSB of Wabigoon ($800), Ignace ($790), and Machin ($740). The Local Study Area communities experienced an increase in average monthly shelter costs for tenant households from 2006 to 2021. From 2016 to 2021, Dryden and Sioux Lookout continued to increase, while Ignace, Machin, and the LSB of Wabigoon saw a decrease. Notable trends include (Statistics Canada 2007; 2022a):

- Sioux Lookout had the highest proportional increase to average monthly shelter costs for tenant households from 2006 to 2021 (increase of 48.9%); and
- Machin had the lowest proportional increase to average monthly shelter costs for tenant households from 2006 to 2021 (increase of 29.8%). Machin had a slight decrease in average monthly shelter costs from 2016 to 2021 (decrease of 6.4%). A decrease in average monthly shelter costs from 2016 to 2021 was also experienced in Ignace (14.0%) and the LSB of Wabigoon (6.9%).

The Kenora District Services Board conducted a market rent study in 2019, including information on Dryden, Sioux Lookout, and a Kenora rural average (Ignace, Ear Falls, Machin, Sioux Narrows-Nestor Falls, and Pickle Lake). Advertised monthly rent sourced through local ads or realtors was not consistent to be captured through primary data collection. **Table 3.6-3** describes the actual market rent in 2019 for Dryden, Sioux Lookout, and a Kenora rural average.

Table 3.6-3: Advertised Monthly Rent for Dryden, Sioux Lookout, and Kenora Rural Average, 2019

Type	2019 Average Market Rents ($/Month)				
	Bachelor	1 Bedroom	2 Bedroom	3 Bedroom	4+ Bedroom
Dryden	$537	$716	$941	$1,107	$1,192
Sioux Lookout	$736	$981	$1,044	$1,234	$1,301
Kenora Rural Avg[1]	$519	$696	$857	$943	$1,016

Source: Kenora District Services Board 2021.

Notes:

1. The Kenora rural average includes Ignace, Ear Falls, Machin, Sioux Narrows-Nestor Falls, and Pickle Lake.

Table 3.6-3 summarizes that Sioux Lookout has the highest average monthly rent, followed by Dryden, and the Kenora rural average. **Figure 3.6-19** similarly shows that Sioux Lookout has the highest monthly rent in the Local Study Area, followed by Dryden and the smaller communities in the Local Study Area (Ignace and Machin).

Residents of Ignace and Machin have mentioned that there is a lack of available rental units in the community, and the lack of supply may be a reason for the increase in rental costs in 2016 (NWO Baseline Studies Key Person Interview Program 2022-2023; IAWG February 24, 2022). As of 2020 the majority of occupied housing units in the Local Study Area are owner occupied (approximately 70%) with the remainder (approximately 30%) tenant occupied (HSAL et al. 2022b). The rental units are largely concentrated in Dryden and Sioux Lookout (approximately 92%), while Ignace accounts for a small proportion (approximately 4%) of rental units (HSAL et al. 2022b). The Kenora District Services Board 2023 Housing Strategy confirms there is a need and demand for affordable housing in Ignace, Dryden, Machin, and Sioux Lookout (KDSB 2023).

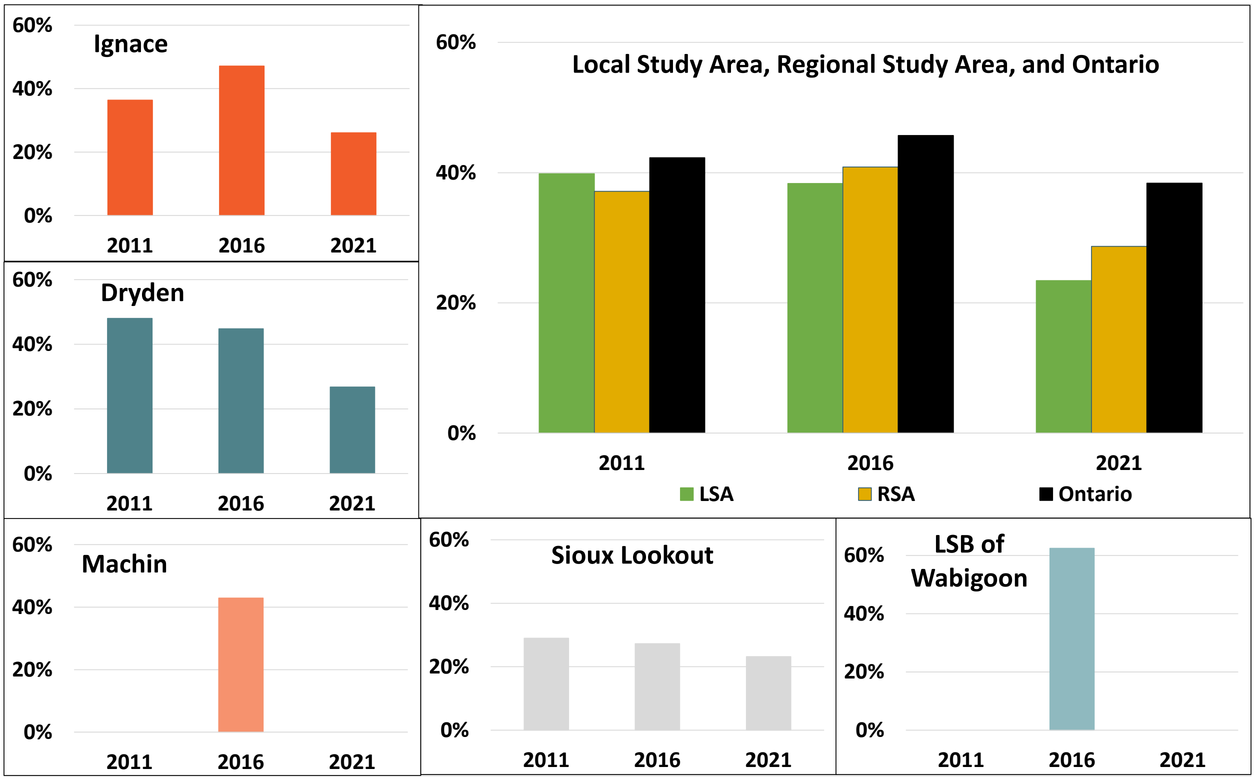
A resident of Melgund commented that there are no current rental properties available, while a resident of Wabigoon Village provided there is one fourplex apartment and a motel converted into rental units (NWO Baseline Studies Key Person Interview Program 2022-2023). A resident of Dinorwic commented that there are approximately 8 to 10 rental properties in the area, but, as of 2023, they have permanent tenants. A 3 bedroom, 1 bath house in Dinorwic recently rented for approximately $1,250 plus utilities (NWO Baseline Studies Key Person Interview Program 2022-2023).

In comparison to average monthly shelter costs for homeowners, tenants in the Local Study Area ($980 in 2021), had lower average monthly shelter costs compared to the average monthly shelter costs for homeowners ($1,120) (**Figure 3.6-17**).

Figure 3.6-20 provides the percent of tenant households spending 30% or more of income on their shelter costs for the Local Study Area, Regional Study Area, and Ontario for 2010 to 2020.[34] The shelter-cost-to-income ratio refers to the proportion of average household income which is spent on shelter costs (Statistics Canada 2022a).

[34] Statistics Canada data for the 2005 Census is not comparable to 2010, 2015, and 2020 Census and is not provided.

Figure 3.6-20: Percent of Tenant Households Spending 30% or More of Income on Shelter Costs, 2011 to 2021[1]



Source: Statistics Canada 2012, 2017, and 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities may be suppressed for confidentiality or data quality, including Machin and the LSB of Wabigoon for 2011 and 2021.

Statistics Canada, the Canada Mortgage and Housing Corporation, and the Province of Ontario all define affordable housing. Affordable housing in Ontario is defined as shelter that does not exceed 30% of household income (Government of Ontario 2020b). **Figure 3.6-20** indicates that, as of 2021, 23.4% of the Local Study Area, 28.7% of the Regional Study Area, and 38.4% of Ontario tenant households spend 30% or more of income on shelter costs. The Local Study Area, Regional Study Area, and Ontario have seen a decrease in the percentage of tenant households spending 30% or more of income on shelter costs from 2010 to 2020. From 2010 to 2015, the Regional Study Area and Ontario both saw a slight increase from 2010 to 2015 where the Local Study Area continued to see a decrease (Statistics Canada 2012; 2022a):

- The Local Study Area had a decrease from 39.8% in 2010 to 23.4% in 2020;
- The Regional Study Area had a decrease from 37.1% in 2010 to 28.7% in 2020; and
- Ontario had a decrease from 42.3% in 2010 to 38.4% in 2020. The higher shelter-costs-to-household income ratios for Ontario as a whole are largely a result of the higher cost of living in large urban centres (Government of Ontario 2020b).

Among Local Study Area communities, in 2021, Ignace (26.1%), Dryden (26.8%), and Sioux Lookout (23.2%) had a similar proportion of tenant households that spend 30% or more of income of shelter costs.[35] A decrease to the tenant household shelter-costs-to-household income ratios from 2010 to 2020 was seen for Ignace, Dryden, and Sioux Lookout.

Overall, fewer tenant households in the Local Study Area spend 30% or more of their income on shelter costs compared to the Regional Study Area and Ontario as a whole in 2020. Households that do spend 30% or more of their income on housing may be due to an increase in the cost of living and lower household incomes, and a lack of affordable housing (HSAL et al. 2022a; IAWG October 06, 2021; IAWG February 24, 2022). Interview participants noted smaller communities in the Local Study Area, such as Ignace and Machin, lack certain types of housing like apartments and subsidized housing (NWO Baseline Studies Key Person Interview Program 2022-2023; HSAL et al. 2022a). For example, in Ignace the scarcity of vacant rental units has led to an increase in rental prices, exacerbating this issue (HSAL et al. 2022a).

Individuals in the Local Study Area may also experience homelessness or are precariously housed. An individual without a permanent address or residence, appropriate housing, or the immediate prospect, means, and ability to acquire it are considered homeless (KDSB 2021). An individual or family whose current housing situation does not meet public health and safety standards are considered to be precariously housed (Gaetz et al 2012). Within the Local Study Area those who may potentially be homeless or precariously housed include seniors, youth and children, and Indigenous peoples (GBA+ Workshop 2023). Gender differences may also occur among these populations. A workshop on vulnerable populations in the Local Study Area identified that, when it comes to a homeowner with a rental property, a renter may have difficulties in obtaining housing due to a criminal record, racism, drug and alcohol use, and stereotypes (GBA+ Workshop 2023). Inflation has also increased homelessness in the Local Study Area and families are finding that children may stay home longer (until the age of 20 to 25) because of cost of living (GBA+ Workshop 2023). Further information on housing is provided in **Section 2.4.7**.

[35] Data for Machin and the LSB of Wabigoon in 2021 was suppressed for data quality.

3.6.3.5 Utility Costs

Utility costs describe the average residential monthly electricity, natural gas, water and wastewater, cellphone, and internet bills.

3.6.3.5.1 Electricity

Electricity service providers in the Local Study Area and Thunder Bay, as a regional comparative, include:

- **Hydro One Networks:** the electricity provider for Ignace, Dryden, Machin, Wabigoon Village, Melgund, and Dinorwic (Township of Ignace 2018; City of Dryden 2017; NWO Baseline Studies Key Person Interview Program 2022-2023).
- **Sioux Lookout Hydro:** the electricity provider for Sioux Lookout (Sioux Lookout Hydro 2023).
- **Synergy North:** the electricity provider for Thunder Bay (Thunder Bay 2023).

Hydro One Networks residential customers include those in the urban high density zone,[36] medium density zone,[37] and low density zone[38] (Hydro One Networks 2023a). Rates are different for these residential electricity zones. Ignace, Dryden, Machin, and Wabigoon Village pay the medium density rate, while residents of Melgund (Dyment and Borups Corners) and Dinorwic pay the low density rate (Hydro One Networks 2023a; NWO Baseline Studies Key Person Interview Program 2022-2023). No communities in the Local Study Area are included under the urban high density rate. Hydro One Networks also includes residential seasonal service, which is defined as any residential service not meeting the residential year-round criteria, and it includes dwellings such as cottages, chalets, and camps (Hydro One Networks 2023a).

Sioux Lookout Hydro residential customers all pay the residential service rate (Sioux Lookout Hydro 2023). Synergy North residential customers in Thunder Bay pay the Synergy North, Thunder Bay Rate Zone (Thunder Bay 2023).

The Ontario Energy Board (2023b) provides an average monthly consumption when calculating bill comparisons for residential consumers in Ontario of 700 kWh, noting that individual usage may vary. These customers are assumed to have natural gas service for home heating and do not use electricity for home heating. For a customer who uses electricity for home heating, an additional 1,500 kWh/month of electricity is assumed for calculating residential monthly bills (total monthly consumption of 2,200 kWh) (OEB 2023b; Artuso 2016). **Section 3.6.3.5.2** describes that Ignace, Dryden, Machin, and Thunder Bay have natural gas service and 700

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[36] Urban high density zone applies to residential customers in year-round residences in an urban high-density zone, which is an area that contains 3,000 or more customers, with at least 60 customers for every kilometre of power line used to supply energy in the zone.

[37] Medium- density zone applies to residential customers in year-round residences in a medium-density zone, which is an area that contains 100 or more customers, with at least 15 customers for every kilometre of power line used to supply energy in the zone.

[38] Low density zone applies to residential customers in year-round residences in a low-density zone which is an area not covered by urban high or medium zones. Customers in this rate class receive rural or remote rate protection.

kWh/month is used to calculate an average residential electricity bill. Sioux Lookout, Wabigoon Village, Melgund, and Dinorwic do not have natural gas service and 2,200 kWh/month is used. The source of home heating in Sioux Lookout, Wabigoon Village, Melgund, and Dinorwic is primarily electricity (electric space heaters and furnaces), and residents may also use fuel oil, propane, and wood burning stoves to heat their homes (Sioux Lookout 2016; NWO Baseline Studies Key Person Interview Program 2022-2023).

Table 3.6-4 provides the average monthly electricity bill for a residential customer for the Local Study Area communities and Thunder Bay.

Table 3.6-4: Average Residential Monthly Electricity Bill After Taxes for the Local Study Area and Thunder Bay, 2023

Provider	Hydro One Medium Density				Hydro One Low Density		Sioux Lookout Hydro	Synergy North
Applicable community	Ignace	Dryden	Machin	Wabigoon Village	Melgund	Dinorwic	Sioux Lookout	Thunder Bay
Natural gas or electric heat[1]	NG	NG	NG	Electric	Electric	Electric	Electric	NG
Assumed monthly kWh	700 kWh	700 kWh	700 kWh	2,200 kWh	2,200 kWh	2,200 kWh	2,200 kWh	700 kWh
Total electricity Charge[2,3]	$125.39	$125.39	$125.39	$328.26	$336.47	$336.47	$319.67	$109.69
HST[4]	$16.30	$16.30	$16.30	$42.67	$43.74	$43.74	$41.56	$14.26
Ontario Electricity Rebate[5]	-$14.67	-$14.67	-$14.67	-$38.41	-$39.37	-$39.37	-$37.40	-$12.83
Total monthly bill	$127.02	$127.02	$127.02	$332.52	$340.84	$340.84	$323.83	$111.12

Source: OEB 2023c; Hydro One Networks 2023b; Sioux Lookout Hydro 2023; Thunder Bay 2023. See **Appendix 3A Detailed Methods**.

Notes:

1. NG refers to 'natural gas.'
2. Total electricity charge is inclusive of the electricity charge, delivery component, and regulatory component (OEB 2023b). The electricity component includes a time-of-use pricing option and a tiered pricing option. Hydro One Network Inc., Sioux Lookout Hydro, and Synergy North residential electricity customers have the choice to participate in either option. The total electricity charge uses the tiered pricing option.
3. Assumes a monthly electricity consumption of 700 kWh for customers with natural gas service for home heating. Assumes a monthly electricity consumption of 2,200 kWh/month for customers that do not have natural gas service and electricity is used to heat the home.
4. Harmonized sales tax is 13% of the total electricity charge.
5. All customers in Ontario are eligible for the Ontario Electricity Rebate (OEB 2023b). The Ontario Electricity Rebate provides an 11.7% reduction on the bill before Harmonized Sales Tax ("HST") is applied. HST is calculated prior to the rebate.

Table 3.6-4 summarizes that the average electricity bill varies depending on whether a household has natural gas service for home heating.

- For the communities with natural gas service, Ignace, Dryden, and Machin average monthly residential bill ($127/month) is approximately 14% higher than Thunder Bay ($111/month).
- For the communities that do not have natural gas service, electricity bills were similar. Residents of Melgund and Dinorwic had the highest monthly bill ($341/month), which was 3% higher than Wabigoon Village ($332/month) and 5% higher than Sioux Lookout ($324/month).

It is noted that the estimated monthly bill is for informational purposes only, as electricity consumption patterns for families may change over the course of the year. **Appendix 3B Supplemental Data** provides additional information on bill comparisons and rates.

3.6.3.5.2 Natural Gas

Natural gas is a common energy source to heat homes in Canada. Of the total energy consumed by Canadian households in 2019, natural gas accounted for 53.4%, electricity for 43.9%, and heating oil for 2.7% (Statistics Canada 2022a).

In the Local Study Area, Ignace, Dryden, Machin, and Thunder Bay, as a regional comparative, have natural gas service for home heating. Service is provided by Union Gas (Enbridge) through the Union North West Rate Zone (OEB 2023a; NWO Baseline Studies Key Person Interview Program 2022-2023). The average family in Ontario consumes approximately 183.33 m^3 of natural gas per month (2,200 m^3 per year) (Canada Energy Regulator 2022). Union Gas assumes an annual residential natural gas consumption of 2,200 m^3 per year when displaying estimated residential bills (Union Gas 2023).

- The average residential monthly natural gas bill for Ignace, Dryden, Machin, and Thunder Bay is $103.19/month before taxes (Union Gas 2023).[39] Including harmonized sales tax ("HST") the average natural gas bill is $116.61/month. Interviews with residents in the Local Study Area confirmed that natural gas bills are similar to the average residential monthly bill calculated (NWO Baseline Studies Key Person Interview Program 2022-2023).

It is noted that the estimated monthly bill is for informational purposes only, as gas consumption patterns for families change over the course of the year. For example, if a household's heat source is natural gas, the monthly natural gas bill will increase in the winter and change seasonally.

Sioux Lookout, Wabigoon Village, Melgund, and Dinorwic do not have natural gas service for home heating. The source of home heating in Sioux Lookout is primarily electricity (electric space heaters and furnaces), as well as fuel oil and propane (Sioux Lookout 2016; NWO Baseline Studies Key Person Interview Program 2022-2023). Residents of Sioux Lookout may also have a wood pellet stove as a secondary source of heat (Sioux Lookout 2016; NWO Baseline Studies

[39] The Union Gas (Enbridge) rates, effective April 1, 2023, include a monthly customer charge, delivery charge, gas commodity charge, transportation charge, facility storage charge, and federal carbon charge. See **Appendix 3A Detailed Methods**.

Key Person Interview Program). Residents of Wabigoon Village, Melgund, and Dinorwic provided that homes are primarily heated with electricity and some homes may also be heated with propane or wood burning stove (NWO Baseline Studies Key Person Interview Program 2022-2023). **Section 3.6.3.5.1** provides information on average monthly electricity bills for the Local Study Area communities that rely on electricity to heat homes.

Appendix 3B Supplemental Data provides additional information on the bill comparisons and rates.

3.6.3.5.3 Water and Wastewater

Municipal water and wastewater service is provided to residents of Ignace, Dryden, Sioux Lookout, and Thunder Bay (Township of Ignace 2022; City of Dryden 2021; Municipality of Sioux Lookout 2021; Thunder Bay 2023). Thunder Bay is included as a regional comparison. Residents of Machin have municipal water service and wastewater service is the responsibility of the homeowner (NWO Baseline Studies Key Person Interview Program 2022-2023). Residents of Machin typically have a septic tank and field for wastewater (NWO Baseline Studies Key Person Interview Program 2022-2023).

Water and wastewater service for residents of Wabigoon Village, Melgund, and Dinorwic are the responsibility of the homeowner (NWO Baseline Studies Key Person Interview Program 2022-2023). Service can come in the form of cisterns and water wells for water service and septic tank and field for wastewater service (NWO Baseline Studies Key Person Interview Program 2022-2023).

The average monthly household water use in Sioux Lookout is 14 m^3 (Municipality of Sioux Lookout 2021). Sioux Lookout's 14 m^3 average monthly household consumption is used as the basis for the average residential monthly water and wastewater consumption for bill comparisons for Ignace, Dryden, Sioux Lookout, and Thunder Bay. Dryden average residential monthly water and waster consumption is approximately 15 m^3 and in line with the average consumption of Sioux Lookout (City of Dryden 2021). Residents of Machin are billed a flat water rate regardless of water usage ($118.27/month) and monthly maintenance costs for a septic system are the responsibility of the homeowner (approximately $25/month) (NWO Baseline Studies Key Person Interview Program 2022-2023). **Table 3.6-5** provides a breakdown of a monthly water and wastewater bill for the average metered residential customer using current rates.

Table 3.6-5: Ignace, Dryden, Sioux Lookout, and Thunder Bay Average Monthly Residential Water and Wastewater Bill After Taxes, Current Rates

	Ignace[1]	Dryden[1]	Machin[2]	Sioux Lookout[1]	Thunder Bay[1]
Total monthly bill, including HST	$146.62	$75.22	$161.90	$137.09	$113.08

Source: Township of Ignace 2022; City of Dryden 2021; Municipality of Sioux Lookout 2021; Thunder Bay 2022. See **Appendix 3A Detailed Methods**.

Notes:

1. Total monthly bill includes a monthly fixed charge and metered rate ($/m3) based on water consumption. Monthly bill assumes average residential water consumption of 14 m^3/month.
2. Residents of Machin are billed a flat water rate and do not have a metered rate. Wastewater service is the responsibility of the homeowner and maintenance costs typically include emptying/pumping the septic tank.

Table 3.6-5 summarizes that the average monthly household water and wastewater bill, including HST, is highest in Machin ($161.90/month), followed by Ignace ($147/month), Sioux Lookout ($137/month), Thunder Bay ($113/month), and Dryden ($75/month). Dryden has the lowest average monthly household water and wastewater bill and is half of the average monthly household water and wastewater bill in Machin, Ignace, and Sioux Lookout. It is noted that the estimated monthly bill is for informational purposes only as water consumption patterns for families may change over the course of the year. **Appendix 3B Supplemental Data** provides additional information on the bill comparisons and rates.

Water and wastewater service for residents of Wabigoon Village, Melgund, and Dinorwic are the responsibility of the homeowner (NWO Baseline Studies Key Person Interview Program 2022-2023). Machin has municipal water service, and wastewater service is the responsibility of the homeowner (NWO Baseline Studies Key Person Interview Program 2022-2023). The installation and maintenance costs for water service and a septic system include:

- **Water service installation:** A resident of Melgund indicated that a well for water service can cost $15,000 to $20,000 to install (NWO Baseline Studies Key Person Interview Program 2022-2023; Summers Drilling 2023). The cost to purchase and install a new cistern is similar in price, approximately $15,000 (Summers Drilling 2023). A water well or cistern can last approximately 20 years, or longer with regular maintenance before replacement is needed (Summers Drilling 2023).
- **Septic system installation:** The installation of a new septic system, including tank and drain field, ranges in price and most residential systems cost approximately $10,000 to $25,000 to install (Allto 2023; Canadian Septic 2017). A septic system can last approximately 20 years, or longer with regular maintenance (Allto 2023; Canadian Septic 2017).
- **Water service maintenance:** Maintenance costs for a water well and cistern include (Summers Drilling 2023):

- A water well requires a new water pump and pressure tank of approximately $3,000 every 20 years[40] (or approximately $13/month) and chlorination once every two years at approximately $350 (or approximately $15/month). Maintenance costs for a water well averaged are approximately $30/month.
- A cistern requires a new water pump and pressure tank of approximately $3,000 every 20 years (or $13/month), a tank cleaning once every two years at approximately $650 (or $30/month), and water delivery at a cost of $1,200/year to $3,600/year for an average family of four (or $100/month to $300/month). Maintenance costs for a cistern averaged are approximately $145/month to $345/month.
- Overall, the averaged maintenance costs for a water well or cistern range from as low as $30/month to as high as $345/month.

- **Septic system maintenance:** Regular maintenance costs include septic tank pumping and costs depend on the size of the tank. The Ontario average cost for septic tank pumping is $575 and a tank typically needs to be pumped every two to five years (Allto 2023; Canadian Septic 2017). This is similar to costs described by residents of Machin who pay $300 annually (or $25/month) to empty/pump their septic tank (NWO Baseline Studies Key Person Interview Program 2022-2023).

In summary, the monthly costs for a homeowner in Wabigoon Village, Melgund, and Dinorwic to maintain their water system and septic system vary and range from $55/month to $370/month. Monthly costs for Machin are described in **Table 3.6-5**. Maintenance costs are dependent on frequency of use, age of the infrastructure, and whether the homeowner can maintain aspects of the water and septic systems themselves or require services from a contractor (NWO Baseline Studies Key Person Interview Program 2022-2023). Cost to install a water or septic system depends on soil type, ground water level, number of bedrooms, the type of system, installer, proximity to supplies, and geography (Allto 2023; Canadian Septic 2017; Summers Drilling 2023).

3.6.3.5.4 Cellular Phone

Cellular phone service for all Local Study Area communities and Thunder Bay, as a regional comparison, is provided by TBayTel, Bell Canada, Telus, Rogers Virgin Mobile, Fido, and Koodoo (TBayTel 2023a; Bell Canada 2023a; Telus 2023; Rogers 2023; Virgin 2023; Fido 2023; and Koodoo 2023). The base 4G smartphone plans with data for each cellular provider, not including the price of a smartphone, promotions, credits, bundles, or applicable taxes, begin at:

- Telus: $70/month, including 25 gigabytes (“GB”) of data and unlimited call and text in Canada (Telus 2023);
- Bell Canada: $65/month, including 15 GB of data and unlimited calling and text in Canada (Bell Canada 2023a);

[40] A water pump’s life expectancy is dependent on frequency of use, whether the size and power of the pump is appropriate for the residence, the quality of the pump, maintenance, and other factors (NWO Baseline Studies Key Person Interview Program 2022-2023, Summers Drilling 2023).

- Fido: $55/month, including 8 GB of data and unlimited calling and text in Canada (Fido 2023);
- Rogers: $55/month, including 5 GB of data and unlimited calling and text in Canada (Rogers 2023);
- TBayTel: $45/month, including 2 GB of data and unlimited calling and text in Canada (TBayTel 2023a);
- Virgin: $37.50, including 2 GB of data and unlimited calling and text in Canada (Virgin 2023); and
- Koodoo: $37.50, including 2 GB of data and unlimited calling and text in Canada (Koodoo 2023).

The monthly base price of cellular phone plans by provider varies depending on the amount of data included. A cellular phone providers monthly plans start at the base price, as described above, and increase in price to unlimited data plans. IAWG members provided that cellular phone service may not be as reliable in rural areas within the Local Study Area (IAWG December 2, 2021; IAWG May 05, 2022).

3.6.3.5.5 Internet

Internet providers in the Local Study Area and Thunder Bay, as a regional comparison, include Starlink, Xplornet, Bell Canada, Shaw, TBayTel, Celerity Telecom, and the Dryden Municipal Telephone Service (owned by Bell Canada) and differ for each community:

- Starlink provides service to all Local Study Area communities and Thunder Bay (Starlink 2023);
- Xplornet provides service to all Local Study Area communities and Thunder Bay (Xplornet 2023);
- Bell Canada provides service to Ignace, Dryden, Machin, Sioux Lookout, and Thunder Bay (Township of Ignace 2018; NWO Baseline Studies Key Person Interview Program 2022-2023; City of Dryden 2017; Municipality of Sioux Lookout 2021; Thunder Bay 2023);
- Shaw provides service to Dryden, Sioux Lookout, and Thunder Bay (City of Dryden 2017; Municipality of Sioux Lookout 2021; Thunder Bay 2023);
- TBayTel provides service to Dryden and Thunder Bay (City of Dryden 2017; Thunder Bay 2023);
- Celerity Telecom provides service to Dryden and Ignace (Celerity Telecom 2023);
- Dryden Municipal Telephone Service (owned by Bell Canada) provides service to Dryden (City of Dryden 2017).

The smaller communities in the Local Study Area (Ignace, Machin, Wabigoon Village, Melgund, and Dinorwic) do not have the selection of internet providers that the larger communities do (Dryden and Sioux Lookout). The base residential high-speed internet plans, not including installation fees, credits, promotions, add-ons, bundles, or applicable taxes, start at:

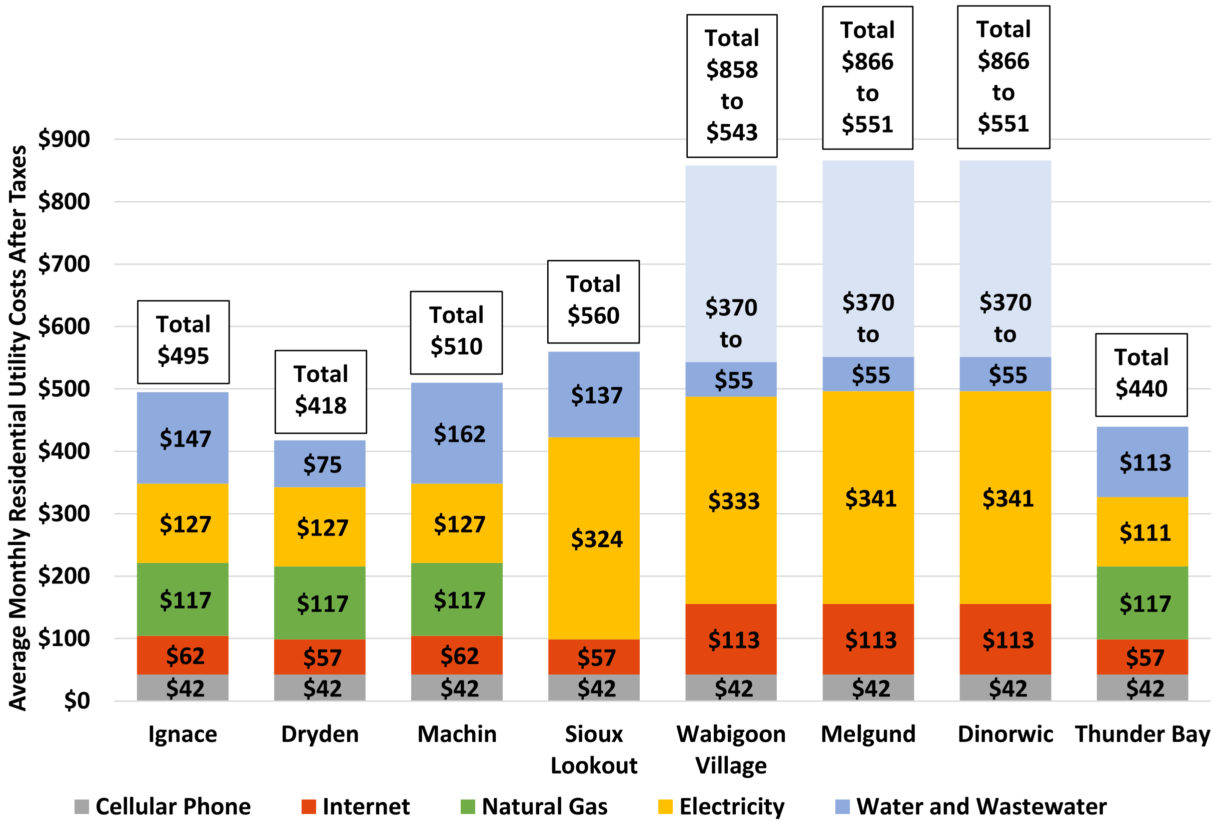
- Starlink: $140/month, including 50 to 200 megabyte per second (“mbps”) download speed and 1 terabyte of monthly download data (Starlink 2023);
- Xplornet: $99.99/month, including 25 mbps download speed and 250 GB of monthly download data (Xplornet 2023);
- Celerity Telecom: $90/month, including 15 mbps download speed and unlimited data (Celerity Telecom 2023);
- Dryden Municipal Telephone Service (owned by Bell Canada): $79.95/month, including 10 mbps download speed and unlimited monthly download data (DMTS 2023);
- TBayTel: $69/month, including 50 mbps download speed and unlimited monthly download data (TBayTel 2023b);
- Bell Canada: $55/month, including 10 mbps download speed and 100 GB of monthly download data (Bell Canada 2023b); and
- Shaw: $50/month, including 10 mbps download speed and 150 GB of monthly download data (Shaw 2023).

The monthly base price of internet plans by provider varies depending on the amount of data included and the internet download speeds. An internet providers monthly plans start at the base price, as described above, and increase in price based on the offering (i.e., higher download speeds and data). IAWG members provided that internet service may be slower or less reliable in rural areas within the Local Study Area (IAWG December 2, 2021; IAWG May 05, 2022). The Kenora District Services Board offers a rebate program to permanent residents within the Kenora District who have purchased or pre-ordered a Starlink kit, including a rebate for households that amounts to 75% to 90% of the total Starlink kit cost (Lappage 2023). The deadline to apply for a Starlink rebate ends November 2023 or until project funding has been fully allocated (Lappage 2023). The Governments of Canada and Ontario are taking steps to bring high speed fibre optic internet throughout all of Northwestern Ontario, including rural communities. The joint federal-provincial investment of over $148 million would bring high speed fibre optic internet throughout Northwestern Ontario by 2025 (Government of Ontario 2021).

3.6.3.5.6 Summary of Utility Costs

Figure 3.6-21 summarizes the average monthly residential utility costs including HST for the Local Study Area communities and Thunder Bay, as of 2023. Utility costs include electricity, natural gas, water and wastewater, cellphone, and internet.

Figure 3.6-21: Summary of Average Monthly Residential Utility Costs After Taxes for the Local Study Area Communities and Thunder Bay, 2023[1,2,3,4,5,6]



Source: OEB 2023c; Hydro One Networks 2023b; Sioux Lookout Hydro 2023; Thunder Bay 2023; Union Gas 2023; Township of Ignace 2022; City of Dryden 2021; Municipality of Sioux Lookout 2021; Thunder Bay 2022; Virgin 2023; Koodoo 2023; Bell Canada 2023b; Shaw 2023; NWO Baseline Studies Key Person Interview Program 2022-2023.

Notes:

1. Total is inclusive of HST. Monthly electricity bill is inclusive of the Ontario Electricity Rebate, which provides an 11.7% reduction on the bill before HST is applied. HST is calculated prior to the rebate.
2. Electricity monthly bill assumes average monthly consumption for residential consumers with natural gas service for home heating in Ontario of 700 kWh. For a customer who uses electricity for home heating, an additional 1,500 kWh/month of electricity is assumed (total monthly consumption of 2,200 kWh). Ignace, Machin, Dryden, and Thunder Bay have natural gas service and 700 kWh/month is used to calculate an average residential electricity bill. Sioux Lookout, Wabigoon Village, Melgund, and Dinorwic do not have natural gas service and 2,200 kWh/month is used.
3. Natural gas monthly bill assumes an average family in Ontario consumes approximately 183.33m^3 of natural gas per month. Applicable to communities with natural gas service, including Ignace, Machin Dryden, and Thunder Bay.
4. Water and wastewater monthly bill assume an average monthly consumption of 14m^3 for Ignace, Dryden, Sioux Lookout, and Thunder Bay. Residents of Machin are billed a flat water rate regardless of

water usage ($118.27/month before taxes) and maintenance costs for a septic system are the responsibility of the homeowner (approximately $25/month before taxes). For Wabigoon Village, Melgund, and Dinorwic maintenance costs for water and septic service are the responsibility of the homeowner and range from $55/month to $370/month.

5. Internet monthly bill includes the lowest priced plan offered for the community. Ignace and Machin lowest priced plan includes Bell Canada. Dryden, Sioux Lookout, and Thunder Bay lowest priced plan includes Shaw. Wabigoon Village, Melgund, and Dinorwic lowest price plan is Xplorenet.
6. Cellphone monthly bill includes the lowest priced plan offered in the Local Study Area, which is Virgin and Koodoo.

Figure 3.6-21 summarizes that residents of Wabigoon Village ($543 to $858/month), Melgund ($551 to $866/month), and Dinorwic ($551 to $866/month) typically have the highest average monthly utility costs followed by Sioux Lookout ($560/month), Machin ($510/month), Ignace ($495/month), Thunder Bay ($440/month), and Dryden ($418/month).[41] Average monthly utility costs in rural communities may be higher as they do not have the selection, option of services, and access to services that larger communities have. For example, monthly internet bills are higher in Wabigoon Village, Melgund, and Dinorwic in comparison to Ignace, Dryden, Machin, and Sioux Lookout as they do not have the access to and selection of internet providers. IAWG members provided that internet service may be slower or less reliable in rural areas within the Local Study Area (IAWG December 2, 2021; IAWG May 05, 2022).

Ignace, Dryden, Machin, and Thunder Bay have natural gas service for home heating, while Sioux Lookout, Wabigoon Village, Melgund, and Dinorwic primarily rely on electricity, as well as fuel oil and propane, to heat homes. Electricity to heat homes is typically higher in cost compared to natural gas service and a reason Sioux Lookout, Wabigoon Village, Melgund, and Dinorwic have higher average monthly utility bills.

Municipal water and wastewater services tend to be lower than water and wastewater services that are the responsibility of the homeowner, and an additional factor in overall average monthly utility bills. Ignace, Dryden, Sioux Lookout, and Thunder Bay have municipal water and wastewater service. In Wabigoon Village, Melgund, and Dinorwic water and wastewater service is the responsibility of the homeowner. Machin has municipal water service, and wastewater service is the responsibility of the homeowner.

[41] Average monthly utility bill includes HST.

3.6.4 Property Values

Major employers in the Local Study Area noted in interviews that a lack of housing is a challenge for attracting workers in Northwestern Ontario (NWO Community and Baseline Studies Key Person Interview Program 2022). Homes are aging and, compared to housing across the province, a higher percentage of homes need repair (**Section 2.4.7**). Rental housing is limited, particularly in Ignace where most of the homes are single family homes (HSAL et al. 2022b). Together, Dryden and Sioux Lookout have the largest number and proportion of housing options that are not single detached homes (i.e., the most semis, duplexes, row, apartment, movable, and other dwellings).

Table 3.6-6 provides the property sales in the Local Study Area communities from 2017 to 2021 (HSAL et al. 2022b).

Table 3.6-6: Property Sales in the Local Study Area Communities, 2017 to 2021[1]

	2017	2018	2019	2020	2021	Total over period	Annual Average over period
Ignace	10	19	10	18	40	97	19
Machin	14	13	7	17	23	74	15
Dryden	123	167	133	159	169	751	150
Sioux Lookout	120	129	93	121	137	600	120
Wabigoon Village	3	3	1	4	2	13	3
Total	**270**	**331**	**244**	**319**	**371**	**1,535**	**307**

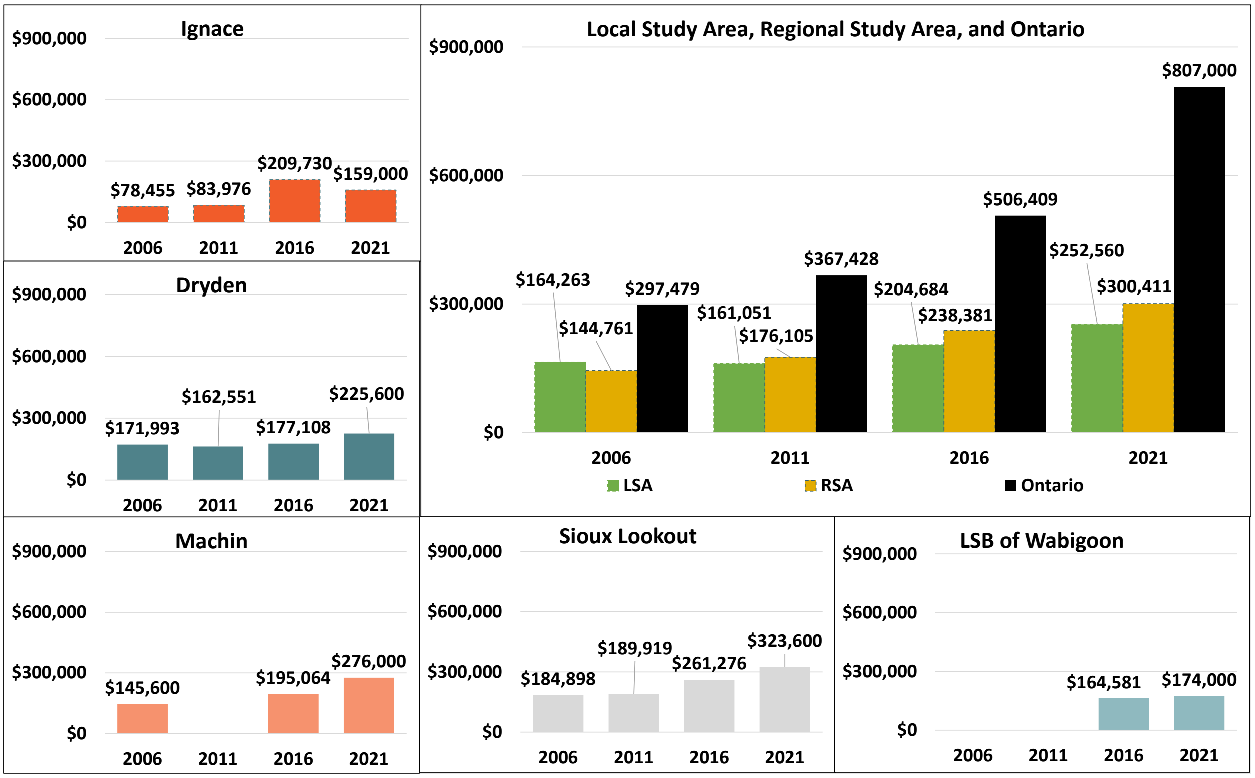
Source: HSAL et al. 2022b. See **Appendix 3B Supplemental Data**.
Note:
1. Sales under $100,000 have been excluded from the analysis to ensure land transfers are not captured. This may impact four-season mobile home sales and other smaller property sales.

Table 3.6-6 provides that between 2017 and 2021, property sales in the Local Study Area communities amounted to approximately 1,535 units. Dryden (751 property sales or 49% of total) and Sioux Lookout (600 property sales or 39% of total) accounted for the majority of property sales in the Local Study Area

2021 was the year with the highest sales volume. This is consistent with trends in the housing market in Ontario during this time (HSAL et al. 2022b). Sales for existing homes in the Local Study Area are increasing over time, with some variation year over year. Indicators of a healthy housing market include new starter homes being available for younger people entering the market, short time periods between homes listed and homes sold, home prices increasing gradually, and housing being affordable for medium income families (HSAL et al. 2022b).

Figure 3.6-22 provides the average value[42] of dwelling for the Local Study Area, Regional Study Area, and Ontario for 2006 to 2021 (Statistics Canada 2007; 2012; 2017; 2022a).

Figure 3.6-22: Average Value of Dwelling for the Local Study Area, Regional Study Area, and Ontario, 2006 to 2021[1,2]



Source: Statistics Canada 2007, 2012, 2017, and 2022a. See **Appendix 3B Supplemental Data**.

Notes:

1. Data for Local Study Area communities may be suppressed for confidentiality, including Machin (2011) and the LSB of Wabigoon (2006 and 2011).
2. Value refers to the dollar amount expected by the owner if the asset were to be sold and the value is estimated as a portion of the market value that applies to the dwelling (Statistics Canada 2022a). As a result, differences in Census years may occur.

Figure 3.6-22 summarizes that as of 2021, the average value of dwelling for the Local Study Area was $252,600, which was 15.9% lower than the Regional Study Area ($300,400) and 68.7% lower than Ontario as a whole ($807,000) (Statistics Canada 2022a). The higher property

[42] Value refers to the dollar amount expected by the owner if the asset were to be sold. In the context of dwelling, it refers to the value of the entire dwelling including the value of the land it is on and of any other structure such as a garage which is on the property. If the dwelling is located in a building which contains several dwellings or a combination of residential and business premises all of which the household owns the value is estimated as a portion of the market value that applies only to the dwelling in which the household resides (Statistics Canada 2022a).

values in Ontario as a whole are largely a result of the housing markets in large urban centres (Government of Ontario 2020b). The Local Study Area, the Regional Study Area, and Ontario all saw an increase to the average value of dwelling from 2006 to 2021 (Statistics Canada 2007; 2022a):

- The Local Study Area saw an increase of 53.7% from 2006 ($164,300) to 2020 ($252,600);
- The Regional Study Area saw an increase of 107.5% from 2006 ($144,800) to 2021 ($300,400); and
- Ontario saw an increase of 171.3% from 2006 ($297,500) to 2021 ($807,000).

As of 2021, among the Local Study Area communities, Sioux Lookout ($323,600) had the highest average value of dwelling, followed by Machin $(276,000), Dryden ($225,600), the LSB of Wabigoon ($174,000), and Ignace ($159,000). The Local Study Area communities generally saw a consistent increase in average value of dwelling from 2006 to 2021. Notable trends include (Statistics Canada 2007; 2022a);

- Ignace had the highest overall proportional increase to average value of dwelling from 2006 to 2021 (increase of 102.7%). Ignace experienced a decline from 2016 ($209,700) to 2021 ($159,000) of 24.2%; and
- Dryden had the lowest proportional increase to average value of dwelling from 2006 to 2021 (increase of 31.2%). Dryden experienced a slight decline from 2006 ($172,000) to 2011 ($162,600) of 5.5%.

Property sales data was collected from August 2022 to March 2023.[43] The property sales data collected includes information through Geowarehouse, a real-estate property information source, as sold through a realtor. The data does not capture private sales. Key person interviews have identified that available properties for sale in the Local Study Area may be identified through word of mouth, resulting in properties that do not go to market and are sold privately (NWO Baseline Studies Key Person Interview Program 2022-2023). From August 2022 to March 2023 there was a total of 186 residential properties sold, including 11 in Ignace, 95 in Dryden, 22 in Machin, 55 in Sioux Lookout, and 3 in Wabigoon. No properties were sold in Melgund (Dyment and Borups Corners) or Dinorwic from August 2022 to March 2023 (NWO Baseline Studies Key Person Interview Program 2022-2023). Due to the limited number of property sales, an analysis of smaller to larger residences was not completed to protect the confidentiality of the households. The data collected included that the average residential property sold was highest in Sioux Lookout ($352,000), followed by Machin ($312,000), Dryden ($281,000), Wabigoon Village ($242,000), and Ignace ($212,000) (NWO Baseline Studies Key Person Interview Program 2022-2023; Geowarehouse 2023). In comparison to **Figure 3.6-22**, property values have continued to increase for all Local Study Area communities, from 2021 to August 2022/March 2023.

IAWG members have commented that people may opt to retire in Ignace as housing has generally been affordable. In recent years, residents have begun to experience an increase in the price of housing as the housing shortage is creating demand and an increase in price (IAWG

[43] Only sales $100,000 and over are included in the analysis to ensure that land transfers are not captured. This may impact four season mobile home sales and other smaller property sales.

October 06, 2021; IAWG March 03, 2022; IAWG April 7, 2022). Residents of Ignace have also commented on the need for more housing to support different age groups, including seniors, which is presently lacking. There is a lack of a variety of housing options, including condominiums, semi-detached, duplexes, and options for retirement that would help people in staying in the community (HSAL et al. 2022a; IAWG October 06, 2021; IAWG February 24, 2022; GBA+ Workshop 2023). The Kenora District Services Board 2023 Housing Strategy confirms the need for a diversity of housing as the majority of housing is single detached in Ignace (91%), Dryden (77%), Machin (85%), and Sioux Lookout (71%) (KDSB 2023). Housing is generally more expensive in Sioux Lookout compared to other communities in the Local Study Area and within communities, such as Ignace and Machin, housing is typically more expensive on the lake than in the town (IAWG October 06, 2021; NWO Baseline Studies Key Person Interview Program 2022-2023). Key person interviews with a resident of Machin have provided that, similar to Ignace, there is a housing shortage. Typically, when a house in Machin goes up for sale it does not stay on the market for long (NWO Baseline Studies Key Person Interview Program 2022-2023). Local Study Area residents identified that there is a need for more housing in the area (GBA+ Workshop 2023). The Kenora District Services Board 2023 Housing Strategy confirms there is a need and a demand for affordable housing in Ignace, Dryden, Machin, and Sioux Lookout (KDSB 2023).

Ontario's housing market as a whole grew in 2021 and early 2022 due to an environment of low interest rates, higher overall incomes, limited resale listings, and shifting home preferences (Province of Ontario 2022). Home resale prices reached a peak in February 2022 as the housing market adjusted to higher interest rates (Province of Ontario 2022). Statistics Canada similarly found that an increase in mortgage rates put a downward pressure on house prices since the peak in early 2022 (Statistics Canada 2023d). Throughout the remainder of 2022 and 2023, housing market activity is expected to continue to moderate as interest rate increases impact affordability and overall housing market activity returns to levels consistent with housing demand (Province of Ontario 2022). The strong momentum of 2021 and early 2022 is expected to support an average annual increase of 5.4% in Ontario average home resale prices throughout 2022 (Province of Ontario 2022). The moderation in the housing market is projected to continue in 2023 before rebounding in 2024 and 2025 (Province of Ontario 2022).

Appendix 3B Supplemental Data provides additional information on property values.

3.6.5 Summary of Income, Cost of Living, and Property Values

In general, incomes in the Local Study Area are similar to Ontario as a whole and higher in comparison to the Regional Study Area; shelter costs in the Local Study Area are similar to the Regional Study Area, and lower than Ontario as a whole; and property values are lower in the Local Study Area in comparison to the Regional Study Area and Ontario. Generally, incomes are higher and shelter costs and/or property values are lower in the Local Study Area in comparison to the Regional Study Area and Ontario and contribute to the ongoing sustainability and affordability of the Local Study Area. Further, throughout Ontario, household income growth in 2023, 2024, and 2025 is projected to remain relatively strong; the CPI is expected to be moderate throughout 2023, 2024, and 2025; and housing market activity is also expected to continue to moderate as interest rate increases impact affordability and the overall housing market returns to levels consistent with housing demand (Province of Ontario 2022).

In summary, findings for income, cost of living, and property values include:

Income

- Average personal income in 2020 for the Local Study Area ($55,100) was higher compared to the Regional Study Area ($51,100) and similar to Ontario ($56,400). Personal income has consistently increased from 2005 to 2020 for the Local Study Area, Regional Study Area, and Ontario.
- Males, overall, have a higher average personal income than females across the Local Study Area, Regional Study Area, and Ontario.
- The Local Study Area, Regional Study Area, and Ontario had a similar trend across the distribution of average personal income by age in 2020. Income is lower at ages 15 to 24 and income increases, with typical career advancement and experience, through ages 35 to 64. From the 45 to 54 age range to the 65 and over age range income decreases and coincides with the typical start of retirement.
- People who identify as Indigenous have a lower average personal income than those who identify as non-Indigenous across the Local Study Area, Regional Study Area, and Ontario.
- Average household income in 2020 for the Local Study Area was $103,500, which was higher than the Regional Study Area ($95,300) and lower than Ontario as a whole ($116,000). Household income has consistently increased from 2005 to 2020 for the Local Study Area, Regional Study Area, and Ontario.

Cost of living

- Ignace has a higher unit price across all food basket categories when compared to Dryden and Thunder Bay. Dryden and Thunder Bay have a larger variety of products to choose from compared to Ignace.
- Thunder Bay regular gasoline prices follow the trend of gasoline prices in Toronto and Canada as a whole. As of March 2023, gasoline prices in Ignace (169.9 cents/litre) were higher than Dryden (154.9 cents/litre) and Thunder Bay (155.9 cents/litre).

- Shelter costs are typically higher for homeowners compared to tenant households. The Local Study Area and Regional Study Area typically had similar shelter costs and were lower than Ontario as a whole.
    - The average monthly shelter costs for homeowners in 2021 for the Local Study Area was $1,120, which was similar to the Regional Study Area ($1,100) and lower than Ontario as a whole ($1,700).
    - The average monthly shelter costs for tenant households in 2021 for the Local Study Area was $980, which was similar to the Regional Study Area ($960) and lower than Ontario as a whole ($1,410).

Within the Local Study Area, average monthly utility costs[44] in rural communities may be higher as they do not have the selection and options that larger communities have. Larger communities, such as Dryden and Thunder Bay, tend to have lower average monthly utility costs. Average monthly utility costs also depend on whether a household heats their home with natural gas or electricity. Home heating is typically higher when sourced with electricity than natural gas. An additional factor in average monthly utility bills is whether water and wastewater service are provided by the municipality or the responsibility of the homeowner. Average monthly costs for water and wastewater service provided by the municipality are typically lower than when they are the responsibility of the homeowner. Average monthly utility costs were generally highest for residents of Wabigoon Village ($543 to 858/month), Melgund ($551 to 866/month), and Dinorwic ($551 to 866/month) followed by Sioux Lookout ($560/month), Machin ($510/month), Ignace ($495/month), Thunder Bay ($440/month), and Dryden ($418/month).

Property values

- The average value of dwelling was lower in the Local Study Area compared to the Regional Study Area and Ontario. As of 2021, the average value of dwelling for the Local Study Area was $252,600, which was lower than the Regional Study Area ($300,400) and Ontario ($807,000). The average value of dwelling has increased from 2005 to 2020 for the Local Study Area, Regional Study Area, and Ontario.

[44] Utility costs include electricity and/or natural gas, water and wastewater, cellular phone, and internet.

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