Appendix 64

2020 Kivalliq Labour Market Analysis





IMPACT ECONOMICS

2020 Kivalliq Labour Market Analysis

Understanding the demand and supply conditions affecting Kivalliq labour and its participation in Agnico Eagle Mines' operations

FINAL REPORT

Submitted: January 22, 2021

Prepared by: Aglu Consulting and Training Inc., Stratos Inc., and Impact Economics

Table of Contents

1	OUTLINE OF RESEARCH	1
1.1	Incorporation of IQ	3
2	OVERVIEW OF AEM'S OPERATIONS, ITS LABOUR DEMAND, AND THE KIVALLIQ REGION'S	
		_
LA	BOUR SUPPLY	5
2.1	Operations	5
2.2	Labour Demand	5
2.3	Labour Supply	6
3	DETAILED INVESTIGATION INTO THE LABOUR DEMAND FROM AEM'S KIVALLIQ MINING	
ΟP	ERATIONS	7
3.1	AEM's Workforce Requirements and Inuit Participation	7
4	FUTURE LABOUR DEMAND	14
5	LABOUR DEMAND SUMMARY	15
6	DETAILED INVESTIGATION INTO KIVALLIQ'S INUIT LABOUR SUPPLY	16
6.1	Methodology	16
١	What is Labour Supply?	16
١	What is Potential Labour Supply?	16
١	What is AEM's Potential Workforce?	17
7	CALCULATING KIVALLIQ'S READY AND ABLE WORKFORCE	23

7.1	Population and Demographics	23
7.2	Education and Skills	27
7.3	Employment Status	33
8	ESTIMATING THE POTENTIAL LABOUR SUPPLY	37
9	LABOUR SUPPLY SUMMARY	40
10	PERSPECTIVES OF THE POTENTIAL LABOUR SUPPLY	43
10.1	Methodology	43
10.2	2 Survey Results	45
At	ttracting & Recruiting Inuit Talent	45
Re	etention	47
Tr	raining and Adult Education	51
Ac	dvancement	52
Co	ontractors	53
CC	OVID-19 Implications	54
10.3	Summary of Recommendations	56
11	CONCLUSION	61
12	LESSONS LEARNED	64
APP	PENDIX A: SURVEY QUESTIONS	65
APP	PENDIX B: NATIONAL OCCUPATION CLASSIFICATIONS	73

1 OUTLINE OF RESEARCH

A labour market analysis (LMA) is an objective assessment of current and future labour demand and supply conditions in a given jurisdiction. The focus of this report is the labour demand of Agnico Eagle Mines' (AEM) Meadowbank and Meliadine operations set against the supply of Inuit labour in the Kivalliq region of Nunavut.

AEM and the Kivalliq Inuit Association (KIA) have agreed to Inuit and Impact Benefit Agreements (IIBAs) for three mining projects in the Kivalliq Region: Meadowbank, Meliadine and Whale Tail. The IIBAs place considerable emphasis on the training and employment of Inuit, including residents of the Kivalliq region. The IIBAs requires that the Employment and Cultural Committee (ECC), made up of representatives from AEM and the KIA, "commission a third-party contractor to conduct an LMA, yearly, to assist in the understanding of Inuit employment." The purpose of the annual LMA is to support the ECC in making recommendations with the objective of enhancing Inuit employment at AEM's Nunavut projects. The LMA also supports the establishment of annual Inuit Employment Goals (IEGs), and the development and implementation of training, and initiatives to support a positive and supportive workplace environment.

It is common in a traditional LMA to find a prospective employer investigating whether its labour force needs can be met from within the region's population. If the analysis finds gaps, the employer must consider how it can best fill them. Options include locating the business elsewhere, importing the missing labour, or developing the skills it needs from within the existing population.

Relocating the mines is obviously not an option in the case of AEM's Kivalliq mining operations. Therefore, AEM and its contractors have filled their collective labour force needs through a combination of imported labour, working with the resident population to improve its education, skills, and workforce readiness, and removing or reducing other barriers to employment.

An LMA can also be undertaken to assess the progress of a particular market over time. In theory, historical labour market data provides much of the evidence needed in the assessment. Labour is free to move into or out of a market, and employers are free to select anyone from within the labour pool; who actually applies for a job and who is ultimately chosen is a matter for the market to decide as are the choices of labour itself in terms of its education and training. If there is a disequilibrium—either because there is excess demand or excess supply—the market adjusts through price corrections; that is, the employer offers higher wages in order to attract more and better employees or the excess labour lowers

its wage requirements. If viewed from an open-market perspective, AEM's employment record is a reflection of the Kivalliq labour market in any given year.

This theoretical perspective is inappropriate for the Kivalliq LMA for several reasons, though elements of it does reflect realities present in the marketplace. Amongst the differences is the fact that the Kivalliq economy and by association its labour market is not fully developed. There isn't a true market with many buyers and sellers of labour. As an example of this, mining had not been present in the Kivalliq economy since the early 1960s when the Rankin Inlet nickel and copper mine closed. AEM's arrival led to a transformational change in the labour market by introducing a demand for a large number and wide variety of labour, much of which was not present in the region. AEM determined that labour had to be imported, but also committed to the development of the resident labour force.

This balance between resident and imported labour and the progress of Inuit labour are at the heart of this 2020 Kivalliq LMA.

AEM's labour demand is set through its updated mine plan, while labour supply is an estimation based on several quantitative factors, including population by age, gender, ethnicity, education, and employment status. Combined, these variables can provide a relatively accurate picture of the number of Inuit residents who are *ready and able* to work. This is not enough for the ECC to predict future employment, however. The reason being the demand and supply data do not tell us anything about residents' *willingness* to work. Being old enough, having a high school diploma and/or some training, and being unemployed or underemployed do not necessary combine to ensure that an individual will work at one of AEM's Kivalliq operations. In Canada, citizens are granted the freedom to make choices, and there are numerous factors that influence these choices. For example, an individual

- might be happily employed and are not interested in a career change,
- may not want to work at a camp or on rotation,
- may not have the right physical attributes,
- might have family or community responsibilities that prohibit employment at one of the mine sites,
- might have a dependency that would make it difficult to work at a camp or on rotation or perhaps to work at all,
- might have a language barrier,
- might prefer working in the traditional or non-wage economy hunting and fishing, or

may not want to work at a mine or for AEM under any circumstance.

All of these influences help to describe the willingness of Inuit labour to participate in AEM's Kivalliq operations. These variables deal with the personal lives of the potential workforce and are subject to change based on the circumstances affecting them. What's more, these individuals are under no obligation to share these details and, therefore, are difficult to assess. It is one of the reasons why economists look at markets and historical data, because within that data is information on consumer behaviour (that is, it tells us something about people's choices). The result is that the ECC sets its annual IEG based on incomplete information. A second result is that AEM must adopt a sometimes-expensive, trial-and-error approach to their recruitment and retention efforts.

The 2020 LMA aims to fill some of these qualitative gaps through a survey of Kivalliq residents. Included in the survey are current and former employees of AEM or one of its contractors, other residents—some of whom are employed while others are not—government and Inuit organisation officials, and AEM human resources staff. A total of 48 survey participants were asked about their experience while working on one of AEM's projects or their interests in working there in the future. The survey questions were designed to learn as much as possible about the willingness to work at AEM's Kivalliq operations and the barriers Inuit face. The survey questions are provided in Appendix A.

Combined, the quantitative analysis regarding the labour supply and demand conditions and the qualitative analysis of the labour survey results illustrates the current and near-term labour market for AEM's mining operations. This report is organised according to these three subjects. The final chapter contains an analysis of the research findings together with a focus on the opportunities and challenges facing AEM recruitment and retention of Inuit labour.

1.1 INCORPORATION OF IQ

The project team also considered **Inuit Qaujimajatuqangit (IQ)** in the development of the Kivalliq LMA and its recommendations, drawing on the collective experiences, expertise, and vision of our entire team. A description of how IQ was considered in this work is provided below.

For the Kivalliq Labour Market Analysis, the following IQ values are most applicable:

- **Aajiiqatiqiinniq** decision making through discussion and consensus
- Piliriqatigiinniq working together for a common cause
- Inuuqatigiitsiarniq respecting others, relationships and caring for people

- Tunnganarniq fostering good spirit by being open, welcoming and inclusive
- Pijitsirniq serving and providing for family and/or community
- Qanuqtuurniq being innovative and resourceful¹

Our team worked collaboratively with all clients, contractors, sub-contractors, and stakeholders, as well as research interviewees and community members, focusing on open communication and discussion with working groups, committees, communities, etc. in order to develop better understanding of research questions and build consensus toward answers and solutions. Ultimately, the recommendations from this work will be a valuable resource for all parties working to support Inuit employment and advancement in the Kivalliq region.

Interviews conducted as a part of this work were designed to be as inclusive, respectful, and as culturally sensitive as possible, focusing on open communication between respondents and interviewers, and the comfort, consent, and protection (e.g., anonymity) of respondents. We worked to make sure we heard their voices, truly understood their responses, and aimed to pass those responses on accurately and respectfully in a way that can valuably and reliably inform decision making results.

In particular, Aglu's interview design and execution approach, built upon the extensive experience and knowledge that its staff and contractors have developed from years of living and working in and with Inuit communities, allowed us to effectively meet and mitigate challenges in the research process by innovative approaches to identifying interview respondents, framing research questions and problems, and using our extensive professional and personal networks to connect and work with communities.

Finally, the recommendations presented at the end of the Kivalliq LMA consider not only the needs of individuals that may seek, obtain or advance through AEM employment, but also the needs of those individuals' families and relationships, accounting for how they can all be best supported as they navigate AEM employment.

2020 Kivalliq Labour Market Analysis

¹ Government of Nunavut (n.d.). *Inuit Societal Values*. Retrieved from: https://www.gov.nu.ca/sites/default/files/3-08-guiding-principles-inuit-societal-values-banner.jpg

2 OVERVIEW OF AEM'S OPERATIONS, ITS LABOUR DEMAND, AND THE KIVALLIQ REGION'S LABOUR SUPPLY

2.1 OPERATIONS

AEM owns two major gold-producing properties in the Kivalliq region. Meadowbank is situated 70 km north of Baker Lake. It opened in 2010 with most mining activities ending in late 2019. That operation was given a second life with the discovery and subsequent development of the Whale Tail deposit located in the Kivalliq region, 50 km north of the Meadowbank original mine site. That site is now fully developed. The mine is expected to operate for 7 years, producing an average of 443,000 ounces of gold each year.

AEM's second operation is situated 25 km north of Rankin Inlet. Its development began in 2017 and has just recently (May 2019) entered production and has enough reserves to remain open for 14 years. The latest mine plan moved the development of the Tiriganiaq deposits forward, which will result in an increase in daily ore processing from 3,350 tonnes to 4,600 tonnes for the next eight years from 2020 to 2027.

2.2 LABOUR DEMAND

The workforce needed for these projects has grown in recent years in line with the new developments and expansions. In 2019, AEM's total labour demand represented an estimated 2,680 full time equivalent (FTE) jobs in a region where the total number of jobs reported by residents was just 3,415 in 2016 when the last Census was taken. AEM expects its annual job count will average 2,350 FTE jobs over the next five years (2020 to 2024).

The jobs being created are diverse, including hundreds of different job descriptions associated with exploration, development, mining, processing, transportation, and camp services, requiring a workforce with a wide range of skills, education, training, and experience. The Kivalliq Inuit labour supply cannot provide AEM with all of its labour force needs, however. The employment record posted for 2019 illustrates the current participation levels and where gaps in the labour supply are.

2.3 LABOUR SUPPLY

The Kivalliq region is relatively small when judged by its population. There are just 11,351 residents (as of 2019) across a geographic range that spans seven communities and more than 440,000 km². This resident population is young—33% are below the age of 15 and 51% are below the age of 25. More than 90% (10,271) of the population is of Inuit descent (2016), with an estimated 5,378 between the ages of 19 and 65. A full 50% of this cohort would have to be working for AEM or one of its contractors to fill all the jobs being created.

Demographics explains why AEM cannot fill all of its workforce needs with Inuit labour from the Kivalliq region, but it doesn't explain why Inuit employment with the mines was 479 FTE jobs in 2019 while there were 3,350 Kivalliq residents without work as of 2016—either unemployed (1,180) or not in the workforce (2,175). If employment were simply a matter of matching every new job with a resident who is not otherwise employed, there would be no unemployment in the Kivalliq region and as many as 1,000 residents would be brought into the labour market by the prospect of work at one of the mining projects. To understand why workforce participation is not higher requires a more thorough investigation into the types of jobs being created and the conditions of that employment, and weigh that evidence against the qualities, interests, and needs of the Inuit labour force.

3 DETAILED INVESTIGATION INTO THE LABOUR DEMAND FROM AEM'S KIVALLIQ MINING OPERATIONS

3.1 AEM'S WORKFORCE REQUIREMENTS AND INUIT PARTICIPATION

AEM entered the Kivalliq economy when it purchased the Meadowbank property from Cumberland Resources in 2007. By 2010, it had completed the construction of its first mine and operations were underway. In its first full year of operations (2011), AEM and its contractors created 697 FTE jobs and provided employment to 241 Inuit (FTE). Contractors employed 407 people, 60 of whom were Inuit. Contractors were not recording employment in terms of FTE at that time, so we should exercise some caution when looking at the results together, as shown in Figure 1.

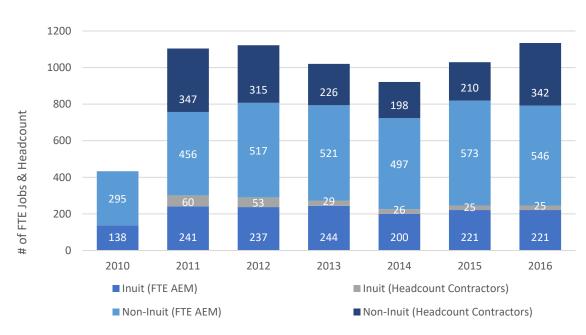


Figure 1: Total Employment²³, Inuit and Non-Inuit, 2010 to 2016

² Employment data between 2010 and 2016 combine FTE jobs for AEM employees and headcount taken at a single point in time for contractors. These two methods should not be combined. However, in the absence of accurate historical data, they are provided for general discussion only. Contractor data is not available for 2010.

³ These data exclude exploration and any other work associated with the Meliadine property.

Inuit participation didn't change by much in the early years of operations in terms of full-time equivalency, though turnover rates amongst Inuit employees was high. It is fair to say that many resident Inuit labour tried working at Meadowbank, but not everyone stayed with it (Figure 2). From 2010 to 2016, the average turnover rate amongst Inuit employees was over 30% while non-Inuit employee turnover averaged a little over 6%.

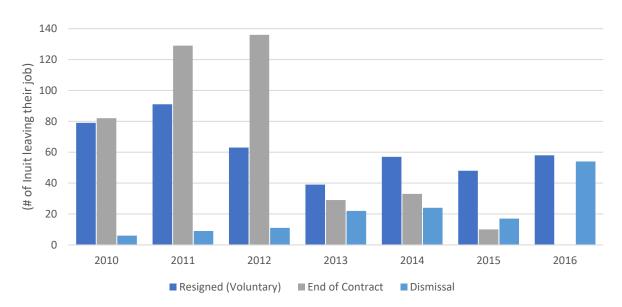


Figure 2: Inuit Turnover, 2010 to 2016

AEM investigated the turnover amongst its workforce through its *Agnico Eagle Inuit Survey* and found several reasons why Inuit were leaving their jobs.

- Does not like the schedule/camp life
- Miss their family
- Found another job
- Family situation or spousal relationship issues
- Conflict with employee/supervisor
- No babysitter
- Does not like the job/lack of advancement

The survey conducted in conjunction with this research revealed hints of other potential factors. Language barriers, perceptions of cultural ignorance and preferential treatment, and issues with leadership were cited. Some caution is warranted in assigning weights to these comments because the sample size was small. More detailed exit surveys of departing Inuit employees or third-party surveys of perceptions within

the communities would substantiate these claims. Based on the information collected, though, there is evidence of several factors affecting the willingness of Inuit to work at one of the mine sites and some of the barriers that this labour might be facing.

The increase in activities (since 2017) associated with the development of Meliadine and the expansion into the Amaruq area has created the need for more labour, with 2019 seeing a peak in employment equal to 2,680 FTE jobs (Figure 3). This expansion has brought more Inuit into the workforce (476 FTE Inuit employment in 2019).

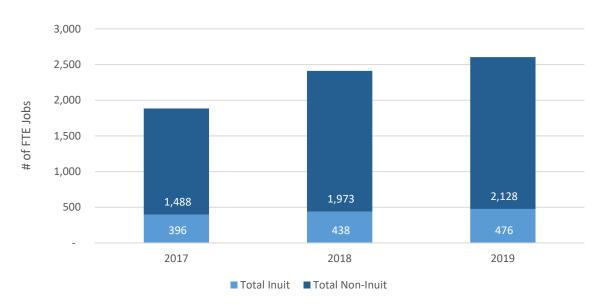


Figure 3: Total employment⁴, Inuit and Non-Inuit, Meadowbank and Meliadine, 2017 to 2019

This growth in Inuit employment can be viewed positively. But a detailed look at the nature of these employees reveals that gaps exist between the labour AEM needs for its operations and the labour Kivalliq Inuit can supply (Table 1, Figure 4). Inuit represent 67% of the total unskilled workforce—210 FTE jobs from a total of 314 FTE jobs in this category. These jobs require minimal qualifications. A high school certificate is often enough, but in the absence of that, some work experience or training can be sufficient. Many Inuit have these credentials, but a modern mine site does not require a large percentage of unskilled employees, and with increased technology, one should expect there will be fewer and fewer of

2020 Kivalliq Labour Market Analysis

⁴ These data exclude exploration and students.

these jobs in the future. (See Appendix B for a list of the jobs classified as Management, Professional, Skilled, Semi-skilled, and Unskilled, and as classified as Level A, B, C, and D according to the National Occupation Classification⁵ codes).

Inuit are well represented in the semi-skilled workforce as well, making up 23% of the labour needed in these jobs—filling 249 of the 1,105 FTE jobs available. The semi-skilled category includes equipment operators and many of the jobs found in a processing plant. Education and skill prerequisites are only slightly greater for these jobs than unskilled jobs. A semi-skilled job might require the employee to have completed specialized training modules or obtained a license to operate specific machinery, in addition to completing high school or having relevant work experience. Semi-skilled work makes up the largest category of jobs at AEM's mine sites, and considering the education and training requirements, represent the best opportunity for increased Inuit employment.

Table 1: Employment by Hiring Priority and Job Classification, 2019

	Inuit	Non-Inuit (person-years)	Grand Total
Management	6	234	240
Professional	4	199	203
Skilled	11	807	818
Subtotal	21	1,240	1,261
Semi-Skilled	249	857	1,105
Unskilled	210	104	314
Subtotal	458	961	1,419
Total	479	2,201	2,680
	ı	Percentage of Hiring Priority	
Management	1%	11%	9%
Professional	1%	9%	8%
Skilled	2%	37%	31%
Subtotal	4%	56%	47%
Semi-Skilled	52%	39%	41%
Unskilled	44%	5%	12%
Subtotal	96%	44%	53%

⁵ Government of Canada, National Occupation Classification. Website: https://noc.esdc.qc.ca/Home/Welcome/935b9f175f03438aaa0d8acf9af22062?GoCTemplateCulture=en-CA

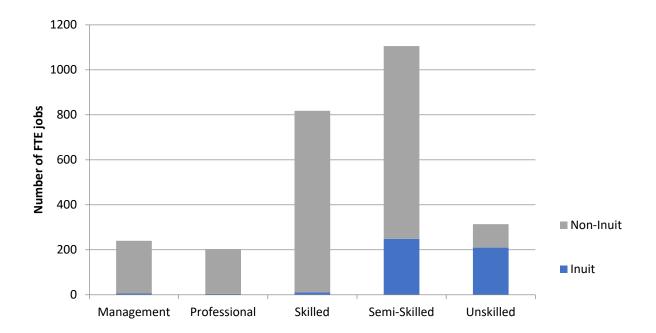
Total	100%	100%	100%
	Percentage of Job Classification		
Management	2%	98%	100%
Professional	2%	98%	100%
Skilled	1%	99%	100%
Subtotal	2%	98%	100%
Semi-Skilled	23%	77%	100%
Unskilled	67%	33%	100%
Subtotal	32%	68%	100%
Total	18%	82%	100%

Note: These data include all AEM employment in the Kivalliq region, including exploration. In 2019, Inuit employment in exploration accounted for 3.4 FTE jobs in the unskilled and semi-skilled job categories.

In the skilled category of jobs, Inuit represent just 1%, or 11 FTE jobs from the 818 available in 2019. This category of jobs is often the largest at a modern-day mine site, though currently AEM and its contractors are employing more semi-skilled workers. Skilled positions typically require a higher level of education, training, or a professional designation such as a journeyman electrician or mechanic. If Inuit are to become more fulsome participants in the Kivalliq mining industry (regardless of the employer), they will have to acquire the skills needed to participate in this category of employment.

The final category includes professionals and management. The professional class is small, representing just 8% of the total workforce. This category includes the engineers, scientists, accountants, and other university educated professionals. Inuit are not well represented in these jobs, with 2019 seeing a total of 4 professional Inuit employees working for AEM or one of its contractors. Management is more diverse, likely because it is possible to work your way up to a management position without having a university degree, though higher levels of education are common amongst AEMs management team. There were 6 FTE Inuit employees working in management positions in 2019.

Figure 4: Employment by Hiring Priority and Job Classification



AEM is committed to the recruitment and retention of women in its workforce (Table 2, Table 3, Figure 5). From the perspective of Inuit labour, Inuit women represent more than 30% of all Inuit labour at AEM operations. This is a much higher participation rate than is typically seen in the mining industry. However, from an overall workforce perspective, women represent just 12% (315 FTE jobs) of AEM's total workforce (2,650 FTE jobs) and Inuit women represent half of that. The large majority (97%) of Inuit women are working in unskilled (57%) and semi-skilled (40%) jobs.

Table 2: Employment by Gender

	(person-years)	(percent)
Inuit		
Men	332	12%
Women	148	6%
Non-Inuit		
Men	2,034	76%
Women	167	6%
Total	2,680	100%

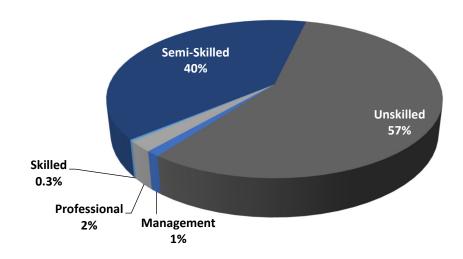
Table 3: Employment by Job Classification for Inuit Women

	(person-years)	(percent)
Management	1.7	1%
Professional	3.3	2%
Skilled	0.5	0.3%

Grand Total	148	100%
Unskilled	83.6	57%
Semi-Skilled	58.6	40%

Note: figures may not add up due to rounding error.

Figure 5: Employment of Women by Job Classification



4 FUTURE LABOUR DEMAND

AEM has ramped up its production efforts with the development of Whale Tail and Tiriganiaq deposits. As a result, its labour force requirements are expected to remain above 2,300 until 2024 (Table 4). This job stability spans all categories of employment. Demand for unskilled and semi-skilled labour is expected to average 1,300 for the five-year period from 2020 to 2024 when combined, while skilled labour demand is expected to average 626 jobs over the same time period. The only noticeable change during this period is a shift away from contractor employment—falling from 958 in 2020 to 800 in 2024—and toward AEM employment that is expected to grow from 1,410 in 2020 to 1,527 in 2024.

Table 4: Future Labour Demand, Predicted Employment by Job Classification and Employer, 2020 to 2025

	2020	2021	2022	2023	2024
AEM					
Management	136	142	143	143	145
Professional	169	170	169	166	165
Skilled	333	338	363	362	366
Semi-Skilled	649	716	722	728	733
Unskilled	123	123	128	127	117
Subtotal	1,410	1,488	1,525	1,526	1,527
Contractor					
Management	76	76	76	76	76
Professional	33	26	43	39	39
Skilled	284	270	273	272	267
Semi-Skilled	410	330	334	291	280
Unskilled	155	136	133	136	138
Subtotal	958	837	859	815	800
Combined					
Management	211	218	219	220	222
Professional	203	195	211	205	204
Skilled	617	607	636	635	633
Semi-Skilled	1,059	1,046	1,056	1,019	1,013
Unskilled	278	259	261	263	255
Total	2,368	2,326	2,384	2,341	2,328

5 LABOUR DEMAND SUMMARY

In summary, the AEM labour force requirements are substantial in a regional economy that has long had a stable but small labour market. Inuit participation in the expanding operations has grown in the past couple of years to 476 FTE jobs in 2019. The majority of these employees work in unskilled and semi-skilled jobs, and both categories have plenty of room for Inuit to increase their participation. In fact, as of 2019, there were 961 jobs in those two categories being filled by imported, non-Inuit labour. Even more room exists for increased participation in skilled work if Inuit can obtain the necessary education, skills, and training. Moving forward over the next five years, labour demand is expected to remain high and opportunities for increased participation will be present throughout.

With that said, the Inuit employment record over the past decade reveals significant gaps in the Kivalliq region's Inuit labour supply. This is the starting point for research into the labour supply that is presented in the next chapter.

6 DETAILED INVESTIGATION INTO KIVALLIQ'S INUIT LABOUR SUPPLY

6.1 METHODOLOGY

What is Labour Supply?

The supply of labour is commonly referred to as the labour force. Its simplest definition could be the residents of a jurisdiction who are working or who want to work. According to Statistics Canada,

"the employed are persons having a job or business, whereas the unemployed are without work, are available for work, and are actively seeking work. Together the unemployed and the employed constitute the labour force. Persons not in the labour force are those who, during the reference week, were unwilling or unable to offer or supply labour services under conditions existing in their labour markets (this includes persons who were full-time students currently attending school)."6.7

Labour Force = Employed + Unemployed who are available for work and are actively seeking work

What is Potential Labour Supply?

Statistics Canada's definition of labour supply is strict in the sense that the unemployed must prove they are actively seeking work to be counted in the labour force. In small communities with a limited number of jobs and communities with high rates of unemployment, an unemployed person might be fully aware of the current job market and know whether there are any jobs available. This person may very well want a job but is not actively searching for work because they know there is no point in doing so. These people are considered to be "not in the labour force," and therefore are not included in the calculation of an unemployment rate, which is the number of unemployed people in the labour force as a share of the total labour force.

⁶ Statistics Canada. 2008. Labour Force definition. https://www150.statcan.gc.ca/n1/pub/81-004-x/def/4153361-eng.htm

⁷ Note that individuals who are incarcerated and those unable to work due to a disability are also excluded.

In Nunavut, the number of residents who are not in the labour force but who want a job is relatively high in comparison to the average across Canada, and we can assume that the Kivalliq region has similar characteristics. These people are included in the calculation of potential labour supply.

Potential Labour Supply = Labour Force + Unemployed who want a job but who are not actively seeking work.

What is AEM's Potential Workforce?

The expanded definition of labour supply—potential labour—is not the same as AEM's potential workforce. This is an important distinction. To be a part of AEM's potential workforce, an individual must be ready, able, and willing to work for the company (or one of its contractors) and, in doing so, perform the tasks associated with the job.

Readiness implies an individual is old enough to work and is not otherwise unavailable to work.^{9,10}

Ability implies the individual has the right education and training and is mentally and physically able to complete the tasks required of the job.

Willingness implies that an individual wants a job and will make whatever changes in their life necessary to take the job. As an example, a majority of AEM's jobs require that employees work at a mine site and live in a camp with a 2-week work rotation. This rotation is an insurmountable barrier for some individuals who are otherwise ready and able to work (see Section 12 - Retention).¹¹ Willingness also includes people who are currently employed but who are willing to leave their job for one with AEM or one of its contractors.

The ready workforce is a subcomponent of the overall population. Specifically, we are interested in the Inuit population aged 18 or older who are living in the Kivalliq region. AEM can and does hire Inuit from

⁸ Statistics Canada. Table 14-10-0292-02 Labour force characteristics by territory, three-month moving average, seasonally adjusted

⁹ Workers' Safety and Compensation Commission regulations preclude AEM from hiring anyone under the age of 18.

¹⁰ Individuals who are incarcerated, serving in the Canadian Armed Forces, or are medically unable to work are old enough but unavailable to work.

¹¹ Note that the focus of this KLMA is on direct employment with AEM or its contractors at the Whale Tail and Meliadine mine sites. A broader look at job creation would include all indirect and induced jobs that the mine expenditures are facilitating. For labour that cannot work at the mine site because of the rotation, it should be understood that other jobs are being created. Furthermore, community-based jobs become available when the current worker quits to work at the mine.

other regions of Nunavut as well as from other jurisdictions throughout Canada, but the geographic setting for this LMA is the Kivalliq region and includes the communities of Arviat, Baker Lake, Chesterfield Inlet, Coral Harbour, Naujaat, Rankin Inlet, and Whale Cove.

This subset of the total population is considered the ready workforce—

- they live in the Kivalliq region,
- they are Inuit, and
- they meet the minimum age requirement.

Estimates of the ready workforce are presented later in section 7.1 Population and Demographics.

While technically correct, it is not accurate to assume everyone within this working-age population is a potential employee. As proof of this, the majority of jobs created by AEM require the employee have at least a high school diploma or its equivalency, some training, or work experience. Many of the jobs require a professional designation, years of experience, or a university education. So, at a minimum, the ready workforce should be separated according to their general qualifications for the types of jobs being created.

- Ready workers without a high school diploma or its equivalency may qualify for entry-level jobs. These types of jobs represent approximately 12% of the 2019 workforce. It is important to note that Inuit currently fill the majority (67%) of the entry level jobs associated with AEM's mine operations, construction, and exploration, and that this category of jobs is not predicted to increase. There is some room for Inuit participation to expand within this job category, but there is a hard limit based on the number of jobs available.
- Ready workers with a high school diploma or its equivalency qualify for a wider variety and larger number of jobs and have the prerequisite education to participate in training needed for advancement. Semi-skilled jobs made up 41% of all FTE employment (over 1,100 jobs) at the mine sites in 2019, most of which require high school education and skills training and/or certification.

Inuit who are ready and able to work represent, at least theoretically, the potential labour supply.

These individuals live in the Kivalliq region, they are of the right age, and they have the basic education required for employment and job-related training for a great number and variety of jobs created by AEM's mining projects.

The difference between this theoretical supply and the actual or realistic supply is the willingness of individuals to work at the Project. Not everyone wants a job at a mine. Others are unwilling or

unable to make changes in their lives that would enable them to work a mine. Still others have tried working at one of the projects and, for different reasons, decided to leave their job. There are numerous reasons or circumstances that might lead someone to stay away from these jobs or leave them after some experience. Based on the results of AEM's exit surveys, the report on workforce barriers¹², and the survey conducted for this report, some potential reasons include:

- **Employment status**—Being employed does not exclude anyone from applying for work at the Project, but it does mean that the individual doesn't need the job. Changing jobs would likely be based on a comparison of benefits (intrinsic and extrinsic) and be conditional on other potential constraints.
- **Aptitudes**—Not everyone possesses the mental and physical abilities to do the work that is required. As examples, some jobs include strenuous physical activities, while others require long periods of constant careful attention while sitting at a workstation.
- Interest—Working at a mining project is not for everyone, some are simply not interested in the jobs available and would prefer other types of employment. Others are simply not interested in working 12 hours a day for 14 consecutive days in a remote setting. AEM's exit surveys of individuals leaving their jobs found that some of its younger, unmarried employees leave because they missed their partner.
- **Familiarity with wage employment**—For some Inuit, work at the Project will be their first job and it can take time before becoming accustomed to the requirements of employment.
- Family responsibilities— Many Inuit have large families (three or more children), and they may care for elder parents or other dependents. For some Inuit, taking a job that would have them leave their families for two weeks is simply not possible. This is particularly true for single-parent families or in families where one partner is already working at a job that has them away from home for extended periods—this would include employment with AEM or any other job that requires regular travel away from home.
- **Language**—English can be a barrier (perceived or otherwise) for some Inuit who are otherwise ready, able, and willing to work. For example, linguistic issues may affect participation in the necessary training for a position.
- **Criminal record**—Crime rates are extremely high in Nunavut, and particularly so for young Inuit. A criminal record may disqualify someone from employment with AEM depending on the number and severity of criminal activities.

2020 Kivalliq Labour Market Analysis

¹² Mining Industry Human Resources Council, "Inuit Workforce Barriers Strategy Study" April 2018. Submitted to the Employment and Cultural Committee.

- **Dependencies**—Different dependencies can deter someone from seeking employment in a camp setting. Addictions are an example that would make working in a camp setting for 2 weeks difficult if not impossible.
- **Not worth the effort**—Nunavut is home to a comprehensive social safety net. Income Support, Public Housing, Child Tax Benefit, and other programs are in place to ensure residents are not destitute. Potential employees might determine that a loss of these benefits combined with the cost of going to work outweighs any gains made from employment. For example, some Inuit have said they are concerned that the cost of their public housing unit will rise as a result of their higher income and do not believe the increased cost is affordable.¹³

The challenge in measuring these willingness factors is that a majority are not easily quantified. There are data produced for employment, language, criminal activity, and family size, but the data cannot be meaningfully compared to understand the significance of these factors. The absence of such data sets means that other methods are needed to help understand their significance in affecting willingness to work.

Previous editions of this LMA used quantitative methods in an effort to identify the critical factors that affect Inuit residents' willingness to work in mining. These analyses were successful in demonstrating how certain factors were or were not critical—for example, tests were conducted to determine whether AEM's compensation package was too low to attract new recruits, finding that mine workers were paid wages well above the region's average wages except for unskilled workers. Other tests were conducted on occupations and absenteeism. They generated important findings such as clarifying a skills mismatch in some job categories, and the amount of lost wages for Inuit due to time away from work.

These tests were conclusive and needn't be redone, while data limitations prevent further or more robust quantitative testing. The alternative is to survey a cross section of the population to gather qualitative data regarding individuals' willingness to work.

Finally, there were a number of additional factors that could have an influence on the study and its results. These are listed for consideration. They do not necessary alter the quantitative analysis, but the ECC

2020 Kivalliq Labour Market Analysis

¹³ Nunavut Housing Corporation has put in place a system whereby rents increase slowly, and only after a full year of employment. However, based on responses from Inuit, this fact is not well known (or perhaps is not believed).

should be mindful of how these factors might affect the estimations of potential Inuit labour supply and labour participation. For example:

- The Labour Market Analysis is concerned primarily with resident Inuit labour in the Kivalliq region.

 Inuit from other regions including southern Canada are potential sources of labour and it is important to point out that ECC's IEG treats all *Nunavut Agreement* Inuit equal regardless of residency.
- The employment status of Inuit is included in the calculations because employment does not preclude anyone from choosing to work at one of AEM's mine sites. However, if one were to view the goal of maximizing Inuit employment more holistically, unemployed labour would be the primary target.
- AEM actively promotes employment amongst women. However, examples from other mining projects in Nunavut and the Northwest Territories (NWT) suggest women tend to fill 10% or 20% of the workforce. AEM could improve upon this, but there is a risk in assuming it will. This doesn't mean women should not be considered a part of the potential labour supply, but it does mean the probability of filling mining positions with women is likely lower than with men.
- In Canada, the source population for the labour market includes residents aged 15 and older. There are good reasons to narrow the age bracket to individuals aged 19 to 59. Being 60 years of age or older does not exclude someone from working at AEM, however, for the purpose of understanding AEM's potential labour force, old age might be a legitimate factor in affecting training and recruitment.¹⁴
- Inuit who are ready and able to work at the Project but have chosen to concentrate the majority of their productive efforts in the traditional or subsistence economy are an important consideration. These individuals are difficult to capture using standard survey methods. It is not uncommon for these people to participate in the wage economy from time to time, sometimes on a part-time or seasonal basis, so they can appear to be available for work according to survey methods such as Statistics Canada's Labour Force Survey depending on how they respond to the questions. Other times, they will be recorded as "Not in the Labour Force" but might meet the ready and able conditions. Regardless, these people are not likely candidates for work at the Project but could be inadvertently included in the potential labour supply estimates.

A realistic estimate of the potential Inuit labour supply is determined by combining the ready, able, and willing factors. The key point is that one cannot simply look at the entire Nunavut population when

¹⁴ Throughout this study, the 25 to 64 age cohort is used as a proxy for the 19 to 59 age cohort. The 25 to 64 age cohort is often used by Statistics Canada when reporting socio-economic cross-sectional data (e.g. employment, education, income). A small bias is created when the socioeconomic profile of the 20 to 24 cohort differs from that of the 60 to 64 cohort.

studying labour force participation. The actual pool of potential workers is a small fraction of this larger
number.

7 CALCULATING KIVALLIQ'S READY AND ABLE WORKFORCE

7.1 POPULATION AND DEMOGRAPHICS¹⁵

Nunavut's population stood at 38,780 as of July 2019.¹⁶ This is 19% higher than in 2009 and 45% higher than 1999. Over the past 20 years, Nunavut's population has recorded an annual compound growth rate of 1.86%. By contrast, Canada's population has grown by about half this much (23.7%) over the same 20-year time period.

The Kivalliq region's population was estimated at 11,351 as of 2019 (Table 5). Growth has been slightly faster than Nunavut as a whole, registering an annual compound growth rate of 2.0% since 2001. Naujaat is easily the faster growing community, averaging 3.9% growth per year since 2001, while Chesterfield Inlet's population growth has been the slowest.

Table 5: Population Estimates for the Kivalliq Region, 2019

	Average Compound Growth Rate since		
	2019	2001	
Kivalliq Region	11,351	2.0%	
Arviat	2,966	2.2%	
Baker Lake	2,159	1.7%	
Chesterfield Inlet	446	1.2%	
Coral Harbour	968	1.5%	
Naujaat	1,266	3.9%	
Rankin Inlet	3,056	1.6%	
Whale Cove	490	2.4%	

Source: Statistics Canada, Demography Division, special tabulation, prepared by Nunavut Bureau of Statistics.

Figure 6 presents Nunavut's population by single age cohort and gender (sometimes referred to as the Demographic Profile or Population Pyramid). It illustrates the large percentage of residents under the age of 20 and the relatively small number of residents over the age of 65.

¹⁵ Data presented in this section is produced by Statistics Canada's Demography and Census Divisions and is also made available by the Nunavut Bureau of Statistics.

¹⁶ Statistics Canada, Population Estimates on July 1, by age and sex. Table #1710000501.

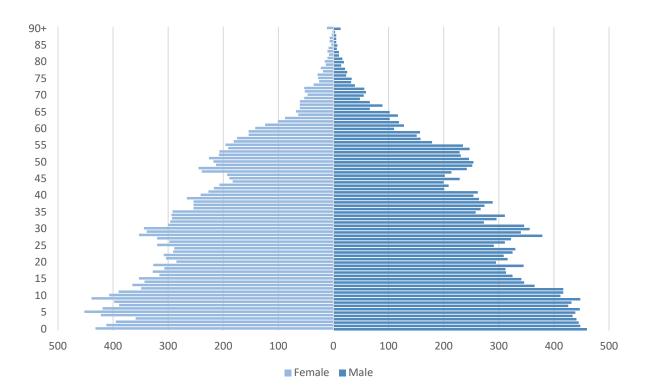


Figure 6: Nunavut's Demographic Profile, 2019

Source: Statistics Canada, Population Estimates on July 1, by age and sex. Table #1710000501.

This profile is present throughout the territory (Table 6), with only those communities with larger percentages of non-Inuit showing some degree of difference. These outlier communities include Iqaluit that is most dissimilar to the Nunavut average, and to a lesser degree Rankin Inlet and Cambridge Bay.

Table 6: Population Estimates by Age Group, Region and Community, 2019, as of July 1

	0 to 4	5 to 14	15 to 24	25 to 44	45 to 64	65+
Nunavut	4,248	8,100	6,319	11,255	7,310	1,548
Kivalliq Region	1,309	2,437	2,007	3,130	2,014	454
Arviat	371	677	571	816	425	106
Baker Lake	232	428	382	564	440	113
Chesterfield Inlet	52	91	71	128	76	28
Coral Harbour	133	233	164	264	141	33
Naujaat	184	352	224	319	161	26
Rankin Inlet	278	528	513	936	678	123
Whale Cove	59	128	82	103	93	25

Source: Statistics Canada, Demography Division, special tabulation, prepared by Nunavut Bureau of Statistics.

The differences in age between communities can be understood by observing the average and median age. The median age in Nunavut is just over 25, which is young compared to Canada where the median age is closer to 41 (Table 7).¹⁷ The Kivalliq region is even younger, with a median age of 23.4, with Naujaat having a median age of 18.2 which is amongst the youngest in the territory (and thus one of the youngest in Canada). Male residents slightly outnumber their female counterparts (51.3% vs 48.7%) (Table 8).

Table 7: Average and Median Age, 2016

	Average	Median
Canada	41.0	41.2
Nunavut	27.7	25.1
Kivalliq Region	26.7	23.4
Arviat	25.3	21.7
Baker Lake	28.2	24.8
Chesterfield Inlet	27.1	24.2
Coral Harbour	25.0	20.8
Naujaat	23.3	18.2
Rankin Inlet	28.9	26.8
Whale Cove	26.5	21.8

Source: Statistics Canada. 2017. Census Profile. 2016 Census.

Table 8: Kivalliq Population by gender and age cohort, 2019

	Female	Male	Ratio (female to male)
Total	5,529	5,822	48.7%
0 to 4	587	722	44.8%
5 to 14	1,195	1,242	49.0%
15 to 24	995	1,012	49.6%
25 to 44	1,549	1,581	49.5%
45 to 64	960	1,054	47.7%
65+	243	211	53.5%

Source: Statistics Canada, Demography Division, special tabulation, prepared by Nunavut Bureau of Statistics.

This labour market analysis is concerned with Inuit residents only. At the territorial level, 84.2% of Nunavut's population are of Inuit descent as of 2016 (Table 9). This ethnic majority has changed little over

B. // - - 12 - - -

¹⁷ Statistics Canada. 2017. Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29 2017. http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E.

the past two decades. In the Kivalliq region, Inuit make up a larger majority at 90.5%. Only Rankin Inlet has a population where less than 90% of residents are Inuit.

Table 9: Percentage of Inuit in Kivalliq region's population, 2016

	Total	Inuit	Non-Inuit	% Inuit
Nunavut	37,082	31,234	5,848	84.2%
Kivalliq Region	10,528	9,526	1,002	90.5%
Arviat	2,772	2,591	181	93.5%
Baker Lake	1,997	1,815	182	90.9%
Chesterfield Inlet	473	427	46	90.3%
Coral Harbour	1,080	1,034	46	95.7%
Naujaat	1,069	1,015	54	94.9%
Rankin Inlet	2,675	2,205	470	82.4%
Whale Cove	462	439	23	95.0%

Source: Statistics Canada, 2016 Canada Census.

The number of Inuit living in the Kivalliq region who are in the 20 to 64 age cohort is estimated to be 5,378 (Table 10). Over the next five years, this cohort is projected to grow to 6,083 as a result of the population ageing, assuming a positive interregional and interprovincial migration negates any losses as a result of death. This Inuit age-cohort represents the underlying pool of available labour; that is, it is an approximation of the <u>ready labour supply</u>. The ready workforce estimate could be narrowed slightly to 5,317 if we took the smaller age range (19 to 59) as noted earlier.

Table 10: Estimates of Kivalliq Inuit Population by Age Cohort

	Inuit	Non-Inuit	Total
0 to 4	1,223	86	1,309
5 to 14	2,284	153	2,437
15 to 19	965	73	1,038
20 to 24	901	68	969
25 to 44	2,747	383	3,130
45 to 59	1,471	242	1,712
60 to 64	259	43	302
65 and over	421	33	454
Total	10,271	1,080	11,351
	(р	ercentage share of population	on)
0 to 4	11.9%	8.0%	11.5%
5 to 14	22.2%	14.1%	21.5%
15 to 19	9.4%	6.8%	9.1%
20 to 24	8.8%	6.3%	8.5%
25 to 44	26.7%	35.5%	27.6%
45 to 59	14.3%	22.4%	15.1%
60 to 64	2.5%	3.9%	2.7%

65 and over	4.1%	3.0%	4.0%
	(0	cumulative share of population	n)
0 to 4	11.9%	8.0%	11.5%
5 to 14	34.1%	22.1%	33.0%
15 to 20	43.5%	28.9%	42.1%
20 to 24	52.3%	35.2%	50.7%
25 to 44	79.1%	70.6%	78.3%
45 to 59	93.4%	93.0%	93.3%
60 to 64	95.9%	97.0%	96.0%
65 and over	100.0%	100.0%	100.0%

Source: Statistics Canada, Demography Division, special tabulation. Impact Economics.

Note: * Estimates of population by ethnicity are calculations based on published Statistics Canada data.

7.2 EDUCATION AND SKILLS

The ready labour supply does not account for what job this labour might be qualified to perform. Without a high school education, some practical work experience, or equivalencies, the likelihood of finding work at one of AEM's Kivalliq projects is low. As reported earlier, the number of unskilled employees needed in 2019 was 314 of which Inuit already fill 210, and by 2024, AEM predicts its unskilled workforce will have shrunk to 255 (about 11% of all jobs available).

Having Inuit fill all unskilled positions is a reasonable goal for AEM and the Kivalliq Inuit Association (KIA). But for Inuit to truly increase their participation and to see a substantive rise in benefits through increased personal income, gains will have to occur in semi-skilled and skilled job categories. Only Inuit labour with the prerequisite education, experience, skills training, or certification may qualify for these jobs. The starting point to determine this able workforce is to study education levels in the Kivalliq region.

The 2016 Canadian Census found that 47% of Kivalliq residents aged 25 to 64 have not completed high school (Table 11).¹⁸ The percentage is higher if Rankin Inlet is excluded (53%). Rankin Inlet education levels are likely influenced by migration, where people with higher levels of education relocate to Rankin Inlet for employment from elsewhere in the Kivalliq region, Nunavut, and other parts of Canada.

2020 Kivalliq Labour Market Analysis

¹⁸ Statistics Canada (2017). Nunavut. Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001.

Table 11: Population that has not completed high school, 2016

	15 Years of Age and Over Aged 25 to 64					
	# of residents	no high school certificate	%	# of residents	no high school certificate	%
Canada	28,643,015	5,239,575	18%	18,931,380	2,169,790	11%
Nunavut	23,935	12,140	51%	16,485	6,750	41%
Kivalliq	6,765	3,800	56%	4,455	2,115	47%
Kivalliq excl. Rankin Inlet	5,090	3,110	61%	3,285	1,750	53%
Arviat	1,695	1,010	60%	1,070	545	51%
Baker Lake	1,400	880	63%	920	490	53%
Chesterfield Inlet	280	165	59%	180	100	56%
Coral Harbour	550	330	60%	350	180	51%
Naujaat	615	440	72%	395	260	66%
Rankin Inlet	1,675	690	41%	1,170	365	31%
Whale Cove	270	180	67%	175	110	63%

Source: Statistics Canada (2017). Nunavut. Census Profile. 2016 Census

Education results are available for Inuit in Nunavut but not at a community level (Table 12). These data reveal that the percentage of Inuit aged 25 to 64 who have not completed high school was 53%.¹⁹ The results also reveal that, for those Inuit who do graduate from high school, 69% go onto acquire additional education and, from that population, 8% earn a certificate of qualification, while 6% earn a bachelor's degree in university.

Table 12: Education Attainment, Inuit Population, Nunavut, 25 to 64 age cohort, 2016

	#	%
Without high school certificate or equivalent	6,555	53%
With high school certificate or equivalent	5,810	47%
High school certificate or equivalent	1,800	31%
Some post-secondary education	4,010	69%
Certificate of Qualification (incl Journeyman)	440	8%

¹⁹ Statistics Canada (2017), 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016266.

Certificate other than for a Trade	845	15%
College or non-University diploma	2,305	40%
University below a bachelor	95	2%
Bachelor or more	325	6%

Source: Statistics Canada - 2016 Census. Catalogue Number 98-400-X2016266.

Low graduation rates have long been an issue for the territory and has serious implications for future Inuit employment with AEM's mining operations. With that said, graduation rates have been improving (Figure 7). Rates across the territory were 39% in 2018 down from its record (48%) a year earlier. Rates in the Kivalliq region have been higher than the territorial average since 2008-09, reaching its high mark in 2016-17 at 56%, a record that was repeated a year later in 2017-18.

Nunavut produced 254 graduates in 2017/18, with the Kivalliq region contributing a record number 116 graduates (Table 13). It is worth noting that these graduates are all prospective employees for AEM or its contractors in a wide variety of semi-skilled jobs. It is also important to know that, historically, females outperform males in school in Nunavut. Though 2017-18 gender differences were negligible, over the past five years, female graduates make up 54.9% of all graduates.



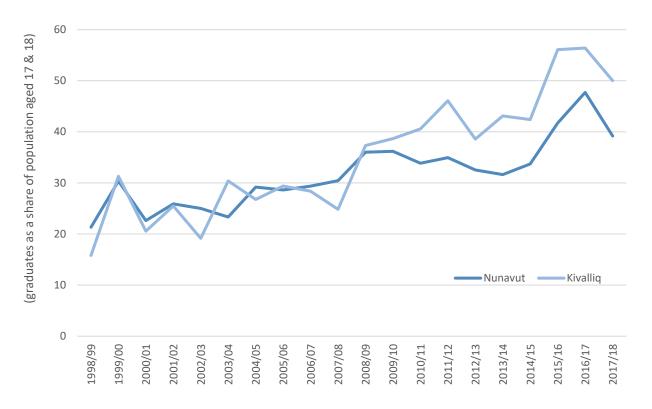


Table 13: High School Graduation Statistics

	2013/14	2014/15	2015/16	2016/17	2017/18
			Kivalliq		
Total Graduates	86	82	106	108	116
Total, 17 and 18 Year Olds	399	387	378	383	411
Graduation Rate	43.1	42.4	56.1	56.4	56.4
		Percentage of	Graduates by	Sex (Nunavut)	
Females	55.3	56.7	57.1	55.8	49.6
Males	44.7	43.3	42.9	44.2	50.4
	P	ercentage of G	raduates by Eth	nnicity (Nunavu	it)
Inuit	92.7	93.8	92.9	91.8	88.6
Non-Inuit	7.3	6.3	7.1	8.2	11.4

Source: Department of Education, Government of Nunavut and Statistics Canada, Demography Division, Special Tabulations, July 2020

The 2016 Census records the education status of the population by highest level attained. Amongst those residents aged 25 to 64 with a high school certificate (Inuit and non-Inuit), the large majority (73%) have

gone on to acquire additional education or training. There were 1,710 residents with some form of post-secondary certificate, 450 of whom have received an apprenticeship or trades certificate.

Table 14: Population by Level of Education, Kivalliq residents aged 25 to 64

	Kivalliq Region	% of total	% of those with at least high school
Population aged 25 to 64 years in private households	4,455	100%	
No certificate; diploma or degree	2,115	47%	
At least Secondary (high) school diploma or equivalency certificate	2,340	53%	100%
Secondary (high) school diploma or equivalency certificate	640	14%	27%
Postsecondary certificate; diploma or degree	1,710	38%	73%
Apprenticeship or trades certificate or diploma	450	10%	19%
College, Non-university, or University certificate below bachelor level	815	18%	35%
University certificate; diploma or degree at bachelor level or above	445	10%	19%
Bachelor's degree	300	7%	13%
Above bachelor's degree	140	3%	6%

Source: Statistics Canada (2017). Nunavut. Census Profile. 2016 Census.

Note: Figures may not add up due to rounding errors.

The diversity of postsecondary education choices within the population is provided in Table 15. From the perspective of AEM recruitment, special attention can be given to areas of study most applicable to its labour force needs, such as engineering, construction trades, mechanics, and transportation. The challenge is that, as will be shown in the next section, the vast majority of Kivalliq residents with higher levels of education are employed. And therefore, these data are only helpful if AEM is looking to coax people away from their current position. These data also are not disaggregated by ethnicity.

Table 15: Postsecondary Education, Major Field of Study, Kivalliq Residents aged 15+

	#
Total	6,765
No postsecondary certificate	4,835
Education	270
Visual and performing arts; communications	30
Humanities	70
Social sciences and law	150
Business and public administration	425
Physical and life sciences and technologies	30
Mathematics, computer sciences	25
Architecture, engineering and related	440
Architecture and related services	10
Engineering	15

Engineering technologies and related	65
Construction trades	235
Mechanic and repair technicians	105
Other	10
Agriculture; natural resources and conservation	35
Health and related fields	175
Personal, protective and transportation	280
Personal and culinary services	75
Military science	30
Transportation and material moving	170
	1

Source: Statistics Canada (2017). Nunavut. Census Profile. 2016 Census.

One can see the types of skills present in a workforce by viewing the labour market by occupation (Table 16). For example, across the Kivalliq communities, there are 1,010 people working in education, health, law, social, community, and government services, 530 jobs are in business, finance, and related occupations, 330 in management, and 80 in sciences. These 1,950 jobs represent 47% of the Kivalliq region's workforce by occupation in what can be referred to as "white collar" jobs that are typically defined as ones taking place in an office or school by people with higher levels of education often obtained through university or college. Another 1,090 (26%) of employees in the region work in sales and service occupations, which are often thought of as requiring basic on-the-job training and little if any formal education beyond high school. A total of 970 jobs (24%) are in trades, transport, equipment operators, manufacturing, utilities, and natural resources. Many of these jobs could be classified as semi-skilled or skilled, requiring formal training beyond high school and in some cases college certificates.

Table 16: Kivalliq Employment by Occupation, 2016

	#	%
All Occupations	4,120	
Management	330	8%
Business, finance and administration	530	13%
Natural and applied sciences and related	80	2%
Health	125	3%
Education, law, community and government	885	21%
Art, culture, recreation and sport	115	3%
Sales and service	1,090	26%
Trades, transport, and equipment operators	855	21%
Natural resources, agriculture and related	75	2%
Manufacturing and utilities	40	1%

Source: Statistics Canada (2017). Nunavut. Census Profile. 2016 Census.

A challenge with these data is that they are four years old and don't reflect changes in the economy that have occurred since the last Census was taken. This is a challenge with all Census data presented in this report, though especially relevant for labour market data given the possibility of structural changes to the Kivalliq economy. One should preface the analysis of these data with an understanding that they illustrate an economic landscape present in 2016. With that said, the purpose of presenting these data is to view the labour market in a manner that helps assess where future AEM employees will come from. If one is looking at the current workforce (that is, if AEM is hoping to find new employees from within the population that are already employed), these data demonstrate the economic structure of the region and the relative number of employees associated with each sector.

7.3 EMPLOYMENT STATUS

One of the challenges in assessing the Kivalliq labour market is the absence of annual survey data to reflect important changes from year to year. Statistics Canada conducts its *Labour Force Survey* (LFS) on a monthly basis for Nunavut and the Census every five years for individual communities.

- The LFS results are presented as a three-month moving average for the 19 largest communities in the territory, which represent 92% of the territory's population. For broad employment data, lqaluit is separated from the other 18 communities included in the survey, but no additional disaggregation takes place.
- The Census collects detailed employment data at a community level. The last census year was 2016.

The methodology adopted is to combine information from these two sources, being careful with the LFS so as to not assign trends to the Kivalliq region that are taking place elsewhere and knowing that the Census will not capture any market changes since 2016.

The LFS results for Nunavut excluding Iqaluit are provided in Table 17. The number of employed residents grew by 1,400 from 2010 to 2013 but has changed very little since then. To look at the unemployment rate during the six years since 2013 can be deceiving. It shows little change. The reason is more and more Nunavummiut have left the labour force (they are not actively seeking work). This has the mathematical effect of keeping the unemployment rate steady, but the employment rate—which measures the number of employed against the source population (residents aged 15 and over) has dropped by over four percentage points and is well below 50%. In the context of a typical labour market assessment, a region

with a lot of available labour would traditionally be viewed as a positive situation for an employer that is in need of more workers.

Table 17: Labour Force Characteristics, 18 Largest Communities (excludes Iqaluit), 2008 to 2019

	Population 15+	Labour Force	Employment	Unemployed	Not in Labour Force	Participation Rate (%)	Employment Rate (%)	Unemployment Rate (%)
2010	15,892	9,450	7,658	1,792	6,442	59.5%	48.2%	19.0%
2011	16,450	10,117	7,983	2,133	6,333	61.5%	48.5%	21.1%
2012	17,325	10,533	8,500	2,033	6,792	60.8%	49.1%	19.3%
2013	17,900	11,017	9,058	1,958	6,883	61.5%	50.6%	17.8%
2014	18,267	10,325	8,517	1,808	7,942	56.5%	46.6%	17.5%
2015	18,567	10,750	8,567	2,183	7,817	57.9%	46.1%	20.3%
2016	18,475	11,267	9,083	2,183	7,208	61.0%	49.2%	19.4%
2017	18,067	10,675	8,808	1,867	7,392	59.1%	48.8%	17.5%
2018	18,908	10,750	8,867	1,883	8,158	56.9%	46.9%	17.5%
2019	19,692	11,075	9,125	1,950	8,617	56.3%	46.3%	17.6%

Source: Statistics Canada, Labour Force Survey, Special Tabulation for Nunavut Bureau of Statistics

The next variable to consider is ethnicity (Table 18). Statistics Canada collects those data but does not publish the results with Iqaluit shown separately. Non-Inuit represent 20% of the source population and 30% of the labour force. There is virtually no unemployment amongst the non-Inuit labour force (the number is too small to allow Statistics Canada to publish it). Non-Inuit participation rate is close to 92%, meaning only a small number are not in the labour force (400). The flip side of these facts is that all the unemployed labour (~100%) and almost all those not in the labour force (95%) are Inuit.

The territory-wide information combined with results for Iqaluit can be used to better understand the gender differences. There are far more unemployed male Inuit (~1,400) than female Inuit (~800), and a more even gender distribution amongst those not in the labour force. As would be expected, the youth labour market is much weaker than that for adults. Over half of this cohort are in school and may not be participating in the labour force; though, this is the case throughout Canada. The results are amplified in Nunavut because a greater number of Nunavummiut leave school before graduating or do not attain additional education that would increase their employability. It is further amplified by the fact that Nunavut's job market for entry-level jobs—the kind of jobs that students in other jurisdictions typically fill—are less prevalent in the territory. The employment rate amongst Nunavummiut aged 15 to 24 is below 30% and over 60% for those aged 25 and older.

Table 18: Labour Force Characteristics, 2019

	Total	Inuit	Non- Inuit	Male	Female	Youth (15-24)	Adult (25+)	Iqaluit
Population (15+)	26,100	20,800	5,200	13,600	12,500	5,800	20,200	6,300
Labour force	16,100	11,300	4,800	8,700	7,400	2,300	13,800	5,200
Employment	13,900	9,200	4,700	7,400	6,600	1,700	12,300	4,900
Unemployment	2,200	2,100	Χ	1,400	800	600	1,500	300
Not in the labour force	10,000	9,500	400	4,800	5,100	3,500	6,400	1,100
Participation rate (%)	61.8	54.2	91.8	64.3	59.0	39.3	68.3	82.1
Employment rate (%)	53.5	44.3	90.2	54.2	52.7	28.6	60.7	77.5
Unemployment rate (%)	13.4	18.4	Χ	15.7	10.7	27.1	11.2	5.8

Source: Statistics Canada, Labour Force Survey, Special Tabulation for Nunavut Bureau of Statistics.

Note: labour force data are shown rounded to the nearest hundred causing some rounding errors; X means the number is too small to be published.

The labour market data for the Kivalliq region and its communities is collected by the Census (Table 19, Table 20). The results show a very high unemployment rate equal to 25.7% for the region and an employment rate just over 50%. There were 3,355 residents who were 15 years of age or older and unemployed or not in the labour market.

Table 19: Labour Market for the Kivalliq Region, 2016 Census

	Kivalliq Region
Population aged 15 years and over	6,765
In the labour force	4,595
Employed	3,415
Unemployed	1,180
Not in the labour force	2,175
Participation rate (%)	67.9
Employment rate (%)	50.5
Unemployment rate (%)	25.7

Source: 2016 Data: Statistics Canada. 2017. Census Profile. 2016 Census.

Table 20: Labour Market for the Kivalliq communities, 2016 Census

	Arviat	Baker Lake	Chesterfield Inlet	Coral Harbour	Naujaat	Rankin Inlet	Whale Cove
Population aged 15 years and over	1,690	1,400	285	550	610	1,670	270
In the labour force	1,060	945	200	340	310	1,310	190
Employed	695	695	175	230	210	1,075	135
Unemployed	370	250	30	110	100	235	50
Not in the labour force	635	460	75	210	305	370	80
Participation rate (%)	62.7	67.5	70.2	61.8	50.8	78.4	70.4
Employment rate (%)	41.1	49.6	61.4	41.8	34.4	64.4	50
Unemployment rate (%)	34.9	26.5	15	32.4	32.3	17.9	26.3

Source: 2016 Data: Statistics Canada. 2017. Census Profile. 2016 Census.

The labour market data demonstrates that there are sufficient numbers of unemployed Inuit in the Kivalliq region to provide AEM's mining operations with more employees. AEM is not required to fill its workforce needs from within the pool of unemployed Inuit labour exclusively, however, the Kivalliq economy would be better off if it did. What's missing from these data are more details regarding the qualifications of this unemployed potential labour force. That subject is discussed later in the report.

8 ESTIMATING THE POTENTIAL LABOUR SUPPLY

An initial estimate of the potential labour supply for AEM's Kivalliq mining operations can be developed from the information presented thus far in the report. There are five categories of jobs, but practically speaking and for the near term (the next one to two years), the immediate focus should be on the first two categories (unskilled and semi-skilled) with medium and long-term focus on the skilled category. Together, the three categories of employment (unskilled, semi-skilled and skilled) represent close to 85% of all jobs at the two mines.

Establishing these areas of focus is important in the estimation of a potential labour supply because they have clear education requirements that can be used to sort the existing data and in making predictions for the near and medium term. To reiterate:

- Unskilled jobs do not necessarily require a high school diploma, though successful candidates typically require some form of equivalency or practical work experience.
- Semi-skilled jobs typically require a high school diploma because it is often a prerequisite to enrolment in skills training programs and is clearly influential in the success rate of students in those programs.
- Skilled jobs require further education and work experience resulting in a professional designation such as a journeyman/journeywoman.

The 2019 Inuit population aged 20 to 64 living in the Kivalliq region was estimated to equal 5,378 and is projected to grow by more than 700 to 6,083 by 2024.

Data showing education levels of Inuit living in the Kivalliq region aged 25 to 64 tell us that 47% of that cohort have graduated from high school and based on territory wide Census data, that 69% of Inuit who graduate from high school go on to acquire additional education, 8% earn a certificate of qualification, and 6% receive a bachelor's degree at university.

We also learned that graduation rates in the Kivalliq region are highest amongst the three regions in Nunavut at 56%. Based on their steady rise, it can be assumed that this trend will continue over the next five years that is estimated to result in an increase of more than 800 Inuit with a high school education in

the 20 to 64 age cohort; and that approximately 565 of these people will have attained some postsecondary education and 50 will have earned a university degree.²⁰

And finally, we learned that, on average, females outperform males in school—55% of graduates are female. Over time, this can and will influence the composition of the labour supply. As mentioned, gender should not be considered a factor in hiring. AEM strongly encourages female participation in its workforce and is committed to that participation through its recruitment practices. However, employment is also a matter of choice and can be impeded by numerous barriers. Female employees rarely represent more than 20% of a mine site's workforce in Canada. For the purpose of this study, we needn't separate the labour force by gender, but this assumption carries some downside risk to the estimates of potential labour supply.

The estimates are provided in the Table 21 and Figure 8. **These estimates represent the potential labour supply by age, ethnicity, and education—the ready and able labour force.** Not included are employment status and factors that affect willingness.

Table 21: Estimated Potential Labour Supply

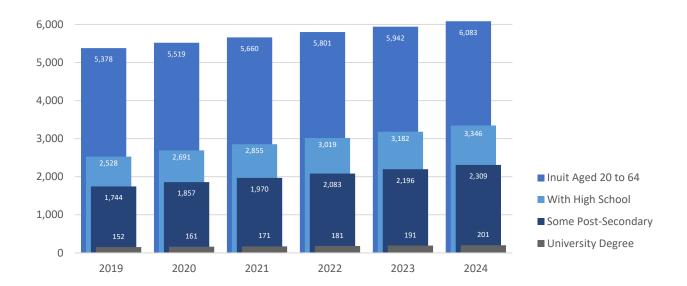
2019 Assumptions and/or Risk of Bias Nunavut 37,082 Published data Kivalliq Published data 11,351 Inuit 10.271 Published data Aged 20 to 64 5,378 Estimated from published data, based on Nunavut's demographic profile Assumes normal distribution. Could underestimate if Inuit are Without High School 2,850 overrepresented in this category. Assumes normal distribution. Could overestimate if Inuit are With High School 2,528 underrepresented in this category. Assumes normal distribution. Could overestimate if Inuit are Some Post-Secondary 1,744 underrepresented in this category. Assumes normal distribution. Could overestimate if Inuit are With University Degree 152 underrepresented in this category. 2024 Assumes a net positive from intraregional and interprovincial migration Inuit Aged 20 to 64 6,083 offsets any losses due to deaths

²⁰ These projections are based on the prudent assumption that historical data reflect a trend that will continue in the future.

Without High School	2,737	Assumes transition of this cohort to be representative of graduation rates
With High School	3,346	Assumes transition of this cohort to be representative of graduation rates
Some Post-Secondary	2,308	Assumes no change from 2019. Could underestimate if more Inuit attain post-secondary education.
With University Degree	201	Assumes no change from 2019. Could underestimate if more Inuit attend university.

Source: Statistics Canada (2017). Nunavut. Census Profile. 2016 Census. Statistics Canada, Demography Division, special tabulation, prepared by Nunavut Bureau of Statistics. Nunavut Bureau of Statistics, Graduation Rates, provided by Department of Education, and Impact Economics.

Figure 8: Estimated Potential Labour Supply, 2019 to 2024



9 LABOUR SUPPLY SUMMARY

The data presented confirms that the current labour supply includes sufficient numbers to provide AEM's mining operations with a lot more Inuit labour. However, there is an important distinction to be made between meeting AEM's Inuit employment targets and increasing employment rates amongst Kivalliq Inuit. The former can be achieved if AEM and its contractors are able to persuade labour already employed to leave their current job for one at a mine. This would significantly improve AEM's employment record against its targets and would mean Inuit are gaining a far greater share of the financial benefits generated by the mining industry. However, it would not necessarily be a net benefit for the Kivalliq region and would be transferring the task of recruitment and training to other employers in the region.

If the focus of recruitment is to be on Inuit not currently employed, AEM needs information on the employability of this cohort. Statistics Canada does not publish cross-sectional data regarding the employability characteristics of unemployed residents, but it is possible to piece together some of these details.

For example, the labour market data presented earlier revealed that virtually all unemployed residents of Nunavut are Inuit. Therefore, it is reasonable to assign everything we know about the unemployed in Nunavut to the Inuit population.²¹ The most relevant being education levels.

A university education that results in a bachelor's degree all but guarantees employment in Nunavut. Results from the 2016 Census introduced in this chapter indicate that there were 325 Inuit aged 25 to 64 in the labour market with a bachelor's degree and that 320 of them were employed (Figure 9). At the other end of the spectrum, there were 6,555 Inuit in this age range who were without a high school diploma and 3,755 were either unemployed (1,370) or were not in the labour force (2,385).

_

²¹ There will be regional discrepancies that will remain unknown.

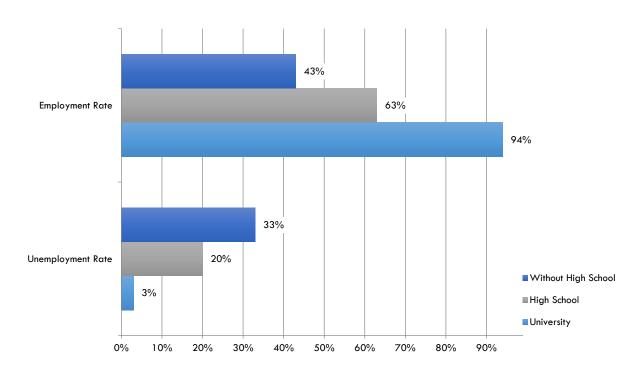


Figure 9: Nunavut Inuit Employment and Education, 2016

Source: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016266.

What this tells us is Inuit who are unemployed or not in the work force are not likely to have completed high school. In fact, 65% of Inuit aged 25 to 64 are in this category—not working and no high school education. Applied to the Kivalliq dataset, this result suggests that a vast majority of the ready Inuit labour supply who are unemployed does not have the qualifications for jobs beyond those classified as unskilled.

These data are not definitive. We cannot identify the exact number of Inuit who are in the correct age range and are unemployed by their level of education. But what can be said is that the majority of Inuit who have acquired a high school education (as a minimum), and a strong majority of Inuit who have acquired a certificate of qualification including journeyman/journeywoman or who have a University degree are employed.

This is further evidence that a near-term Inuit employment strategy should focus on unskilled and semi-skilled job categories, with skilled categories being a longer-term focus. It also points to a strategy targeting new entrants into the labour market. Projecting forward based on current population, education levels, and graduation rates, the 25 to 64 age cohort is estimated to grow by 700 over the next five years, while the number who have completed high school is estimated to grow by more than 800 and the

number who acquire post-secondary education is estimated to grow by approximately 565. These people should be the focus of recruitment efforts related to semi-skilled and skilled positions.

Meanwhile, there are approximately 100 unskilled and 600 semi-skilled positions currently filled by non-resident, non-Inuit employees, though there will be fewer unskilled jobs in the future.²²,²³ The ECC can ask basic questions, such as:

- Is it reasonable to expect that all unskilled jobs are filled by Inuit? How much time is needed to reach this goal? And, who amongst the ready labour supply might be good candidates?
- How many semi-skilled jobs could be filled by Inuit? 50%? 60%? More? Who are the candidates? It is estimated that the Kivalliq region will produce over 120 new Inuit high school graduates every year, on average (Figure 8: Estimated Potential Labour Supply, 2019 to 2024. How many could be attracted to employment in the mining industry?

This approach to goal setting works for skilled and professional jobs as well. The point is that goals should be attainable and be based on real data. It can also be helpful to establish intermediate or annual targets that, if accomplished over several years, results in the ultimate goal—an increase of "X" number of Inuit employees each year in specified job categories for example. Such targets are clear and are easily measured and are more helpful than simply stating long-term aspirational goals.

Once set, the question of "how can we achieve these goals" is answered in part from learning through communications, surveys, and experiences with residents, as well as paying close attention to lessons learned over the past 10 years. Such an approach helps in determining who amongst the ready and able labour force are truly candidates for employment. Some of this information was gathered through the survey process.

The potential Inuit labour supply has been assembled based on age, ethnicity, education, and to some extent, on employment. What remains is willingness. Who amongst these cohorts is interested in work at a mine site, have the right aptitudes, and have no other barriers that would otherwise prevent them from working?

_

²² Agnico Eagle Mines Ltd., Agnico Kivalliq Projects, 2019 Socio-Economic Monitoring Program Report. March 2020.

²³ Agnico Eagle Mines, Labour Force Projections.

The survey of Kivalliq Inuit looked to answer these questions.

10 PERSPECTIVES OF THE POTENTIAL LABOUR SUPPLY

To further understand and characterize the interest, availability, and preparedness of Inuit in the Kivalliq region to obtain employment at AEM's Nunavut projects, this labour market analysis included the collection and synthesis of additional qualitative information. This section describes the approach taken to gather and analyse qualitative data, the results and key messages that emerged, and recommendations to the ECC. The recommendations primarily concentrate on what actions the ECC could take to increase Inuit recruitment, retention, and career advancement.

10.1 METHODOLOGY

The project team conducted a survey in all seven Kivalliq communities to gather the insights of Kivalliqmiut who were interested in working or have previously worked at AEM's Kivalliq Projects, as well as individuals working in organizations that provide training and/or employment support to Inuit in Nunavut in the mineral sector. We reviewed relevant documents and studies to complement and inform the survey process, enabling identification of existing AEM programs and practices, challenges, barriers and opportunities specific to Inuit employment (recruitment, retention and advancement). The documents reviewed include:

- The previous Kivalliq Labour Market Analysis Report (2019)
- Agnico Eagle Kivalliq Projects Socio-economic Monitoring Report (2020)
- Inuit Workforce Barriers and Strategies (2019)
- Nunavut Inuit Labour Force Analysis (2019)

The results of the document review informed the profile of survey participants (*Table 22*), as well as the content and structure of the survey (Appendix A) and the analysis of the findings presented throughout this section. As described in section 1.1, IQ was also central to the survey approach and the analysis of the survey results.

The project team developed the list of survey participants with the input of rightsholders and stakeholders in the region. To prevent the spread of COVID-19 and comply with associated travel restrictions, the project team relied on existing community connections and the support of AEM's Community Liaison Officers to secure and conduct the interviews. Approximately one-hour long interviews were held with 48

individuals between late September and November 2020, either in person with the AEM Community Liaison Officers who live in the Kivalliq communities, or via teleconference.

Table 22: Profile of interviewees

Inte	erviewee Category	Description					
1.	Inuit AEM employees (11 interviews completed)	 Current and former Inuit AEM employees Most respondents were between the ages of 25-54. No respondents were older than 54. Most respondents were not high school graduates, while some were high school graduates with additional training. Many respondents were in entry level positions; only a couple were in semi-skilled or supervisory positions. 					
2.	AEM Contractors (5 interviews completed)	Company owners or senior managers (rather than contractor employees)					
3.	Inuit Labour Force (10 interviews completed)	 Including the hidden work force, those looking for a job at AEM, and participants who have completed Work Readiness/Mine Readiness training Most respondents were between the ages of 18-34. No respondents were older than 54. Most respondents were not high school graduates. Work experience ranged from 1 week in a co-op program to 12 years in automotive repairs. 					
4.	AEM Representatives (8 interviews completed)	Inuit and non-Inuit, managers/supervisors, senior management					
5.	Other Stakeholders (14 interviews completed)	Inuit and non-Inuit, Government of Nunavut (GN), Kivalliq Inuit Association (KIA), Nunavut Tunngavik Inc., Nunavut Arctic College, social programs, economic development, training organizations					

The following sub-sections summarize the survey results, including key messages and recommendations for ECC to consider as they establish annual IEG and develop and implement training and other initiatives to provide for a positive and supportive workplace environment for Inuit at AEM's Kivalliq Projects.

10.2 SURVEY RESULTS

This section presents the key messages from the survey results, accompanied by specific

recommendations for consideration by the ECC.

The areas addressed include:

- Attracting and Recruiting Inuit Talent
- Retention*
- Training and Adult Education
- Advancement
- Contractors
- COVID-19 Implications

*Retention is a broad category with multiple dimensions. The analysis and recommendations are framed around a 'whole person' approach that considers:

- Supporting Inuit Family Life and Relationships
- Accommodating Inuit Cultural Priorities and Integrating IQ
- Breaking Down the Language Barrier
- Working to Address the Pre-conditions for Inuit Employment
- Enhancing AEM's Programming and Processes

Attracting & Recruiting Inuit Talent

The focus of this section is on opportunities for recruiting Inuit youth, approaches that may attract Inuit to a career with AEM, and AEM's recruitment process and work readiness training.

Key Messages

Recruiting Inuit Youth

The growing Inuit youth population and increasing number of high school graduates presents the greatest opportunity for future AEM recruitment. Across most interviewee categories, respondents acknowledged that there is still room for growth in Inuit high school attainment and especially post-secondary education or training. While AEM supervisors noted that it would be valuable to specifically target skilled Inuit workers in the recruitment process, a common theme was that education and training opportunities are not easily accessible in a culturally or linguistically relevant manner. This is in part due to the limited post-secondary education and training facilities and programs in the region. In most cases, Inuit are required to leave their communities to access the education and training they need to attain the qualifications required for positions in the mining sector.

Attracting Inuit Talent

To support attracting Inuit talent, a range of awareness initiatives are in place to share information with communities about careers and work life in the mining sector, such as the Trades Awareness Skills and Knowledge (TASK) week, the Government of Nunavut (GN) Department of Education's partnership with Mining Matters, regional and community career fairs, trade shows, and other resources in communities

such as AEM Community Liaison Officers (CLOs), Hamlet Community Economic Development Officers, and GN and KIA staff. However, these initiatives were not explicitly mentioned by interviewees. Current and former Inuit AEM employees shared that specific employment opportunities are most often communicated by word of mouth.

Recruitment Process & Work Readiness

Most current and former Inuit AEM employees agreed that the application process was easy, and that they applied either online and/or through local supports such as CLOs, Hamlet office, or KIA offices. The critical role of local supports to Inuit through the hiring process was emphasized by individuals in nearly all interviewee categories, with the exception of AEM contractors. Over half of the Inuit who sought employment with AEM indicated that the wait time to hear back and/or to advance in the hiring process was too long.

The Work Readiness Program, which is the first step in AEM's Labour Pool Process, was viewed positively by AEM supervisors and management. Supervisors observed that applicants with some experience started from the same entry level point, noting that it would be valuable to consider a different approach to attracting and recruiting skilled workers.

Recommendations

Recruiting Inuit Youth

- Concentrate awareness and future recruitment efforts on Inuit youth and high school graduates (e.g. hold virtual mine tours for youth groups and schools).
- Engage with GN Education to advocate for career counsellors, who could work directly with youth and soon-to-be graduates in local high schools.
- Consider supporting an Inuit education perseverance campaign/program to generate awareness of the importance of education to long-term economic independence (similar to the ESUMA Program, run by the Kativik Regional Government's Sustainable Employment Department).

Attracting Inuit Talent

- Ensure existing employees are aware of job openings and encourage them to share this information with community members they think would be a good fit. Consider offering a 'referral bonus' for employees who refer successful candidates to AEM.
- Identify specific strategies to attract and recruit skilled Inuit workers, such as targeted communications and outreach to the pool of skilled workers.
- To the extent possible, ensure that the CLO positions are always staffed and that CLOs have the support they need to fulfill their roles successfully (e.g.

- CLOs may benefit from networking with one another and AEM/contractor supervisors to share challenges and solutions).
- Increase communication with potential future employees, including those on the labour pool list, to help them understand the hiring process and anticipated timelines.

Streamlining the Recruitment Process & Work Readiness

Requirements

- Examine the hiring process to identify and implement opportunities to reduce delays and lags for identified candidates.
- Eliminate or streamline work readiness requirements for prospective skilled Inuit employees/those who have already gone through work readiness training and continue to offer work readiness programming to entry level hires.

Retention

Interviewees suggested several opportunities to improve the retention of Inuit employees in the following areas:

- Supporting Inuit family life and relationships
- Accommodating Inuit cultural priorities and integrating IQ
- Breaking down the language barrier
- Enhancing AEM's programming and processes
- Working to address the pre-conditions for Inuit employment

Note that all the recommendations in this section apply to both AEM and AEM's contractors, except for those related to enhancing AEM's programming and processes.

Key Messages

Supporting Inuit Family Life and Relationships

Across the interviewee categories, individuals recognized the importance of family life and relationships to Inuit workplace satisfaction. Some current and former Inuit AEM employees mentioned that they decided to work for the company because of friends/family and that they would recommend working at AEM to others because the income stability enables them to provide for themselves and their families. Several current and former Inuit AEM employees also said that one of the core benefits of employment at AEM is/was their supportive network of friends, family and co-workers. Conversely, almost all potential Inuit employees who are not looking for work cited family obligations/expectations, including caring for

partners or children, as the main reason why they are not seeking employment. Interviewees in every category acknowledged that the fly-in-fly-out (FIFO) schedule puts a strain on Inuit family life and relationships. Some AEM contractors, AEM representatives and other stakeholders also noted that family responsibilities are a significant contributor to absenteeism and resignations.

Accommodating Inuit Cultural Priorities and Integrating IQ

Interviewees in nearly every category emphasized the need for further accommodation of Inuit cultural priorities, such as time off to hunt, fish, and be 'on the land'. This time off may be seasonal and/or short notice, as harvesting opportunities may be unpredictable. Peter's Expediting Ltd. was mentioned as an employer with good practices for accommodating their Inuit employees' cultural activities. AEM representatives and contractors also expressed the need for more cross-cultural training, noting that cultural differences/misunderstandings between southern and Inuit workers disrupt workplace harmony. Likewise, other stakeholders identified cross-cultural training as a leading potential solution to Inuit employment barriers, second to the need for additional training programs and/or resources. Other stakeholders also highlighted the integration of IQ and Inuit culture into the workplace (e.g. hunting requirements, learning styles, etc.) as one of the top three challenges that employers face in retaining employees in the mining industry. AEM representatives, contractors, and other stakeholders recognized earning the support of communities, particularly that of respected Elders, as an opportunity for improvement.

Breaking Down the Language Barrier

Over half of the current or former Inuit AEM employees identified French-English language/communication challenges as a barrier to working for Agnico, and one expressed that approaching their boss was difficult. AEM representatives similarly identified a lack of strength in English as a significant obstacle for Inuit, as well as Quebec/Francophone employees, in their roles at AEM, noting that information is often lost in translation on site. Despite the fact that English is the working language of the mine, AEM representatives noted that French is the dominant language in many social situations and side conversations. For example, one AEM representative stated, "It is not uncommon to walk by an office, a meeting, a phone call and the language is French. This does not align with AEM values of family and inclusion." According to over half of the other stakeholders, one of the greatest potential barriers to the retention of Inuit in the mining industry overall is language.

Working to Address the Pre-conditions for Inuit Employment

Interviewees raised or touched on a number of other support services or areas that – if effectively implemented within the community – could support successful recruitment and retention. This included additional support on:

- · Housing access and costs, including concerns about increased rent as salaries increase
- Childcare access at the mine site and in communities
- Access to mental health supports in communities
- Access to alcohol and drug use supports in communities
- Financial management, such as assistance with opening bank accounts

Enhancing AEM's Programming and Processes

The project team also identified key messages related specifically to AEM's programming and processes. Overall, most of the current and former Inuit AEM employees said that working for Agnico was different from their expectations in various ways, including the experiences of camp life, work expectations, and opportunities. Most AEM representatives agreed there is high turnover of Inuit employees within the company. In some cases, this was attributed to poor upward mobility or lack of appeal of positions available for Inuit. Most of the interviewee categories identified a need to expand on-site mental health and addictions counselling, particularly as employees adjust to a new work and life environment. AEM conducts exit interviews with all Inuit employees to understand the reason(s) behind their dismissal or termination. However, most AEM supervisors interviewed were not aware of the exit interview process.

Recommendations

Supporting Inuit Family Life and Relationships

- Continue to encourage a friendly work environment and nurture opportunities for employees to connect during their rotations (e.g. offer more fun, structured social activities in the off hours).
- Consider modifications to the FIFO work schedule (e.g. 7 on/7 off), informed by experiences in other jurisdictions (e.g. NWT).
- Support Inuit employee interactions with their family/spouse by providing access to regular video calls, virtual mine site tours and other forms of interaction (i.e. demystify perceptions of AEM/contractor work life).
- Ensure Inuit have access to family/relationship counselling (e.g. hire a family counsellor at the mine sites or support Inuit in accessing counselling externally through KIA or other community-based organizations).

Accommodating Inuit Cultural Priorities and Integrating IQ

- Consider how best to further accommodate Inuit traditional activities, such as offering more flexible work hours or providing job sharing opportunities during hunting/whaling/fishing seasons.
- Connect with Peter's Expediting Ltd. to seek lessons learned from their approach to accommodating Inuit cultural activities (and seek sharing with other contractors, if possible).
- Increase frequency and coverage of cross-cultural sensitivity training for all employees, managers and supervisors.
- Create fora for Inuit employees to share their experiences in working with AEM with their communities (e.g., role modelling), while being mindful that humility is highly valued in Inuit culture.

Breaking Down the Language Barrier

- Assess the need for English language training and provide this training on site to support use of a common language on site.
- Increase the awareness of the French-English language barrier to help
 French-speaking employees understand the direct impact of communication
 challenges on the Inuit employee experience. This could be integrated within
 cross-cultural training discussed in another recommendation.
- Consider increasing Inuktitut signage on site, particularly for critical signage (e.g., safety protocols, exit signs).

Working to Address the Preconditions for Inuit Employment

- Consider advocating, in partnership with KIA, the GN and other service providers, to secure adequate funding and program delivery to address underlying challenges associated with:
 - housing access and costs, including concerns about increased rent as salaries increase
 - o childcare access at the mine site and in communities
 - o access to mental health supports in communities
 - o access to alcohol and drug use supports in communities
 - o financial management
- Identify whether additional information should be included on any of the subject areas within work readiness, orientation or on-going training provided to potential candidates and employees. This could include material

	to raise awareness of existing programs and supports, or specific modules to
	increase understanding of specific areas (e.g. financial management;
	explaining the relationship between salary and the cost of rent).
Enhancing AEM's •	Continue working with the KIA to assign Elder(s) who will work with the Inuit
Programming and	Impact Benefit Agreement (IIBA) on-site working groups and potentially
Processes	provide counselling during their visits to site, which may include relationship
	counselling (see "Supporting Family Life and Relationships").
•	Share the exit interview results with AEM supervisors (e.g., aggregate data to
	protect identities, review them on an annual basis and identify areas/actions
	for improvement to be shared with supervisors).

Training and Adult Education

Key Messages

According to stakeholders, the greatest challenge/opportunity that needs to be addressed to advance Inuit employment is improving the availability and variety of education and training programs. Inuit employee interviewees who had participated in a training program through AEM felt that it was a positive experience, however, several Inuit interviewees mentioned that they were either waiting for a training program or that the wait for training was too long. From the perspective of some stakeholders, the establishment of a local training facility (outside of the mines) would be ideal, but Inuit should also be supported if they wish to pursue training opportunities in the south. Some stakeholders also noted that Inuit AEM employees who would like to advance to more skilled positions are not offered additional training, which negatively impacts employee retention. AEM representatives, contractors, and other stakeholders said training initiatives should be focused on skilled, leadership positions, in addition to entry level positions with high employment potential. These kinds of initiatives would lead to more skilled and confident potential/current employees. According to AEM representatives, potential training needs include adult education, leadership development, apprenticeship programs, and trades access/readiness. A few Inuit interviewees identified leaving their families as a challenge to complete the training necessary to fill a position in the mining sector.

Recommendations

Addressing Training Needs

- Work with the Nunavut Arctic College Kivalliq Mine Training Coordinator and other training providers, as needed, to determine how AEM training needs can be met through in-community or on-site programs, where possible.
- Engage with the Nunavut Arctic College on the development of the Rankin Inlet Mine Training Facility, ensuring it reflects AEM and AEM contractor training needs and is advanced as quickly as possible.

Advancement

Key Messages

Some current and former Inuit AEM employees indicated that the wait time to advance to more senior or different positions was too long. AEM representatives were divided on whether or not Inuit have adequate opportunities to advance at AEM, with some acknowledging that there is limited opportunity for Inuit to advance to superintendent or managerial roles. One AEM contractor mentioned that Inuit might be more comfortable and confident at the workplace if there were more Inuit managers. Most of the current and former Inuit AEM employees said they would accept a supervisor position if offered, with several indicating they had already worked supervisory roles, sometimes in temporary capacities. However, some indicated they would not accept a supervisory role, all citing increased responsibility as the reason they would not want the role. While most AEM representatives highlighted the Career Path Program as a key support for Inuit advancement, current and former Inuit AEM employees expressed a desire for the Program to be more flexible. The majority of the Inuit interviewees identified the Career Path Program as a key support for Inuit advancement; however, some indicated that additional support and training would be beneficial (see "Training and Adult Education").

Recommendations

Modifying

Approaches to

Advancement

Seek Inuit employee feedback on advancement barriers and opportunities (e.g. through focus groups) and modify the current hiring structure, as required, to ensure that there is space for Inuit to advance to semi-skilled / more senior positions.

- Continue to support Inuit advancement into more senior positions, including through formal job shadowing and targeted career path plans to ease employees into additional responsibilities (where possible).
- In addition to supporting advancement, consider modifying the Career
 Path Program to enable Inuit to move:
 - Into less senior roles if they are finding their current positions too challenging
 - Laterally if they would like to try other positions within the company at the same skill level, including through job shadowing

Contractors

Key Messages

Most AEM contractors emphasized the difficulty of finding and retaining qualified and experienced Inuit employees. Their local, Inuit employees most commonly work as labourers. All contractors identified workforce readiness, preparation, and/or training as a major barrier, i.e. employees often do not have the education, training, or experience that employers require. When they do, there is competition for those employees. Challenges and comfort levels with rotational/camp work were identified by most contractors as contributing to employee retention, absenteeism, and recruitment problems. Cultural and language barriers were discussed by contractors, but language was not always identified as a major issue. Cultural differences between southern workers and Inuit, and the need for workplaces to adapt to Inuit cultural priorities and responsibilities were identified by approximately half of the contractor interviewees.

Recommendations

Increasing AEMContractor
Coordination and
Information Sharing

- Increase AEM-contractor coordination on training needs and program delivery (e.g., consider whether there is potential to share access to training programs, coordination with the Nunavut Arctic College).
- At least annually, share lessons learned for improving Inuit employee retention (e.g., synthesized exit interviews) with and across contractors.

- Consider holding a working session with contractors to share experiences, approaches and lessons learned.
- Assess whether any further data and information is required from contractors to monitor their implementation of Inuit employment and training goals and commitments.

COVID-19 Implications

Key Messages

Individuals from all interviewee categories emphasized some of the ways the COVID-19 pandemic is affecting Inuit employment in the mining sector. About half of Inuit interviewees seeking employment were worried about COVID-19 in the workplace; they mentioned feeling nervous or unsafe and that precautions should be taken. Most Inuit employees want to return to work and some mentioned that their training was delayed due to the pandemic. There may be a risk of losing Inuit employees following COVID-19 due to lack of engagement. Some Inuit employees are moving to the south to be able to work at the mine site, although this had also been observed prior to COVID-19.24

Recommendations

Engaging Inuit	•	Continue efforts to engage Inuit employees in their communities (e.g.,
During the Pandemic		reaching the Inuit employees who have not yet been contacted to
		participate in the Good Deeds Brigade) and use Inuit employees to
		support awareness/recruitment efforts (e.g., speak in schools about
		mining and related career opportunities).
Encouraging Off-site	•	Encourage and support Inuit employees to enroll in training programs
Professional		available to them during COVID-19, in alignment with professional
Development		development plans.
	Į	

²⁴ Two individuals in the "other stakeholders" category mentioned that Inuit had moved to the south and continued to work at the mine pre-COVID-19 (one specified that the reason was better housing, the other did not specify a reason). Further inquiry is needed.

Planning for Various COVID-19 Scenarios

Consider identifying different IEGs based on multiple COVID-19 scenarios (e.g., IEG if Inuit employees return to work by May 2021 vs. Sept 2021).

The 2021 target may need to focus on retaining and advancing existing employees rather than expanding the Inuit workforce.

10.3 SUMMARY OF RECOMMENDATIONS

The project team has included a summary table of recommendations below (Table 23) for ease of reference and to support the implementation of the recommendations stemming from this section of the analysis. We have also indicated to whom each recommendation applies and a suggested time horizon for each recommendation (near-term: 1-2 years; long term: 3-5 years). We proposed accountability based on the relationship between the scope of each recommendation and the mandate of relevant companies and organizations. For instance, the scope of some recommendations is specific to AEM and/or AEM contractor processes, programming, or practices, whereas other recommendations will require engagement and coordination with other organizations, which KIA may be best placed to lead/support.

Table 23: Summary of Recommendations

Theme	Ref. #	Recommendation	Accountable	Time Horizon
Attracting & Recr	uiting Inu	it Talent		
	1	Concentrate awareness and future recruitment efforts on Inuit youth and high school graduates (e.g. hold virtual mine tours for youth groups and schools).	AEM, AEM Contractors	Near term
Recruiting Inuit	2	Engage with GN Education to advocate for career counsellors, who could work directly with youth and soon-to-be graduates in local high schools.	AEM, KIA	Near term
Youth	3	Consider supporting an Inuit education perseverance campaign/program to generate awareness of the importance of education to long-term economic independence (similar to the ESUMA Program, run by the Kativik Regional Government's Sustainable Employment Department).	KIA, other stakeholders (local schools and Inuit students)	Long term
Attracting Inuit Talent	4	Ensure existing employees are aware of job openings and encourage them to share this information with community members they think would be a good fit. Consider offering a 'referral bonus' for employees who refer successful candidates to AEM.	AEM, AEM Contractors	Near term
	5	Identify specific strategies to attract and recruit skilled Inuit workers, such as targeted communications and outreach to the pool of skilled workers.	AEM, AEM Contractors	Near term

Theme	Ref. #	Recommendation	Accountable	Time Horizon
	6	Increase communication with potential future employees, including those on the labour pool list, to help them understand the hiring process and anticipated timelines.	AEM, AEM Contractors	Near term
	7	To the extent possible, ensure that the CLO positions are always staffed, and that CLOs have the support they need to fulfill their roles successfully (e.g., CLOs may benefit from networking with one another and AEM/contractor supervisors to share challenges and solutions).	AEM	Long term
Streamlining the Recruitment	8	Examine the hiring process to identify and implement opportunities to reduce delays and lags for identified candidates.	AEM, AEM Contractors	Near term
Process & Work Readiness Requirements	9	Eliminate or streamline work readiness requirements for prospective skilled Inuit employees/those who have already gone through work readiness training and continue to offer work readiness programming to entry level hires.	AEM	Near term
Retention				
	10	Continue to encourage a friendly work environment and nurture opportunities for employees to connect during their rotations (e.g. offer more fun, structured social activities in the off hours).	AEM, AEM Contractors	Near term
Supporting Inuit Family Life	11	Support Inuit employee interactions with their family/spouse by providing access to regular video calls, virtual mine site tours and other forms of interaction (i.e. demystify perceptions of AEM/contractor work life).	AEM, AEM Contractors	Near term
and Relationships	12	Ensure Inuit have access to family/relationship counselling (e.g. hire a family counsellor at the mine sites or support Inuit in accessing counselling externally through KIA or other community-based organizations).	AEM, AEM Contractors, KIA	Long term
	13	Consider modifications to the FIFO work schedule (e.g. 7 on/7 off), informed by experiences in other jurisdictions (e.g. NWT).	AEM, AEM Contractors	Long term
Accommodating Inuit Cultural Priorities and Integrating IQ	14	Connect with Peter's Expediting Ltd. to seek lessons learned from their approach to accommodating Inuit cultural activities (and seek sharing with other contractors, if possible).	AEM, AEM Contractors	Near term
	15	Consider how best to further accommodate Inuit traditional activities, such as offering more flexible work hours or providing job sharing opportunities during hunting/fishing seasons.	AEM, AEM Contractors	Long term

Theme	Ref. #	Recommendation	Accountable	Time Horizon
	16	Increase frequency and coverage of cross-cultural sensitivity training for all employees, managers and supervisors.	AEM, AEM Contractors	Long term
	17	Create fora for Inuit employees to share their experiences in working with AEM with their communities (e.g., role modelling – however, be mindful that humility is highly valued in Inuit culture).	AEM, AEM Contractors	Long term
Breaking Down the Language	18	Increase the awareness of the French-English language barrier to help French-speaking employees understand the direct impact of communication challenges on the Inuit employee experience. This could be integrated within cross-cultural training discussed in another recommendation.	AEM, AEM Contractors	Near term
Barrier	19	Consider increasing loubtiful signage on site particularly for critical		Near term
	20	Assess the need for English language training and provide this training on site to support use of a common language on site.	AEM, AEM Contractors	Long term
Working to Address the Pre-conditions for Inuit Employment	21	Identify whether additional information should be included on any of the relevant subject areas within work readiness, orientation or on-going training provided to potential candidates and employees. This could include material to raise awareness of existing programs and supports, or specific modules to increase understanding of specific areas (e.g. financial management; explaining the relationship between salary and the cost of rent).	AEM, AEM Contractors	Near term
	22	Consider advocating, in partnership with KIA, the GN and other service providers, to secure adequate funding and program delivery to address underlying challenges associated with: • housing access and costs, including concerns about increased rent as salaries increase • childcare access at the mine site and in communities • access to mental health supports in communities • access to alcohol and drug use supports in communities • financial management	AEM, AEM Contractors, KIA	Long term
Enhancing AEM's	23	Continue working with the KIA to assign Elder(s) who will work with the IIBA on-site working groups and potentially provide counselling during	AEM, KIA	Near term

Theme	Ref. #	Recommendation	Accountable	Time Horizon
Programming and Processes		their visits to site, which may include relationship counselling (see "Supporting Family Life and Relationships").		
	24	Share the exit interview results with AEM supervisors (e.g., aggregate data to protect identities, review them on an annual basis and identify areas/actions for improvement to be shared with supervisors).	AEM	Near term
Training				
Addressing	25	Work with the Nunavut Arctic College Kivalliq Mine Training Coordinator and other training providers, as needed, to determine how AEM training needs can be met through in-community or on-site programs, where possible.	AEM, AEM Contactors, KIA	Long term
Training Needs	26	Engage with the Nunavut Arctic College on the development of the Rankin Inlet Mine Training Facility, ensuring it reflects AEM and AEM contractor training needs and is advanced as quickly as possible.	AEM, AEM Contactors, KIA	Long term
Advancement				
Evaluating Approaches to	27	Seek Inuit employee feedback on advancement barriers and opportunities (e.g. through focus groups) and modify the current hiring structure, as required, to ensure that there is space for Inuit to advance to semi-skilled / more senior positions	AEM, AEM Contractors	Near term
Advancement	28	Continue to support Inuit advancement into more senior positions, including through formal job shadowing and targeted career path plans to ease employees into additional responsibilities (where possible).	AEM, AEM Contractors	Long term
Modifying the Career Path Program	29	 In addition to supporting advancement, consider modifying the Career Path Program to enable Inuit to move: Into less senior roles if they are finding their current positions too challenging Laterally if they would like to try other positions within the company at the same skill level, including through job shadowing 	AEM	Long term
Contractors				
Increasing AEM- Contractor Coordination	30	Increase AEM-contractor coordination on training needs and program delivery (e.g., consider whether there is potential to share access to training programs, coordination with the Nunavut Arctic College).	AEM, AEM Contractors	Near term
and Information Sharing	31	At least annually, share lessons learned for improving Inuit employee retention (e.g., synthesized exit interviews) with and across contractors.	AEM, AEM Contractors	Near term

Theme	Ref. #	Recommendation	Accountable	Time Horizon
		Consider holding a working session with contractors to share experiences, approaches and lessons learned.		
	32	Assess whether any further data and information is required from contractors to monitor their implementation of Inuit employment and training goals and commitments.	AEM, AEM Contractors	Long term
COVID-19 Implica	ntions			
Engaging Inuit During the Pandemic	33	Continue efforts to engage Inuit employees in their communities (e.g., reaching the Inuit employees who have not yet been contacted to participate in the Good Deeds Brigade) and use Inuit employees to support awareness/recruitment efforts (e.g., speak in schools about mining and related career opportunities).	AEM, AEM Contractors	Near term
Encouraging Off-site Professional Development	34	Encourage and support Inuit employees to enroll in training programs available to them during COVID-19, in alignment with professional development plans.	AEM, AEM Contractors	Near term
Planning for Various COVID- 19 Scenarios	35	Consider identifying different IEGs based on multiple COVID-19 scenarios (e.g., IEG if Inuit employees return to work by May 2021 vs. Sep 2021). The 2021 target may need to focus on retaining and advancing existing employees rather than expanding the Inuit workforce.	AEM	Near term

11 CONCLUSION

A LMA is an objective assessment of current and future labour demand and supply conditions in a given jurisdiction. The focus of this report has been the labour demand of AEM Meadowbank and Meliadine operations set against the supply of Inuit labour in the Kivalliq region of Nunavut where the employers have filled their collective labour force needs through a combination of imported labour, working with the resident population to improve its education, skills, and workforce readiness, and removing or reducing other barriers to employment. Learning about the balance between resident and imported labour and the progress of Inuit employees are at the heart of this 2020 Kivalliq LMA.

The study has found that AEM labour force requirements are substantial in a regional economy that has long had a stable but small labour market. Inuit participation in the expanding operations has grown in the past couple of years to 476 FTE jobs in 2019. The majority of these employees work in unskilled and semi-skilled jobs, and both categories have plenty of room for Inuit to increase their participation. As of 2019, there were 961 jobs in those two categories being filled by imported, non-Inuit labour. Moving forward over the next five years, labour demand is expected to remain high and opportunities for increased participation will be present throughout this time period.

The challenge is in matching available Inuit labour supply with available job openings. The study followed a methodology for understanding the limits of this available labour supply. Simply being present in a market is not enough to ensure employment. Using readily available data, Nunavut's population was narrowed by age, ethnicity, and education. Other variables including employment status and gender were also considered. The mathematics produced estimates of a ready and able Inuit labour supply that was a small fraction of the overall population.

What the math could not produce, though, was an estimate of the available labour's willingness to work or remain working at one of AEM's mine sites. Willingness encapsulates numerous factors that are challenging to quantify. For example, regardless of one's age or qualifications, they:

- might be happily employed and are not interested in a career change,
- may not want to work at a camp or on rotation,
- may not have the right physical attributes,
- might have family or community responsibilities that prohibit employment at one of the mine sites,

- might have a dependency that would make it difficult to work at a camp or on rotation or perhaps to work at all,
- might have a language barrier,
- might prefer working in the traditional or non-wage economy hunting and fishing, or
- may not want to work at a mine or for AEM under any circumstance.

The past 10 years of historical data provides some insight into these factors that can be combined with AEM's employee exit surveys and other analysis completed on workforce barriers and previous labour market analyses to form an educated opinion about this potential source of employees. To improve our knowledge in this area, a survey of current and former employees along with mine officials, contractors, and government bureaucrats was conducted to gain further qualitative insights.

The survey had limited reach, gathering the input from 10 current employees and 11 Inuit from within the Kivalliq labour market, but provides evidence of the experiences, attitudes, and opinions of the 21 people alongside the observations from 27 employer and government representatives.

The survey uncovered insights into current recruitment and retention efforts, job satisfaction, and what might be easy solutions to existing problems. For example, we learned of the important role of CLOs in promoting job opportunities and assisting in the application process. Having an effective person in this position can be more important and perhaps less expensive than numerous other recruitment strategies. We also learned that promotion could play a role in retention but that, for some employees, lateral moves into a job the employee is better suited and where they can have greater success is equally important. Making such moves possible, or perhaps even promoting such movement, might result in increased productivity and greater retention.

In combination with what was learned from the quantitative analysis, it has become clear that future recruitment and retention efforts need to be more targeted, identifying specific cohorts within the potential labour supply when designing recruitment strategies. For example, there are approximately 100 unskilled and 600 semi-skilled positions currently filled by non-resident, non-Inuit employees, though there will be fewer unskilled jobs in the future. It is clear, based on the existing data and survey results, that the greatest gains can be made in semi-skilled jobs where employers should be targeting new graduates through direct employment or sponsorship and/or through select promotion.

The ECC can establish its annual Inuit Employment Goal based on this knowledge. It can ask basic questions, such as:

- Can all unskilled jobs are filled by Inuit? How much time is needed to reach this goal? And, who amongst the ready labour supply are good candidates?
- How many semi-skilled jobs could be filled by Inuit? Who are the candidates? How many new graduates can be attracted to employment in the mining industry?

The point is that goals should be attainable and be based on real data, whether quantitative or qualitative.

The question of how these goals can be achieved is answered in part from learning through communications, surveys, and experiences of current and prospective Inuit employees, as well as paying close attention to lessons learned over the past 10 years. This approach is easily undertaken with high probability of success once the question of "who" is answered.

12 LESSONS LEARNED

The 2020 Kivalliq LMA is the third in the series and the first completed by the Project Team of Aglu Consulting and Training Inc., Impact Economics, and Stratos Inc. With a strong team with years of experience in different elements of the research conducted, there were important lessons learned that might help the ECC in managing future LMAs.

From the perspective of quantitative analyses, the methodology undertaken to produce this year's Kivalliq LMA is relatively simple. The methods adopted in this report involve a lot of data, but only some are produced annually. These datasets can be easily updated, and often times, the new information contained in these data do not change the report's conclusions.

Most of the detailed information regarding the quality and quantity of Kivalliq's Inuit labour supply comes from the Canadian Census, which is collected every five years. Efficiencies can be realised in future reporting by adopting the methods used in the 2020 report, updating the statistics in non-Census years, and reserving the more rigorous analysis for the year's when the Census database is released or when specific economic questions require answers.

The 2020 Kivalliq LMA was the first to introduce a survey of current and prospective employees, industry, and government. The approach was to cast a wide net to capture insights from a broad cross-section of opinions. Future survey work is encouraged, but with greater specificity regarding the target audience. For example, this year's analysis has resulted in a recommendation for targeted recruitment of new graduates. A future survey might consider focussing exclusively on this cohort, including high school students and recent graduates. To further understand the interests of this next generation of Inuit, AEM could consider a range of engagement pathways, such as encouraging the CLOs to have conversations with recent graduates, connecting with existing youth initiatives and organizations (e.g., through TASK week, the National Inuit Youth Council), and/or coordinating with high school principals to explore opportunities for student-focused discussions on potential interests in mining careers.

Similar to the recommendations around data collection and analysis, the survey work can also be reserved for addressing specific questions or knowledge gaps or be undertaken every 3 to 5 years as part of a larger reimagination of the Kivalliq LMA.

APPENDIX A: SURVEY QUESTIONS

This appendix provides all questions and associated guidance for the interviewer that met with survey participants to collect additional qualitative information. Five interview guides were produced according to the survey participant's background and perspectives (interviewee categories) and are provided below.

2020 Kivalliq Labour Market Analysis (LMA) Interview Guides

Notes for Interviewer (Note that this intro section was identical for each interview category)

1) OPENING

- Introduce yourself.
- Explain the project.
- Ask if the participant would prefer to be interviewed in English or Inuktitut. If you cannot proceed
 in the participant's preferred language, let the participant know the interview will be rescheduled
 and contact Aglu for assistance with interpretation. If you know in advance that interpretation will
 be needed, please let Aglu know prior to the interview so interpretation can be arranged.
- Review advance documents sent to participant, if any.
- Remind participant that the interview could take up to 60 minutes, but they can stop the interview at any time if they need to.
- Remind the participant that their answers will be anonymous.
- Review the Consent Form with the participant. Make sure they clearly understand, and that you have answered any questions they might have.
- Ask the participant to sign the Consent Form. If they don't sign it, the interview can't proceed.

2) INTERVIEW

- Remind participant that this interview will help AEM train, employ, and promote more Inuit at their mine sites.
- Complete interview questions. During the interview, participants may skip questions if they like, or return to previous questions if they think of things they want to add.

3) CLOSING

- Ask the participant if they have any further questions or comments.
- Tell the participants to contact you if they have any questions later.
- Thank the participants for their help and participation.

Category 1 - Current and Former (within last 5 years) Inuit AEM employees

I would like to ask you questions about getting and keeping a job with AEM. We will start with questions about you and work in general. I'd also like to hear about your job or previous job at Agnico and your work experience.

Do you have any questions before we get started?

Participant Demographic Information

Age (circle/underline)	18-24	25-34 35-44	45-54 55	-64 65+
Where are you from?				
Where do you live now?				
Gender (circle/underline)	М	F Othe	r Prefer not t	o say
Highest Education Level				
Any other training or trades				
Work experience (jobs, length of time held, etc.)				

Deciding to get a job

- 1. Why did you decide to get a job at AEM?
- 2. How did you hear about jobs at AEM?
- 3. What was the application process like for you? Was it easy or difficult to apply? Did you have any help or support during the application process?
- 4. How long were you on the Labour Pool waiting list? Do you feel this was a reasonable amount of time?
- 5. Would you recommend to family or friends that they consider getting a job with AEM? Why or why not? If not, what would it take for you to recommend AEM to family or friends?

Working at Agnico

- 1. Was/is working with AEM as you expected it to be? How was/is it different from your expectations?
- 2. What were/are the good aspects of working for AEM?
- 3. What were/are the challenges of working for AEM?

- 4. If you no longer work for AEM, why did you leave? How long did you work for AEM?
- 5. Have you ever been offered a promotion in AEM? If so, did you accept it? Why or why not?
- 6. If you were offered an opportunity to advance into a supervisor position at AEM, would you take it? Why or why not?
- 7. Did you take any training opportunities while working for AEM? If so, what training did you take, and was it worth your time? If not, why not?
- 8. Finally, has the COVID-19 pandemic changed your thoughts about working at an AEM mine site, or your willingness to work for AEM? If so, how?

Category 2 - Current and Former Inuit AEM Contractors

I would like to ask you questions about getting and keeping a job with contractors working with AEM. We will start with questions about you and work in general. I'd also like to hear about your job or previous job with contractors for Agnico and your work experience.

Do you have any questions before we get started?

Participant Demographic Information

Age (circle/underline)	18-24	25-34	35-44	45-54	55-64	65+
Where are you from?						
Where do you live now?						
Gender (circle/underline)		M F	Other	Prefer n	ot to say	
Education Level						
Training and trades						
Work experience						

Deciding to get a job

- 1. Why did you decide to get a job with an AEM contractor? How long have you worked with them?
- 2. How did you hear about jobs with a contractor for AEM?
- 3. What was the application process like for you? Was it easy or difficult to apply?
- 4. What was the initial training or orientation process for your job?
- 5. Would you recommend to family or friends that they consider getting a job with an AEM contractor? Why or why not?

Working at an AEM Contractor

- 1. Was/is working with a contractor for AEM as you expected it to be? What was/is different from your expectations?
- 2. What were/are the good aspects of working for a contractor for AEM?
- 3. What were/are the negative aspects of working for a contractor for AEM?
- 4. If you no longer work for an AEM contractor, why did you leave? How long did you work there?
- 5. In your opinion, what's the difference between working for AEM and working for a contractor?
- 6. Have you ever been offered a promotion? If so, did you accept it? Why or why not?
- 7. If you were offered an opportunity to advance into a supervisor position, would you take it? Why or why not?
- 8. Did you take any training opportunities while working for an AEM contractor? If so, what training did you take, and was it worth your time? If not, why not?
- 9. Finally, has the COVID-19 pandemic changed your thoughts about working at an AEM mine site, or your willingness to work for AEM contractors? If so, how?

Category 3 - Inuit Labour Force, Non-AEM/Non-Contractor Employees (I.E. Inuit working or looking for work, but not working for AEM)

During the interview, I would like to ask you questions about your employment, finding a job, and potentially working for AEM. We will start with questions about you in general. I'd also like to hear about your previous experience.

Do you have any questions before we get started?

Participant Demographic Information

Age (circle/underline)	18-24	25-34	35-44	45-54	55-64	65+
Where are you from?						
Where do you live now?						
Gender (circle/underline)	N	1 F	Other	Prefer r	ot to say	
Highest Education Level Completed						
Any Other Training or Trades						
Work experience (jobs held, length of time held, etc.)						

Work experience

- 1. Do you currently have a job? If so, can you describe it (your employer, is it full time or part time, is it rotation work, seasonal, etc.)? What do you like and not like about your current job?
- 2. Are you currently looking for a job or for a new job? If so, why? (Currently unemployed, looking for a better job, looking for more hours, etc.?)
- 3. Have you ever considered a job at AEM?
- 4. Do you know how to apply for a job at AEM? Can you tell me how to apply to AEM?
- 5. Have you ever applied to work at AEM? YES or NO
- 6. If YES:
 - a. What steps did you take to apply?
 - b. Did you have any language issues while applying?
 - c. Did you participate at a community information session?
 - d. Are you on the AEM Labour Pool list? Explain.
 - e. Did you participate in any of the pre-employment training such as Work Readiness?
 - f. What are your thoughts about the mandatory pre-employment training for AEM, and the Labour Pool list?
- 7. If NO, why have you not applied to work at AEM? What would make you consider applying for AEM?
- 8. Who do you see as a good employer in the Kivalliq region? What makes them a good employer in your view?
- 9. How would you describe the job market for your skills? Would you say that jobs are hard to find or easy to find? Why?
- 10. Finally, has the COVID-19 pandemic changed your thoughts about working or your willingness to work, whether for AEM or anywhere else?

Category 4 - AEM Representatives

During the interview, I would like to ask you questions about your experience working at AEM and working with Inuit.

Do you have any questions before we get started?

Participant Demographic Information

Are you Kivalliqmiut?	Yes	No
Are you Inuit?	Yes	No

Where are you from?	
Education Level	
How long have you worked at AEM? What is your role/job?	
Are you in a supervisory position? If yes, how many employees do you supervise? How many are Inuit?	
What is your experience before AEM (mining experience, working with remote communities)	
What is your experience with Inuit employees? How many people do you supervise, work with? How long have you been supervising Inuit?	

Job Entry for Inuit

- 1. In your experience, what is the hiring process like for Inuit workers at AEM?
- 2. What is working well with the hiring process?
- 3. What are the challenges with the hiring process?
- 4. What can be improved about the hiring process?
- 5. If you are a supervisor or manager, do you feel that the hiring process is doing what it is supposed to do, that is, getting more Inuit working for AEM? Why or why not?

Working with Inuit

- 1. Can you describe your experience working with Inuit employees, in terms of job performance, attendance, attitudes towards work, group dynamics, etc.?
- 2. Do you feel there are any cultural or language barriers when working with Inuit? If so, do you have any suggestions on how to address them?
- 3. Have you taken any cultural awareness training during your time with AEM? If so, can you describe the experience? Was it helpful?
- 4. Can you describe your experience working at a remote site?
- 5. How much knowledge do you have of the IIBA that governs AEM's operations in the Kivalliq?

Turnover and Retention

- 1. What is your experience with turnover of Inuit employees at AEM?
- 2. What do you think would help reduce turnover of Inuit employees at AEM?
- 3. What do you think are the main reasons why Inuit leave their positions with AEM?

- 4. Do you feel AEM's exit interviews are helpful? Why or why not?
- 5. What do you think are the most important things to offer Inuit employees in order to improve employee retention?
- 6. What re-hiring supports are or could be provided to employees and their families?

Inuit advancement

- 1. Do you believe Inuit employees have adequate opportunities and supports to advance within AEM? Why or why not?
- What supports are in place for Inuit advancement, and do you think they are adequate or effective?
- 3. What barriers to Inuit advancement do you see?
- 4. Do you have any suggestions about how AEM could help more Inuit advance within the company?

Training and Development

- 1. Have you been involved in any training programs or initiatives targeted at Inuit employees or potential employees? If so, what worked well and what didn't work well about them?
- 2. If not, are you aware of any such training programs? Please describe them if so.
- 3. Are there any potential training programs or training needs that you would identify as important to Inuit employment, retention, and/or advancement within AEM?

Covid-19 Concerns

1. Finally, do you have any thoughts or reflections on how the current COVID-19 crisis is impacting the mining industry in Nunavut, and the employment of Inuit with AEM in particular?

Category 5 - Other Stakeholders

During the interview, I would like to ask you questions about your background and your experience with the Inuit workforce and the mining industry in the Kivalliq.

Do you have any questions before we get started?

Questions

1. Are you aware of any challenges that employers have in filling positions, worker availability, or employee retention in the mining industry? If so, what are they?

- 2. What do you see as potential barriers to recruitment, employment, and retention of Inuit in the mining industry?
- 3. Do you have any suggestions for potential solutions to employment barriers for Inuit?
- 4. Do you see absenteeism as a problem in the mining industry? If so, what do you think are some of the reasons for absenteeism?
- 5. Are there cultural or language barriers facing Inuit who wish to work in the mining industry?
- 6. What are the main reasons why Inuit may choose not to work or seek employment?
- 7. What supports are you aware of to assist Inuit who want to work but are having trouble finding employment?
- 8. What are the two top challenges or opportunities you think need to be addressed to advance Inuit employment?
- 9. Finally, do you have any thoughts or reflections on how the current COVID-19 crisis is impacting the mining industry in Nunavut, and the employment of Inuit with AEM in particular

APPENDIX B: NATIONAL OCCUPATION CLASSIFICATIONS

National Occupation Classification	Job Category	Skill Level
071 Managers in construction and facility operation and maintenance	Management	Skill level A: Occupations usually require university education
0714 Facility operation and maintenance managers	Management	Skill level A: Occupations usually require university education
081 Managers in natural resources production and fishing	Management	Skill level A: Occupations usually require university education
0811 Managers in natural resources production and fishing	Management	Skill level A: Occupations usually require university education
11 Professional occupations in business and finance	Professional	Skill level A: Occupations usually require university education
1121 Human resources professionals	Professional	Skill level A: Occupations usually require university education
12 Administrative and financial supervisors and administrative occupations	Skilled	Skill level B: Occupations usually require college education or apprenticeship training
1225 Purchasing agents and officers	Skilled	Skill level B: Occupations usually require college education or apprenticeship
- 122 - archasing agonio and omosts		training
152 Supply chain logistics, tracking and scheduling co- ordination occupations	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation- specific training
1524 Purchasing and inventory control workers	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation- specific training
21 Professional occupations in natural and applied sciences	Professional	Skill level A: Occupations usually require university education
2113 Geoscientists and oceanographers	Professional	Skill level A: Occupations usually require university education
2115 Other professional occupations in physical sciences	Professional	Skill level A: Occupations usually require university education
2143 Mining engineers	Professional	Skill level A: Occupations usually require university education
2154 Land surveyors	Professional	Skill level A: Occupations usually require university education
22 Technical occupations related to natural and applied sciences	Skilled	Skill level B: Occupations usually require college education or apprenticeship training
2212 Geological and mineral technologists and technicians	Professional	Skill level A: Occupations usually require university education
30 Professional occupations in nursing	Professional	Skill level A: Occupations usually require university education
3012 Registered nurses and registered psychiatric nurses	Professional	Skill level A: Occupations usually require university education
40 Professional occupations in education services	Professional	Skill level A: Occupations usually require university education
4021 College and other vocational instructors	Professional	Skill level A: Occupations usually require university education
41 Professional occupations in law and social, community and	Professional	Skill level A: Occupations usually require university education
government services		
4161 Natural and applied science policy researchers, consultants and program officers	Skilled	Skill level B: Occupations usually require college education or apprenticeship training
42 Paraprofessional occupations in legal, social, community and education services	Skilled	Skill level B: Occupations usually require college education or apprenticeship training
4212 Social and community service workers	Skilled	Skill level B: Occupations usually require college education or apprenticeship training

National Occupation Classification	Job Category	Skill Level
63 Service supervisors and specialized service occupations	Skilled	Skill level B: Occupations usually require college education or apprenticeship
		training
6322 Cooks	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation-
		specific training
65 Service representatives and other customer and personal services	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation-
occupations		specific training
6541 Security guards and related security service occupations		Skill level D: On-the-job training is usually provided for occupations
	Unskilled	
67 Service support and other service occupations, n.e.c.	Unskilled	Skill level D: On-the-job training is usually provided for occupations
6711 Food counter attendants, kitchen helpers and related support	Unskilled	Skill level D: On-the-job training is usually provided for occupations
occupations		
6733 Janitors, caretakers and building superintendents	Unskilled	Skill level D: On-the-job training is usually provided for occupations
72 Industrial, electrical and construction trades	Skilled	Skill level B: Occupations usually require college education or apprenticeship
		training
7237 Welders and related machine operators	Skilled	Skill level B: Occupations usually require college education or apprenticeship
		training
7242 Industrial electricians	Skilled	Skill level B: Occupations usually require college education or apprenticeship
		training
7251 Plumbers	Skilled	Skill level B: Occupations usually require college education or apprenticeship
		training
7271 Carpenters	Skilled	Skill level B: Occupations usually require college education or apprenticeship
		training
73 Maintenance and equipment operation trades	Skilled	Skill level B: Occupations usually require college education or apprenticeship
		training
7311 Construction millwrights and industrial mechanics	Skilled	Skill level B: Occupations usually require college education or apprenticeship
		training
7312 Heavy-duty equipment mechanics	Skilled	Skill level B: Occupations usually require college education or apprenticeship
		training
7372 Drillers and blasters - surface mining, quarrying and	Skilled	Skill level B: Occupations usually require college education or apprenticeship
construction		training
74 Other installers, repairers and servicers and material handlers	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation-
7450 M	6	specific training
7452 Material handlers	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation-
		specific training
75 Transport and heavy equipment operation and related	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation-
maintenance occupations		specific training

National Occupation Classification	Job Category	Skill Level
7521 Heavy equipment operators (except crane)	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation-
		specific training
76 Trades helpers, construction labourers and related occupations	Unskilled	Skill level D: On-the-job training is usually provided for occupations
7611 Construction trades helpers and labourers	Unskilled	Skill level D: On-the-job training is usually provided for occupations
82 Supervisors and technical occupations in natural resources,	Skilled	Skill level B: Occupations usually require college education or apprenticeship
agriculture and related production		training
8221 Supervisors, mining and quarrying	Skilled	Skill level B: Occupations usually require college education or apprenticeship
		training
8231 Underground production and development miners	Skilled	Skill level B: Occupations usually require college education or apprenticeship
		training
84 Workers in natural resources, agriculture and related production	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation-
		specific training
8411 Underground mine service and support workers	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation-
		specific training
86 Harvesting, landscaping and natural resources labourers	Unskilled	Skill level D: On-the-job training is usually provided for occupations
8614 Mine labourers	Unskilled	Skill level D: On-the-job training is usually provided for occupations
923 Central control and process operators in processing and	Skilled	Skill level B: Occupations usually require college education or apprenticeship
manufacturing		training
9231 Central control and process operators, mineral and metal	Skilled	Skill level B: Occupations usually require college education or apprenticeship
processing		training
94 Processing and manufacturing machine operators and related	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation-
production workers		specific training
9411 Machine operators, mineral and metal processing	Semi-skilled	Skill level C: Occupations usually require secondary school and/or occupation-
		specific training
96 Labourers in processing, manufacturing and utilities	Unskilled	Skill level D: On-the-job training is usually provided for occupations
9611 Labourers in mineral and metal processing	Unskilled	Skill level D: On-the-job training is usually provided for occupations