



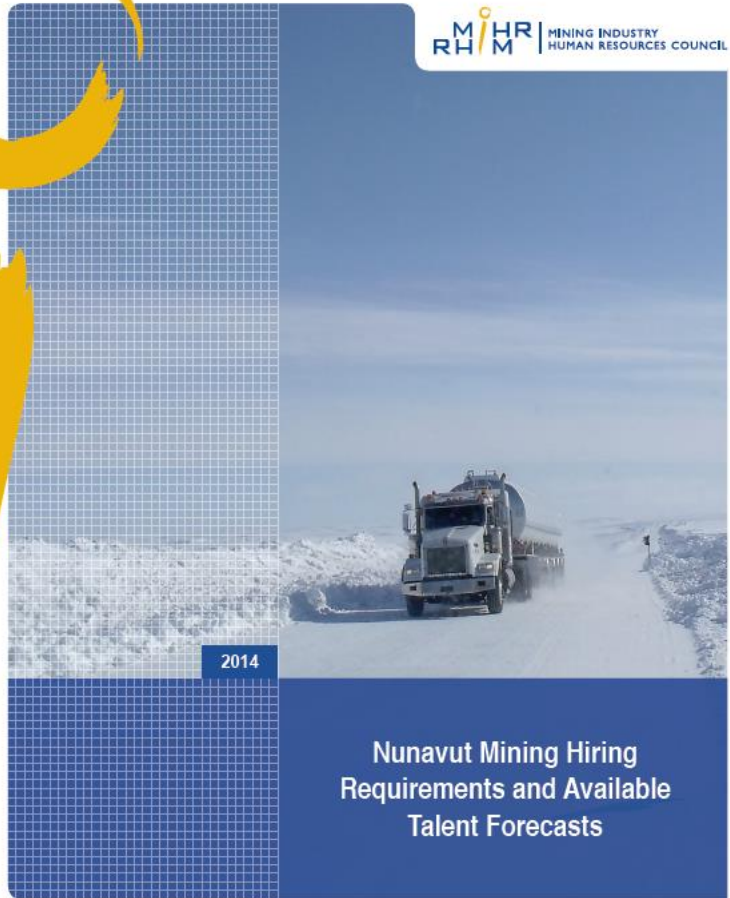
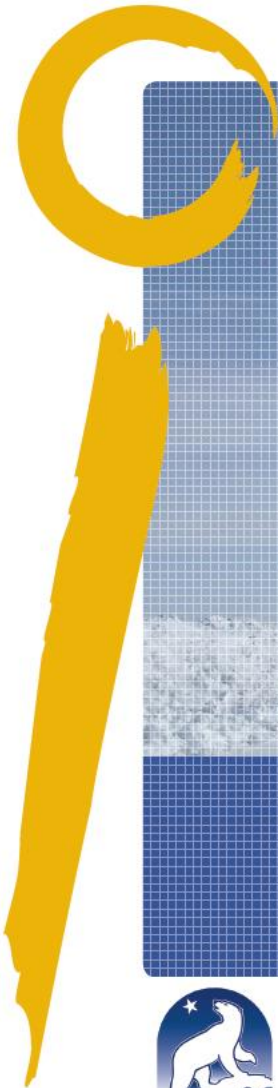
April 8, 2014

Nunavut Mining Labour Market Forecasts

2014 Nunavut Mining Symposium

Nunavut Mining Labour Market Project

- Provide a detailed overview and forecast of the mining labour market in Nunavut.
- Include a gap analysis of hiring requirements (demand) and available talent (supply) for Nunavut.
- Provide a summary and assessment of the key workforce issues and challenges in Nunavut's mining sector.



2014

**Nunavut Mining Hiring
Requirements and Available
Talent Forecasts**



The Need and the Challenge

- Skills and labour shortages are among the greatest threats to the future success of the mining industry in Canada and Nunavut.
- The need for Information on Nunavut's current and future mining labour market.
- Understanding how skills and labour shortages impact Nunavut provides the foundation for decision making by industry, communities, education providers, and governments.

Main Activities

- Background research, literature review, data collection, and local labour market analysis.
- Survey and interviews with local exploration, mining, and support services employers and contractors.
- Construct and validate a sub-sector model of employment and hiring requirements, with reporting for 3 sectors.
- Develop, validate, and report on model of available talent for Nunavut.
- Conduct gap analysis for broad occupational categories.

Mining Industry & Labour Market Trends

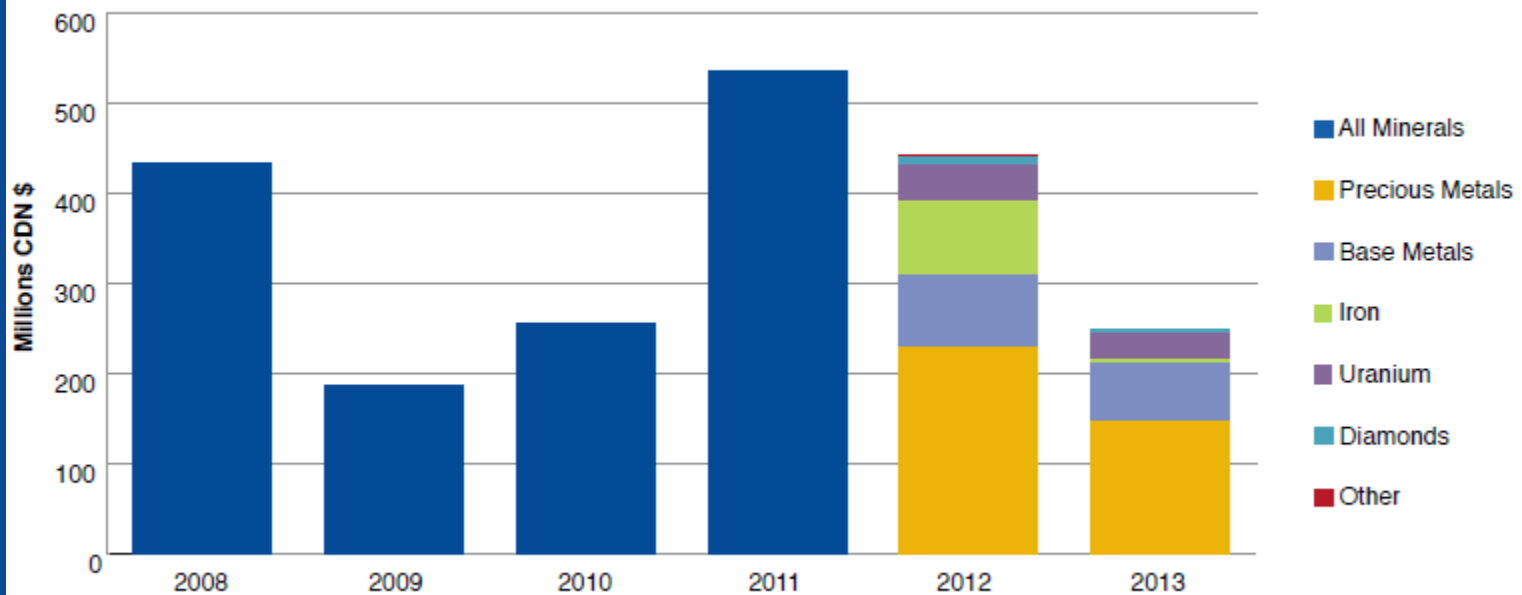


Industry Definition

- MiHR forecasts include
 - Exploration and Advanced Development
 - Mining and Quarrying
 - Support Services and Contractors (for exploration and mining)
 - Mineral Processing

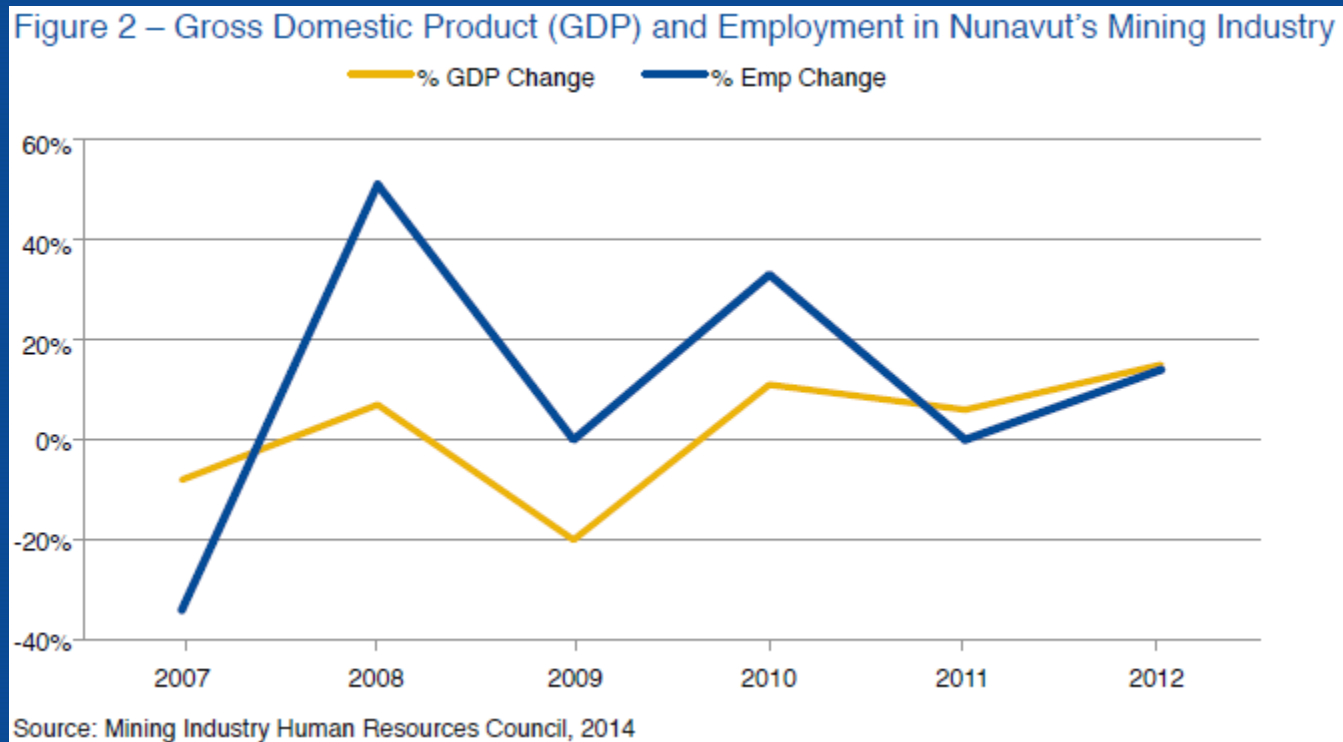
Exploration Expenditures in Nunavut by Commodity

Figure 4 – Value of Mineral Exploration and Deposit Appraisal Activity in Nunavut, 2008 to 2013

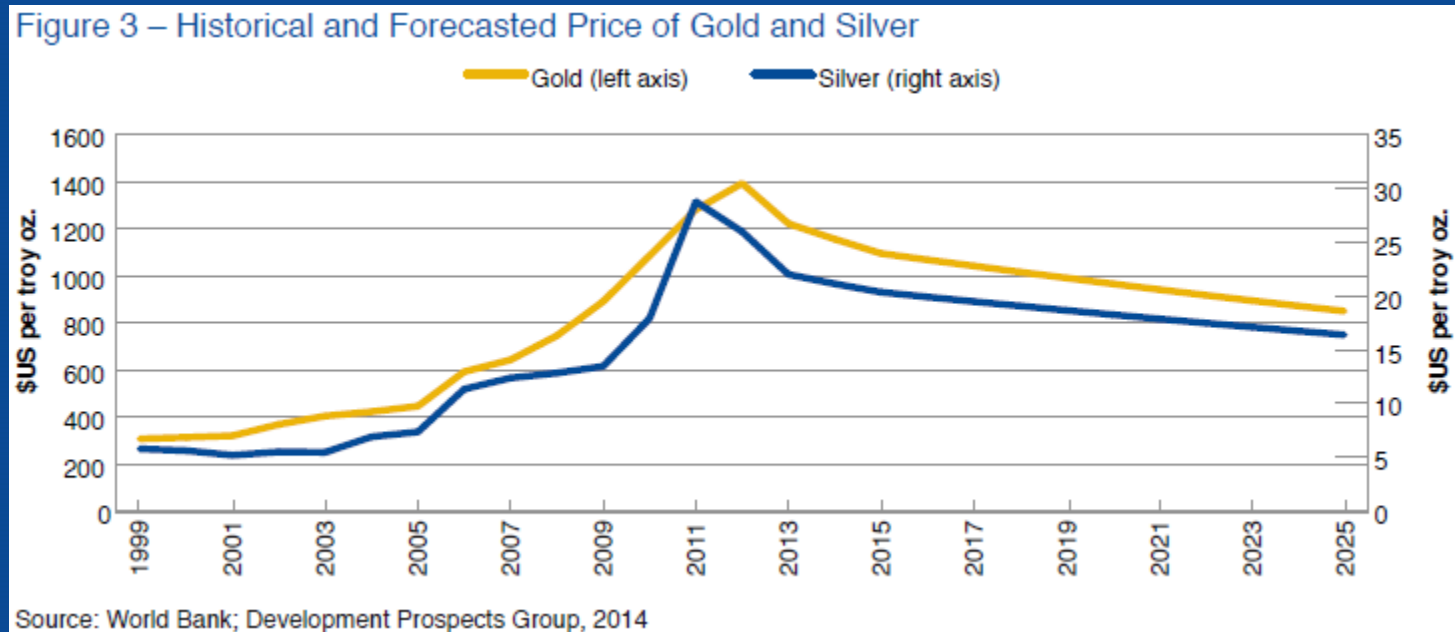


Source: Natural Resources Canada; Mining Industry Human Resources Council, 2013

Nunavut's Mining GDP and Employment

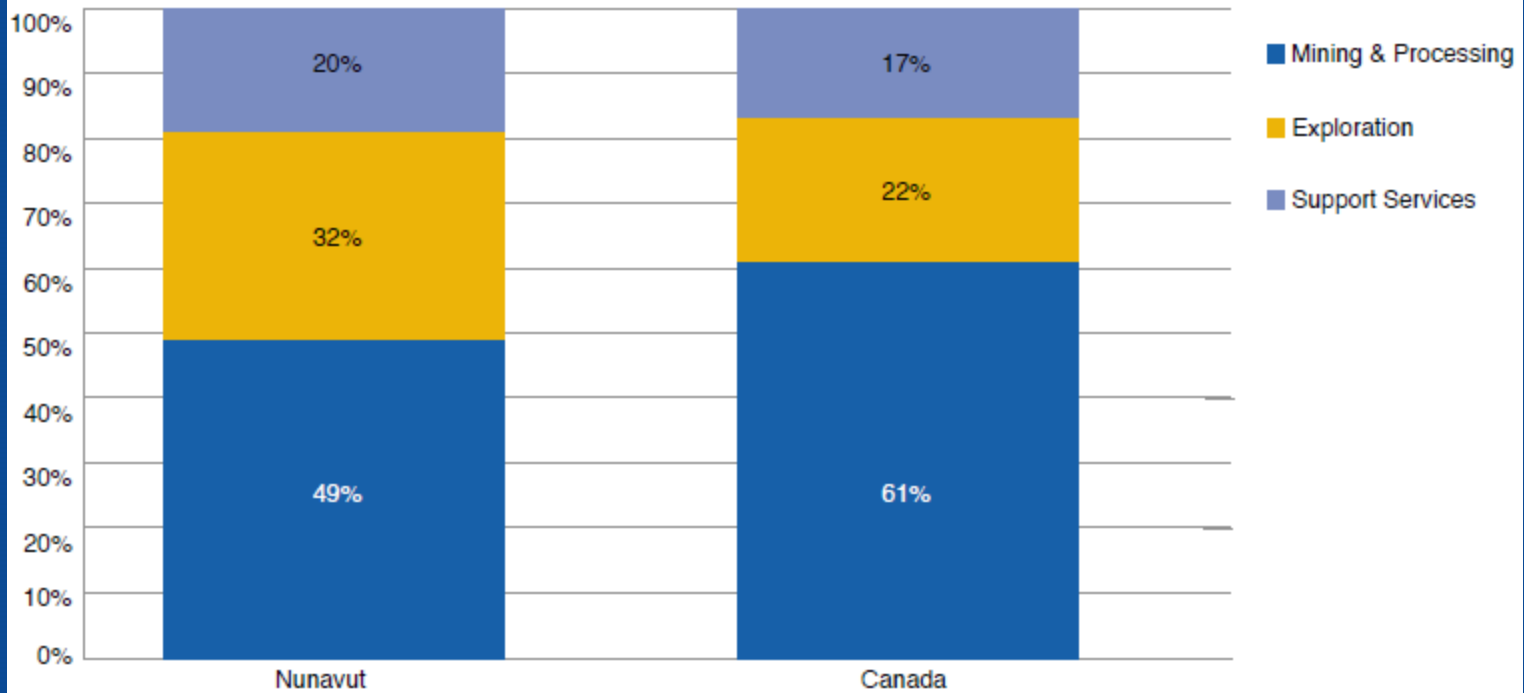


Historical and Forecasted Price of Gold and Silver



2013 Employment in Nunavut Mining Sub-sectors

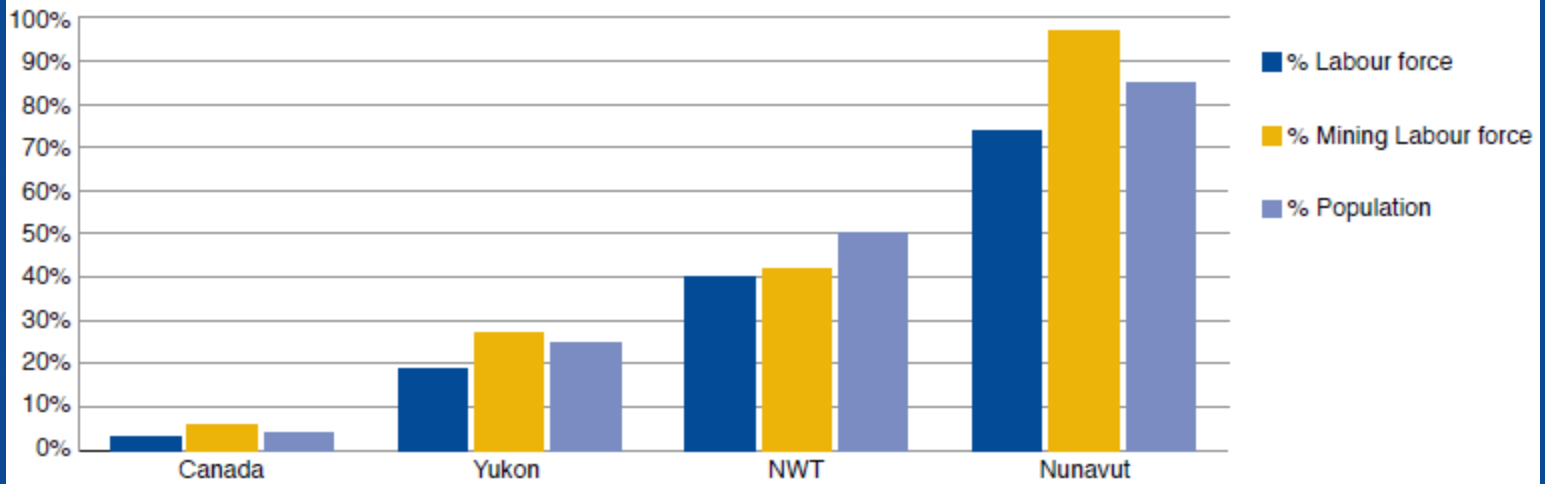
Figure 5 – Employment in Mining Sectors in 2013, Nunavut and Canada



Source: Mining Industry Human Resources Council, 2014

Aboriginal Representation in the Local Labour Force

Figure 9 – Aboriginal Participation in Mining, Canada and Northern Territories, Local Labour Forces, 2011

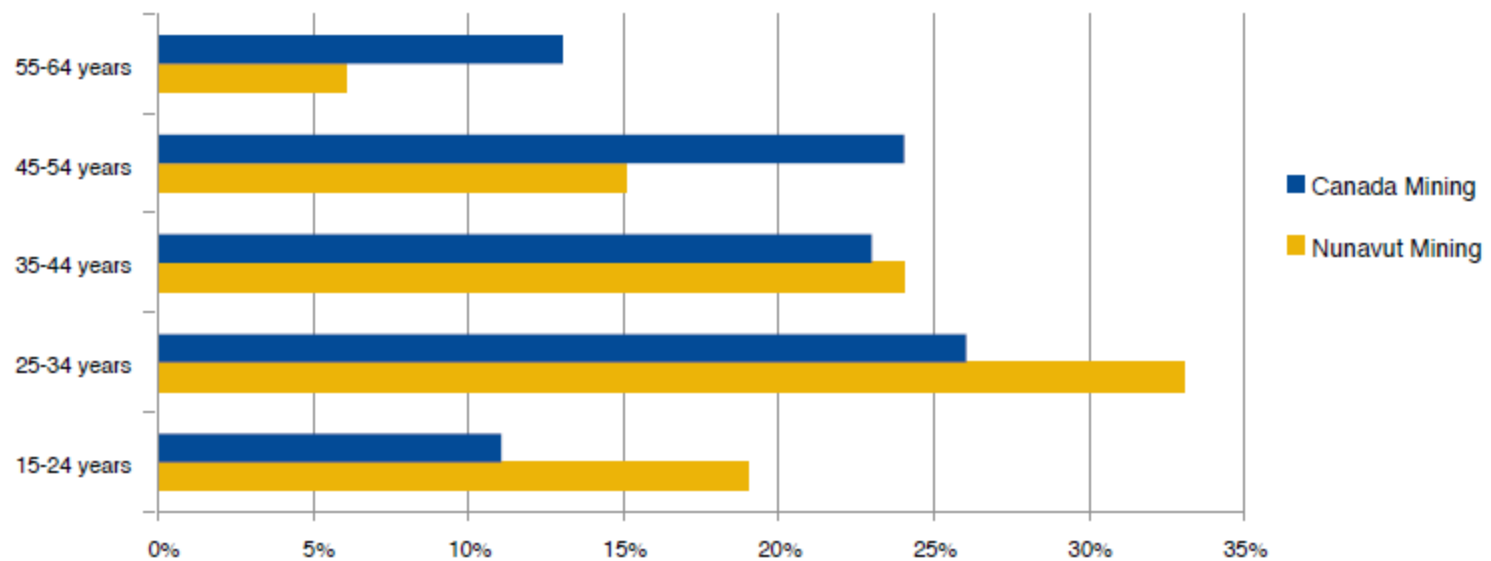


Source: Mining Industry Human Resources Council, 2014

Nunavut Mining Labour Market Trends

Age Profile

Figure 6 – Age Profile of the Mining Labour Force, Canada and Nunavut, 2011



Source: Mining Industry Human Resources Council, 2014

Overview of MiHR's Labour Market Forecasts



MiHR's Forecasting: Three Main Parts

- 1. Hiring Requirements
- 2. Available Talent
- 3. Gap Analysis

1. Hiring Requirements

2. Available Talent

3. Gap Analysis

- How many people does the industry need to hire over the next 10 years?

MiHR Hiring Requirements Forecast

- Net change in employment
- Replacement requirements
 - Retirement
 - Others
- Three scenarios (baseline, contractionary, and expansionary)
- 10-year period

Nunavut's Cumulative Hiring Requirements Forecast

Table 1 – Cumulative Hiring Requirements Forecasts, by Scenario – to 2024

	Net Change in Employment	Replacement Requirements		Cumulative Hiring Requirements 2015
		Retirement	Non-Retirement	
Contractionary	-380	240	90	-50
Baseline	30	400	690	1,120
Expansionary	180	570	1,080	1,820

Source: Mining Industry Human Resources Council, 2014

*Note that numbers may not add perfectly due to rounding. Also note that hiring requirements do not translate to new job growth; they reflect the combination of net change in employment and replacements.

Nunavut's Cumulative Hiring Requirements Forecast by Industry Sector

Table 5 – Cumulative Hiring Requirements Forecast, by Industry Sector, Baseline Scenario – to 2024

	Employment in 2013	Net Change in Employment	Replacement Requirements		Cumulative Hiring Requirements 2015
			Retirement	Non-Retirement	
Mining	1,075	110	220	350	680
Mining Support Services	440	30	70	140	240
Mineral Exploration	700	-110	100	200	180
Total Mining (All three Sub-Sectors)	2,215	30	400	690	1,120

Source: Mining Industry Human Resources Council, 2014

*Note that numbers may not add perfectly due to rounding. Also note that the Statistics Canada industry sector definitions and classification schemes constrain some of the data analysis; "exploration" and "support services" may include or exclude activities that the sector would categorize differently—for example, drilling services are counted under "support services" and assay laboratories are counted under "exploration."

Nunavut's Cumulative Hiring Requirements Forecast by Occupational Category

Table 3 – Cumulative Hiring Requirements Forecast, by Broad Occupational Categories, Baseline Scenario – 2016, 2019, 2024

	Cumulative Hiring Requirements		
	2016	2019	2024
Trades and Production Occupations	130	280	505
Professional and Physical Sciences Occupations	15	30	60
Human Resources and Financial Occupations	<5	<5	5
Support Workers	20	40	80
Technical Occupations	10	20	60
Supervisors, Coordinators, and Foremen	20	35	80
All Other Occupations	105	195	330
Total	300	600	1,120

Source: Mining Industry Human Resources Council, 2014

1. Hiring Requirements

2. Available Talent

3. Gap Analysis

- How many people will become available to offset the hiring requirements over the next 10 years?

Available Talent Forecast Methodology

- Occupation forecast
 - 66 key mining occupations
- The main sources of new entrants include:
 - school leavers (high school, PSE)
 - net international migration
 - net interprovincial migration
 - and “others”, such as people changing occupations and those re-entering the workforce after a temporary absence.

Available Talent for Selected Occupations

Figure 14 – An Illustration of the Labour Pool and Available Talent



Source: Mining Industry Human Resources Council, 2014

Nunavut's Available Talent Forecast

Mining's Share of Selected Occupations

Table 6 – Cumulative Available Talent, All Industries and Mining,
42 Occupations – 2016, 2019, 2024

	2016	2019	2024
Total entrants for select occupations, for all industries	340	710	1,280
Mining's share of entrants for select occupations (assuming historical rate of attraction)	20	60	120

Source: Mining Industry Human Resources Council, 2014

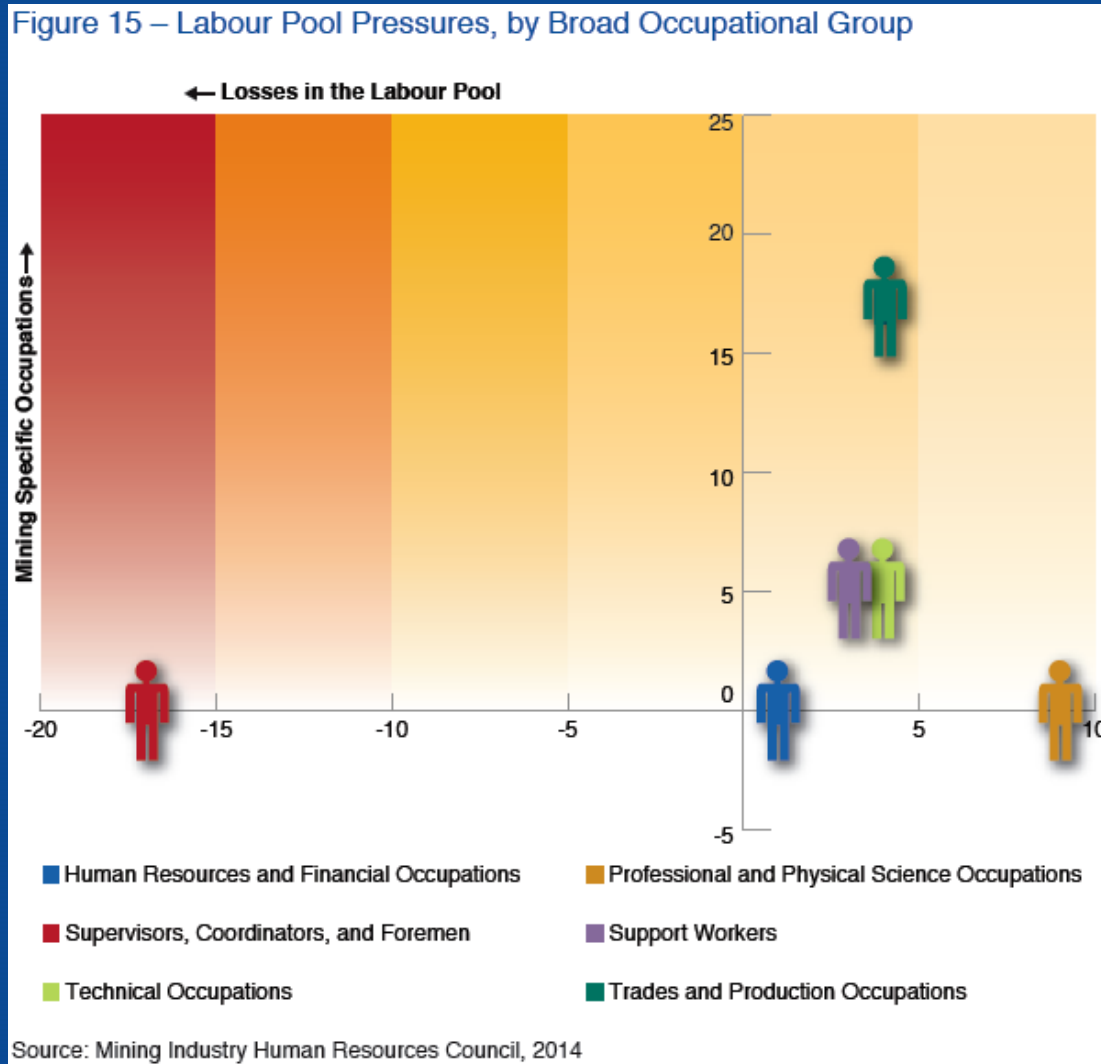
Nunavut's Available Talent Forecast by Occupational Category

Table 7 – Cumulative Available Talent, by Broad Occupational Categories – to 2024

	Mining's Share of Available Talent (Number of Workers)	Total Available Talent, All Industry's (Number of Workers)	Mining's Historical Share of Available Talent (Per cent)
Trades and Production Occupations	100	660	15%
Professional and Physical Sciences Occupations	< 5	40	< 1%
Human Resources and Financial Occupations	< 5	220	< 1%
Support Workers	10	280	4%
Technical Occupations	< 5	20	< 1%
Supervisors, Coordinators, and Foremen	< 5	60	< 1%

Source: Mining Industry Human Resources Council, 2014

Labour Pool Pressures by Occupations



1. Hiring Requirements
2. Available Talent
- 3. Gap Analysis**

- The difference between hiring requirements and available talent

Nunavut: The Gap by Occupational Category – to 2024

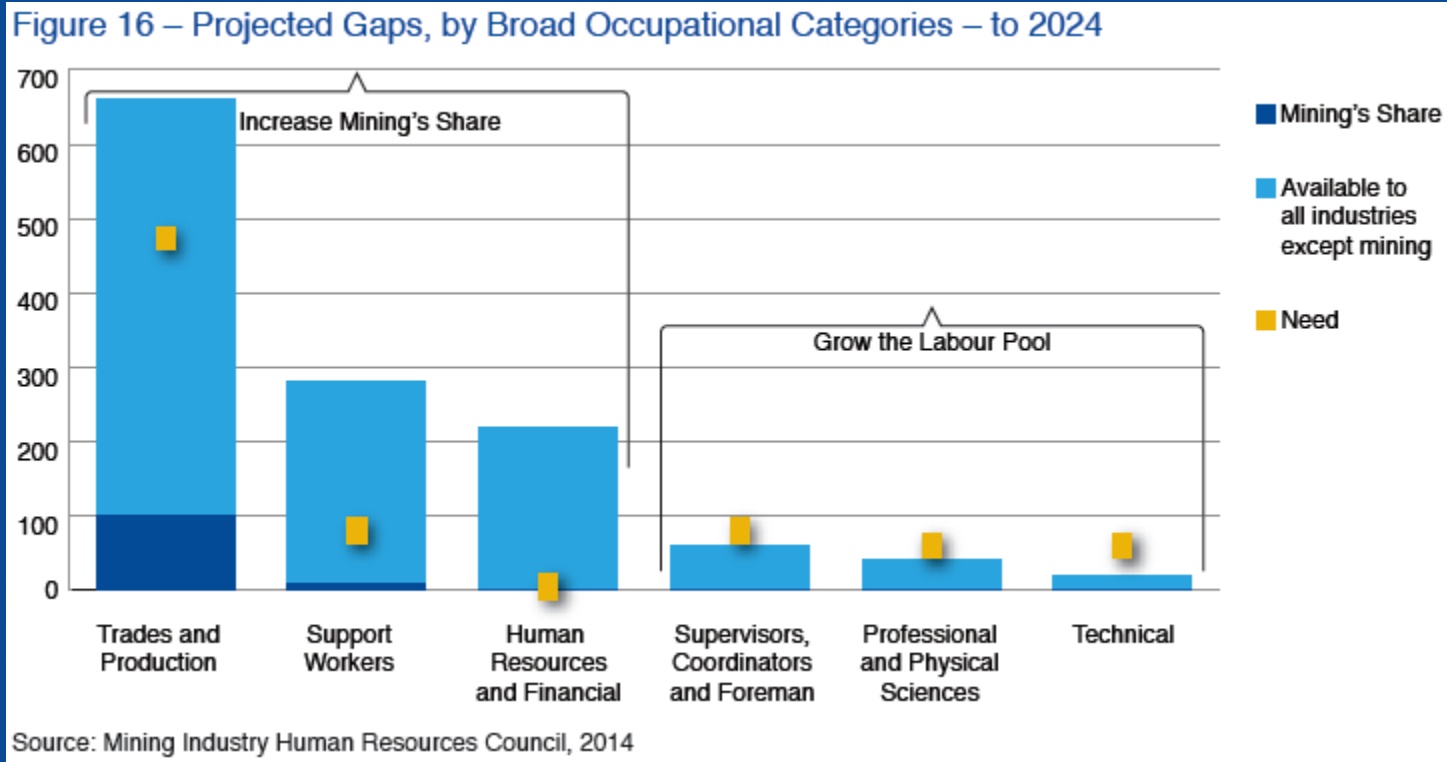
Table 8 – The Gap and Challenge, by Broad Occupational Categories – to 2024

	The Need	Available Talent & Gap		The Challenge		
	Cumulative Hiring Requirements	Available Talent – Mining's Share	Gap	Total Available Talent – All Industries	Mining's Share	Mining's Required Share
Trades and Production Occupations	505	100	-405	660	15%	77%
Professional and Physical Sciences Occupations	60	< 5	-60	40	< 1%	150%
Human Resources and Financial Occupations	5	< 5	-5	220	< 1%	2%
Support Workers	80	10	-70	280	4%	29%
Technical Occupations	60	< 5	-60	20	< 1%	300%
Supervisors, Coordinators, and Foremen	80	< 5	-80	60	< 1%	133%

Source: Mining Industry Human Resources Council, 2014

*Note: To ensure appropriate comparisons, these figures do not include the full industry-wide hiring requirements forecast, but rather only the forecast for broad occupational groups to be consistent with available talent forecasts.

Projected Gaps by Occupational Category - to 2024



Addressing the Gaps

- The nature of the gaps differ among occupations—variety of approaches needed to address gaps.
- In some cases, the industry must aim to attract more people from an existing pool of talent.
- In other cases, the industry must aim to grow the size of a talent pool that is otherwise too small to meet its needs (e.g., through partnerships and support for education and training, labour market transition programs, immigration and aboriginal training programs).
- In all cases, the industry must strive to make the best possible use of the talent already involved with the industry (e.g., retaining mature workers and re-engaging the retired workforce).

Thank you
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