



STRENGTHENING MINING'S TALENT ALLOY

Exploring **Immigrant** Inclusion



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Executive Summary

The Mining Industry Human Resources Council (MiHR) has undertaken a focused research program designed to help the sector meet its needs for talent – in particular through greater engagement of key target labour supply groups. One of these groups is immigrants to Canada – a source of talent that is currently under-represented in the sector and presents an important opportunity. Currently immigrants comprise only 13 per cent of Canada’s mining workforce – well below the Canadian workforce figure of 22 per cent, and lower than other resource sectors.

To better engage this talent pool, the current research compiles insights of employers, immigrant serving agencies and immigrants themselves regarding several commonly found barriers to immigrants’ entry and advancement within the mining sector. It also begins to explore some of the dynamics of career pathways for immigrants within the sector. Evidence is drawn from previous research and best practices, a survey and interviews with mining employees, and consultations with stakeholders knowledgeable about the immigrant labour force and the needs of Canada’s mining sector.

Beginning with barriers to entry into the sector, this research and the results of MiHR’s most recent labour market information highlight some key challenges related to immigrants’ limited awareness of opportunities and mining careers. Employers do not generally see immigrants as a priority source of talent to meet their hiring needs. Furthermore, employers do not rate awareness of the industry as an important consideration in facilitating the employment of immigrant talent. Perhaps as a consequence of these employer perspectives, immigrants and immigrant serving agencies reported that general information about the mining industry is not easily accessible to them. Immigrant serving agencies commented that mining employers are not as proactive with them as are other industries.

What do we mean by “immigrant”?

For the purpose of this research, when we talk about immigrants, we are referring to people who hold, or have previously held, permanent resident visas. These individuals are not “temporary foreign workers,” or on inter-company transfers – they are individuals who have Canadian citizenship or are working towards it.

Lacking more effective information channels, immigrant mining workers emphasized the importance of personal networks in gaining entry to the sector. Yet newcomers to Canada seldom have a robust set of contacts within the industry.

Other commonly seen barriers to entry were confirmed and explored further through the experiences of immigrants already working in the sector. Those who were interviewed highlighted the challenges in gaining recognition for their skills and credentials, and consistent with a large body of earlier research, the need for Canadian work experience was seen as a barrier.

Once hired, immigrants continue to face challenges. Almost half of the nearly 300 mining workers who responded to the survey – both immigrants and Canadian-born – believe that it is harder for an immigrant to succeed in their workplace. Cross-cultural differences in workplace practices or interpersonal interactions have a subtle but powerful effect. Immigrants themselves are a diverse group – in age, industry expertise, gender, language skills, region of origin, and so on. Their personal characteristics intersect with systemic barriers to powerfully shape careers. In particular, women immigrants seeking to succeed in mining face additional barriers as immigrant challenges and gender issues in the industry intersect.



The industry's reality of remote and rural work locations further amplifies the hurdles faced by newcomers, including accessing credit, housing, and spousal employment. However, the industry's use of a "commuter workforce" in Fly-in Fly-out (FIFO) operations can also offer an opportunity for immigrants who settle in urban centres to benefit from a large city's cultural connections and various other supports while still having meaningful employment in the mining industry.

Effective inclusion of immigrants can offer important benefits to mining companies. Transferable skills, commitment to a mining career and openness to relocation are valuable characteristics that many immigrants can bring to the workplace. However, there might well be retention risks on the horizon. Job instability due to the current downturn in the industry might be more keenly felt by immigrants who lack family support, a cushion of personal financial resources and strong professional networks.

Recommendations

The current study has focused on understanding the barriers from the perspective of those who are directly involved – drawing insights from the experience of immigrants, employers and immigrant serving agencies. The research has also helped to identify additional suggestions and examples of success that are particularly relevant to the operational realities of Canada's mining and minerals sector. Based on the research findings, the following evidence-based industry recommendations are proposed. These recommendations involve a wide range of industry stakeholders and include employers, immigrant serving agencies, immigrant and non-immigrant workers.

✓ Tackling workplace barriers

- Build the capacity of skilled immigrants to gain meaningful access to opportunities.
- Create an industry-focused strategy to educate employers on the opportunity for immigrant talent to be part of the talent solution.
- Enable employers to identify and take action on unintended barriers.
- Foster stronger industry partnerships among employers, professional associations and immigrant serving agencies.

✓ Building successful career paths

- Develop a strategy for optimizing the engagement and recruitment of international students.
- Focus on retention and success of immigrants in the Canadian mining and minerals sector.
- Collaborate with stakeholders in the mining sector, professional associations and other related industry sectors to explore cross-sector career paths.
- Develop career transition supports for immigrants who are faced with layoffs, or other types of career instability.

✓ Enhancing workplace culture

- Provide training and education to employers and their workforce on the elements of an inclusive workplace culture.
- Work with industry employers to implement robust strategies, including training and education to encourage culture change and inclusive behaviours across their workplaces.

✓ Extend the research

- Explore the barriers faced by immigrants working in labour, production and maintenance roles within the mining sector.
- Investigate the intersection of immigrant status with gender, generational differences, and cross-cultural differences.
- Explore any links between previous work experience and the length of time it takes for integration into Canada's mining sector.
- Articulate a compelling business case that aligns directly to the benefits of having an inclusive workplace culture.



Introduction and Background

The Mining Industry Human Resources Council (MiHR) undertakes initiatives in support of Canada's mining and minerals industry, including efforts to help the sector address talent gaps and skills shortages. To meet these challenges, a program of three related studies has been conducted to identify strategies for greater engagement of key target labour supply groups, namely: Aboriginal peoples, women and immigrants.

MiHR's objective for this research is that it will contribute to a deeper understanding and more informed discussion of the barriers, opportunities and experiences in relation to immigrants in Canada's mining and minerals sector—as well as recommendations for addressing these issues. These insights will support industry stakeholders in improving attraction, recruitment, development and retention of a skilled labour force to meet future labour needs.

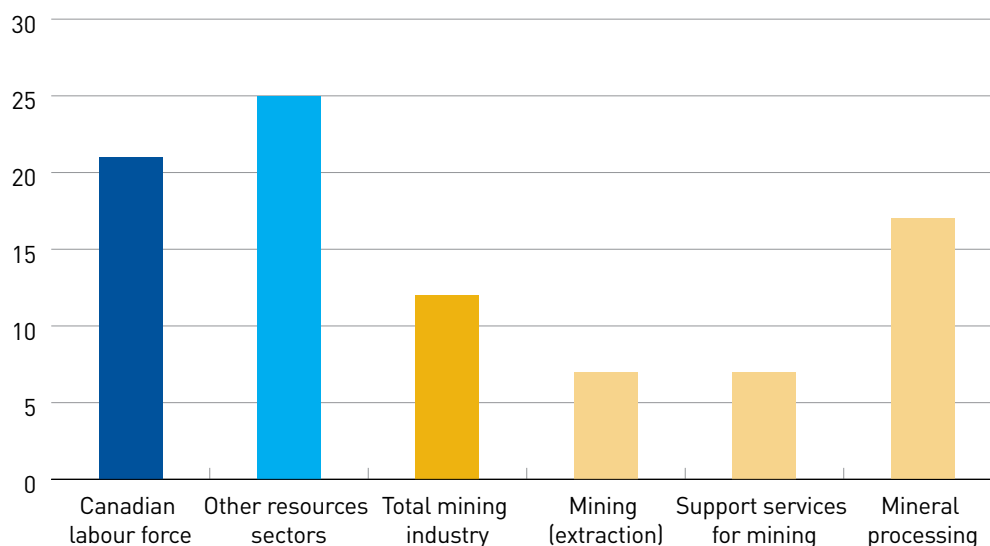
The Participation of Immigrants in Canada's Mining and Minerals Sector

Immigrants to Canada are much less likely to be employed in the mining and minerals sector than in other sectors of the Canadian economy. Immigrants represent only 13 per cent of the total mining workforce, well below their 22 per cent representation in the total Canadian workforce. Other resource sectors outpace mining in their inclusion of immigrants; for example in 2012 (most recent data available) immigrants represented 24 per cent of the workforce in the oil and gas sector and 26 per cent of the workforce in the utilities sector (MiHR, 2013a, p. 26).

Figure 1 illustrates the percentages of workers who are immigrants in various mining subsectors. The mineral processing subsector outperforms other mining sectors in employing immigrants; approximately 16 per cent of employees in mineral processing (secondary metal fabrication and smelting) are immigrants, compared to 7 per cent in extraction and support services. This trend may reflect the fact that immigrants tend to settle in larger, urban centres; metals fabrication and smelting activities are more likely to be located in or near cities, while extraction activities tend to occur in more remote locations. Consistent with this hypothesis, in the oil sands region of Wood-Buffalo-Cold Lake, immigrants represented only 7 per cent of the population in 2012; however immigrants made up 10 per cent of the oil sands mining

workforce (MiHR, 2013c). These findings demonstrate the importance of understanding workforce dynamics – the opportunities and challenges – that impact the industry’s ability to integrate immigrants into the mining workforce.

Figure 1: Immigrants as a Percentage of the Workforce



Source: Mining Industry Human Resources Council, 2013; Statistics Canada, 2012

Immigrant workers tend to be highly educated, and over half of the immigrants working in the Canadian mining sector are university graduates (MiHR, 2015). In terms of occupations within the mining sector, 36 per cent of immigrants are working in professional and physical science occupations while 7 per cent work in trades and production occupations (MiHR, 2016 pending). Although useful for general categorization, the occupational categories do not provide details on specific jobs and if employment outcomes are aligned with the experience and qualifications of workers.

Some research on labour market dynamics has investigated the relationships between immigration status and employment outcomes for particular professions. For example, a recent report from the Ontario Society of Professional Engineers suggests that the observed higher levels of graduate engineer underemployment in Ontario and British Columbia could be partially attributed to a higher number of immigrant engineers who are unable to find work at a level commensurate with their university level education. Similarly, the researchers hypothesize that higher levels of underemployment among mid-career engineers might be attributable to an influx of young immigrant engineers in the early 2000s, many of whom were possibly laid off from manufacturing sector companies during the 2008 recession (Ontario Society of Professional Engineers, 2014). At this time, there is a lack of in-depth research on the career paths and trajectories of immigrant workers in the mining industry.

Barriers to Inclusion

Several Canadian industries are facing projected labour and skills shortages and/or mismatches, and are actively seeking to leverage immigrant talent as a mechanism for filling critical gaps within their sector. Considerable research has been conducted on the challenges faced by newcomers to Canada in integrating into the labour force.

Previous research studies focused on the mining industry or on relevant occupations such as engineers and have identified several barriers to the successful inclusion of immigrants in Canada's mining and minerals industry. These include:

- Lack of awareness of opportunities and industry careers;
- Challenges with skills and credential recognition;
- Employer requirements for Canadian work experience;
- Biases, whether conscious or unconscious, in the hiring process;
- Complexities in the immigration process;
- Remote work locations and relocation;
- Language and communication constraints; and
- Barriers to hiring and advancement in the workplace, particularly around integrating into Canadian mining workplace culture.

(Hughes, C.; BC HR Taskforce, 2013, p. 11; MiHR, 2011; MiHR, 2013c; Randstand Engineering, 2012; Saskatchewan Apprenticeship and Trade Certification Commission, 2011).

In 2015, MiHR published the results of a national industry survey that asked employers to evaluate various aspects of the immigrant workforce and to indicate the level of importance of each aspect in facilitating employment in the industry. A large proportion of employers cited "language skills" (English/French) as relatively important to facilitating employment among the immigrant community. "Workplace culture" was also highlighted – in fact 70 per cent rated this factor as moderately to very important and no one rated it as unimportant (MiHR, 2015, p. 39).

Career Pathways and Trajectories

Building a more thorough understanding of career development pathways – the entry points, exit points and development paths of specific diversity groups – enables a more robust discussion on the workforce barriers experienced and creates a framework for initiating solutions targeting the different barriers experienced at specific career points.



Research Objectives and Methodology

This research study was designed to identify employment barriers, opportunities and career trajectories of immigrants working in the Canadian mining sector.

This research sought perspectives on mining workplaces from immigrants working in the sector. In addition, it explored the experiences of employers and immigrant serving agencies to identify best practices and support next steps as documented in *Strengthening Mining's Talent Alloy – Practices in Inclusion*.

Research Topics

The *Strengthening Mining's Talent Alloy — Exploring Immigrant Inclusion* study had three primary research objectives:

1. Identification of current *Barriers to Inclusion of Immigrants*, validating and exploring those barriers that are of particular relevance to the mining and minerals sector.
2. Examination of *Career Development Pathways* of immigrant workers, including an identification of entry and exit points.
3. Development of a compendium of *Strategic Diversity and Inclusion Practices* that employers or other organizations have in place to enhance the inclusion of immigrant talent in the sector. This line of inquiry has generated a companion report *Strengthening Mining's Talent Alloy – Practices in Inclusion* on promising practices for inclusion, including six that address immigrants; these insights and case studies can serve to inspire industry employers and other stakeholders.

Methodology

This study combined both secondary and primary research elements. The secondary research included an environmental scan of industry-relevant resources and literature on immigrant inclusive policies, programs and activities. The primary research included an online survey and interviews with mining workers and industry representatives. The survey investigated employment barriers, opportunities, workplace culture and examined career development pathways. The findings from the secondary and primary research were reviewed and validated by a group of industry stakeholders during an in-person validation session.

The methodological approaches were tailored to the three key research topics, as summarized in the following table.

Question	Method	Participants
1. Barriers to Inclusion	Online survey	Individuals who are/were currently or formerly (within the past five years) employed in the Canadian mining industry. The 280 respondents included 31 immigrants, 18 of whom had immigrated as adults.
	In-depth telephone interviews to explore the immigrant experience	10 immigrant individuals drawn from the survey respondents and identified through industry stakeholders
	In-depth focus groups to explore barriers to entry into the sector as well as key issues emerging from the survey	Four focus groups, with a total of 28 employers and immigrant serving agencies
2. Career Paths and Trajectories	Online survey	18 immigrants with current or recent work experience in the Canadian mining sector
	In-depth telephone interviews to explore the immigrant experience	10 immigrant individuals drawn from the survey respondents and identified through industry stakeholders
	In-depth focus groups to explore career dynamics as well as key issues emerging from the survey	Four focus groups, with a total of 28 employers and immigrant serving agencies
3. Immigrant Inclusion in Mining Practices	Review of secondary literature	n/a
	In-depth telephone interviews for case studies	Six representatives of promising practice employers and immigrant service agencies
	In-depth focus groups to uncover successful practices	Four focus groups, with a total of 28 employers and immigrant serving agencies

Research methods and protocols were reviewed and approved through the MiHR ethics review and approval process. Details of the research methods are provided in the Appendix.

Profile of Research Participants

Survey

280 individuals provided full responses to the online survey and of those respondents 31 identified that they had immigrated to Canada. Of the 31 immigrants who completed the survey, 13 had arrived as youth, and 18 had arrived as adults (defined as 18 or older).

Of the immigrants who arrived as youth; 12 have been in Canada more than 10 years and one had been in Canada for 6-10 years. An initial analysis of survey responses confirmed that the perspectives of “youth immigrants” on industry careers and barriers were more similar to the perspectives of Canadian-born workers than they were to those of adult immigrants. The operational definition of the immigrant population for this research was then refined to include:

- Individuals who have been a landed immigrant to Canada, having arrived in Canada at 18 years of age or older.

Consequently, the youth immigrants were then included with the Canadian-born sample for any subsequent analyses.

The survey was open to people currently employed in the industry as well as those “recent leavers” who had worked in the industry within the last five years. Within the sample, 90 per cent were currently employed in the mining sector and 10 per cent were “recent leavers.”

It is important to recognize that “*immigrants*” is a broad categorization that includes newcomers and people who have spent decades in Canada; people whose first and only language is English and those who struggle with basic communication in English; people who have relocated from another continent with a cultural context considerably different from Canada and those who might have been raised only a few kilometers away, across the border with the U.S. In short, “immigrants” are not a homogeneous group.

The same research sample is used throughout the various sections of this report. Key demographic characteristics of the complete sample as well as breakdowns by immigrant status are presented in the Appendix. These characteristics are important to consider for three reasons: (1) to help assess how well the survey sample reflects the overall industry workforce (see below); (2) to explore whether other factors such as age or experience account for apparent survey differences between immigrants and Canadian-born workers; and (3) to understand the impacts of the intersections between immigrant status and other characteristics.

Immigrants & Diversity

It is important to recognize that “immigrants” is a broad categorization that includes newcomers and people who have spent decades in Canada; people whose first and only language is English and those who struggle with basic communication in English; people who have relocated from another continent with a cultural context considerably different from Canada and those who might have been raised only a few kilometers away, across the border within the U.S. In short, “immigrants” are not a homogeneous group.

In summary, the full survey population had the following characteristics. Any notable differences between immigrants and Canadian-born are highlighted.

Time since immigration:	All but one of the 13 people who had immigrated as youth have been in Canada more than 10 years. Of the 18 who immigrated as adults, 44 per cent were newcomers, having been here for five years or less.
Ethnic background:	More than 6 per cent of the respondents considered themselves to be members of a visible minority; and approximately 11 per cent of the respondents were immigrants to Canada.
Occupation:	In their current or most recent job, survey respondents reported being mostly professionals in technical/scientific fields (21 per cent), middle or line management/supervisors (18 per cent) or production/maintenance (16 per cent).
Employer:	Two-thirds of the complete sample was working in large mining companies, defined as having more than 500 employees.
Age:	75 per cent of the participants were between 25 and 54 years of age (equally distributed). The remainder was below 25 or over 55. The population of immigrants who had arrived as adults were more likely to be younger; 10 of the 18 were 25–34 years old.
Family status:	Most respondents (76 per cent) were married or in a common-law relationship.
Education:	The survey respondents were well educated, with two-thirds having completed college or university. Of the 18 immigrants who arrived as adults, all had completed university education, with at least some relevant postsecondary education completed prior to arrival in Canada, and half of those had done so in a mining-related field.
Years in the industry	About half of the respondents were relatively early in their mining career, with under ten years in the industry. Just over one-fifth of the respondents (22 per cent) reported they have been in the industry more than 25 years. Among the immigrants who had arrived as adults, 10 of the 18 indicated they had at least one year of work experience in mining prior to their arrival in Canada. Roughly one-third of the adult immigrants had less than one year; one-third had between one to five years; and one-third had more than five years.
Location:	Respondents' work locations were drawn from eleven provinces or territories, most of the "adult immigrant" respondents were located in British Columbia.

Interviews and Focus Groups

Among the 10 immigrants who participated in research interviews, all had arrived as adults; six were men and four were women. They were all currently employed in the industry, mostly in professional (technical/scientific) roles, and in a range of provinces and territories.

In total, 18 immigrant serving agency representatives and 10 employer representatives participated in the focus groups. Over half were located in BC; the rest were located in a variety of other provinces and territories. The immigrant serving agencies were drawn from seven provinces and territories, and 13 locations ranging from large urban centres (Vancouver, Edmonton) to smaller centres near mining operations (Sudbury, Campbell River, Wood Buffalo); the locations are listed in the Appendix.

Limitations and assessment of the research sample

The survey sample differs in important ways from the overall workforce in Canada's mining and minerals sector. The respondents were more highly educated than the overall mining workforce. Occupations such as labourer, skilled trades, and maintenance/production are under-represented in the survey sample. Because of these differences, the voluntary nature of the research sampling and the small number of immigrants in the survey sample, it is important to be cautious in generalizing the results to the overall mining workforce.

A small sample size makes it difficult to conduct statistical comparisons or draw population-based conclusions. Using a comprehensive survey and interview data supplemented with stakeholder focus groups, allows an "idiographic" research approach that pulls insights from a richer understanding of individual experiences. The following sections on findings utilized a variety of research approaches to provide a portrait of the barriers and career trajectories that are part of the immigrant worker experience within Canada's mining and minerals sector.





Findings

Barriers to Inclusion – Findings at a Glance

- Awareness of opportunities and industry careers is seen as a significant barrier. Immigrants and immigrant serving agencies reported that general information about the mining industry is not easily accessible. Immigrant serving agencies commented that mining employers are not as proactive with them as employers from other industries.
- Skills and credential recognition is often seen to be a complex process, particularly for formalized accreditation like a P.Eng. The immigrants consulted in this research had successfully confronted this barrier, although some of them have acquaintances who are still struggling to enter the sector.
- There is a perception that international experience is not fully recognized which possibly reflects a disconnect in expectations based on differences between an immigrant's former status in their home country and the occupation's status in Canada.
- Lack of Canadian work experience is seen as a barrier, but it encompasses a range of elements, from the supervised engineering experience required for a P.Eng. accreditation, to a demonstrated appreciation for safety and ethical work practices, to a more nuanced understanding of cultural norms in a Canadian workplace.
- Biases, whether conscious or unconscious, in the employment process operate at both hiring and promotional stages. Women immigrants seeking to succeed in the mining industry face particular challenges that relate both to gender and their identity as immigrants.
- Complexities in the immigration process and how this impacts hiring - reportedly discourage employers from considering immigrants – often employers did not make a distinction between those who are still seeking to immigrate to Canada and those who are already within Canada.

- Remote work locations and relocation pose particular challenges to newcomers. Some agency staff are less likely to encourage them to apply for mining positions, assuming that relocation will be a barrier. Newcomers who do relocate to remote or rural locations face hurdles such as accessing credit, housing and spousal employment.
- Language and communication barriers have been highlighted as critically important by employers in previous research, yet they are not seen as critical by the immigrants in this research, many of whom immigrated to Canada from English-speaking countries or have completed university education in English.
- Almost half (44 per cent) of the 280 respondents in the full survey sample reported that it is “often” or “usually” harder for an immigrant to succeed in their workplace. Immigrants and immigrant serving agencies highlighted the challenges faced in integrating into the workplace culture. Cross-cultural differences in workplace practices or interpersonal interactions have a subtle but powerful effect.

Barriers to Inclusion of Immigrants in Mining Workplaces

The first of three primary research objectives for this project was “an identification of current *Barriers to Inclusion of Immigrants*, validating and exploring those barriers that are of particular relevance to the mining and minerals sector.” This section presents the findings and themes uncovered in the research; note that several challenges are also described in the following section, under *Career Paths and Trajectories*.

The current research has provided an opportunity to explore these barriers in greater depth through the perspectives of immigrants themselves, immigrant serving agencies and industry employers.

Awareness of Opportunities and Industry Careers

Previous research within the mining sector has highlighted a gap in awareness among immigrants of the career opportunities available in mining. The current project’s findings from immigrants, immigrant serving agencies and employers were fully consistent in providing confirmation that lack of career awareness poses a challenge to the industry’s ability to attract qualified immigrant talent.

The survey results showed that, on average, the immigrant respondents rated an awareness of openings and careers as significantly more challenging¹ than did the other survey respondents. In contrast, in the most recent MiHR national LMI survey of employers (MiHR, 2015, p. 39) employers rated “awareness of careers/jobs available” and “awareness of the industry” as only “moderately important” to “neutral” as an aspect facilitating immigrant employment in the industry and noticeably less important than other factors. Employers might be underestimating the challenges faced by immigrants in gaining access to useful employment information about the industry.

¹ Statistically significant at $p < .05$

Interviewees and focus group participants reported that general information about the mining industry was not easily accessible. Immigrant serving agencies sometimes found that there is too much scattered information or misinformation and it is difficult for them to adequately support their clients. Lack of pre-arrival information was also cited as a challenge. Focus group participants suggested that a more proactive approach to providing information to immigrants before they arrive in Canada would help to raise awareness.

The immigrant serving agencies that were consulted during the research were not approached by mining employers as often as by other sectors²:

“We are approached by a wide array of businesses and sectors to do presentations, post information or make connections to our client base that are looking for jobs, but I don’t remember a mining company, in the six years that I have been here, asking us to do stuff like that.”

(Representative of immigrant serving agency)

“If I have a client who is looking for work in the mining industry, I have to actively search out that information. Otherwise, there is no way I will know that there is an opening out there in the field.”

(Representative of immigrant serving agency)



A recent immigrant who had been supported on arrival by an immigrant serving agency had the same experience to report:

“Three years ago when I was looking, I don’t recall seeing any information about the mining industry. In the last year, the industry has done a lot of outreach [in my region] and now the immigrant serving agencies are starting to be more knowledgeable.”

(Immigrant woman; professional, non-technical role)

Consequently, immigrants looking for career opportunities may have limited exposure to the industry overall, such as the various companies and where they are located, and where to look for opportunities.

The apparent gap in outreach by mining employers is consistent with other findings from the MiHR 2015 LMI survey (MiHR, 2015, p. 33). Employers did not necessarily agree (and some disagreed) that immigrants were a priority talent source for meeting their company’s hiring needs.

² As needed, the quotes have been edited slightly for clarity. In some cases, particular biographical details have been changed for confidentiality. Any remaining details that are similar to specific people in the industry are purely coincidental. The meaning has not been affected.

University alumni networks and student career supports (job fairs networking events, etc.) were seen as helpful – so a challenge for immigrants is to gain access to these important supports, perhaps through enrolling in additional training or through membership in professional associations.

Geography also plays an important role in the inclusion of immigrant workers. Immigrants are more likely to settle first in an urban area and will often have limited awareness of more remote regions. There are some indications that agencies in urban centres are not well connected to the mining industry. Additionally, agency staff might not highlight the opportunities to new immigrants because of an assumption (often untested) that there could be a need to relocate and that the newcomer will be reluctant to do so. However, urban locations combined with FIFO assignments offer the possibility of a “commuter workforce” in which the industry can benefit from immigrant talent while the immigrant and his/her family can still benefit from family and community supports available in an urban centre. This issue is further addressed below, in the section that explores the barriers of Remote Work Locations and Relocation.

In summary, this research confirmed that limited awareness about the industry and the dynamics of finding opportunities poses barriers to the inclusion of immigrants in the mining sector. The “information infrastructure” to create awareness of mining career opportunities among the skilled immigrant population does not seem to be working effectively. Within the research, immigrant serving agencies indicated that they were not well connected to the mining industry and some of the relevant professional groups, and these agencies find it difficult to gain access to timely and useful information that they can pass on to their clients. Without an adequate “information infrastructure,” networking becomes vitally important as a way to find out about the industry – and this can be a barrier for newcomers who are outside of the Canadian mining sector.

Skills and Credential Recognition

One of the most significant challenges facing immigrants as they transition into employment within Canada is the assessment and recognition of skills and qualifications from previous employment experiences, formal education, and job training.

Within the research, the difficulty and complexity of skill and credential recognition was highlighted by immigrants, employers and immigrant serving agencies. Beyond formal credentials, there were reported barriers in the appreciation of international industry experience. Some immigrant respondents found that their international experience was often discounted.

“I have seven to eight years of work experience in mining, outside of Canada – those years of experience don’t count much; the company can’t verify, do reference checks; they don’t have the contacts.”

(Immigrant woman; professional, technical role).

“Some people who come here were highly respected where they came from, whereas here they are not respected as much. They do not think that their credentials are being given the proper attention as in their home country.”

[Representative of immigrant serving agency].

The requirements for achieving Canadian professional accreditation, including the P.Eng. designation, was cited as being a surprise and also a complex, lengthy and bureaucratic process. Experienced engineers from Australia highlighted it as a key difference between Australia and Canada.

“I am a British immigrant and for me getting foreign credential recognition was easy. I have colleagues who have not bothered applying for jobs because of the hoops and steps they need to go through to get their credentials; i.e. 10 – 12 technical exams.”

[Immigrant man; professional, technical role].

“One key challenge was that I was told I couldn’t operate without a P.Eng. – it is not required in Australia. It was a frustrating, time-consuming process. I took a career step backwards coming here.”

[Immigrant man; professional, technical role].

Working with career seekers, some agencies use a PLAR system (Prior Learning Assessment and Recognition) to help immigrants understand the equivalencies and gaps between their international training/experience and the requirements of the Canadian mining industry. It is clear from the surveys and interviews that not all immigrants have had access to this type of support – and even in this regard, personal networks seem to be a critical source of information.

“I wish I had been helped to get the licensing and educational requirements sorted out early. It would have been easier for me if I had known what I needed.”

[Immigrant man; professional, technical role].

“Some people have family and friend connections that can provide them with guidance to go to settlement services once they arrive to help them navigate through the system.”

[Representative of industry stakeholder organization].

In summary, the skilled professionals consulted for this research have obtained employment in the mining sector – they have generally found a way to have their credentials recognized. Many of them mentioned that their friends and acquaintances were still struggling to address this barrier. Often this has been a lengthy and complex process, and several had mitigated the difficulty by coming here as a student and pursuing Master’s level education. The process for achieving the P.Eng designation is a particular frustration that leads to delays in career advancement for experienced engineers from abroad. International work experience is difficult for companies to assess and consequently it is often discounted.

Canadian Work Experience

Previous research has identified a lack of Canadian work experience as a significant hiring barrier for immigrant applicants in a wide range of industries, including the mining sector.

The immigrant survey respondents had a mixed perspective on the impact of the need for Canadian experience, equally split between “it was not a barrier” and “it was a significant barrier.”

From this sample, the people who were self-employed or working in a company that provides services to the industry (e.g., consulting firms) do not see the lack of Canadian experience as a barrier; the reverse is true for those working in large mining firms. Respondents who reported they were required to upgrade their training or qualifications also reported Canadian experience was presenting a barrier.

The interviews and focus groups revealed that “Canadian experience” is not a one dimensional construct – it can include considerations as varied as: experience with the type of mining operations, topography and regulatory regime found in Canada; the ability to gain supervised engineering work experience for the P.Eng. designation; appreciation for Canadian industry norms around safety and ethics; and “fit” with the Canadian work culture.

What makes work experience “Canadian”?

The comments from research participants in the current study uncovered that the “Canadian work experience” umbrella encompasses a wide variety of elements that are not always well understood or clearly articulated – ranging from the supervised engineering experience required for a P.Eng. accreditation, to a demonstrated appreciation for safety and ethical work practices, to a more nuanced understanding of workplace cultural norms in a Canadian workplace.

Within the research, immigrant serving agencies indicated that without Canadian mining work experience, many employers would not move an applicant further in the hiring process. Not all immigrant serving agencies felt well-equipped to address this issue with employers or with their immigrant clients.

“Some smaller companies that are hiring are reluctant to hire people who have no Canadian experience. They seem to have a certain way of thinking: ‘That person does not have Canadian experience so we are not going to hire them.’ That is where it gets very tricky.”

[Representative of immigrant serving agency]

“The question I would ask is what we are doing to prepare our clients [to respond to a question about Canadian experience] because it is likely to come up in an interview.”

[Representative of immigrant serving agency]



In summary, consistent with previous research in mining and other industries, the lack of Canadian work experience can pose a barrier to entry into the sector. There is evidence that a lack of “Canadian work experience” is a barrier related to a wide range of situations including credential recognition and perceived bias within hiring processes. It appears that within the mining sector “Canadian experience” can mean any combination of factors such as familiarity with mining operations, safety, supervised engineering experience and fit with workplace culture.

Biases in the hiring decision process

The impact of biases in the hiring decision process has been well documented in the literature and the popular press. The experiences that the research participants described confirmed that these challenges still exist, and are present in the mining industry. Even if infrequent, such experiences are described and shared among personal networks and can create a ripple effect far beyond the individual who was directly involved. A few negative experiences can have a detrimental effect on other qualified immigrants’ interest in pursuing mining sector opportunities.

“An honest person from the agency I was working with told me that although I had industry background, my name would be a barrier to entry – i.e., it would be better if I changed my name to an Anglophone name.”

[Immigrant man; professional, technical role]

“In my experience, employers are more likely to hire immigrants for professional positions. They hesitate to hire them if they seem over-qualified, or if they’re applying to technical or labour positions – they’re afraid they won’t stay.”

(Immigrant man; professional, technical role)

In summary, there was quite widespread acknowledgment among the immigrant research participants, employers and immigrant serving agencies in this study that biases in the hiring process still exist and have a significant impact – certainly on specific individuals for specific opportunities, and also more generally on the immigrant talent pool that the mining industry seeks to engage.

Complexities in immigration and hiring processes

During the focus groups, as well as in a series of employer interviews, many employers assumed that hiring an “immigrant” meant they were hiring someone who was not yet in Canada. This connotation of the term “immigrant” might create unnecessary anxieties and hesitations on the part of employers.

“A big barrier is the employer’s perception of how difficult it may be to hire someone from another country, as opposed to hiring someone in Canada.”

(Representative of industry stakeholder organization)

“As an employer, it is sometimes difficult obtaining the necessary immigration paperwork for getting work-permits.”

(Representative of employer organization)

“There are individual barriers from a financial perspective: not having a credit rating; renting a place, paying a mortgage, getting utilities, even getting a driver’s license.”

(Representative of industry stakeholder organization)

“I started in one province through their Provincial Nominee Program, but then the work ended and I found another job in a different province, which created problems with my PNP approval – I was very glad that the company supported me – financially for the legal advice and the HR person helped me with the paperwork.”

(Immigrant man; professional, technical role)

In summary, there are complexities in extending job offers to people not yet in Canada. The immigration process is seen as a big investment of time and money for both the employer and the immigrant trying to enter Canada; this is relevant, of course, for job offers that are made to individuals who are not yet in Canada. However, the experiences of the research participants uncovered complexities that arise even after arrival, and how important it is for employers to provide necessary support.

Remote Work Locations and Relocation

It is commonly known that the mining industry faces particular challenges in the recruitment and retention of workers into remote locations and rural communities. The immigrant serving agencies that participated in the focus groups highlighted this as a key challenge, based on their extensive experience with immigrant job seekers. It is unclear whether the particular concerns are equally true of immigrant and Canadian-born job seekers and whether it is as true of people with an interest in mining careers as it is of the general immigrant population. It is also possible that the concerns are over-stated and/or based on assumptions that have not been fully tested or challenged. As examples, the following quotes are typical of the challenges highlighted by the agencies:

“Due to the shortage of mining jobs in the area, it is difficult for them to find jobs, especially if they are unwilling to move.”

(Representative of immigrant serving agency)

“Another barrier is ensuring the spouse has work when they move to the mining location.”

(Representative of immigrant serving agency)

“A challenge can be the inability to maintain regular connections with family and friends, mostly when having to move to a remote location or if there is a lack of diversity in the towns and neighborhoods they move to.”

(Representative of industry stakeholder organization)

Immigrants do face some specific challenges in remote or rural locations. When asked about the extent to which having to live in rural or remote locations has posed a challenge in their career, there was a significant difference between immigrants and Canadian-born workers. The Canadian-born were far less likely to see remote/rural locations as having posed a significant difficulty to them; in fact, 40 per cent reported that it had created no impact or difficulty. Over half of the immigrant respondents said it created a significant difficulty.

The comments provided some interpretation of this finding. For immigrants, there can be a heightened sense of isolation and additional challenges for integration of the worker's spouse and/or family, particularly in small communities where there might not be a history of immigration or cultural diversity, or limited connection to networks or communities with similar backgrounds. Financial constraints can make it difficult to get access to credit and housing, which can be even more problematic in remote locations. Finally, during the current downturn in the industry, the immigrants consulted for this research expressed a concern about being in a location that is dependent on a single industry, particularly a cyclical sector like mining. If there are already barriers to integrating into the mining labour market, the added risk of layoffs can be more significant to an immigrant.

“As a new immigrant, I can’t get any credit (financial) here, despite having a high salary. Since I can’t get credit, it resigns me to the rental market. I live in [rural location], which is a beautiful place, but the rental market here is terrible.”

(Immigrant man; professional, technical role)

“We recently had a large lay-off at one of our mining companies where some immigrants were cut loose with no support (no retraining) and, since they have moved to a remote area, they are unsure how to start-up again.”

(Representative of immigrant serving agency)

Immigrants are more likely to settle initially in urban centres, making it even more difficult to network and meet with decision makers in remote operations.

“I got in because I pushed – I came to the region on vacation and actively pursued face-to-face informal interviews. I didn’t know anyone before coming. I believe that without that face-to-face, I was unlikely to have gotten a job.”

(Immigrant man; professional, technical role)



It is possible that the mining industry’s use of FIFO operations, and the related “commuter workforce,” can present an opportunity for a greater engagement of immigrants. Settlement in a large urban centre provides an immigrant and his or her family with better access to critical supports such as cultural community networks, language training or skills upgrading, settlement and integration services, and spousal employment opportunities. A FIFO assignment could allow the industry to benefit from the immigrant’s mining skills while also providing the personal benefits of an urban centre’s resources. In some locations, these dynamics are already in play to some extent:

“In [our urban area], immigrants are primarily trying to enter the mining industry through the higher-end professional occupations in headquarters where they might get flown out to sites as opposed to moving to the mine’s location.”

(Representative of immigrant-serving agency)

Language and Communication Barriers

Language competency continues to be widely perceived as a significant barrier facing immigrant employment and development in the mining sector. As mentioned above, employers in MiHR's most recent industry survey (MiHR, 2015) highlighted this as the most important factor in facilitating the employment of immigrants in the sector.

Language as a challenge with respect to integrating in the workplace was cited by some interviewees, and also as a barrier to entry by focus group participants. Some interviewees and focus group participants indicated that this barrier may be more subtle than just an ability to speak English at a basic level, and it can create challenges after hiring, on the immigrant's credibility and social inclusion in the workplace.

"English as a second language is not the problem so much as is your ability to articulate your particular critical thinking in English."

(Representative of immigrant serving agency)

"Language, as everyone knows, it is not just about writing and speaking English. It's about thinking in Canadian English. They need to be able to understand this way of thinking and speaking."

(Representative of immigrant serving agency)



"Sometimes there are language/culture barriers – people can understand what you're saying, but maybe not what you mean."

(Immigrant woman; professional, non-technical role)

Conversely, the immigrant worker respondents to the research survey did not express significant concern about language barriers having had a negative impact on their careers. It is important to note that the immigrants within the survey sample were working primarily in English, and 10 of the 18 immigrants, spoke English as their first language. Several of the immigrants had acquired years of experience in mining in their country of origin. Additionally, they were more likely than the Canadian-born sample to be self-employed or working in a firm providing services to the industry. Immigrant worker respondents indicated that working in roles where they could contribute high levels of industry expertise to some extent mitigated language barriers.

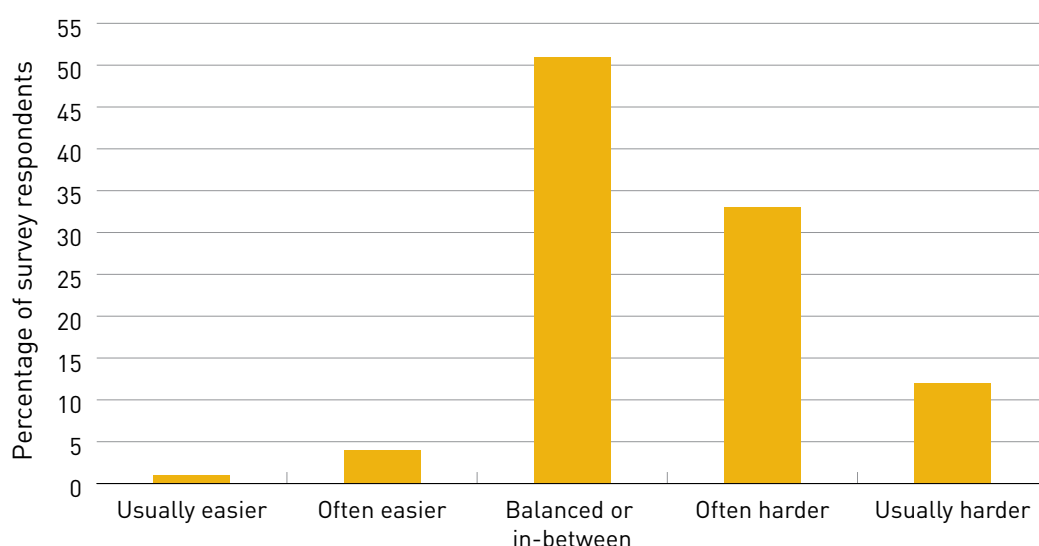
In summary, the research supports that communication ability in English is an important factor for the inclusion of immigrants in the mining sector. Although the immigrant survey respondents did not report that language was strongly holding them back in their careers, they might not be fully representative of the wider pool of immigrant talent. Immigrant serving agencies with broad experience with those seeking to enter the sector highlight language skills as a very critical barrier, and particularly emphasized the importance of being able to show "critical thinking ability" in English. For professional positions such as engineering,

language is the medium through which a person's skills are demonstrated and any communication limitations can pose a barrier to inclusion. Subtle dynamics of culture and being an "outsider" are often intertwined with language issues. Bilingualism requirements can also create challenges for newcomers hoping to work in certain regions of the country.

Barriers to success and advancement in the workplace

Many workers who responded to the survey, whether they were immigrant or Canadian-born, indicated that it is harder for an immigrant to succeed in their workplace. On a 5-point scale, 44 per cent of the respondents in the full survey sample replied that it is "often" or "usually" harder for an immigrant to succeed in their workplace (see Figure 2).

Figure 2: Perspectives on difficulty for immigrants to succeed in the workplace



For comparison, 26 per cent of all respondents said that it is often or usually harder for Aboriginal peoples, and 57 per cent said it is harder for women.

Barriers faced by immigrant women

There is a considerable body of evidence that illustrates that across the Canadian economy, immigrant women face particular challenges. For example, Statistics Canada data reveals that the unemployment rate for immigrant women is almost double that of Canadian-born women; this gap between immigrants and Canadian-born is substantially greater for women than it is for men (Statistics Canada, 2012).

"Some of the reasons I have left previous jobs have been those cultural differences, but a lot of times it was more because of how I was treated as a woman. Often, I was not taken seriously."

(Immigrant woman; professional, technical role)

“A lot of assumptions are made about people’s abilities based on whether someone is a woman, an immigrant or an Aboriginal person – they don’t look at experience or actual job performance. Often people are excluded from opportunities based only on their gender and where they are from.”

[Canadian-born woman; professional, technical role]

“There are always amazing individuals in each of these categories that break through the glass ceiling....but it comes with a lot of ‘scars’ which they would argue might not have been worth the journey.”

[Immigrant woman; professional non-technical role]

“For any of the ‘under represented’ there is a requirement to go above and beyond the average in order to get promoted.”

[Immigrant woman; professional, non-technical role]



Differences in interaction and communication patterns between co-workers can be even more subtle and difficult to adjust to. One immigrant serving agency highlighted that “fit” with the workplace or the community was the primary determinant of success among their clients, across all industries.

Several interviewees commented that they had an easier time than some other immigrants because they spoke English as a first language, or came from a culture that was similar in many respects to Canada (Australia/Europe/UK/U.S.).

“I think it is the ‘soft’ things that are not obvious i.e. bias. Visible minorities are seen as different however the treatment is subtle and hard to pin point. Even though I’m a [visible minority], because I was raised in [English-speaking country similar to Canada] I have an advantage.”

[Immigrant man; professional, technical role]

Cultural differences play an important role and there is often limited awareness of the differences and their impact. Challenges that some people attribute to “personality” such as extraversion-introversion are undoubtedly also infused with cross-cultural differences such as openness vs. privacy. As long as they are seen as personality, or individual differences, the onus for adapting will remain with the immigrant, and there will be less interest in exploring the systemic aspects of national, industry, or workplace cultures and putting in place appropriate strategies to support inclusion.

“Personality has an impact on success: introvert or extrovert. When I worked in camp environments, privacy doesn’t happen much.”

(Immigrant woman; professional, non-technical role)

“My personality is outgoing and I’m good at networking – it’s important to help people to get to know who you are and that you’re good at what you do. I am not afraid to express myself amongst peers, or speak to a senior executive at a conference – this garners respect. I just don’t give people the chance to think I can’t do it or am not qualified.”

(Immigrant woman; professional, non-technical role)

“Also the cultural interactions in the workplace are different – here, people are more distant; in my home country, people are more like family – they work together.”

(Immigrant woman; professional, technical role)



“The local people here tend to be more closed; they have history here; they grew up here; they talk about lakes, plants, etc. that I’m unfamiliar with.”

(Immigrant woman; professional, technical role)

“I find that the unionized part of the workforce is culturally very different. There is a lack of ‘political correctness’ — the terms/language they use are very behind the times. It’s somewhat of a frontier workforce.”

(Immigrant man; professional, technical role)

The factors that lead to career advancement were also touched on in the current survey. Similar to the hiring process, there was a sense of bias (often unconscious) in the promotion processes. Immigrant or Canadian-born alike, the research participants believed that immigrants faced specific challenges to career advancement. These challenges can include: understanding some of the different practices in Canadian workplaces; navigating workplace cultures that are not inclusive; accessing opportunities for career development.

Several research participants highlighted that Canadian workplace norms can be different from those that immigrants might have experienced in their countries of origin. Not understanding these differences can create barriers to success. In the recent MiHR national LMI study (MiHR, 2015, p. 39), employers highlighted the importance of “workplace culture” in facilitating the employment of immigrants in the mining sector. None of the respondents in the MiHR industry survey indicated that “workplace culture” was not important and 70 per cent rated this factor as “moderately” to “very important.”

“The Canadian workplace culture can differ from other countries’ work cultures, and that creates barriers to success. For example, someone coming into a workplace won’t know that we bury our negative feedback between pieces of positive feedback.”

(Representative of industry stakeholder organization)

“Ethical behaviour and safety and security are such high priorities, specifically in the Canadian and the U.S. mining industries, which can be very difficult if you are coming from a place where bribery and solicitation payments are more important.”

(Representative of industry stakeholder organization)

However, one focus group participant commented that at the most senior levels in some organizations, there is an appreciation for the global perspective that an international team can bring – although this does not yet extend to lower levels in the organization.

“There is bias towards internationals as opposed to local that, in order to succeed in the top levels, you need to be from a different country than the country you are operating in...Unfortunately, if you look at who is working in the mines you might not see that as much.”

(Representative of industry stakeholder organization)

In summary, the research has confirmed that barriers to the inclusion of immigrants are not limited to recruitment. There was recognition amongst the research participants that it is more difficult for immigrants to succeed in Canadian mining industry workplaces. Nonetheless, there is openness to immigrant talent within the mining industry – as demonstrated by the positive experiences of many of the immigrant research participants.

Career Pathways – Findings at a Glance

- Personal characteristics intersect with systemic barriers to powerfully shape careers.
- Entering Canada as a student in a mining-related university program helps newcomers to:
 - Build networks and access career information,
 - Mitigate the barrier of requiring Canadian experience, and
 - Improve or demonstrate language abilities and familiarity with Canadian culture.
- Young immigrants, like young Canadian-born professionals, are characterized by the Gen X or Millennial characteristics and interests in a dynamic work environment, flexibility for work-life balance, supporting spouses' careers, starting a family, buying a house and building a career characterized by early and frequent promotions. Additionally, for many immigrants:
 - Having already changed countries, immigrant professionals are open to moving again
 - Transferable skills make it easier to change industries
 - Young professionals who have immigrated are committed to building a successful career and will seek out opportunities that allow them to meet all of their goals – personal and professional
 - Immigrants have a global view of the industry and compare their lived experience and their future job opportunities in Canada to options that might exist elsewhere
- The current economic downturn in the industry has a profound effect that might be more keenly felt by immigrants
 - With a lack of a local “safety net” such as family support, personal financial resources, and strong professional networks, immigrants are strongly affected by layoffs, part-time work, and job insecurity
- The competition for talent affects the industry's ability to attract and retain qualified immigrant talent.
 - International students pursuing advanced degrees in Canada often take these skills out of the country – to mining operations in Australia, South America and elsewhere

Female immigrants, immigrants who are members of a visible minorities and individuals with culture and linguistic backgrounds that are rather unlike Canada's, can find it more difficult to integrate successfully into mining workplace culture.

- Even young women who initially saw no barriers have changed their perspective as they became more experienced within the industry.
- Immigrants from Australia, Europe/UK or the U.S. pointed out that there are some cultural differences, but they generally felt comfortable with the mining culture in Canada. However, immigrants from elsewhere mentioned feeling like "outsiders" – partly due to language differences and lack of familiarity with local references (plants, lakes, movies), but also due to subtle cultural nuances in the workplace.
- Senior professionals who are approaching retirement have had successful careers and are very satisfied.
- The research participants who have had relatively longer careers in the Canadian mining sector are very positive about their careers. These particular individuals have achieved positions of managerial responsibility in their chosen field and still enjoy their work.

Career Paths and Trajectories Findings

The second of three primary research objectives for the current project was an examination of *Career Development Pathways* of immigrant workers, including an identification of career entry and exit points within the mining sector.

The research approach for exploring career pathways has leveraged both the quantitative survey data and the one-on-one focused interviews, with a total sample size of 22. As outlined earlier in the report, it is unlikely that this sample was fully representative of the population of immigrants working in Canada's mining sector today. The respondents were more highly educated than the overall mining workforce. Occupations such as labourer, skilled trades, and maintenance/production are under-represented in the survey sample. The following characteristics are likely to have an impact on their career paths and trajectories:

- Their entry into the sector in Canada
- Key career turning points and success determinants
- The drivers of their current career intentions



Entry Points to the Sector

To start at the beginning, below are the findings related to immigrants' entry into Canada's mining and minerals sector. Among these 22 people, common entry points were:

■ Canadian university programs in a mining related field:

The outstanding reputation of certain Canadian mining programs attracts a large number of international students. Some of the interviewees came to Canada to pursue graduate studies in a mining-related field; typically they already had an undergraduate degree and relevant career experience from their country of origin. Previous research has identified that immigrants who pursue advanced education as international students in Canada do enjoy subsequent labour market benefits, compared to immigrants without Canadian post-secondary education (Sweetman & Warman, 2009).

One interviewee emphasized that her Canadian education opened doors for her.

"I came as a student and I think that counted to get a job in Canada."

(Immigrant woman; professional, technical role)

■ Companies providing support services to the mining industry:

Professionals with specialized skills in fields such as geology, engineering and other technical domains often start their Canadian careers by working for companies that provide services to the industry.

Other immigrants without a career history in mining also get connected to the industry through working in firms that provide supporting services – IT, business consulting, and others.

Some individuals have started with a company as a self-employed contractor and eventually are able to confirm a more permanent role in the mining sector.

■ Intra-company transfer:

Some individuals have started their career in Canada through a transfer from their employer in their country of origin. Intra-company transfer highlights a fairly unique characteristic about the Canadian mining industry and its global reach. As the industry includes international mining employers, some organizations are able to attract individuals from other company locations to Canadian projects and benefit from international operational experience.

■ Targeted direct entry into the sector:

Either prior to arriving in Canada, or once here, some immigrant respondents pursued a career in mining to continue a career they had begun in their country of origin.

Given the barriers to entry outlined in previous sections, direct entry into a mining company is not always an easy path, even for those with advanced education and mining industry experience. A few individuals commented that it took them between two and four years to land a job after arriving in Canada.

■ Mining by chance:

Particularly for immigrants with expertise in a more general business field, such as IT, HR, marketing and so on, it is pure chance that they found work in the mining sector.

All of the immigrants in the research sample had university degrees, and even if they weren't in a technical field (geology, engineering, etc.) these highly qualified workers had certifications or advanced training as well as several years of experience in specialist roles that could be applied as easily within the mining industry as in others.

In summary, multiple entry points have been used to gain access to careers in Canada's mining sector. Having particular expertise that is valued by an employer seems to smooth the way – including a graduate degree from a Canadian university, skills that can be used in consulting/contracting opportunities, or specialized skills that are directly relevant to a company's international operations.

Career Paths

The research survey gave respondents an opportunity to provide information on the specifics of their individual career paths by collecting information on job changes and movements. Overall, the survey respondents (immigrants and Canadian-born) were most likely to have changed positions as the result of an internal opportunity (i.e., within the same employer), accounting for 37 per cent of the 415 job transitions reported in the survey. The second most common move was for an external opportunity, accounting for 25 per cent of all job transitions. Other reasons, such as resignation, site closure, completion of contract, etc. each accounted for less than 10 per cent of the job transitions. Although survey respondents and interviewees alike often commented on the insecurity of work in the mining sector, the data *from this survey sample* suggest that most of their job changes reflected new opportunities.

Respondents also reported on significant events within their career and, if relevant, what impact the event had on their career. Almost half of the full survey population had upgraded their education or training, either while continuing to work or by taking a break in their career. Those who had taken this action saw it as having had a very positive impact, receiving an average rating of over 4.5 on a 5-point scale; approximately 90 per cent felt it had a positive impact on their career. A similar percentage (45 per cent) reported they had changed employers within the mining sector – and the people who did so generally reported that this had a positive impact on their career, with 76 per cent reporting the change had either a positive or very positive impact.

■ Moving by choice – for career growth and development:

For some, switching occupations is a choice they have made in order to manage their own career, continually learn and expand their skill sets. This type of career path – switching types of work – was the exception within the survey sample; there appeared to be very little movement across career paths. Those who started in a production and maintenance role most likely are still in this type of role, or have been promoted into line management/supervisory roles. People who started in a professional role, whether in a technical/scientific or administrative function have remained in their respective category as an individual contributor, or been promoted into middle or senior management.

■ Movement across types of employers:

Approximately half of the immigrants who participated in the research were (or most recently) employed in large mining companies. Many of them had moved to these companies from smaller companies or from companies providing services to the industry. This is consistent with the survey results, which showed that the general “gravitational pull” is to large employers. In fact, 59 per cent of over 400 reported job transitions in the complete survey sample were movements into a job in a large employer. Very seldom did anyone leave a large employer for some other type of employment relationship. The very few individuals who reported having left a large mining company generally did so because their contract ended or they were laid off/terminated; one individual moved to a position with greater responsibility in a smaller company.



Among the research participants, there were more frequent job changes among small employers, companies providing services to the industry, and self-employment; in these contexts, people appear to move back and forth depending on contracts ending or new opportunities presenting themselves.

Factors That Shape Career Intentions

Research participants were asked what they hoped would happen, in terms of their career, in the next three to five years, and also how likely it was that they would look for work outside Canada’s mining and minerals sector. As mentioned above, two of the immigrants reported that they were close to retirement. About half of the remainder expected to stay in the sector, but hoped to have a different job, while the other half expected to leave Canada’s mining and minerals industry.

Some of the factors that shape these career intentions can be identified through the immigrants’ interviews and/or by also looking at the survey responses to other questions.

■ **Enjoying the work encourages people to stay:**

Those respondents who were successfully established in their community and in their current company reported that they like the industry and hoped to stay. Many of them hoped for a promotion or other job change.

“I plan to stay with this company. There are lots of opportunities. I had applied for a senior position – I did not get it because others had more experience – in another year or two, I will have a better chance.”

(Immigrant woman; professional, technical role)

Passion about the mining industry is not limited to geologists and mining engineers – people who are in roles such as HR or other general business fields feel engaged in the industry and want to stay.

“I am very unlikely to leave the sector – I like the global reach of the industry, the people and the business of mining.”

(Immigrant woman; professional, non-technical role)

■ **Concerns about a lack of job security, career instability and limited prospects force people to consider other sectors:**

Several participants highlighted the current industry downturn when explaining their plans to leave the sector. Some reported that they would like to stay, but expected they will not be able to. For example:

“I am looking to get out of the industry. This has been a great opportunity, a stepping stone. I’m passionate about the industry – and it has a good relationship in my country of origin. But my job is still part-time and with the downturn the company can’t pay me more; I am looking for full-time work with stability.”

(Immigrant woman; professional, non-technical role)

“I am likely to leave – because for geologists in Canada, the rate of pay is low, there are currently very few jobs; and there is low job security.”

(Immigrant man; professional, technical role)

Beyond the current downturn, a history of job instability causes some people to choose to leave the sector. For example:

“Also this industry is too cyclical and that is stressful. Especially as a newcomer, with no family support, or perhaps if I had been here longer – that would all make a difference.”

(Immigrant woman; professional, non-technical role)

■ **Transferable skills make it easier for people to consider other sectors during a downturn:**

Immigrants who have transferable skills are open to leaving the industry. This arises in particular if they have had a series of short-term contracts or temporary jobs, or are concerned about the current downturn, or sometimes if they just want to expand their career horizons and seek new opportunities.

“I am likely to leave – it is not a stable job condition, my skills and education are from another area and transferable. Mining jobs are not stable especially for professionals (engineer, geologist, etc.) and I found that there are lots of lay-offs. It’s getting worse over the years I’ve seen.”

(Immigrant man; professional, technical role)



■ **Women and possibly immigrants from certain cultures are driven out by work environments that are not inclusive:**

Some of the women immigrants who participated in the research attributed difficulties they have experienced to being an immigrant, while some attributed difficulties to being a woman, and some to both. It might be difficult for these individuals to dissect their experience – to identify if a “poor fit” with the work environment is a function of gender, of cross-cultural differences, of individual characteristics, or some combination. While it is not possible to draw firm conclusions from the small sample, it does appear that some of the women immigrants who were consulted had experienced more challenges than their men counterparts.

“My motivation to change jobs [she has had four job changes] has been because of the work environment and gender-related issues – it’s not related to being an immigrant.”

(Immigrant woman; professional, technical role)

“I am likely to leave the industry – I feel my skill sets will be more valued outside of the industry; I want to get away from the ‘boys club’ feel and the politics.”

(Immigrant woman; professional, non-technical role)

It also appears that immigrants whose first language was not English and who are visible minorities were also more likely to consider leaving. Admittedly with small sample sizes, comparing immigrants from Australia and Europe/UK/U.S. with immigrants in similar situations from Asia, for example, shows that those who are visible minorities from Asia were more likely to consider leaving the sector. This finding is in keeping with research that suggests that immigrants from non-Western countries face additional barriers in labour market outcomes (Sweetman & Warman, 2009) and (Bucklaschuk & Wilkinson, 2011). One interviewee reported:

“Generally it is an embracing industry, but I have overheard prejudiced conversations – this would make it more challenging if you are a [visible] minority.”

(Immigrant woman; professional, non-technical role)

The combination of cultural differences AND gender differences can be particularly challenging. For example, the companion report on gender issues, *Strengthening Mining’s Talent Alloy – Exploring Gender Inclusion*, reviews the impact of gender roles such as women’s greater responsibilities for child care, house work, elder care and so on, as well as gendered behaviour such as willingness to ask for promotions. In certain cultures, these expectations about gendered roles and appropriate behaviour are even more pronounced, leading to a complex set of pressures.



“It’s different for women. Immigrant women face more challenges than men. They are also a mother, etc. vs. a man who can just go to work. There is no family support here, and women go through more challenges than men. For example, in getting employment, it is harder because self-confidence is more fragile; men can often just ask for what they want. Women will give up – they can’t afford to spend two months to get a job; or they are worried because they have an accent, etc.”

(Immigrant woman; professional, non-technical role)



Enhancing the Inclusion of Immigrants into the Sector

MiHR's 2015 National Employer LMI Survey (MiHR, 2015) asked employers to evaluate the priority they place on Aboriginal peoples, immigrants and women to meet their company's hiring needs. It was found that employers did not necessarily agree (and some disagreed) that immigrants were a priority hiring group to fulfill their organizational hiring requirements.

With this in mind, the current research collected immigrant, agency and industry perspectives on the drivers and indicators of mining employers' commitment toward the increased inclusion of immigrants.

Respondents to the survey provided a clear assessment of their employers' demonstrated interest in the immigrant talent pool. Overall, the respondents (immigrant and Canadian-born) found that their employers strove to create an atmosphere where diverse perspectives can be leveraged:

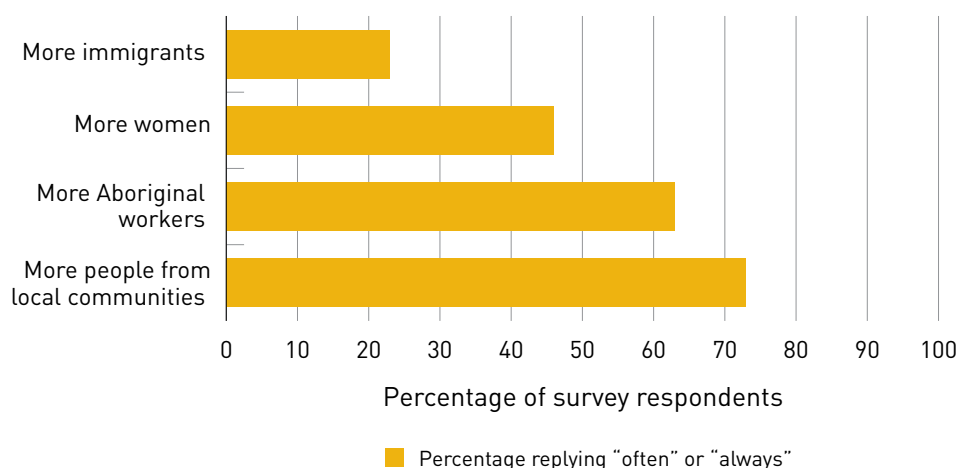
- 68 per cent of the 280 respondents in the full sample reported that their employer "often" or "always" takes action to encourage a respectful and welcoming atmosphere
- 56 per cent of the respondents reported that their employer "often" or "always" takes action to encourage people to express themselves

These workplace characteristics are core to an organization's ability to achieve the "business case" benefits that a diverse workforce can bring.

The results in Figure 3 show that the survey respondents' perspectives echo the employers' priorities with regard to talent pools for meeting their hiring needs. Few of these respondents' employers are seen as demonstrating a commitment to the hiring of immigrants, particularly when compared to actions they are seen to take to leverage the talent of women and Aboriginal peoples. Less than one quarter of respondents indicated that they see their employer "often" or "always" taking action to encourage the employment of more immigrants in their workplace.

The perspectives of the interviewees and focus group participants corroborated this assessment. They generally suggested that there needs to be more pro-active efforts from employers, especially in taking greater initiative in hiring immigrants.

Figure 3: Survey respondents' view of employer actions toward diversity



The research focus group discussions with employers and immigrant serving agencies explored what might foster employer interest in the opportunities presented by the immigrant talent pool. Several barriers to inclusion of immigrants have been explored in this research (see earlier sections). Two of them, in particular, were echoed in these discussions. First, many employers have a perception that hiring immigrants can be complicated, and second there continues to be a preference for Canadian experience. Consequently, the focus group participants highlighted that employers will be most keen to hire immigrants when there is seen to be a compelling need; in short, when they have no other choice. A consistent theme was that employers need to be educated on the business case for hiring immigrants.

"One of the challenges we are facing is, with the mining industry being depressed over the last few years, it could be due to the reality or the perception, that there are tons of [other] candidates in the marketplace."

(Representative of industry stakeholder organization)

"The availability of skills is what matters. If there is a severe lack of skilled candidates applying for the jobs, this may encourage the employer to look outside of the easy route."

(Representative of industry stakeholder organization)

In addition to general needs for talent, shortages of very specific skills will encourage employers to more actively consider the immigrant talent pool. Situations that were mentioned as possibly creating a greater interest in immigrant candidates included a knowledge of different languages and specific vacancies that cannot be filled by Canadian-born candidates.

Employers face barriers as well in the hiring of immigrant talent. Focus groups emphasized challenges in availability and access. In many rural and remote mining communities, the populations of immigrants are limited. Also, as noted earlier, the term “immigrant” often has a connotation of an individual who is not yet in Canada – rather than someone who has already arrived. The timeframes required to source candidates, confirm qualifications, and then hire and integrate new immigrant employees were cited as a significant barrier. Without strong relationships already in place between employers and immigrant serving agencies or other sources, outreach to immigrant talent can be difficult.

“If we are looking at it from a local community aspect where we are hiring, the population of [location] is not diverse unless you are looking at First Nations. If there were higher percentages of immigrants in those communities, then we would be able to hire and have more people represented in our mine sites.”

(Representative of employer organization)

“Timeliness is a concern. Having foreign certifications accepted, especially where there may be prerequisites such as provincial red seal designations, etc. Employers need to work actively with the agencies in order to test and acquire those equivalent certifications prior to arrival.”

(Representative of employer organization)

In summary, the research participants were clearly of the opinion that Canada’s mining employers have generally demonstrated little interest in engaging immigrant talent, unless there is no viable alternative. A shortage of skills, or perhaps the availability of a particularly prized and unique skill, can overcome employers’ hesitation to reach out and hire immigrants. The potential benefits of having more diverse international perspectives and a larger talent pool to draw from – i.e., the broader business case – does not seem to be particularly salient in the day-to-day hiring decisions of many employers.

The research also uncovered many examples of encouraging and successful practices already in place in some mining workplaces and in relevant comparator industries. These good practices were explored in the research, and the findings and a compendium of case studies are available as a companion report titled *Strengthening Mining’s Talent Alloy: Practices in Inclusion*.





Recommended Industry-Wide Strategies

The current study has focused on understanding the barriers from the perspective of those who are directly involved – drawing fresh insights from the experience of immigrants, employers and agencies. The research has also helped to identify additional suggestions and examples of success that are particularly relevant to the operational realities of Canada’s mining and minerals sector. Based on the research findings, the following evidence-based recommendations are proposed.

✓ Tackling workplace barriers

The findings of this research project suggest the following evidence-based, industry-wide strategies for addressing workplace barriers:

1. Build the capacity of skilled immigrants to gain meaningful access to opportunities. There is a talent pool of qualified immigrants whose job search could be more effective with better and timelier access to information. For example:
 - a) Develop and implement a dissemination strategy to improve accessibility to immigrant-relevant industry information about careers, current opportunities, employers, and professional requirements. Several effective resources already exist that could be further leveraged. Immigrant serving agencies and professional associations should be considered as primary conduits and access points for this information.
 - b) Facilitate networking opportunities for immigrants to explore career opportunities and meet with industry decision makers. Several successful models exist that could be customized to meet the specific needs of the mining industry, leading to approaches such as enhanced Virtual Career Fairs, and/or a Professional Network for Immigrants in Mining, etc.

2. Create an industry-focused strategy to educate employers on the opportunity for immigrant talent to be part of the talent solution:
 - a) Articulate the business case for greater inclusion of immigrants, focused on elements of direct relevance to mining employers.
 - b) Educate decision makers about the “internationally trained and experienced” (or other positive terms rather than “immigrant”) talent pool that is already available within Canada, to counter the assumption that the focus is on hiring from outside our borders.
 - c) Disseminate best practices and share success stories.
 - d) Demonstrate the advantages and potential benefits of taking long-term action despite temporary market downturns.
3. Enable employers to identify and take action on unintended barriers. For example,
 - a) Develop and disseminate a set of “self-audit” tools to support committed employers in identifying barriers within their own organization, and in taking action and measuring results with business-oriented metrics.
 - b) Alternatively, work with a group of committed industry stakeholders to address one barrier in their companies, within a given timeframe.
4. Foster stronger industry partnerships among employers, professional associations and immigrant serving agencies. There are shared interests that could be achieved through more consistent and intentional collaboration. For example, options to consider could include:
 - a) An annual congress focused on strategic actions across the country;
 - b) A toolkit that would support employers and agencies in developing effective partnerships (adapting existing models to meet the industry’s needs);
 - c) A national communications strategy to provide useful industry information to agencies in key mining locations;

✓ **Building successful career paths**

The findings of this research project suggest the following evidence-based, industry-wide strategies for building successful career paths for immigrant workers in Canada’s mining and minerals sector.

1. Develop a strategy for optimizing the engagement and recruitment of international students who are enrolled in mining-related university programs. The current research suggests that this is an effective entry point to the sector, yet there are indications that many graduates receive (and accept) competitive offers from other countries.
2. Focus on retention and success of immigrants in the Canadian mining and minerals sector. For example:
 - a) Develop mentoring or networking relationships for immigrants.
 - b) Develop methods to mitigate barriers such as access to credit, integration into remote communities, and spouses’ careers.
 - c) Describe opportunities and practical steps to pair FIFO assignments with urban settlement of immigrants and their families.

3. Collaborate with stakeholders in the mining sector, professional associations and possibly other related industry sectors to explore possibilities for cross-sector career paths that would allow people with transferable skills to smoothly transition from mining during a downturn, and yet return when hiring needs expand again.
4. Develop career transition supports for immigrants who are faced with layoffs, short-term contract positions, or other types of career instability.

✓ **Enhancing workplace culture**

Although not an explicit focus for this particular study, there are a number of promising directions that were uncovered through the research process. These can be explored in greater detail in future MiHR projects:

1. Provide training and education to employers and their workforce on the elements of an inclusive workplace culture, including, for example, building an awareness of unconscious bias and micro-inequities.
2. Work with industry employers to implement robust strategies to encourage culture change and inclusive behaviours across their workplaces.

✓ **Extend the research**

The current research project has contributed to the industry's understanding of some of the particular challenges and opportunities of leveraging the talent within the immigrant population. These issues have been explored through the perspectives of individual immigrants, immigrant serving agencies and employers, and from this new research questions have been raised.

1. Extend the current research by exploring the barriers faced by immigrants (already in Canada) who are working in labour, production and maintenance roles within the mining sector. The entry barriers and the career trajectories for these occupational groups might well be different than those for geologists and engineers.
2. Investigate the intersection of immigrant status with gender, generational differences, and cross-cultural differences.
3. Explore any links between previous work experience and the length of time it takes for integration into Canada's mining sector – perhaps affected by access to networks and industry information, involvement in advanced education in Canada, and geographic location.
4. Articulate a compelling business case that aligns directly with the benefits of having an inclusive workplace culture. These might include, for example: a consistently strong safety record, enhanced innovation and problem-solving, benefits of health and wellness, enhanced reputation as a business and as an employer.





Appendix

Research Methodologies

Literature Review

The literature review was documented using a standard capture template. Findings were analyzed thematically to address the primary research topics as well as secondary themes identified in earlier MiHR research studies.

Survey

The online survey was hosted on the FluidSurveys platform from January to March 2015. The survey was available in both English and French. Alternative methods for survey completion, (printed copy, or telephone interview) were made available upon request.

In order to respond to the survey, individuals were required to meet the following criteria:

- Currently or recently (within the last five years) working in Canada's mining and minerals industry, including those working as an independent contractor, and those who worked with a company providing services to the sector.
- Willing to provide confirmation of informed consent, through providing a response to a consent confirmation at the start of the survey. Detailed information was available online for the respondent to review prior to completing the survey.

An incentive was provided to respondents – if they consented, their name was entered into a draw for one of ten \$50 VISA gift cards; they were not required to complete the survey in order to enter the draw.

To achieve an acceptable response, supporting materials, including postcards with the study's information as well as a factsheet for the wider project were developed. Several methods for distributing the survey were utilized:

- News release distributed via all MiHR channels, posts on relevant MiHR social media, materials distributed at conferences: Immigrant Women in Mining, BC in November 2014, and Mineral Exploration Roundup and Northern Exposure in Jan 2015 and PDAC in March 2015.
- Online portal to sign up for the survey, in advance of it becoming available in January 2015. Individuals who had "registered" in this manner were advised by email when the survey became available.
- Three MiHR tweets daily prior to the survey's launch and while it was live.
- Specific to Aboriginal employees, NationTalk distributed a fax blast to Aboriginal communities; project consultants made targeted calls to Aboriginal associations, ASETs, Friendship Centres and communities, following up by email with materials.
- Followed up with immigrant and Aboriginal survey participants who had offered to participate in the next phase of the research, asking them to distribute the link.

Data were analyzed using SPSS, to produce descriptive and inferential statistics, as well as multivariate statistics to explore patterns in the data such as the intersections of various factors within immigrant status (such as age, gender, occupational category, etc.). Any inferential statistics in the survey findings (such as differences in average scores between groups) that are presented throughout this report are statistically significant at $p < .05$, unless otherwise indicated.

Open-ended responses were subjected to a qualitative analysis, to identify themes and patterns that could aid in the interpretation of the quantitative survey data. These findings were also helpful in framing the interview and focus group research questions.

A total of 357 people provided some responses to the survey. The sample that was used for analysis was the 280 respondents who completed the survey to the end. Within this sample, 31 reported that they were immigrants to Canada.

Telephone Interviews

Telephone interviews were conducted with ten immigrants who are currently working in Canada's mining and minerals industry. Six of these individuals were among those who had volunteered for follow-up interviews upon completing the survey; four were identified through contacts with industry stakeholders.

The purpose of the interviews was to explore themes emerging from the online survey, particularly focusing on two lines of inquiry: Workplace Barriers to Inclusion and Career Paths and Trajectories. Interviews were conducted by telephone and lasted approximately 45 minutes.

Transcripts from the interviews were offered to interviewees for validation and confirmation of accuracy. They were then combined with the focus group transcripts (see below) into one qualitative data set and subsequently analyzed using the NVIVO qualitative analysis tool to identify key themes and patterns.

Focus Groups

To gain a more in-depth understanding of themes emerging from the online survey and to supplement the interviews, four focus groups were conducted. These online sessions lasted approximately 90 minutes with both immigrant serving agencies and employers to uncover barriers at entry points to the sector and explore their experiences and perspectives in this regard.

There were two sessions with immigrant serving agencies, one session with employers, and one with a mixed group of key informants who are involved in a concurrent MiHR project focused on career information for immigrants. In total, 18 immigrant serving agency representatives and 10 employer representatives participated in the focus groups.

The immigrant serving agencies represented the following locations:

Vancouver	Whitehorse	Sudbury
Richmond	Edmonton	Restigouche
Surrey	Wood Buffalo	Halifax
Prince George	Thunder Bay	St. John's
Campbell River		

Transcripts from the focus groups were integrated with the interview transcripts and subsequently analyzed using the NVIVO qualitative analysis tool to identify key themes and patterns. The questions and themes being explored in the interviews and focus groups were similar; as such it was appropriate to combine the transcripts for the analysis. The source of comments was retained, so that if there were trends or important differences in perspectives, these could be identified and reported.

Validation of Findings

The final research component was a 90 minute industry validation session hosted online by MiHR, with the Project Steering Committee and other key informants. This discussion provided an opportunity to review the draft research findings, recommendations and the industry practice findings outlined in *Strengthening Mining's Talent Alloy – Practices in Inclusion*. Its purpose was to ensure that the findings were grounded in the operational realities of the industry and useful for industry stakeholders.

Data collection tools

Four tools were created to support the primary research in this project:

- Online survey, in English and French.
- Interview protocol and script for telephone interviews with immigrants currently or recently working in the Canadian mining and minerals sector.
- Focus group protocol and script for online sessions with six to eight immigrant serving agencies and/or employers – sessions were conducted in English, but translation into French was made available.
- Key informant interview protocol and script for documenting case studies.

Copies of these tools are available from MiHR upon request.

Selected Survey Data Tables

Table 1: Demographic characteristics of the survey respondents; Canadian-born and immigrants

	Canadian-born (n=248 or 249)	Immigrated as youth (n=13)	Immigrated as adult (n=18)	Total
Gender				
Man	60%	54%	56%	59.5%
Woman	40%	46%	44%	40.5%
Age of respondent				
18–24 years old	4%	15%	0	5%
25–34	23%	15%	56%	25%
35–44	26%	15%	11%	25%
45–54	28%	39%	22%	28%
55–64	1%	8%	11%	15%
65 or above	2%	8%	0	2%
No. of years in Canada				
5 years or less	n/a	0	44%	26%
6–10 years	n/a	8%	22%	16%
More than 10 years	n/a	92%	33%	58%

Table 2: Work-related demographics of survey respondents; Canadian-born and immigrants

	Canadian-born (n=248 or 249)	Immigrated as youth (n=13)	Immigrated as adult (n=18)	Total
Completed post-secondary education in a mining-related field				
Yes	21%	23%	50%	24%
No. of years in Canadian mining sector				
Less than 1	5%	8%	6%	5%
1–5	23%	31%	44%	25%
6–10	27%	15%	28%	27%
11–15	10%	8%	17%	10%
16–20	17%	15%	0	7%
21–25	5%	8%	0	5%
More than 25	23%	15%	6%	22%
Current (or most recent) occupation				
Clerical and Support	2%	0	0	2%
Labourer	6%	0	0	5%
Production/Maintenance	18%	8%	0	16%
Technical and Skilled Trades	7%	8%	0	7%
Lead hand or Foreman	5%	0	0	5%
Professional – Technical and Scientific	17%	46%	44%	21%
Professional – Admin., HR, Legal, Finance, etc.	11%	8%	17%	11%
Middle and Line Management/Supervisor	17%	23%	28%	18%
Senior Management	11%	8%	6%	10%
Other	7%	0	6%	7%
Current (or most recent) employer				
Self-employed, contractor, consultant	4%	31%	11%	5%
Company providing services to mining	10%	8%	22%	11%
Small mining/minerals company (<500)	16%	15%	17%	16%
Large mining/minerals company (>500)	68%	39%	50%	66%
Different industry, NOT mining or minerals	1%	8%	0	1%
Other	2%	0	0	1%

Analytical Note: Operational definition of immigrant – comparison of youth immigrants to adult immigrants

Reported differences are statistically significant ($p < .05$)

1. Career Satisfaction: Participants' response to "How satisfied have you been with your jobs so far in the mining sector?" [1 to 10 scale, positively scaled with 10 being greater satisfaction] was used as the dependent variable in an Analysis of Variance (ANOVA) with post-hoc means test. The group means were:

Canadian-born: 8.1 (n=313)

Immigrated as youth: 8.6 (n=14)

Immigrated as adult: 6.8 (n=24)

2. Experience of Barriers: A calculated variable that sums the 5-point ratings across 19 listed career challenges and barriers was used as the dependent variable in an ANOVA with post-hoc means test. The group means (higher scores indicate more barriers or barriers that were rated as more important) were:

Canadian-born: 36.7 (n=265)

Immigrated as youth: 37.2 (n=14)

Immigrated as adult: 48.7 (n=20)

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