Crawford Nickel Project
Impact Statement

Chapter 23 Assessment of Potential Effects on Economic Conditions

Prepared for:
Canada Nickel Company

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Table of Contents

List of Tables

List of Figures

Acronyms and Abbreviations

C$B	billions of Canadian dollars
C$M	millions of Canadian dollars
CSD	Census Subdivision
FNETB	Far Northeast Training Board
GDP	Gross Domestic Product
kt/d	kilotonnes per day
LQ	location quotients
LSA	Local Study Area
PA	Project Area
PY	Person year
RSA	Regional Study Area
VC	Valued Component

Glossary of Technical Terms

Capital expenditures	Capital expenditures refer to funds used to undertake new projects or investments as well as funds used to acquire or upgrade physical assets (e.g., property, buildings, or equipment).
Direct effect	Direct effects measure the initial requirements for an extra dollar's worth of output of a given industry. The direct effect on the output of an industry is a $1 change in output to meet the change of $1 dollar in final demand. Associated with this change, there will also be direct effects on GDP, jobs, and imports.
Gender Based Analysis Plus (GBA Plus)	An analytic tool used to assess the different positive and negative impacts projects can have on groups of people with distinct characteristics who live in the geographic area of interest (LSA, RSA, province/territory, etc.).
Gross domestic product (GDP)	The total unduplicated value of goods and services produced in the economic territory of a country or region during a given period and provides information about the size of an economy. In this report, it is calculated as GDP by Production. The production, or value added, approach to estimating GDP is calculated as the difference between an industry's output and its intermediate consumption is its gross value added.
Indirect effect	A measure of change due to inter-industry purchases as they respond to the new demands of the directly affected industries. This includes all the chain reaction of output up the production stream as each of the products purchased will require, in turn, the production of various inputs.
Induced effect	A measure of the change in the production of goods and services in response to consumer expenditures induced by households' incomes (i.e., wages) generated by the production of the direct and indirect requirements.
Person year (PY)	A unit of measurement used to describe the amount of work done by an individual throughout the entire year (based on an ideal amount of work per day). For this analysis, a person year is equal to 2,100 hours.
Statistics Canada Interprovincial	From Statistics Canada, this model is based on input-out tables, and is used to simulate the economic impact on the business sector of an expenditure ('shock') on a given set of goods and services or the output of one of several industries.

Input-Output Model (SCIPIOM)	The model simulates direct and indirect impacts, including the number of jobs created, indirect taxes and subsidies generated, and GDP (among others).

23 Assessment of Potential Effects on Economic Conditions

Economic Conditions was selected as a Valued Component (VC) for assessment because economic activities, such as employment and business, support the economic livelihoods of residents and provide associated social benefits stemming from earned income. Economic impacts (e.g., labour, labour income, and contributions to Gross Domestic Product [GDP] and government revenues) are of interest to Indigenous nations, the public, stakeholders, regulators, and governments.

The Tailored Impact Statement Guidelines (TIS Guidelines) (Appendix A.1 of the Impact Statement) requires consideration of the potential positive and adverse effects of the Project on Indigenous Peoples and to the local, regional, provincial, and national economies, including employment, business environment, and economy.

Economic Conditions are linked to other VCs / chapters, including:

- Social Conditions (Chapter 22), whereby changes in employment, labour capacity, and investment may impact housing and community well-being, including for diverse subgroups
- Health (Chapter 21), whereby changes to economic conditions may impact the social determinants of health, including the health of Indigenous Peoples
- Indigenous Interests (Chapters 25 to 28), whereby changes in economic conditions may impact economic conditions of Indigenous nations
- Sustainability (Chapter 33), whereby economic conditions contribute to the well-being of present and future generations

23.1 Scope of Assessment

This section defines and describes the scope of the assessment of potential effects on Economic Conditions, including employment, business environment, and local economy.

23.1.1 Regulatory and Policy Setting

There are several federal and provincial regulatory requirements that may apply to the Project, including environmental assessment and other environmental permitting obligations.

23.1.1.1 Federal Requirements

The Project is being assessed in accordance with the *Impact Assessment Act,* 2019, which requires that it include a description of the baseline for the environmental, health, social, and economic conditions related to the project. The *Impact Assessment Act,* 2019*,* also requires a consideration of Gender Based Analysis Plus (GBA Plus) through the disaggregation of baseline data, where possible.

The requirements to consider potential Project effects on Economic Conditions are described in Section 11 of the TIS Guidelines (Appendix A.1 of the Impact Statement). Additional guidance for the preparation of the assessment of Economic Conditions was obtained from Analyzing Health, Social and Economic Effects under the *Impact Assessment Act* (IAAC 2020), with consideration of IAAC's Guidance: Gender Based Analysis Plus in Impact Assessment (IAAC 2019).

23.1.1.2 Provincial Requirements

Components of the Project are also being assessed in accordance with the Ontario *Environmental Assessment Act*, 1990, via one or more provincial Class Environmental Assessment processes, as outlined in Section 23.1.1.2.

Ontario is divided into 11 economic regions. These regions were defined by Statistics Canada and the Ontario provincial government. The regions are used as administrative units to collect information on economy, employment, and business (e.g., the Labour Force Survey and the federal Census). The Project is located within the Northeast economic region, which is composed of the District of Cochrane.

The Growth Plan for Northern Ontario, 2011 (Ministry of Economic Development, Job Creation and Trade and Ministry of Northern Development 2011) ('the Plan') is a 25-year Plan that guides provincial decision-making and investment aimed at strengthening the economy of the north through initiatives that include stimulating new investment and entrepreneurship. The minerals sector and mining and supply services are among several priority economic sectors discussed in the Plan, with the minerals and mining supply and services sector identified as an existing and emerging priority economic sector for which northern Ontario has a distinct competitive advantage. Examples of policies specific to the growth of the minerals sector include expanding the mining supply and services industry and enabling new mining opportunities. See Section 23.4.4 for further efforts by the province, sector, and others to grow and diversify the minerals and mining supply and services sector.

Key provincial agencies expected to be involved with approvals for components of the Project include:

- Ministry of Mines, with the responsibility for the orderly development of mineral resources in Ontario, including responsibility for the disposition of provincial Crown lands for mining, mine closure activities, and mining-related dams located on land as well as, the wise use of Crown resources not otherwise disposed, such as through the *Mining Ac,* 1990*,* including natural heritage features.
- Ministry of Economic Development, Job Creation and Trade, with the responsibility of supporting a strong, innovative economy that can provide jobs and prosperity for all Ontarians, including small businesses.

23.1.2 The Influence of Consultation and Engagement on the Assessment

Canada Nickel Company (Canada Nickel) has engaged with potentially affected Indigenous nations, regulators, the public, and stakeholders. Table 23.1 provides a summary of the topics, key information including Indigenous knowledge, and concerns that Canada Nickel identified as part of their engagement efforts that relate to Economic Conditions, as well as a summary of the influence that the outcomes of this engagement had on the assessment.

Overall, feedback on Economic Conditions has been received during the various consultation and engagement activities. Concerns related to Economic Conditions include economic and infrastructure development in northern Ontario, government support for housing, mine start-up and closure funding, and cost of living, and worker retention. Feedback was also received on positive economic effects through employment, labour availability, tax revenue generation, local procurement, and economic impacts extending beyond the Project footprint.

Questions and concerns regarding Economic Conditions were raised during Workforce Committee Meetings, public engagement meetings, and email. Meetings were also held with the Project Socio-economic Committee (formerly the Community Contributions and Local Procurement Committee), which was formed by Canada Nickel with social, economic, and municipal representatives from the Project's surrounding communities. The Committee's mandate is to identify and discuss potential social, economic, and health impacts related to the Project in order to jointly define and implement potential solutions.

This information was considered when evaluating whether Canada Nickel's planned mitigation will effectively manage the identified potential interactions, or whether additional or refined mitigation is warranted. Specific concerns regarding Economic Conditions raised during engagement for the Project and any additional and specific mitigation measures added to address one or more of the concerns, are described in Table 23.1.

Table 23.1 Summary of Key Information, Indigenous Knowledge, and Concerns for the Project Related to Economic Conditions

Topic	Key Information, Indigenous Knowledge, and Concerns	Influence on the Assessment	Where Information is Addressed in the Impact Statement

Employment and Training Opportunities	• Members of the public and other stakeholders expressed concern regarding the cost of living and worker retention.
	• Members of the public and other stakeholders expressed interest in the potential positive economic effects through employment.
	• Matachewan First Nation expressed concern that training opportunities may not lead to any jobs in the mine or elsewhere, and that training opportunities through the Project would be inadequately split between the affected Indigenous nations.
	• Matachewan First Nation recommends funding and targeted efforts towards developing culturally relevant programs and training opportunities for Nation members and mine employees.
	• Taykwa Tagamou Nation recommends the creation of an education hub on reserve and host career fairs and education events, and promote lesser-known fields of work opportunities, as well as partner with Apatisiwin Training and Employment Ltd. for employment opportunities.
	• Flying Post First Nation, Matachewan First Nation, Mattagami First Nation, and Taykwa Tagamou Nation recommended engagement with First Nations to identify community-specific reinvestment opportunities for employment, education, and social programming to enhance positive impacts.
	• Flying Post First Nation and Matachewan First Nation recommended inclusion of traditional practices on-site for Indigenous employees, such as tobacco offering and smudging areas.
	• Flying Post First Nation, Matachewan First Nation, and Mattagami First Nation recommend:
	  • development of Indigenous employment retention policies in consultation with such Nations or representative organizations
	  • recommend support to overcome barriers to employment, improve recruitment, and retention of women in the industry
	  • advancing youth perspectives and opportunities for youth training, employment, and careers in mining
		• Contributed to an understanding of existing conditions for employment.
		• Considered in the development of mitigation and management measures and supported scope of issues assessed.
		• Informed the assessment on Indigenous interests in Chapters 25 to 28 of the Impact Statement (Assessment of Potential Effects on Indigenous Interests).
		• Canada Nickel's responses to mitigation recommendations made by the Indigenous nations are provided in Chapters 25 to 28 of the Impact Statement (Assessment of Potential Effects on Indigenous Interests).
			• Chapter 23 (Assessment of Potential Effects on Economic Conditions), Sections 23.2.2.6, 23.4.2, 23.4.3 and 23.4.4
			• Chapters 25 to 28 (Assessment of Potential Effects on Indigenous Interests)

Topic	Key Information, Indigenous Knowledge, and Concerns	Influence on the Assessment	Where Information is Addressed in the Impact Statement

Business and Contracting Opportunities	• Members of the public and other stakeholders expressed concern regarding:
	  • the need for information on the Project's costs, and if Canada Nickel would include procurement from local sources
	  • the need for further information on any potential impacts to the existing economic activity and business in the region (such as tourism), beyond the Project footprint, including mitigation for negative impacts, as identified by nearby communities
	• Mattagami First Nation emphasized the need for more time when planning business opportunities related to the Project.
	• Apitipi Anicinapek Nation expressed concern regarding potential effects to economic benefits, investment and inclusion including impacts (direct or indirect) on local Indigenous businesses, potential business opportunities and partnerships.
	• Matachewan First Nation recommended Canada Nickel consider scorecards and/or a ranking process related to best practices, parameters, conditions, and criteria for its tenders and subcontractors that are aligned with the values of Indigenous nations.
	• Flying Post First Nation and Taykwa Tagamou Nation recommended:
	  • priority access to opportunities for Indigenous service providers before they are submitted for tender
	  • Canada Nickel foster partnerships and provide business opportunities for the Indigenous nations engaged on the Project
		• Contributed to an understanding of existing conditions for business.
		• Considered in the development of mitigation and management measures and supported scope of issues assessed.
		• Informed the assessment on Indigenous interests in Chapters 25 to 28 of the Impact Statement (Assessment of Potential Effects on Indigenous Interests).
		• Canada Nickel's responses to mitigation recommendations made by the Indigenous nations are provided in Chapters 25 to 28 of the Impact Statement (Assessment of Potential Effects on Indigenous Interests).
			• Chapter 23 (Assessment of Potential Effects on Economic Conditions), Sections 23.4.1, 23.4.3.2, and 23.4.3.3
			• Chapters 25 to 28 (Assessment of Potential Effects on Indigenous Interests).

Topic	Key Information, Indigenous Knowledge, and Concerns	Influence on the Assessment	Where Information is Addressed in the Impact Statement

Economic Development	• Members of the public and other stakeholders expressed concern regarding:
	  • economic and infrastructure development in Northern Ontario.
	  • access to mine-starting up and mine-closure funding (e.g., funding for closure monitoring/planning)
	  • the need for further information on projected baseline economic conditions in the region, and any incremental effects from the Project. Include projections of baseline labour availability
	  • the need for further information on tax revenue generation by carrying out the Project during all Project phases
	• Members of the public and other stakeholders expressed interest in the potential positive economic effects through tax revenues.
	• Taykwa Tagamou Nation recommends plans for economic diversification and capacity building.
	• Taykwa Tagamou Nation recommends Canada Nickel alleviate the boom-and-bust effect on the community by supporting Taykwa Tagamou Nation to establish a fund that collects a portion of mining revenues during the boom periods (e.g., to support the community during downturns; provide essential services during the bust phases).
		• Contributed to an understanding of existing conditions for the economy.
		• Considered in the development of mitigation and management measures and supported scope of issues assessed.
		• Informed the assessment on Indigenous interests in Chapters 25 to 28 of the Impact Statement (Assessment of Potential Effects on Indigenous Interests).
		• Canada Nickel's responses to mitigation recommendations made by the Indigenous nations are provided in Chapters 25 to 28 of the Impact Statement (Assessment of Potential Effects on Indigenous Interests).
			• Chapter 23 (Assessment of Potential Effects on Economic Conditions), Sections 23.2.2.5, 23.2.2.6, 23.4.3.2, 23.4.3.3, 23.4.4.2, and 23.4.4.3.
			• Chapter 22 (Assessment of Potential Effects on Social Conditions)
			• Chapters 25 to 28 (Assessment of Potential Effects on Indigenous Interests)
			• Social and Economic Conditions Report (Appendix B.9 of the Impact Statement)

Where made available by Indigenous nations through engagement, information gathering, and voluntary information sharing, Indigenous knowledge has been considered and incorporated into the Impact Statement, as applicable. Refer to the Description of Engagement with Indigenous Peoples (Chapter 7 of the Impact Statement) for detailed methods regarding the incorporation of Indigenous knowledge to the Impact Statement.

23.1.3 Potential Effects, Pathways and Measurable Parameters

For this assessment, economic conditions are defined as direct, indirect, and induced economic impacts. Direct impact measures the value-added to the economy attributed directly from the wages earned and the revenues generated from the workforce spending in Ontario and Canada. Indirect impact measures the value-added generated within the economy through business and organizational demand for intermediate inputs or other support services (e.g., the supply chain). Induced impacts are derived when workers in the various industries spend their earnings. These purchases lead to more employment, higher wages and increased income and tax revenues, and can be felt across a wide range of industries. Project-related effects to be assessed for Economic Conditions are identified in Table 23.2 and have been determined by the TIS Guidelines (Appendix A.1 of the Impact Statement). For each effect in Table 23.2, effect pathways and indicators/measurable parameters have been identified to facilitate the quantitative and qualitative measurement of change in Project-specific and cumulative effects potentially caused by the Project.

Where possible, the assessment of potential effects on infrastructure and services used measurable parameters that are quantifiable (e.g., GDP). However, not all effects pathways can be quantified (e.g., impacts to sub-populations identified through GBA Plus). Therefore, some effects are predicted qualitatively through use of published literature, professional judgment, and project experience.

Table 23.2 Potential Effects, Effect Pathways and Measurable Parameters for Economic Conditions

Potential Effect	Effect Pathway	Measurable Parameter(s) and Units of Measurement
Change in employment	• Positive economic effects may occur when project-related employment and other expenditures have direct, indirect and induced beneficial effects on employment, incomes, business activity, and government tax revenues • Adverse economic effects may occur when the labour, goods, and services required for a project exceeds the existing capacity, leading to supply issues and cost increases (e.g., wage and price inflation)	• Qualified labour supply (persons), employment rate, participation rate, wage levels, labour income • Economic indicators of relevant sub-populations (e.g. age, gender, indigeneity, other identity factors) identified through GBA Plus • Project workforce (average and peak number)
Change in business		• Value of local and regional spending and related employment • Cost of labour • Cost of living (e.g. cost of housing, food, goods, and services)
Change in provincial economy		• Value provincial spending, and related employment • GDP • Tax and royalty revenue • Government revenue and expenditures

23.1.4 Boundaries

23.1.4.1 Spatial Boundaries

The **Project Area (PA)** encompasses the Project footprint and is the anticipated area of physical disturbance associated with the construction, operations, and decommissioning/closure of the Project. The PA includes the Open Pit, Stockpiles, and Impoundment Facility, Tailings Management Facility (TMF), two ore Processing Plants, and other mine-related infrastructure, as well as a new rail spur line and the relocation of Highway 655 and an existing 500 kV transmission line. The extent of the PA for the Project is shown on Figure 3.1 (Chapter 3 of the Impact Statement [Project Description]).

The **Local Study Area (LSA)** encompasses the area in which Project-related effects (direct or indirect) were predicted or measured with a level of confidence appropriate for the assessment and in which there is a reasonable expectation that the potential effects in the LSA are of public interest. This includes the PA and, to comply with provincial regulatory requirements and to capture effects of the specific components being assessed, includes the City of Timmins and the Towns of Cochrane, Iroquois Falls, and Smooth Rock Falls, as well as five First Nations reserves: Taykwa Tagamou First Nation (New Post 69A), Flying Post First Nation (Flying Post 73), Matachewan First Nation (Matachewan 72), Mattagami First Nation (Mattagami 71), and Apitipi Anicinapek Nation (Abitibi 70). The extent of the LSA for Economic Conditions is shown on Figure 23.1.

The **Regional Study Area (RSA)** includes the area within which cumulative effects on the VC are likely to occur, depending on the location of other past, present, or reasonably foreseeable future projects or activities. The RSA for the Project includes the Cochrane District (Census Division), the Timiskaming District (Census Division), and Mattagami First Nation (which is located in Sudbury District). The extent of the RSA for Economic Conditions is shown on Figure 23.1.

23.1.4.2 Temporal Boundaries

The temporal boundary of the assessment includes all Project phases from the start of construction through to the end of closure. Based on the current Project schedule, the Project phases include:

- Construction (Year -3 to Year -1)
- Operations
  - Operations phase 1 (Year 1 to Year 5): 60 kilotonnes per day (kt/d) milling capacity with ore extraction
  - Operations phase 2 (Year 5 to Year 30); 120 kt/d milling capacity with ore extraction
  - Operations phase 3 (Year 30 to Year 41); 120 kt/d milling capacity with no ore extraction
- Decommissioning and closure
  - Active closure (Year 41 to Year 46)
  - Passive closure (Year 46+)

23.1.5 Residual Effects Characterization

The characterizations used to assess residual effects on economic conditions are provided in Table 23.3.

Table 23.3 Characterization of Residual Effects on Economic Conditions

Characterization	Description	Quantitative Measure or Definition of Qualitative Categories
Direction	The long-term trend of the residual effect	**Positive –** a residual effect that moves measurable parameters in a direction beneficial to economic conditions relative to baseline. **Adverse –** a residual effect that moves measurable parameters in a direction detrimental to economic conditions relative to baseline. **Neutral –** no net change in measurable parameters for the economic conditions relative to baseline.
Magnitude	The amount of change in measurable parameters or the VC relative to existing conditions	**Negligible –** no measurable change in the effect can be noted. **Low –** A measurable change in employment and economic conditions but residual effects cannot be distinguished from existing conditions within normal range of variability **Moderate –** A measurable change but not likely to pose a serious risk or benefit to employment and economic conditions **High –** Measurable change that is likely to pose a serious risk or benefit to employment and economic conditions
Geographic Extent	The geographic area in which a residual effect occurs	**PA –** residual effects are restricted to the PA **LSA –** residual effects extend into the LSA **RSA –** residual effects extend into the RSA
Timing	Considers when the residual effect is expected to occur, where relevant to the VC	**No sensitivity** – timing does not affect VC. **Moderate sensitivity**– timing may affect VC during lower sensitivity period, but the effects are manageable with proper planning and mitigation measures. **High sensitivity** – residual effects occur during high sensitivity period.
Duration	The time required until the measurable parameter or the VC returns to its existing condition, or the residual effect can no longer be measured or otherwise perceived	**Short-term –** the residual effect is restricted to construction (<3 years) **Medium-term –** the residual effect extends through the operations phase (3 to 41 years) **Long-term –** the residual effect extends beyond the life of the Project (>41 years)
Frequency	Identifies how often the residual effect occurs and how often during the project or in a specific phase	**Single event** **Multiple irregular event –** occurs at no set schedule **Multiple regular event –** occurs at regular intervals **Continuous –** occurs continuously

Characterization	Description	Quantitative Measure or Definition of Qualitative Categories
Reversibility	Pertains to whether a measurable parameter or the VC can return to its existing condition after the project activity ceases	**Reversible –** the residual effect is likely to be reversed after activity completion and reclamation **Irreversible –** the residual effect is unlikely to be reversed

23.2 Existing Economic Conditions

Existing economic conditions for the Project are presented in detail in the Social and Economic Conditions Baseline Report provided in Appendix B.9 of the Impact Statement. The existing conditions and the methods used to characterize baseline conditions are summarized in the subsections below.

23.2.1 Methods

Secondary sources of information were used to describe existing conditions in the LSA and RSA. Secondary information included government sources (Statistics Canada, Government of Ontario), publicly available data and literature, as well as previously prepared information (e.g., reports, studies) submitted to Canada Nickel by Indigenous nations and local communities.

Much of this chapter relies on government databases, including Census data from Statistics Canada. Statistics Canada regularly suppresses (i.e., selectively does not disclose) survey information to protect the identity of individuals and to address data quality issues. The 2021 Census of the Population (Census), which is used in this section is subject, in part, to such data suppression.

Results of engagement with stakeholders and Indigenous nations have also been integrated into the description of existing conditions, where applicable.

As required by the TIS Guidelines (Appendix A.1 of the Impact Statement), baseline information is presented for sub-populations and sub-groups of the LSA and RSA population who may experience disproportionate effects from the Project, where such information is available. This baseline information will contribute to an analysis of disproportionate effects through GBA Plus. Sub-populations and sub-groups may include women, Indigenous nations, visible minorities, persons with disabilities, youth, and older adults among others, and groups who demonstrate any intersection of those characteristics.

To obtain information regarding the sub-populations and sub-groups that may be disproportionately affected by the Project, results of Project engagement to date and comments from Indigenous nations and stakeholders on Project documents were reviewed. Concerns and issues brought forward by members of vulnerable groups were documented and have informed the description of existing socio-economic conditions. They will also be carried through the assessment.

Canada Nickel has used engagement methods that are inclusive and contributed to the GBA Plus. Canada Nickel has and will continue to identify and engage with organizations that may work with and/or represent under-represented, potentially impacted populations. Examples include organizations that provide supportive housing, shelter, and related services; organizations that represent visible minority groups; and organizations that work with or advocate for the those experiencing homelessness, low-income households, and other vulnerable populations. Canada Nickel has and will continue to share Project information with these organizations and work to identify issues, interests, and concerns with respect to the Project; seek feedback on potential means of limiting adverse effects and enhancing beneficial effects on vulnerable sub-populations; and seek qualitative and quantitative information on vulnerable sub-populations.

With respect to quantitative data, where possible, disaggregated data have been used in to describe baseline conditions for diverse or distinct sub-groups to support the GBA Plus of effects, as described in guidance from the Impact Assessment Agency of Canada. Both qualitative and quantitative data have been used to describe baseline conditions across diverse or distinct subgroups, where GBA Plus has the potential to be relevant to the understanding of effects.

23.2.2 Overview

23.2.2.1 Population

In 2021, the total population of the LSA was 52,710 (evenly split between men+[1] and women+[2]), a 1.4% decrease since 2016 (Table 23.4) (Statistics Canada 2017, 2022). All First Nations communities, where data was available, experienced population increases between 2016 and 2021. For the RSA, total population was 109,590 (50.2% women+) in 2021, a decrease of 2.3% over 2016. In comparison, the provincial population of 14,223,940 (51.0% women+) experienced a 5.5% increase from 2016 to 2021. Approximately 16% of persons within both the LSA (8,410, of which 50.9% are women+) and RSA (17,600, of which 50.3% are women+) identified as Indigenous. Indigenous populations increased from 2016 to 2021 in the province (7.9% increase), the RSA (11.6%) and the LSA (18.4%).

Table 23.4 Population Change – 2016 to 2021

Location	Total	Men+[1]	Women+[2]	% Change (Total)	% Change (Men+)	% Change (Women+)
Total Population						
Mattagami First Nation (2023)[4]	43	6	37	9.5%	14.3%	4.8%
Matachewan First Nation (2023)	66	33	33	7.7%	14.3%	14.3%
City of Timmins	41,145	20,555	20,590	-1.6%	-0.6%	-2.5%
Town of Iroquois Falls	4,420	2,210	2,210	-2.7%	-1.1%	-4.3%
Apitipi Anicinapek Nation	155	85	70	6.5%	0.0%	14.3%

[1] This category includes men (and/or boys), as well as some non-binary persons.
[2] This category includes women (and/or girls), as well as some non-binary persons.

Location	Total	Men+[1]	Women+[2]	% Change (Total)	% Change (Men+)	% Change (Women+)
Town of Cochrane	5,395	2,695	2,700	1.2%	2.6%	0.4%
Town of Smooth Rock Falls	1,200	610	590	-10.8%	-11.5%	-10.2%
Flying Post First Nation (2023)	258	X	X	X	X	X
Taykwa Tagamou First Nation	130	70	60	28.0%	28.6%	25.0%
LSA	52,710	26,360	26,360	-1.4%	-0.4%	-2.4%
Timiskaming Census Division	31,420	15,510	15,910	-2.6%	-3.1%	-2.2%
Cochrane Census Division	77,960	38,985	38,975	-2.2%	-1.5%	-2.9%
RSA	109,590	54,600	54,990	-2.3%	-1.9%	-2.7%
Ontario	14,223,940	6,970,855	7,253,085	5.5%	5.9%	5.0%
Indigenous Populations[3]						
Mattagami First Nation (2023)	43	6	37	8.1%	-5.9%	15.0%
Matachewan First Nation	50	25	25	9.1%	0.0%	20.0%
City of Timmins	5,995	2,955	3,040	21.4%	23.4%	19.4%
Town of Iroquois Falls	570	295	275	3.5%	6.8%	0.0%
Apitipi Anicinapek Nation	140	70	70	0.0%	-14.3%	14.3%
Town of Cochrane	1,275	610	670	18.0%	9.8%	26.1%
Town of Smooth Rock Falls	55	20	35	-75.0%	-125.0%	-71.4%
Flying Post First Nation	X	X	X	X	X	X
Taykwa Tagamou First Nation	135	70	65	30.8%	28.6%	30.8%
LSA	8,410	4,130	4,280	18.4%	18.2%	18.5%
Timiskaming Census Division	2,865	1,415	1,450	10.8%	9.5%	12.1%
Cochrane Census Division	14,550	7245	7,305	11.8%	12.3%	11.4%
RSA	17,600	8,745	8,855	11.6%	11.7%	11.5%
Ontario	406,595	195,100	211,495	7.9%	7.8%	8.1%

Notes:
1 This category includes men (and/or boys), as well as some non-binary persons.
2 This category includes women (and/or girls), as well as some non-binary persons.
3 Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size.
X no information available.

2021 'Total Population' and 'Indigenous Populations' data from 2021 Census of the Population – Census Profile. Values shown in "Total" columns are the sum of male and female Census Subdivision (CSD) subsets taken from Statistics Canada's 2021 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2022) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.

Source: Statistics Canada 2022 , Mattagami First Nation 2023, Matachewan First Nation 2023, Flying Post First Nation 2023

23.2.2.2 Educational Attainment

Educational attainment levels for residents of the LSA and RSA in 2021 are summarized in Table 23.5. Within the LSA, 48.0% of the total population had completed post-secondary education compared to the RSA average of 47.4% (Statistics Canada 2022). Women+ within both the LSA (60.7%) and RSA (62.3%) accounted for a greater proportion of the total population with a college or university certificate, diploma or degree at bachelor level or above, while men+ accounted for a greater proportion of the population with an apprenticeship or trades certificate or diploma (79.9% in the LSA and 78.1% in the RSA). Similar to the general population, Indigenous where women+ account for a greater proportion of the total Indigenous populations with a college or university certificate, diploma or degree at bachelor level or above (69.6% of the LSA and 76.0% of the RSA), while men+ accounted for a greater proportion of the Indigenous populations with an apprenticeship or trades certificate or diploma (80.9% in the LSA and 77.0% in the RSA).

Table 23.5 Education Attainment in LSA and RSA – 2021

	LSA				RSA			
Educational Attainment	**Total**	**Percent**	**Men+[1] (%)**	**Women+[2] (%)**	**Total**	**Percent**	**Men+ (%)**	**Women + (%)**
Total Population								
No certificate, diploma or degree	9,625	22.4%	51.5%	48.5%	21,650	24.1%	52.5%	47.5%
High (secondary) school diploma or equivalency certificate	12,740	29.6%	50.7%	49.6%	25,520	28.5%	50.9%	49.1%
Apprenticeship or trades certificate or diploma	3,435	8.0%	79.9%	19.8%	7,385	8.2%	78.1%	21.7%
College, CEGEP or other non-university certificate or diploma	11,605	27.0%	44.1%	56.0%	23,850	26.6%	43.3%	56.7%
University certificate or diploma below bachelor level	475	1.1%	43.2%	60.0%	1,090	1.2%	36.7%	64.2%
Bachelor's degree or higher	5,140	11.9%	38.9%	60.7%	10,200	11.4%	37.5%	62.3%
Indigenous Populations[3]								
No certificate, diploma or degree	1,760	27.8%	49.4%	51.4%	4,080	31.1%	54.2%	45.7%
High (secondary) school diploma or equivalency certificate	1,830	28.9%	49.7%	50.5%	3,645	27.8%	50.1%	49.9%
Apprenticeship or trades certificate or diploma	470	7.4%	80.9%	21.3%	980	7.5%	77.0%	23.5%
College, CEGEP or other non-university certificate or diploma	1,755	27.7%	43.0%	58.1%	3,400	25.9%	41.2%	58.5%

Educational Attainment	LSA				RSA			
	Total	Percent	Men+[1] (%)	Women+[2] (%)	Total	Percent	Men+ (%)	Women + (%)
University certificate or diploma below bachelor level	55	0.9%	36.4%	81.8%	195	1.5%	25.6%	79.5%
Bachelor's degree or higher	460	7.3%	26.1%	69.6%	835	6.4%	24.0%	76.0%

Notes:
1 This category includes men (and/or boys), as well as some non-binary persons.
2 This category includes women (and/or girls), as well as some non-binary persons.
3 Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size.
2021 'Total Population' and 'Indigenous Populations' data from 2021 Census of the Population – Census Profile. Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2021 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2022) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.
Source: Statistics Canada 2022

23.2.2.3 Labour Force

Labour force indicators for the LSA and RSA are summarized in Table 23.6. In 2021, the total size of the LSA labour force was 43,050 persons, of which 50.1% were women+, while the RSA labour force was 89,700 persons, of which 50.2% were women+ (Statistics Canada 2022). The total size of the LSA labour force for the Indigenous populations was 6,345 persons, of which 51.9% were women+, while the RSA labour force was 13,120 persons, of which 50.9% were women+ (Statistics Canada 2022). In 2021, the LSA total labour force participation rate[3] of 60.1% was lower than the RSA average (58.0%) (Statistics Canada 2022). The participation among the Indigenous populations was higher in the LSA and RSA compared to the total population, as was the unemployment rate. There were minor variations in labour force participation rates observed between men+ and women+ within the LSA and RSA and overall men+ had a higher participation rate.

Table 23.6 Labour Force Indicators – 2021

Topic	LSA			RSA		
	Total	Men+[1]	Women+[2]	Total	Men+	Women+
Total Population						
Population aged 15+	43,050	21,470	21,580	89,700	44,690	45,010
In the labour force	25,865	13,670	12,195	51,985	27,470	24,515
Employed	23,595	12,595	11,000	47,350	25,085	22,265
Unemployed	2,270	1,080	1,190	4,635	2,395	2,240
Employment rate	54.8%	58.7%	51.0%	52.8%	56.1%	49.5%

[3] The participation rate is the total labour force (employed and unemployed, combined) relative to the working-age population.

Topic	LSA			RSA		
	Total	Men+[1]	Women+[2]	Total	Men+	Women+
Participation rate	60.1%	63.7%	56.5%	58.0%	61.5%	54.5%
Unemployment rate	8.8%	7.9%	9.8%	8.9%	8.7%	9.1%
Indigenous Populations[3]						
Population aged 15+	6,345	3,055	3,290	13,120	6,440	6,680
In the labour force	3,915	1,925	1,980	7,755	3,875	3,880
Employed	3,455	1,725	1,730	6,850	3,400	3,450
Unemployed	445	195	250	910	485	425
Employment rate	54.6%	56.5%	52.6%	52.2%	52.8%	51.6%
Participation rate	61.7%	63.0%	60.2%	59.2%	60.2%	58.1%
Unemployment rate	11.4%	10.1%	12.6%	11.6%	12.5%	11.0%

Notes:
1. This category includes men (and/or boys), as well as some non-binary persons.
2 This category includes women (and/or girls), as well as some non-binary persons.
3. Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size.

2021 'Total Population' and 'Indigenous Population' data from 2021 Census of the Population – Census Profile. Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2021 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2022) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.

Source: Statistics Canada 2022

23.2.2.4 Employment by Industry

Table 23.7 presents employment by industry in the LSA and RSA. Individuals working in industries that are most likely to provide employment to the Project include mining, quarrying, and oil and gas extraction; construction; manufacturing; transportation and warehousing; and professional, scientific, and technical services. The sectors most likely to supply direct labour to the Project employ a higher proportion of men+ for both the total and Indigenous populations.

Table 23.7 Employment by Industry – 2021

Employment by Industry	LSA			RSA		
	Total	Men+1 (%)	Women+ 2 (%)	Total	Men+ (%)	Women+ (%)
Total Population						
Health care and social assistance	4,000	15.6%	85.0%	8,370	15.9%	84.2%
Mining, quarrying, and oil and gas extraction	3,670	88.7%	10.5%	6,250	89.5%	10.6%
Retail trade	2,920	45.0%	55.1%	5,905	45.9%	54.1%
Educational services	2,150	24.2%	76.0%	4,385	23.6%	76.3%
Public administration	1,860	46.2%	53.5%	3,415	45.8%	53.7%
Construction	1,690	88.5%	11.5%	3,575	88.3%	11.3%

Employment by Industry	LSA			RSA		
	Total	Men+1 (%)	Women+ 2 (%)	Total	Men+ (%)	Women+ (%)
Accommodation and food services	1,300	37.7%	61.9%	2,460	39.4%	60.8%
Transportation and warehousing	1,265	70.8%	29.2%	2,510	71.5%	28.3%
Professional, scientific and technical services	1,105	52.9%	47.1%	1,835	49.3%	51.2%
Other services (except public administration)	1,080	57.4%	42.6%	2,230	54.9%	45.3%
Administrative and support, waste management and remediation services	920	54.9%	44.0%	1,575	54.3%	46.3%
Manufacturing	910	78.0%	21.4%	2,835	80.1%	19.9%
Wholesale trade	590	75.4%	23.7%	930	76.3%	24.2%
Finance and insurance	485	25.8%	73.2%	910	24.2%	75.8%
Agriculture, forestry, fishing and hunting	405	75.3%	23.5%	1,570	70.4%	29.9%
Utilities	315	84.1%	7.9%	685	89.8%	8.8%
Real estate and rental and leasing	255	56.9%	45.1%	435	57.5%	43.7%
Information and cultural industries	240	58.3%	39.6%	500	54.0%	47.0%
Arts, entertainment and recreation	190	57.9%	44.7%	440	54.5%	45.5%
Management of companies and enterprises	30	33.3%	33.3%	50	20.0%	60.0%
Indigenous Populations[3]						
Health care and social assistance	545	14.7%	85.3%	1,390	19.8%	80.2%
Mining, quarrying, and oil and gas extraction	530	80.2%	19.8%	825	85.5%	14.5%
Retail trade	435	48.3%	51.7%	830	47.0%	53.0%
Public administration	390	39.7%	60.3%	770	44.2%	55.8%
Construction	255	86.3%	13.7%	480	90.6%	9.4%
Educational services	220	25.0%	75.0%	650	23.1%	76.9%
Accommodation and food services	215	32.6%	67.4%	350	30.0%	70.0%
Other services (except public administration)	215	44.2%	55.8%	355	45.1%	54.9%
Transportation and warehousing	190	65.8%	34.2%	355	64.8%	35.2%
Administrative and support, waste management and remediation services	160	62.5%	37.5%	260	61.5%	38.5%
Manufacturing	155	67.7%	32.3%	315	76.2%	23.8%
Professional, scientific and technical services	145	44.8%	55.2%	210	38.1%	61.9%
Finance and insurance	80	0.0%	100.0%	120	8.3%	91.7%
Wholesale trade	60	66.7%	33.3%	95	84.2%	15.8%
Utilities	50	50.0%	50.0%	120	83.3%	16.7%
Agriculture, forestry, fishing and hunting	45	88.9%	11.1%	115	82.6%	17.4%
Arts, entertainment and recreation	25	60.0%	40.0%	70	71.4%	28.6%
Information and cultural industries	20	50.0%	50.0%	55	54.5%	45.5%

Employment by Industry	LSA			RSA		
	Total	Men+1 (%)	Women+ 2 (%)	Total	Men+ (%)	Women+ (%)
Real estate and rental and leasing	15	0.0%	100.0%	45	44.4%	55.6%
Management of companies and enterprises	0	0.0%	0.0%	0	0.0%	0.0%

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Source: Statistics Canada 2022

23.2.2.5 Employment by Occupation

Table 23.8 summarizes employment by occupation in the LSA and RSA. Sales and service occupations, which are predominantly worked by women+, account for the highest number of labour force workers, in both for the general population and Indigenous populations. This is followed by trades, transport and equipment operators (and related) which is predominantly worked by men+ across the LSA and RSA in both the total) and Indigenous populations.

Table 23.8 Employment by Occupation – 2021

Employment by Occupation	LSA			RSA		
	Total	Men+1 (%)	Women+2 (%)	Total	Men+ (%)	Women+ (%)
Total Population						
Sales and service occupations	6,025	38.9%	61.0%	11,550	39.1%	60.9%
Trades, transport and equipment operators and related occupations	5,660	90.9%	8.9%	11,510	91.8%	8.1%
Occupations in education, law and social, community and government services	3,575	27.6%	72.9%	6,995	25.5%	74.6%
Business, finance and administration occupations	3,260	21.2%	78.7%	6,560	20.2%	79.8%
Health occupations	2,160	15.5%	84.5%	4,470	15.8%	84.2%
Natural resources, agriculture and related production occupations	2,055	92.2%	8.0%	4,210	89.4%	10.3%
Natural and applied sciences and related occupations	1,390	78.4%	21.9%	2,540	77.2%	23.0%
Occupations in manufacturing and utilities	830	88.0%	13.3%	2,055	85.2%	14.6%
Occupations in art, culture, recreation and sport	255	37.3%	64.7%	590	36.4%	64.4%

Employment by Occupation	LSA			RSA		
	Total	Men+1 (%)	Women+2 (%)	Total	Men+ (%)	Women+ (%)
Legislative and senior management occupations	155	67.7%	32.3%	380	57.9%	42.1%
Indigenous Populations[3]						
Sales and service occupations	985	37.1%	62.9%	1,780	40.4%	59.6%
Trades, transport and equipment operators and related occupations	885	86.4%	13.6%	1,685	87.8%	12.2%
Business, finance and administration occupations	535	13.1%	86.9%	1,080	18.5%	81.5%
Occupations in education, law and social, community and government services	515	29.1%	70.9%	1,225	24.5%	75.5%
Natural resources, agriculture and related production occupations	260	96.2%	3.8%	445	95.5%	4.5%
Health occupations	255	7.8%	92.2%	595	15.1%	84.9%
Natural and applied sciences and related occupations	155	80.6%	19.4%	250	80.0%	20.0%
Occupations in manufacturing and utilities	135	88.9%	11.1%	240	87.5%	12.5%
Legislative and senior management occupations	30	33.3%	66.7%	65	53.8%	46.2%
Occupations in art, culture, recreation and sport	15	0.0%	100.0%	60	41.7%	58.3%

Notes:
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2 This category includes women (and/or girls), as well as some non-binary persons.
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Source: Statistics Canada 2022

23.2.2.6 Labour Capacity

The Far Northeast Training Board (FNETB) encompasses a geographic area similar to the Project's RSA and has developed sector-specific labour forecasts for northeastern Ontario to better understand the labour capacity for current and projected mining projects.

Based on its 2017 assessment of northern Ontario's mining workforce, and accounting for the active, inactive, and prospective projects at the time, the FNETB predicted that the mining workforce would expand by 14% by 2027 (FNETB 2018c). However, the FNETB also predicted that approximately 30% of the current mining workforce will be retired by 2027, leaving a 44% vacancy rate of positions needing replacements. Based on the decline of overall population in the LSA and RSA from 2016 to 2021, and the

establishment of new projects not initially envisioned when the FNETB study was undertaken, the vacancy rate within northern Ontario's mining sector could exceed that predicted by the FNETB.

As of 2017, 14% of the mining workforce permanently resided outside of northeastern Ontario. Predominant occupations of mobile mining workers included professional and physical science occupations, such as metallurgical and materials engineers (39% of the total occupational workforce), geologists, geochemists and geophysicists (26% of the total occupational workforce), and mining engineers (25% of the total occupational workforce), as well as a variety of trades and production occupations such as truck drivers (25% of the total occupational workforce) and drillers and blasters (21% of the total occupational workforce). Table 23.9 provides a breakdown of all out of region workers.

Table 23.9 Mobile Mining Workers, RSA

Occupation	2017 Workforce (#)	Out of Region Workforce (#)	Out of Region Workforce (%)
Trades and Production Occupations			
Underground production and development miners	1,358	215	16%
Heavy equipment operations (except crane)	357	61	17%
Heavy-duty equipment mechanics	359	47	13%
Truck drivers	498	126	25%
Welders and related machine operators	250	45	18%
Drillers and blasters – surface mining, quarrying and construction	273	57	21%
Professional And Physical Science Occupations			
Geologist, geochemists and geophysicists	105	27	26%
Mining engineers	83	21	25%
Metallurgical and materials engineers	18	7	39%
Support Workers			
Asset Protection	91	39	43%
Technical Occupations			
Geological and mineral technologists and technicians	136	16	12%
Supervisors, Coordinators, Foremen			
Supervisors, mining and quarrying	212	43	20%
Source: FNETB (2018c)			

Table 23.10 identifies the projected workforce in the mining industry in occupations of interest by 2027. Occupations of interest are occupations that are in high demand, are mining industry specific, or have a high level of impact on the mining industry.

Table 23.10 Occupations of Interest Projections, RSA

Occupation	2017 Workforce	2027 Required Workforce	Net Change 2017-2027	Cumulative Retirements 2017-2027	2027 Workforce Deficit
Trades and Production Occupations					
Underground production and development miners	1,358	1,486	128	269	(397)
Construction millwrights and industrial mechanics (except textile)	374	727	353	86	(439)
Heavy equipment operations (except crane)	357	376	19	193	(212)
Industrial electricians	169	209	40	58	(98)
Central control and process operators, mineral and metal processing	133	129	(4)	25	(21)
Heavy-duty equipment mechanics	359	459	100	129	(229)
Truck drivers	498	655	157	179	(336)
Welders and related machine operators	250	290	40	97	(137)
Drillers and blasters – surface mining, quarrying and construction	273	305	32	66	(98)
Professional And Physical Science Occupations					
Geologist, geochemists and geophysicists	105	132	27	17	(54)
Metallurgical and materials engineers	18	15	(3)	4	(1)
Chemists	5	18	13	1	(14)
Support Workers					
Asset Protection	91	220	129	0	(129)
Supervisors, Coordinators, Foremen					
Supervisors, mineral and metal processing	80	56	(24)	34	(10)
Supervisors, mining and quarrying	212	226	14	88	(102)
Contractors and supervisors, mechanic trades	93	86	(7)	19	(12)
Source: FNETB (2018c)					

Following up to these mining workforce projections, FNETB compiled workforce projections across all sectors by Community Futures Development Corporation (CFDC) area from 2016 to 2036 (FNETB 2018a; 2018b). The geographic area of the Venture Centre CFDC and the North Claybelt CFDC aligns with the LSA of the Project.

A combination of retirement of current workers as well as the outmigration of younger workers and their pursuit of different occupations impacts the capacity of local labour for the Project. Between 47% and 53% of current workers residing within the LSA employed in occupations of interest for the Project will be of retirement age within the next 20 years. In addition, the workforce aged 15-24 and 25-39 are predominantly employed in occupations outside of the mining industry and/or relocating outside the LSA (FNETB 2018a). This reflects a potential shortfall of 23% to 30% vacancy rates in the mining industry within the LSA by 2037.

FNETB's workforce projections were completed in 2017 and may not represent the labour capacity at the time of the Project. As an example, it did not consider Canada Nickel's Project, nor did it account for potential forthcoming mine closures in the area. As such, the availability of labour to supply the demands of the Project will differ from what is provided in these reports based on the current mining activity in the LSA and RSA.

While youth outmigration may impact the labour capacity in the region, a recent report focused on youth outmigration in northern Ontario has suggested this trend may change (Ouellet and Lefebvre 2022). Survey respondents indicated the value they have on the north, highlighting the nature and nature-based activities in particular. As such, the research suggests that youth outmigration will likely experience a boomerang concept, where youth will move out of their communities after graduating high school for different experiences but have a desire to settle in northern Ontario (Ouellet and Lefebvre 2022).

Respecting working conditions in mining in Ontario, the industry predominantly employs males (up to 84%). The average wage of workers in the mining sector was $42.65 in 2022 compared to the average wage of all industries which was $27.30. Approximately 9.0% of the total mining workforce identifies as Indigenous, compared 2.3% of individuals that identify as Indigenous across all industries (Department of Natural Resources 2022).

The Government of Ontario recognizes the role of working conditions for the recruitment and retention of mining workers. In 2015, the Government of Ontario released a plan to address the health and safety concerns associated with the working conditions in Ontario. This included releasing a risk assessment tool for workers to determine their level of risk on a work site, as well as strategies to mitigate risks, such as enhanced engineering controls, industrial hygiene practices, and investments in personal protective equipment (OMLITSD 2022).

23.2.2.7 Location Quotient

Location quotients (LQ) provide a measure of the intensity of employment in a given sector in a region (i.e., the LSA or RSA) relative to the level of employment in that sector to a reference region (i.e., the province), and are commonly used to assess the labour capacity and concentration of economic activities in a smaller area relative to an overarching region. Critical values for the LQ analysis are as follows:

- LQ > 1.0 – the LSA or RSA has a higher intensity of employment in the given sector relative to Ontario
- LQ = 1.0 – the LSA or RSA has the same intensity of employment in the given sector relative to Ontario
- LQ < 1.0 – the LSA or RSA has a lower intensity of employment in the given sector relative to Ontario

Where the LQ is greater than 1.25, the LSA can be considered to have a concentration of economic activity in the specific sector relative to the RSA and may be an indication that the local economy is specialized in this sector and/or has capacity to support development in this sector. Conversely, an LQ of less than 1.0 may suggest that the LSA does not have the capacity to support development in this sector.

Table 23.11 provides the LQ for the LSA and RSA for both the total and Indigenous populations relative to Ontario in sectors areas related to the Project (using information provided by Statistics Canada).

Table 23.11 Labour Force Population Aged 15 Years and Over by Sector, Location Quotients, 2021

Sector	Total Population		Indigenous Population	
	LSA	RSA	LSA	RSA
Forestry, fishing, mining, quarrying, oil and gas	43.81	25.89	7.32	5.74
Construction	1.29	0.95	0.75	0.71
Manufacturing	0.57	0.62	0.55	0.56
Transportation and Warehousing	1.37	0.94	1.18	1.11
Professional, scientific and technical services	0.67	0.38	0.81	0.59
Source: Labour information from Statistics Canada 2022				

For the LSA and RSA in both the total and Indigenous populations, there is a much higher proportion of workers employed in the forestry, fishing, mining, quarrying, oil and gas sectors compared to Ontario overall. Northern Ontario accounts for most of the mining activity in the province, and the makeup of the workforce is reflected of the concentration of this sector within these geographies. For the LSA, transportation and warehousing (LQ value of 1.37) and construction (LQ value of 1.29) has a higher-than-average intensity of employment relative to Ontario. In addition, the Indigenous population in the LSA and RSA has a higher intensity of employment in transportation and warehousing, compared to Ontario, with LQ values of 1.18 and 1.11, respectively. In all other sectors in the LSA and RSA for both the total and

Indigenous populations, the workforce would not be considered specialized, and that the labour capacity for these sectors would be considered low.

23.2.2.8 Average Wages for Select Sectors

Table 23.12 provides a summary of average gross hourly wages in 2022 for Ontario workers in sectors likely to supply direct labour to the Project. Average annual wages were applied to three work schedule/shift scenarios to estimate average annual wages. As calculated, estimated annual wages under Scenario 1 is based on full-time employment and 2,100 person-hours per year (no overtime); Scenario 2 is based on 12-hour workdays and a two-week on / two-week off work schedule (overtime after 40 hours per week); and Scenario 3 is based on 10-hour workdays and a three-week on/one-week off work schedule (overtime after 40 hours per week).

Table 23.12 Provincial Wages in Select Sectors, Average – 2022

Industry	Average Hourly Wage	Scenario 1 – Annual Wage (based on 2,100 hrs/year)	Scenario 2 – Annual Wage (based on 12-hour 2x2 work schedule)[1]	Scenario 3 – Annual Wage (based on 10-hour 3x1 work schedule)[1]
Forestry, fishing, mining, quarrying, oil and gas	$42.65	$89,565	$117,866	$152,893
Construction	$30.71	$64,491	$84,869	$110,090
Manufacturing	$28.55	$59,955	$78,900	$102,347
Transportation and Warehousing	$27.82	$58,422	$76,883	$99,730
Professional, scientific and technical services	$28.52	$59,892	$78,817	$102,239

Note:
1 Assumes overtime payments beyond 40 hours per week; rounded down to nearest thousand.
Source: Statistics Canada 2023

23.2.2.9 Individual Income and Income Inequality

Income information for the LSA and RSA is summarized in Table 23.13. Total income is presented for persons aged 15 years and older and is the sum of regular and recurring monetary receipts from part-time and full-time employment income (e.g., wages, tips, and commissions), income from investment sources (e.g., dividends, guaranteed investment certificates, and mutual funds), income from employer and personal pension sources (e.g., private pensions and payments from annuities and registered retirement income funds), other regular cash income (e.g., child support payments and spousal support payments), and income from government sources (e.g., social assistance, Employment Insurance benefits, Old Age Security benefits, and Canada Pension Plan benefits and disability income).

The mean total income and mean employment income in the LSA and RSA are less for Indigenous than non-Indigenous persons and lower for women+ than men+ with Indigenous women+ earning the lowest average income. Disparities in income also exist within each category (total and employment income) among both men+ and women+ as illustrated through differences in mean and median total and employment incomes within the LSA and RSA (Table 23.13). In particular, while the total population overall receives higher income than the Indigenous population, the disparity between men+ and women+ across all categories is more pronounced.

In 2021, the mean total income in the LSA was $50,345 ($36,533 among the Indigenous populations) with men+ earing an average of $59,488 ($50,800 among Indigenous men+) and women+ $41,360 ($28,200 among Indigenous women+). Mean employment income was higher for the total population ($48,150) than the Indigenous population ($44,480), with men+ earning an average of $57,750 ($52,800 among Indigenous men+) and women+ earning and average of $37,550 ($37,440 among Indigenous women+). For both the total and Indigenous populations (male and female), mean total incomes in the LSA were less than provincial means.

In the RSA, the mean individual income was $51,115 ($38,400 among the Indigenous populations), with men+ earning $59,875 ($43,00 among Indigenous men+) and women+ $42,420 ($34,800 among Indigenous women+). The mean employment income was higher among the total population ($49,380) and lower among the Indigenous populations ($45,760), with men+ earning $58,225 ($43,000 among Indigenous men+) and women+ $39,320 ($34,800 among Indigenous women+). For the men+ and women+ total and Indigenous populations, mean employment incomes in the RSA were less than provincial averages.

Table 23.13 2021 Individual Income (Annual – Before Tax)

Topic	LSA			RSA		
	Total	Men+1	Women+2	Total	Men+	Women+
Total Population						
Weighted median total income ($) (2021)	41,500	50,200	34,500	40,400	48,200	34,800
Weighted median employment income ($) (2021)	37,500	49,200	30,500	39,800	50,400	32,100
Mean total income ($) (2021)	50,345	59,488	41,360	51,115	59,875	42,420
Mean employment income ($) (2021)	48,150	57,750	37,550	49,380	58,225	39,320
Indigenous Populations[3]						
Weighted median total income ($) (2021)	38,300	48,667	35,050	38,400	39,600	36,800
Weighted median employment income ($) (2021)	49,145	55,013	43,060	47,320	52,600	42,300
Mean total income ($) (2021)	36,533	50,800	28,200	38,400	43,000	34,800
Mean employment income ($) (2021)	44,480	52,800	37,440	45,760	52,700	38,870

Notes:

1. This category includes men (and/or boys), as well as some non-binary persons.
2. This category includes women (and/or girls), as well as some non-binary persons.
3. Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size.

Total income is presented for persons aged 15 years and older and is the sum of regular and recurring monetary receipts from part-time and full-time employment income (e.g., wages, tips, and commissions), income from investment sources (e.g., dividends, guaranteed investment certificates, and mutual funds), income from employer and personal pension sources (e.g., private pensions and payments from annuities and registered retirement income funds), other regular cash income (e.g., child support payments and spousal support payments), and income from government sources (e.g., social assistance, Employment Insurance benefits, Old Age Security benefits, and Canada Pension Plan benefits and disability income).

Employment income is the sum of wages, salaries, tips, commissions, and net income from self-employment.

Values shown in "Total" columns are the sum of male and female census subdivision subsets taken from Statistics Canada's 2021 Census. Due to Statistics Canada rounding (Statistics Canada 2019b) totals may not exactly align with those shown on census subdivision Census Profiles and may not sum across tables.

Totals may not sum across tables due to Statistics Canada data suppression.

Source: Statistics Canada 2022

Total incomes (mean and median) and employment incomes (mean and median) of the LSA were lower than RSA incomes in 2021. In each case (e.g., LSA and RSA averages), total incomes and employment incomes (mean and median) were higher among men+ than women+. Overall, income among the total population is higher than the Indigenous populations, however, the weighted median employment income was higher among Indigenous populations compared to the total population.

23.2.3 Summary of Existing Conditions on Sub-Populations for Gender Based Analysis Plus

Within the LSA, men+ account for the largest proportion of the employed labour force in most occupations likely to provide the goods, services, and labour to the Project (see Section 23.2.2.4). Men+ also account for the greatest proportion of the population with an apprenticeship or trades certificate or diploma (see Section 23.2.2.1), education required for occupations with the most demand during all Project phases. Average employment income (both mean and median) earned by men+ is greater than that earned by women+ within the LSA and is greater among the non-Indigenous population than the Indigenous populations. Further, women+ are disproportionately under-represented in the mining labour force (see Sections 23.2.2.4 and 23.2.2.5).

23.3 Project Interactions with Economic Conditions

Table 23.14 identifies, for each potential effect, the physical activities that might interact with the VC and result in the identified effect. These interactions are indicated by a check mark (✓) and are discussed in detail in Section 23.4, in the context of effects pathways, standard and project-specific mitigation/enhancement, and residual effects.

Table 23.14 Project Interactions with Economic Conditions

Physical Activities	Effects		
	Change in employment	Change in business	Change in provincial economy
Construction			
Mobilization of construction equipment and materials on site.	–	–	–
Vegetation clearing, including the removal and disposal of trees, brush, shrubs, and other foliage.	–	–	–
Stripping, including the removal of topsoil and other organic materials, as well as storing of some materials for use in reclamation.	–	–	–
Grading of overburden to be used as fill.	–	–	–
Handing and use of explosives, including blasting.	–	–	–
Excavating and pre-stripping of mine rock from the Open Pit and surrounding area.	–	–	–
Development of the Impoundment Facility for storage of rock, clay, sand, and till.	–	–	–
Preparation of construction surfaces, including hauling reclaimed graded material and crushed mine rock to construction locations.	–	–	–
Construction of water management systems to collect, manage, treat and discharge contact water from mine components to the receiving waterbodies via collection ponds, ditches, and water treatment plants.	–	–	–

Physical Activities	Effects		
	Change in employment	**Change in business**	**Change in provincial economy**
Construction of minor water diversions around perimeter of the mine site to collect and divert flows.	–	–	–
Dewatering of natural water bodies within the PA.	–	–	–
Waste management, including collection and temporary storage.	–	–	–
Construction of mine infrastructure, including crusher facilities, process plant and TMF, as well as the potable water well, and ancillary infrastructure (e.g., offices, workshop, fuel farm, magazine storage and explosives pad).	–	–	–
Construction of internal haul roads and internal access roads, including water crossings.	–	–	–
Construction of power supply and distribution systems.	–	–	–
Construction of temporary Highway 655 by-pass and overpass.	–	–	–
Construction of the rail spur.	–	–	–
Vehicle operation within the PA.	–	–	–
Employment and expenditures[1].	✓	✓	✓
Operations (Mining and Processing)			
Construction of Project infrastructure, including the expansion of ore processing components.	–	–	–
Relocation and decommissioning of Highway 655 and associated infrastructure.	–	–	–
Relocation of 500 kV transmission line.	–	–	–
Construction of the North Driftwood Diversion Channel.	–	–	–
Handling and use of explosives including blasting.	–	–	–
Ore extraction in the Main Zone and East Zone of the Open Pit, including drilling, loading and hauling of mine rock from the pits.	–	–	–
Maintenance and management of mine rock stockpiles, overburden, and TMF.	–	–	–
Ore processing, including conveyor, crushing and processing activities with and between the stockpiles, crusher facilities and process plant.	–	–	–
Operation of water management systems, including the collection, management, treatment and discharge of contact water from mine components to the receiving waterbodies via collection ponds, ditches and water treatment plants.	–	–	–
Transportation of Ore via the rail spur line.	–	–	–
Waste management, including collection and temporary storage.	–	–	–

Physical Activities	Effects		
	Change in employment	Change in business	Change in provincial economy
Vehicle operation within the PA.	–	–	–
Progressive reclamation of disturbed areas.	–	–	–
Employment and expenditures[1].	✓	✓	✓
Decommissioning and Closure			
Pit flooding through the creation of channels from the collection ponds towards the Open Pit.	–	–	–
Water management, including groundwater and surface water.	–	–	–
Decommissioning, dismantling and/or disposal of buildings and mine infrastructure.	–	–	–
Removal of power lines and electrical equipment.	–	–	–
Decommissioning of potable water and sewage systems.	–	–	–
Vehicle operation within the PA.	–	–	–
Reclamation, including the placement of overburden, seeding and re-grading.	–	–	–
Monitoring and maintenance.	–	–	–
Employment and expenditures[1].	✓	✓	✓

Notes:
✓ = Potential interaction
– = No interaction
1. Project employment and expenditures are generated by most Project activities and are the main drivers of many potential socio-economic effects. Rather than acknowledging this by placing a checkmark against each of these activities, 'employment and expenditures' is listed as a separate item under each phase of the Project.

Project demand and expenditures on services, labour, materials, and equipment are the primary pathways through which changes in the labour force, business, and economy occur. All pathways are captured through the identified interaction with economic conditions. All remaining Project activities and components are identified as having no interaction, as it is the employment and expenditures component of these activities that interacts with economic conditions, not the physical activities of the Project themselves. The assessment of change in labour force, business, and economy is considered in the overall context of each Project phase (i.e., construction, operations, and decommissioning.)

23.4 Assessment of Residual Effects on Economic Conditions

23.4.1 Analytical Assessment Techniques

Economic impacts of Project construction, operations, and decommissioning and closure were estimated at the provincial level using Statistics Canada's 2018 detail level provincial input-output multipliers (derived from its Interprovincial Input-Output Model). The Interprovincial Input-Output Model does not estimate personal income taxes. These were estimated by applying federal and provincial effective tax rates, based on income bracket and province, to modelled labour income per person year (PY) of

employment adjusted to represent mean taxable income. Modelled direct impacts of labour and labour income stemming from turnarounds were not estimated.

Statistics Canada does not provide economic impact multipliers at the local or regional level. Economic impacts to the RSA and LSA were estimated through customized location quotients based on available provincial level information, including employment, labour, and GDP coefficients.

Economic impacts are described in terms of direct, indirect, and induced effects, where:

- direct effects result from labour, materials, and services demand from the Proponents and its contractors during Project construction and operations (e.g., labour, project management)
- indirect effects result from contractor expenditures on goods and services (e.g., employment with 34 suppliers/manufacturers of materials used during construction)
- induced effects result from spending by direct and indirect workers on consumer goods and services (e.g., restaurant servers, retail positions)

A brief overview of how Project construction, operations, and decommissioning were estimated is presented below, with a more thorough discussion provided in the Economic Impact Assessment (Appendix C.10 of the Impact Statement).

23.4.1.1 Construction

The capital expenditures estimate includes costs such as local infrastructure upgrades, open pit mine development, ore processing facility, tailings management facility, high-voltage substation and power supply infrastructure, offices, maintenance shops and utilities, as provided in the feasibility study. The estimate conforms to Class 3 guidelines for a feasibility study level estimate with a ±15% accuracy according to the Association of the Advancement of Cost Engineering International (AACE International). Most costs have a base date of Q4 2022, except for mining, tailings management, and water management costs, which have a base date of Q2 2023.

The following items were not included in the cost estimate:

- financing charge
- residual value of temporary equipment and facilities
- environmental approvals
- further Project studies
- force majeure events
- future scope changes
- special incentives (e.g., schedule, safety, or others)
- strikes or other work stoppages
- management reserve above the Project contingency included

- foreign exchange exposure
- land acquisition.

Costs are generally grouped into three categories:

1. Initial Capital – initial Project development, with a mill throughput of 60 kilotonnes per day (kt/d)
2. Expansion Capital – all costs from the completion of initial development through the expansion of throughput to 120 kt/d, planned for Year 4
3. Sustaining Capital – all costs subsequent to completion of the expansion

Table 23.15 identifies the capital expenditures planned for these three phases. The initial capital investment is projected to be $2,556 millions of Canadian dollars (C$M), the expansion capital investment is projected at $2,105 C$M, and the sustaining capital investment is projected at $1,950 C$M. Closure costs of $175 C$M are incurred throughout all three phases bringing the total capital investment to $6,786 C$M.

Table 23.15 Capital Expenditures (C$M) for the Project by Phase

Activity	Initial Capital (C$M)	Expansion Capital (C$M)	Sustaining Capital (C$M)	Closure Costs (C$M)	Total Capital (C$M)
Mining	657	552	1,715	**175**	2,924
Process	902	914	0		1,816
Utilities	46	40	0		86
Tailings and Water Management	129	111	136		375
On-Site Infrastructure	120	67	97		284
Off-Site Infrastructure	150	56	0		205
Indirect Costs	244	174	0		418
Owner's Costs	65	0	0		65
Contingency	244	191	0		435
Total Capital	2,556	2,105	1,950		6,786
Total Investment	**2,556**	**2,105**	**1,950**		**6,786**
Source: Ausenco 2023					

Mining activities are the largest category of capital expenditures for the Project. Mining capital costs include site preparation, stripping, fleet, buildings and mechanical infrastructure, electrical infrastructure, and trolley assist. Process activities including crushing, grinding, floatation, and mineral separation to begin the magnetic recovery and concentrate filtration. Utilities involve costs associated with powering the facility during construction. Tailings and water management expenditures are for activities associated with establishing infrastructure required for the management of water within the site. On-site infrastructure predominantly includes site preparation work as well as the development of additional ancillary buildings, whereas off-site infrastructure involves investments in transportation and the transmission line. Indirect costs predominantly involve the establishment of temporary infrastructure and equipment, such as first aid centres, temporary roads temporary utilities, as well as engineering procurement, and construction management. Owner's costs are administrative costs associated with the construction of the Project. The contingency allowance is provided to reflect the accuracy of the estimate based on 10% of the total engineering complete.

23.4.1.2 Operations

The operating cost estimate (Table 23.16) is composed of mining, tailings/water management, processing, and general and administrative costs.

Table 23.16 Estimated Operational Expenditures (C$M) for the Life of the Project

Activity	Operations (C$M)
Mining	10,792
Tailings and Water Management	380
Process	11,698
General and Administrative Costs	1,688
Total Expenditures	24,558
Source: Ausenco 2023	

As identified in Table 23.16, processing makes up the largest operational expense in the Project. The mining costs are associated with activities such as drilling and blasting, loading, hauling, revegetation, and other ongoing maintenance. Tailings and water management feature are all of the activities associated with operating the tailings management facility and the water treatment plant. Process operating costs include areas such as labour, power, consumables, maintenance materials, mobile equipment, and laboratory and assays. General and administrative costs are based upon the level of service required for the size of the operation, which include transporting employees to the site, providing personal protective equipment, as well as other administrative services, including information technology, finance, security, and cleaning.

23.4.1.3 Decommissioning and Closure

The closure cost estimate makes provision for the following:

- decommissioning of the process plant and infrastructure
- reclamation and revegetation of disturbed areas, including the impoundment facility and the tailings management facility, as well as the footprint of the low-grade stockpiles and decommissioned plant
- Ongoing monitoring of (1) run-off from the decommissioned site to meet post-mining land use objectives; (2) Open Pit, TMF, and the Impoundment Facility for geotechnically stable; and (3) effects to receiving environment and aquatic communities to manage according to the costs associated with the placement of a closure bond

Closure costs would be expended as the various plants and infrastructure are closed. For example, impoundment of tailings in the TMF is completed in Year 17, at which time impoundment transitions to the mined out Open Pit. Then, closure of the tailings management facility commences. However, a financial assurance to cover closure expenses must be placed prior to this time as per requirements of the *Mining Act,* 1990. The current approach is for the financial assurance to be updated periodically over the life of mine. The financial assurance can be submitted in phases tied to the construction schedule. The amount of financial assurance also considers deduction for any progressive reclamation done.

As summarized in Table 23.17, closure expenditures will total $175 C$M.

Table 23.17 Closure Expenses for the Project

Activity	Total (C$M)
Decommissioning – Phase 1 Process Infrastructure	24
Decommissioning – Phase 2 Process Infrastructure	21
Reclamation	84
Monitoring	13
Finance Charges	33
Total Closure Costs	**175**
Source: Ausenco 2023	

The decommissioning phase is broken into two phases: active closure where buildings and infrastructure will be demolished, decommissioned and removed; passive closure where post-closure monitoring will occur. Cost during passive closure include work related to the monitoring and reclamation of the mine area, including site maintenance, surface and groundwater monitoring, as well as other safety expenses. Monitoring costs account for a 100-year post-closure period and apply a 4% discount rate beginning in the first year of closure.

23.4.2 Change in Employment

23.4.2.1 Project Pathways

Project demand for labour can result in positive effects on employment, including increased local employment and income during all phases of the Project, including construction, operations, and decommissioning and closure. Employment numbers will fluctuate over the life of the mine based on demand and services required. Based on existing labour force conditions, positive effects may not be equitably distributed across subpopulations.

23.4.2.2 Mitigation and Enhancement Measures

The following mitigation measures have been incorporated into the design of the Project and/or are proposed to avoid or reduce Project-related effects with respect to employment:

- Canada Nickel is committed to hire from local communities and the region, pending the availability of qualified applicants.
- Canada Nickel is in regular communication with local training/education institutions regarding existing, upcoming, and potential course and training offerings, and how this aligns with Canada Nickel's anticipated needs. Canada Nickel continues to explore education, training opportunities and will develop hiring practices that encourages the employment and retention of qualified Indigenous peoples and local community members, including opportunities targeted towards youth.
- Canada Nickel will explore opportunities to support training, education, and scholarship programs that improve employment opportunities, including participation in and contribution to local training networks, which are targeted at diverse groups such as Indigenous nations, local youth, and various relevant subgroups, such as the Indigenous Skills and Employment Training Program.
- Canada Nickel will increase flexibility in work schedules to enable the continued participation of Indigenous employees in traditional and cultural activities.
- Canada Nickel will develop a Diversity and Inclusion Policy, which encompasses respectful workplace behaviours for diverse groups such as Indigenous nations, local youth, seniors, 2SLGBTQQIA+, visible minorities, persons with disabilities and members of the GBA Plus community. Such a policy and subsequent training consist of awareness training for non-Indigenous employees to foster a respectful working relationship with Indigenous employees and contractors.
- Canada Nickel is participating in the initiative “Equal by 30”, which aims to increase benefits to women and to accelerate gender equality and diversity to close the gender gap by 2030.
- Canada Nickel will participate in initiatives aimed at addressing wage inequality among Indigenous populations through working with organizations such as Keepers of the Circle.

23.4.2.3 Project Residual Effects

23.4.2.3.1 Estimated Workforce Size

The estimated average number of workers for each Project phase is summarized as follows:

- Construction – An average of 449 FTEs (maximum 1,998 FTEs)
- Phase 1 operations – An average of 1,200 FTEs (maximum 1,290 FTEs)
- Phase 2 operations – An average of 850 FTEs (maximum 1,371 FTEs)
- Phase 3 operations – An average of 300 FTEs (maximum 334 FTEs)

During the operations phase, ore extraction and processing will occur 24-hours a day, seven days a week, 365 days a year. This will be achieved by employing four rotating crews that work 12-hours shifts and an average 42-hours a week. A compliment of office, environmental and other support staff will work a more traditional five-day per week schedule or similar.

The Project will have a peak workforce of 1,998 FTEs (during construction) and an average of 708 FTEs over the life of the mine. The peak labour force during operations is expected during Year 6 (operations phase 2) when construction (e.g., clay stripping) is still occurring in conjunction with ore extraction. The workforce during this period will include a mixture of staff working on preparing the pit, ore extraction, management, and maintenance activities.

Assuming an average construction workforce of 449 FTEs, annual employment of 2,100 hours per FTE, and a 30-month construction period, Project construction will involve a total of 2.36 million person-hours of labour.

The operations and maintenance of Project facilities will be a constant undertaking, with workers employed full-time through the life of the Project. It is estimated that a 1,200 FTEs average during Phase 1 requires 8.82-million-person hours. Phase 2, which involves an average workforce of 850 FTEs, will require 47.3-million-person hours of labour. The final phase, Phase 3, involves an average of 300 FTEs, requires 7.09-million-person hours.

Employment forecasts for decommissioning were not available at the time of the study, but they are expected to be reduced relative to the construction and operations phase.

Table 23.18 shows the direct, indirect, and induced labour generated from the Project in the RSA and LSA based on estimates generated from the input-output model.

Table 23.18 Direct, Indirect, and Induced Labour (Person Year) Generated from the Project

Geography	Impact	Construction	Operations
Total Canada	*Direct (modelled)*	17,153	18,812
	Direct (estimate)	3,996	30,100
	Indirect	6,425	19,861
	Induced	3,520	13,099
Ontario	*Direct (modelled)*	12,912	16,377
	Direct (estimate)	2,997	26,187
	Indirect	3,644	17,805
	Induced	2,143	11,375
RSA	*Direct (modelled)*	9,684	14,248
	Direct (estimate)	2,248	22,783
	Indirect	2,733	15,490
	Induced	1,607	9,896
LSA	*Direct (modelled)*	7,263	12,396
	Direct (estimate)	1,686	19,821
	Indirect	2,050	13,476
	Induced	1,205	8,610

Notes:
- Modelled values are based on the results of Stantec's input-output model.
- Estimated values are those provided by Canada Nickel

Direct employment estimates are also provided based on the estimates generated from Canada Nickel and converted into PY. PY is used to provide a more accurate representation about the level of labour required throughout the duration of the Project. It is expected that the estimates provided by Canada Nickel are a more accurate representation of the labour required for the Project. The estimate numbers are based on a detailed labour needs assessment while the modelled results are based on expenditures. It is estimated that direct, indirect, and induced labour will be generated across Canada; however, there will be substantial labour required for Project-based activities in the LSA and RSA during both construction and operations.

23.4.2.3.2 Estimate Workforce Availability

Table 23.9 and Table 23.10 highlight workforce projections for the mining industry in the RSA, which do not include the forecast labour required for the Project. By 2027, it is estimated that there will be a deficit in required labour for the mining industry, and that the use of mobile workers will be required to fill this void. By 2037, it is estimated that there will be a potential shortfall of 23% to 30% of vacancy rates in the mining industry within the LSA. As identified by the LQ analysis in Table 23.11, both the LSA and the RSA have a strong specialization in the mining industry, which has potential to continue catering to the increased demand in the job market. However, given the size of the labour force within the LSA and RSA

as identified in Table 23.7 and Table 23.8, it is likely that the vacancy rates will continue to increase beyond 30%, and that the incorporation of mitigation and enhancement measures to fulfill the labour required for the Project will be needed.

While estimates of local and regional employment are provided, the degree to which residents of the LSA and RSA secure employment with the Project depends on numerous considerations, including existing levels of educational attainment, labour force conditions, and the extent to which local workers wish to participate in the Project. The extent to which contractors draw on labour from outside the LSA and RSA to complete Project work also affects levels of Project-related local and regional employment.

Based on the composition of similarly sized past mining and construction projects, it is reasonable to expect that the local labour component would not exceed 20% of the Project labour force. Therefore, the peak construction labour force of approximately 2,000 persons could be comprised of 400 local residents and 1,600 non-local workers. During operations, the peak labour force of nearly 1,400 could include 280 local residents and 1,120 employees from outside of the LSA/RSA. Considering typical work rotations for similarly sized mining and construction projects, it is likely that 75% of the labour force during construction and operations will be on-site at any one time.

Canada Nickel is committed to enhancing the positive impacts locally of the Project through the inclusion of mitigation and enhancement measures. Canada Nickel's corporate gender equity and diversity policies include provisions to hire locally first, with a focus on hiring members of Indigenous nations, women, and youth to increase Project employment among underrepresented populations, as well as to reduce the wage inequality gap between men, women, and Indigenous populations. This includes providing accommodations during the hiring process, as well as providing training opportunities for local people. For Indigenous peoples, accommodations are provided to allow employees to engage in traditional and cultural activities. In addition, with emerging technology trends, employees require a specific set of skills, and Canada Nickel is working with NORCAT to develop courses that will be administered by Northern College, which will include apprenticeship programs as well as specialized training for vehicle operation. This program will be run multiple times to provide an opportunity to equip locals with the skills needed to work on the Project. Further, Canada Nickel will develop a Diversity and Inclusion Policy, which does not discriminate against employees or contractors of the company based on race, ethnicity, physical/mental capabilities, sexual orientation, or Indigeneity, and requires employees to adhere to respectful workplace practices.

23.4.2.3.3 Effects on Sub-populations identified through Gender Based Assessment Plus

Recognizing that Indigenous populations represent 16% of the LSA total population (Table 23.4), it is conservatively assumed that the Project will employ more non-Indigenous than Indigenous persons. It is also likely that the Project will employ more males than females as most jobs associated with the Project will be in trades and construction-related occupations and industries that employ disproportionately high numbers of males (Table 23.7 and Table 23.8). To enhance diversity and inclusion within the workforce, Canada Nickel will implement the mitigation and enhancement measures identified in Section 23.4.2.2, such as the Diversity and Inclusion Policy, which will assist in recruiting and retained sub-populations, include those identifying as Indigenous. Nevertheless, despite mitigation and enhancement measures it is likely that more men, specifically more non-Indigenous men than women will be employed by the Project. While mitigation and enhancement measures are expected to have a positive effect on employment and income inequality at the Project level (with baseline information identified in Section 23.2) given the size of the Project's construction, operations, and decommissioning and closure workforces relative to the size of the LSA labour force, the Project is not expected to measurably reduce employment and income equality across genders or between persons of Indigenous and non-Indigenous identity within the LSA given the small size of the Project workforce relative to the size of the LSA labour force. However, the effects of this Project will be to provide a greater opportunity for employment in the LSA, including the employment of underrepresented individuals in the workforce.

23.4.2.3.4 Summary

With the implementation of mitigation and enhancement measures, Project residual effects on the LSA labour force are expected to be positive in direction and high in magnitude during construction and operations. Moderate magnitude adverse effects are anticipated as the Project transitions from operations through decommissioning and closure (i.e., loss of direct employment). Positive and adverse effects are expected to extend to the RSA, although it is recognized that employment extends beyond Ontario. Effects are short-term in duration during construction and decommissioning and closure, and medium-term during operations. Effects occur continuously throughout each Project phase and are reversible following the completion of construction and operations; however, these are irreversible following the completion of decommissioning and closure due to potential permanent loss of Project-related employment.

In other words, the benefits of employment through job creation during construction and operations will be reversed as project activities, and the corresponding workforce requirements of the Project, are reduced. These jobs will provide for full time employment for a substantial number of individuals within the LSA and RSA over the life of the Project, and while these numbers are expected to be reduced during the later stages of operations and decommissioning, the benefits of long-term employment (>40 years) and training/skills development that will result will be realized.

23.4.3 Change in Business

23.4.3.1 Project Pathways

Project expenditures on materials, equipment, and services could result in both positive and adverse effects on business. Positive effects include increased business revenue, which can support capital investment and hiring, thereby increasing capabilities and capacity among local businesses. Spending of income by direct and indirect workers contributes to positive effects on local businesses, primarily within the service sector, resulting in induced employment effects. Adverse effects include labour drawdown (i.e., workers leave current employers to secure employment with the Project due to wage differentials or a desire to work on the Project) and wage inflation (i.e., to attract and retain workers local employers may increase compensation paid to workers).

23.4.3.2 Mitigation and Enhancement Measures

The following mitigation measures have been incorporated into the design of the Project and/or are proposed to avoid or reduce Project-related effects that affect business:

- Canada Nickel will prepare plans, programs and policies to encourage contracting and procurement opportunities for Indigenous businesses. Such plans will include the enhancement of supplier network development initiatives, including keeping a repository of local and Indigenous suppliers with potential to bid on the Project. Indigenous nations located near the Project will be directly contacted regarding procurement opportunities from Canada Nickel and Canada Nickel will accommodate barriers there may be to bid on a contract (such as translation services), where feasible.
- Canada Nickel commits to consider bids from qualified locally owned businesses first, including those submitted from diverse groups such as Indigenous-owned companies, women-owned companies, 2SLGBTQQIA+-owned companies, persons with disabilities-owned companies and visible minority-owned companies, as per Canada Nickel's Local Procurement Policy.

23.4.3.3 Project Residual Effects

23.4.3.3.1 Construction

Accounting for the capital expenditures provided in Section 23.4.1.1, Table 23.19 presents the estimated direct, indirect, and induced economic and employment impacts as a result of the capital expenditures of the Project. The model assumes that 60.8% of expenditures will be conducted in Ontario, 24.7% of expenditures will be conducted in other parts of Canada, and the remaining 14.5% will take place outside of Canada.

Table 23.19 Impacts to Labour Income and Employment

Type	Initial Capital (C$M)			Expansion Capital (C$M)			Sustaining Capital (C$M)		
	Direct	Indirect	Induced	Direct	Indirect	Induced	Direct	Indirect	Induced
Ontario									
Labour Income	303.4	59.6	31.4	285.3	56.0	29.5	333.7	65.5	34.5
Employment (PY)	4,247	1,192	705	3,993	1,121	663	4,672	1,311	775
Other Canada									
Labour Income	101.3	52.8	16.5	95.3	49.7	15.5	111.4	58.1	18.1
Employment (PY)	1,395	922	364	1,312	867	343	1,535	1,014	401
Total Canada									
Labour Income	404.7	112.4	47.9	380.5	105.7	45.0	445.2	123.6	52.7
Employment (PY)	5,642	2,113	1,069	5,305	1,987	1,005	6,206	2,325	1,176

Substantive labour income is anticipated to be generated from the capital expenditures. Income generated from all three phases directly from the Project is expected to reach $922.4 C$M in Ontario and $1.2 billions of Canadian dollars (C$B) in all of Canada. Labour income also has high indirect impacts ($270.2 C$M in Ontario and $341.7 C$M in Canada) as does induced labour income ($95.4 C$M in Ontario and $145.6 C$M in Canada).

The labour income is derived from the number of PY of employment that the Project is expected to generate. In Ontario, across all three phases, the Project is expected to directly generate 12,912 PY of employment. In comparison, across Canada that number is expected to rise to 17,153 PY. Indirect employment generated from the Project in Ontario is projected to 3,624 PY and up to 6,425 PY in Canada. The Project is projected to generate 2,143 PY of induced employment in Ontario and 3,250 PY in all of Canada. Further discussion on the effects on employment is provided in Section 23.4.2.

The degree to which LSA businesses benefit from Project contracting and supply opportunities, and therefore result in indirect employment, depends on several factors, including their size, capability and capacity to accommodate Project requirements. Specifically, indirect employment resulting from Project spending on goods and services would only be expected to result in ‘net new’ (i.e., creation of) indirect employment if businesses become established or expand (by increasing workforces) to meet Project demands. In consideration of the LSA’s industrial composition, existing labour force (Section 23.2.2.3 and 23.2.2.4) conditions, and using employment as a measure of capacity, businesses within the LSA are likely well positioned to compete for small- to medium-sized service and supply contracts, particularly those related to construction, transportation, and warehousing (Section 23.2.2.4).

Because induced employment depends on consumer purchasing on the part of direct and indirect workers, the magnitude of effect largely depends on the magnitude of Project-related direct and indirect employment. While there is a low likelihood that all Ontario-based induced employment effects will occur in the LSA and result in ‘net-new’ employment, it is estimated that approximately 70-80% of induced employment will directly impact the LSA and as such residual effects within the LSA are considered high in magnitude.

As the Project transitions from operations through decommissioning and closure, a loss of Project expenditures within the LSA could result (depending on economic conditions at the time) in adverse effects (i.e., a reduction) on indirect employment. The magnitude of this effect would align with gains in indirect employment during construction and operations (i.e., low magnitude).

23.4.3.3.2 Operations

Table 23.20 presents the estimated direct, indirect, and induced economic and employment impacts as a result of the operational expenditures of the Project. The model assumes that 65.1% of operational expenditures will be conducted in Ontario, 7.9% of expenditures will be conducted in other parts of Canada, and the remaining 27.1% will take place outside of Canada. These ratios were established based on a review of the cost estimate and assessment of most likely service, material, consumable or equipment provider available provincially and/or nationally.

Table 23.20 Direct, indirect, and included impacts, operational expenditures (C$M), Canada, life of mine.

Type	Direct	Indirect	Induced
Ontario			
Labour Income	1,759.8	1,161.6	506.5
Employment (PY)	16,377	17,805	11,375
Other Canada			
Labour Income	324.2	52.8	77.8
Employment (PY)	2,435	2,056	1,723
Total Canada			
Labour Income	2,084.0	1,214.4	584.3
Employment (PY)	18,812	19,861	13,099

Direct labour income generated during mine operations is expected to exceed $1.5 C$B in Ontario and $2.0 C$B in all of Canada. The labour income is derived from the number of PY of employment that the Project is expected to generate.

Wages paid to the Project's direct workforce are predicted to be substantially higher than the average wage rates paid within the LSA and RSA. However, when compared to the range of mean annual wages paid to Ontario workers employed in other provinces, and in reference industries and sectors, projected wages fall within existing levels of compensation (see Section 23.2.2.8).

While Project wages are likely to fall within the existing range of compensation paid to Ontario workers of industries and sectors most applicable to Project-related work, due to differentials between existing LSA and RSA conditions, the Project has the potential to contribute to upward pressure on wages through increased competition for labour among local employers. Combined with the potential for Project-related employment to be perceived as being more desirable than other forms of employment within the LSA and RSA, the Project could result in increased difficulty for local businesses to recruit or retain qualified workers.

To manage the Project's contribution to upward pressure on wages, Canada Nickel will pay its direct workforce wages that are consistent with Ontario's mining industry. Combined with the anticipated size of the Project's local direct workforce, adverse effects on local and regional businesses (in terms of upward pressure on wages and associated increased difficulty to recruit or retain workers) is expected to be low in magnitude.

Given the length of construction, operations, and decommissioning and closure, it is possible that local businesses could expand (workforce size) or new businesses could be established (especially those seeking to fulfill operational service and supply contracts) to meet Project demands. It is possible that new and expanded businesses may be established in the LSA, particularly as the Project has the potential to stimulate a new and specialized industry for the province and the country, which would stimulate further indirect impacts and induced spending. Given the potential for increases for indirect spending in the LSA, paired with the low likelihood that all indirect Ontario-based employment effects will occur in the LSA, resulting in 'net-new' employment, residual effects within the LSA are considered moderate in magnitude.

23.4.3.3.3 Decommissioning and Closure

No economic modelling has been done for the decommissioning and closure phase given the likelihood that the economy will continue to change during the life of the Project. Induced employment estimates were not calculated for the decommissioning and closure phase. However, the closure of the Canada Nickel operation may result in an adverse effect on regional businesses. The potential for benefits associated with indirect and induced employment and direct, indirect, and induced spending will be realized during Project construction and operations and the conclusion of the Project will present an irreversible residual effect. The establishment of this Project may stimulate further developments of similar projects in the LSA of which regional businesses will have the potential to avail.

23.4.3.3.4 Effects on Sub-populations identified through Gender Based Analysis Plus

By implementing measures specifically aimed at increasing economic participation among local and Indigenous businesses a disproportionate amount of Project contracting and procurement in Ontario is expected to be realized by these groups. While mitigation and enhancement measures are expected to have a positive effect on Indigenous and local procurement at the Project level, the Project is expected to have a low impact in reducing inequalities across within the LSA. The likelihood of residual effects occurring as assessed is moderate. Mitigation and enhancement measures are specifically targeted at increasing local content and participation among Indigenous and local businesses. With the inclusion of such mitigation and enhancement measures, it is not expected that the Project will directly or indirectly create economic hardships or the displacement of Indigenous businesses.

23.4.3.3.5 Summary

With the implementation of mitigation and enhancement measures, Project residual effects on local and regional businesses are expected to be mixed in direction (positive and adverse) and predominantly moderate in magnitude. Positive effects relate to Project spending on goods and service contracts, and direct, indirect and induced employment effects alongside the prospect of improved financial positions of

LSA constituents. Adverse effects may result from anticipated upward pressure on wages, increased difficulty of local employers to recruit or retain workers who may be qualified for employment with the Project.

Positive and adverse effects on regional businesses are expected to extend to the RSA, although it is recognized that employment also extends beyond Ontario. Effects are short-term in duration during construction, and during decommissioning and closure, and medium-term during operations. Effects are expected to occur continuously throughout each Project phase and are reversible following the completion of construction and operations; however, these are irreversible following the completion of decommissioning and closure (due to the potential for permanent loss of Project-related expenditures and employment). Based on existing conditions, effects occur within a resilient socio-economic context within the LSA and RSA.

23.4.4 Change in Provincial Economy

23.4.4.1 Project Pathways

Project spending will result in overall increased economic activity in the LSA and RSA and will also contribute to provincial and federal government revenues through royalty payments and taxation on production, labour, goods, and services.

23.4.4.2 Mitigation and Enhancement Measures

Canada Nickel has and will continue to engage local Indigenous nations and has established agreements to support present engagement and participation in the Project. Additional long-term agreements are currently being developed (e.g., Impact Benefit Agreement, Mutual Support Agreements as well as additional agreements, as appropriate. These agreements may include elements to assist in mitigating the adverse economic impacts from the Project and enhance the positive economic impacts for these Indigenous nations.

23.4.4.3 Project Residual Effects

23.4.4.3.1 Construction

Accounting for the capital expenditures provided in Section 23.4.1.1, Table 23.21 presents the estimated direct, indirect, and induced economic and employment impacts as a result of the capital expenditures of the Project. The model assumes that 60.8% of expenditures will be conducted in Ontario, 24.7% of expenditures will be conducted in other parts of Canada, and the remaining 14.5% will take place outside of Canada.

Table 23.21 Impacts to Provincial Economy, Capital Expenditures

Type	Initial Capital (C$M)			Expansion Capital (C$M)			Sustaining Capital (C$M)		
	Direct	Indirect	Induced	Direct	Indirect	Induced	Direct	Indirect	Induced
Ontario									
Output	947.9	189.4	115.1	891.3	178.1	108.2	1,042.7	208.3	126.6
GDP	717.3	92.6	67.6	674.5	87.0	63.5	789.1	101.8	74.3
Other Canada									
Output	385.1	104.9	60.9	362.1	98.7	57.3	423.6	115.4	67.0
GDP	262.5	80.5	34.9	246.8	75.7	32.9	288.8	88.5	38.4
Total Canada									
Output	1,332.9	294.3	176.0	1,253.4	276.7	165.5	1,466.3	323.7	193.6
GDP	979.8	173.1	102.5	921.4	162.7	96.4	1,077.9	190.4	112.8

The Project is projected to provide a substantial contribution to both the provincial and federal GDP. The total direct GDP contributions in Ontario across the three phases is projected to be approximately $2.9 C$B. When considering the direct GDP contributions for all of Canada, the GDP contributions are projected to reach approximately $4.1 C$B. Indirect and induced GDP contributions are also expected to substantively contribute to GDP growth, with $281.4 C$M indirect and $205.4 C$M induced impacts towards GDP in Ontario and $526.2 C$M indirect and $311.7 C$M induced impacts towards Canada's GDP.

23.4.4.3.2 Operations

Table 23.22 summarizes the projected direct, indirect, and induced economic output on GDP contributions as a result of the operational expenditures of the Project. The model assumes that 65.1% of expenditures will be conducted in Ontario, 7.9% of expenditures will be conducted in other parts of Canada, and the remaining 27.1% will take place outside of Canada. These ratios were established based on a review of the cost estimate and assessment of most likely service, material, consumable or equipment provider available provincially and/or nationally.

Table 23.22 Impacts to Provincial Economy, Operational Expenditures (C$B)

Type	Direct	Indirect	Induced
Ontario			
Output	15,739.2	3,342.4	1,856.7
GDP	12,850.4	1,796.2	1,091.0
Other Canada			
Output	1,910.0	491.3	287.9
GDP	1,297.6	523.3	165.1

Type	Direct	Indirect	Induced
Total Canada			
Output	17,649.2	3,833.8	2,144.5
GDP	14,148.0	2,319.5	1,256.1

The total direct GDP contributions in Ontario for the life of the mine are projected to be approximately $12.8 C$B. When considering the direct GDP contributions for all of Canada, the GDP contributions are projected to exceed $14 C$B. Indirect and induced GDP contributions are also expected to contribute to GDP growth, with approximately $1.8 C$B indirect and $1.1 C$B induced contributions towards GDP in Ontario and $2.3 C$B indirect and $1.3 C$B induced contributions towards GDP in Canada.

Table 23.23 provides the changes to government revenue that are expected as a result of corporate and personal income, as well as sales and mining taxation from the Project. Wage and benefits were estimated based on the best available information provided by Canada Nickel and are comparable to the average wages in Ontario in relevant sectors as identified in Table 23.12 as well as in the Cochrane District as per a salary wage and benefits survey completed by Lincoln Strategic International.

Table 23.23 Impacts from Taxation, Operational Expenditures (C$M)

Type	Direct (estimate)	Indirect (model)	Induced (model)
Federal income tax	4,172	121	53
Federal sales tax (modelled)	13	312	8
Provincial income tax	2,781	73	37
Provincial sales tax (modelled)	19	455	11
Ontario Mining Tax	2,474	-	-
Clean Technology Manufacturing	(1,142)	-	-

Corporate income taxes on Project related revenue are estimated to produce over C$4B in government revenue. Based on an assumed taxation rate of 10% on taxable income, the Project will generate nearly C$3B in revenue province of Ontario. In addition, the Ontario Mining Tax is applied at a rate of 10% on resource projects from taxable revenue, which will generate approximately C$2.5B in revenue for the Ontario government over the life of the Project.

While both provincial and federal sales tax are expected to be low for direct contributions from the Project, it is expected that indirectly, a total of C$320M will be generated from indirect and induced federal sales tax and C$466M will be generated from indirect and induced provincial sales tax throughout operations.

It is assumed that Canada Nickel would be eligible for the Clean Technology Manufacturing tax credit that was announced in the 2023 federal budget. This credit, which applies to capital invested in the plant and equipment necessary for the production of critical minerals, provides a refund of 30% on eligible expenditures until 2031, and ramps down until it is phased out in 2035. The total value of this credit is estimated to be C $1.1B.

While estimates of GDP contributions to the LSA have not been prepared, the Project is inherently beneficial to the local and regional economy. As GDP is a measure of overall economic activity, the magnitude of effect is represented through the additive effect of Project-related changes in the local and regional labour force and businesses. The Project is expected to have a moderate magnitude positive effect on the GDP of the LSA and RSA during construction and operations. As the Project transitions from operations, and into and through decommissioning and closure, Project contributions to the GDP of the LSA and RSA will cease; however, contributions made during the decommissioning and closure phase are estimated to be positive in direction and low in magnitude.

23.4.4.3.3 Decommissioning and Closure

As noted in Table 23.15 (direct Project costs) Canada Nickel is expected to spend $175 C$M for decommissioning the Project, with the majority of expenses expected to occur in Ontario. Once decommissioning of the Project is complete, the economic benefits for the LSA and the RSA will have been realized. The Project will no longer contribute towards GDP growth, presenting an irreversible residual effect. However, it is likely that the Project will further enhance the specialization of mining activity in the LSA and RSA, which may provide labour market benefits once the decommissioning of the Project is complete.

23.4.4.3.4 Effects on Sub-populations identified through Gender Based Assessment Plus

By implementing measures specifically aimed at increasing diverse employment opportunities as well as economic participation among local and Indigenous businesses, a disproportionate amount of positive economic effects can be realized by sub-populations. While mitigation and enhancement measures are expected to have a positive effect on Indigenous and local procurement at the Project level, the Project is not expected to measurably reduce inequalities across within the LSA. The likelihood of residual effects occurring as assessed is moderate. Mitigation and enhancement measures are specifically targeted at increasing local content and participation among Indigenous and local businesses.

23.4.4.3.5 Summary

With the implementation of mitigation and enhancement measures, Project residual effects on the economy are predicted to be positive in direction and moderate in magnitude during construction and operations. Adverse effects are anticipated during decommissioning and closure. Effects are expected to primarily extend to the RSA, although it is recognized that Project expenditures and, therefore, contributions to GDP will extend beyond Ontario. Effects are expected to be short-term in duration during construction and decommissioning and closure, and medium-term in duration during operations. Effects are expected to occur continuously throughout each Project phase and are reversible following the completion of construction and operations, and irreversible for decommissioning and closure. Because Project effects are inherently beneficial, the socio-economic context in which effects occur is characterized as being resilient.

23.4.5 Summary of Project Residual Effects

Table 23.24 summarizes Project residual effects on Economic Conditions.

Table 23.24 Project Residual Effects on Economic Conditions

Residual Effect	Residual Effects Characterization							
	Project Phase	Direction	Magnitude	Geographic Extent	Timing	Duration	Frequency	Reversibility
Change in Employment	C	P	H	LSA / RSA	NS	ST	C	R
	O	P	H	LSA / RSA	NS	MT	C	R
	D	A	M	LSA / RSA	NS	ST	C	IR
Change in Business	C	P / A	M	LSA / RSA	NS	ST	C	R
	O	P / A	H	LSA / RSA	NS	MT	C	R
	D	P / A	M	LSA / RSA	NS	ST	C	IR
Change in Provincial Economy	C	P	M	LSA / RSA	NS	ST	C	R
	O	P	M	LSA / RSA	NS	MT	C	R
	D	A	M	LSA / RSA	NS	ST	C	IR

Key:
See Table 23.3 for detailed definitions.

N/A: Not applicable

Project Phase:
C: Construction
O: Operations
D: Decommissioning and Closure

Direction:
P: Positive
A: Adverse
N: Neutral

Magnitude:
N: Negligible
L: Low
M: Moderate
H: High

Geographic Extent:
PA: Project Area
LSA: Local Study Area
RSA: Regional Study Area

Timing:
NS: No sensitivity
MS: Moderate sensitivity
HS: High sensitivity

Duration:
ST: Short-term
MT: Medium-term
LT: Long-term

Frequency:
S: Single event
IR: Irregular event
R: Regular event
C: Continuous

Reversibility:
R: Reversible
I: Irreversible

23.4.5.1 Summary of Adverse Residual Effects

The Project is anticipated to result in low magnitude adverse effects on business during all Project phases (construction, operations, and decommissioning and closure). Adverse effects on business stem from increased competition for labour and upward pressure on wages. Adverse effects stem from Project-related wages being greater than existing conditions, albeit consistent with wages in the mining industry, and due to the potential for Project employment to be deemed more desirable than other forms of employment in the LSA, both of which can result in increased competition for labour and upward pressure on wages (to attract and retain workers). Adverse effects will be present during the decommissioning and closure of the Project as all potential employment and economic impacts will be realized.

23.4.5.2 Summary of Positive Residual Effects

The Project is anticipated to result in positive effects on employment, business, and the economy during all Project phases (construction, operations, and decommissioning). Positive effects in the form of direct, indirect, and induced employment and labour income in the LSA and other parts of Ontario and Canada and contributions to local, regional, provincial, and federal GDP and government revenues stem from Project demand and expenditures on labour, goods, and services.

Over the course of three phases, the total capital investment for the Project is estimated at $6,786 C$M, which will substantially contribute to both the provincial and federal GDP. The total direct GDP contributions in Ontario across the three phases is projected to be approximately $2.9 C$B. When considering the direct GDP contributions for all of Canada, the GDP contributions are projected to reach approximately $4.1 C$B. Indirect and induced GDP contributions are also expected to substantively contribute to GDP growth, with $281.4 C$M indirect and $205.4 C$M induced impacts towards GDP in Ontario and $526.2 C$M indirect and $311.7 C$M induced impacts towards GDP in Canada.

Operational expenditures for the Project are expected to reach $24,558 C$M, which will also substantially contribute to both the provincial and federal GDP. The total direct GDP contributions in Ontario for the life of the mine is projected to be approximately $12.8 C$B. When considering the direct GDP contributions for all of Canada, the GDP contributions are projected to exceed $14 C$B. Indirect and induced GDP contributions are also expected to contribute to GDP growth, with $1.8 C$B indirect and $1.1 C$B induced contributions towards GDP in Ontario and $2.3 C$B indirect and $1.3 C$B induced contributions towards GDP in Canada.

Positive effects of the Project are expected to be unevenly distributed among the LSA labour force. Given existing labour force characteristics, it is likely that a larger percentage of non-Indigenous men will be employed on the Project than other subpopulations. Mitigation and enhancement measures will be implemented to increase participation among underrepresented groups on the Project who will disproportionally benefit from these measures; however, given the estimated size of the Project's workforce, measurable changes in employment equity across the LSA are not expected. Increased employment in the LSA is expected to have positive effects on unemployment rates, increase income levels for individuals (and families) who secure employment with the Project and will provide valuable employment experience that can be leveraged by workers to secure employment with other projects/employers following completion of Project-related work.

23.5 Prediction Confidence

There is a moderate degree of confidence in the assessment of effects on economy, employment, and business. While an economic model was development and labour capacity was assessed based on available data, there remains uncertainty about future economic conditions in the LSA and RSA. The extent of local and regional employment will also depend on finalized Project workforce planning, while the extent to which businesses are affected depends on how they choose to respond to the opportunities presented by Project spending.

23.6 Potential Effects on Federal Land

Federal lands within the LSA and RSA for the Economic Conditions VC consist of the following:

- Abitibi Reserve No. 70 (a community of the Apitipi Anicinapek Nation located in the LSA)
- Flying Post Reserve No. 73 (a community of the Flying Post First Nation in the LSA)
- Matachewan Reserve No. 72 (a community of the Matachewan First Nation in the LSA)
- Mattagami Reserve No. 71 (a community of the Mattagami First Nation in the LSA)
- New Post Reserve No. 69A (a community of the Taykwa Tagamou Nation in the LSA)

No changes to the environment on these Federal Lands as a result of changes to Economic Conditions are anticipated. Effects on Federal Lands, in consideration of disproportionate effects on Indigenous nations and women, are anticipated to be similar to other areas in the LSA and RSA as described in Section 23.4.

23.7 Assumptions

In some instances, data limitations necessitated that a conservative approach be taken to accommodate uncertainty for the effects assessment. Conservative assumptions were made with respect to effects on employment, business, and economy. Economic use activities were assumed to occur within the LSA and RSA using economic multipliers through an input-output model and are subject to change depending on the amount of labour and level of procurement that occurs locally. Information used for this analysis was reliant on the feasibility study and is considered the benchmark for the Project (Ausenco 2023). The labour projections were provided from a 2017 report from the Far Northeast Training Board and reflected assumptions based on the information available at the time. Taxation impacts were calculated based on the programs that were available at the time.

23.8 Follow-up and Monitoring

Dedicated follow-up and monitoring activities are not anticipated for the economics VC.

23.9 References

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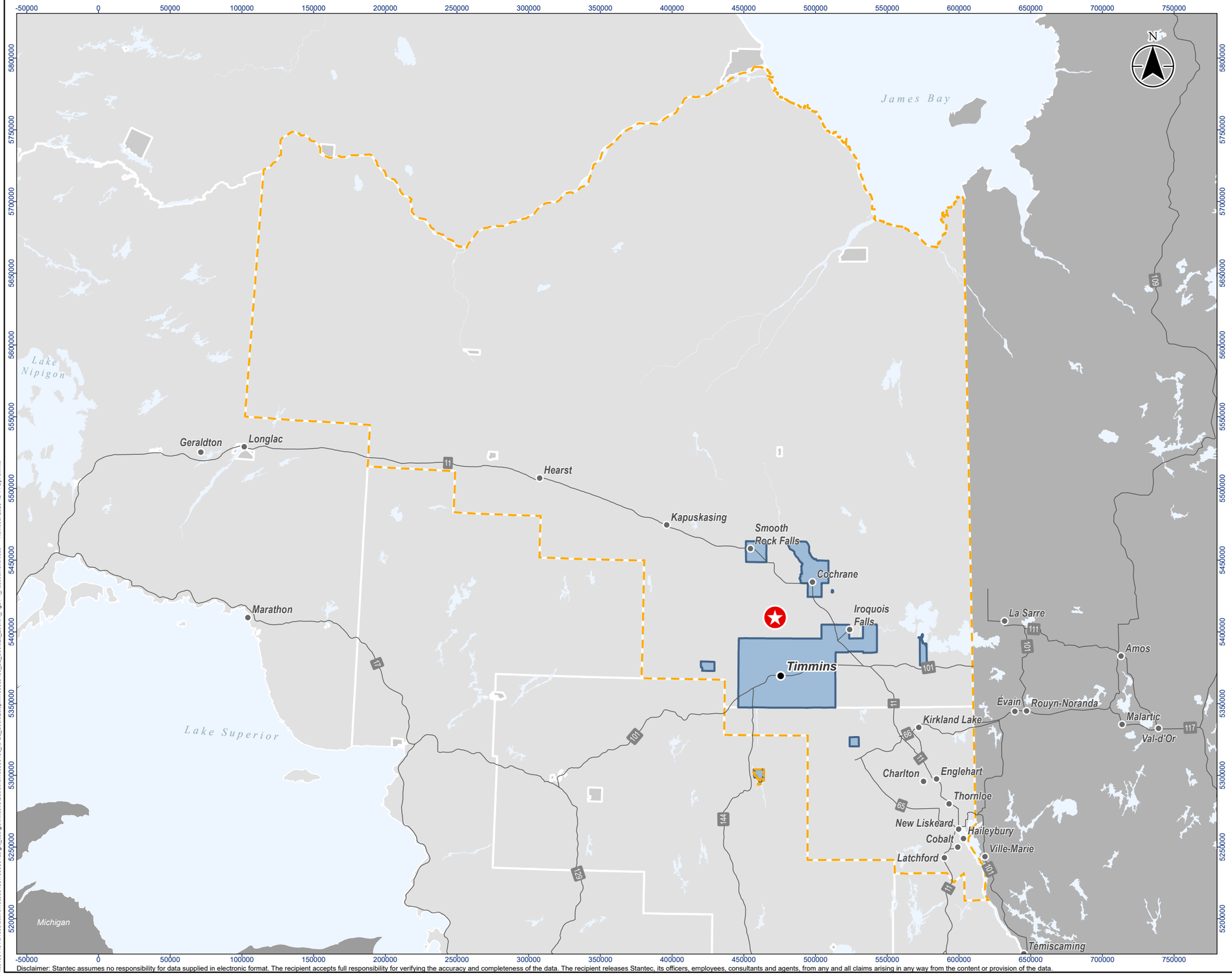
23.10 Figures



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Legend

- Project Location
- Local Study Area
- Regional Study Area
- Major Road
- Waterbody

0 50 100 km

1:2,700,000 (At original document size of 11x17)

Notes

1. Coordinate System:NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © King's Printer for Ontario, 2023.

Project Location
Timmins, Ontario

160903456 REVA
Prepared by awhite on 2023-12-14

Client/Project
Canada Nickel Company (CNC)
Crawford Nickel Project

Figure No.
23.1

Title
Economic Conditions Local Study Area and Regional Study Area