Mining Industry Workforce Information Network: 2011 Yukon Exploration Survey

The Mining Industry Human Resources Council (MiHR), in partnership with the Yukon Chamber of Mines (YCM) and the Centre for Northern Innovation in Mining (CNIM) at Yukon College, is conducting a survey to better understand the labour market conditions in the territory's minerals exploration, placer and service related industry. Earlier in 2011, MiHR - in collaboration with its Yukon Partners - surveyed the Yukon's producing mines and their contractors. Findings from that initial survey showed that the Yukon will face significant skills shortages and will be faced with substantial hiring and training requirements over the next decade.

However, the Yukon Producer's survey also showed significant and unique challenges that Yukon will face compared to the mining industry in Canada. To understand the reality and specifics of Yukon's labour force it is of ultimate importance to include in future forecasts the Yukon's exploration sector, placer sector and service-related sector to improve the forecast for Yukon's hiring and training requirements. The resulting information will be used to validate and verify recent modeling work underway at MiHR to better incorporate mineral exploration into its annual forecasts of industry hiring requirements.

At the national and provincial level, forecasts prepared by MiHR have shown that employers will face significant hiring requirements over the next decade. This need is primarily being driven by the age of the workforce and the looming retirements of large numbers of experienced workers, but also by rapid expansion and development activities. The Council has recently undertaken research work to better understand trends such as these in mineral exploration.

The Survey

We request your participation in this survey on exploration, placer and service-related employment trends. Your input on the situation in your organization is essential to us in providing relevant labour market forecasts. The following survey asks specific questions about the occupational structure of the workforce, retirement projections and other parameters that will impact future hiring needs. The information you provide will help to validate and update labour market information (LMI) obtained through various other sources. We will also use information from this survey to provide customized, relevant, exploration-specific LMI in MiHR's hiring requirements forecasts. Your participation is optional.

<u>Should you Please report all workforce and employment data as of December 31, 2011 and return completed survey to MiHR by Monday April 30, 2012</u>.

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CONFIDENTIALITY

Information collected in this survey will be treated as strictly confidential and managed in accordance with the guidelines laid out in MiHR's Privacy and Research Ethics Policies. Data will be reported only in aggregate and no individual will be identified as participating in this survey without prior written consent. Data will be kept in a secure location at MiHR and not used for any other purposes without prior written consent. Copies of MiHR's Research Policies are available upon request.

If you have any questions about the survey or the research in general, please contact:

Martha Roberts
Director of Research
Mining Industry Human Resources Council (MiHR)
613-270-9696 x21
research@mihr.ca

Instructions for Completing the Survey

This questionnaire uses Acrobat forms. To fill it out please download the attached PDF file, save it to your desktop, and open it using Acrobat Reader (or other Adobe versions). If you do not have a PDF viewer, Acrobat Reader is available free of charge from: http://get.adobe.com/reader/.

You can navigate through, save, open/close, and print the questionnaire as you would any other document. To fill in your responses, simply point and click on your selection, using your mouse, or place your cursor over a section to type your written responses, as needed.

Please save your questionnaire to your desktop as you fill it out—this ensures that you have a copy for your records.

Once complete, please click on the "**Submit Form**" button that appears at the end of the survey. This will automatically submit your completed survey data. These final few steps will vary, as follows, depending on which Adobe software you are using.

- If you are using **Adobe Acrobat Reader**, when you click on the "Submit Form" button, a dialogue box will appear and prompt you to enter your email address and name. Next you will be prompted to select whether you would like to send your response from your desktop email application or from an internet email application. Depending on your security settings, you may also be asked to indicate "yes" (the middle button) to trust that the document is secure and send it out. (Responses are strictly confidential and will be sent to a private, secure MiHR email address).

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- If you are using **Adobe Acrobat 8.0 or 9.0, Standard or Professional versions**, the "Submit Form" button will automatically coordinate with your desktop email application or internet email, as per the preferences you have already set up.

Your participation is completely voluntary. We deeply appreciate your time!

Respondent Profile (Optional)

The information you provide here will be used only for purposes of contacting you in the event that a clarification is needed on the information provided. You will not be held personally responsible for the information provided, nor will you be identified in any reporting of the results.

Title: ☐Mr. ☐Mrs. ☐Ms. ☐Dr.

First name: _____

Last name: _____

Job title:_____

Organization name: _____

Organization address: _____

City: _____ Province: _____ Postal Code: _____

Phone number: _____

Email address: _____

☐ **Please include my company's name in a list of participating organizations.**

A. Organization Profile

Please respond only for your organization's current situation. (If you are responding for an advanced development project, please fill in information for your current workforce.)

A1. Name of organization: _____

A2. Location of organization: _____

A3. Type of organization:

☐ Exploration
☐ Advanced Development
(Expected date of commencement of production activities (calendar year) _____)
☐ Placer Mining
☐ Exploration, Mining and Placer Mining Support Service or Contractor
(Estimated % of business working in or with minerals hard-rock exploration and mining sector: _____)

(Estimated % of business working in or with Placer Mining: _____)

☐ Governments and Non-Profit Organizations
(Estimated % of total activities working in or with minerals hard-rock exploration and mining sector: _____)

(Estimated % of total activities working in or with Placer Mining: _____)

☐ Service Sector (non-governmental and for profits)
(Estimated % of total business working in or with minerals hard-rock exploration and mining sector: _____)

(Estimated % of total business working in or with Placer Mining: _____)

A4. Which of the following activities does your organization carry out? (**Please check all that apply**).

☐ Exploration
☐ Surveying and mapping
☐ Prospecting
☐ Drafting, GIS
☐ Drilling
☐ Expediting
☐ Environment/Engineering
☐ Placer Mining
☐ Exploration Contracting
☐ Camp setup and management
☐ Laboratory Services
☐ Earth works, trenching, blasting
☐ Consulting
☐ Transportation
☐ Construction
☐ Telecommunication
☐ Other (Please specify):_____

A5. Which of the following commodities does your organization explore for? (**Please check all that apply**).

☐ Aggregate
☐ Coal
☐ Copper
☐ Diamonds
☐ Gold
☐ Iron ore
☐ Molybdenum
☐ Nickel
☐ Platinum
☐ Rare Earths
☐ Silver
☐ Lead
☐ Tungsten
☐ Uranium
☐ Zinc
☐ Other (Please specify): _____

A6. The current state of business conditions for your organization is generally:

☐ Favourable
☐ Neutral
☐ Unfavourable
☐ Don't know

A7. Over the next 12 months business conditions for your organization are expected to:

- ☐ Improve
- ☐ Stay the same
- ☐ Deteriorate
- ☐ Don't know

A8. Approximate exploration expenditures for 2011 (in Canadian $) _____

A.9 Approximate total Budget of your business/organization for 2011 (in Canadian $) (total operation, maintenance and capital expenses) _____

B. Workforce Profile

B1. How many individuals (i.e., number of individuals, or "headcount") are employed in your organization in the following categories?

Categories	# of Employees (head count) as of Dec. 31	# of Vacancies as of Dec. 31	Projected Hiring Requirements In:			Do not track this information
			2yrs	5yrs	10yrs	
Permanent full-time						
Permanent part-time						
Non-permanent full- or part-time employed during 2011 (Please include seasonal, casual, temporary or term employees. Do not include external independent contractors.)						
Long-term External Contractors (Estimate) retained during 2011						

Occupation	NOC(NOC-S)	# of Employees (head count) as of Dec. 31	# of Vacancies as of Dec. 31	Projected Hiring Requirements In:			Do not track this information
				2yrs	5yrs	10yrs	
Administrative clerks	1441 (B541)						
Archeologist							
Payroll	1432 (B532)						
Carpenters	7271 (H121)						
Chemists	2112 (C012)						
Construction estimators	2234 (C134)						
Construction managers	0711 (A371)						
Cooks	6242 (G412)						

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Occupation	NOC(NOC-S)	# of Employees (head count) as of Dec. 31	# of Vacancies as of Dec. 31	Projected Hiring Requirements In:			Do not track this information
				2yrs	5yrs	10yrs	
Drillers and blasters	7372 (H622)						
Engineers, Chemical	2134 (C034)						
Engineers, Civil	2231(C031)						
Engineers, Electrical and electronics	2133 (C033)						
Engineering managers/Project managers	0211 (A121)						
Engineers, Environmental	2131						
Engineers, Geological	2144 (C044)						
Engineers, Industrial and manufacturing	2141 (C041)						
Engineers, Mechanical	2132 (C032)						
Engineers, Metallurgical and materials	2142 (C042)						
Engineers, Mining	2143 (C043)						
Engineers, Steam	7351 (H221)						
Chemical technologists and technicians	2211(C111)						
Drafting technologists and technicians (CAD)	2253 (C153)						
Electrical and electronics engineering technologists and technicians	2241 (C141)						
Environmental technician/technologist	2212						
Instrumentation technicians/technologists	2233 (C133)						
Lab Technicians/technologist	2212						
Land surveyors, Land surveyor technologists/technicians	2254 (C054)						
Mapping and related technologists and technicians (GIS)	2255 (C155)						
Mechanical engineering technologists and technicians	2232 (C132)						
Electricians	7242 (H212)						
Industrial mechanic/millwright	7311 (H411)						
Plumbers	7251 (H111)						
Steamfitters, pipefitters	7252 (H112)						
Welders	7265 (H326)						

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Occupation	NOC(NOC-S)	# of Employees (head count) as of Dec. 31	# of Vacancies as of Dec. 31	Projected Hiring Requirements In:			Do not track this information
				2yrs	5yrs	10yrs	
Financial and investment analysts	1112 (B012)						
Financial auditors and accountants	1111 (B011)						
Financial managers	0111(A013,						
Geological and mining technologists and technicians	2212 (C112)						
Field/entry level support Positions: Field Exploration Assistant (core cutting, drill support, soil, stream sampling, line cutting, etc…) Exploration Camp Manager/assistant Environmental assistants Laboratory Workers							
GIS technologists and technicians							
Geologists, geochemists and geophysicists	2113 (C013)						
Heavy duty Mechanics	7312 (H412)						
Heavy equipment operators	7421 (H611)						
Human resources managers	0112 (A112)						
Specialists in human resources	1121 (B021)						
Information systems analysts	2171 (C071)						
Marketing/communications	0611 (A131)						
Mill (Surface) support worker	9611 (J214)						
Primary production managers	0811 (A381)						
Radiation Technicians/Technologist	2212						
Registered Nurses/Health	3152(D111)						
Safety Professional/officer	2263 (C163)						
Supervisors, mineral and metal processing/ General foreman/ Supervisor	9211 (J011)						
Supervisors, mining and quarrying	8221 (I121)						
Underground hard rock production and development miners specialized miners	8231(I131)						
Underground mine service and	8411 (I141)						
Other (Please list job titles and specify number of employees in each. Include a spreadsheet as needed).							

B1-A. Seasonal Employment/Camp Employment

B1-A1. Average length of employment for seasonal employees in 2011:

Average number of days: _____

Average hours/day: _____

B1-A2. What is the weekly work schedule/rotation in your camps?

☐ 2 weeks in / 2 weeks out
☐ 4 weeks in / 1 week out
☐ 3 weeks in / 1 week out
☐ 5 days in / 3 days out
☐ Other (Please specify): _____

B2. Which of the following types of services does your organization hire external contractors (individuals/firms) to perform? If you are a mining service or support company, which of the following types of services do you provide? (**Please check all that apply**).

☐ Geological/Mineral Experts or Specialists (physical scientists, engineers, technologists, technicians)
☐ Metallurgical experts or specialists (e.g., physical scientists, engineers, technologists, technicians)
☐ Exploration, surveying and mapping (e.g., cartographers, photogrammetrists, survey technicians)
☐ Exploration camp management and support personnel and services
☐ Computer/Information Specialists (e.g., CNC, CAD, industrial instruments, central control processes)
☐ Safety Specialists (e.g., rock and soil stabilization, ventilation, inspection, etc.)
☐ Non-mining specific engineering (e.g., civil, stationary, mechanical, electrical or chemical)
☐ Robotics, Automation and Communications
☐ Environmental specialists (e.g., physical scientists, engineers, technologists, technicians)
☐ Underground Drilling/Blasting/Boring/Tunneling
☐ Surface drilling (diamond drilling and RC
☐ Other technologies (e.g., fiber optics, ground cables, utilities, electricity, etc.)
☐ Satellite telecommunication and other remote telecom?
☐ Site Remediation/Reclamation services
☐ Heavy equipment operators and mechanics (e.g., crane, mineral extraction, mineral and metals processing, etc.)
☐ Education and training
☐ Road Transportation (e.g. truck drivers, etc…)
☐ Air Transportation (e.g. Fixed wings, Helicopters, etc…)
☐ Earth works and material-moving (e.g., excavation, road construction, trenching and blasting, etc.)

☐ General maintenance/Equipment maintenance
☐ Other (Please specify): _____

B3. Please indicate the proportion of your organization's permanent (full- and part- time) workforce and the proportion of the seasonal workforce that falls within the following age categories:

Age Categories	Proportion of Permanent Workforce	Proportion of Seasonal Workforce	Do not track
15to 24 years	____%	____%	
25 to 34 years	____%	____%	
35 to 44 years	____%	____%	
45 to 54 years	____%	____%	
55 to 64 years	____%	____%	
65 years+	____%	____%	

B4.What is the average age (in years) of your organization's current permanent (full- and part-time) employees?

_____

B5. Please indicate the proportion of your organization's current permanent (full- and part-time) and seasonal employees in the following categories.

Demographic Category	Proportion of Permanent Workforce	Proportion of Seasonal Workforce	Do not track
Women __	__%	____%	
New Canadians (relocated to Canada within the last 5 years)	____%	____%	
Temporary Foreign Workers	____%	____%	
Aboriginal Peoples (Inuit, Métis, First Nations)	____%	____%	
Persons with a Disability (mental, physical)	____%	____%	

B6. Please indicate the proportion of your organization's current permanent (full- and part-time) and seasonal employees in the following categories. This experience is with the exploration industry as a whole, not just your operation.

Experience/ Turnover Category	Proportion of Permanent Workforce	Proportion of Seasonal Workforce	Do not track
Have fewer than 12 months experience working in the mining industry	____%	____%	
Have between 1 year and 5yrs experience working in the mining industry	____%	____%	
Have between 6 year and 10yrs experience working in the mining industry	____%	____%	
Have between 11 year and 15yrs experience working in the mining industry	____%	____%	
Have more than 15yrs experience working in the mining industry	____%	____%	

B7a. Please estimate the percentage of your organization's current permanent (full- and part-time) employees that permanently reside in the Yukon: _____

B7b. Please estimate the percentage of your organization's current permanent (full- and part-time) employees that permanently reside in the Yukon who are Aboriginal: _____

B8a. Please estimate the percentage of your organization's 2011 seasonal employees that permanently reside in the Yukon: _____

B8b. Please estimate the percentage of your organization's 2011 seasonal employees that permanently reside in the Yukon who are Aboriginal: _____

B9a. Where do your permanent (full- and part-time) employees who **do not** permanently reside in the Yukon come from? (Please check all that apply and provide a n estimated proportion for your organization's current permanent full- and part-time employees).

☐ Alberta ____%
☐ British Columbia ____%
☐ Northwest Territories ____%
☐ Saskatchewan ____%
☐ Manitoba ____%
☐ Nunavut ____%
☐ Ontario ____%
☐ Quebec ____%
☐ New Brunswick ____%
☐ Nova Scotia ____%
☐ Prince Edward Island ____%
☐ Newfoundland and Labrador ____%
☐ Alaska ____%
☐ Other (Please specify): _____

B9b. Where do your 2011 seasonal employees who **do not** permanently reside in the Yukon come from? (Please check all that apply and provide an estimated proportion for your organization's 2011 seasonal employees).

☐ Alberta ____%
☐ British Columbia ____%
☐ Northwest Territories ____%
☐ Saskatchewan ____%
☐ Manitoba ____%
☐ Nunavut ____%
☐ Ontario ____%
☐ Quebec ____%
☐ New Brunswick ____%
☐ Nova Scotia ____%
☐ Prince Edward Island ____%
☐ Newfoundland and Labrador ____%
☐ Alaska ____%
☐ Other (Please specify): _____

B10a. Please indicate the proportion of your organization's current permanent (full- and part-time) employees in the following categories.

Highest Level of Education	Proportion of Yukon Resident Employees	Proportion of Aboriginal Employees	Proportion of non-Yukon Resident Employees	Do not track
Completed high school	____%	____%	____%	
Completed college diploma/degree program	____%	____%	____%	
Received certification for a trade	____%	____%	____%	
Completed university degree program	____%	____%	____%	

B10b. Please indicate the proportion of your organization's 2011 seasonal employees in the following categories.

Highest Level of Education	Proportion of Yukon Resident Employees	Proportion of Aboriginal Employees	Proportion of non-Yukon Resident Employees	Do not track
Completed high school	____%	____%	____%	
Completed college diploma/degree program	____%	____%	____%	
Received certification for a trade	____%	____%	____%	
Completed university degree program	____%	____%	____%	

B11a. Please indicate the proportion of your organization's current Aboriginal permanent (full- and part-time) employees in the following job categories.

Occupational Category of Aboriginal Employment	Proportion of Aboriginal Employees	Do not track
Trades and Labour Occupations	____%	
Professional and physical science occupations	____%	
Human resources and financial occupations	____%	
Support workers	____%	
Technical occupations	____%	
Supervisors, coordinators and foremen	____%	

B11b. Please indicate the proportion of your organization's current Aboriginal seasonal employees in the following job categories.

Occupational Category of Aboriginal Employment	Proportion of Aboriginal Employees	Do not track
Trades and Labour Occupations	____%	
Professional and physical science occupations	____%	
Human resources and financial occupations	____%	
Support workers	____%	
Technical occupations	____%	
Supervisors, coordinators and foremen	____%	

C. Turnover and Separation

Definitions:
Voluntary turnover is defined as employee initiated departures. This excludes retirements, dismissals, severance, redundancies, transfers, and leaves (e.g., disability, parental, sabbatical, etc).
Overall turnover comprises voluntary turnover + involuntary turnover (i.e., turnover initiated by the employer, such as in the case of termination)

Calculating turnover rates: Consider only your permanent full- and part- time employees and calculate:
[# of exits / average headcount for the year] x 100

C1. What are your organization's rates of turnover/separation over the last 12 months? (**Please exclude external independent contractors**).

Type of turnover or separation	Proportion	Do not track
Overall turnover	____%	
Voluntary turnover (i.e., employee initiated, not including leaves of absence, illness, retirement, etc.)	____%	
Retirement rate	____%	
Non-retirement exit rate (i.e., all other separation)	____%	

C2. When employees depart your organization, where do they generally go to?

☐ Another exploration/contracting organization in the Yukon
☐ Another type of company in the Yukon
☐ Another type of company in Canada
☐ Another exploration/contracting organization in Canada (Please specify the main province(s): _____).
☐ Another type of company in the world (Please specify the main industry sector(s) and where :_____).
☐ Another exploration/contracting organization in the world (Please specify what country :_____)
☐ Don't know

C3. What are your organization's estimates of turnover/separation for your **seasonal employees** in 2011? (**Please exclude external independent contractors**). Please estimate the % of your seasonal employees that left your organization in 2011 before the end of the season and that you had or tried to replace.

Type of turnover or separation	Proportion	Do not track
Overall turnover	____%	
Voluntary turnover (i.e., employee initiated, not including leaves of absence, illness, retirement, etc.)	____%	
Retirement rate	____%	
Non-retirement exit rate (i.e., all other separation)	____%	

C4. When **seasonal** employees depart your organization, where do they generally go to?

☐ Another exploration/contracting organization in the Yukon
☐ Another type of company in the Yukon
☐ Another type of company in Canada
☐ Another exploration/contracting organization in Canada (Please specify the main province(s): _____).
☐ Another type of company in the world (Please specify the main industry sector(s) and where: _____).
☐ Another exploration/contracting organization in the world (Please specify what country: _____).
☐ Don't know

C5. What is the average age of retirement at your organization? _____

C6. What proportion of your organization's **permanent (full- and part-time)** workforce is, or will be, **eligible** for retirement in the following time frames? And what proportion is **expected** to retire?

Time Period	Proportion Eligible	Proportion Expected	Do not track
Currently	____%	____%	
In the next 12 months	____%	____%	
In the next 1 to 2 years	____%	____%	
In the next 3 to 5 years	____%	____%	

C7. What are the five positions/occupations that your organization has the most difficulty hiring for, or filling? Please indicate if the position is permanent or seasonal and rank how urgently the position(s) needs to be filled.

Difficult Positions to Hire For	Permanent or Seasonal?	Not very urgent (1)	(2)	Somewhat urgent (3)	(4)	Extremely urgent (5)
____						
____						
____						
____						
____						

Thank you for your input!

Please visit www.mihr.ca to learn more about this and other exciting research projects.