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**Addendum
Custom Labour Market Report –
Thunder Bay District
Mining Industry**



North Superior
Workforce Planning Board

HR
FORECASTS

HR FORECASTS

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The views expressed in this document do not necessarily reflect those of Employment Ontario.

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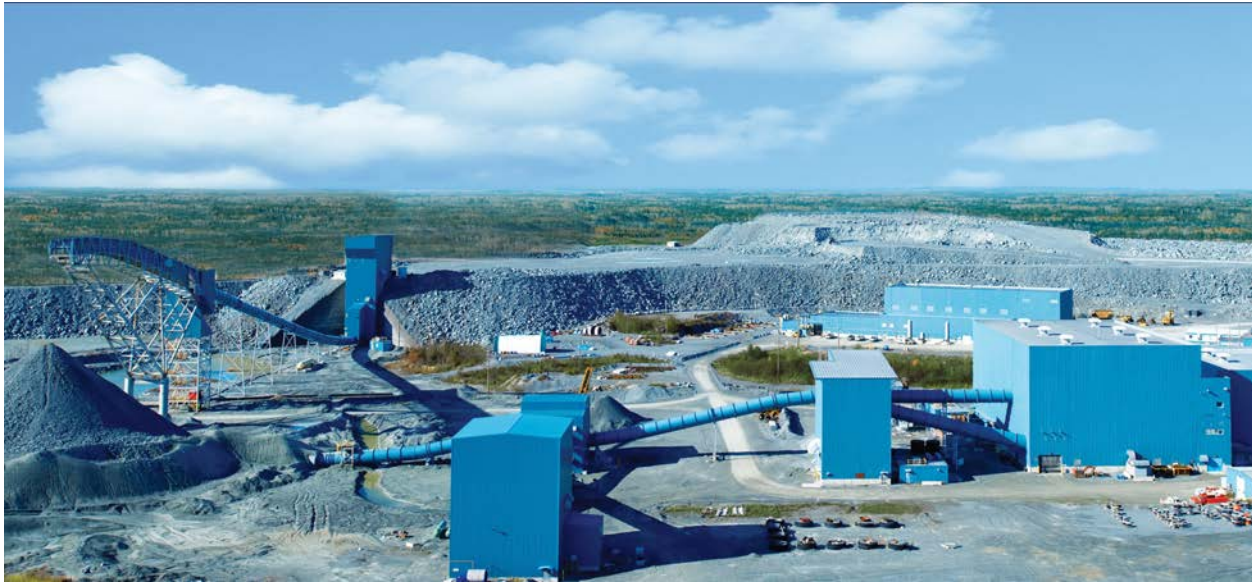
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Overview



Recent mining activity and a wave of new exploration has resulted in tight labour market conditions in Ontario's mining industry. The impending retirement of baby boomers, low participation rates of women, outmigration of youth, under-utilization of Aboriginal Peoples and new immigrants are among the labour market and HR issues faced by the industry. With similar pressures felt across Canada, strategic and coordinated efforts will be needed to address these issues across the province.

This is an addendum report prepared for North Superior Workforce Planning Board (NSWPB) that complements and adds to discussions developed in *Custom Labour Market Report—Thunder Bay District Mining Industry, 2012*. This additional report captures the results of a new survey administered in the District that supports the previous research and explores key labour market issues in more depth. The new survey was distributed to participants of the previous research as well as other local mining, exploration and support services organizations in the region. The results of the survey provide additional insights into the hiring challenges in the local labour market and lend new support for the previous research done by MiHR.

Since developing the Thunder Bay District report, MiHR has also developed regional labour market forecasts for the exploration and mining industry in five other regions across Northern Ontario — the result of a innovative partnership between MiHR and six Northern Ontario workforce planning boards. Each report presents a district-level outlook that follows MiHR's labour market forecasting model. Districts include: Sudbury, Nipissing, Kenora and Rainy River, Algoma, and Cochrane and Timiskaming.

This addendum report begins with an economic overview and description of the regional labour market in the Thunder Bay District. Results from the new survey are then discussed. The report concludes with HR issues and recommendations to be added to the ones reported in the full outlook report.

Economic Overview

The global economic recovery stalled due to increased uncertainty in the second half of 2011; as a result, the outlook for global growth deteriorated in the last two quarters of the year. The key factor underlying this deterioration was the ongoing euro-area sovereign debt and banking crisis. With the continued uncertainty, global exploration and mining activity slowed in 2012, casting a shadow over industry prospects for the near-term.

However, fluctuations are a reality in the mining industry and overall — despite recent activities — the economic outlook is cautiously optimistic. In the United States (U.S.), the largest single customer for Canadian output and production, the economy has shown signs of a gathering momentum for sustained growth since the fall of 2011. Consumer confidence in the U.S. increased in 2012 from the near-record lows of August 2011 and output growth accelerated in both the U.S. manufacturing and non-manufacturing sectors. In addition, demand for Canadian commodities continues to grow as China, India, Brazil and other nations further develop their economies.

Canadian Economic Overview

Canadian exploration activity slackened in 2012 and industry information indicates that exploration expenditures did not meet anticipated levels during the second half of the year. As a result, the exploration and mining sector operated under a blanket of caution in the latter part of 2012. Nonetheless, Canada's economic outlook remains positive amid continued international uncertainty and a tenuous global recovery. Canadian economic growth is forecast to be modest in the near-term and then to gradually increase slightly over the next 10 years, as demand for Canada's natural resources continues.



Canada posted the strongest growth in employment in the G-7 during the recovery period — with both the quantity and quality of new employment exceeding expectations. Overall, Canada has regained the ground in employment lost during the recent recession. About 90 per cent of the added jobs were in full-time positions, with over three-quarters in high-wage industries in the private sector. In an October 2012 update of Canada’s fiscal and economic outlook, the federal government predicted that real GDP growth in 2013 would be lower than private sector forecasters had projected in early 2012.

The largest impact in Canada of the global economic turbulence has been lower commodity prices. The European crisis and its impact on growing economies, including China, remains a drag on world economies. In North America, however, both Canadian and U.S. governments have indicated they will act as needed to provide stimulus to help sustain recovery. This is a clear message to other countries and to industry to continue to invest in North American economies. In early 2012, investment in Canada was well above pre-recession levels, at an annualized rate of 9.4 per cent.

Mining Industry Economic Overview and Outlook

In sync with other industrial sectors in the economy, the Canadian mining sector’s GDP rebounded in 2010 after 2009’s precipitous decline — increasing by 15 per cent over the levels of the previous year. The sector responded quickly to international demand with strong exports in 2010.

Globalization of international trade and rebounding demand for Canada’s mineral resources have stimulated the industry’s recovery; however, in mid-2011, the uncertainties associated with weak markets returned due to a number of developments, including a slowdown in the U.S. economy and higher than anticipated inflation in China. These trends and others produced a temporary reduction in the demand for Canadian metals and minerals and resulted in much lower prices.

Despite the sector’s cyclical nature, demand for Canadian metals and minerals is expected to grow over the long-term. This prediction arises from gradual but stable economic growth in the U.S. and from the relatively high economic growth rates of China, India and Brazil. These countries’ large domestic markets for Canadian exports of base metals, potash and potassium compounds, and coal bode well for additional incremental demand for Canadian metals and minerals in the near term, as well.

Ontario Mining Industry Overview – Northern Ontario and the Ring of Fire

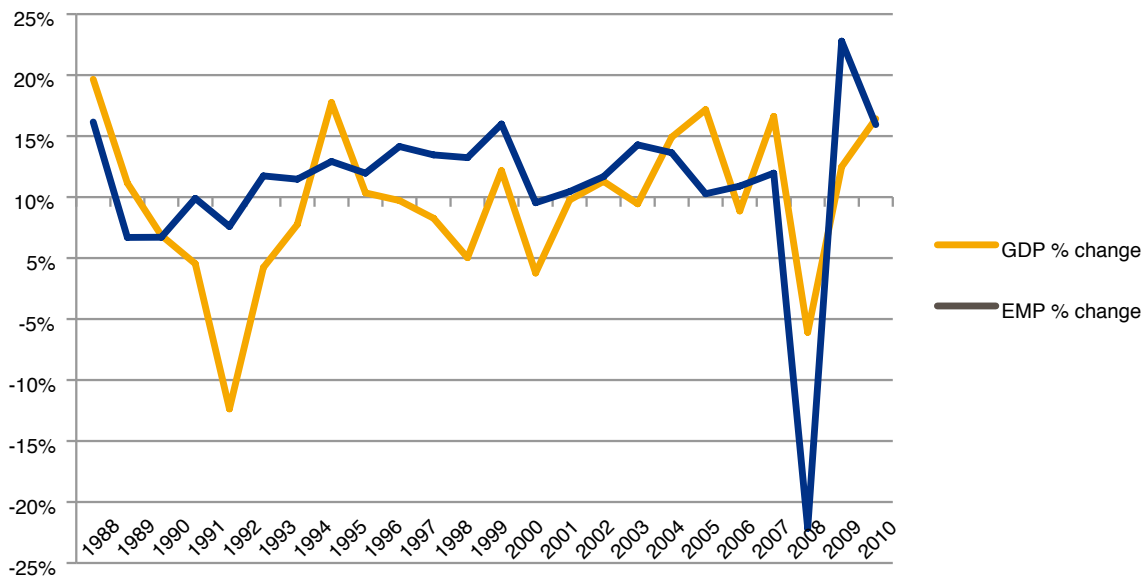
Resource-based industries are a vital part of a strong Northern Ontario economy. The discovery of significant mineral deposits in the Ring of Fire, an area in Ontario’s Far North, presents major development opportunities in mining that will contribute to the Ontario economy. Development of the mineral deposits in the Ring of Fire area will create jobs and better position the Northern Ontario economy for future sustained growth. According to recent feasibility and impact studies, the mine developments currently under consideration in the Ring of Fire are expected to create more than 1,500 permanent jobs, once the mines are in full production. In addition, related jobs will be created in the mining service and supply sector.

Regional Labour Market

Canadian Mining Industry Employment

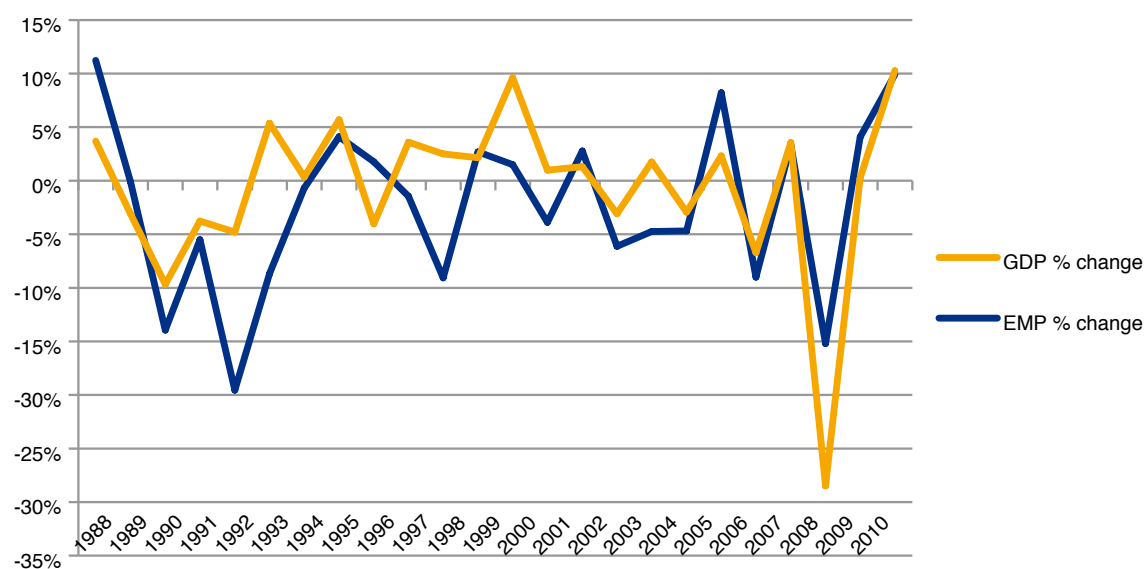
The mining industry directly employs over 235,000 people in Canada. Employment in the sector reflects a net increase of 15 per cent during the last six years, or an average increase of 2.5 per cent year-over-year, between 2004 and 2010. Canadian mining industry employment is sensitive to changes in GDP. Figures 1 and 2 depict this relationship in Canada and in Ontario.

Figure 1 – Relationship Between Mining Employment and GDP (per cent change) – Canada



Source: Mining Industry Human Resources Council, 2013

Figure 2 – Relationship Between Mining Employment and GDP (per cent change) – Ontario



Source: Mining Industry Human Resources Council, 2013

Thunder Bay

Northern Ontario is going through a demographic transition. An aging labour force, shrinking population and outward migration are potential threats to the economic growth of the region. The Thunder Bay District is no exception. Impending retirements of baby boomers, shrinking talent pool and lack of skilled labour are creating challenging labour market conditions for prospective employers. The cyclical nature of the mining sector adds an additional layer to the labour market issues.



The Thunder Bay District is home to Thunder Bay, a large urban centre in Northwestern Ontario. Historically exploration and mining activities have been a corner stone of the Northern Ontario economy; contributing to development of infrastructure and creating job opportunities. Recent exploration activities in the region have contributed not only to new economic development but have also impacted the local labour market with new demand for skilled workers. Meeting this demand may prove challenging with competition from other resources sectors for similar skills sets.

The demographics of the District are characterized by an older workforce — 20 percent of the Thunder Bay population is over the age of 60. The changing demographics in the region are further strained by a shrinking population (as shown in the 2011 Census) and a higher median age (43.2), relative to the Ontario average (40). Census data shows that Thunder Bay District's population decreased by 2 per cent from the 2006 census to 2012. Population declines along with the high levels of youth out-migration continue to cause supply-side pressures in the local labour market.

Skills Shortages

The Thunder Bay District is facing an impending shortage of skilled workers, primarily due to a lack of younger people with appropriate skills coming into the labour market. Competition for skilled workers both among mining employers and among resource sector employers in this region and in other parts of Northern Ontario is heating up. This results in increased worker mobility and new recruitment and retention challenges.

Various initiatives could help ease the region's skilled worker shortages. These include supports for education, through matching individual students or graduates to specific employers for work experience; industry-education partnerships and coordination to better align industry needs to academic curricula, particularly for occupations that require highly specialized training. Targeted initiatives to coordinate industry and communities to reduce youth out-migration and provide stability.

The Survey



Inputs for this addendum report included an industry survey to build on the knowledge and findings from previous research conducted in Thunder Bay District. Sub-provincial analysis was conducted in five other Northern Ontario regions and a new survey was needed to update and align research in Thunder Bay with the reporting in the other Districts. Findings from primary research in the District were used to further define local context; verify and validate key challenges; and provide local inputs on industry and education partnerships; methods of sourcing and recruiting talent; and impacts of the seasonal workforce.

In Thunder Bay District, 12 employers participated in survey and phone interviews of the 46 invited—for a response rate of 25 per cent. Stakeholders included government, education, industry associations, and employers in extraction, exploration and development, and mining support-services sectors. These inputs were used to validate previous findings and explore key labour market issues in more detail.

Regional respondents to MiHR's survey questionnaire indicated that employment in mining exploration, development and support activities will likely increase in the region beginning in 2013. Nearly all of employers reported business conditions as favourable and expected conditions to remain the same or improve in the year ahead. Most employers anticipate in advance and react quickly (within six months) to economic conditions. The challenge will be to proactively find enough skilled workers to support employment expansion, given the District's current demographics and education levels.

Seasonal Workforce

The seasonal workforce is a major component of the exploration sector labour market in Thunder Bay. In Northwestern Ontario, Thunder Bay is a major centre for exploration and mining supply and support services. Most of the employees working in these sectors are permanent residents of the District, with few commuting in from the other Northern Ontario Districts. Respondents to MiHR's survey indicated that they readily employ a seasonal workforce and on average seasonal workers are employed for six months, mostly in the summer season.

Respondents also stated that approximately 70 per cent of their non-Aboriginal workforce lives in the District, with some employers reporting as much as 100 per cent local workforce. For the non-resident workforce, people mainly commute into the region from neighbouring Ontario districts, Quebec, and even the Southwestern U.S.

Sourcing and Recruiting Talent

Employers in the Thunder Bay District rely most heavily on external online job boards, company websites, and printed media (newspaper, classified ads, magazines) when recruiting talent. Very few (less than 5 per cent) of employers reported using social media, job fairs, placement programs, or direct recruiting from schools to find talent. A few exploration employers indicated that word of mouth helps them source talent; a practice that is a large part of the culture of that sector.

Education and Training Challenges

MiHR's survey results show that employers are readily investing in education and training of their employees. However fluctuating economic conditions in the sector can force them to make workforce adjustments and lose key talent. Participants also stated that in Northern Ontario the skills shortage is a bigger problem in the mining industry than labour shortages.

Given the technical nature of mining jobs and health and safety requirements, mining employers invest in internal training and education of their employees for aspects of technical development and health and safety programs. Nearly half of the employers surveyed indicated that they do not outsource any training programs.

Survey results show that 66 per cent of the employers outsource education and training for leadership and management training. Twenty two percent of the participants stated that they mostly outsource occupational health and safety training, GIS training, and ATV equipment safety and repair. Ontario common core training was not top of mind for any employer surveyed. This is likely a reflection of the mix of employers and exploration and mining activity in the region.

For all employers, a lost employee translates to lost investment in skills and training programs. Despite this, and along with a seasonal and transient workforce, employers in the region continue to make this investment. A coordinated emphasis in the District on retention strategies can help the local employers in retaining their key talent and realising the return on investments in employee development.

Additional Trends and HR Issues

Research for this addendum report exposed some new HR trends and issues to add to the issues raised in the full report.

- In Thunder Bay, Aboriginal communities represent 11 per cent of the total population. Responses to MiHR's survey showed that most of the Aboriginal employees are residents of the District. Many of the Aboriginal people employed in the industry are in entry level, trades and production occupations. Stakeholders from industry, education, and communities highlighted the opportunity for local employers to continue and increase collaboration with Aboriginal communities in order to expand the limited skilled labour pool.
- Employers in Thunder Bay tend to rely on traditional methods to source and recruit talent. None of the employers surveyed indicated using social media, placement programs, or direct recruiting from local schools. Social media may present a new option for District employers in reaching out to youth in labour markets both in the region and in larger urban centres. Placement programs and visits to local schools may also serve to attract youth to the sector.
- Encouraging seasonal workers to settle in the community will provide a longer-term solution to the District's labour market challenges. Generally, seasonal workers are not local residents. However, survey respondents in Thunder Bay indicated a large portion of their seasonal workforces are local. This adds a new layer to the labour market pressures felt in the region and points to stress on the local communities with higher unemployment or even out-migration in the off-season. Although transient workers fill the labour gap over the short-term, chronic employment of a seasonal workforce does not contribute in the long-run to addressing skills shortages. A combination of solutions, with an aim to encouraging workers to remain in the region in the off-season will be needed to address the skills shortages.



- Perceptions about the mining industry play a vital role in attracting young talent to pursue mining-related disciplines of study. Environmental stewardship, fair and respectful engagement with local communities, and a sense of exciting career potential and stability are important to young people. Given the recent expansion in exploration activity in the region, there is great potential to attract a younger workforce to the region. Employers can showcase the industry as rapidly changing, challenging, viable, environmentally and socially responsible and attractive employment option for the youth.
- Education and training partnerships are essential in encouraging youth participation in the mining sector and addressing skills shortages. During a down-turn when graduates are not able to find work in mining, they look to other sectors. If students are discouraged from the sector at the education stage of their development, they will be unlikely to move into the sector upon graduation. Thunder Bay mining employers can look to creative initiatives to maintain supports for students through fluctuations in economic conditions in the years ahead as the industry's needs grow.
- Developing long-term strategic partnerships with education and training institutes can help the Districts' mining organizations to attenuate the talent gap and to proactively adjust their training needs to economic cycles. Active partnerships with training institutes, community colleges and professional training facilities for continuing education will support industry stakeholders in developing their current workforce and attracting new talent. Partnerships can range from information sharing about required skills and programs to active engagement from the industry in the curriculum and training development, co-op placements and donating equipment for training.
- Volatility in the business cycles can also create a misalignment between industry needs and the skills of students being supplied by training programs. As it can take many years to fully prepare someone for the workplace, changing conditions mean the education-system response falls behind and is forced to play catch-up. A proactive relationship and cooperation between industry and education is necessary to create better coordination.

Human resources form the backbone of an industry-wide strategy for success. Stakeholders in the Thunder Bay District have many promising programs, initiatives and partnerships in place to address the skills shortages in the region. With the inclusion of the suggestions in this addendum and the main report, new strategies will emerge, and existing strategies will be strengthened. Solutions will require cooperative, collaborative, and innovative approaches to industry branding, career awareness and outreach to youth, enhanced training and education, and engaging and developing underrepresented and under-utilized talent groups. A variety of approaches will ensure that Thunder Bay District exploration and mining is well positioned for future sustainability and success.



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