



Giant Mine Remediation Project

GMRP Labour Resource Study 2017

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SUBMITTED TO:

Aaron Braumberger
Indigenous and Northern Affairs Canada
Northern Contaminated Sites Program
15 Eddy Street
Gatineau, Quebec K1A 0H4

Via email to: aaron.braumberger@canada.ca

PREPARED BY:

Stratos Inc.
1404-1 Nicholas Street
Ottawa, Ontario
K1N 7B7
Tel: 613 241 1001
Fax: 613 241 4758
www.stratos-sts.com



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Executive Summary

Through its Socio-Economic Strategy, the Giant Mine Remediation Project (GMRP) commits to implement strategies that will maximize economic opportunities for Northerners and local Aboriginal people through employment and procurement. In order to meet this commitment, the GMRP needs to understand and regularly assess local labour capacity. This labour resource study provides an overview and analysis of current labour market conditions, existing local skills, local interests and capacity building programs, presented relative to the anticipated labour requirements of the GMRP. GMRP will use this information to inform decisions related to work package structure and contracting and to identify where additional capacity development may be required. It will also share this study with the Main Construction Manager (MCM) to inform their work. The key findings, conclusions and next steps of this study are outlined below.

Economic Conditions

The Canadian economy experienced a dramatic slowdown in 2015-16, due to a sharp fall in commodity prices and a weak Canadian dollar. Although the economy is showing some signs of recovery in 2017, the slowdown has resulted in mine closures, project cancellations and labour force reductions. Economic growth in the Northwest Territories (NWT) is expected to be high in 2017 due to the completion of the Gahcho Kué (De Beers) diamond mine. However, the territory's GDP growth is expected to decline again for the next few years until new mines come online around the turn of the next decade. All of this leads to the expectation that the GMRP will not be facing a competitive environment when recruiting the workers needed for the project. In particular, the GMRP could target its communication of job opportunities to mining and construction workers who may be unemployed due to closures or slowdowns. However, this continues to be a dynamic situation and is heavily influenced by volatile and unpredictable commodity prices.

Labour Supply and Demand

The NWT is expected to face occupational shortages in construction, trades and engineering occupations, while Canada overall is expected to see labour surplus conditions in entry-level and semi-skilled occupations. Typically, the mining and construction sectors report labour shortages in regions where Aboriginal unemployment is also high. NWT Aboriginal workforce participation rates are also low, although small local communities near the NWT diamond mines have seen Aboriginal workforce participation rates increase in the past decade. Overall, it is clear that the Aboriginal workforce has the potential to grow over time if accompanied by appropriate education and training. It is also noteworthy that the NWT has the highest proportion among the three territories of a commuter (i.e. out-of-territory) workforce. An awareness of immigration support programs will be important to ensure GMRP labour needs are met.

Conclusions

Interviews conducted with Northern and Northern Aboriginal governments and organizations, supplemented by desktop research, helped to identify existing skills, interests and capacity building programs in the NWT, particularly for communities in the vicinity of the GMRP. Based on the information gathered, we identified GMRP occupations/positions with Northern and Northern Aboriginal supply (i.e. areas with more than three suppliers or areas with interest, training and some



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expertise), occupations/positions with potential supply (i.e. areas with interest or training and some expertise) and gaps (i.e. areas with no interest, no or limited expertise and no training). The findings demonstrate that there is Northern and Northern Aboriginal capacity for GMRP entry-level and semi-skilled occupational needs, as well as some skilled and professional occupational needs (e.g. some technicians, blasting/drilling, environmental monitoring and safety supervision). There is a potential local labour supply for some skilled and professional occupational needs (e.g. some trades, technicians, supervisors, planners, engineers), where additional training may help increase the available local supply. Finally, there is limited local labour supply for some skilled and professional occupational needs (e.g. some technicians, trades and underground workers), indicating a need for local capacity building and/or recruitment of out-of-territory workers.

The information in this study should be used to communicate and engage with relevant Northern and Northern Aboriginal governments, organizations and communities, educational institutions and capacity building coordinating bodies to identify additional capacity development that may be required. This information may also be used by the MCM to inform decisions related to work package structure and contracting, to allow for the maximization of local employment and procurement.

Recommendations and Next Steps

This report recommends the following actions be taken to maximize local benefits from GMRP economic opportunities:

- Engage with coordinating bodies, educational and training institutions, capacity building programs and communities to keep apprised of programs that may be relevant to meeting GMRP labour needs
- Engage with Northern and Northern Aboriginal governments and organizations to communicate GMRP labour resource needs and explore what opportunities may be of interest to communities

This Labour Resource Study should be updated on an annual basis, as stipulated in the MCM contract. This update should include a review of any more recent labour market studies that have been released since this study was last published, as well as interviews with key stakeholders (for a complete list, refer to Appendix D). The GMRP labour resource requirements, as outlined in Section 4, should continue to be refined as project design advances.

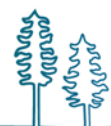
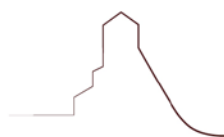


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1 Introduction

1.1 Background and Context

The Giant Mine is located close to Yellowknife's city centre (about five kilometres from the North end) and within the asserted traditional territory of the Akaitcho Territory Dene First Nations, within the extended Monfwi (Môwhì Gogha Dè Nîĩtâèè) boundary as defined in the *Tłı̨chǫ Land Claim and Self Government Agreement*, and adjacent to, or on the boundary of, the Interim Measures Agreement Area of the Northwest Territory Métis Nation.

In 1999, the Government of Canada took over responsibility for Giant Mine after the mine's last owner went bankrupt. After the Government assumed responsibility, the biggest concern was the arsenic trioxide dust stored underground. The site became the subject of several studies, workshops, community consultation sessions and the work of experts to find a solution for the dust. After several options were considered, it was determined that the best option available was to freeze the dust in place (the "frozen block method").

In 2007, the project submitted a Water Licence application to the Mackenzie Valley Land and Water Board (MVLWB) for the remediation of the site. While the MVLWB determined that the project should advance directly to the regulatory process, the Yellowknife City Council voted unanimously to refer the project to environmental assessment, as the mine is within the boundaries of the City.

Environmental assessment processes involve very thorough public and technical reviews. The assessment for the Giant Mine Remediation Project (GMRP) took seven years to complete and included a Developers Assessment Report¹, the Freeze Optimization Study, five days of technical sessions, five days of public hearings, over 400 information requests and hundreds of meetings and discussions with stakeholder groups, the Yellowknives Dene and the public.

On August 14, 2014, the Responsible Ministers issued their Decision of Environmental Assessment, and stipulated 26 legally binding measures that need to be completed before a Water Licence for the project will be issued, which would allow the project to proceed to remediation. These 26 measures will help focus the project team's work for the next phase of engagement, design and decision-making.

The Remediation Plan for the Giant Mine site can be broken down into five distinct but interconnected components.

- The arsenic trioxide waste stored in sealed chambers and vaults will be contained in frozen blocks.
- The surface remediation includes taking down close to 100 buildings, covering four tailings ponds, fencing off eight open pits and cleaning up the contaminated soil.

¹ The Developer's Assessment Report was developed based on the direction provided in the Review Board's Terms of Reference for the environmental assessment. The report identifies and assesses any likely adverse environmental effects that might be caused during the implementation of the Remediation Project, the selected mitigation measures and a monitoring framework.



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- Water entering the underground tunnels and coming into contact with contaminated material used to backfill mined out areas during the mine's operation will continue to be treated.
- Baker Creek, which runs through the mine site, will require some remediation to help restore it to a condition that is as ecologically sound as possible.
- After remediation is complete, the site will be maintained and monitored in order to ensure the ongoing protection of human health and safety as well as the environment.

GMRP has an integrated Environment, Health & Safety and Community (EHSC) Management System² designed to ensure proactive management of key environment, health, safety and social issues at the site. An important issue addressed within the Management System is the provision of social and economic benefits. The GMRP will implement strategies to maximize the economic opportunities for Northerners and local Aboriginal people through employment and procurement. Through its Socio-Economic Strategy, it will:

1. Clarify and communicate socio-economic impacts, opportunities and benefits
2. Coordinate with stakeholders to minimize impacts, build capacity and deliver benefits, and
3. Improve socio-economic planning and performance, leading to a strengthened social license.

To help ensure access of Aboriginal people and Northerners to employment and procurement opportunities, GMRP needs to understand and regularly assess local capacity. This labour resource study provides an overview and analysis of current labour market conditions, as well as local skills and capacities. GMRP will use this information to identify where additional capacity development may be required, and to inform decisions related to work package structure and contracting.

1.2 Purpose

Indigenous and Northern Affairs Canada (INAC) commissioned Stratos Inc. (Stratos) to update the *Labour Resource Study Update* prepared by Merit Consultants International Inc. (Merit) in October 2012.³ The purpose of this study is to evaluate the anticipated labour requirements of the GMRP against the available labour resources in the Government of the Northwest Territories (GNWT) and Canada, including available Aboriginal labour and business resources and their potential involvement in the project.

Previous labour resource studies completed for the GMRP (in August 2010 and October 2012) focused on the current state and forecasts of labour resources based on best available information. The scope of this report goes beyond the previous studies to include additional information on Northern and Aboriginal business capacity along with a discussion on the potential for training and capacity building

² The GMRP EHSC Management System is in alignment with internationally recognized standards in order to enable a single integrated approach (specifically, the ISO 14001:2004 Environmental Management Systems standard and the OHSAS 18001: 2007 Occupational Health and Safety Management Systems standard).

³ Merit's 2012 *Labour Resource Study Update* summarizes labour force profile, skill capability information within the NWT and Yellowknife, and portions of GMRP work packages that could be assigned to in-territory resources. It provided an update of information contained within an earlier report, entitled *Local Industrial Capacity Resource Study* (Merit, 2010).

opportunities in the coming years to support workforce readiness. These additional sections support achievement of GMRP's socio-economic objectives.

This report is presented as a standalone document and is not considered a supplementary report or update to the previous labour studies. It is included within solicitation documents for the Main Construction Manager (MCM) contract and is intended to provide guidance on the level of effort and detail that Public Services and Procurement Canada (PSPC) expects in the MCM's Labour Resource Assessment. The 2017 version of this report is an update from the 2016 version that was shared in the MCM Request for Proposal and is intended to provide a compilation of current information for the MCM upon contract award.

1.3 Methodology

The methodology to complete this study involved the following steps:

- A review of publicly-available data and information on economic outlooks and labour market information from government departments, industry organizations, and Aboriginal organizations with a strong preference for publications issued within the past year, given rapidly changing economic conditions. For a detailed list of references described in this section, see References.
- Supplementary information gathering through interviews with Northern and Northern Aboriginal governments and organizations to collect more detailed, regionally specific data and information.
- Analysis and presentation of data, information, and implications for GMRP within this report.
- Identification of limitations and areas requiring further examination in future reports.

1.3.1 Limitations

During the course of this study, we encountered the following limitations:

- Rapidly changing economic conditions put into question future economic forecasts.
 - Given the dramatic changes and highly dynamic nature of commodity prices and the value of the Canadian dollar in past 2 years, we worked to find and draw upon the most current reference documents available. In some instances, we had to use documents that were more than a year old and, as such, likely provide a less accurate forecast of market demand.
 - Some of the available projection data (e.g. models of the Canadian Occupational Projection System (COPS)) were prepared before commodity prices continued to drop in late 2015. It is likely that, in the short term, employment growth projections may be lower than forecasted.



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- To address this limitation, GMRP may wish to update the COPS projection information (see Section 3.1.3) when it becomes available.
- GMRP labour requirement estimates may be underestimated.
 - Project design is not yet complete. As such, while Section 5 provides the most recent estimates for GMRP's labour requirements, we anticipate these will continue to change until further decisions are taken on project design.
 - This study assumes that remediation work (Phase 2) will begin in 2021. It should be noted that the start date for Phase 2 is dependent on GMRP receiving its water licence.
 - To address this limitation, GMRP may wish to update the labour requirement estimates and associated analysis in Sections 5 and 6 as more refined estimates become available.
- GNWT releases community specific data for labour force activity employment on a 5-year cycle
 - Some community level and aboriginal data in Sections 3, 6 and Appendix C (Aboriginal community statistics) is outdated as the last community survey conducted by the NWT Bureau of Statistics was in 2014. Results from the next survey will be available in 2019.
- Lack of publicly available information on Aboriginal-owned businesses, Aboriginal employment and NWT resident interests.
 - Information on the contribution of small businesses and Aboriginal-owned businesses to economic diversity and employment is limited. For example, there are no agencies or departments reporting the number and type of Aboriginal owned businesses, earnings, number of employees and location (GNWT Education, 2015).
 - Information on the interests of NWT residents for future employment opportunities is also limited and only tracked in a limited capacity by some Northern and Northern Aboriginal governments.
 - To address this limitation, Stratos interviewed representatives from a number of Northern and Northern Aboriginal governments and organizations to get a better understanding of available personnel, skills and businesses, as well as areas of interest for further capacity development.
- Assumptions and interpretations were made to illustrate links between GMRP labour resource needs and Northern and Northern Aboriginal skills and capacities.
 - Links between Northern Aboriginal skills and capacities, as identified through a desktop review of Northern Aboriginal business descriptions, and GMRP labour resource needs were identified based on assumptions outlined in Appendix A.
 - To address this limitation, Stratos tested the conclusions drawn from these assumptions with Northern Aboriginal governments and organizations for validation.

2 Economic Conditions

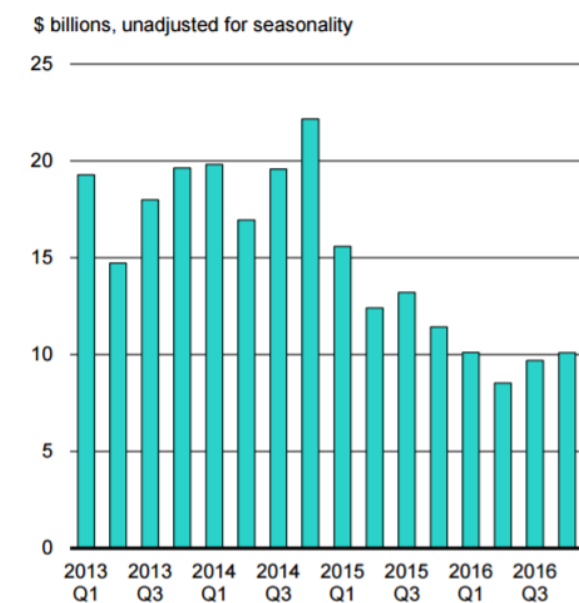
This section provides an overview of current economic conditions and trends that are affecting or are expected to affect resource development and major construction projects in Canada.

2.1 Canadian Economic Conditions

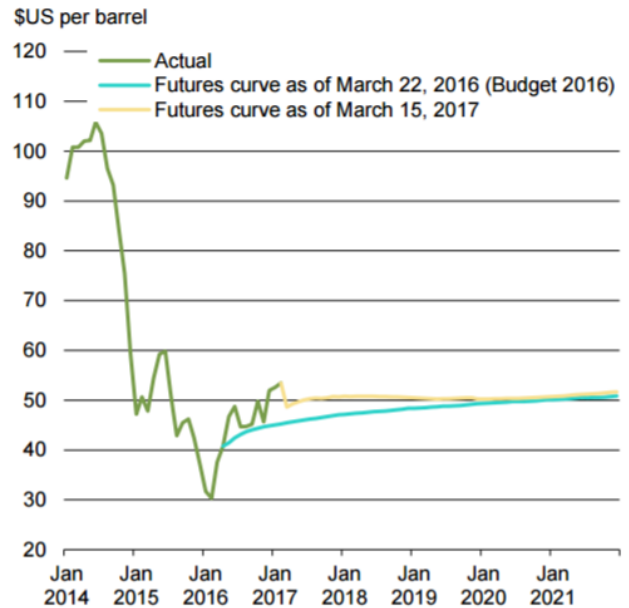
The Canadian economy has been experiencing a dramatic slowdown since 2014. The sharp fall in commodity prices (base metals and energy products) was a contributing factor to this downturn. Although the economy has shown signs of short term improvements in 2017 with an expected Gross Domestic Product (GDP) growth rate of 2.6% for the year, growth is likely to fall again in 2018 to below 2% (CBOC n, 2017).

In January 2016, oil traded below US\$30 for the first time since 2003 (CBOC a, 2016). Oil prices are expected to remain relatively low for the next five years at around US\$50. However, oil and gas investment activity is expected to stabilize in 2017 and increase in 2018 (Government of Canada, 2017).

Figure 1: Oil and Gas Investment (\$ billion) and Oil Prices (\$US per barrel)



Note: Last data point is 2016Q4.
Source: Statistics Canada.



Notes: Futures for West Texas Intermediate crude oil prices. Last data point is December 2021.
Source: Commodity Research Bureau.

Source: (Government of Canada, 2017)

Linked to lower commodity prices is the weakening of the Canadian dollar, which fell to its lowest point since 2003 against the U.S. dollar in January 2016, and has continued to remain low relative to the U.S. dollar. The weakening Canadian dollar has resulted in higher consumer prices on imported goods such as heavy equipment.

As a consequence of the economic downturn, major projects in the energy and mining sectors are not expected to support the Canadian economy as significantly as they have in previous years. The trade sector is likely to be one of the most important drivers of Canadian growth in the near term. Public infrastructure investment is also expected to help stimulate the economy. The federal government has committed to investments in public transit, sustainable and social infrastructure, transportation that supports trade and Canada's rural and northern communities in its 2017 budget.

In the 2016 budget, the federal government had announced a plan to invest almost \$12 billion over 5 years on infrastructure. In the 2016 Fall Economic Statement, it announced an additional \$81 billion in infrastructure spending over 11 years to better meet the needs of Canadians and better position Canada's economy for the future (Government of Canada, 2017).

Other large infrastructure projects, including hydro development and transmission, pipelines, and liquefied natural gas (LNG) plants may support economic growth in some regions of Canada if they move forward (BuildForce Canada a, 2017).

2.2 Territorial Economic Conditions

In 2016, economic conditions in the territories also faced challenges due to depressed global commodity prices and weak demand for natural resources due to rising global inventories of mining and oil and gas commodities. As a result of the downturns in these important industries, the Northwest Territories and Yukon have been experiencing weakened economic conditions. This has been manifested through recent mine closures, project cancellations, and labour force reductions. Nunavut's economy is looking promising compared to the other two territories, mainly due to public infrastructure projects and a host of new mining projects.

Northwest Territories

The economic outlook for the Northwest Territories (NWT) is the weakest of the three territories (CBOC b, 2017). The GNWT's Finance Department released a five-year financial outlook for the territory in 2016, stating that the economy is "very fragile" and could amass a \$1 billion debt by 2020. This is due to the territory's heavy reliance on a mature and struggling mining sector, which accounts for almost 25% of real GDP in the territory (Statistics Canada, 2017). Other factors include reductions in funds available for capital investment and eroded borrowing authority as the territory slips further into debt (GNWT, 2016). Information provided by the Department of Industry, Tourism and Investment (ITI) in July 2017 indicated that the financial outlook in GNWT may be improving to some degree; however, no official publications were available at the time of writing to corroborate this. This section provides the most current information included in official publications.

Resource-based companies in the NWT have been affected by the fall in commodity prices. De Beers halted production at its Snap Lake diamond mine in December 2015 in light of poor market conditions. The mine has been in care and maintenance since then. The shutdown resulted in the loss of more than 400 jobs (De Beers, 2015), and also affected approximately 100 contractors. Of the permanent employees affected, approximately 100 were Northerners (CBC, 2015). Several other major projects,

including Nechalacho (Thor Lake), Prairie Creek, Yellowknife City Gold, NICO and Pine Point Mine have been postponed due to poor market conditions.

Although diamond production remains at elevated levels overall, it is expected to decline in the long term. Production at the Diavik diamond mine is expected to decrease over the rest of the decade, and the Ekati diamond mine will be the only operating diamond mine in operation in 2030 (CBOC b, 2017). There are currently approximately 1,000 people employed at Diavik and 1,400 in operational jobs at Ekati. An expansion project for Ekati's most significant undeveloped deposit, the Jay pipe, is expected to extend the mine life by 10 years, to 2033 (Paddon, 2017). There is currently exploration of another deposit, Misery Deep, which is anticipated to operate from 2020-2023 and extend the Ekati mine life to 2035 (Business Wire, 2017). The construction phase of the Jay pipe expansion, which started in early 2017, is expected to employ approximately 400 people (CBC, 2016). The Washington Companies have recently purchased the Dominion Diamond Corporation which owns and operates both the Diavik and Ekati mines. Experts do not anticipate that the takeover will lead to any job cuts (CBC d, 2017). The De Beers' Gahcho Kué mine opened and began commercial production in September 2016 and is expected to employ 380 people during the operations phase for 11 years.

Shale oil deposits in the NWT have also been affected by low commodity prices. In recent years, several large companies including ConocoPhillips, Husky Energy, Chevron Canada and MGM Energy have suspended drilling or pulled out of the region completely, with low and uncertain oil prices cited as a major factor (Paddon, 2017).

Publicly funded infrastructure and construction projects, including development of the Mackenzie Valley Highway, an all-season road to Whatì, a Fibre Optic Cable to Inuvik, and the Stanton Territorial Hospital in Yellowknife, have and continue to provide support for the construction sector (CBOC h, 2016). Overall, economic growth in the NWT is expected to surge to 12.2% in 2017 as the Gahcho Kué mine ramps up production, then decline by 1.6% per year from 2018 to 2020 (CBOC b, 2017).

Table 1 provides a summary of the existing and proposed major projects in the NWT, including estimated capital costs associated with the construction phase. Where start and end dates are available, they are provided in the table below.

Table 1: Major Projects and Capital Costs in the NWT

Project	Status	Capital cost (millions)
All-season Road to Whatì	Construction of a 97-km all-season gravel road is planned for 2018-2022.	\$150
City of Yellowknife Aquatic Centre	Construction is planned for 2020-2021.	\$45
Giant Mine Remediation Project	A water licence application for the project will be submitted in 2019. Construction is planned for 2021.	\$480

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Project	Status	Capital cost (millions)
NICO Mine	Environmental Assessment approvals and major mine permits received. Revised feasibility study underway.	\$210
Pine Point Mine	Exploration ongoing with positive results from a preliminary economic analysis in April 2017. Pending results of a feasibility study, financing and permitting, construction could take place within the next 12-18 months.	\$140
Prairie Creek Mine	Prefeasibility study completed. Environmental assessment for all season road access conditionally approved.	\$120
Yellowknife City Gold Mine	Exploration ongoing (drilling and mapping exercises); the company has found smaller deposits and sees opportunity for a 'regional play', with operations across multiple areas.	\$193
Nechalacho (Thor Lake) Mine	Pre-construction permits received, but no immediate activities planned.	\$902

Source: (BuildForce Canada c, 2017) (MVLWB, 2017) (Avalon, 2016)

Yukon

After two years of consecutive GDP contraction, Yukon's real GDP increased by 4.6% in 2016 (Yukon Finance, 2017). The economy is expected to remain flat for 2017 but increase sharply between 2018 and 2020 (CBOC b, 2017). Capstone's Minto Mine will stay active at least until 2020 (CBC c, 2017) and should tide over the mining industry as new mines come under development in the next few years. The upcoming mining projects in the territory are summarized below:

- Alexco Resource is investing in its **Bellekeno silver mine** in the hope of restarting production (CBOC b, 2017).
- Goldcorp's **Coffee Gold**, a \$350 million project, should be under development in 2018-2019 (CBOC b, 2017).
- Victoria Gold's **Eagle Gold** mine will enter production in 2020 (CBOC b, 2017) and is valued at \$4.7 million (Tarikh, 2017).
- The **Casino Mine**, Yukon's largest upcoming project, valued at \$2.5 billion, is expected to operate for 22 years and bring 1000 jobs (CBOC b, 2017). The project is currently in the environmental assessment review stage (Casino, 2017).

Yukon's Zinc has put its Wolverine Mine – a zinc-copper-lead-gold underground mine – into care and maintenance citing unfavourable market conditions and the ongoing weakness of silver prices as the reason for the temporary shutdown. This affected approximately 140 mine workers and 80 contractors (Yukon Zinc Corp., 2015).

The Coffee Gold project will contribute to the construction sector in late 2017-2018, and the Casino project will enable growth in the sector in 2021. The Canada-Yukon Infrastructure agreement, and government spending on the Whistle Bend Continuing Care Facility and the French secondary school will also be significant contributors to the sector while construction in the mining industry picks up again through new projects (CBOC b, 2017).

Nunavut

Nunavut is showing the strongest economic growth prospects of all provinces and territories in Canada over next decade due to a host of new projects. Public sector investments in infrastructure are contributing to this growth trend, including the \$143 million Canadian High Arctic Research Station (CHARS) in Cambridge Bay and the recently completed \$300 million upgrade to the Iqaluit airport. The Meliadine project by Agnico Eagle Mines (AEM) is contributing to the construction sector and is also expected to start production in 2019. Although AEM is ceasing operations in 2018 at its Meadowbank mine, many Meadowbank workers are expected to be transferred to the Amaruq (AEM) development, starting up in 2019. The territory is expected to have five mines operating by 2020. These will include AEM's Meliadine and Amaruq mines, TMAC Resources' Hope Bay mine, Baffinland Iron Mines Corp.'s Mary River mine (CBOC m, 2017), and the Back River gold mine by Sabina Gold and Silver corporation (CBC e, 2017). Nunavut's economy is forecast to expand by 3.5% in 2017 and 2018, and to average 3.9% growth between 2016 and 2025 (CBOC b, 2017).

2.3 Economic Conditions in Neighbouring Provinces

Other neighbouring provinces with a heavy reliance on natural resource and industry-based sectors have also experienced economic challenges over the two past years.

British Columbia

The slowing natural resource sector is causing economic strain, especially in the northeast and interior. Mines have closed in the northeast, causing significant job losses, and many British Columbia companies that supply equipment or services to the Alberta oil sands are being adversely affected. Within the province, exploration work for oil and gas and for mining is almost non-existent. Real GDP in the province is forecast to slow down sharply in the near term. The forestry industry is facing uncertainty as challenging negotiations with the U.S. continue on the expired Softwood Lumber Agreement. B.C. may bear the burden of U.S. import tariffs on softwood lumber as the province accounts for 60% of Canada's softwood lumber exports (CBOC i, 2017).

British Columbia's nascent LNG industry has responded to the downturn by postponing or shelving a number of development projects, including Royal Dutch Shell's \$50 billion project for the LNG Canada development in Kitimat (Zussman, 2016) and Petronas' \$11.4 billion project, Pacific Northwest LNG, near Prince Rupert (Eagland, 2017). However, recent developments, including some agreements between companies and First Nations, indicate that some development may be underway for shale oil and gas (CBOC j, 2017). The metal and coal mining industry is looking more optimistic as annual revenues in the sector increased by 16% in 2016. Employment also rose in the sector by over 100 jobs last year. Among new projects, Pretium Resources' Brucejack Mine is expected to start commercial production this year (Hampel, 2017).



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Alberta

After a two-year deep recession, Alberta is forecasted to be moving slowly onto a path of recovery in 2017. Although investment growth in the energy sector is expected to turn around, the economy is expected to remain sluggish this year overall. Some positive impacts will result from the rebuilding efforts in Fort McMurray following the fires (CBOC k, 2017). Deficits are expected to decrease over the next two years, from \$10.8 billion in 2016-17 to \$8.4 billion in 2018-19. (Government of Alberta, 2017).

Following the slump in commodity prices, large oil companies like Exxon Mobil Corp. and ConocoPhillips have written down or removed a combined 4.65 billion barrels of oil sands reserves from their books in the last year (Financial Post, 2017). Smaller projects, such as Connacher Oil and Gas Limited's steam-driven Great Divide project, have significantly reduced production due to "exceptionally low commodity prices" (Lewis, 2016).

A number of companies have also divested their holdings in their oil sands assets over the last year. Shell divested most of its oil sands holdings in a \$7.25 billion deal with Canadian Natural Resources Ltd (CNRL) in March 2017 (Morgan, 2017). Citing low oil prices, Statoil sold all its oil sands holdings in December 2016, leaving no operating assets in Western Canada (Cattaneo, 2016). Marathon Oil Corporation sold its non-operated interest in the Canadian oil sands to Shell and CNRL for \$2.5 billion in March 2017 (Marathon, 2017).

Saskatchewan

The drop-in commodity prices has also hurt Saskatchewan's economy. In the last year, Cameco Corporation put its Rabbit Lake uranium mine in temporary closure and laid off close to 620 workers across four of its locations, including Rabbit Lake (CBC, 2017). The province is still expected to enter recovery mode in 2017, with a strong growth forecast for the near term (CBOC e, 2017). These effects may be aided by increasing production of potash at the K+S Potash Canada (KSPC) Bethune mine, as well as a rebounding agricultural sector, which will benefit from a lower Canadian dollar (CBOC e, 2017). In the longer term, Saskatchewan is expected to face slow growth, low investment levels and underperforming real GDP growth compared to the national average, partly as a result of the province's dwindling crude oil reserves (CBOC l, 2017).

3 Human Resource Availability and Demands

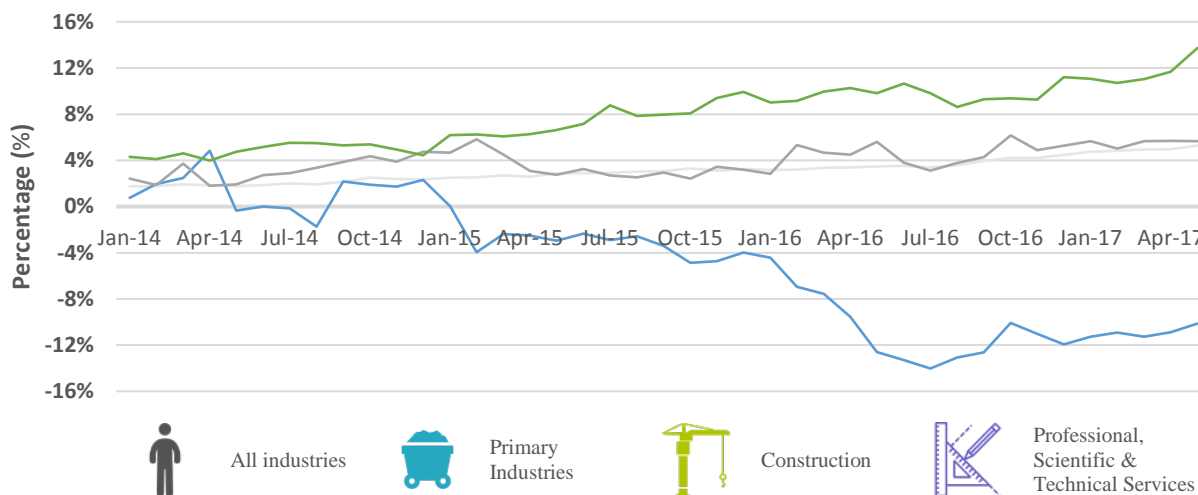
Changes in economic conditions across the country since 2012 have affected labour availability. This section summarizes information on current human resource availability and forecasts of availability and demands in Canada, the NWT and neighbouring provinces.

3.1 Labour in Canada

3.1.1 Employment Rate

Overall, the national employment rate has stayed relatively constant in 2017. Employment in natural resource industries, or primary industries, increased between January and November 2017, by 6400 jobs or 2.1% (Statistics Canada c, 2017). Figure 2 shows the percentage change in Canada's workforce as a whole and for three sectors since 2014: primary industries, construction and professional services. Employment growth in the primary industries continues to lag behind the Canadian average, while employment growth in the professional, scientific and technical services has continued to outperform the national average.

Figure 2: Percentage Change in Canada-Wide Employment, Total and by Select Industry, against 2012 baseline (2014 – 2017)

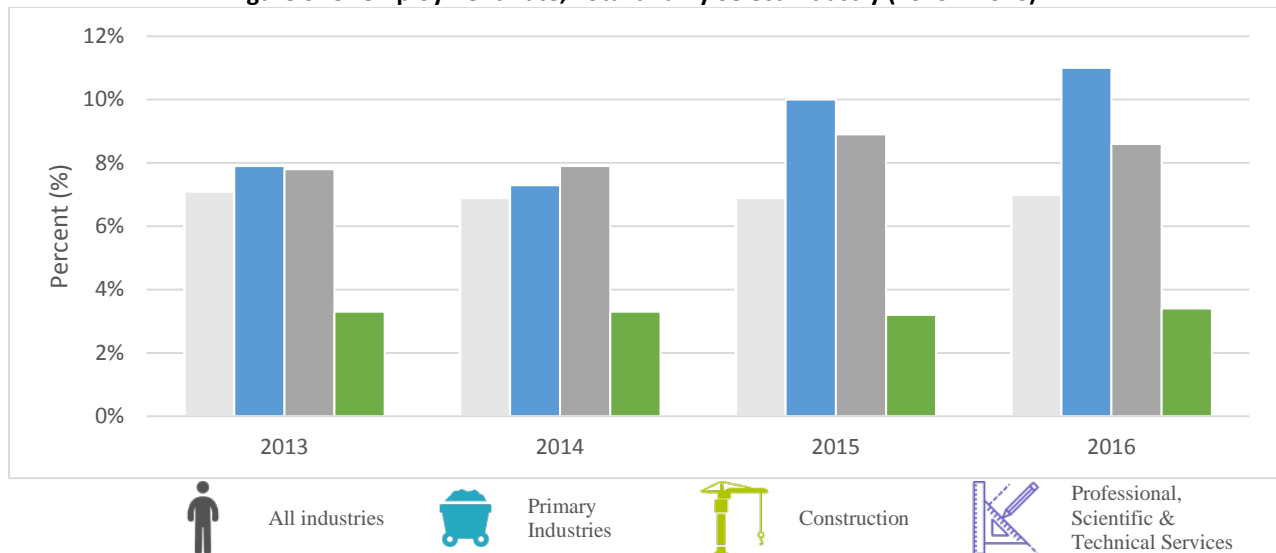


Source: (Statistics Canada c, 2017)

The national unemployment rate declined in 2016, from 7.2% to 6.8% (Statistics Canada g, 2017). While unemployment rates in mining, quarrying and oil and gas extraction had been fairly consistent with the Canadian average in 2013-14, certain regions, such as Alberta, have experienced higher than normal unemployment rates in the past two years. This has pushed the national unemployment rate in the primary industries higher in 2015 and 2016 (See Figure 3). If commodity prices remain low, the unemployment rate for the primary industries is expected to stand near 10% in the short to medium term. In the long term, the Canada unemployment rate is projected to trend around 6.7% by 2020 (CBOC a, 2016).

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Figure 3: Unemployment Rate, Total and By Select Industry (2013 – 2016)



Source: (Statistics Canada d, 2017)

3.1.2 Demographics

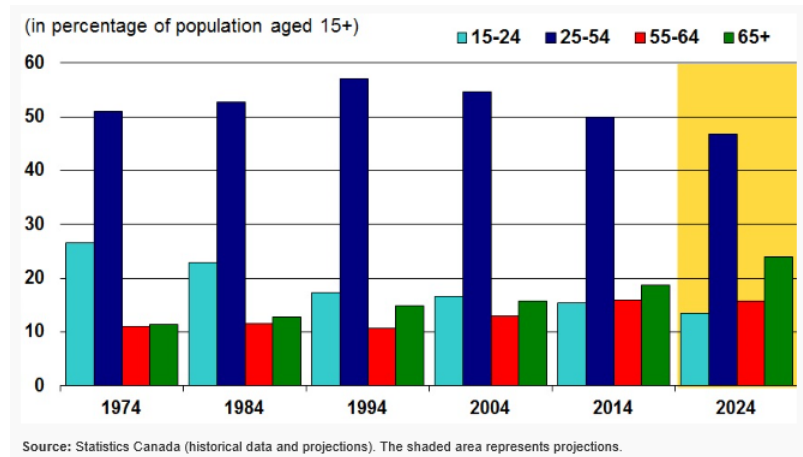
Relative to previous decades, Canada is expected to enter into a period of much slower labour force growth which will be heavily influenced by demographic changes, including an ageing population and slower population growth (ESDC a, 2016).

Growth in Canada's population of working age people (15 to 64 years) is projected to slow significantly over the period 2015-2024, with an annual average growth rate of 0.9% versus 1.3% in the previous ten-year period (2005-2014) (ESDC a, 2016). The projected slowdown in growth of the working age population is primarily driven by ageing baby-boomers (born between 1946 and 1965) retiring from the work force. A decline in the natural increase of the population (births minus deaths) attributable to fewer births and a rise in deaths due to population ageing, will also contribute to the slowed growth of the working age population (ESDC a, 2016). Increasing life expectancy and the number of immigrants are not expected to offset this deceleration.

The distribution of the working age population in Canada is also going to shift as people in the older age groups will account for a greater share of the working age population. By 2024, those aged 55-64 are projected to represent 16% of the working age population. When added to the percentage of working age population over the age of 65, this means that 40% of the labour force source population will be aged 55 and over by 2024, compared to 35% in 2014 (ESDC a, 2016) (See Figure 4).

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Figure 4: Distribution and Projection of the Working Age Population by Age Group, 1974 - 2024



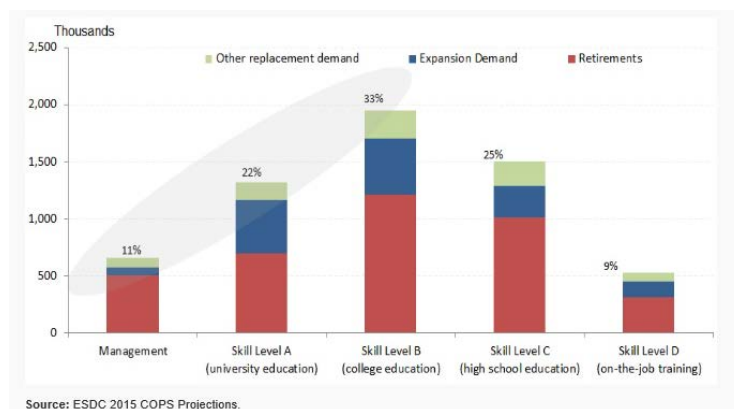
Source: (ESDC a, 2016)

Similar demographic trends are expected in the national mining sector. The Mining Industry Human Resources Council's (MiHR) Labour Market Information Survey found that approximately 43% of Canada's mining labour force was between the ages of 45 and 64 and that individuals in these age categories are among those more likely to retire in the coming decades (MiHR d, 2016). The annual retirement rate among the mining industry workforce is projected to rise from about 1.8% in 2015 to 2.5% by 2025 (MiHR a, 2015).

3.1.3 Skill Profile

Over the period 2015-2024, COPS projections show that two-thirds (71%) of the expected job openings (due to economic growth plus replacement needs) are in occupations that usually require post-secondary education (college, university or vocational) or in management occupations (ESDC e, 2016) (See Figure 5).

Figure 5: Job Openings from Expansion and Replacement Demand by Skill Level, 2015 - 2024



Source: (ESDC e, 2016)



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During the same period, labour shortages (excess labour demand) are expected in professional and highly-skilled occupations (i.e. occupations usually requiring a college or a university education, or management occupations) including engineers, inspectors, technicians, supervisors in the mining and oil and gas sectors, and underground miners (ESDC e, 2016).

Similar labour shortages are expected in the trades. According to BuildForce Canada's data, collected from construction firms across the country, up to 129,400 skilled tradespeople in the non-residential construction sector alone will retire by 2025. The ability to fill this gap depends on the availability of workers with portable experience, skills and qualifications across construction markets and provinces, and their willingness to move to find work. To meet demands, non-residential construction will need to recruit from other industries and increase efforts to recruit more women, Indigenous people, and new immigrants as key sources of labour supply. For some provinces, out-of-province recruitment will also be necessary to meet their long term needs (BuildForce Canada a, 2017). In contrast, skill profiles that are projected to face labour surplus conditions (excess supply) over the projection period include mainly low-skilled occupations (i.e. occupations that usually require less than post-secondary education) such as labourers and machine operators (ESDC e, 2016).

3.1.4 Sectoral Distribution

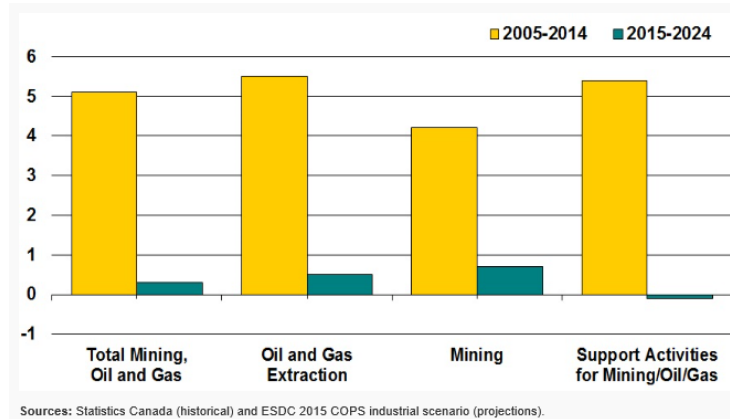
From a sectoral perspective, distribution of employment is expected to shift further towards the services and construction sectors by 2022 (ESDC g, 2016). Employment growth in the natural resources sector (mining, oil and gas, forestry, logging, agriculture, fishing) is projected to slow over the 2015-2024 period, reflecting job losses and slower job creation in mining, and oil and gas, especially in extraction and support activities. Boosts in public infrastructure investment will lead to employment growth in the non-residential construction sector (civil projects).

Mining

The Canadian mining industry directly employed 230,000 people in 2015, exceeding expectations given the poor performance of weak commodity prices. This unexpected figure was attributed to job losses in exploration and support services for mining being offset by stronger than expected performance in extraction and milling activities (MiHR d, 2016). Despite the recent slowdown in this sector, the pace of job creation in mining and support activities is expected to remain above the annual average of 0.7% anticipated for the overall economy (See Figure 6).

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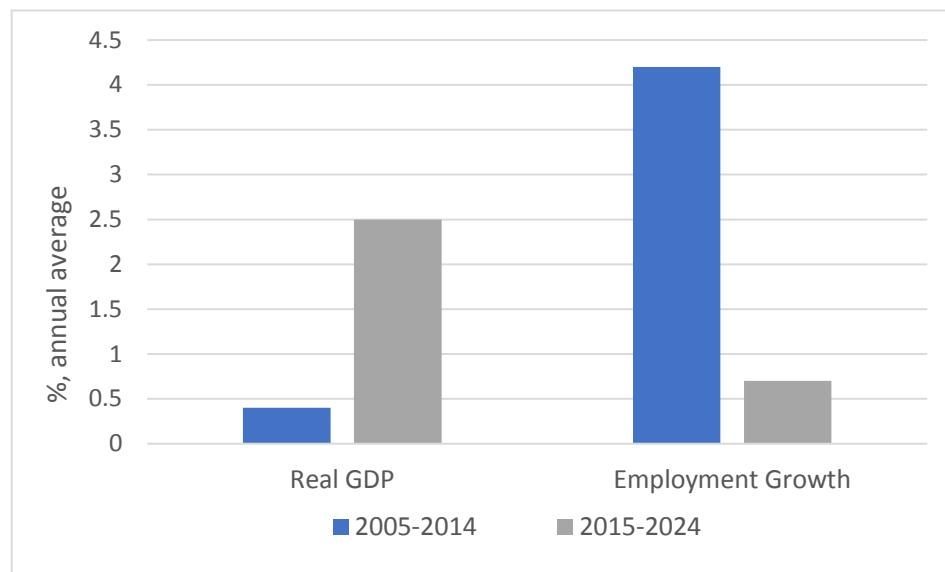
Figure 6: Forecast of Employment Growth in Mining, Oil and Gas, 2015 – 2024



Source: (ESDC g, 2016)

MiHR’s cumulative hiring requirement forecasts, which include total recruitment demands, show that over the next decade, the mining industry is expected to hire 106,490 workers, based on the current economic climate and forecasted business outlook (MiHR d, 2016). This forecast is in line with the COPS industrial projections for mining, which show an increase in contributions to real GDP and employment growth in the sector during the period 2015 - 2024 (see Figure 7).

Figure 7: Forecast of Industrial Projection Real GDP and Employment Growth – Mining, 2015 - 2024

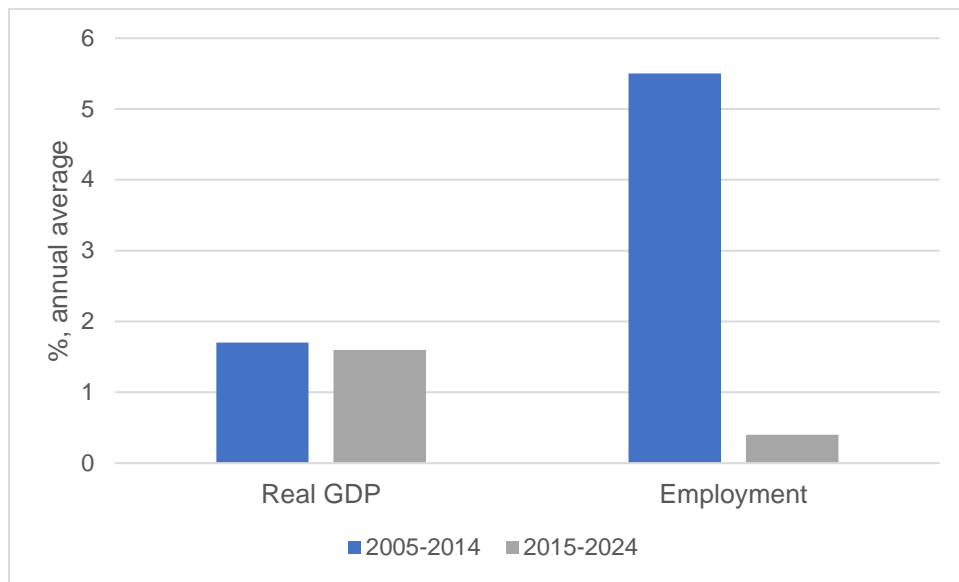


Source: (ESDC c, 2016)

Oil and Gas

Employment growth in oil and gas extraction is expected to weaken substantially compared to the previous decade (see Figure 6). Major investments made in the oil and gas extraction industry over the period 2005-2014 resulted in employment growth that largely exceeded output growth. This situation is reversing dramatically with the low price of oil resulting in a rapid slowdown in the expansion of new oil sands projects which is expected to continue to reduce labour demand during the period 2015-2024 (See Figure 8).

Figure 8: Forecast of Industrial Projection Real GDP and Employment Growth – Oil and Gas Extraction, 2015 - 2024



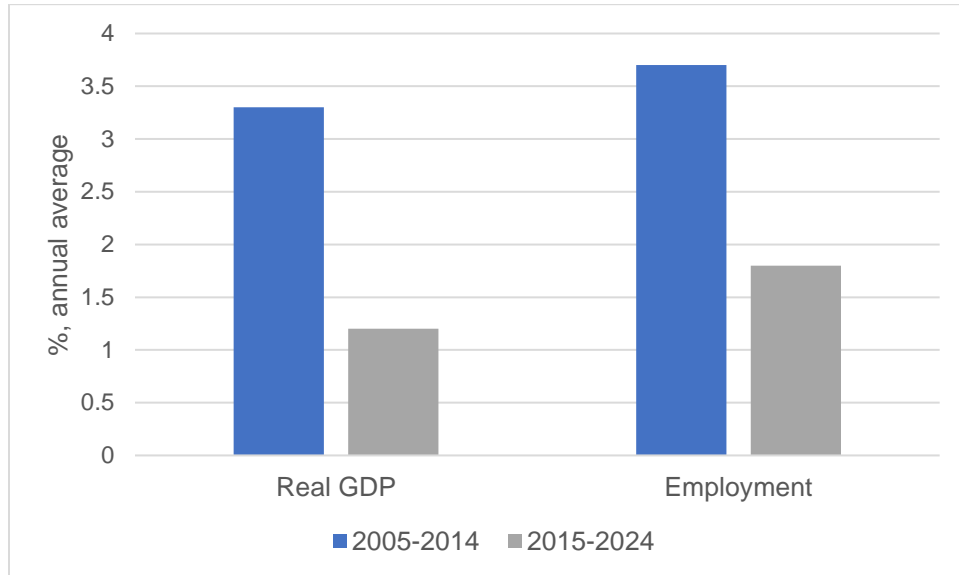
Source: (ESDC g, 2016)

Construction

Slow resource development expansion since 2013 has resulted in project delays and cancellations for several oil and gas and mining sector projects. These trends have affected the construction sector considerably. Looking forward, employment requirements in resource driven markets such as Alberta are expected to continue to weaken in the short-term (BuildForce Canada c, 2017). Investments in engineering structures associated within mining and energy projects are also expected to continue decreasing, resulting in slower employment growth over the short to medium term. (See Figure 9)

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Figure 9: Forecast of Industrial Projection Real GDP and Employment Growth – Construction, 2015 - 2024



Source: (ESDC g, 2016)

3.1.5 Aboriginal Labour Force

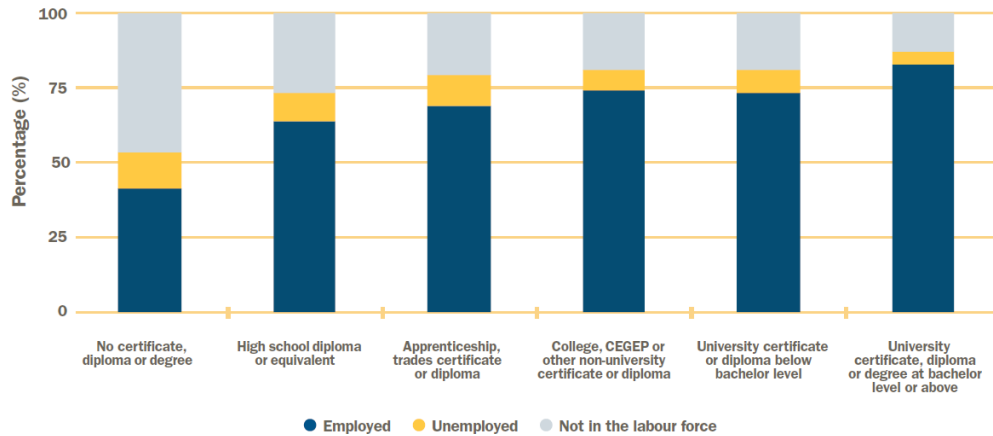
Aboriginal peoples in Canada record a much higher unemployment rate than the Canadian non-Aboriginal unemployment rate. Among Canada's Aboriginal people, the average unemployment rate in 2016 was 12.4%. In comparison, the Canadian average unemployment rate in 2016 was 7%. Aboriginal peoples' labour participation rate was 64.4% at the same point, just slightly lower than the overall national participation rate of 65.7% (Statistics Canada, 2017).

Educational attainment is one factor related to low participation by Aboriginal peoples. Those with no certificate, diploma or degree are less likely to participate in the labour force, and participation is higher among those with a certificate, diploma or degree. Figure 10 shows this pattern for Aboriginal peoples in Canada.

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Figure 10: Labour Market Outcomes among Aboriginal Peoples in Canada, by Educational Attainment

Figure 35: Labour market outcomes among Aboriginal peoples in Canada, by educational attainment (2011)



Source: Mining Industry Human Resources Council, Statistics Canada, 2015

Source: (MiHR a, 2015)

Typically, the mining, oil and gas extraction, and construction sectors report labour shortages in regions where Aboriginal unemployment is high. This suggests that Aboriginal workers do not have the right skills for the available jobs, although other factors including cultural barriers may also be relevant (McKellips, 2015). Targeted skills training for Aboriginal populations can help to increase workforce participation and help Aboriginal peoples prepare for, find and maintain jobs.

3.2 Labour in NWT

3.2.1 Employment Rate

Labour markets in the NWT saw a slight improvement in 2016. The labour force went up by 300 people compared to 2015, and the employment rate increased by 0.8% to 69.2% but remained below the 70% seen in 2011-13. The unemployment rate was down to 7% in January 2017, compared to 9.4% in January 2016 (the highest for the month of January since 2003). The drop in the unemployment rate translated to 700 fewer unemployed persons in January 2017 compared to the same time last year (NWT Bureau of Statistics, 2017). This decrease in unemployment can be partly attributed to the new De Beers' Gahcho Kué diamond mine that came into production this year.

Table 2: Population and Overall Labour Force Activity in the NWT

Year	Population	Labour Force	Employment	Unemployment	Not in labour force	Unemployment rate	Participation rate	Employment rate
2001	28,400	21,800	19,900	1,900	6,600	8.7	76.8	70.1
2002	29,200	22,300	21,000	1,300	6,900	5.8	76.4	71.9
2003	30,200	22,900	21,300	1,600	7,300	7.0	75.8	70.5
2004	30,900	23,600	22,100	1,500	7,300	6.4	76.4	71.5

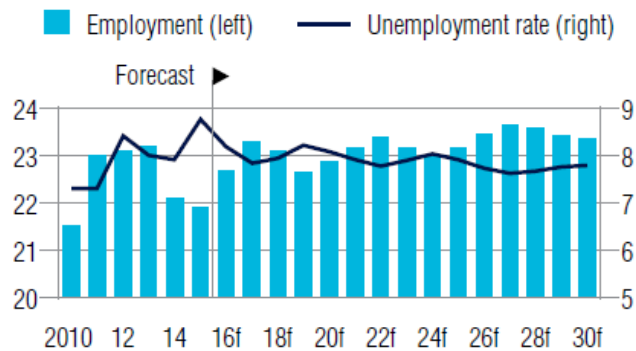
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Year	Population	Labour Force	Employment	Unemployment	Not in labour force	Unemployment rate	Participation rate	Employment rate
2005	31,200	23,900	22,700	1,200	7,300	5.0	76.6	72.8
2006	31,200	24,300	23,100	1,200	6,900	5.3	77.9	74.0
2007	31,600	24,700	23,300	1,400	6,900	5.7	78.2	73.7
2008	31,800	23,900	22,500	1,400	7,900	5.9	75.2	70.8
2009	31,700	22,600	21,100	1,500	9,100	6.2	71.3	66.6
2010	32,000	23,200	21,500	1,700	8,800	7.3	72.5	67.2
2011	32,300	24,800	23,000	1,800	7,500	7.3	76.8	71.2
2012	32,400	25,100	23,100	2,000	7,300	8.4	77.5	71.3
2013	32,600	25,100	23,200	1,900	7,500	8.0	77.0	71.2
2014	32,300	24,000	22,100	1,900	8,300	7.9	74.3	68.4
2015	32,000	24,000	21,900	2,000	8,000	8.3	75.0	68.4
2016	32,500	24,300	22,500	1,800	8,200	7.4	74.8	69.2

Source: (NWT Bureau of Statistics, 2017)

Some job creation is expected over the 2017-2019 period as a result of new mining operations. However, employment levels are expected to decline when mines close (e.g. Ekati and Diavik) and construction on new projects is completed (e.g. Inuvik–Tuktoyaktuk all-season road). Overall, the unemployment rate is expected to increase to 8.2% in 2019 (See Figure 11). The new Gahcho Kué diamond mine that came into production this year will be a contributor to slight increases in employment levels in the short term. However, weak commodity prices and a mature diamond industry with fragile diamond prices are still a significant source of uncertainty for employment levels in the NWT in the medium and long term (CBOC h, 2016). Table 3 provides a project-based look at potential employment growth in the NWT, which shows current and new projects and the expected number of jobs associated with each project, based on best available information.

Figure 11: Forecasted Employment and Unemployment in the NWT to 2030



f = forecast

Sources: The Conference Board of Canada; Statistics Canada.

Source: (CBOC h, 2016)

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Table 3: Major Projects in the NWT and Projected Labour Demand⁴

PROJECT	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Ekati (+ Jay pipe)	1889	1889	1889	1889	1889	1889	1038	1038	1038	1038	1038	1038	1038	1038	1038	1038	1038	282
Diavik + A21 (1)	1134	1134	1134	1134	1134	1134												
Snap Lake (2)	55	35																
Gahcho Kue	380	380	380	380	380	380	380	380	380	380	380	380						
Cantung (3)	254																	
Inuvik-Tuk Hwy (4)	49	49																
Whati Hwy (5)		150	150	150	150	10	10	10	10	10	10	10	10	10	10	10	10	10
GMRP	30	30	30	30	204	312	254	251	202	162	162	162	162	36	30	30	30	30
TOTAL (Excluding GMRP)	3761	3637	3553	3553	3553	3413	2562	1428	1428	1428	1428	1428	1048	1048	1048	1048	1048	292

(1) A21 will allow Diavik to maintain current production rates

(2) It is unclear whether care and maintenance will continue beyond 2018

(3) This mine site is located near the Yukon border, a long distance from the GMRP site and Yellowknife community

(4) This project indicates an additional 40 long-term jobs are expected following the completion of the project, but it is unclear whether this will be direct or indirect employment.

(5) The labour numbers are preliminary, taken from a public announcement by the NWT DM of Transportation.

Legend
Construction
Operations
Reclamation

There are several other projects in the pipeline in NWT. However, due to a slump in market conditions in recent years, the start and end dates for these projects are currently unknown. Table 1 in Section 2 provides more details on the status of each project; Table 1 provides their forecasted employment numbers⁵:

Table 4: Projected Labour Demand for Potential NWT Major Projects

Project	Forecasted Jobs	Expected Duration
Prairie Creek	220	10 years
NICO Project 1	231	2 years
NICO Project 2	233	16 years
Pine Point Mine	320	13 years
Nechalacho (Thor Lake) Project	286	17 years

3.2.2 Demographics

The population in the NWT in April 2017 was 44,381 and has remained fairly constant since 2005 (NWT Bureau of Statistics, 2017). It is forecasted to remain at the same level into 2030 (CBOC h, 2016). Yellowknife is the largest community with 21,502 people. International immigration is expected to add to the territorial population over the next 15 years, but negative net interprovincial migration is expected to continue, keeping the total population stagnant.

The average age in the NWT is 34.9 years (Statistics Canada, 2017). Despite a relatively young population, the 15-to-24 year-old age group is forecast to remain stagnant. Meanwhile, the share of the

⁴Data was identified through publicly available industry reports and news articles (included in References section).

⁵Data was identified through publicly available industry reports and news articles (included in References section).

population aged 60 and over will almost double over the forecast period, from 11.7% in 2016 to 20.5% by 2035 (See Table 5).

Table 5: Population Projection Estimates in the NWT

	2016*	2020	2025	2030	2035
Northwest Territories	44,469	44,923	45,282	45,524	46,026
0 - 4	3,221	3,326	3,173	2,965	2,868
5 - 14	6,484	6,547	6,251	6,103	5,750
15 - 24	6,222	5,637	5,925	6,506	6,275
25 - 44	14,107	14,360	13,829	12,856	13,095
45 - 59	9,242	8,888	8,207	8,358	8,655
60+	5,193	6,165	7,897	8,736	9,383
Male	22,643	22,800	22,846	22,889	22,986
Female	21,826	22,123	22,436	22,635	23,040
Aboriginal	22,013	22,208	22,320	22,307	22,150
Non-Aboriginal	22,456	22,715	22,962	23,217	23,876

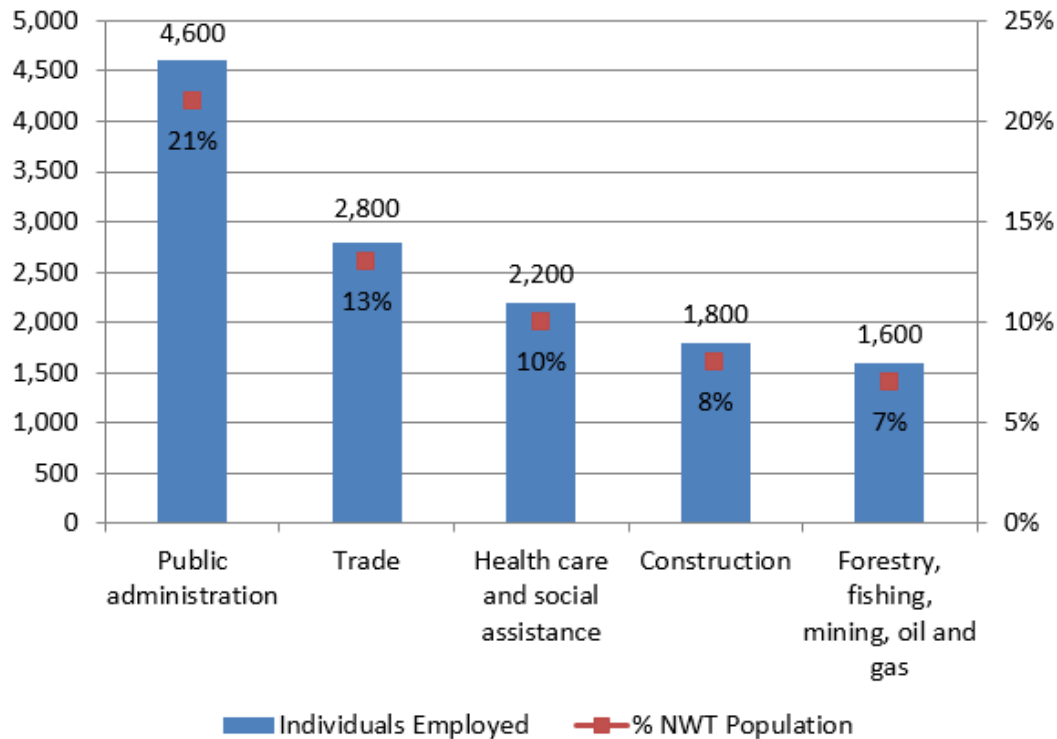
Source: (NWT Bureau of Statistics, 2017)

3.2.3 Sectoral Distribution

The public sector employs the most people in the territory with over 20% of the population. Mining directly employs just over 6% of the population (roughly 1,600 jobs) (See Figure 12). However, MiHR estimates that the mining industry in the NWT employed roughly 3,690 people in 2013. The difference is the out-of-territory workforce. Mining employers in the NWT rely heavily on the commuter workforce (i.e. people who work at any mine in the NWT and live in another province or territory) that do not take up residency in the territory (CBOC f, 2015). The NWT has the highest proportion among the three territories of commuter workforce and this is not expected to change significantly due to the lack of local, in-territory human resources skilled in the mining and construction sectors.

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Figure 12: Distribution of Employment Relative to Population in the NWT



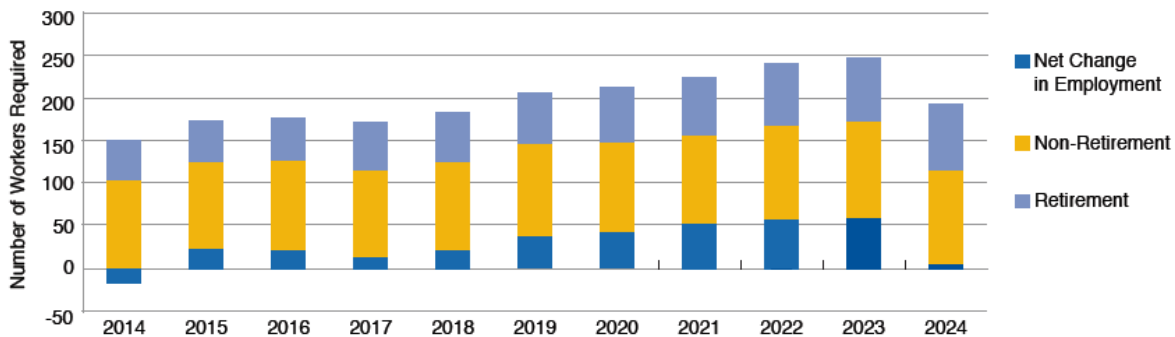
Source: (NWT Bureau of Statistics, 2016)

Mining

Compared to Canada's mining labour force, the NWT's mining labour force is relatively young, has fewer workers in their mid-career onwards, and supports a large number of commuting workers (i.e. individuals working in the territory but living elsewhere). These factors will be important for future labour force planning in NWT's mining sector. MiHR's forecast for the NWT predicts cumulative hiring requirements (i.e. new demand and replacements) of approximately 2,170 additional workers by 2024 (MiHR c, 2014). Figure 13 provides MiHR's expected breakdown of future hiring requirements under a baseline scenario, which averages about 200 workers per year.

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Figure 13: NWT Annual Hiring Requirements Forecast, Mining, Baseline Scenario – 2014-2024



Source: Mining Industry Human Resources Council, 2014

* Captures the collective activity for mining, mining support services and exploration.

Source: (MiHR c, 2014)

In a more recent study, the Conference Board of Canada (CBoC) has taken a slightly more conservative approach and projects new job growth or net change in employment to be limited, showing a net decrease of about 100 workers between 2020 and 2025 (CBoC o, 2016).

Overall, the mining sector replacement rate is increasing over time, in part due to an increase in retirements over the coming years. However, the more recent study by CBoC indicates total employment in the sector may be on a declining trend.

Oil and Gas

Oil production has been in steady decline in the NWT for almost 15 years. Although there has been oil and gas exploration work in recent years, the fall in oil prices along with limited infrastructure in the territory have halted any major projects in oil and gas in the NWT. Labour demands for this sector are expected to be low across the territory.

Construction

Upcoming developments at the Ekati mine (Jay pipe expansion) will bolster the construction sector in 2017. However, weak commodity prices and an uncertain financing environment for new mining operations mean that the forecast for construction may be subdued compared to previous years. Publicly funded construction work is expected to provide short to medium-term relief employment opportunities within this sector.

3.2.4 Skills Profile

Due to the relatively bleak economic outlook in NWT, several major projects have been postponed in the last year. The short- and medium-term outlook for skill profiles in construction, trades and engineering occupations is looking weak with low overall demand. Table 6 provides BuildForce Canada's estimates of labour requirements for various trades in the NWT, Yukon and Nunavut between 2017 and 2026. The largest requirement is for heavy equipment operators, followed by trades helpers and labourers, and truck drivers. Table 7 shows the projected breakdown of trades required based on project timelines. The peak years for requirements are projected to be in 2022-26 at 1,236 workers.

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Table 6: Construction Trades Demand by Territory

	Northwest Territories	Yukon	Nunavut	Total
Boilermakers	13	34	0	46
Construction estimators	24	65	0	90
Construction managers	15	41	0	57
Construction millwrights and industrial mechanics	4	10	0	14
Contractors and supervisors	31	82	0	113
Crane operators	38	102	0	140
Drillers and blasters	36	96	0	132
Electricians	4	10	0	14
Heavy equipment operators (except crane)	323	864	0	1,188
Heavy-duty equipment mechanics	22	59	0	81
Ironworkers and structural metal fabricators	19	51	0	70
Sheet metal workers	1	3	0	4
Steamfitters, pipefitters and sprinkler system installers	4	10	0	14
Trade helpers and labourers	116	309	0	425
Truck drivers	63	168	0	230
Welders and related machine operators	28	74	0	101
Total	740	1,979	0	2,719

Source: Yukon Economic Development, NWT Bureau of Statistics, Nunavut Bureau of Statistics, company websites and BuildForce Canada

Source: (BuildForce Canada c, 2017)

Table 7: Projected Construction Trades Demand within the Territories (all major projects)

All projects	2017	2018	2019	2020	2021	2022-26	Total
Boilermakers	0	5	5	8	8	21	46
Construction estimators	0	9	9	15	15	41	90
Construction managers	0	6	6	10	10	26	57
Construction millwrights and industrial mechanics	0	1	1	2	2	6	14
Contractors and supervisors	0	12	12	19	19	51	113
Crane operators	0	15	15	24	24	64	140
Drillers and blasters	0	14	14	22	22	60	132
Electricians	0	1	1	2	2	6	14
Heavy equipment operators (except crane)	0	123	123	201	201	540	1,188
Heavy-duty equipment mechanics	0	8	8	14	14	37	81
Ironworkers and structural metal fabricators	0	7	7	12	12	32	70
Sheet metal workers	0	0	0	1	1	2	4

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Steamfitters, pipefitters and sprinkler system installers	0	1	1	2	2	6	14
Trade helpers and labourers	0	44	44	72	72	193	425
Truck drivers	0	24	24	39	39	105	230
Welders and related machine operators	0	10	10	17	17	46	101
Total	0	283	283	459	459	1,236	2,719

Source: Yukon Economic Development, NWT Bureau of Statistics, Nunavut Bureau of Statistics, company websites and BuildForce Canada

Source: (BuildForce Canada c, 2017)

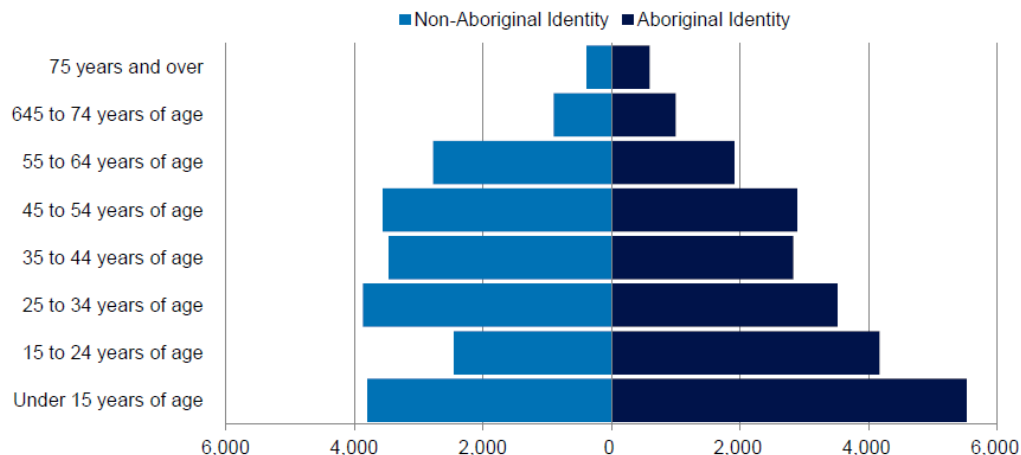
Note: At the time of publication of the 2017 BuildForce report, Phase 2 of the Mary River project was known to be postponed and AEM's Meliadine project timelines were unknown, explaining the lack of data for Nunavut in Table 6 and Table 7. Since then, construction at Meliadine mine has begun and is on track for completion in 2019. The Meliadine project is expecting to hire 300 workers during the construction phase of the project (Bell, 2017).

MiHR makes particular note of the future need for professionals and supervisors (MiHR c, 2014). Although fewer overall positions will be required in these categories, it may be more of a challenge or require longer term planning to fill these positions compared with other categories given the education and job experience requirements needed to replace retiring workers in this category.

3.2.5 Aboriginal Labour Force

Large differences exist between the Aboriginal and non-Aboriginal sub-population in the NWT when comparing demographics, skills attainments and occupational categories. The Aboriginal population is significantly younger than the non-Aboriginal population and about 50% of the working age population (15 and older) is Aboriginal (see Figure 14). Over the next few decades, these young Aboriginal people will represent a large portion of the future labour force in the territory.

Figure 14: Aboriginal and Non-Aboriginal Population in the NWT – 2014⁶



Source: 2014 Northwest Territories Community Survey.

Source: (CBOC g, 2015)

⁶ The Northwest Territories Community Survey is updated every five years; the next survey results will be available in 2019.

A significant proportion (nearly 35%) of Aboriginal peoples do not participate in the NWT's labour force, and the unemployment rate in 2016 was 13.9%, significantly higher than the 2.8% unemployment rate for non-Aboriginal people in the NWT (NWT Bureau of Statistics, 2016). A much greater number of Aboriginal peoples in the NWT have some or no high school education compared to non-Aboriginal people (see Table 8). The labour participation rate is much lower for the Aboriginal population (65.2%) compared to non-Aboriginals (83.5%) in NWT (NWT Bureau of Statistics, 2016). These statistics highlight the importance of access to employment opportunities, especially skills development initiatives and training programs that aim to improve the likelihood of Aboriginal labour force participation and employment in the NWT.

Table 8: Labour Force Activity and Highest Level of Schooling in the NWT (as of 2014)

	Population 15 & Older	Labour Force	Employed	Unemployed	Participation Rate (%)	Unemployment Rate (%)	Employment Rate (%)
All Persons	34,087	25,014	22,353	2,661	73.4	10.6	65.6
Less than Grade 9	2,219	972	696	276	43.8	28.4	31.4
High School, No Diploma	6,333	3,471	2,528	943	54.8	27.2	39.9
High School Diploma	7,813	5,360	4,771	589	68.6	11.0	61.1
Other Certificate or Diploma	10,566	9,042	8,381	661	85.6	7.3	79.3
University Degree	6,698	6,056	5,903	154	90.4	2.5	88.1
Not Stated	458	112	74	38	24.5	33.9	16.2
Aboriginals	16,837	10,919	8,753	2,166	64.9	19.8	52.0
Less than Grade 9	2,024	820	550	270	40.5	32.9	27.2
High School, No Diploma	5,171	2,762	1,881	881	53.4	31.9	36.4
High School Diploma	3,589	2,519	2,069	450	70.2	17.9	57.6
Other Certificate or Diploma	4,816	4,004	3,484	520	83.1	13.0	72.3
University Degree	790	706	699	7	89.4	1.0	88.5
Not Stated	447	108	70	38	24.2	35.2	15.7

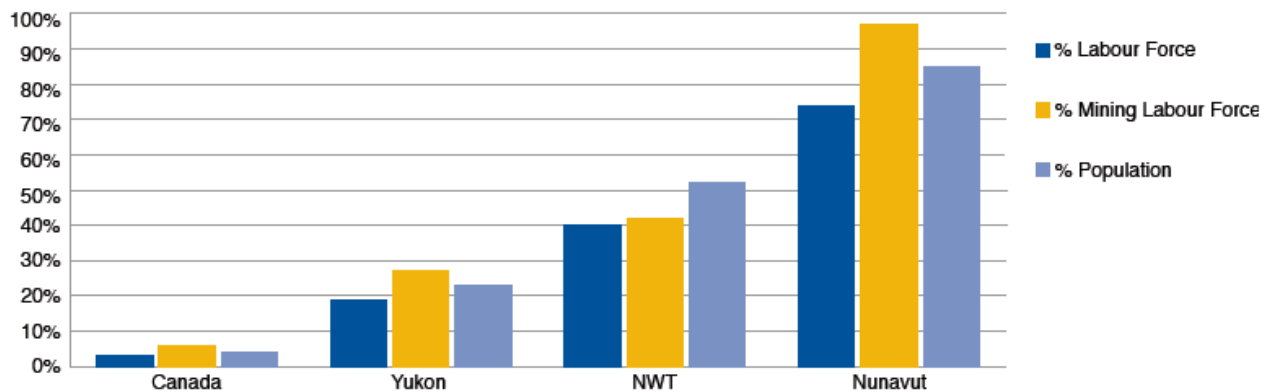
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Non-Aboriginals	17,250	14,094	13,599	495	81.7	3.5	78.8
Less than Grade 9	195	152	146	6	77.9	3.9	74.9
High School, No Diploma	1,161	709	647	62	61.1	8.7	55.7
High School Diploma	4,224	2,841	2,702	139	67.3	4.9	64.0
Other Certificate or Diploma	5,750	5,038	4,897	141	87.6	2.8	85.2
University Degree	5,908	5,350	5,204	147	90.6	2.7	88.1
Not Stated	11	8	4	4	72.7	50.0	36.4

Source: (NWT Bureau of Statistics, 2014)

From a sectoral perspective, Aboriginal representation in the NWT mining sector was lower than for the population as a whole when compared to other territories and Canada as a whole (MiHR c, 2014). This suggests there is an opportunity in the NWT to better engage the region's Aboriginal people in this sector. (See Figure 15).

Figure 15: Aboriginal Participation in Mining, Canada and Northern Territories – 2011

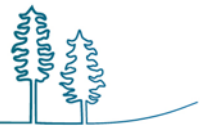


Source: Mining Industry Human Resources Council, Statistics Canada, 2014

Source: (MiHR c, 2014)

MiHR has identified the following barriers that restrict Aboriginal participation in certain mining occupations:

- Employer and potential employee perceptions that educational and skills levels do not meet entry requirements
- Limited employer awareness of how to find and recruit candidates and how to incorporate cultural norms into their hiring processes, and
- Need for improvements in human resource aspects of various partnership agreements (i.e. Impact Benefit and Socio-economic Agreements).



Yellowknife

In 2016, there were approximately 5,000 Aboriginal people and 16,000 non-Aboriginal people living in Yellowknife (NWT Bureau of Statistics, 2017). Compared to other communities, a larger proportion of Aboriginal people in Yellowknife (77%) have higher level education (e.g. high school, certificate or diploma, university degree) than Aboriginal peoples in the rest of the territory (49%) (NWT Bureau of Statistics, 2014). This indicates there may be more skilled Aboriginal workers to draw on in Yellowknife.

3.3 Labour in Neighbouring Regions

This section provides a snapshot of recent changes to the unemployment rate and human resource demand in certain sectors within the neighbouring jurisdictions of British Columbia, Alberta and Saskatchewan.

British Columbia (Statistics Canada d, 2017)
<ul style="list-style-type: none">Collectively, the construction, primary industries and professional, scientific and technical services industries accounted for 18% of the province's employment in 2016 – a number that has held fairly stable over the past four years.The unemployment rate of the primary industries in British Columbia decreased in 2016, from a high of 10.2% to 8.5%. Interestingly, unemployment in the construction industry did not decrease during the same period and remains almost at par with 2015 levels at 5.8%.The professional, scientific and technical services industry held relatively stable, with an unemployment rate of 3.2% in 2016.
Alberta (Statistics Canada d, 2017)
<ul style="list-style-type: none">In Alberta, the construction, primary industries and professional, scientific and technical services industries accounted for 25% of employment in 2016, remaining fairly stable over the past four years.2016 saw the unemployment rate for the primary industries in Alberta almost triple from 3.8% to 10.1% over the past two years. The construction industry's unemployment rate also rose over the same period, from 5.1% to 9.1%.The professional, scientific and technical services industry was also heavily hit, with the unemployment rate more than doubling to 4.5% in 2016 from 2.1% in 2014.
Saskatchewan (Statistics Canada d, 2017)
<ul style="list-style-type: none">Collectively, the construction, primary industries and professional, scientific and technical services industries accounted for 19% of the province's employment in 2016 – a number that has held relatively stable over the past four years.In 2016, the unemployment rate for the primary industries was 7.1%, more than double the 2014 rate of 3.1%, but an improvement from the 2015 rate of 8.1%. The construction industry's unemployment rate rose from 5.3% to 9.8% between 2014 and 2016.Unemployment in the professional, scientific and technical services has significantly increased from 2.3% in 2015 to 4.1% in 2016.

Increasing unemployment rates in those industries with similar workforce requirements to the GMRP will likely lead to an increased supply and less competition for human resources in the short term. However, this continues to be a dynamic situation, heavily influenced by unpredictable commodity prices.

4 Summary of GMRP Resource Requirements

This section summarizes the GMRP labour requirements and what reasonable number of Aboriginal and Northern employees the GMRP could strive to hire, contract or sub-contract. Since the 2016 Labour Resource Study, the active remediation phase has been extended to cover a ten-year period, rather than a six-year period, and long-term monitoring needs are reflected following the active remediation phase. These changes are reflected in Table 9. For details on the GMRP labour requirements by work type (e.g. underground, care and maintenance, etc.), see Appendix B: GMRP Labour Requirements. These numbers will require further validation and refinement by INAC Project Leads and the MCM as the project design advances.

4.1 GMRP Labour Requirements

Table 9 outlines the total full-time employees (FTEs) required by GMRP per year by occupation. Some FTEs may not be year-round staff, due to the seasonal nature of some of the work. Year-round occupations will include some underground work, care and maintenance and environmental monitoring. More detailed numbers by position (where there are multiple positions per occupation) and by work type (e.g. underground, care and maintenance, etc.) are provided in Appendix B: GMRP Labour Requirements.

Table 9: Total Anticipated Number of FTEs per Year across Occupations, Totals

Category	Occupation	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Entry Level		2	2	2	24	47	43	37	32	30	24	24	24	3	2	2	298
Semi-Skilled		2	2	2	64	98	81	83	80	64	58	58	58	15	2	2	669
	Truck Driver	0	0	0	35	57	44	44	43	36	32	32	32	5	0	0	360
	Equipment Operator	1	1	1	26	38	34	39	37	28	26	26	26	10	1	1	295
	Drilling Support	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	6
	Admin Support	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	8
Skilled		25	25	25	108	154	115	124	82	65	50	50	50	30	22	22	947
	Technician	13	13	13	28	34	27	27	25	23	23	23	23	16	13	13	314
	Trades	8	8	8	31	64	34	50	25	17	6	6	6	1	8	8	280
	Surveyor	1	1	1	6	6	7	6	4	4	4	4	4	1	1	1	51
	Surface Drilling	0	0	0	21	21	21	20	8	6	6	6	6	6	0	0	121
	Blasting/Drilling	0	0	0	5	5	5	8	8	4	4	4	4	4	0	0	51
	Underground Miner	3	3	3	9	5	5	0	0	2	0	0	0	0	0	0	30
	Supervisor	0	0	0	8	19	16	13	12	9	7	7	7	2	0	0	100
Professional		1	1	1	8	13	15	7	6	5	3	3	3	1	1	1	69
	Management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Environmental	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	4
	Safety	1	1	1	7	11	9	6	5	4	3	3	3	1	1	1	57
	Engineer	0	0	0	1	1	5	0	0	1	0	0	0	0	0	0	8
Total Employees per year		30	30	30	204	312	254	251	200	164	135	135	135	49	27	27	1983

Source: (Merit, 2016), adjusted by Stratos to show the active remediation phase over a ten year period (rather than a six year period)



4.1.1 Northern and Aboriginal Resource Requirements

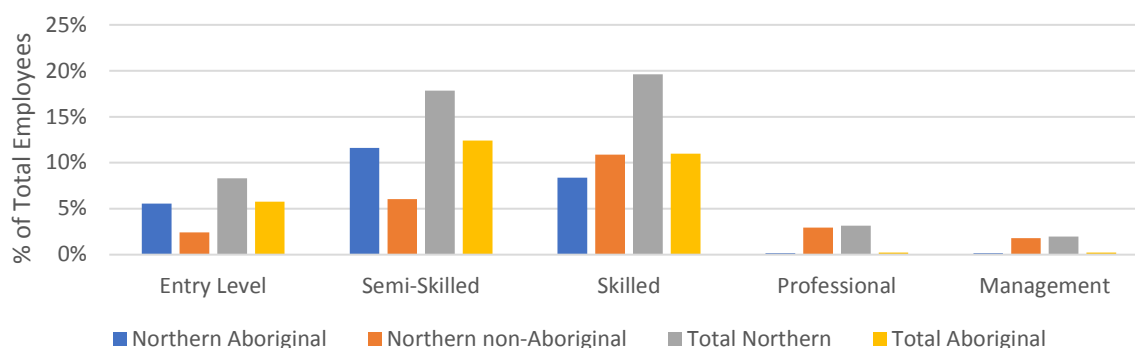
The numbers below are representative of the average proportion of Northern and Aboriginal employees at the Ekati and Diavik diamond mines in the 2016 reporting year. As can be viewed in Table 10 and Figure 16 below, approximately 50% of employees are Northerners, and 30% are Aboriginal. Northern and non-Northern Aboriginals are in entry-level, semi-skilled and skilled positions, with no representation in professional and management positions. Diavik also provides employee data on a community basis. The data indicated Yellowknife and Hay River supplied the greatest number of Northern Aboriginal employees for Diavik (as per the 2016 reporting year). These proportions can be applied to the GMRP to inform potential Northern and Aboriginal employee targets.

Table 10: Diavik and Ekati Northern and Aboriginal Labour, 2016 (mine employment and contractor employment)

	Northern Aboriginal ⁷	Northern ⁸ non-Aboriginal	Total Northern	Total Aboriginal ⁹
Entry Level	6%	2%	8%	6%
Semi-skilled	12%	6%	18%	12%
Skilled	8%	11%	20%	11%
Professional	0%	3%	3%	0%
Management	0%	2%	2%	0%
% of Total Employees	26%	24%	51%	30%

Source: (Dominion Diamond, 2016); (Rio Tinto, 2016)

Figure 16: Northern and Aboriginal Representation by Type of Position in Diamond Mines (Ekati & Diavik)



⁷ Northern Aboriginal is defined by Ekati as a self-declared Aboriginal who is indigenous to the NWT or Nunavut and resides in the North. It is defined by Diavik as a self-declared Aboriginal person born in or descendant of an Aboriginal person born in the NWT or the West Kitikmeot region of Nunavut, and who is residing in that region.

⁸ Northern is defined by Ekati as any resident in the NWT or Nunavut. It is defined by Diavik as any resident in the NWT or the West Kitikmeot region of Nunavut.

⁹ Aboriginal is defined by Ekati as a self-declared Aboriginal who is indigenous to the NWT or Nunavut and resides anywhere. It is defined by Diavik as a self-declared First Nations, Inuit or Métis person in Canada.

5 Analysis of GMRP Requirements vs. Forecast Available Resources

This section outlines skillsets needed by GMRP that are available, or not, in the NWT. It also identifies challenges and opportunities particular to the surrounding NWT communities, with a focus on Northern and Northern Aboriginal labour.

5.1 General Trends

The following subsections summarize the implications of current economic conditions and human resource availability and demands in Canada and the NWT to the GMRP (see Sections 2 and 3 for further details).

5.1.1 Economic Downturn

The Canadian economy has experienced an economic downturn over the last two years, particularly in the energy and mining sectors (CBOC a, 2016). Although it has shown signs of short-term improvements in 2017 with an expected GDP growth rate of 2.6% for the year, growth is likely to fall again in 2018 to below 2% (CBOC n, 2017). The NWT similarly has a weak economic outlook, with the postponement of several new projects, and the planned closure of at least one major diamond mine, Diavik, by 2025 (CBOC b, 2017). **All of this leads to the expectation that there will be a greater supply of mine sector workers than there is demand for them, allowing the GMRP to recruit the workers needed for the project.** However, this continues to be a dynamic situation and is heavily influenced by volatile and unpredictable commodity prices.

5.1.2 Aging Workforce

The NWT has a younger mining workforce than Canada overall, although it is expected that the workforce will age significantly by 2030, which will increase challenges for employers seeking to fill jobs with an in-territory workforce in the future (CBOC h, 2016). **As GMRP is expected to conclude by 2032, this may have some effect on the project, but is not expected to be pronounced.**

5.1.3 Labour Shortages

Canadian labour shortages are expected in professional and highly-skilled occupations including engineers, technicians, supervisors, and managers, as well as in trades in the mining sector (ESDC e, 2016). Based on the demographic information and the major projects outlook, the **NWT is expected to face occupational shortages in construction, trades and engineering occupations.**

5.1.4 Labour Surpluses

Canadian labour surplus conditions are expected in low-skilled occupations e.g. labourers and equipment operators (ESDC e, 2016). No labour surplus conditions were noted for the NWT.



5.2 NWT Workforce Considerations

The following subsections summarize the implications of the NWT workforce demographics and trends relevant to the GMRP (see Sections 2 and 3 for further details).

5.2.1 NWT Aboriginal Workforce

The NWT Aboriginal population is significantly younger and represents 50% of the working age population in the NWT. Aboriginal unemployment is significantly higher than non-Aboriginal unemployment, workforce participation is lower, and Aboriginal representation in the mining sector is also comparatively lower (NWT Bureau of Statistics, 2014). However, small local communities (SLCs) near the diamond mines have seen workforce participation rates increase in the past decade, which could be a new trend or a response to the increased education levels over the past decade (GNWT b, 2016). **The Aboriginal workforce may therefore grow over time, due to increased participation rates.**

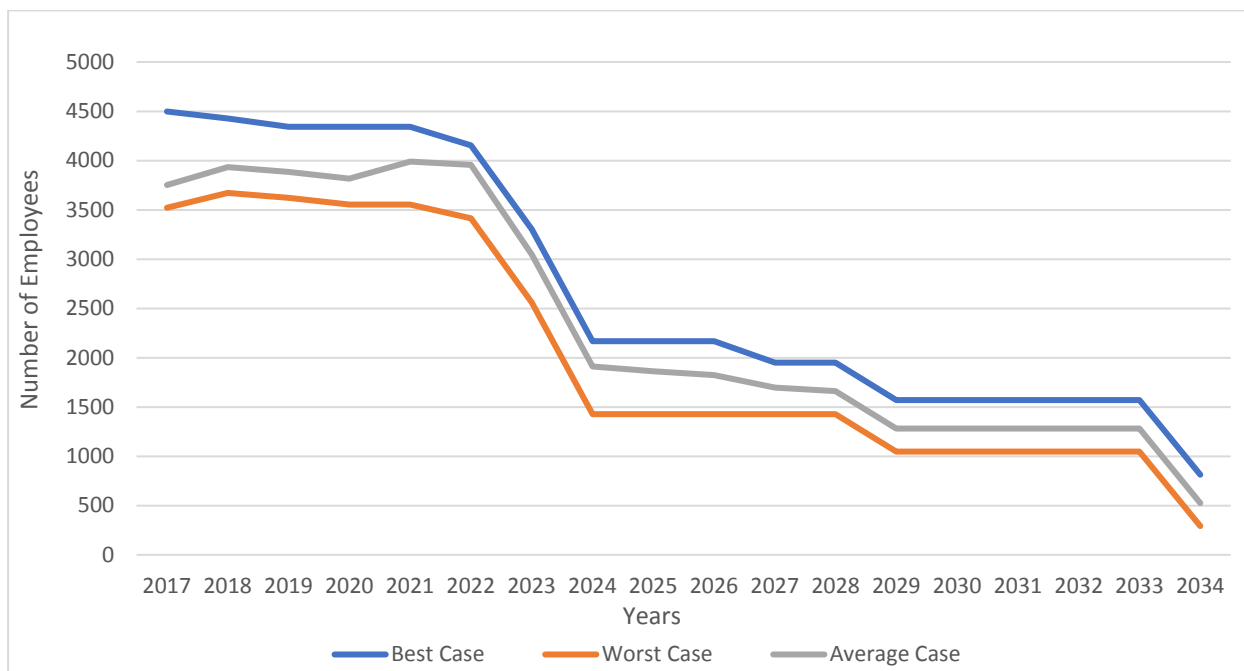
5.2.2 Commuter Workforce

The NWT has the highest proportion among the three territories of a commuter (i.e. out-of-territory) workforce, and this is not expected to change due to the lack of local, in-territory human resources (CBOC f, 2015). **An awareness of programs that encourage Canadian residents to move to the NWT (see section 6.2.4) will be important to ensure the GMRP labour needs are met.**

5.2.3 NWT Mining Project Timelines

As Table 3 in Section 3.2.1 indicates, NWT mining and construction sector employment is expected to consistently decrease from 2017 to 2034. Construction employment, in particular, is expected to significantly drop in 2022.

Figure 17: NWT Project Scenarios





The GMRP's peak years of employment are expected to be from 2021 to 2029, which aligns with significant drops in employment seen in other projects. **There is an opportunity for the GMRP to hire mining and construction sector workers that may be recently unemployed due to closures or slowdowns in other NWT projects. The GMRP should consider targeting its communication of job opportunities accordingly** (i.e. communicating to the former employees of Ekati in 2023, when the workforce is expected to shrink by 850 people).

5.3 Community Specific Considerations

The GMRP is located close to Yellowknife's city centre, within the asserted traditional territory of the Akaitcho Territory Dene First Nations, within the extended Monfwi (Môwhì Gogha Dè Nîttâèè) boundary as defined in the *Tłı̨chǫ Land Claim and Self Government Agreement* and adjacent to, or on the boundary of, the Interim Measures Agreement Area of the Northwest Territory Métis Nation. The communities affected by the above-mentioned territory agreements are listed in Table 11 below, in addition to the City of Yellowknife, due to its proximity to the GMRP. These communities fall into the regions of North Slave and South Slave in the NWT. The subsections that follow provide information relevant to these identified communities.

Table 11: GMRP Communities

Community	Aboriginal government/group	NWT Region
Yellowknife	Yellowknives Dene First Nation (Akaitcho Territory Dene First Nation), Northwest Territory Métis Nation and North Slave Métis Alliance	North Slave
Ndilo	Yellowknives Dene First Nation (Akaitcho Territory Dene First Nation)	North Slave
Dettah	Yellowknives Dene First Nation (Akaitcho Territory Dene First Nation)	North Slave
Łutselk'e	Łutsel K'e Dene First Nation (Akaitcho Territory Dene First Nation)	North Slave
Fort Resolution	Deninu Kue First Nation (Akaitcho Territory Dene First Nation) and Northwest Territory Métis Nation	South Slave
Behchokǫ	Tłı̨chǫ and North Slave Métis Alliance	North Slave
Gameti	Tłı̨chǫ	North Slave
Whatì	Tłı̨chǫ	North Slave
Wekweètì	Tłı̨chǫ	North Slave
Fort Smith	Northwest Territory Métis Nation	South Slave
Hay River	Northwest Territory Métis Nation	South Slave

5.3.1 Communities' Potential Available Workforce

Table 12 provides two key indicators to represent a community's potential available workforce, using population data from 2016 and community level employment data from 2014¹⁰. The first is the unemployed workforce, which indicates the number of unemployed persons seeking and available for employment, by community. This does not indicate whether these persons have appropriate education or training for GMRP positions.

The second indicator is new workforce potential, which represents the number of residents 15 years of age and over that are neither currently employed, nor seeking employment. It is possible that some portion of this category may become interested in employment moving forward within the project timeline.

¹⁰ Community population has not changed significantly between 2014 and 2016, and the rate of change has ranged from 0-15%.

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Additionally, these communities have seen an increase in education rates over the past decade, improving the likelihood of community members competing for semi-skilled, skilled or professional occupations.

These two indicators demonstrate that it should be possible to partially fulfill the labour needs of the GMRP with the local Aboriginal workforce, provided that the currently unemployed and potential workforce are provided with the appropriate level of education and/or training to allow them to meet GMRP's position requirements.

Table 12: Workforce Potential by Community, 2016 and 2014¹¹

Communities	Total Population (15 years & older)	Aboriginal Population	Unemployment Rate	Unemployed Workforce	Participation Rate	New Workforce Potential ¹²
Behchokò	1475	91%	33%	272	57%	634
Whatì	406	91%	35%	81	61%	158
Gamètì	199	97%	26%	34	57%	86
Wekweètì	112	94%	19%	13	69%	35
Ndilo ¹³	345	--	35%	140	56%	152
Dettah	210	96%	36%	49	70%	63
Yellowknife	16,591	24%	4.7%	590	79%	3,484
Łutselk'e	267	82%	24%	40	70%	80
Fort Smith	1,896	60%	7%	98	70%	569
Fort Resolution	396	90%	33%	89	68%	127
Hay River	2,991	45%	7%	162	76%	718

Source: (NWT Bureau of Statistics, 2017)

5.3.2 Communities' Existing Capacity

The communities' existing capacities were identified through interviews with Northern and Northern Aboriginal governments and organizations and supplemented with desktop research. Key sources of information on existing capacities of relevant Northern and Northern Aboriginal businesses is summarized below.

Northern Aboriginal Businesses

Northern Aboriginal businesses within the project area were identified through interviews with the Aboriginal governments and organizations (see right), supplemented with desktop research. The Łutsel K'e Dene First Nation and Northern Aboriginal Business Association were also contacted, but they were unavailable to participate within the timeframe of this update. Many of the Aboriginal organizations have joint ventures established through their development corporations to diversify their service offerings.

¹¹ Unemployment rate, unemployment workforce and participation rate are sourced from the 2014 NWT community survey. Updated results will be available in 2019.

¹² New workforce potential is calculated by multiplying the community population (over 15 years of age) by the non-participation rate.

¹³ Population from 2011 census; all other data from 2014.



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The complete listing of Northern Aboriginal businesses we prepared based on available information (see Appendix A: NWT Aboriginal Business Listing) includes the following information for each business:

- Business name
- Organizational structure (e.g. Joint venture, wholly owned subsidiary, corporation, etc.)
- Business office location(s)
- Applicable employee categories (e.g. Tłıchq, Akaitcho, YKDFN, etc.)
- Overview of firm services
- Skill offerings applicable to GMRP
- Number of employees
- Contract experience (e.g. clients, projects, total sales)
- Key contact(s)

Interviews conducted with:

- Tłıchq Investment Corporation
- Tłıchq Government
- Det'on Cho Corporation
- Yellowknives Dene First Nation
- Northwest Territory Métis Nation
- North Slave Métis Alliance
- Denesoline Corporation Ltd.
- Deninu K'ue First Nation
- Denendeh Development Corporation

The communities' existing skills, as summarized in Table 13 below, were identified through two sources of information:

1. Northern Aboriginal business listing (see Appendix A: NWT Aboriginal Business Listing), i.e. services provided.
2. Interviews with individuals from Aboriginal communities and business organizations (see Appendix C: Aboriginal Community Profiles), through which Stratos identified skills that exist within particular Aboriginal communities. Aboriginal community members that have completed or are in the process of completing training programs were also included in the identified existing skills.

A number of assumptions were made in matching Northern Aboriginal business service offerings with GMRP occupations and positions. These assumptions are detailed in Appendix A: NWT Aboriginal Business Listing.

Table 13 summarizes existing skills by occupation and position, as identified by Appendix B: GMRP Labour Requirements.

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Table 13: Northern Aboriginal Existing Skills

Category	Occupation	Position	Northern Aboriginal Business Skills	Northern Aboriginal Community Skills
Entry Level	Labourer	General Labourer	X*	X
		Flag Person	X*	
Semi-Skilled	Truck Driver	Atriculated dump truck	X*	X
		5 Ton (Mixer/Water/Flat Deck w Picker/Vac/Tandem Dump/Compactor)	X*	
		Skid Steer / Telehandler / Mini Excavator/Manlifts	X*	
	Equipment Operator	Excavator	X*	X
		966 Loader	X*	
		Grader operator	X*	
		Dozer operator	X*	
		Jumbo operator	X*	
		LHD operator	X*	
		U/G Dump Truck	X*	
		U/G man carriers	X*	
	Drilling Support	Driller's helper	X*	
		Rod man	X*	
	Admin Support	Clerk		X
Skilled	Technician	Lead instrument technician		
		Instrument technician	X	
		Technician - GeoFabric Liner Welder	X	
		Technician - Environmental	X*	
		Technician - Civil		
		ETP operator	X	X
		Crusher/ screener operator	X	
		Security Personnel	X	X
	Trades	Carpenter	X	X
		Ironworker (Rebar or Structural)	X	
		Trades Supervisor	X	
		Crane Operator		
		Mechanic	X	
		HVAC	X	
		Electrician	X*	X
		Millwright		
		Pipe fitter	X	
		Pipe welder	X	X
		Hazmat crew workers		X
		Hazmat FM		X
	Surveyor	Quantity surveyor	X	
		Surveyor	X	
	Surface Drilling	Driller	X*	
		Driller's helper	X*	
	Blasting/Drilling	Surface driller	X*	
		Surface blaster	X*	
		Underground driller		
	Underground Miner	Underground shift boss	X	
		Underground miners	X	X
	Supervisor	Project Manager	X*	
		Supervisor	X	
		Shift foreman	X	
Professional	Management	Planner	X	

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Category	Occupation	Position	Northern Aboriginal Business Skills	Northern Aboriginal Community Skills
		Accountant		
	<i>Environmental</i>	<i>Environmental superintendent</i>	X*	
		Environmental monitor	X*	
	<i>Safety</i>	<i>Safety supervisor</i>		
		Safety officer		
		Underground safety		
	Engineer	Civil engineer	X	
		Mining engineer	X	
		Chemical engineer	X	
		Mechanical engineer	X	
		Electrical engineer	X	

Legend for Table 13 and Table 14:

X – Some supply available

X* - More than three suppliers

Italics – No GMRP labour needs identified (Merit, 2016)

Other skill categories identified through both the Northern Aboriginal business listing and the Northern Aboriginal community interviews, which may be relevant to the GMRP, are listed in Table 14 below.

Table 14: Other Category Occupations/Positions

Other Category	Northern Aboriginal Business Skills	Northern Aboriginal Community Skills
Catering	X	X
Housekeeping / Janitorial	X	X
Shotcrete	X	
Trucking Transportation (e.g. freight delivery)	X*	X
Trucking Transportation – Fuel Hauls	X	X
Bus Transportation	X	
Emergency Response	X	
Road Construction	X	X
Home Construction	X	
Air Transportation	X*	X
Cost Estimation	X	
Training	X	X
Community Engagement	X	
Aboriginal Engagement	X	
Environmental Engineer	X	
Leadership Development / Business Management		X
Boating		X
Timber Harvesting		X
Logistics	X	X
Concrete Operations	X	
Medical Services	X	

Some Northern Aboriginal businesses identified provide equipment that may meet GMRP's needs (rather than services). Equipment suppliers were identified for the following categories:

- Tires
- Lubricants
- Heavy equipment rentals
- Pipe/pump parts
- HVAC systems
- Ground support systems

- Food

Table 13 indicates that **there is Northern Aboriginal business capacity for most GMRP entry-level and semi-skilled occupational needs**, as well as in surface blasting. There is limited Northern Aboriginal business capacity in the remaining GMRP skilled and professional occupation needs. There are also additional services and goods that Northern Aboriginal businesses offer that may be of interest to the GMRP. If this is the case, it is recommended that the GMRP labour requirements (Appendix B: GMRP Labour Requirements) be revised to include any other relevant occupations.

Northern Businesses

Northern business capacity in the project area can be identified through several directories:

- The GNWT Business Incentive Policy (BIP) registry, <http://www.bipregistry.nt.ca/>. The BIP registry can be filtered by Community, Region, and Service Offering.
- The Yellowknife Chamber of Commerce, <https://ykchamber.com/list>, for Yellowknife businesses, organized by business category.
- The Northwest Territories and Nunavut Construction Association, <https://nnca.ca/membership/membership-directory>, for members of the association, searchable by category, classification, or community.
- The NWT Chamber of Commerce website, <https://www.nwtchamber.com/content/current-members>, for a list of current members.

To collect further information on the existing capacity of Northern businesses, Stratos interviewed the following Northern business associations:

- Yellowknife Chamber of Commerce
- NWT Chamber of Commerce
- NWT & NU Construction Association

These interviews informed this report's conclusions on available capacity in occupations relevant to the GMRP, as summarized in Section 8.

5.4 Summary

Currently, Canada's – and, more specifically, NWT's – natural resource sector forecasts indicate a decline in employment levels over the next decade, providing an opportunity for the GMRP to hire mining and construction sector workers who are unemployed due to project closures and slowdowns. The GMRP should consider targeting its communication of job opportunities accordingly.

Overall, local labour supply can partially fulfill GMRP labour needs, although the local labour market may not have the interest or skills needed to fulfill some of GMRP's labour needs and therefore may require additional training or education. Additionally, the local Aboriginal workforce may be larger than presumed, due to potential growth in workforce participation and increasing education levels.

Local (i.e. Northern Aboriginal) labour supply exists for all GMRP entry level (i.e. labourer) and most GMRP semi-skilled (i.e. truck driver and equipment operator) occupations. No local labour supply was identified in



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some technician occupations (i.e. instrument technician, geofabric liner welder technician, crusher/screener operator), some trades occupations (i.e. crane operator, to be confirmed with construction companies, and millwright) and for safety officers, although it is recommended that this assumption (see Appendix B: GMRP Labour Requirements) be confirmed with construction companies. Finally, there appears to be limited local labour supply in all other GMRP semi-skilled, skilled and professional occupations.

Numerous other Northern Aboriginal services and equipment suppliers were identified, which the GMRP should review and consider for inclusion in future labour studies.



6 Capacity Building Opportunities

To help ensure access of Aboriginal people and Northerners to employment and procurement opportunities, GMRP needs to understand and regularly assess local skills and capacities and identify where additional capacity development may be required. This section summarizes information on current human resource capacity-building and training programs that the GMRP could support or leverage to help achieve socio-economic objectives.

6.1 Community Interests

We identified Aboriginal community¹⁴ interests in specific sectors and occupations through interviews with Aboriginal governments and organizations (see Appendix C: Aboriginal Community Profiles). All communities expressed interest in GMRP employment opportunities. We also conducted initial work to identify Northern business interests through interviews with three business associations / organizations (see Section 4.2).

Industries in which Aboriginal communities expressed interest include transportation, logistics, construction (road and other), quarrying, mining (base and precious metal mines), remediation (diamond mines), environmental monitoring, and tourism. With the exception of tourism, all these sectors would provide skills that address GMRP labour needs. More specifically, the Tłıchǫ, Yellowknives Dene First Nation (YKDFN), and Northwest Territories Métis Nation indicated interest in growing their mining industry employment. The Det'ón Cho Corporation, the economic development arm of the YKDFN, also indicated interest in growing construction and diamond mine remediation employment. Northern Business representatives did not identify specific sectors or occupations of interest, since their members cover a wide range of sectors and occupations.

An Aboriginal organization and a Northern Business representative noted the reliance on mineral exploration and natural resource extraction in the NWT, and would welcome diversification.

We recommend that the GMRP continue to engage with Northern and Northern Aboriginal governments and organizations to explore what GMRP skills and employment may be valuable for each community to pursue.

Table 15 identifies community interests specific to identified GMRP needs.

Table 15: Community Interests Specific to GMRP Needs

Community Interests	Category	GMRP Occupation	GMRP Position
Construction	Entry Level	Labourer	All
Class 1 driver training, fuel hauls	Semi-Skilled	Truck Driver	All
Heavy machinery or equipment operation	Semi-Skilled	Equipment Operator	All
Drilling/blasting	Semi-Skilled	Drilling Support	All
	Skilled	Surface Drilling	All

¹⁴ For a list of GMRP communities, refer to section 5.3

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Community Interests	Category	GMRP Occupation	GMRP Position
		Blasting/Drilling	All
White collar jobs, leadership development	Semi-Skilled	Admin Support	All
	Skilled	Supervisor	All
	Professional	Management	All
Water management	Skilled	Technician	ETP Operator
Security training	Skilled	Technician	Security Personnel
Carpentry	Skilled	Trades	Carpenter
Mechanical apprenticeships	Skilled	Trades	Mechanic
Mining	Skilled	Underground Mining	All
Water/Wildlife monitoring	Professional	Environmental	Environment monitor
First aid	Professional	Safety	Safety Officer

6.2 Existing Capacity Building Programs

This section provides a summary of applicable capacity building programs with which the GMRP may wish to coordinate and/or engage. A primary source of information for identification of these programs is the Skills for Success Initiative (S4S) Discussion Papers, prepared by GNWT's Department of Education, Culture and Employment (ECE). These programs are categorized into five types:

- Coordinating bodies that work to identify and address training needs
- Educational institutions
- Financial supports for capacity-building programs (i.e. directed towards NWT residents, employers or organizations)
- Immigration programs
- Community-specific training programs

6.2.1 Coordinating Bodies

Three main organizations/initiatives are currently working on coordination between the needs of industry and the needs of communities and their members (see Table 16).

We recommend that the GMRP communicate its labour needs to the coordinating bodies listed below (Table 16), and consider participating in the North Slave Regional Training Partnership to coordinate readiness for upcoming GMRP opportunities.

Table 16: Coordination Organizations and Initiatives

Organization/Initiative	Description
North Slave Regional Training Partnership (NSRTP)	<p>The NSRTP was established to create synergy within regional partners and to provide leadership in identifying and addressing short and long-term labour market needs. Its objectives are to:</p> <ul style="list-style-type: none"> • Exchange information on community needs and opportunities, as well as programs, services and funding available through partners; • Identify training, education and employment needs/gaps; • Develop and implement joint initiatives that will address identified needs of industry, communities and governments; • Efficiently direct training providers to available funding sources; and

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Organization/Initiative	Description
	<ul style="list-style-type: none"> Advocate to government for additional training funds. <p>The NSRTP membership includes representatives from the GNWT, Aboriginal governments in the North Slave region, major industry proponents in the North Slave region (e.g. diamond mines), Service Canada, and educational organizations including the Mine Training Society, Aurora College and the NWT Literary Council. This partnership has been inactive over the past two years, but was expected to be reestablished in 2017-2018.</p>
Tłıchq Regional Economic Development Working Group	The Tłıchq Regional Economic Development Working Group is a partnership between the Tłıchq government and the four Tłıchq communities to advance cooperative economic development in the region. The group meets regularly to discuss the implementation of the Tłıchq Region Training and Economic Development Strategy. One of its key priority areas is natural resources and energy.
Canadian Northern Economic Development Agency (CanNor)	CanNor fosters growth and development in the North by delivering economic development programs and by collaborating with and aligning the efforts of partners in northern and southern Canada to respond to economic challenges and opportunities in the North. CanNor has developed a database of all funding programs available to NWT residents and businesses from federal, territorial and Aboriginal government and other sources; however, this database is approximately two years out of date.

6.2.2 Educational and Training Institutions

Table 17 identifies educational institutions that have programs targeted toward NWT residents and their typical program planning cycles. Both the Aurora College and the NWT Mine Training Society were referenced by interviewed Northern and Northern Aboriginal governments and organizations as important partners and providers of training programs that their community members use. All three diamond mines (Ekati, Diavik, Gahcho Kué) have built partnerships with these institutions.

Table 17: Educational and Training Institutions

Institution	Description	Program Planning
Aurora College	Aurora College serves all communities in the Northwest Territories. A majority of Aurora College students are Aboriginal, and many come from small, remote communities. Aurora College delivers programs and courses as close to the communities as possible. This is achieved through a network of three regional campuses as well as Community Learning Centres in most communities. More information is provided in Table 18 below.	Program planning occurs on an annual basis, where courses starting in September are planned the previous January. Programs can be developed in collaboration with other university programs, based on identified needs.
NWT Mine Training Society (MTS)	The NWT MTS is a partnership between Aboriginal governments, public government and the mining industry with a strong record in evaluating, training and offering job placements to Northerners in the mining sector, with approximately a 90% employment rate amongst its graduates. The MTS approach addresses both life and job skills, and is able to respond to specific industry demands. Training programs are delivered based on "letters of commitment" from industry	Program planning occurs on a 4-year cycle. The next round of planning starts in 2019, for implementation from April 2020 to March 2024. Training program plans are developed based on forecast labour market needs.

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Institution	Description	Program Planning
	partners for hiring graduates following completion of training ¹⁵ . More information on MTS is provided below this table.	
Environmental Careers Organization of Canada (ECO Canada)	ECO Canada offers the Building Environmental Aboriginal Human Resources (BEAHR) Training Programs, which are environmental training programs for Aboriginal communities. They are community-driven and customizable (i.e. designed to meet community needs), delivered by external agents or licensed trainers. ECO Canada also previously offered remediation training for entry-level, semi-skilled, and skilled individuals through the Canadian Remediation Training Organization of Canada.	ECO Canada reassesses the need for training and course offerings on an ongoing basis (approximately every 3 months).
Canadian Mining Certification Program (CMCP)	Developed by the MiHR, the CMCP is a national mining certification program that certifies the skills and knowledge of workers in the mining sector. Certification is currently available for the following occupations: Underground Miner; Surface Miner; Minerals Processing Operator; Diamond Driller; Frontline Supervisor; Industry Trainer; Hoist Operator.	Unknown.
Northern Safety Association (NSA)	The NSA is a non-profit organization that offers a range of in-class (typically 1-day) and online health and safety courses in NWT. Examples of in-class courses relevant to GMRP include Asbestos Management Training, Light Duty Vehicles, and Workplace Hazardous Materials Information System "Train-the-Trainer". Their e-learning courses include more specific training on topics such as electrical components and safety, hydraulic systems, forklift operations, etc.	Unknown.
NWT & Nunavut Construction Association (NNCA)	The NNCA hosts e-learning courses offered by BuildForce relevant to the construction industry. Many of these courses provide Gold Seal credits, to meet the Gold Seal Certification offered by the Canada Construction Association, which recognizes construction industry professionals (Project Managers, Superintendents, Construction Safety Coordinators). The NNCA website also hosts a directory of other educational institutions that offer courses for trades and other construction-related degrees.	Unknown.
NWT Business Development & Investment Corporation (BDIC)	BDIC has an active business services centre offering a range of courses and seminars for new and existing entrepreneurs. Their courses range from developing business models to financial analysis and negotiating contracts. They also host an annual Small Business Week and regular two-day intensive Business Boot Camps for potential entrepreneurs.	N/A.
Skills Canada NWT	Skills Canada NWT is a registered charity that promotes careers in technology and skilled trades for northern youth. The organization aims to link youth, employers, and educators, and works across many sectors including education, government and industry. It runs several annual / regular conferences and events	Skills Clubs are implemented based on community interest and volunteer availability on an ongoing basis.

¹⁵ It is important to note that these letters of commitment can be conditional, i.e. pending tender award. If multiple companies submit letters of commitment for a single tender they are competing on, the MTS will train the employees required for the tender and the company awarded the tender will then be expected to hire these new graduates.

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Institution	Description	Program Planning
	to inform and engage youth. For example, the PowerUp! Conferences are one-day conferences that provide Grade-8 students throughout the Northwest Territories with an opportunity to learn about career options available to them. The Career Expo is a one-day interactive event for students in Grades 6-12.	
Dechinta Centre for Research and Learning	The Dechnita Centre for Research and Learning is a northern-led initiative that delivers land-based, University of Alberta-accredited educational programs. 12-week semester programs located in a remote eco-lodge focus on learning from the land while living in community. Dechinta offers over 20 university-accredited courses, including community governance, health and wellness, community research methodologies, sustainable communities, boreal ecology, and boreal field studies.	Executive Professional Development Programs (5 and 10 day) are underdevelopment ¹⁶

The NWT MTS currently offers two programs on a regular basis:

- 1) A 6-week “Intro to the Mining Industry” course, and
- 2) A 10-day intensive “Mine Safety Boot Camp” course on industrial safety training, developed in partnership with industry.

Other MTS programs are developed on an as-needed basis, in line with industry needs. Examples of other programs delivered in the past include training for underground mining, mineral process plant operators, fuel haul operators, and environmental monitoring, among others.

Aurora College offers certificate, diploma and degree programs, including pre-apprenticeship and apprenticeship programs. Aurora College also offers academic upgrading and access programs to support students in preparing for college and university. Table 18 identifies education and training programs currently offered by Aurora College specific to GMRP needs. Aurora College has also offered remediation training programs in the past, which could be revived based on demand.

Table 18: Aurora College Programs

Aurora College Programs	Category	GMRP Occupation	GMRP Position
Pre-Apprenticeship Heavy Equipment Technician / Heavy Equipment Operator Program ¹⁷	Semi-skilled	Equipment Operator	All
Office Administration	Semi-skilled	Admin Support	All
Environment and Natural Resources Technology Program	Skilled	Technician	Technician - Environmental
Pre-Apprenticeship / Apprenticeship Carpenter	Skilled	Trades	Carpenter
Apprenticeship Electrician	Skilled	Trades	Electrician

¹⁶ Dechinta Professional Development, URL: <http://dechinta.ca/programs/professional-development/>

¹⁷ A new Heavy Equipment Operators’ (HEO) Training Facility is being constructed in the Aurora College Fort Smith Campus (South Slave region). The facility is expected to be ready by March 31, 2018 (Aurora College, 2017)

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Aurora College Programs	Category	GMRP Occupation	GMRP Position
Introduction to Underground Mining / Underground Miner Training Program	Skilled	Underground Miner	All
Project Management Fundamentals / PMP Certification Preparation	Skilled	Supervisor	Project manager
Environmental Monitor Training Program	Professional	Environmental	Environmental monitor

ECO Canada's BEAHR training programs all incorporate soft skill components (e.g. conflict resolution, project management) and Traditional Knowledge, in addition to training for specific topics or roles (e.g. training for contaminated sites remediation coordinators, environmental technicians, etc.). ECO Canada also works with BEAHR graduates who are interested in pursuing college or other skill upgrade opportunities. ECO Canada often works collaboratively with other training providers (e.g. MTS, Aurora College, federal departments) to meet the needs of the communities they serve.

We recommend the GMRP engage with Aurora College, the NWT Mine Training Society and ECO Canada to communicate labour needs and identify training programs that could meet those needs, in alignment with each organization's planning cycle.

6.2.3 Financial Support for Capacity Building Programs

The following tables describe programs that provide financial support for capacity building to NWT employers, organizations and residents. The MCM and its subcontractors could use these programs to support capacity building of NWT employees.

We recommend that the MCM maintain awareness of these capacity building programs and communicate applicable programs to subcontractors to support local hiring efforts.

Table 19 outlines wage subsidies and other financial supports delivered through the GNWT ECE to private and public sector employers offering training opportunities. These programs are similar in scope but targeted towards different demographics.

Table 19: Financial Support for NWT Employers

Program	Description	Eligible Recipients
Training-on-the-Job	Helps NWT Employment Insurance participants take part in skills development opportunities by providing wage subsidies to employers who offer them training in the workplace.	NWT employers that may apply for this program are the following: <ul style="list-style-type: none"> • Business or Corporation • Aboriginal Government or Organization • Non-governmental Organization • Municipal or Local Government (excluding territorial/federal) • Industry Association • Local Housing Authority Preference is given to businesses eligible under the GNWT BIP.

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Program	Description	Eligible Recipients
Apprenticeship Training-on-the-Job	Helps NWT residents take part in apprenticeship training by providing wage subsidies to employers who train them towards journey person certification.	NWT employers with under 300 employees that may apply for this program are the following: <ul style="list-style-type: none"> • Business or Corporation • Aboriginal Government or Organization • Non-governmental Organization • Municipal or Local Government • Industry Association • Local Housing Authority Preference is given to those with under 20 employees.
Training-on-the-Job: Small Community Employment Support	Provides wage subsidies to employers in small NWT communities¹⁸ who offer training in the workplace to unemployed individuals that reside in small NWT communities.	Small NWT community employers that may apply for this program are the following: <ul style="list-style-type: none"> • Business or Corporation • Aboriginal Government or Organization • Non-governmental Organization • Municipal or Local Government • Industry Association • Local Housing Authority • Educational Institution/Training Provider • Board/Agency
Canada – Northwest Territories Job Grant	Provides financial assistance for employers providing third-party training to new or current employees in the NWT .	NWT employers that may apply for this program are the following: <ul style="list-style-type: none"> • Private sector employers • Not-for profit sector employers • Designated crown corporations and Aboriginal governments

Table 20 provides examples of financial support programs for employers and other organizations to increase employability among groups facing barriers to employment, including youth and people with disabilities. Program funders are provided in brackets following the program title.

Table 20: Financial Support for NWT Employers and Other Organizations

Program	Description	Eligible Recipients
Skills Links (Service Canada)	Provides funding for employers and organizations to offer eligible activities to youth facing barriers to employment in a particular province, territory, or local area. Activities should help youth acquire skills, realize educational achievements and/or improve their employability. Calls for proposals were last issued September 2016, with a focus on targets such as Indigenous youth or essential skills.	Organizations that may apply for this program are the following: <ul style="list-style-type: none"> • Not-for-profit organizations • Municipal governments • Indigenous¹⁹ organizations (including band councils, tribal councils and self-government entities) • For-profit organizations • Provincial and territorial governments, institutions, agencies and Crown Corporations
Career Focus (Service Canada)	Career Focus aims to increase the supply of highly qualified workers and facilitate the transition of highly-skilled young people to a rapidly changing labour market. It provides funding for employers and organizations to design and deliver activities that enable youth (ages 15-30) to make more	Organizations that may apply for this program are the following: <ul style="list-style-type: none"> • Not-for-profit organizations, • Municipal governments,

¹⁸ SMALL NWT COMMUNITIES RELEVANT TO THE GMRP ARE DETTAH, FORT RESOLUTION, GAMETI, WEKWEETI, WHATI AND LUTSELK'E

¹⁹ The terms "Indigenous" and "Aboriginal" are not used consistently in this table, and are rather identified according to the terminology that the funding program uses.

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Program	Description	Eligible Recipients
	informed career decisions and develop relevant skills.	<ul style="list-style-type: none"> Aboriginal organizations (including band councils, tribal councils and self-government entities), For-profit organizations (for non-commercial projects), and Provincial and territorial governments, institutions, agencies and Crown Corporations.
Opportunities Fund for Persons with Disabilities (Service Canada)	This fund helps people with disabilities prepare for, obtain and maintain employment or self-employment. This program provides on-the-job training, workshops, and academic training. Organizations apply for funding and then recruit eligible participants. Employers can also request this funding to hire people.	<p>Organizations that may apply for this program are the following:</p> <ul style="list-style-type: none"> Not-for-profit organizations, Municipal governments, Aboriginal organizations (including band councils, tribal councils and self-government entities), For-profit organizations, and Provincial and territorial governments, institutions, agencies and Crown Corporations.

Table 21 provides examples of programs offering funding support to Indigenous organizations, and First Nations and Inuit governments to increase employability and training opportunities among Indigenous peoples. Program funders are provided in brackets following the program title.

Table 21: Funding for Indigenous Organizations

Program	Description	Eligible Recipients
First Nations and Inuit Summer Work Experience Program (INAC)	Provides funding for First Nations and Inuit governments and organizations to offer support to First Nations and Inuit youth in gaining summer work experience opportunities. Eligible projects may include: wage subsidy programs, job counselling and summer employment programs. Calls for proposals were last issued March 2017.	First Nations and Inuit governments and organizations may apply for this program.
Aboriginal Skills and Employment Training Strategy (ASETS)²⁰ (Service Canada)	Provides funding for Aboriginal agreement holders to design and deliver employment programs best suited to the unique needs of their clients. All Aboriginal people, regardless of status or location, may access its programs and services which may include: <ul style="list-style-type: none"> Skills development Training for high demand jobs Programs and care initiatives for youth and children 	Aboriginal agreement holders may apply for this program.

²⁰ The ASETS program is up for renewal in 2018. The program design may differ post renewal.

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Program	Description	Eligible Recipients
Skills and Partnership Fund (SPF) (Service Canada)	Provides funding for projects that contribute to the skills development and 'training-to-employment' of Indigenous workers. This fund encourages innovations in training methods, service delivery, and efforts in improving employment outcomes for Indigenous peoples.	Indigenous organizations, including in incorporated for-profit and not-for-profit Indigenous controlled organizations, Indigenous controlled unincorporated associations, Indian Act bands, Tribal Councils and Indigenous self-government entities.

Table 22 outlines examples of supports for community-based projects or partnership initiatives to improve employability through training or other means (program funders are in parentheses following the program title). Eligible participants are typically groups facing barriers to employment, including Aboriginal governments and small NWT communities.

We recommend that the GMRP keep apprised of any community-based projects or partnership initiatives that may support GMRP labour needs through engagement with GMRP communities.

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Table 22: Funding for Community-Based Projects or Partnership Initiatives

Program	Description	Eligible Recipients
Community Initiatives (GNWT ECE)	Provides financial assistance (e.g. salaries and benefits, overhead costs, etc.) for NWT community partners to deliver initiatives that engage underrepresented groups . Eligible initiatives may include: training programs, workplace education programs, construction boot camps, trades awareness programs and job coaching/counselling.	NWT organizations that may apply for this program are the following: <ul style="list-style-type: none"> • Business or Corporation • Aboriginal Government or Organization • Non-governmental Organization • Municipal or Local Government • Industry Association • Local Housing Authority Preference is given to businesses eligible under the GNWT BIP.
Community Initiatives: Small Community Employment Support (GNWT ECE)	Provides financial assistance to organizations in small NWT communities who initiate project based training to enhance the employability of residents . Eligible projects may include: training programs, workplace education programs and job coaching or counselling.	Small NWT community organizations that may apply for this program are the following: <ul style="list-style-type: none"> • Business or Corporation • Aboriginal Government or Organization • Non-governmental Organization • Municipal or Local Government • Industry Association • Local Housing Authority • Educational Institution/Training Provider • Board/Agency
Strategic Investments in Northern Economic Development (SINED) (CanNor)	This is an economic development program that strengthens key economic sectors in the three territories. SINED supports projects that increase northern economic growth and diversification, support innovation and capacity development, and create jobs for Indigenous and non-Indigenous Northerners.	Organizations that may apply for this program are the following: <ul style="list-style-type: none"> • Organizations or associations whose mandate includes work that advances northern economic development • Non-federal governments or agencies that facilitate economic development in the North • Small- to medium-sized enterprises employing 500 or fewer workers
Strategic Partnerships Initiative (SPI) (INAC)	This program works to increase Aboriginal participation in complex economic development opportunities, particularly in the natural resource sectors. A lead federal department, in collaboration with other key federal partners, submits a proposal for SPI funding. Work plans are then developed, in collaboration with Aboriginal communities and other partners, to identify the specific activities to be undertaken with the SPI investment. Investments are prioritized on the extent to which they meet specific criteria, such as alignment with Government of Canada priorities and with the objectives of the Federal Framework for Aboriginal Economic Development.	Federal departments may apply for this program. Funding can be directed towards: <ul style="list-style-type: none"> • First Nations, Métis and Inuit communities • Tribal Councils, Self-governing First Nations and local governments of Inuit communities • Aboriginal corporations, associations, cooperatives and institutions (for-profit and not-for-profit) • Aboriginal businesses, partnerships and joint ventures

Table 23 outlines examples of GNWT ECE financial supports for individuals seeking training or education opportunities. These programs target different demographics including youth, First Nation and Inuit, people with disabilities, students and recipients of other government supports (e.g. employment insurance, income assistance, student financial assistance).

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Table 23: Funding for Individuals

Program	Description	Eligible Recipients
Building Essential Skills and Building Essential Skills – Apprentice	Provides financial assistance for training opportunities that help NWT Employment Insurance participants return to work. Eligible training opportunities may include: pre-employment training courses, skill-specific training programs and apprenticeship technical training.	NWT Employment Insurance participants
Skills Development	Provides financial assistance for training opportunities that help unemployed individuals who are not eligible for Employment Insurance find employment and help employed individuals who want skills upgrading . Eligible training opportunities may include: pre-employment training courses, skill-specific training programs and essential workplace skills.	NWT residents unemployed and ineligible for Employment Insurance benefits or employed and “under-skilled” (e.g. no high school diploma or recognized certification)
NWT Student Financial Assistance	Financial assistance to NWT residents to assist with postsecondary education-related expenses.	NWT residents

A variety of business support and financing programs are available for communities and contractors. These are identified and plotted in Figure 18 below, based on their target and when they will be most relevant in the GMRP timelines. Tables 24-26 provide more detail on the identified programs.

Figure 18: Business Capacity Building Programs



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Table 24: Business Planning and Growth Programs

Program	Description	Eligible Recipients
Community Futures Business Counseling (Community Futures Canada)	The Community Futures Program is a community-based economic initiative delivered by the Community Futures Development Corporations in each region of the NWT. Based on the economic development priorities for each region, the program offers a range of services including assistance for entrepreneurs starting a new business or expanding their business, and access to Canada Business NWT Internet sites and business information services (GNWT Industry, Tourism and Investment, 2017b).	All NWT communities have access to the Community Futures Business Counseling Program.
Business Development Bank of Canada (BDC) Advisory Services (BDC)	BDC provides advisory services for small business to scale up, increase productivity, innovate and globalize. They provide assistance with managing a small business, including strategic planning, financial planning, advisory board programs and human resources management. BDC also provides coaching for small businesses in financial management, human resources, leading change, and sales and marketing. BDC also offers loans and capital for starting or scaling up a small business (BDC, 2017).	Canadian entrepreneurs of small and medium-sized businesses.
Aboriginal Business and Entrepreneurship Development (INAC)	The Aboriginal Business and Entrepreneurship Development program provides funding to support Aboriginal entrepreneurs access a range of services, including: business planning, establishment (capital) costs, business acquisitions, business expansions, marketing initiatives that are local, domestic or export oriented, new product or process development, adding technology to improve operations and competitiveness, operating costs in association with capital costs, and financial services, business support, business-related training and mentoring services. (Indigenous and Northern Affairs Canada, 2013)	Eligible recipients for this program include: <ul style="list-style-type: none"> • Individuals of Canadian Aboriginal heritage – Status or Non-status Indian (on or off-reserve), Métis or Inuit • Majority-owned Aboriginal businesses • Aboriginal community and/or development corporations
Entrepreneurship and Business Development (CanNor)	The Entrepreneurship and Business Development program provides financial support to Aboriginal entrepreneurs, businesses and commercial entities to expand their business in the three territories. The fund supports the following business activities: business advisory and entrepreneurship development, planning and research, skills and capacity building, commercial ventures, developing and promoting a market, innovation, capitalizing, and advocacy. (Canadian Northern Economic Development Agency, 2014)	Funding is available to the following recipients: <ul style="list-style-type: none"> • Aboriginal person • Business or commercial entity owned and controlled by an Aboriginal person, Aboriginal community or Aboriginal government • An organization, corporation, association, cooperative, partnership or institution controlled by an Aboriginal person or people (excluding those established for charitable or religious purposes)



Table 25: Business Financing Programs

Program	Description	Eligible Recipients
BDIC Financial Programs (BDIC)	BDIC supports the economic objectives of the GNWT by encouraging the creation and development of businesses. The BDIC provides financial assistance to businesses by offering loans, project funds, and subsidies, and directly invests in businesses through capital or venture investments. (Northwest Territories Business Development and Investment Corporation, 2017)	Businesses operating in the Northwest Territories that are: <ul style="list-style-type: none"> • Individual or sole proprietorship • A partnership • A corporation registered under the NWT Business Corporations Act • A co-operative registered under the NWT Business Co-operative Association Act
Support for Entrepreneurs and Economic Development (SEED) (GNWT ITI)	The SEED program provides financial support to qualified applicants to start businesses, improve their capacity or skills and help communities expand their economy. Its programs include: <ol style="list-style-type: none"> 1. Entrepreneur Support: start-up funding, asset acquisition, market and product development and operational support (NWT businesses) 2. Sector support: capital expansion incentive, i.e. offsets loan interests (note: sectors designated by the Minister) 3. Micro-business support: purchase of or payment for tools, equipment or raw materials; film-making equipment or production expenses; other self-employment activities 4. Business intelligence and networking, i.e. attendance at seminars and trade shows 5. Other strategic investments for NWT businesses 	All programs except for program 3: Micro-business support are offered to NWT businesses. Program 3 is offered to NWT residents engaged in traditional harvesting activities, arts and craft production for commercial purposes, or other self-employment activities. NWT residents may additionally apply to funding from program 4.
Community Futures Business Loans (Community Futures Canada)	The Community Futures Program is a community-based economic initiative delivered by the Community Futures Development Corporations in each region of the NWT. Based on the economic development priorities for each region, the program offers a range of services including business loans, loan guarantees and wage subsidies. (GNWT Industry, Tourism and Investment, 2017b)	All NWT communities have access to the Community Futures Program. The program is delivered by seven regional associations, which may have additional information on eligibility requirements.
Canada Small Business Financing Program (Industry Canada)	The Canada Small Business Financing Program provides loans for start-ups and existing for-profit small businesses in Canada. Loans may be used to finance the costs of purchasing or improving land, buildings, equipment, or leaseholds, or covering registration fees. (Government of Canada, 2017)	The following types of start-ups and for-profit small businesses are eligible for funding: <ul style="list-style-type: none"> • Corporations • Sole proprietors • Partnerships • Cooperatives Businesses must be operating in Canada with gross revenues of \$10 million or less. Farming businesses are not eligible for this program.



Table 26: Community Business Development Programs

Program	Description	Eligible Recipients
Community Economic Opportunities Program (CanNor)	This program provides project-based funding support to First Nation and Inuit communities for community-based economic development. Funding is available for activities such as: employment of community members, community-owned and community-member business development, development of land and resources under community control, research and advocacy and promotion of the community as a source of investment. (Canadian Northern Economic Development Agency, 2013)	The following organizations are eligible for funding: <ul style="list-style-type: none"> • First Nation Councils • Governments of self-governing First Nation and Inuit communities, • Representative organizations of Inuit communities and other organizations mandated to carry out activities and projects on behalf of the above
SEED Community Economic Development (GNWT ITI)	The SEED's Community Economic Development program offers funding to cover: <ul style="list-style-type: none"> • Feasibility plans for community-based projects or economic opportunities • Physical infrastructure that is a constraint to business development • Access to business information • Community-based or industry strategy plans • Events that promote economic development • Sector-specific research 	The following recipients are eligible to receive funds from this program: <ul style="list-style-type: none"> • NWT associations • Band councils • Community councils
Community Opportunity Readiness (INAC)	The Community Opportunity Readiness program provides financial assistance to Aboriginal communities in pursuit of, or wishing to participate in, an economic opportunity. The program supports: the pursuit of economic opportunities and private sector funding (i.e. feasibility studies, marketing, advertising and promotion, planning); community-owned businesses where there is an equity gap (i.e. business advisory services and training); and community economic infrastructure development related to business development (Indigenous and Northern Affairs Canada, 2010).	The following organizations are eligible for funding: <ul style="list-style-type: none"> • First Nation and Inuit communities and their governments (including Tribal Councils) • Organizations and associations controlled by First Nation and Inuit communities (except those with charitable or religious purposes) • Non-Aboriginal organizations and associations (except those with charitable or religious purposes) that plan to provide economic development services for the benefit of First Nation and Inuit communities • The Province of Ontario, as per the Canada-Ontario Resource Development Agreement

6.2.4 Immigration Programs

Immigration support programs, as described in Table 27 below, are provided for Canadians and international residents interested in immigrating to the NWT.

We recommend that the GMRP or MCM become a business partner with the Come Make Your Mark program, in order to advertise positions that may not be filled by local residents.



Table 27: Immigration Support Programs

Program	Description	Recipients
Come Make Your Mark (GNWT)	A program that supports individuals and their families from across Canada to move and work in the NWT. The program also works with business partners (free sign-up), who receive: <ul style="list-style-type: none"> Increased promotion in target regions across Canada Representation at tradeshow and career fairs across the country Access to online tools, including the job board and an active social media presence 	Canadian citizens and NWT employers.
NWT Nominee Program (Citizenship and Immigration Canada, GNWT)	An immigration program to help fast-track the processing of an application for permanent residency, by sending prospective immigrants a NWT Provincial Nomination Certificate. The program can assist employers with recruiting and retaining foreign workers, while helping those workers make NWT a permanent home. The program is also designed to attract entrepreneurs with business expertise and investment capital to settle in the NWT.	Foreign workers, entrepreneurs and NWT employers.

6.2.5 Community-Specific Training Programs

Aboriginal organizations and governments mentioned the effectiveness of in-house or one-on-one training offered to their members, often in partnership with other organizations (e.g. ECO Canada; Aurora College). Specific training programs used to date are detailed in Appendix C: Aboriginal Community Profiles.

We recommend that the GMRP continue to engage with the Aboriginal governments and organizations to communicate GMRP's labour needs. In particular, the Tłıchq, YKDFN, and Northwest Territories Métis Nation indicated interest in growing mining industry employment, and the YKDFN also indicated interest in growing diamond mine remediation employment.

In addition, GNWT ECE directly delivers programs and services through ECE Service Centres (formerly called 'Career Centres'). These centres offer a range of career development and income security programs and services to Northerners. Recommendations on engagement with GNWT ECE are captured in section 7.2.1 above.

6.3 Capacity-building and Training Priorities

Table 28 summarizes recommended next steps that can be taken by GMRP and/or the MCM by capacity building program type.



7 Engagement on Socio-Economic Opportunities

The GMRP conducts engagement with a number of external stakeholders (section 7.1). The MCM is expected to support the GMRP in relevant engagement activities, some of which are listed in section 7.2 below.

7.1 GMRP Stakeholders

Figure 19 builds from the results of an initial external stakeholder identification and prioritization exercise completed in late 2015 to inform plans for bilateral engagement, and includes updates made in 2017.

Figure 19: Key External Stakeholders

Tier A: Key Players	Tier B: Influencers
<ul style="list-style-type: none"> • Tłıchǫ Government • Yellowknives Dene First Nation • Łutsel K'e Dene First Nation • Deninu K'ue First Nation • North Slave Métis Alliance • Northwest Territories Métis Nation • Tłıchǫ Investment Corporation • Det'on Cho Corporation • Denesoline Corporation • Deninu K'ue Development Corporation • Metcor Inc. • Denendeh Development Corporation • NWT & NU Construction Association • NWT & Nunavut Chamber of Mines • Yellowknife Chamber of Commerce • Northern Aboriginal Business Association • NWT Mine Training Society • Aurora College • City of Yellowknife • Native Women's Association of the NWT • NWT Chamber of Commerce • Dominion, De Beers, Rio Tinto 	<ul style="list-style-type: none"> • GNWT – ECE (Education, Culture and Employment) • GNWT – ITI (Industry, Tourism, Investment) • GNWT – HSS (Health and Social Services) • CanNor • MIHR (Mining Industry Human Resources Council) • ESDC (Employment and Social Development Canada) • Health Canada • ECO Canada • Akaitcho Territory Government • Ndilo and Dettah Residents • Yellowknife Residents

Key
<ul style="list-style-type: none"> Engage on employment, business capacity and impact programs Engage on employment and business capacity Engage on business capacity and/or impact programs Consider engaging at a later date

7.2 Engagement Activities

The MCM will engage with relevant stakeholders on upcoming GMRP economic opportunities and to support preparedness for those opportunities. Proposed engagement objectives for different stakeholder groups are provided below, and these have been informed by interviews with these stakeholders²¹.

²¹ Stakeholders who were not available for interviews may not be included in this list if it is unclear what topics are of interest to them. For a list of stakeholders not yet interviewed, please refer to Section 8.1: Recommendations and Next Steps.

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Aboriginal Governments and Economic Development Corporations

- *Share GMRP opportunities for distribution*
- *Validate the GMRP's understanding of existing skills, training programs and interests*
- *Provide information on funding sources to support readiness and skills development (e.g. capacity building) for GMRP opportunities*

Tłıchq Government

Yellowknives Dene First Nation

Łutsel K'e Dene First Nation

Deninu K'ue First Nation

North Slave Métis Alliance

Northwest Territories Métis Nation

Akaiitcho Territory Government

Tłıchq Investment Corporation

Det'on Cho Corporation

Denesoline Corporation

Deninu K'ue Development Corporation

Metcor Inc.

Denendeh Development Corporation

Territorial Government

- *Share GMRP opportunities for distribution (CDOs – jobs, EDOs – tenders)*

GNWT ECE

GNWT ITI

Funders for Capacity Building Programs

- *Share GMRP analysis of local ability to meet GMRP labour needs*
- *Communicate priority project needs in terms of skills and experience*
- *Share GMRP opportunities, upon request*

GNWT ECE

Employment and Social Development Canada (ESDC)²²

Indigenous and Northern Affairs Canada (INAC)

Citizenship and Immigration Canada

Canadian Northern Economic Development Agency (CanNor)

NWT Business Development and Investment Corporation (BDIC)

Educational Institutions

- *Share GMRP opportunities for distribution*
- *Share GMRP training needs aligned with planning cycle*

Aurora College

NWT Mine Training Society

ECO Canada

Mining Industry Human Resources Council (MiHR)

Northern Safety Association (NSA)

NWT & Nunavut Construction Association (NNCA)

Skills Canada NWT

Coordinating Bodies

- *Share GMRP opportunities and training needs to coordinate local readiness for economic opportunities*

North Slave Regional Training Partnership (NSRTP)

Tłıchq Regional Economic Development Working Group

CanNor

²² Umbrella organization of Service Canada



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Northern Business Organizations

- *Share GMRP opportunities for distribution (except NWT Chamber of Commerce)*

NWT & Nunavut Chamber of Mines
NWT & Nunavut Construction Association
Yellowknife Chamber of Commerce

Appendix D: Contact List provides a complete list of contact details for the organizations listed in the tables above.

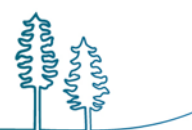
Appendix C: Aboriginal Community Profiles provides additional details on preferred communication methods for the listed communities. Generally speaking, sending job opportunities to Aboriginal governments or their career/economic development officers²³ is the best way to distribute job or business opportunity information to Aboriginal communities. Other methods include posting the information on community Facebook pages and posting the information on the community's jobs bulletin board, typically located in the band office or general store.

The MCM may also be asked to support GMRP engagement activities, such as:

- Working with the GMRP to support planning for a capacity building conference and tradeshow in the region, and
- Supporting GMRP engagement with Aboriginal groups on the GMRP socio-economic and procurement approach.

We recommend that the MCM ensure that any engagement conducted supports and is integrated with the GMRP engagement strategy/plan.

²³ Career development officers focus on supporting local employment and are funded by GNWT ECE, but managed by Aboriginal governments to deliver services in their communities. Similarly, economic development officers focus on supporting local business development and are funded by GNWT ITI and managed by Aboriginal governments.



8 Conclusions

Currently, the natural resource sector forecasts for both Canada and the NWT indicate an expected decline in employment levels over the next decade, providing an opportunity for the GMRP to hire mining and construction sector workers who are unemployed due to project closures or slowdowns. The GMRP should consider targeting its communication of job opportunities accordingly (e.g. communicating to former employees of Ekati, which is expected to close in 2019), in addition to targeted communication with local Aboriginal and northern communities and businesses.

Table 29 provides a summary of identified Northern Aboriginal community interests, existing skills, and NWT training programs mapped relative to GMRP labour needs.

Table 28: Northern Aboriginal Skills and Interest and NWT Training Opportunities

Category	Occupation	Position	Northern Aboriginal Skills	Community Interest	Available Training
Entry Level	Labourer	General Labourer	X*	X	
		Flag Person	X*	X	
Semi-Skilled	Truck Driver	Atriculated dump truck	X*	X	
		5 Ton (Mixer/Water/Flat Deck w Picker/Vac/Tandem Dump/Compactor)	X*	X	
		Skid Steer / Telehandler / Mini Excavator/Manlifts	X*	X	
	Equipment Operator	Excavator	X*	X	X
		966 Loader	X*	X	X
		Grader operator	X*	X	X
		Dozer operator	X*	X	X
		Jumbo operator	X*	X	X
		LHD operator	X*	X	X
		U/G Dump Truck	X*	X	X
		U/G man carriers	X*	X	X
	Drilling Support	Driller's helper	X*	X	
		Rod man	X*	X	
	Admin Support	Clerk	X	X	X
Skilled	Technician	Lead instrument technician			
		Instrument technician	X		
		Technician - GeoFabric Liner Welder	X		
		Technician - Environmental	X*		
		Technician - Civil			
	Trades	ETP operator	X	X	
		Crusher/ screener operator	X		
		Security Personnel	X	X	
		Carpenter	X	X	X
		Ironworker (Rebar or Structural)	X		
		Trades Supervisor	X		
		Crane Operator			
		Mechanic	X	X	
		HVAC	X		
		Electrician	X*		X
		Millwright			
		Pipe fitter	X		
		Pipe welder	X		
		Hazmat crew workers	X		
		Hazmat FM	X		
	Surveyor	Quantity surveyor	X		
		Surveyor	X		
	Surface Drilling	Driller	X*	X	

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Category	Occupation	Position	Northern Aboriginal Skills	Community Interest	Available Training
	Blasting/Drilling	Driller's helper	X*	X	
		Surface driller	X*	X	
		Surface blaster	X*	X	
		Underground driller		X	
	Underground	Underground shift boss	X		X
	Miner	Underground miners	X		X
	Supervisor	<i>Project Manager</i>	X*		X
		Supervisor	X	X	X
		Shift foreman	X		X
	Professional	Management	Planner	X	
			Accountant	X	
		Environmental	Environmental superintendent	X*	
			Environmental monitor	X*	X
		Safety	Safety supervisor		
			Safety officer	X	
			Underground safety		
		Engineer	Civil engineer		
			Mining engineer		
			Chemical engineer		
			Mechanical engineer		
			Electrical engineer		

Legend for Table 29:

X – Supply available

X* - More than three suppliers

Italics – No GMRP labour needs identified (Merit, 2016)

Based on the above table, we have identified areas with local supply (i.e. areas with more than three suppliers or areas with interest, training and some expertise), areas with potential (i.e. areas with interest or training and some expertise) and gaps (i.e. areas with no interest, no or limited expertise and no training), for the short-term (i.e. until 2020) and the long-term (see Table 30). These results were refined and validated through interviews with relevant stakeholders.

Table 29: Summary of Local Labour Supply

	Short-Term (until 2020)	Long-Term
Local Supply	Labourer Equipment Operator Admin Support Technician: Environmental Technician: Security personnel Surveyor Safety: Safety officer	Labourer Truck Driver Equipment Operator Drilling Support Admin Support Technician: Environmental Technician: Security personnel Surveyor Surface Drilling Blasting/Drilling: Surface driller Blasting/Drilling: Surface blaster Environmental Safety Management: Accountant
Potential Local Supply	Technician: Water treatment plant operator Trades: Carpenter Trades: Electrician Trades: Mechanic	Technician: Water treatment plant operator Trades: Carpenter Trades: Electrician Trades: Mechanic Supervisor: Supervisor

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	Short-Term (until 2020)	Long-Term
	Trades: Millwright	Supervisor: Shift foreman Management: Planner Engineer
Limited Local Supply	Trades: Trades Supervisor Underground Miner	Technician (except Environmental, Water treatment plant operator, Security personnel) Trades (except Carpenter, Electrician, Mechanic, Millwright) Blasting/Drilling: Underground driller Underground Miner

The above tables are based on existing skills identified through interviews with Aboriginal governments and organizations. The additional potential available workforce, as identified in section 5.3.1, as well as Northern businesses could also work to meet GMRP labour needs. Assumptions made in identifying existing skills are outlined in Appendix A: NWT Aboriginal Business Listing.

The above information should be used to communicate and engage with relevant stakeholders to inform decisions related to work package structure and contracting, and to identify additional capacity development that may be required to maximize local employment and procurement.

8.1 Recommendations and Next Steps

Recommendations identified in this report are summarized in the table below for ease of reference. This is followed by suggested next steps for keeping the labour resource study up to date on an annual basis.

Table 30: Summary of Recommendations

Relevant Section	Recommendation
6.2.1 Coordinating Bodies	Communicate GMRP labour needs to the coordinating bodies (as listed in Section 6, Table 16) and consider participating in the NSRTP to coordinate readiness for upcoming GMRP opportunities.
6.2.2 Educational and Training Institutions	Engage with Aurora College, the NWT Mine Training Society and ECO Canada to communicate GMRP labour needs and identify training programs that may meet those needs, in alignment with each organization's planning cycle.
6.2.2 Educational and Training Institutions	Engage with Skills Canada to communicate GMRP job opportunities to its network of students and identify opportunities for exposing students to the GMRP (e.g. through participation in Career Expo, PowerUp Conference, etc.).
6.2.3 Financial Support for Capacity Building Program	Maintain awareness of capacity building programs (as outlined in Section 6) and communicate applicable programs to subcontractors to support local hiring efforts.

Relevant Section	Recommendation
6.2.3 Financial Support for Capacity Building Program	Keep apprised of any community-based projects or partnership initiatives that may support GMRP labour needs through engagement with GMRP communities.
6.2.4 Immigration Programs	Consider becoming a business partner with the Come Make Your Mark program, in order to advertise GMRP positions that may not be filled by local residents.
6.1 Community Interests 6.2.5 Community-specific training programs	Continue to engage with the Northern and Northern Aboriginal governments and organizations to communicate GMRP's labour needs and explore what opportunities may be valuable for each community to pursue.
7.2 Engagement Activities	Ensure that any engagement conducted supports and is integrated with the overall GMRP Communications and Engagement Strategy.

This Labour Resource Study should be updated on an annual basis, as stipulated in the MCM contract. This update should include a review of any more recent labour market studies that have been released since this study was last published, as well as interviews with key stakeholders (for a complete list, refer to Appendix D). Stakeholders who were unavailable for interviews during the 2017 Labour Resource Study update should also be contacted, including:

- Łutsel K'e Dene First Nation
- North Slave Métis Alliance
- Northwest Territories Métis Nation
- Northern Aboriginal Business Association
- Native Women's Association of the NWT
- NWT & Nunavut Chamber of Mines

Finally, the GMRP labour resource requirements, as outlined in Section 4, should be reviewed and refined on an ongoing basis to inform future studies.

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Appendix A: NWT Aboriginal Business Listing

The Excel file that follows identifies Aboriginal businesses in GMRP communities and includes the following information for each business:

- Business name
- Organizational structure (e.g. joint venture, wholly owned subsidiary, corporation, etc.)
- Business office location(s)
- Applicable employee categories (e.g. Tłıchq, YKDFN, etc.)
- Overview of firm services
- Skill offerings applicable to GMRP
- Number of employees
- Contract experience (e.g. clients, projects, total sales)
- Key contact(s)

The skill offerings applicable to the GMRP were identified based on the overview of firm services. In identifying the relevant skills, we made the following assumptions:

- If a description of services is not provided for a joint venture (JV), the services described are based on firm overviews from one or both of the companies in the JV.
- If a part of the firm overview did not have an obvious matching occupation, a matching occupation is not identified (e.g. site clean-up).
- References to construction or remediation services assume that labourers, truck drivers and equipment operators are available. In the case of remediation, an environmental technician is also assumed to be available.
- Truck drivers can drive all GMRP trucks listed.
- Equipment operators can operate all GMRP equipment listed.
- Services related to drilling or blasting exclude underground drilling experience, unless it is specifically identified in the firm services overview.
- Admin support and project management skills are only listed if they are applicable to a wide range of skills i.e. if admin support is only provided for pipe welding services, it is not included.
- Safety services are only identified if specified in the firm overview. First aid services is not assumed to satisfy the “safety officer” position requirements.
- Any reference to liner installations e.g. geomembrane lining systems, High-density polyethylene (HDPE), etc. assumes a geofabric liner welder is available.
- Any reference to environmental services, wastewater or water management assumes an environmental technician is available.
- Any reference to water treatment skills assumes a water treatment plant operator is available.
- Any reference to firearms operation assumes security personnel are available.
- Any reference to structural steel or structural engineering assumes an ironworker is available.
- A trades’ supervisor is identified when the majority of trades’ services are offered by the firm.
- Any reference to mechanical work assumes a mechanic is available.
- Any reference to mechanical systems or buildings assumes HVAC services is available.
- Any reference to piping work assumes a pipe fitter is available. A pipe welder is only identified if welding services are included in the firm overview.

Appendix B: GMRP Labour Requirements

The Excel file that follows provides a detailed breakdown of GMRP labour requirements by occupation, position, and work type (e.g. underground, care and maintenance, etc.), as identified by Merit in March 2016 (Merit, 2016), and as updated by Stratos in November 2017 based on direction from GMRP.

Appendix C: Aboriginal Community Profiles

In both 2016 and 2017, Stratos interviewed individuals from Aboriginal communities and organizations in proximity to the Giant Mine to better understand current Northern and Aboriginal labour force and business capacity (see Table 31).

Table 31: Individuals Interviewed on Local Business Capacity and Interests

Organization	Individuals
Tłıchq Investment Corp.	2016 & 2017: Kelly Brenton, CEO
Tłıchq Government	2017: Vickie Francisco, Training and Development Facilitator; Jessica Hum, Acting Manager of Lands Protection Department
Det'on Cho Corporation	2017: Paul Gruner, CEO 2016: Bob Murphy, President and CEO; Gord Kirby, General Manager; Nyasha Magony, Human Resources Manager
Yellowknives Dene First Nation (YKDFN)	2017: Margaret Erasmus, Dehchita Naawo Manager; Johanne Black, Director Lands Management; Nora Taylor, Human Resources Manager 2016: William Lyons, Community Liaison
Northwest Territory Métis Nation	2016: Garry Bailey, President
North Slave Métis Alliance (NSMA)	2016: Bill Enge, President
Denesoline Corporation Ltd. (Economic development arm of the Łutsel K'e Dene First Nation)	2017: Samantha Morandin, Community Relations Manager and Executive Assistant; Iqbal Bhatti, Director of Recycling 2016: Jesse Weng, Operations / Project Manager
Deninu K'ue First Nation	2017: Carol-Ann Chaplin, Senior Administrative Officer/Band Manager
Denendeh Development Corporation	2017: Roy Erasmus Jr.

This appendix provides a summary of the information collected through interviews, presented by Aboriginal community as follows:

- Tłıchq Government (communities of Behchokò, Gamètì, Wekweètì and Whatì)
- Yellowknives Dene First Nation (communities of Ndilo and Dettah)
- Łutsel K'e Dene First Nation (community of Łutselk'e)
- Deninu K'ue First Nation (community of Fort Resolution)
- Northwest Territory Métis Nation (represents Métis in Fort Resolution, Fort Smith, Hay River and Yellowknife)
- North Slave Métis Alliance (represents Métis in Behchokò and Yellowknife)

This section begins with a summary of the Denendeh Development Corporation, an organization owned by 27 Dene First Nations in NWT.

Denendeh Development Corporation

Overview

Denendeh Development Corporation (DDC) is owned by 27 First Nations in NWT. It was established in 1982 as a not-for-profit Corporation. In 2000, the Chiefs of Denendeh approved a new investment structure that resulted in the creation of Denendeh Investments Limited Partnership (DILP) and its general partner Denendeh Investments Incorporated (DII) (DII, 2016). DDC works to create long-term economic self-sufficiency for the Dene (DDC, 2016).

Services

DDC owns 50% of the NWT Dene Métis Development Fund (which provides loans to all business types in the NWT), along with the NWT Métis Development Corporation, and it owns preferred and ordinary partnership units in DILP. Denendeh Investments Inc. has invested in the following businesses: Northland Utilities, Falcon Communications Ltd., Broadband Business Alliance, MacKenzie Aboriginal Corp. (construction services), Denendeh Manor LP (real estate), Northern Aboriginal Services Company (facilities maintenance services), Shehtah Nabors LP (drilling services), and DEMCO LP (exploration services).

Capacity Building

DDC does not provide in-house training; training occurs on-the-job.

Communication of Job Opportunities

DCC advertises job opportunities in Northern newspapers and circulates opportunities to local band offices.

Tłıchq Government

The Tłıchq government consists of four communities: Behchokò, Gamètì, Wekweètì, and Whatì. Basic demographic and employment statistics are provided in the table below. The sub-sections that follow outline the skills, capacities and interests of Tłıchq communities, as identified in interviews with the Tłıchq Investment Corporation and the Tłıchq Government.

	Behchokò	Whatì	Gamètì	Wekweètì
Population (2016)				
Total	2,154	549	271	148
Aboriginal (%)	91%	91%	97%	94%
15-24 yrs	388	98	48	22
25-44 yrs	584	184	76	52
45-59 yrs	317	65	34	20
60 yrs & Older	186	59	41	18
Education (2014)				
High School Diploma or More (%)	45.4%	43.1%	41.0%	35.9%
Employment (2014)				
Participation Rate (%)	56.9%	61.2%	56.5%	68.6%
Employment Rate – Total (%)	37.9%	39.5%	41.8%	55.3%
Employment Rate – Less than High School Diploma (%)	19.8%	31.3%	32.6%	40%
Employment Rate – High School Diploma or Greater (%)	61.6%	53.5%	57.9%	83.2%
Employment Rate – Aboriginal (%)	34.1%	35.9%	38.3%	53.4%

Source: (GNWT Industry, Tourism and Investment, 2017b)

Existing Businesses / Services

The **Tłıchq Investment Corporation** is the parent organization owned by the Tłıchq Government. It owns approximately 50 companies, which provide a range of services including trucking, mining support services, remediation, logistics, commercial construction, winter road construction, all weather road construction, and other civil works. Of these companies, four are community-based development corporations (i.e. one in each community - Behchokò, Gamètì, Wekweètì and Whatì). The Investment Corporation's website lists the following businesses:

- **Community Operations (e.g. fuel dispensing; property management):** Gamètì Development Corporation; Lac La Martre Development Corporation (within Whatì); Wekweètì Development Corporation; Behchokò Development Corporation; Rae-Edzo Dene Band Development Corporation (within Behchokò)
- **Mining Support and Remediation:** Tli Cho Logistics; Aboriginal Engineering; Tłıchq Environmental Engineering Services
- **Logistics and/or Construction:** Nishi Khon Freeway; Tłıchq Learning & Development Centre; Tłıchq Road Constructors; Tli Cho Construction



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- **Transportation:** Tłıchq Landtran; Ventures West²⁴
- **Catering and Janitorial services:** Tłıchq Domco Inc.

Existing Skills / Capacity and Interests

The Tłıchq Investment Corp. operates a database that layers community members' skills over community demographics; a main input to this database is a survey that asks each individual for his/her career aspirations. **Interests identified include:**

- Job readiness
- Heavy machinery operation
- Security training
- Class 1 driver training
- Leadership
- Carpentry
- Mechanical apprenticeships
- Aviation training
- Water management (e.g. testing or monitoring)

Capacity Building Programs

The Tłıchq Investment Corp. identifies talent within the organization and works to enhance skills for individuals to grow within the organization. 65 to 70% of the workforce at the Investment Corp. is Tłıchq people.

An interviewee observed that the **most effective capacity building programs are done in-house**, using both external and internal trainers. Existing programs offered by the Tłıchq Government include:

1. A 12-week **wilderness safety training** program that combines Traditional Knowledge of the land with western safety training, where graduates receive 17 safety certifications.
2. The **Wek'hodi program**, which provides training programs in lands monitoring and protection, water quality monitoring, and other related topics on an annual basis. Under this program, the Tłıchq Government partnered with the federal government and ECO Canada (through its BEAHR Program) to deliver a 3-week customized curriculum on contaminated sites management and environmental monitoring in 2016, where thirteen students graduated.
3. Collaboration with the GNWT Department of Lands to hire graduates from the Tłıchq wilderness safety and environmental monitoring programs. GNWT Lands has also provided on-the-job baseline environmental monitoring training to new employees.

²⁴ Denesoline Corp. has a 10% stake in this company



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The Tłıchq Government is also developing new training programs, which include:

1. **An environmental monitoring program (Stewardship of the Lands)**, which is currently being developed and will be delivered in partnership with GNWT ECE and Aurora College.
2. On-the-job training in well decommissioning, to be delivered in partnership with Stantec and the Investment Corp.
3. A “**train-the-trainer**” curriculum, delivered by mine workers.

The Tłıchq Government is looking to develop transferable skills wherever possible (e.g. wilderness training).

Community members have also accessed other skills development and job readiness programs to improve skills, such as operation of large machinery. Several community members have obtained a **certificate in Leadership Development** through the University of Alberta.

Communication Tools

Career Development Officers, based in the four Tłıchq communities, are funded through the Tłıchq Government. Their role is to support community members in accessing employment opportunities, which can include identifying skill gaps and developing plans to address them. All Tłıchq Investment Corp. employment opportunities are posted in community band offices.

Expected Future Employment

The Tłıchq Investment Corp. sees employment opportunities increasing in **mining services, remediation, trucking, winter road construction, all weather road construction, etc.** because of growth in **mining** and the spin-off industries. The Corporation is also working to diversify its businesses and geography (e.g. NWT, Yukon and Western Canada).

Yellowknives Dene First Nation

The Yellowknives Dene First Nation (YKDFN) are members of the Akaitcho Treaty 8 Tribal Corporation. The YKDFN consists of two communities: Ndilo and Dettah. Basic demographic and employment statistics are provided in the table below, including statistics for YKDFN members overall. The sub-sections that follow outline the skills, capacities and interests of YKDFN communities, as identified in interviews with the YKDFN and Det'on Cho Corporation.

	YKDFN (2014)	Ndilo (2011)	Dettah (2016)
Population			
Total	1,484	345	248
Aboriginal (%)	N/A	--	96%
15-24 yrs	--	--	51
25-44 yrs	--	--	71
45-59 yrs	--	--	62
60 yrs & Older	--	--	26
Education (2014)			
High School Diploma or More (%)	51%	51.5%	41.7%
Employment (2014)			
Participation Rate (%)	63%	56.0%	69.7%
Employment Rate – Total (%)	41%	36.6%	44.7%
Employment Rate – Less than High School Diploma (%)	--	30.3% ²⁵	44.7%
Employment Rate – High School Diploma or Greater (%)	--	63.8% ¹	49.3%
Employment Rate – Aboriginal (%)	N/A	52.0%	43.8%

Source: (GNWT Industry, Tourism and Investment, 2017b)

Existing Businesses / Services

The **Det'on Cho Corporation (DCC)** is the economic development arm of the Yellowknives Dene First Nation. There are twelve member companies, with four wholly-owned subsidiaries, which employ 200 individuals, of which over 130 are local NWT employees. Total number of staff for all companies and partnerships is between 600-800 individuals, most of which are NWT residents.

- **Subsidiaries:** Det'on Cho Construction Services, Bouwa Whee Catering, Det'on Cho Mining Supplies, We Le Dai Corporation
- **Joint Ventures (51% ownership):** Det'on Cho Nahanni Construction Ltd., Det'on Cho Medic North Ltd., Det'on Cho Logistics Ltd. and Det'on Cho / Scarlett Security Services Ltd.
- **Additional Joint Ventures and Partnerships:** Det'on Cho Summit Aviation LP, Det'on Cho Nuna, KeTe Whii Ltd., Det'on Cho Landtran Transport, Det'on Cho Environmental (recently formed, and focused on care & maintenance and reclamation projects), DICAN/ADG Aboriginal Diamonds Group Ltd.

DCC is currently pursuing other joint ventures and collaborations for the following areas: electrical, remediation, drilling (expansion), and blasting.

²⁵ 2009 data sourced from De Beers Group and Companies Snap Lake Mine Socio-Economic Assessment Toolbox (SEAT) Report for the period 1 January to 31 December 2013.

Existing Skills / Capacity and Interests

A YKDFN Readiness Study was completed in 2014, which included an assessment of skills and education within the community. The YKDFN will revisit the study and consider / incorporate the GMRP Labour Resource estimates. **Heavy equipment operation** is seen as a growing skill, with potential employment through GMRP remediation work.

Neither the YKDFN nor the DCC formally track the skills and capacities of community members; however, DCC is in the process of acquiring a new database system that will allow the organization to track YKDFN employment / skills of members to work with DCC's membership in sourcing meaningful employment. Under the YKDFN's Dechita Naowo Program, described in more detail below, individuals are assisted in identifying their current knowledge / skills and their current and future interests.

Capacity Building Programs

YKDFN

A four-year (2016-2020) **Job Creation and Training** program, the **Dechita Naowo Program**, is housed under the YKDFN Wellness Department and is primarily funded by CanNor (YKDFN, 2016). This program consists of three main components:

- **Component 1:** Training to Employment – provides skill development programs for Indigenous participants in a wide-range of occupations; includes life skills modules and employment training modules (e.g. construction/ carpentry; environmental monitoring / land stewardship; administrative assistant).
- **Component 2:** Lands and Environmental Specialist – a work-integrated training program that integrates TK with contemporary environmental and land use practices.
- **Component 3:** Access to Employment - assists individuals with identification of their current knowledge, skills and attitudes and their current and future interests.

Additional training is also provided in partnership with other organizations. For example, the YKDFN delivered BEAHR training with Eco Canada in Fall 2016, and delivered heavy equipment training (a 3-week course) with the Contaminants and Remediation Division of INAC.

A YKDFN interviewee noted that there are often two training initiatives for the same positions, run by contractors and the YKDFN (e.g. workplace safety), and that there is an opportunity to coordinate training offerings.

The YKDFN has received funding from Service Canada to fund a Training Coordinator position that would help link contractor needs with training needs. The Training Coordinator would determine



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future job prospects and the training required to fill those positions, help develop the training programs, recruit to fill the positions, and deliver some of the training.

DCC

DCC outlined a capacity building program in 2017 (DCC, Job Creation / Capacity Building Plan, 2017), which includes the following key areas:

- **Pre-employment:** Criminal Record Check / Security Clearance assistance; Training, in partnership with YKDFN – DCC training focuses on functional training and certification; Documentation assistance to ensure YKDFN members have all required information on file.
- **Employment:** Job Postings (see below – Communication Tools); Summer Student / Internship – a 1-year program within DCC; Entry Level Positions – identification and matching with interested YKDFN community members.
- **Capacity Building:** Capacity Building – DCC seeks to develop programs to increase the number of YKDFN members progressing in their careers; Succession Planning; Structured Training / Certification, in collaboration with YKDFN.
- **Career Development:** Business Unit Professional / Management positions; Corporate Professional / Leadership Positions.

DCC seeks to make mine reclamation a core competency, given its substantial involvement with the three diamond mines and their expected evolution to mine reclamation and closure. Training / skills development will focus on **construction** and **remediation/reclamation skills**. They are also looking to grow water monitoring, project management, safety, and leadership skills.

As outlined above, DCC is working to identify career progression opportunities, within the corporation and within their companies. They are developing training and leadership programs to assist YKDFN members through career progression and enhance their transferable skills outside of the resource sector.

Communication Tools

The **DCC website** advertises job postings, and DCC also sends job postings to the two community **band offices**. The YKDFN also post job opportunities at both Dettah and Ndilo band offices and within the **YKDFN Wellness Department**.

Expected Future Employment

While DCC foresees growth in the **remediation of diamond mines**, it also is seeking new opportunities to diversify outside of the mining sector, where possible.



Łutsel K'e Dene First Nation

The Łutsel K'e Dene First Nation (LKDFN) are members of the Akaitcho Treaty 8 Tribal Corporation. LKDFN members reside in Łutselk'e, a community approximately 200 km east of Yellowknife. Basic demographic and employment statistics are provided in the table below. The sub-sections that follow outline the skills, capacities and interests of the LKDFN, as identified in interviews with Denesoline Corporation Ltd. representatives, in both 2016 and 2017.

	Łutsel K'e
Population (2016)	
Total	327
Aboriginal (%)	82%
15-24 yrs	49
25-44 yrs	110
45-59 yrs	71
60 yrs & Older	37
Education (2014)	
High School Diploma or More (%)	38.3%
Employment (2014)	
Participation Rate (%)	69.6%
Employment Rate – Total (%)	52.9%
Employment Rate – Less than High School Diploma (%)	42.4%
Employment Rate – High School Diploma or Greater (%)	73.5%
Employment Rate – Aboriginal (%)	49.3%

Source: (GNWT Industry, Tourism and Investment, 2017b)

Existing Businesses / Services

Denesoline Corporation, the sole representative of the business interests of the LKDFN, has several joint ventures, including Denesoline-Acasta Heliflight, Denesoline-Arctic West Transport, Dene- Aurora Manufacturing, Dyno Nobel, and Denesoline-Air Tindi. Services include: air freight, aviation, bulk freight, catering, drilling & blasting services, electrical and mechanical services, engineering services, expediting and logistics, general contracting, geomembrane lining systems, mine site maintenance, prefab buildings, steel fabrication, underground mining and winter ice road construction and camps.

The Denesoline Corporation also has a subsidiary, the Denesoline Community Development Corporation, which focuses on tourism.

Existing Skills / Capacity and Interests

Existing skills include chainsaw operation, construction, manufacturing, boating, firearms operation, and food services.

There is also interest within the community for jobs in **heavy equipment operation, drilling/blasting, and wildlife monitoring.**

Capacity Building Programs

Aurora College and the band office have offered capacity building programs. The most popular programs include the **winter ice road employment program**, **first aid** and assistance with **resume development**. The band office also offers training in **chainsaw operation**, **construction**, **manufacturing** (through Aurora College), **boating**, **firearms operation**, and **driver training**. Customized training is also offered (e.g. the band office trains an individual to fill a position). Finally, community members are trained on-site as employees of the corporation's JVs (e.g. drilling and blasting through Dyno Nobel, food services, etc.).

Communication Tools

The **community Facebook page** reaches the most community members. Job opportunities are also posted on the **co-op store**, **band office bulletins**, and a **job board** at the **corporate office**. The **Operations/Project Manager** and **Human Resource Manager** also distribute opportunities. The **Impact Benefit Agreement** officer oversees job placements.

Expected Future Employment

Tourism development is a focus and priority of the organization with growth potential. A national park is opening beside the community and there is some interest to open a hotel in Łutsel K'e. **Recycling and waste management** is also an emerging priority in the organization and some projects are in the pipeline for the short and medium run. Opportunities of interest include **solid waste management** and **effluent treatment**.



Deninu K'ue First Nation

The Deninu K'ue First Nation (DKFN) are members of the Akaitcho Treaty 8 Tribal Corporation. DKFN members reside in Deninu Kue, formerly known as Fort Resolution, a community in the South Slave Region. Basic demographic and employment statistics are provided in the table below. The sub-sections that follow outline the skills, capacities and interests of the Deninu K'ue, as identified in an interview with a DKFN representative.

	Fort Resolution
Population (2016)	
Total	499
Aboriginal (%)	90%
15-24 yrs	80
25-44 yrs	133
45-59 yrs	93
60 yrs & Older	90
Education (2014)	
High School Diploma or More (%)	51%
Employment (2014)	
Participation Rate (%)	68%
Employment Rate – Total (%)	46%
Employment Rate – Less than High School Diploma (%)	27%
Employment Rate – High School Diploma or Greater (%)	63%
Employment Rate – Aboriginal (%)	41%

Existing Businesses / Services

The Deninu K'ue Development Corporation offers shuttle services, building rentals, cabin rentals, and runs a variety of stores. Additionally, the corporation has joint ventures with RCanada Construction for construction projects, Rose Construction for road building and equipment operation, and Rise & North for camping and catering.

Existing Skills / Capacity and Interests

The Environment Department of the DKFN runs an **environmental monitoring** program, including air, water and wildlife (fish) sampling. They provide wildlife monitoring escorts for the GNWT Department of Environment and Natural Resources, when requested.

Capacity Building Programs

The DKFN provides training each year, offering a safety certificate program (e.g. chainsaw safety). Through the Akaitcho Territory Government ASETS program, DKFN forecasts employment opportunities to determine community demand for training. A ready-to-work program was offered by Aurora College in May 2017, which included courses such as **flagging** and **heavy equipment operation**. Four community members graduated from the heavy equipment operator course.



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The DKFN have previously partnered with the University of Saskatchewan to provide **on-the-job training** (e.g. fish sampling). The community also runs a **job fair** each year, with representation from mining companies, where local employees discuss their careers with interested community members.

Communication Tools

The DKFN Senior Administrative Officer distributes job opportunities to the community, as necessary.

Northwest Territory Métis Nation

Members of the Northwest Territory Métis Nation (NWTMN) reside in four communities: Fort Smith, Hay River, Fort Resolution (Deninu Kue) and Yellowknife. Its membership is politically represented by the Fort Resolution Métis Council, the Fort Smith Métis Council and the Hay River Métis Government Council. Basic demographic statistics are provided in the table below; further detailed statistics on NWTMN members are not available. The sub-sections that follow outline the skills, capacities and interests of NWTMN members, as identified in an interview with the NWTMN.

	Fort Smith	Fort Resolution	Hay River	Yellowknife
Population (2016)				
Total	2,542	470	3,528	19,569
Aboriginal	1,645	430	1,635	4,460
Métis ²⁶	585	105	765	1,345
Métis as % of Aboriginal population	36%	24%	47%	30%

Existing Skills / Capacity and Interests

The NWTMN does not currently track its members' skills and capacities. In general, the interviewee noted that the community members have a variety of skillsets, including: **heavy equipment operation**, timber harvesting, road construction / maintenance, communicators for airports, business management, cooking, **welding, carpentry, electrical, trucking, underground mining**, plumbing, **book-keeping and water treatment**.

Capacity Building Programs

The NWTMN use the **ASETS program** to provide training to its members and also works with the **NWT Mine Training Society** and **GNWT Education, Culture and Employment programs**.

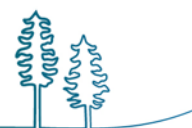
Communication Tools

An **Economic Development Officer** posts job opportunities and helps community members with job applications. The **three Métis Councils** (Fort Smith, Hay River and Fort Resolution) receive business development opportunities from companies.

Expected Future Employment

NWTMN expects to see an increase in **mining development** and would like to see community members benefit from this development.

²⁶ This refers to those in the community that self-identify as Métis, rather than as NWTMN members specifically.



North Slave Métis Alliance

The North Slave Métis Alliance (NSMA) represents Métis in Yellowknife and Behchokò (Shiga, 2016). Basic demographic statistics are provided in the table below; further detailed statistics on NSMA members are not available. The sub-sections that follow outline the skills, capacities and interests of NWTMN members, as identified in an interview with the NSMA in 2016.

	Behchokò	Yellowknife
Population (2016)		
Total	1,874	19,569
Aboriginal	1,755	4,460
Métis ²⁷	50	1,345
Métis as % of Aboriginal population	3%	30%

Existing Businesses / Services

Metcor Inc. is the parent company with several joint ventures and one subsidiary. The joint ventures are 51% owned by Metcor and include:

- **Metcrete Services Ltd. for shotcrete contracts** (joint venture between Metcor and Multicrete Systems Ltd.)
- **Metshaw Freighters** (joint venture between Metcor and Grimshaw Trucking)
- **Northcan Freighters Ltd. for fuel haul contracts** (joint venture between Metcor and Westcan)
- Joint venture between Metcor and **Nuna Logistics**
- Joint venture between Metcor and **Stantec**

All joint ventures operate out of Metcor's Yellowknife office, which has two full-time employees (the President and a controller) and a range of seasonal workers (up to 20 individuals during winter truck hauls).

Metcor's subsidiary (100% solely owned) is North Slave Freighters, which provides **dry goods hauling**.

Existing Skills / Capacity and Interests

The NSMA does not currently track skills or capacities of its members. The interviewee indicated that NSMA members are interested in **white collar jobs** (e.g. admin support, supervisor, etc.).

Capacity Building Programs

NSMA is a founding member of the **NWT Mine Training Society** and has been active in that forum. For example, they worked to create the Mineral Process Plant Operator Training Program,

²⁷ This refers to those in the community that self-identify as Métis, rather than as NSMA members specifically.



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the Shotcrete Operators training program (i.e. coat walls of mines) and trained fuel haul operators. Federal and territorial funding have been used to support these programs. The interviewee has observed a cutback in program funding, with a reduction in programs offered at this time.

Communication Tools

When a contract is let, the RFP goes through the **Metcor President**, who notifies joint venture partners of job opportunities if it is relevant. If the opportunity is not relevant to joint venture partners, the President contacts NSMA members who may have relevant businesses. NSMA puts its job opportunities on its **job board**.

Expected Future Employment

NSMA is cautiously optimistic there will be steady growth for NSMA businesses, especially due to the political change respecting Métis. NSMA expects that it will negotiate a land claim within the next 5 years, which is expected to be beneficial for NSMA business growth.



Appendix D: Contact List

The following table summarizes the contact information for each organization relevant to preparing for economic opportunities from the GMRP. Each contact listed below specifies what information they would like to receive for distribution or informational purposes (i.e. information on upcoming tender opportunities, job opportunities and the updated Labour Resource Study), as identified in their interview. Not all individuals were available for interviews during the 2017 Labour Resource Study update, and in those cases their preferences may not be identified.

Contact List							
Contact	Role	Organization	E-mail	Number	Tender	Jobs	Study
Aboriginal Governments							
Johanne Black	Director Lands Management	Yellowknives Dene First Nation	jblack@ykdene.com	(867) 766-3496	X	X	X
Margaret Erasmus	Dehchita Naawo Manager	Yellowknives Dene First Nation	merasmus@ykdene.com	(867) 920-2925	X	X	X
Vickie Francisco	Training & Development Facilitator	Tłı̨chǫ Government	vickiefrancisco@tlcho.com	(867) 392-6381 ext. 1313			X
Carol-Ann Chaplin	SAO/Band Manager	Deninu K'ue First Nation	sao@dkfn.ca	(867) 394-4335	X	X	X
Agatha Laboucan	SAO/Band Manager	Łutsel K'e Dene First Nation	sao.lkdfn@gmail.com	(867) 370-7000			
Bill Enge	President	North Slave Métis Alliance	general@nsma.net	(867) 873-6762 ext. 25			
Garry Bailey	President	Northwest Territory Métis Nation		(867) 872-2770			
Aboriginal Development Corporations							
Paul Gruner	CEO	Det'on Cho Corporation	paul@detoncho.com	(867) 873-6533	X	X	X
Jasper Lamouelle ²⁸	CEO	Tłı̨chǫ Investment Corporation	jlamouelle@tlchoic.com	(867) 766-4909 ext. 222	X	X	X
Samantha Morandin	Community Relations Manager	Denesoline Corporation	sam@dcnwt.com	(867) 873-5080	X	X	X
Roy Erasmus	Advisor	Denendeh Investments	erasmus@denendeh.ca		X	X	X
Federal and Territorial Governments							

²⁸ Kelly Brenton, CEO at the time of the 2017 Labour Resource Study interview, shared the Tłı̨chǫ Investment Corporation's preference for information sharing. Since that time, Jasper Lamouelle has become the CEO at the Tłı̨chǫ Investment Corporation.



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Contact List							
Contact	Role	Organization	E-mail	Number	Tender	Jobs	Study
Leanne Graydon ²⁹ / Amy Lizotte	Manager, Trade and Investment, North Slave Regional Office	GNWT ITI for distribution to North Slave EDOs	leanne_graydon@gov.nt.ca amy_lizotte@gov.nt.ca	(867) 767-9212 ext. 63260	X		X
Chris Joseph	Regional Superintendant, North Slave ECE Service Centre	GNWT ECE for distribution to North Slave CDOs	chris_joseph@gov.nt.ca	(867) 767-9352 ext. 71075	X	X	X
Sarah Kalnay-Watson	Secretariat	North Slave Regional Training Partnership	Sarah.Kalnay-Watson@gov.nt.ca	(867) 767-9351 ext. 71166			X
Kabuya Muepu	Canada Programs Director	Service Canada	kabuya.muepu@servicecanada.gc.ca	(306) 564-5413			X
David Alexander	Manager, Yellowknife Office	CanNor	David.Alexander@cannor.gc.ca	(867) 669-2597			
Educational and Training Institutions							
Jane Arychuk	President	Aurora College	jarychuk@auroracollege.net.ca	(867) 872-7009		X	X
Hilary Jones	General Manager	NWT Mine Training Society	gm@minetraining.ca	(867) 765 0445			X
Kevin Nilson	President & CEO	ECO Canada	knilsen@eco.ca	(403) 233-0748			X
Allison Kincaid	Executive Director	Skills Canada NWT	skillsnt@skillscanada.com	(867) 873-8743		X	X
Alisa Praamsma	Executive Director	Native Women's Association of the NWT		(867) 873-5509 ext. 222			
Pawan Chugh	CEO	BDIC	pawan_chugh@gov.nt.ca	(867) 767-9075 ext. 86000	X		
Ryan Montpellier	Executive Director	MiHR	rmontpellier@mihr.ca	(613) 270-9696			
Northern Business Associations							
Trevor Weivers	President	NWT Chamber of Commerce	admin@nwtchamber.com	(867) 920 9505			X
Deneen Everett	Executive Director	Yellowknife Chamber of Commerce	ExecutiveDirector@ykchamber.com	(867) 920-4944	X ³⁰	X	X
Louise Elder	Executive Director	NWT & NU Construction Association	director@nnca.ca	(867) 873-3949	X	X	X
Tom Hoefer	Executive Director	NWT and Nunavut Chamber of Mines	ExecutiveDirector@miningnorth.com	(867) 873-5281			
Margaret Gorman	Executive Director	Northern Aboriginal Business Association	Gorman@denendeh.ca	(867) 920-2764			

²⁹ Leanne Graydon participated in the 2017 Labour Resource Study interview, but left on maternity leave in July 2017.

³⁰ The Yellowknife Chamber of Commerce charges organizations \$125.00 for sending job or tender opportunities to its members.

Appendix E: List of Acronyms

A list of acronyms used in the Labour Resource Study 2017 are provided below for reference.

Acronym	Definition
AEM	Agnico Eagle Mines
ASETS	Aboriginal Skills and Employment Training Strategy
BDIC	Business Development and Investment Corporation
BEAHR	Building Environmental Aboriginal Human Resources
BIP	Business Incentive Policy
CanNor	Canadian Northern Economic Development Agency
CBoC	Conference Board of Canada
CHARS	Canadian High Arctic Research Station
CMCP	Canadian Mining Certification Program
COPS	Canadian Occupational Projection System
DDC	Denendeh Development Corporation
DII	Denendeh Investments Incorporated
DILP	Denendeh Investments Limited Partnership
DKFN	Deninu K'ue First Nation
ECE	Department of Education, Culture and Employment
EHSC	Environment, Health, Safety and Community
ESDC	Employment and Social Development Canada
FTE	Full-time employees
GDP	Gross Domestic Product
GMRP	Giant Mine Remediation Project
GNWT	Government of the Northwest Territories
HDPE	High-Density Polyethylene
HEO	Heavy Equipment Operators

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Acronym	Definition
INAC	Indigenous and Northern Affairs Canada
ITI	Department of Industry, Tourism and Investment
JV	Joint Venture
LKDFN	Łutsel K'e Dene First Nation
LNG	Liquified Natural Gas
MCM	Main Construction Manager
MiHR	Mining Industry Human Resources Council
MTS	Mine Training Society
MVLWB	Mackenzie Valley Land and Water Board
NNCA	NWT & Nunavut Construction Association
NSA	Northern Safety Association
NSMA	North Slave Métis Alliance
NSRTP	North Slave Regional Training Partnership
NU	Nunavut
NWT	Northwest Territories
NWTMN	Northwest Territory Métis Nation
PSPC	Public Services and Procurement Canada
S4S	Skills for Success Initiative
SEED	Support for Entrepreneurs and Economic Development
SINED	Strategic Investments in Northern Economic Development
SPF	Skills and Partnership Fund
SPI	Strategic Partnerships Initiative
YKDFN	Yellowknives Dene First Nation