Regional Skills Gap Analysis

Regional District of Bulkley-Nechako

January, 2014

Contents

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Burns Lake, BC
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Regional District of Bulkley-Nechako

"A World of Opportunities Within Our Region"

January 24, 2014

The Regional District of Bulkley-Nechako would like to thank the Province of British Columbia and the Government of Canada for generously funding this project. The Regional Skills Gap Analysis would not have been possible without this financial support.

The next step in this project will be to distribute the Final Report to interested stakeholders. To do this, a Launch Event will be planned for Spring 2014. At this event community members and stakeholders will come together to discuss the final report, build relationships and form partnerships to move the strategies forward.

The Regional District of Bulkley-Nechako was pleased to lead this project with the support of the Project Management Committee.

Bill Miller
Chair, Regional District of Bulkley-Nechako

Municipalities:
Smithers, Fort St. James, Vanderhoof, Fraser Lake, Houston, Telkwa, Burns Lake, Granisle

Electoral Areas:
A - Smithers Rural
B - Burns Lake Rural
C - Fort St. James Rural
D - Fraser Lake Rural
E - Ootsa Lake/Francois Lake
F - Vanderhoof Rural
G - Houston Rural

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Regional Skills Gap Analysis – Regional District of Bulkley-Nechako Board of Directors
February 6, 2013

A strong competitive climate supported by diversity in business and industry, and empowered by a skilled, resilient and talented labour pool is a goal common across many regions, provinces and nations. As the Board of Directors for the Regional District of Bulkley-Nechako, we recognize that our strongest asset is our people. Collectively we support this initiative which examined our local labour force needs of today, and as importantly for our future. It is this knowledge and understanding that will inform and influence our decision making process to sustain a competitive and progressive region.

We recognize that this is not a simple task, but rather a complex system that requires collaboration, cooperation, and commitment across communities, education, government, unions, business, and our not-for-profit sector. On January 23rd, 2014 the Board of Directors for the Regional District of Bulkley-Nechako adopted this report, demonstrating our belief that this plan informs our response for collaboration, promotion, information, and action.

This plan is OUR collective plan, owned by our member municipalities, local stakeholders and residents of Bulkley-Nechako. We encourage you to consider your role and that of your community, organization or agency in moving this from a written plan to one that is actioned and monitored. Our commitment is to provide an annual update that celebrates our successes, informs on those activities and initiatives that have been implemented.

Bill Miller, (Chair) Director
Electoral Area B

Taylor Bachrach, Mayor
Town of Smithers

Stephen Freeman, Director
Electoral Area E

Carman Graf, Mayor
Village of Telkwa

Tom Greenaway, Director
Electoral Area C

Bill Holmberg, Mayor
District of Houston

Dwayne Lindstrom, Mayor
Village of Fraser Lake

Thomas Liversidge, Councillor
Village of Granisle

Rob MacDougall, Mayor
District of Fort St. James

Rob Newell, Director
Electoral Area G

Jerry Petersen, Director
Electoral Area F

Stoney Stoltenberg, Director
Electoral Area A

Gerry Thiessen, Mayor
District of Vanderhoof

Ralph Roy, Director
Electoral Area D

Luke Strimbold, Mayor
Village of Burns Lake

Regional District of Bulkley-Nechako
Regional Skills Gap Analysis

Regional Skills Gap Analysis – Project Management Committee
February 25, 2013 - January 31, 2014

As members of the Project Management Committee we have worked collaboratively to guide, challenge, and inform the Regional Skills Gap Analysis presented in this evidence-based report. Designed to capture the results of a comprehensive skills gap analysis that emerged through statistical data and local consultations, the findings provide communities and stakeholders across the Regional District of Bulkley-Nechako with a comprehensive plan to best meet local labour supply and demand needs.

The following pages offer information about the local current and projected labour market situation and presents tangible and realistic strategies and actions to strengthen development, recruitment and retention practices, and labour force planning.

As a committee it has been our privilege to work together to undertake this important initiative, and to apply a future focused lens that reflects our community and resident needs of today, and as importantly those that will strengthen our businesses, our labour force, and our individual and collective competitiveness to respond in a global marketplace.

Having now completed this important first step, we recognize that the plan will only influence change if it is implemented. So we now shift our focus to advancing the strategies and actions presented, and to engaging local communities and stakeholders who must become part of that implementation.

Our signatures represent our ongoing commitment to move from planning to action. While that commitment may take on a different form across the committee, it is agreed that our work must remain inclusive, transparent, and accountable.

Claudette Gouger , New Gold Inc., Blackwater Project

Maureen Czirfusz, Houston Chamber of Commerce

Corrine Swenson, Regional District of Bulkley-Nechako (Staff)

Lynn Synotte, College of New Caledonia

Mike McDiarmid, School District #54

Danielle Smyth, Northwest Community College

Deneve Vanderwolf, Regional District of Bulkley-Nechako (Staff)

Rob Newell, Regional District of Bulkley-Nechako (Board)

Karin Hunt, Prince George Nechako Aboriginal Employment and Training Association

Lianne Olson, Rio Tinto Alcan

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Acknowledgements

Thank you to all who offered their time, expertise and knowledge to inform and influence this report. The culmination of multiple perspectives, individual and collective vision, and passion for a competitive and sustainable economy for Regional District of Bulkley-Nechako have been fundamental to creating a strategy that will strengthen the local labour market.

Labour Force Gap Analysis – Project Management Committee:

The project was guided and informed by the Regional Skills Gap Analysis Project Management Committee whose contributions strengthened local community stakeholder engagement and provided insight into the development of the labour force skills gap strategy.

Committee members:

Maureen Czirfusz, Manager/ EDO, Houston Chamber of Commerce
Carrie Dusterhoft, Manager, Community Transitions, Ministry of Jobs, Tourism and Skills Training
Halley Finch, ESC Manager, Work BC
Karin Hunt, Executive Director, Prince George Nechako Aboriginal Employment and Training
Association (PGNAETA)
Kathie LaForge, Community Manager, New Gold Inc., Blackwater Project
Rob Newell, Director – Electoral Area “G” (Houston Rural), RDBN
Eugene Marks, Director of Instruction, School District #91
Mike McDiarmid, Assistant Superintendent, School District #54
Lianne Olson, Community Relations Liaison, Rio Tinto Alcan
Danielle Smyth, Regional Director, Eastern Region, Northwest Community College (NWCC)
Lynn Synotte, Marketing, Recruitment and Program Linkages, College of New Caledonia (CNC)
Corrine Swenson, Manager of Regional Economic Development, RDBN
Deneve Vanderwolf, Regional Economic Development Assistant, RDBN

Consultants

This labour force gap analysis and action-based strategy has been delivered by the national economic development consultancy firm of Millier Dickinson Blais.

Executive Summary

The Regional District of Bulkley-Nechako (RDBN) is taking proactive steps to support regional competitiveness through its greatest asset, its people. This Skills Gap Analysis provides an assessment of current and forecasted labour market trends, opportunities and needs, resulting in an evidence-based plan to positively influence local supply and demand alignment. This report has been informed through extensive conversations with local businesses, residents, educational institutions, employment service providers and government, resulting in the development of a targeted strategy that will strengthen talent development, recruitment and retention practices and labour force planning across the district.

This plan is a community-influenced plan that now requires a collective and coordinated approach to ensure effective and efficient implementation. It is important to recognize that while the Regional District of Bulkley-Nechako facilitated the advancement of the skills gap analysis, the resulting strategy must be seen as regional in scope but local in value. The stated goals and actions should be examined for municipal relevancy, for it is the collective implementation across the region that will result in the greatest impact.

Stakeholders affirmed that RDBN struggles with a skills mis-match between supply and demand in the labour market, and through the consultations held across the region ideas were offered that have been integrated into the strategy. The Skills Gap Analysis puts forward region-specific recommendations designed to use the understanding gained about regional employment trends, employer requirements, training and education programs, and worker transition across high growth and declining industries to inform skill needs. The key focus going forward is to utilize this understanding to advance implementation of the recommendations.

The project is designed to achieve four central goals:

- Understand the current gaps and factors influencing recruitment, attraction efforts and labour market participation
- Align worker skills and knowledge with the employer demands
- Strengthen participation of all target groups (persons with disabilities, older workers, students, Aboriginal people and new Canadians) in the labour market
- Inform and influence secondary and post-secondary training programs to best align with the local labour market needs.

In order to understand the labour force of RDBN and it's challenges, an understanding of the larger Canadian context is helpful, as many regions across Canada are experiencing labour force mis-match. These challenges were assessed in detail and well summarized during the *2011 Building on Recovery Conference* hosted by the Public Policy Forum. The forum opened with a presentation by Ian Shugart, Deputy Minister, Human Resources and Skills Development Canada, which effectively summarized the challenges facing Canada's labour market, as follows:

- "With demographic change depressing labour force growth to only half of what it was in the previous decade, labour force participation rates need to be increased, especially among underrepresented groups.
- Since Canada can no longer rely on labour force growth to drive the expansion of the overall economy, productivity will be the predominant factor in driving economic growth.
- Technological change has shown to have major implications for labour markets, such as higher job skills requirements (via skill-biased technological change).

- Structural changes continue to demand adaptation from the workforce. The Canadian workforce will increasingly compete with workers in emerging economies as they improve the education of their workforce, allowing them to compete based on skills, as well as cost."[1]

These four forces; demographic change, productivity, technology, and globalization, define the challenge for Canada as the nation works to ensure that its businesses are able to continue to compete in the economy of the future. The Regional Skills Gap Analysis uses the Canadian context as a backdrop agains which to understand regional labour force requirements.

In order to assess labour force supply and demand considerations in the Regional District of Bulkley-Nechako, labour force supply and demand projections for the Regional District were generated. The analysis reviews recent trends in population and employment in the RDBN and assesses the future occupational requirements of the region against the backdrop of two different economic development scenarios that reflect skill development and recruitment opportunities based on different economic conditions.

Summary of the Base Case

- Total change in employment is -935 jobs from 2011-2021
- Top 5 Occupations in Base Case 2011-2021 (considers retirements)
    - Managers in agriculture (298)
    - Construction millwrights and industrial mechanics (81)
    - Transport truck drivers (72)
    - Administrative officers (70)
    - Registered nurses (69)

Summary of the Projects Case

- Total change in employment is 1,673 jobs from 2011-2021
- Top 5 Occupations in Project Case 2011-2021 (considers retirements)
    - Supervisors, mining and quarrying (309)
    - Managers in agriculture (298)
    - Transport truck drivers (286)
    - Construction millwrights and industrial mechanics (270)
    - Underground production and development managers (154)

The research indicates significant variation in the potential scenarios for RDBN, which is taken into consideration in the development of recommendations, by seeking strategies and action that will support both scenarios.

Moving to Solutions

The goals, strategies and actions put forward in the Regional Skills Gap Analysis are based on extensive research, consultation and the experience of the consulting team. The strategic plan will be grounded in five goals and a series of related strategies and tactical actions which can be found in the Recommendations Section of this report. In summary, the goals and strategies are presented below:

[1] Building on Recovery: Addressing Canada's Labour Market Challenges over the next 10 years, Public Policy Forum, 2011

Goal Statement: Regional and local assets and quality of life strengthen capacity to attract and retain talent

- Strategy #1: Promote the Regional District of Bulkley-Nechako as an opportune and welcoming employment destination
- Strategy #2: Support Small and Medium Enterprises (SMEs) to address human resource needs and future planning

Goal Statement: Ensure that the labour force is skilled, resilient and aligned with local labour market needs, supporting retention, partipation and economic development

- Strategy #1: Prepare local labour force through career engagement, learning and skills development
- Strategy #2: Empower youth through increased career awareness and experiential learning opportunities, supported by the business community

Goal Statement: Increase collaboration between and among key stakeholder groups and communities to strengthen opportunities and impact at both the local and regional levels

- Strategy #1: Foster a culture of collaboration between and among stakeholder groups and communities
- Strategy #2: Embrace cultural diversity and recognize it as a competitive advantage

Goal Statement: Empower evidence-based decision making through reliable, current and relevant information

- Strategy #1: Inform to strengthen decision-making
- Strategy #2: Support community engagement with fly-in, fly- out workforce

1 Report Approach

The Skills Gap Analysis opens with a **Situational Analysis**, which begins with an assessment of global, provincial and regional trends in key setors, including the implications for workforce development. The economy of RDBN is reviewed in detail, including labour force and business trends.

Labour force trends are mapped out in the **Labour ForceSupply and Demand** analysis, presenting projection scenarios and estimates occupations that will be in high demand within RDBN to 2021.

The **Community Engagement and Capacity** section describes the results of consultation with residents, employers and fly-in fly-out workers, as well as organizations and educational institutions responsible for supporting the local labour force. Major themes that emerge from this work are outlined in this section.

In the final section of the report, **Recommendations and Next Steps**, all data is considered and a series of goals, strategies, and ecommended actions are put forward to support the development of the labour force and the future prosperity the Regional District of Bulkley-Nechako.

2 Situational Analysis

2.1 Global Trends

In its recent report on global employment trends, the International Institute for Labour Studies (IILO) refers to the recent financial crisis, over and over, as the force currently shaping the world's labour markets[2]. The 2007-2008 financial crisis was unique in its severity and global reach. The employment effects of the crisis go beyond the 2008-2009 global recession and are expected to affect global employment prospects today and for many years in the future. The global recession and its employment effects are relevant to the Regional District of Bulkley-Nechako (RDBN) because the slow global recovery is likely continuing to affect the business community and in turn, the regional labour market.

The most severe recession since the Great Depression of the 1930's occurred in 2008-2009, triggered by the initial failure of major financial institutions in the United States in 2007. The effects of the failure spread to other financial institutions globally due to the pervasiveness of certain financial instruments, such as derivatives and hedge funds, and the global effects of reduced business and consumer confidence[3].

Employment effects often lag the reduced levels of spending and investment that characterize a recession. The IILS reports that only employment in only 30% of the countries studied have recovered to pre-recession level and that many of these countries are developing nations. Canada, the United States and China are among the 37% of countries where employment levels have increased but have not reached pre-recession levels. In the remaining 33% of nations studied employment levels have continued to deteriorate. This group includes a number of European countries, long term unemployment can lead to troubling economic impacts and associated social effects.

The world economic recovery is tentative and the global unemployment rate is projected to continue to rise to 214 million people unemployed in 2018, which is significant for every country to note in an increasingly interconnected world. Although developing economies are expected to recover to average pre-recession employment rates by 2015, many of the world's advanced economies are not expected to reach this milestone until after 2017[4].

The following international sector trends provide a basis for understanding national and regional trends.

- **Forestry:** Globally there are increasing concerns with the sustainability of the forestry sector. In the developing world in particular, deforestation and forest degredation are under scrutiny due to the important role that the world's forests play in climate regulation[5]. At the same time, the potential of chemical products in the emerging bio economy and new manufactured wood products are being created out of this renewable resource which are touted as possibilites to add high value to wood fibre. The UN REDD+ program (REDD+ stands for Reducing Emissions from Deforestation and Forest Degradation; the 'plus' denotes the conservation of forests, enhancement of forest carbon stocks and sustainable management of forests) is promoting these and other trends with a focus on the potential of carbon credits as a policy solution to the sustainability of the global forest resource6.

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[2] World of Work Report 2013: Repairing the economic and social fabric, International Labour Organization & International Institute for Labour Studies June 2013
[3] Financial Crises and Labour Market Performance, Misbah Tanveer Choudhry, Enrico Marelli and Marcello Signorelli, March 2010
[4] World of Work Report 2013: Repairing the economic and social fabric, International Labour Organization & International Institute for Labour Studies June 2013
[5] The State of the World's Forests
[6] UN-REDD Policy Brief: REDD+ and a Green Economy: Opportunities for a mutually supportive relationship

Canada is not supporting this program. However, the Province of British Columbia has set up a legislative framework for voluntary participation in carbon credits[7].

- **Mining:** Deloitte's recent Tracking the Trends 2013 report on the mining sector identifies falling commodity prices and continued global economic uncertainty as new pressures that are causing many companies to re-evaluate the priority of projects in the short term. As a result, international projects with the best potential for profitability are moving forward while others lay idle. A number of rising costs (including labour, taxation and community relations), social instability in some areas of the world, combined with the lowered prices and deteriorating capital markets, are causing short term uncertainty for mining companies. In the long term, however, global demand is still expected to be strong and in the medium term firms are anticipated to intensify efforts to meet that demand [8].
- **Energy:** International demand for energy is anticipated to continue to rise, according to the World Energy Outlook 2012, led by increasing demand in emerging markets. The dynamics of global oil and gas production are changing due to new technologies in unconventional oil production where horizontal drilling and fracturing are increasing supply and depressing prices. The price of oil is expected to increase in the long term although price volatility is possible at any point. These techniques have led to the development of new energy reserves, including natural gas among other products, in the United States and Canada. The World Energy Outlook also highlights growing investments in wind and solar energy generation as a strengthening global trend[9]. The emerging Asian market is driving future demand for liquefied natural gas (LNG), and although there is significant interest in increasing LNG exports to supply this demand, there are also a number of projects poised to increase global supply. The Canadian Energy Research Institute concludes that, "although exporting LNG is becoming increasingly risky and less lucrative for North American companies…there is room for some North American export in the emerging Asia-Pacific market"[10] The report highlights that North American projects have a generally competitive cost formula, and includes data that identifies the most competitive among these is the proposed Kitimat project. The key challenge is a potential for over supply of LNG around 2020, which would result in depressing prices, and caution is recommended as many proposed projects would be active during that time[11].
- **Tourism:** The economic impact of global tourism is on the rise and outpacing many other sectors of the global economy. Although Asia and Latin America are the fastest growing areas in terms of both new visitors and destinations, North America and Europe still have the greatest share of tourism activity and explain the majority of GDP growth in this sector, according to the World Travel and Tourism Council. Global travel and tourism employment increased by four million jobs in 2012[12].
- **Agriculture:** For most of the 20th century, agricultural production, including crop and livestock sectors, has expanded and the real price of agricultural goods has reduced. In the first quarter of the 21st century, the Food and Agriculture Organization of the United Nations (FAO) projects that natural resources available per person (i.e. land, energy, water) may decline, however the current trends of technology based gains in productivity and genetic engineering are expected to continue to lower average commodity prices and limit employment. Global trade policy is a highly debated area and although many countries are reducing tariffs and border related taxes, quality and safety standards are becoming more stringent due to food safety scares and consumer concerns about genetic

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[7] Our Natural Advantage: Forest Sector Strategy for British Columbia, Province of British Columbia, 2012
[8] Tracking the trends 2013: The top 10 issues mining companies face in the coming year, Deloitte 2013
[9] World Energy Outlook 2012, International Energy Agency, 2012
[10] Global LNG: Now, Never or Later? Canadian Energy Institute, Study # 131, January 2013
[11] Ibid.
[12] Economic Impact of Travel & Tourism 2013 Annual Update, World Travel and Tourism Council, 2013

modification and production techniques. The intent of safety policies are being examined as they are suspected as acting as a proxy for trade barriers[13].

2.2 National Trends

Although Canada's economy has weathered the global storm of the recession better than many other countries, there are still some concerning trends that are relevant for RDBN. The unemployment rate is the good news. During the recession, unemployment in Canada reached only 8.3%, which is low compared to the high of 11.4% in the previous 1993 recession. Further, the national unemployment rate in 2012 averaged 7.2%[14]. However, the International Labour Organization notes that although Canada has experienced positive job growth, the overall quality of jobs has decreased[15] and the Canadian Chamber of Commerce identifies a national skills shortage, which it labels a crisis, in its recent national symposium on skills and small business[16].

Canada's workforce is therefore still facing challenges, which were assessed in detail during the 2011 Building on Recovery conference hosted by the Public Policy Forum. The forum opened with a presentation by Ian Shugart, Deputy Minister, Human Resources and Skills Development Canada, which effectively summarized the challenges facing Canada's labour market, as follows:

- "With demographic change depressing labour force growth to only half of what it was in the previous decade, labour force participation rates need to be increased, especially among underrepresented groups.
- Since Canada can no longer rely on labour force growth to drive the expansion of the overall economy, productivity will be the predominant factor in driving economic growth.
- Technological change has shown to have major implications for labour markets, such as higher job skills requirements (via skill-biased technological change).
- Structural changes continue to demand adaptation from the workforce. The Canadian workforce will increasingly compete with workers in emerging economies as they improve the education of their workforce, allowing them to compete based on skills, as well as cost."[17]

These four forces; demographic change, productivity, technology, and globalization, define the challenge for Canada as the nation works to ensure that its businesses are able to continue to compete in the economy of the future.

With respect to the quality of jobs, Gordon Betcherman, professor at the University of Ottawa, discussed the evidence pointing to a loss of middle-skilled jobs in the Canadian economy due to off-shoring or automation during the past 20 years. The manufacturing sector is provided as an example. Although Canada is experiencing more growth in the ratio of high-skilled jobs to low-skilled jobs as compared with the United States, both countries are seeing a concerning "hollowing out of the middle", which is a loss of middle and high skilled jobs [18].

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[13] World agriculture: towards 2015/2030 An FAO perspective,
[14] Statistics Canada Labour Force Survey [Online June 2013]
[15] World of Work Report 2013: Repairing the economic and social fabric, International Labour Organization & International Institute for Labour Studies June 2013
[16] Closing the Skills Gap: Mapping a Path for Small Business, Canadian Chamber of Commerce, February 2013
[17] Building on Recovery: Addressing Canada's Labour Market Challenges over the next 10 years, Public Policy Forum, 2011
[18] Ibid.

2.3 Provincial Trends

British Columbia's unemployment rate for 2012 mirrors the national unemployment rate of 7.2% and many of the challenges identified in national trends are also reflected at the provincial level. In the Skills for Growth Strategy[19] the Province forecasts that the B.C. economy will grow and diversify between 2010-2020, and add jobs in the following areas: services including healthcare and retail sales; green technology, digital technology and digital media; and innovations in the natural resource sector. The following occupations are expected to experience the strongest growth:

- Health occupations (2.6%)
- Trades, Transport and Equipment Operators and Related Occupations (2.3%)
- Natural and Applied Sciences and Related Occupations (2.1%)

The Skills for Growth Strategy anticipates that more than 1.1 million positions will open from 2010-2020, including more than 675,000 retirements, and that there will be a shortage of workers to meet this demand. The majority of job openings (77%) are expected to require post-secondary education, including a college diploma, trade certificate, university degree or higher, and approximately a quarter of the labour force does not have the basic secondary skills required to compete for these positions. Therefore in terms of numbers and in terms of skills, B.C. is preparing for the labour market to fall short, and plans to address this shortfall by welcoming skilled immigrants and entrepreneurs into the province, increasing educational achievement, and maximizing workforce participation [20].

The following comments outline sector trends at the provincial level.

Forestry

There are conflicting influences affecting the future of B.C.'s forestry sector. The global recession negatively impacted forestry, leading to fewer firms and loss of employment. The pine beetle epidemic simultaneously caused a temporary glut in the supply of wood fibre which may lead to medium term supply issues. Now that the forestry industry is experiencing some positive growth, it is having a difficult time attracting and retaining labour due to intense competition for skilled employees with the mining and oil and gas sectors.

Despite these challenges, the Province is enacting an aggressive strategy[21], based on export development and industry diversification, which requires a robust labour market with diverse and specialized skills.

- The Province is promoting a green brand for B.C. forest products as they are legally and ethically sourced, produced with minimal environmental impact, and support a low-carbon economy.
- The use of forest products in local construction is encouraged by increasing the number of stories permitted for a building constructed with forestry products. This change in regulation is facilitated by the next generation of wood based building systems with increased load bearing capacity. Forty-two local governments around B.C. have also adopted Wood First policies, resolutions or bylaws to promote wood in municipally funded buildings.
- B.C. aims to be known internationally as the source of new wood construction expertise.

[19] Skills for Growth Strategy: British Columbia's Labour Market Strategy to 2020, Province of British Columbia, 2010
[20] Skills for Growth Strategy: British Columbia's Labour Market Strategy to 2020, Province of British Columbia, 2010
[21] Our Natural Advantage: Forest Sector Strategy for British Columbia, Province of British Columbia, 2012

- The diversification of the forestry sector through new investments in the bio economy, including expanding on the resource of existing forest product facilities to include both onsite generated power and biomass-based fuels.

In order to fill anticipated gaps due to employment growth and retirements of 25,000 forestry workers over the next 10 years, the Province is focused on attracting youth to the forestry sector and in particular Aboriginal youth who are anticipated to be an important part of the workforce. Immigration is also identified as a solution to skilled labour shortages.

The forestry industry's workforce is expected to require more technical skills and more scientists and engineers for the bio economy and advanced wood construction. Demand is also anticipated for fire suppression services associated with forestry as a result of climate change and the amount of wood residue produced by the pine beetle.[22]

Mining

Mining and mineral exploration in Canada is expected to grow 91% from 2011-2020 and Northern BC is expected to experience the fastest expansion among Canada's provinces and territories, with 300% growth in output within the same timeframe. This growth is expected to result in a net gain of 3,458 jobs, a high percentage of the total of 4,826 people who will be employed in mining in northern British Columbia[23]. When it comes to the mining and oil and gas sectors, British Columbia has the advantage of an abundance of natural resources and a Provincial commitment to supporting development, as long as it meets environmental and safety standards. This commitment is evidenced by current infrastructure investments such as the Northwest Transmission Line. The supply of resources is only available to projects that pass the environmental assessment (EA) process. Many of the projects proposed in northern B.C. and the RDBN area are currently in an EA process and may or may not move forward, depending on the results.

Employment increases are expected to include construction jobs, as well as direct and indirect employment. Skills shortages present a risk to these mining opportunities, with major considerations such as retirement and competition from other sectors.[24] Low levels of participation by women and low levels of education and work experience in Aboriginal population are identified as concerns by the Province. Specific gaps in post-secondary degree training, from advanced degrees in engineering to trades and apprenticeships to certifications for heavy equipment operators and truck drivers, need to be addressed for British Columbians to benefit from these employment opportunities[25].

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[22] Our Natural Advantage: Forest Sector Strategy for British Columbia, Province of British Columbia, 2012
[23] The Future of Mining in Canada's North, The Conference Board of Canada, 2011
[24] British Columbia's Mineral Exploration and Mining Strategy: Siezing Global Demand,
[25] British Columbia's Mineral Exploration and Mining Strategy: Siezing Global Demand,

Energy

British Columbia is proud of its commitment to environmental responsibility, and energy generation is a key area where the province has shown leadership in living these values. Proposed liquid natural gas projects and oil pipelines are testing the strength of these values, emissions targets and commitments to community engagement. The 2009 B.C. Energy Plan identifies a natural advantage for B.C. in producing clean hydroelectric power generation, and the ability to operate on 90% green power and commits to maintaining that standard by enforcing no nuclear power in the province and net zero greenhouse gas emissions from coal fired plants, all new electricity generation projects, and thermal generation power plants (by 2016). Other commitments include creating the best coal bed gas practices in the world and eliminating the practice of flaring by 2016.

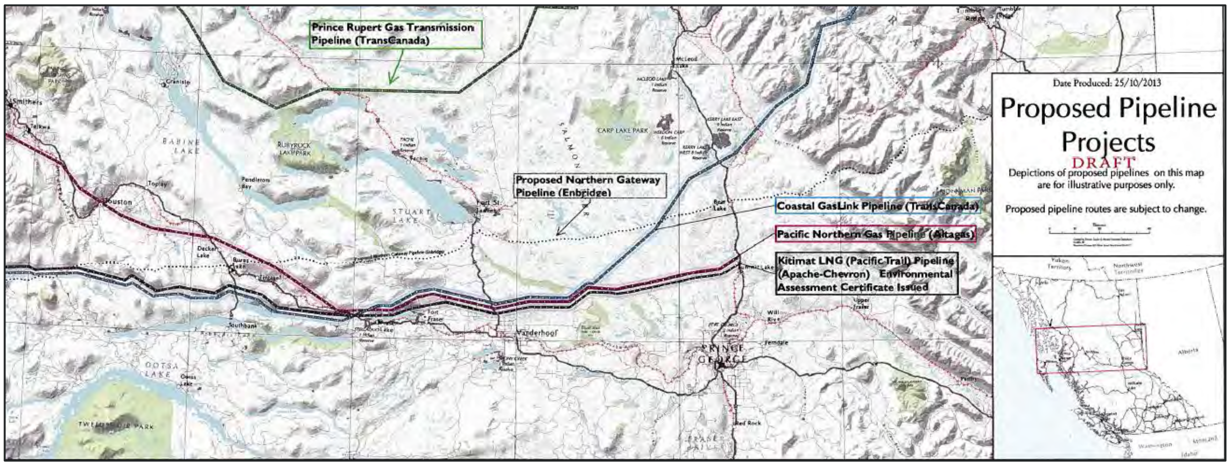
More recently, B.C. released two strategies that relate to the production of Liquid Natural Gas (LNG) in 2012, which the Province sees as a high priority to diversify the economy of the province, increasing employment (100,000 jobs) and resource revenues. The province's natural gas resource is located in northeast B.C. and natural gas would have to be transported by pipeline to processing facilities proposed in the port of Kitimat. Recently Petronas, the Malaysian national oil company announced a 16 billion dollar investment on a liquefied natural gas export facility on the west coast. Other associated projects include Douglas Channel LNG, Kitimat LNG, and Coastal GasLink.

The proposed Enbridge Northern Gateway Pipeline has attracted significant scrutiny, consisting of a dual pipeline system crossing the northern regions of British Columbia to transport bitumen from the Alberta oil sands to a new marine terminal in the coastal community of Kitimat. The project is expected to require 3,000 jobs during construction and 560 long term jobs, and is associated with 1.2 billion dollars in tax revenue (over 30 years). The Regional District of Bulkley-Nechako is expected to benefit in terms of tax revenues and construction employment should the project move forward, as well as a part of the 400 million dollars in anticipated spending on goods and services in central B.C.[26]. The Province as a whole will benefit from short term construction employment and in the long term, employment in marine shipping, maintenance and monitoring.

The Province of B.C. recently announced that it officially opposes the proposal at this time, sending Enbridge and its partners back to the drawing board to meet the Province's requirements before a final decision is recommended by the Joint Review Panel. This recommendation is expected late in 2013. Figure 1 shows the proposed routes of the pipeline projects currently under review. The map is for information purposes only and is subject to change, however from the map it is clear that a number of pipeline projects can be expected to impact RDBN, should they move forward.

[26] Benefits for British Columbians, Enbridge Northern Gateway Pipeline, [Online June 2013: http://www.northerngateway.ca/economic-opportunity/benefits-for-british-columbians/]

FIGURE 1: PROPOSED PIPELINE PROJECTS (DRAFT),



Source: Forest, Lands and Natural Resource Operations B.C., Oct 2013, subject to change

The requirements that the Province has identified for the project to receive provincial approval are as follows.

- Successful completion of the environmental review process. In the case of Enbridge, that would mean a recommendation by the National Energy Board and Joint Review Panel that the project proceed;
- World-leading marine oil spill response, prevention and recovery systems for B.C.'s coastline and ocean to manage and mitigate the risks and costs of heavy oil pipelines and shipments;
- World-leading practices for land oil spill prevention, response and recovery systems to manage and mitigate the risks and costs of heavy oil pipelines;
- Legal requirements regarding aboriginal and treaty rights are addressed and First Nations are provided with the opportunities, information and resources necessary to participate in and benefit from a heavy oil project; and,
- British Columbia receives a fair share of the fiscal and economic benefits of a proposed heavy oil project that reflects the level, degree and nature of the risk borne by the province, the environment and taxpayers.[27]

The Enbridge Northern Gateway Pipeline is not the only massive energy project in the works in B.C. Kinder Morgan Energy Partners are also planning to expand the Trans Mountain Pipeline, which will twin an existing bitumen pipeline from Strathcona County in Alberta to Burnaby B.C.

In order to supply power to these and other projects, including the mining sector, B.C. Hydro is in the process of completing the Northwest Transmission Line, which is expected to be in service in 2014. BC HydroService may be required to plan for more capacity depending on the proposals for major projects in Kitimat.

Tourism

B.C. Tourism includes accommodation and food services, retail services, transportation services and other services as part of the broader picture of tourism revenue. Using this definition of tourism, in 2011,

[27] Requirements for British Columbia to Consider Support for Heavy Oil Pipelines, Province of B.C. 2012

18,034 tourism-related establishments operated in the province, and approximately 126,700 British Columbians or one in 15, work in tourism related businesses.[28]

Gaining the Edge is the Province of B.C.'s five year tourism strategy, completed in 2011.[29] Through this strategy the Province aims to increase overall sector revenue to $18 billion by 2016, which is 5% growth per year, and to ensure that annual increases in sector revenue and/or tourism sector employment are experienced in every tourism region.

The key tourism products that are highlighted in the strategy are touring vacations, city experiences, skiing/snowboarding, Aboriginal tourism, conventions and meetings and outdoor adventure/eco-tourism. Target groups include retiring baby boomers and people in emerging markets because they represent growing sources of tourists. Specifically, the international markets targeted in the strategy include California (U.S.), Japan, South Korea, Australia, Germany, United Kingdom and the emerging markets of China, India, and Mexico. International markets as well as travellers from Ontario are the responsibility of the Province. Regional organizations and communities are responsible for marketing B.C. to shorter haul markets like Alberta, Washington and B.C. residents. Fluctuations in the Canadian dollar, increasing international competition and price sensitivity of the target markets are further strategic considerations for tourism[30].

Agriculture

The province of British Columia has unique dynamics in comparison with the rest of Canada. In the 2011 Census, the number of farms was stable with a minor 0.4% decrease, while the number of farms across Canada decreased by more than 10%[31]. The employment impact of farming in British Columbia is predominately seasonal and temporary employment. B.C. farms reported that 32.9% hired paid labour for the year 2010. The census counted a total of 45,505 paid employees in the province, of whom 29.1% worked year-round in a full or part-time capacity while 70.9% were seasonal or temporary employees.

Strategically, the province of B.C. is supporting the resilience of the agricultural sector by focusing on high quality and high value products; expanding domestic and international markets; and enhance the industry's competitiveness. Access to Asian markets is again a significant competitive advantage highlighted as the key to continued growth in agricultural exports including seafood as well as fruit, vegetables and other products. The future of employment in the province in agri-foods is expected to include not only family owned farms, but increasing numbers of scientists, technicians, analysts, brokers, architects, designers and engineers [32]

Other significant findings of the 2011 Agricultural Census include the fact that greenhouse and nursery farms account for more than 25% of farm receipts in the province, followed by poultry and egg production at 19.9%. A significant increase in blueberry production (76%) was noted from 2006-2011. The number of dairy cows increased by 1.6% while the number of breeding cattle dropped by 26.9%, potentially linked with the impact of bovine spongiform encephalopathy (BSE) during the census period [33].

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[28] Quick Facts on the Value of BC's Tourism Industry, Ministry of Jobs, Tourism and Skills Training: Tourism Strategy and Policy Branch [Online June 2013 http://www.jtst.gov.bc.ca/tourismstrategy/]

[29] Gaining the Edge: A Five-year Strategy for Tourism in British Columbia 2012 – 2016, Province of British Columbia,

[30] Gaining the Edge: A Five-year Strategy for Tourism in British Columbia 2012 – 2016, Province of British Columbia,

[31] 2011 Census of Agriculture Highlights and Analysis, Statistics Canada, 2012 [Online June 2013: http://www.statcan.gc.ca/pub/95-640-x/2012002/prov/59-eng.htm]

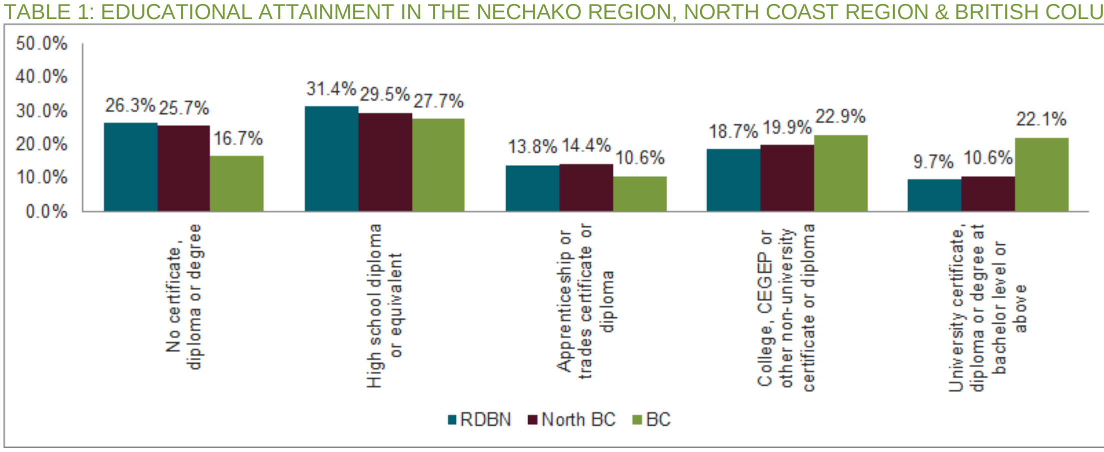
[32] BC Agrifoods: A Strategy for Growth, Province of British Columbia Ministry of Agriculture, 2012

[33] 2011 Census of Agriculture Highlights and Analysis, Statistics Canada, 2012 [Online June 2013: http://www.statcan.gc.ca/pub/95-640-x/2012002/prov/59-eng.htm]

2.4 Regional Trends

The Regional District of Bulkley-Nechako is located in central British Columbia, and has a population of 39,208 people according to the 2011 census. The population of the region has increased by 2.5%, from 38,243 in 2006. The economy is strongly supported by the forestry sector, with emerging opportunities in the mining and oil and gas sectors. The region is well positioned to benefit from proposed projects in the energy sector, particularly construction efforts, should they move forward. Agriculture and tourism are also identified as important sectors to the Nechako Development Region[34]. Table 1 illustrates a key challenge for the northwest British Columbia, educational attainment, which is highlighted in the recently completed Regional Skills Training Plan 2013-2018.

TABLE 1: EDUCATIONAL ATTAINMENT IN THE NECHAKO REGION, NORTH COAST REGION & BRITISH COLUMBIA, 2011[35]



Source: 2011 National Household Survey, Statistics Canada, Adapted by Millier Dickinson Blais Inc.

Although the northern region of British Columbia lead in certified trades people, the percentage of adults without a high school education was close to double that of the province in 2006. More recently, this percentage has improved, however there is still approximately a 10% higher percentage of residents without formal educational credentials in RDBN as compared to the province. As national and provincial trends have demonstrated, an increasing number of positions require postsecondary education, and without completing secondary school, the regional workforce is less able to adapt to this requirement. The importance of increasing educational attainment is a trend that runs through a number of regional strategies. The OMINECA Retention and Attraction Strategy, which relates to the RDBN and Regional District of Fraser Fort George, contains a recommendation with respect to education, as follows, “Provide assistance to the region’s young people and other residents to access training, obtain jobs and facilitate growth in self-employment opportunities.” Similarly, the Regional Skills Training Plan[36] discusses a number of recommendations to improve the skills and abilities of the northwestern B.C. workforce, as follows:

- Provide students with a vision of a bright economic future in the region
- Help lower-skilled workers upgrade to gain access to construction and operations jobs the major projects will create
- Increase Aboriginal people’s participation in high-demand occupations

[34] Nechako Development Region, 2012 BC Check-Up, Institute of Chartered Accountants of British Columbia, 2012
[35] Regional Skills Training Plan 2013-2018, Northwest Regional Workforce Table, 2013
[36] Ibid.

- Encourage collaboration among industry and regionally-based training providers
- Keep people informed and encourage collaboration to achieve Training Plan goals

The Nechako Development Region experienced a significant improvement in the youth unemployment rate, from 2010 to 2011, evenly distributed between the Nechako and North Coast Development Regions. The Institute of Chartered Accountants of British Columbia identifies worker shortages in the resource sector as a potential cause.[37] Although this is encouraging news, encouraging youth to pursue post-secondary education, and non-graduates to upgrade their skills, remains a priority. RDBN is a well serviced region with respect to education. The College of New Caledonia campuses In Fort St. James, Vanderhoof and Burns Lake and the Northwest Community College campuses in Houston and Smithers provide post-secondary educational services. Northwest Community College completed an expansion in 2011 valued at $17 million dollars to accommodate mining and mineral exploration and health services programs.[38]

In terms of transportation, the region is well connected from the perspective of industry, although public transportation is not available which is identified as a barrier to work and training opportunities. The regional airport in Smithers provides charter and scheduled flight services with 44 flights weekly and four major carriers. There are local airports in Houston, Burns Lake, Fraser Lake, Vanderhoof, and Fort St. James, which can accommodate charter flights but have no scheduled flights. The region is connected to major provincial highway corridors, and is relatively close to the Prince Rupert Port and the Prince George International Airport.

The RDBN has completed or is a partner in a number of regional strategies which are summarized by sector as follows.

- **Forestry:** The forestry sector in RDBN has been severely impacted by the Pine Beetle infestation; however, it remains a mainstay of the regional economy and has succeeded in expanding into the bio economy. Pinnacle Renewable Energy Group for example, produces wood pellets and employs 41 people in Burns Lake. Sadly, the loss of the Babine Forest Product Sawmill in a fire in 2012 has also dampened the local economy in this area of the region. The OMENICA forestry strategy [39] identifies the following areas of potential future growth; the production of energy from wood, value added manufacturing, agro-forestry, and increased tourism. The strategy outlines the following requirements to support diversification; access to resources and certainty of supply, access to capital, transportation infrastructure to access markets, and sharing information about markets and market opportunities. Also, forest management systems that engage communities in a direct management role are seen as a way to facilitate business

- **Mining:** Skills shortages present a risk to potential mining opportunities in RDBN, with major considerations such as retirement and competition for labour from other sectors. The OMENICA mining strategy[40] highlights low participation by women and low levels of education and work experience of Aboriginal communities as critical challenges to overcome. However, the region is also experiencing some success. Together, the two active mines in RDBN employ 625 people; Endako Mines in Fraser Lake and Huckleberry Mines in Houston. The construction of the Mount Milligan Mine began in 2011. With significant untapped mining potential and a number of projects in the development stage, mining is a key sector to monitor with respect to workforce planning.

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[37] Regional Skills Training Plan 2013-2018, Northwest Regional Workforce Table, 2013
[38] Nechako Development Region, 2012 BC Check-Up, Institute of Chartered Accountants of British Columbia, 2012
[39] Future Forest Products and Fibre Use Strategy, OMINECA Beetle Action Coalition, 2008
[40] British Columbia's Mineral Exploration and Mining Strategy: Siezing Global Demand,

- **Energy:** Due to its strategic location in the northern transportation corridor, RBDN is in the centre of the controversy and potential for energy investment in northern B.C. as outlined in provincial trends. Energy is part of the mandate of the Northern Development Initiative Trust. Major projects like the Northwest Transmission Line (and the Forrest Kerr Hydroelectric Project in the coastal region) have moved forward in the last year, contributing to employment gains in the construction sector in 2011[41].
- **Tourism:** The mountainous terrain of northern B.C. and all of its exceptional recreational opportunities are important assets of the tourism economy in the region, including its exceptional fishing, rivers and lakes at all elevations.[42] Travellers on highways 97 and 16, enjoying leisure activities are a source of tourist visitation, as are business travellers which represent 10-20% of visitation in the OMINECA Beetle Action Coalition (OBAC) region[43]. The OBAC region has 114 accommodation properties which represent 2,736 rooms and 1,551 campsites. Few of these accommodations were branded (10) at the time when the regional tourism strategy was created (2007), which can be a challenge in attracting tourists.
- **Agriculture:** RDBN has a long history of strength in cattle ranching and identifies future opportunities in greenhouses, associated with the growing bio energy sector. The Agricultural Plan for the RDBN involves some very straightforward actions designed to create a responsive planning environment that protects agricultural uses of agricultural land. The study recommends actively promoting and supporting 4H clubs in the region as well as the use of alternative energy sources such as bio-digesters, co-generation, biomass energy, and wind power by agricultural operations.

2.4.1 Canadian Business Patterns

Statistics Canada tracks the number of businesses located in communities across the country, including the Regional District of Bulkley-Nechako (RBDN), categorized by number of employees and by industry. This dataset is called Canadian Business Patterns and it provides important insights into the composition of the region's business community and how it has changed over the past five years.

Comparing time periods using business patterns data has some challenges because the data cannot show mergers, changes in the categorization of business locations and growth or loss in the number of employees in a particular industry category.

With the limitations of comparing business patterns data between time periods in mind, in December 2008 there were a total of 3390 business locations in RDBN, which decreased by 4.5% to 3239 locations in 2012. Overall the number of business locations appears stable, although the loss in businesses is concentrated in employers, which has a more significant impact on employment. Within these figures certain sectors appeared to experience business location growth such as Real Estate and Rental and Leasing (+20) and Construction (+10), while business locations in Accommodation and Food Services declined (-65) as well as Agriculture, Forestry, Fishing and Hunting with a loss of 30 business locations.

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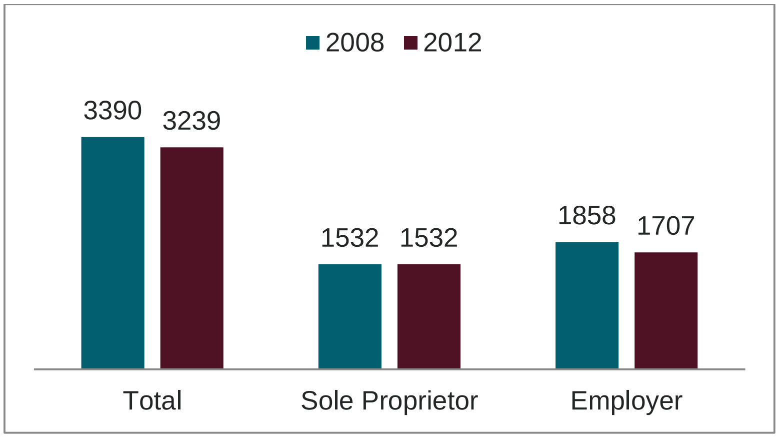
[41] Nechako Development Region, 2012 BC Check-Up, Institute of Chartered Accountants of British Columbia, 2012
[42] Investment Ready Community Profile, Regional District of Bulkley-Nechako, 2013
[43] Tourism Sector Strategy, OMINECA Beetle Action Coalition, 2009

FIGURE 2: NUMBER OF BUSINESS LOCATIONS, REGIONAL DISTRICT OF BULKLEY-NECHAKO, DEC 2008 AND DEC 2012



Source: Canadian Business Patterns, Statistics Canada, Dec 2008 and 2012, Adapted by Millier Dickinson Blais Inc.

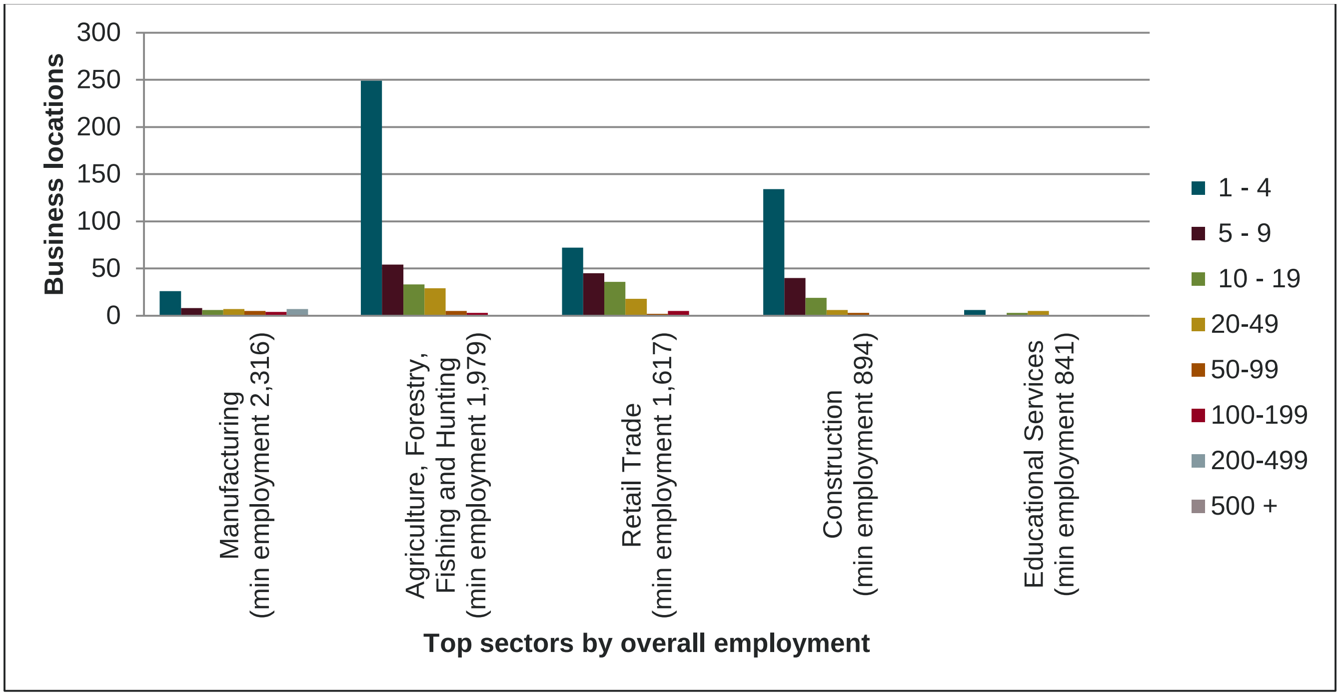
From this point forward, the analysis focuses on business locations with employees, or employers, as these businesses have the greatest effect on the local economy and are more likely to pay property taxes. Therefore, in Table 2, industry sectors are listed from high to low by the number of employers. The industries with the highest number of employer business locations, are Agriculture, Forestry, Fishing and Hunting and Construction. Business patterns data does not provide an accurate number of employees, but the minimum number of employees in each sector has been identified to give a sense of the relative employment impact of each sector. The industry with the highest employment impact is Manufacturing, with a minimum of 2,316 employees (actual figure can vary greatly) and the sector with the lowest number of business locations as well as employees is Utilities. Overall, the total minimum number of people employed by businesses in RDBN is 13,386.

TABLE 2:CANADIAN BUSINESS PATTERNS, SORTED BY NUMBER OF EMPLOYER BUSINESS LOCATIONS, REGIONAL DISTRICT OF BULKLEY-NECHAKO, DEC 2012

RDBN - Industry (NAICS)	December 2012		
	Total	Sole Proprietor	Employer
Agriculture, Forestry, Fishing and Hunting	793	420	373
Construction	393	190	203
Retail Trade	244	66	178
Other Services (except Public Administration)	252	111	141
Transportation and Warehousing	247	125	122
Health Care and Social Assistance	132	22	110
Professional, Scientific and Technical Services	191	93	98
Real Estate and Rental and Leasing	250	178	72
Accommodation and Food Services	106	40	66
Manufacturing	102	39	63
Administrative and Support, Waste Management and Remediation Services	92	41	51
Finance and Insurance	105	56	49
Wholesale Trade	72	32	40
Arts, Entertainment and Recreation	55	23	32
Public Administration	27	2	25
Mining, Quarrying, and Oil and Gas Extraction	44	21	23
Information and Cultural Industries	28	6	22
Management of Companies and Enterprises	79	62	17
Educational Services	22	5	17
Utilities	5	0	5
Total Economy	**3239**	**1532**	**1707**

Source: Canadian Business Patterns, Statistics Canada, Dec 2012, Adapted by Millier Dickinson Blais Inc.

FIGURE 3: CANADIAN BUSINESS PATTERNS REGIONAL DISTRICT OF BULKLEY-NECHAKO BUSINESS LOCATIONS AND EMPLOYMENT, DEC 2



Source: Canadian Business Patterns, Statistics Canada, Dec 2012, Adapted by Millier Dickinson Blais Inc.

Business locations have a varying degree of impact on employment and Figure 3 provides insight into the sectors with the largest employment in the RDBN. Manufacturing has the largest impact on jobs, and yet these jobs are concentrated in fewer business locations with seven businesses in the category of 200-499 employees. Agriculture, Forestry, Fishing and Hunting has the highest number of small businesses under 10 employees, with 249 businesses employing between one and four people and 54 businesses employing between five and 10 people. Different strategies are required to support sectors with large industry players as opposed to small and medium sized businesses.

Location quotient analysis

Location Quotients (LQs) assess the concentration of economic activities, in this case measured by business locations, within a smaller area relative to a larger region to identify areas of competitive advantage and gaps in the business mix. In Table 3, the business location concentrations in the Regional District of Bulkley-Nechako are calculated relative to the province of British Columbia as a whole. The analysis is based on December 2012 data.

To interpret the table, it is important to understand that a location quotient with a value greater than 1.0 indicates a concentration of economic activity that is greater than the overarching region, and may indicate a competitive advantage. A location quotient of less than 1.0 suggests that RBDN does not have as much of a concentration in that industry as the province. A low location quotient may present an opportunity for a new entrant or indicate strong regional competition in that industry.

TABLE 3:CANADIAN BUSINESS PATTERNS INDUSTRY LOCATION QUOTIENT, BULKLEY-NECHAKO TO BRITISH COLUMBIA, DEC 2012

Industry	LQ RDBN/BC	Rating
Agriculture, Forestry, Fishing and Hunting	4.81	High
Public Administration	2.63	High
Utilities	2.14	High
Accommodation and Food Services	2.13	High
Mining, Quarrying, and Oil and Gas Extraction	1.81	High
Transportation and Warehousing	1.53	High
Arts, Entertainment and Recreation	1.05	Moderate
Retail Trade	0.93	Moderate
Information and Cultural Industries	0.91	Moderate
Construction	0.91	Moderate
Manufacturing	0.85	Moderate
Other Services (except Public Administration)	0.81	Moderate
Educational Services	0.70	Low
Finance and Insurance	0.68	Low
Health Care and Social Assistance	0.65	Low
Real Estate and Rental and Leasing	0.65	Low
Management of Companies and Enterprises	0.64	Low
Administrative and Support, Waste Management and Remediation Services	0.57	Low
Professional, Scientific and Technical Services	0.54	Low
Wholesale Trade	0.40	Low

Source: Canadian Business Patterns, Dec 2012, Modified by Millier Dickinson Blais Inc.

High concentration of business location

The following three sectors have been selected for further analysis based on their potential impact on employment.

- **Agriculture, Forestry, Fishing and Hunting:** The majority of businesses in this sector are related to logging (194) or support forestry(64). With respect to agriculture, beef businesses are significant (42) as well as hay farming (17), horse (11) and dairy (9) operations.
- **Accommodation and Food Services:** Hotels and motels (23) are a large part of this grouping. Hunting and fishing camps(14) that are employers are also significant, with a similar number of business locations that are sole proprietors(13).
- **Mining, Quarrying, and Oil and Gas Extraction:** Business locations in this category are focused on mining support (13) and contract drilling (8).

Areas of moderate or low business concentration

The following three sectors have been selected for further analysis based on their potential employment impact or gaps in the local economy.

- **Manufacturing:** The major employers in this category are sawmills (23), with a smaller number of millwork business locations (8) and an assortment of businesses in various areas of manufacturing, generally wood related.
- **Construction:** The number of business locations are focused in residential construction (56) however industrial construction (6) employs more people. Other areas with significant numbers of business locations include highway construction (24), electrical business locations (17) and plumbling, heating and air conditioning contractors (23).
- **Professional, Scientific and Technical Services:** Although lawyers (17), bookeepers (6) and accountants (12) are certainly well represented, so are engineering professional services (10). Some of the smaller numbers stand out including surveying and mapping (3), and a total of five business locations described as research and development for either the physical sciences or the humanities.

3 Labour Supply and Demand

In order to assess labour force supply and demand considerations in the Regional District of Bulkley-Nechako, Strategic Projections Inc. (SPI) prepared labour force supply and demand projections for the Regional District. The analysis reviews recent trends in population and employment in RDBN and assesses the future occupational requirements of the Region against the backdrop of two different economic development scenarios, in order to offer insight on skill development and recruitment opportunities based on different economic conditions.

3.1 Recent Trends

Bulkley-Nechako's population has been declining steadily since the late 1990s. According to Statistics Canada's post-censal annual estimates, the population of Bulkley-Nechako in 2012 was 38,126, down from a peak of 44,084 in 1997. This is in contrast to the growth trends outlined in the previous section, which showed an increase of 2.5% from 2006 to 2011. While the population base in the Regional District continues to trend downward overall, recent growth suggests that Bulkley-Nechako has perhaps been able to leverage some of the industrial growth trends emerging in Northern British Columbia.

Overall, the area's economic base remains dependent on natural resource-related industries, including wood products manufacturing (e.g. sawmills and wood preservations, other wood products) and mining, oil and gas (e.g. metal ore mining and support activities for mining). In 2011, according to the National Household Survey, there were 16,755 jobs in the region of which 2,425 were accounted for by wood products manufacturing and 805 by mining, oil and gas. The wood products industry has faced severe difficulties throughout BC in recent years, as the epidemic of mountain pine beetles devastated trees throughout the north. As a result of the industry's decline, employment in wood products manufacturing fell from 3,160 in 2001 to 2,970 in 2006 and to 2,425 in 2011. During that span, employment in mining, oil and gas fell from 715 in 2001 to 700 in 2006, but increased to 805 in 2011.

Since 2001, total employment growth has been relatively flat in the Regional District, falling from 16,820 in 2001 to 16,545 in 2006, but increasing close to its 2001 level in 2011 at 16,775. As a result of the lack of overall employment growth, paired with the sharp decline in wood products manufacturing employment, many people have left the area to find jobs elsewhere. In part, this has contributed to the overall decline in local population since 1996.

3.2 Development Potential for the Bulkley-Nechako Area

SPI develops detailed projections at the regional level for communities across Canada. The firm's **Base Case** projection for RDBN is based on long term trends, including an expectation that the area's wood products-dependent employment base is likely to deteriorate further over the next decade and that its mining, oil and gas employment base is likely to grow, but modestly. In this projection the area's population base declines further in tandem with its eroding economic base.

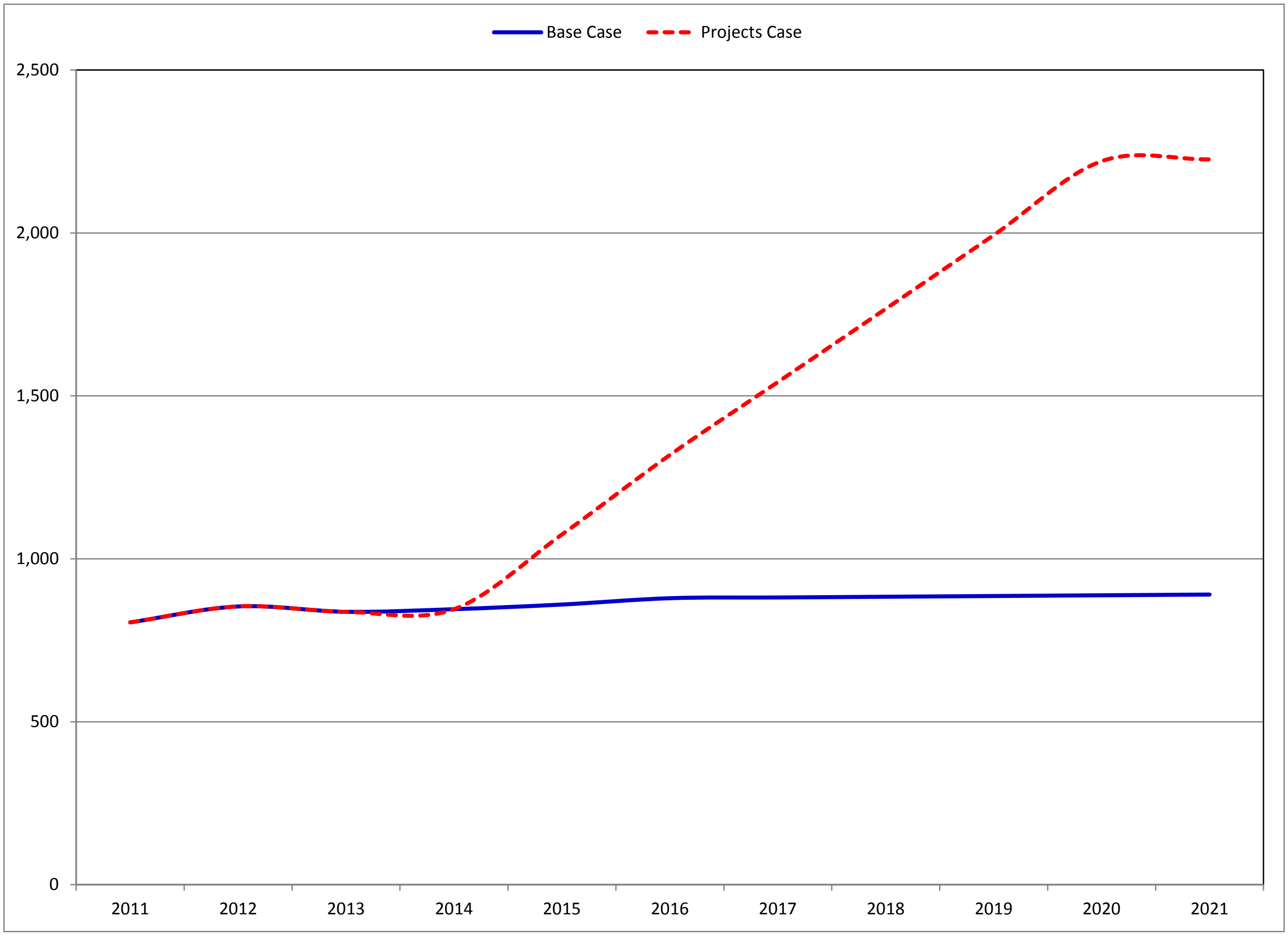
However, it is widely anticipated in BC that a number of natural gas projects will go forward in the province's northern regions, and that significant development of this sort is a possibility within Bulkley-Nechako. In the absence of specific plans of this type, the project team has developed an alternative projection – the **Projects Case** – based on a future for Bulkley-Nechako that includes a significant increase in the capacity for oil and gas production in the district.

For illustrative purposes it is assumed in the Projects Case that employment in oil and gas in the region will increase from 805 employed in 2011 to almost 2,225 employed in 2021, thus more than doubling the oil and gas capacity of the district in just 10 years. The scenario also assumes that there will be modest increases in employment in the mining sector each year beginning in 2015, as the additional capacity comes on stream. Under that assumption, the industry could reach full capacity by 2021. As a result of this expansion in oil and gas capacity, the construction sector will see a sharp increase early on in employment, falling back to current levels once the major mining infrastructure has been created. Construction employment will increase not only due to the expansion of oil and gas facilities, but also as more roads, housing and commercial facilities are required to meet the needs of a growing – rather than declining –population.

Given the more temporary nature of construction activities, especially associated with natural resource-related industrial projects, it is assumed that most construction workers will not permanently move to the area, but rather will reside there on a temporary basis for only as long as they are required to complete a project. As a result, much of the industrial activity is expected to generate only temporary increases to the regional population. However, the increased activity in mining and oil and gas is expected to drive moderate population growth, as new employees will likely become permanent residents.

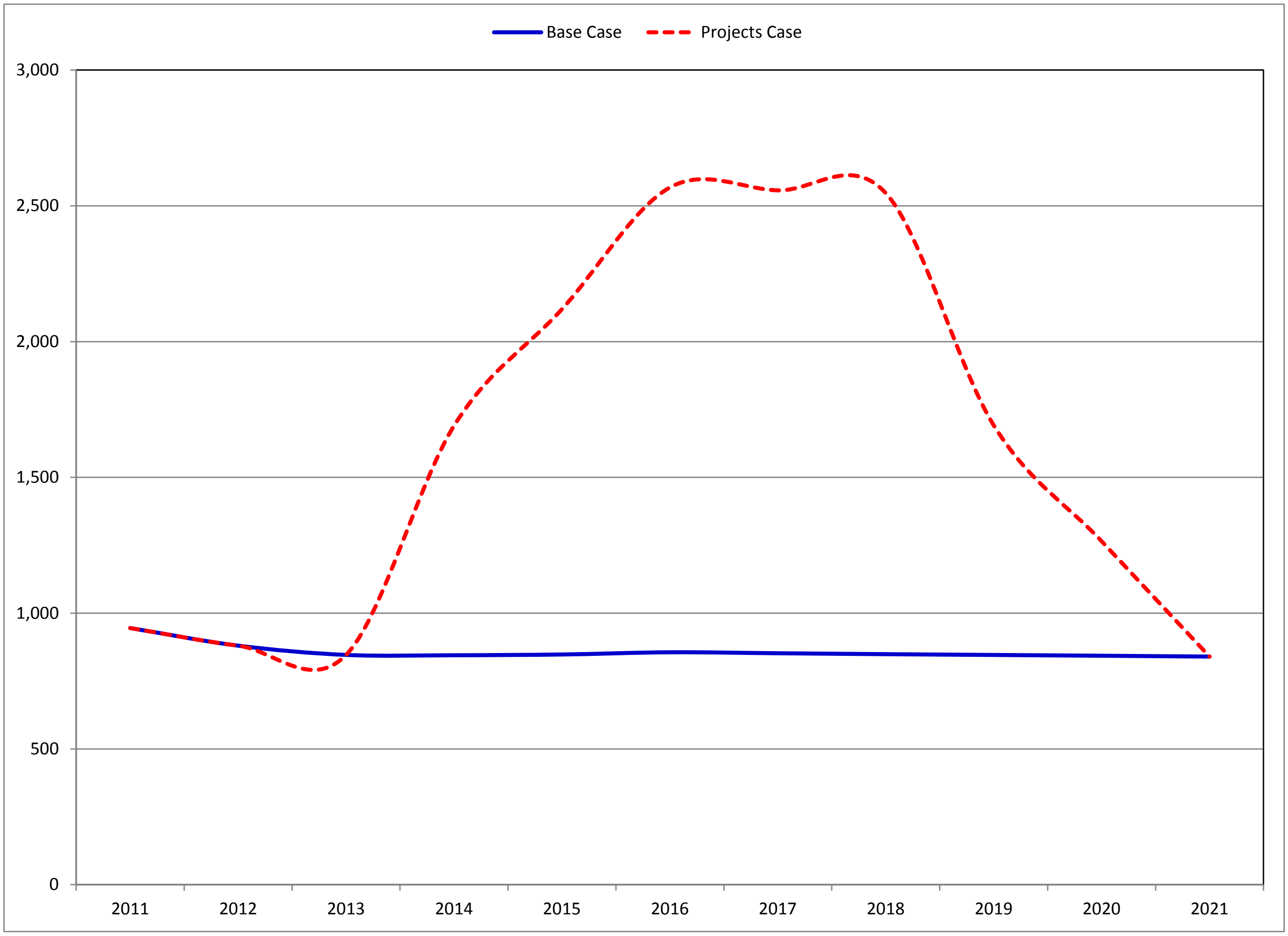
Figure 4 through Figure 8 compare the **Base Case** and **Projects Case** in terms of mining employment, construction employment, all other employment, total employment and total population in Bulkley-Nechako from 2011 to 2021.

FIGURE 4: MINING EMPLOYMENT IN BULKLEY-NECHAKO, BASE AND PROJECTS CASE, 2011-2013 ESTIMATED, 2014-2021 PROJECTED



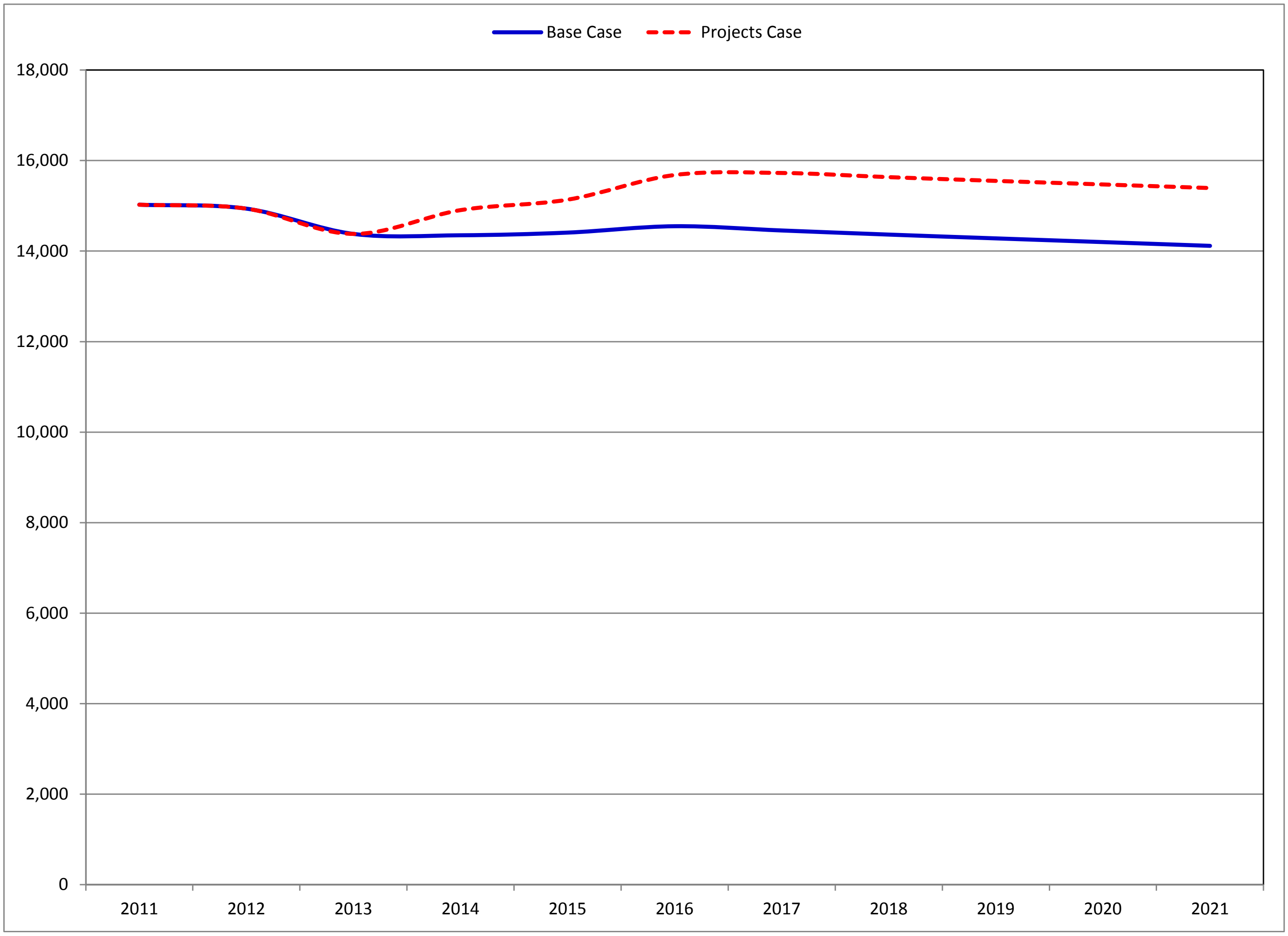
Source: SPI, 2013

FIGURE 5: CONSTRUCTION EMPLOYMENT IN BULKLEY-NECHAKO, BASE AND PROJECTS CASE, 2011-2013 ESTIMATED, 2014-2021 PROJECTED



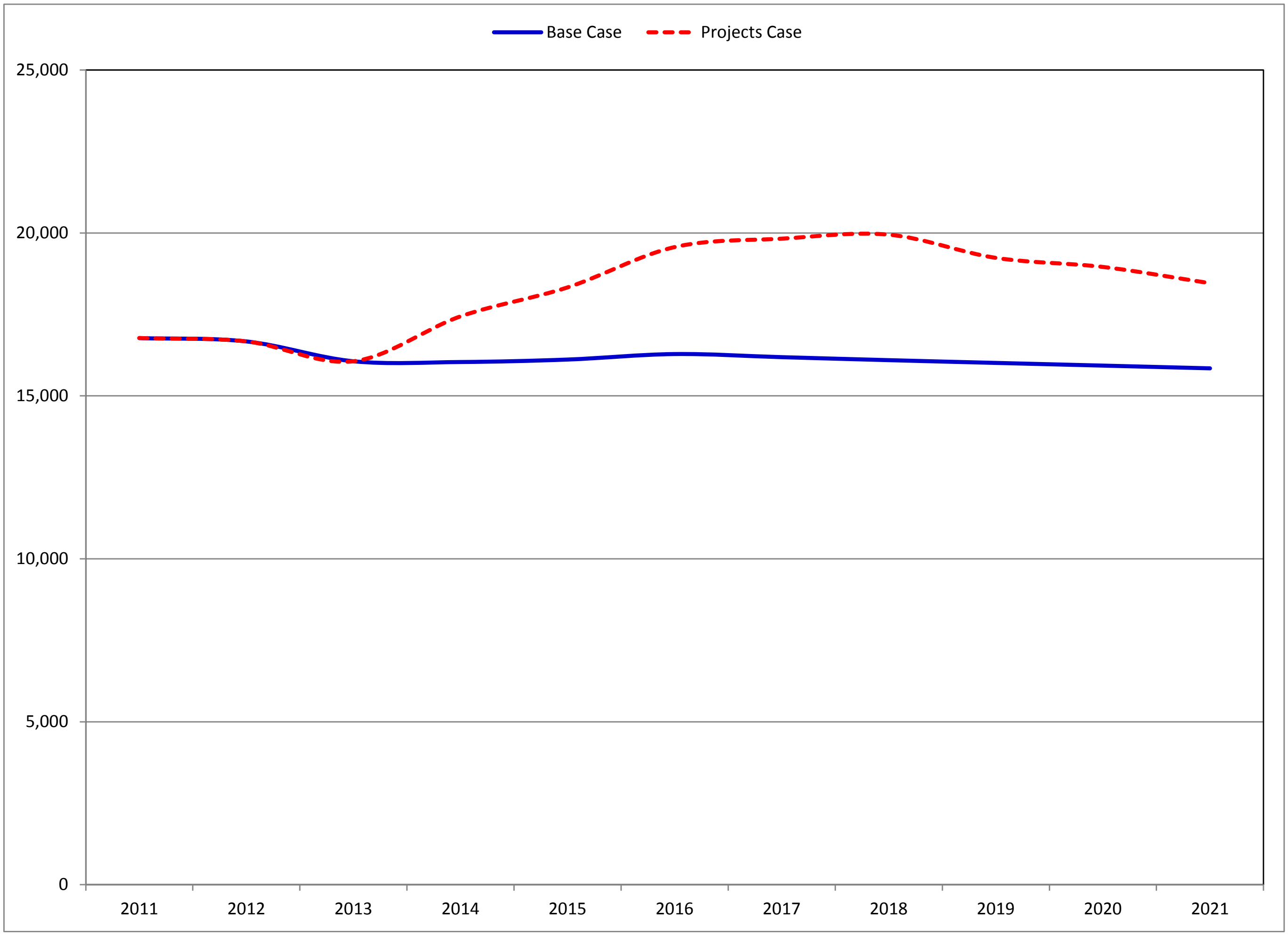
Source: SPI, 2013

FIGURE 6: OTHER EMPLOYMENT IN BULKLEY-NECHAKO, BASE AND PROJECTS CASE, 2011-2013 ESTIMATED, 2014-2021 PROJECTED



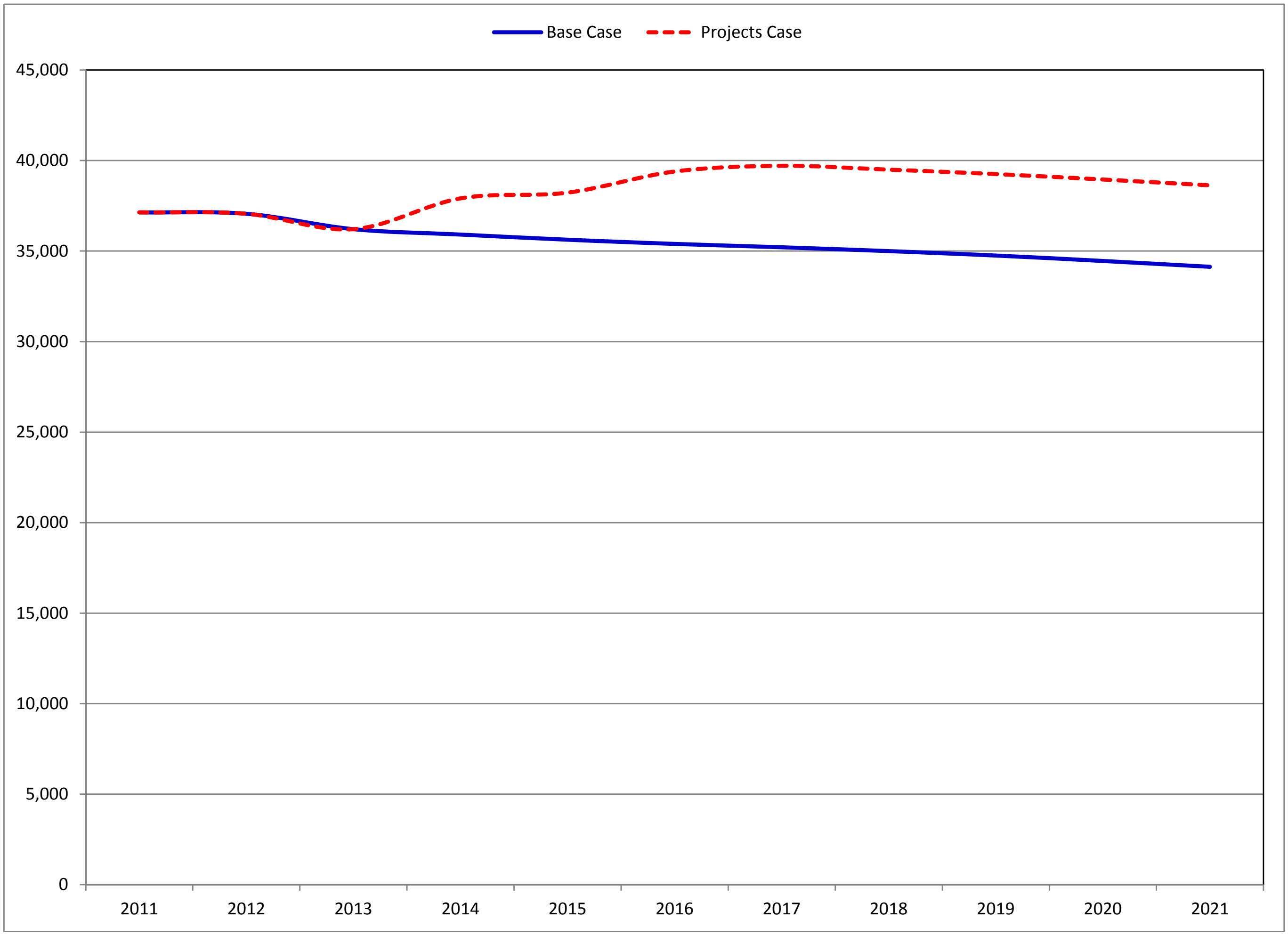
Source: SPI, 2013

FIGURE 7: TOTAL EMPLOYMENT IN BULKLEY-NECHAKO, BASE AND PROJECTS CASE, 2011-2013 ESTIMATED, 2014-2021 PROJECTED



Source: SPI, 2013

FIGURE 8: TOTAL POPULATION IN BULKLEY-NECHAKO, BASE AND PROJECTS CASE, 2011-2013 ESTIMATED, 2014-2021 PROJECTED



Source: SPI, 2013

Before addressing the occupational implications of these two scenarios for Bulkley-Nechako, it is important to keep in mind the following:

- The discussion regarding the development of oil and gas in the northern parts of BC is widespread. However, in an uncertain North American environment it is not at all clear which projects will develop, nor when they will begin (if they do begin at all). The Base Case projection assumes no such projects will occur in Bulkley-Nechako before 2021.
- The magnitude of oil and gas project development that has been assumed in the Projects Case for the area is consistent with the timing and magnitude of projects being discussed for BC's northern regions. However, the scenario that has been created is purely hypothetical. It was developed for this report to illustrate the type of impacts such development could have on occupational recruitment in the area during the next decade.

The Projects Case scenario that has been created foresees construction employment peaking in 2016 and mining employment peaking in 2021. A series of figures that compare employment by occupation in Bulkley-Nechako in 2016 to that of 2011 and employment in 2021 to that of 2011 have been created to separate the short-term occupational requirements – mostly due to construction – from the longer-term requirements – mostly due to the increase in oil and gas production capacity plus local community needs arising from a higher population.

3.3 Occupational Requirements to 2021

The implications of the Projects Case and the Base Case for workers in the region are best understood by looking at occupational trends. This section reviews the implications of the two scenarios by major occupational category, based on the trends and assumptions outlined above, as well as the implications of the two projections for specific occupations (i.e. occupations by unit group) as a result of both economic and industrial performance in RDBN and demographic change (e.g. aging and retirements).

Figure 9 shows the projection of jobs by major occupation category for the Base Case scenario for each of 2016 and 2021. In this scenario, total employment in the area declines between 2011 and 2016 and between 2011 and 2021. As a result significant recruitment efforts are not required overall, although some specific recruitment requirements will be discussed in the following Requirements by Detailed Occupation section. Figure 10 shows the projections for the Projects Case. In this scenario, total employment increases significantly between 2011 and 2016 and between 2011 and 2021. As a result significant recruitment is required. Figure 11 calculates the difference between the Projects Case and the Base Case and reflects the kind of relative recruiting effort that will be required in the area should oil and gas projects of the magnitude and timing assumed in the Projects Case go ahead.

Figure 11 shows that in 2016 total regional employment in the Projects Case would exceed that of the Base Case in 2016 by 3,279. This comparison reveals the extent to which new labour force, over and above the norm, would need to be recruited between 2011 and 2016 to meet the area's temporarily high worker requirements stemming from the construction phase of the mining and oil and gas projects. The largest increases by major occupation category between 2011 and 2016 would occur in:

- Industrial, electrical and construction trades (585)
- Transport and heavy equipment operation and related maintenance occupations (515)
- Trades helpers, construction labourers and related occupations (299)
- Middle management occupations in trades, transportation, production and utilities (262)
- Maintenance and equipment operation trades (212)

- Finance, insurance and related business administrative occupations (188)

Figure 11 also shows that in 2021, total employment in the region in the Projects Case would exceed that of the Base Case by 2,608 workers. As with the difference between 2011 and 2016, this comparison reveals the extent to which new labour force over and above the norm would need to be recruited to 2021 to meet the needs of industry in Bukley-Nechako once the construction phase is completed. The largest increases by major occupation category would occur in:

- Supervisors and technical occupations in natural resources, agriculture, related production (436)
- Transport and heavy equipment operation and related maintenance occupations (304)
- Maintenance and equipment operation trades (278)
- Industrial, electrical and construction trades (134)
- Service support and other service occupations, n.e.c. (112)
- Harvesting, landscaping and natural resources labourers (90)

FIGURE 9: EMPLOYMENT BY MAJOR OCCUPATION GROUP, BULKLEY-NECHAKO, BASE CASE, 2011, 2016, 2021

Occupations - Major Group (NOC)	2011	2016	2021	Change	
				2011-2016	2011-2021
Total - All occupations	16,610	16,122	15,675	-488	-935
Senior management occupations	115	111	103	-4	-12
Specialized middle management occupations	261	244	233	-17	-27
Middle management occupations in retail and wholesale trade and customer services	516	475	454	-42	-63
Middle management occupations in trades, transportation, production and utilities	931	967	909	36	-22
Professional occupations in business and finance	252	233	226	-19	-26
Administrative and financial supervisors and administrative occupations	616	595	567	-21	-48
Finance, insurance and related business administrative occupations	435	416	396	-18	-38
Office support occupations	468	434	415	-34	-53
Distribution, tracking and scheduling co-ordination occupations	314	311	298	-4	-16
Professional occupations in natural and applied sciences	356	334	319	-22	-37
Technical occupations related to natural and applied sciences	323	301	284	-22	-39
Professional occupations in nursing	264	276	283	12	19
Professional occupations in health (except nursing)	106	105	104	-2	-2
Technical occupations in health	242	241	240	-1	-1
Assisting occupations in support of health services	211	221	226	9	15
Professional occupations in education services	711	701	665	-10	-46
Professional occupations in law and social, community and government services	482	471	463	-11	-19
Paraprofessional occupations in legal, social, community and education services	464	465	464	0	0
Occupations in front-line public protection services	147	129	123	-19	-25
Care providers and educational, legal and public protection support occupations	423	421	406	-2	-17
Professional occupations in art and culture	17	17	16	0	-1
Technical occupations in art, culture, recreation and sport	55	61	62	6	7
Retail sales supervisors and specialized sales occupations	202	189	180	-13	-22
Service supervisors and specialized service occupations	421	401	387	-20	-34
Sales representatives and salespersons – wholesale and retail trade	710	659	626	-51	-84
Service representatives and other customer and personal services occupations	656	605	587	-51	-69
Sales support occupations	449	412	391	-36	-58
Service support and other service occupations, n.e.c.	991	941	930	-51	-61
Industrial, electrical and construction trades	545	541	542	-4	-4
Maintenance and equipment operation trades	1,011	1,005	981	-6	-30
Other installers, repairers and servicers and material handlers	335	319	325	-15	-9
Transport and heavy equipment operation and related maintenance occupations	899	874	848	-26	-52
Trades helpers, construction labourers and related occupations	193	174	170	-19	-23
Supervisors and technical occupations in natural resources, agriculture and related production	461	492	481	32	20
Workers in natural resources, agriculture and related production	282	297	271	15	-11
Harvesting, landscaping and natural resources labourers	143	146	142	3	-1
Processing, manufacturing and utilities supervisors and central control operators	192	190	187	-3	-6
Processing and manufacturing machine operators and related production workers	663	643	645	-20	-17
Assemblers in manufacturing	23	22	22	-1	-1
Labourers in processing, manufacturing and utilities	722	684	699	-37	-22

Source: SPI, 2013

FIGURE 10: EMPLOYMENT BY MAJOR OCCUPATION GROUP, BULKLEY-NECHAKO, PROJECTS CASE, 2011, 2016, 2021

Occupations - Major Group (NOC)	2011	2016	2021	Change	
				2011-2016	2011-2021
Total - All occupations	16,610	19,401	18,283	2,791	1,673
Senior management occupations	115	117	110	2	-6
Specialized middle management occupations	261	271	264	11	3
Middle management occupations in retail and wholesale trade and customer services	516	529	513	12	-3
Middle management occupations in trades, transportation, production and utilities	931	1,229	984	298	52
Professional occupations in business and finance	252	257	253	5	0
Administrative and financial supervisors and administrative occupations	616	653	632	37	17
Finance, insurance and related business administrative occupations	435	605	426	170	-9
Office support occupations	468	480	467	12	-1
Distribution, tracking and scheduling co-ordination occupations	314	344	336	30	21
Professional occupations in natural and applied sciences	356	358	346	2	-11
Technical occupations related to natural and applied sciences	323	329	316	6	-7
Professional occupations in nursing	264	307	320	43	56
Professional occupations in health (except nursing)	106	116	118	10	11
Technical occupations in health	242	268	272	26	30
Assisting occupations in support of health services	211	246	256	34	45
Professional occupations in education services	711	780	753	69	42
Professional occupations in law and social, community and government services	482	525	524	43	42
Paraprofessional occupations in legal, social, community and education services	464	517	526	53	61
Occupations in front-line public protection services	147	143	139	-4	-8
Care providers and educational, legal and public protection support occupations	423	468	460	45	37
Professional occupations in art and culture	17	19	19	2	1
Technical occupations in art, culture, recreation and sport	55	68	70	13	15
Retail sales supervisors and specialized sales occupations	202	211	204	8	2
Service supervisors and specialized service occupations	421	451	461	30	40
Sales representatives and salespersons – wholesale and retail trade	710	733	709	23	-1
Service representatives and other customer and personal services occupations	656	672	662	17	7
Sales support occupations	449	459	443	10	-6
Service support and other service occupations, n.e.c.	991	1,038	1,042	46	50
Industrial, electrical and construction trades	545	1,126	675	581	130
Maintenance and equipment operation trades	1,011	1,217	1,259	206	248
Other installers, repairers and servicers and material handlers	335	334	369	-1	34
Transport and heavy equipment operation and related maintenance occupations	899	1,389	1,152	490	252
Trades helpers, construction labourers and related occupations	193	473	173	280	-20
Supervisors and technical occupations in natural resources, agriculture and related production	461	636	916	175	456
Workers in natural resources, agriculture and related production	282	297	271	15	-11
Harvesting, landscaping and natural resources labourers	143	177	232	34	89
Processing, manufacturing and utilities supervisors and central control operators	192	190	187	-3	-6
Processing and manufacturing machine operators and related production workers	663	662	704	-1	41
Assemblers in manufacturing	23	22	22	-1	-1
Labourers in processing, manufacturing and utilities	722	684	699	-37	-22

Source: SPI, 2013

FIGURE 11: EMPLOYMENT BY MAJOR OCCUPATION GROUP, BULKLEY-NECHAKO, PROJECTS CASE MINUS BASE CASE, 2011, 2016, 2021

Occupations - Major Group (NOC)	2011	2016	2021	Change	
				2011-2016	2011-2021
Total - All occupations	0	3,279	2,608	3,279	2,608
Senior management occupations	0	6	6	6	6
Specialized middle management occupations	0	28	31	28	31
Middle management occupations in retail and wholesale trade and customer services	0	54	60	54	60
Middle management occupations in trades, transportation, production and utilities	0	262	74	262	74
Professional occupations in business and finance	0	24	27	24	27
Administrative and financial supervisors and administrative occupations	0	58	65	58	65
Finance, insurance and related business administrative occupations	0	188	30	188	30
Office support occupations	0	46	52	46	52
Distribution, tracking and scheduling co-ordination occupations	0	33	37	33	37
Professional occupations in natural and applied sciences	0	24	27	24	27
Technical occupations related to natural and applied sciences	0	29	32	29	32
Professional occupations in nursing	0	31	37	31	37
Professional occupations in health (except nursing)	0	12	14	12	14
Technical occupations in health	0	27	32	27	32
Assisting occupations in support of health services	0	25	30	25	30
Professional occupations in education services	0	79	88	79	88
Professional occupations in law and social, community and government services	0	53	61	53	61
Paraprofessional occupations in legal, social, community and education services	0	53	61	53	61
Occupations in front-line public protection services	0	15	16	15	16
Care providers and educational, legal and public protection support occupations	0	48	54	48	54
Professional occupations in art and culture	0	2	2	2	2
Technical occupations in art, culture, recreation and sport	0	7	8	7	8
Retail sales supervisors and specialized sales occupations	0	21	24	21	24
Service supervisors and specialized service occupations	0	50	75	50	75
Sales representatives and salespersons – wholesale and retail trade	0	74	83	74	83
Service representatives and other customer and personal services occupations	0	67	76	67	76
Sales support occupations	0	47	52	47	52
Service support and other service occupations, n.e.c.	0	97	112	97	112
Industrial, electrical and construction trades	0	585	134	585	134
Maintenance and equipment operation trades	0	212	278	212	278
Other installers, repairers and servicers and material handlers	0	14	44	14	44
Transport and heavy equipment operation and related maintenance occupations	0	515	304	515	304
Trades helpers, construction labourers and related occupations	0	299	3	299	3
Supervisors and technical occupations in natural resources, agriculture and related production	0	143	436	143	436
Workers in natural resources, agriculture and related production	0	0	0	0	0
Harvesting, landscaping and natural resources labourers	0	31	90	31	90
Processing, manufacturing and utilities supervisors and central control operators	0	0	0	0	0
Processing and manufacturing machine operators and related production workers	0	19	58	19	58
Assemblers in manufacturing	0	0	0	0	0
Labourers in processing, manufacturing and utilities	0	0	0	0	0

Source: SPI, 2013

3.3.1 Requirements by Detailed Occupation (Unit Group)

Figure 12 illustrates the individual occupations requiring the largest recruitment efforts in the Regional District, from 2011 to 2021 and under the Base Case scenario, due to anticipated economic change (the column identified as Change 11-21) associated employment demands, and potential retirements (those aged 55 and over in 2011 in the column identified as Potential Retirees). The top 50 occupations are ranked according to the sum of these two future recruitment factors (that is by the final column identified as Total Demand).

Over the 2011 to 2021 period in the Base Case scenario, total employment is expected to decline by 935 based on the trends and assumptions outlined above. However, the total number of potential retirees is 2,060. As a result, even with a declining employment base overall, the area would need to recruit 1,125 new workers. The occupations most likely to require new recruitment would be:

- Managers in agriculture (298),
- Construction millwrights and industrial mechanics (81),
- Transport truck drivers (72),
- Administrative officers (70), and
- Registered nurses (69).

In line with expected growth in industrial and resource-based areas of the economy like mining and oil and gas, more technical and trades-based occupations account for the highest shares of total demand. However, more knowledge-based occupations like administrative officers and registered nurses also account for notable demand to 2021.

FIGURE 12: TOP 50 (FINAL DEMAND) DETAILED OCCUPATIONS (UNIT GROUP), BULKLEY-NECHAKO, BASE CASE, 2011-2021

NOC Code (Unit Group)	Occupation - Unit Group Description (NOC)	2011	2016	2021	Change 2011-2021	By Age 55-64	By Age 65+	Potential Retirees	Final Demand
	Total all occupations	16,610	16,122	15,675	-935	1,765	295	2,060	1,125
	Subtotal - Top 50 Occupations	10,903	10,853	10,648	-265	1,560	285	1,845	1,580
0821	Managers in agriculture	574	608	552	-22	145	175	320	298
7311	Construction millwrights and industrial mechanics	427	420	423	-4	85	0	85	81
7511	Transport truck drivers	471	476	459	-13	65	20	85	72
1221	Administrative officers	180	178	169	-10	80	0	80	70
3012	Registered nurses and registered psychiatric nurses	264	276	283	19	50	0	50	69
6733	Janitors, caretakers and building superintendents	369	367	366	-3	70	0	70	67
9431	Sawmill machine operators	366	346	352	-14	80	0	80	66
7321	Automotive service technicians, truck and bus mechanics and mechanical repairers	267	269	251	-17	80	0	80	63
1311	Accounting technicians and bookkeepers	435	416	396	-38	60	35	95	57
7237	Welders and related machine operators	190	211	214	24	30	0	30	54
1241	Administrative assistants	248	236	226	-22	75	0	75	53
2122	Forestry professionals	257	244	233	-25	65	0	65	40
7521	Heavy equipment operators (except crane)	276	260	259	-18	55	0	55	37
7452	Material handlers	335	319	325	-9	45	0	45	36
4212	Social and community service workers	301	296	296	-5	40	0	40	35
3112	General practitioners and family physicians	59	61	63	4	25	0	25	29
7241	Electricians (except industrial and power system)	60	54	53	-7	35	0	35	28
7621	Public works and maintenance labourers	29	26	25	-5	30	0	30	25
6541	Security guards and related security service occupations	59	58	58	-1	25	0	25	24
3413	Nurse aides, orderlies and patient service associates	129	135	138	9	15	0	15	24
6731	Light duty cleaners	244	232	232	-12	35	0	35	23
4031	Secondary school teachers	198	195	185	-13	35	0	35	22
0811	Managers in natural resources production and fishing	74	80	77	2	20	0	20	22
7312	Heavy-duty equipment mechanics	161	163	157	-5	25	0	25	20
1411	General office support workers	155	146	140	-15	35	0	35	20
0121	Insurance, real estate and financial brokerage managers	61	58	56	-5	25	0	25	20
8221	Supervisors, mining and quarrying	175	191	194	19	0	0	0	19
8431	General farm workers	180	191	173	-7	0	25	25	18
7242	Industrial electricians	87	87	89	2	15	0	15	17
4214	Early childhood educators and assistants	147	151	153	6	10	0	10	16
0631	Restaurant and food service managers	120	107	104	-16	0	30	30	14
0714	Facility operation and maintenance managers	110	121	124	14	0	0	0	14

NOC Code (Unit Group)	Occupation - Unit Group Description (NOC)	2011	2016	2021	Change 2011-2021	By Age 55-64	By Age 65+	Potential Retirees	Final Demand
4166	Education policy researchers, consultants and program officers	29	29	27	-2	15	0	15	13
4413	Elementary and secondary school teacher assistants	335	329	312	-23	35	0	35	12
4411	Home child care providers	23	25	25	2	10	0	10	12
0122	Banking, credit and other investment managers	64	61	59	-6	15	0	15	9
8231	Underground production and development miners	88	96	97	9	0	0	0	9
8616	Logging and forestry labourers	90	89	84	-6	15	0	15	9
8421	Chain saw and skidder operators	45	47	44	-2	10	0	10	8
5212	Technical occupations related to museums and art galleries	55	61	62	7	0	0	0	7
2223	Forestry technologists and technicians	156	146	137	-19	25	0	25	6
8614	Mine labourers	53	57	58	6	0	0	0	6
4153	Family, marriage and other related counsellors	76	80	82	5	0	0	0	5
4021	College and other vocational instructors	76	75	71	-5	10	0	10	5
3411	Dental assistants	65	68	69	5	0	0	0	5
4412	Home support workers, housekeepers and related occupations	65	68	69	5	0	0	0	5
0621	Retail and wholesale trade managers	351	327	311	-41	45	0	45	4
9617	Labourers in food, beverage and associated products processing	40	44	44	4	0	0	0	4
9411	Machine operators, mineral and metal processing	35	38	39	4	0	0	0	4
6322	Cooks	236	219	214	-22	25	0	25	3

Source: SPI, 2013

Figure 13 identifies the individual occupations requiring the largest recruitment efforts in the area from 2011 to 2021 under the Projects Case scenario, due to expected economic change and employment demand, and potential retirements. Again, the top 50 occupations are ranked according to the sum of these two future recruitment factors, or the Total Demand.

From 2011 to 2021, total employment would increase by 1,673 due to significant economic growth in the Projects Case. Furthermore, the total number of potential retirees is unchanged from the Base Case scenario, at 2,060. As a result the area would need to recruit 3,733 new workers to meet demand at 2021.

As with the Base Case, recruitment would be most urgent among occupations characteristic of industrial and resource-based sector growth. Labour force demand to 2021 under the Projects Case would be led by:

- Supervisors, mining and quarrying (309)
- Managers in agriculture (298)
- Transport truck drivers (286)
- Construction millwrights and industrial mechanics (270)
- Underground production and development managers (154)

Demand in some more knowledge-based occupations – primarily registered nurses and registered psychiatric nurses – would also see increased levels of demand under the Projects Case, associated with the increase in local population and associated demand on population-related sectors of the economy like health care.

FIGURE 13: TOP 50 (FINAL DEMAND) DETAILED OCCUPATIONS (UNIT GROUP), BULKLEY-NECHAKO, PROJECTS CASE, 2011-2021

NOC Code (Unit Group)	Occupation - Unit Group Description (NOC)	2011	2016	2021	Change	By Age		Potential Retirees	Final Demand
					2011-2021	55-64	65+		
	Total all occupations	16,610	19,401	18,283	1,673	1,765	295	2,060	3,733
	Subtotal - Top 50 Occupations	12,117	13,913	13,823	1,697	1,650	295	1,945	3,642
8221	Supervisors, mining and quarrying	175	287	484	309	0	0	0	309
0821	Managers in agriculture	574	608	552	-22	145	175	320	298
7511	Transport truck drivers	471	615	673	201	65	20	85	286
7311	Construction millwrights and industrial mechanics	427	576	612	185	85	0	85	270
8231	Underground production and development miners	88	143	242	154	0	0	0	154
7237	Welders and related machine operators	190	292	290	100	30	0	30	130
6733	Janitors, caretakers and building superintendents	369	406	412	43	70	0	70	113
7521	Heavy equipment operators (except crane)	276	621	331	55	55	0	55	110
3012	Registered nurses and registered psychiatric nurses	264	307	320	56	50	0	50	106
7321	Automotive service technicians, truck and bus mechanics and mechanical repairers	267	297	282	14	80	0	80	94
8614	Mine labourers	53	86	145	93	0	0	0	93
1311	Accounting technicians and bookkeepers	435	605	426	-9	60	35	95	86
1221	Administrative officers	180	191	184	5	80	0	80	85
1241	Administrative assistants	248	260	253	5	75	0	75	80
0811	Managers in natural resources production and fishing	74	99	135	60	20	0	20	80
6421	Retail salespersons	683	702	678	-5	75	10	85	80
7452	Material handlers	335	334	369	34	45	0	45	79
7242	Industrial electricians	87	107	147	60	15	0	15	75
4212	Social and community service workers	301	330	335	34	40	0	40	74
9431	Sawmill machine operators	366	346	352	-14	80	0	80	66
9411	Machine operators, mineral and metal processing	35	57	97	62	0	0	0	62
6322	Cooks	236	251	269	33	25	0	25	58
2122	Forestry professionals	257	258	248	-9	65	0	65	56
4413	Elementary and secondary school teacher assistants	335	366	353	18	35	0	35	53
4031	Secondary school teachers	198	217	210	12	35	0	35	47
7316	Machine fitters	26	43	73	46	0	0	0	46
0621	Retail and wholesale trade managers	351	364	352	0	45	0	45	45
6731	Light duty cleaners	244	251	254	10	35	0	35	45

NOC Code (Unit Group)	Occupation - Unit Group Description (NOC)	2011	2016	2021	Change	By Age		Potential Retirees	Final Demand
					2011-2021	55-64	65+		
4032	Elementary school and kindergarten teachers	402	441	426	24	20	0	20	44
3413	Nurse aides, orderlies and patient service associates	129	150	157	27	15	0	15	42
3112	General practitioners and family physicians	59	68	71	12	25	0	25	37
4214	Early childhood educators and assistants	147	169	173	27	10	0	10	37
1411	General office support workers	155	160	155	1	35	0	35	36
6541	Security guards and related security service occupations	59	63	65	5	25	0	25	30
0714	Facility operation and maintenance managers	110	135	140	30	0	0	0	30
7241	Electricians (except industrial and power system)	60	162	53	-7	35	0	35	28
7621	Public works and maintenance labourers	29	29	28	-2	30	0	30	28
631	Restaurant and food service managers	120	119	117	-3	0	30	30	27
0121	Insurance, real estate and financial brokerage managers	61	65	63	2	25	0	25	27
7312	Heavy-duty equipment mechanics	161	167	162	1	25	0	25	26
1111	Financial auditors and accountants	204	206	203	-1	20	0	20	19
2223	Forestry technologists and technicians	156	157	150	-6	25	0	25	19
1522	Storekeepers and partspersons	204	228	222	18	0	0	0	18
8431	General farm workers	180	191	173	-7	0	25	25	18
0122	Banking, credit and other investment managers	64	68	66	2	15	0	15	17
4166	Education policy researchers, consultants and program officers	29	32	31	2	15	0	15	17
4153	Family, marriage and other related counsellors	76	89	93	16	0	0	0	16
4411	Home child care providers	23	27	28	5	10	0	10	15
5212	Technical occupations related to museums and art galleries	55	68	70	15	0	0	0	15
4021	College and other vocational instructors	76	83	80	4	10	0	10	14

Source: SPI, 2013

3.3.2 Requirements by Skill Level

Human Resources and Skills Development Canada (HRSDC) consolidates the occupational data by National Occupation Classification (NOC) into broad skill categories, in order to provide an indication of the type of training and level of educational attainment an individual needs to acquire the occupation. These skill categories include:

- Skill level A – Knowledge-based occupations, or those that usually require a university-level education
- Skill level B – Skilled trade and paraprofessional occupations, or those that usually require college education or apprenticeship training
- Skill level C – Semi-skilled occupations, or those that usually require secondary school and/or occupation-specific training
- Skill level D – Unskilled occupations, or those that primarily require on-the-job training

Looking at the projected areas of demand for RDBN under both the Base Case and Projects Case scenarios by skill level provides an indication of the types of education, training, or recruitment programs that should be developed or expanded, as a means of meeting occupational demand under varying levels of industrial activity. Figure 14 outlines total demand in Bulkley-Nechako under both the Base Case and Projects Case to 2021, by skill level.

FIGURE 14: TOTAL DEMAND TO 2021 BY SKILL LEVEL, BASE CASE AND PROJECTS CASE, BULKLEY-NECHAKO

Skill Level	Base Case			Projects Case		
	2011	2021	Total Demand (incl. retirements)	2011	2021	Total Demand (incl. retirement)
Total - All Occupations	16,610	15,675	1,125	16,610	18,283	3,733
A	4,013	3,775	472	4,013	4,202	899
B	5,114	4,894	411	5,114	6,084	1,600
C	4,985	4,672	202	4,985	5,408	938
D	2,498	2,333	40	2,498	2,589	296

Source: Adapted from SPI, 2013 by Millier Dickinson Blais

As noted above, the Base Case is expected to produce a total demand of 1,125 workers, based on expected economic conditions and socio-demographic trends (e.g. retirements). The 2001 and 2021 figures do not include retirements, which is why they decline and yet total demand increases. Overall, knowledge-based occupations are expected to encompass the majority of that demand, suggesting that university-level programs and graduates are likely targets for programming and talent attraction and development in the Regional District. The majority of that demand is expected from:

- Managers in agriculture (298)
- Registered nurses and registered psychiatric nurses (69)
- Forestry professionals (40).

Skilled trade and paraprofessional occupations are expected to experience the next highest demand to 2021, led by a mixture of:

- Trades-based occupations (e.g. construction millwrights and industrial mechanics; automotive service technicians, truck and bus mechanics and mechanical repairers; welders and related machine operators)
- Administrative occupations (e.g. administrative officers, accounting technicians and bookkeepers, and administrative assistants)

As a result, the primary focus of talent attraction and workforce development tasks under the Base Case scenario should be on knowledge-based and skilled trade/paraprofessional occupations to address expected gaps. With that said, RDBN still needs to focus on improving and expanding secondary school completion rates, with the intent of meeting expected occupational demands in semi-skilled areas as well.

Under the Projects Case, occupational demand is expected to be more than triple that of the Base Case,with a difference of 3,733 workers, as illustrated in Figure 14. The difference is based largely on increasing demands from oil and gas, mining, and construction, which drive associated population-related (e.g. health care, education, public administration, retail) industry and occupational growth. Unlike the Base Case scenario, skilled trades and paraprofessional occupations are anticipated to account for the majority of demand to 2021, with 1,600 additional workers required by 2021. Occupations expected to drive this demand are closely connected to mining, as well as oil and gas and industrial construction:

- Supervisors, mining and quarrying (309)
- Construction millwrights and industrial mechanics (270)
- Underground production and development miners (154)
- Welders and related machinery operators (130)

Semi-skilled occupations are expected to account for the next highest share of total demand, reflecting the increased economic activity in the industrial sector under the projects case. Occupations expected to lead in demand are:

- Transport truck drivers (286)
- Heavy equipment (except crane) operators (110).

Though occupations characteristic of more population-related industries are also expected to experience demand as well (e.g. retail salespersons, elementary and secondary school teacher assistants, and personal support workers) the majority of demand is expected in occupations more industrial in nature, with material handlers (79), sawmill machine operators (66), mineral and metal processing machine operators (62) augmenting the demand for transport truck drivers and heavy equipment operators noted above.

Demand in knowledge-based occupations is expected to closely follow demand for semi-skilled workers. The occupation expected to be in highest demand in the Base Case – managers in agriculture – is expected to be equally in demand under the Projects Case. Other industrial and natural resource-related occupational demand in the Projects Case mirrors that of the Base Case, though total demand levels in occupations like managers in natural resources production and fishing and forestry professionals are slightly higher in the Projects Case.

The more notable change in the Projects Case is the emergence of professional and knowledge-based occupations characteristic of population-related industries, such as:

- Registered nurses (106)
- Secondary school teachers (47)

- Retail and wholesale trade managers (45)
- Elementary school and kindergarten teachers (44),
- General practitioners and family physicians (37)

Based on anticipated industrial growth, these occupations are expected to experience demand above their comparatively limited demand in the Base Case (which is generated primarily though demographic trends like retirement).

Overall, the training and recruitment implications of the Projects Case span most areas of the economy. Where the emphasis in the Base Case could be placed almost equally on knowledge-based and skilled trade/paraprofessional occupations, the Projects Case requires a more holistic approach focused on institutional and private sector/employer training and recruitment programs across all skill levels to meet projected demand. Though skilled trades and paraprofessional occupations make up the bulk of demand – and necessitate a focus on programs and placements at the post-secondary (especially college) and apprenticeship level – demand in knowledge-based and semi-skilled occupations necessitate additional focus on areas like talent recruitment, management training, professional development, secondary school completion, post-secondary expansion, and career pathway development. This is especially critical given the comparatively higher proportions of population in RDBN with no certificate/diploma/degree or high school credentials, and lower proportions of those with college or university-level credentials.

While addressing the skill implications of both scenarios will require stakeholders from a range of organizations, the additional scope of skill and talent demands in the Projects Case requires RDBN to ensure program development and recruitment efforts are widely focused and inclusive of a broad range of stakeholders and reflect the objectives of those in the region (e.g. youth employment, aboriginal employment).

4 Community Engagement and Capacity

4.1 Community Engagement Process

The Regional Skills Gap Analysis seeks to understand the dynamics of the labour market from several perspectives, that of residents, employers and employees. Once these perspectives are captured, a set of themes emerge that cut across all groups and characterize the trends in regional workforce development.

In order to capture these perspectives, three surveys were launched, focus groups were completed in each community, and a number of interviews were completed, including sets of interviews with First Nations representatives, education stakeholders and mining companies. The specific perspective of fly-in fly-out workers was also captured through the previously mentioned employee survey.

In total, the consultations reached approximately 440 people, through the following activities:

- Surveys:
    - Resident survey had a total of 219 respondents
    - Employer survey had 66 respondents
    - Employee survey (targeting fly-in fly-out workers) has 36 respondents
- Focus Groups: Held in Smithers, Houston, Burns Lake, Fraser Lake, Fort St James and Vanderhoof, often with the support of the local Chamber of Commerce and economic development staff. The sessions were attended by 52 individuals.
- Individual interviews: Completed with 67 individuals. Included in this figure are ten interviews with education stakeholders, three interviews with mining companies and six interviews with representatives of First Nation communities or individuals that work directly with First Nation communities.

The following points summarize the various viewpoints collected during the consultation activities. For more detailed commentary on each engagement activity, including summaries of responses to each survey question, see the Supporting Research Documentation section of the report, beginning on page 61.

Resident Perspectives

- Residents reported a lack of post-secondary education as a key barrier to employment
- Residents report a lack of employment opportunities in Bulkley-Nechako, leading to residents leaving the region or experiencing unemployment, and intense competition for desirable positions
- Word of mouth is the top method of recruiting and finding employment limits knowledge of opportunities
- Residents also report using the local newspaper to advertise and learn about employment opportunities, followed by local employment agencies, and relatively fewer are advertising/job seeking online
- Residents reported a lack of post-secondary education as a key barrier to employment

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Employer Perspective

- Employers universally did not rate the workforce as excellent in any skill category, including labour availability, professional and managerial skills, educational attainment, technical skills and work ethic
- Employers identified the most available skills as physical, mechanical or hands on skills and computer or teamwork skills and less available skills as leadership, information technology and literacy/numeracy skills
- In interviews, employers stated concerns with youth texting during work, pointed to a lack of commitment to a place of work; they are looking for independently motivated staff with a variety of skills - handle responsibility
- Quality of student outcomes in basic literacy and numeracy at the high school level, as well as post-secondary, are a concern for employers
- Employers report that residents are not fully aware of possible career opportunities in the region, particularly youth, with respect to the resource based economy, trades, small business and entrepreneurship opportunities

Fly-in Fly-out Worker's perspective

- Fly-in fly-out workers are concerned about the variety in employment opportunities, job stability and the sustainability of housing values
- Fly-in fly-out workers describe the barriers to relocation as; the size of communities and remoteness, amenities such as retail shopping, health care, restaurants, and entertainment, and the lack of ocean and mountain peaks in many areas of the region
- Workers mention work schedule, wages and incentives as attractive; factors that might make a difference in terms of relocation

4.2 Local Training and Education Capacity

As part of the Regional Skills Gap Analysis, an inventory of programs offered in RDBN has been compiled and can be reviewed in Appendix A. The original desire for the inventory was to outline not only what programs are available, but program completion and graduate employment rates, anticipated impacts on supply over the short, medium , and long terms, minimum requirements for admission/entry. The information available is more limited.

Both Northwest Community College (NWCC) and College of New Caledonia (CNC) offer foundational courses in the region that appear to support the stated needs of the community to prepare workers for participation in the labour force, including:

- Essential Skills for Work (NWCC)
- Career and College Preparation (NWCC)

- Adult Education Centre (CNC)
- Worker Entry Level Training (CNC)

These courses may be a good entry point to influence labour market outcomes, and provide a starting point for action on challenges related to professionalism, work ethic, or employment maintenance skills.

Shortages in the certified skilled trades are the topic of discussion with many business owners, who see this as an area of urgent need. Northwest Community College has no current programming in the region to serve this need, but College of New Caledonia does have a variety of foundational courses, as follows;

- Carpentry Foundation (CNC)
- Industrial Mechanic (CNC)
- Welding Level A-C (CNC)
- Electrical Foundation (CNC)
- Pipe Trades (CNC)

Trades programs are expensive for the colleges, and the ability to expand services in this area is tightly tied to government funding. Although the B.C. government recently announced funding for both NWCC and CNC to expand seats in the trades, the benefits for RDBN were limited to the Fort St. James CNC campus.

Ultimately the challenge that RDBN faces with respect to training, including but not limited to the trades, is one of distance. Communities are far apart, and First Nations Communities are often far from communities. Transportation to and from each campus can be a significant barrier to post-secondary enrolment and completion. Therefore serving the catchment area of each campus can be a significant challenge with limited funding.

Maintaining a more complete inventory of information and providing that information to employment service providers, potential investors. career and employment counselors and residents supports a stronger labour market in the long term.

4.3 Major Consultation Themes

The result of all of the consultation activites developed through this report are a series of themes. The consultation themes are based on the Supporting Research Documentation section of the report, beginning on page 61.

4.3.1 Theme A: Develop an attraction strategy to ensure local employers have access to a skilled labour force that meets talent demand

- Hiring immigrants and international workers is being considered by employers in Bulkley-Nechako, although there are concerns about how welcoming communities will be
- While local labour force from a pure population perspective does not indicate a significant shortage of people, there is concern that the skills available do not/will not align with employer demand (short and medium term)
- Fly-in/fly-out employees have stated that work schedule, wages and other incentives are seen as influencing factors for potential relocation

- A poor/fair rating (over 70%) dominated employer ranking of the RDBN workforce skills (work ethic, professional/managerial skills, technical skills)
- More than 74% of employers have significant difficulty finding the skills and talents they need

4.3.2 Theme B: Advance regional and local economic development initiatives to create and sustain local jobs

- Attract quality jobs across all skill levels to RDBN
- Diversify the economy to support broader range of employment opportunities
- Support community vitality to create welcoming and fully serviced communities
- Strengthen entrepreneurial skills and business development to promote entrepreneurship
- Driver's licence attainment a challenge in the region, affecting employment sustainability

4.3.3 Theme C: Ensure alignment of education/training programs with business needs

- More than 60% of employers indicated that there is not sufficient engagement between employers and the post-secondary sector (Colleges, universities, and training facilities)
- Employers identified a disconnect between the types of programs offered and their relevance to local business skill needs (most specific to trades training). Challenges with basic life skills, budgeting, debt management and overall low incomes were also reported by residents and employers as challenges

4.3.4 Theme D: Increasing opportunities for local education/training access

- If the opportunities exist locally people may be better positioned to access
- Courses need to span entry level to professional to support increased skills development and career advancement
- There is external funding constraints that impede curriculum development, enhancement of programming
- Students may be working full time and cannot access courses part-time
- Industry specific qualifications are reported as low by employers
- Residents reported the # 1 barrier to employment as lack of education/training (23%). Quality of student outcomes in basic literacy and numeracy at the high school level, as well as post-secondary, are a concern for employers, and create concerns regarding how prepared students are post-secondary education or other training opportunities

4.3.5 Theme E: Continue to strengthen relationships with first nations people to enhance labour force participation

- In some cases, post-secondary education and training programs are reported to have low employment outcomes for First Nation participants

- First Nations communities report more challenges with transportation to work, as reserves are often father from employers, and fewer drivers are available
- Worker mobility is described as relatively low; some workers are not comfortable away from their home communities or have trouble in situations where they are isolated from fellow community members
- An understanding of aboriginal cultural is reported to be a challenge for many employers, leading to challenges with communications, integration into the workplace, overall job performance and effective management
- It is reported that First Nation workers can face discrimination in seeking employment, within the workplace, and from clients, creating stress, performance and retention challenges
- Social issues such as poverty and addiction, and the limitations that they place on the ability of the labour force to be educated, acquire and retain employment, are a concern among community leaders

4.3.6 Theme F: Improve information about the labour market

- There appears to be a lack of understanding of the value of labour market information or how it may be used to support career decision making (only 7% of respondents identified LMI as a means of increasing employment potential)
- There is a need to more fully understand what local jobs are available
- Improve employers' access to information/tools to support employee recruitment and retention (wages, benefits, where they should focus their recruitment efforts)

4.3.7 Theme G: Promote the region's assets to strengthen local employers' success in recruiting and retaining suitable employees

- Market RDBN assets as a place to live, work and to enjoy quality of life
- Targeted marketing to those who appreciate or may be interested in a northern lifestyle, including a wealth of outdoors activities, small town culture and the peace and quiet

4.3.8 Theme H: Develop a retention strategy targeting youth

- It was recognized that youth may leave the area to pursue education or other work opportunities
- Access to the types of programs of interest to youth is restricted
- There is a lack of awareness of the local opportunities (i.e. small business, forestry, mining)
- Transportation access is restrictive (no public transit, distance from home to work, driver's licences)

4.3.9 Theme I: An improved apprenticeship program that connects the employee /trainee with the employer

- This theme was added by those in attendance during the regional forum, and voted as a priority
- Reporting on apprentices has be an issue for apprentices and employers, although there have been changes in delivery mechanisms recently and work to improve in this area is ongoing

- Larger businesses report that they fill their skilled trades needs by training apprentices internally as well as recruiting; however, some employers have difficulty when candidates have not completed the academic pre-requisites to enter a training program
- Retaining workers after an apprenticeship is completed is reported to be more difficult than in the past; for small businesses, this may mean scaling back or terminating their apprenticeship program due to a lost investment in training, while larger businesses have increased the number of apprentices that they promote internally in response to the challenge
- Smaller businesses report more challenges securing, funding and retaining apprentices in general

5 A Strategic Approach to the Regional Skills Gap

The inter-relationship between workforce and economic development has never been more evident as communities and regions place increasing emphasis on attracting and retaining talent to meet the skill needs of employers. This report presents evidence that validates the current and projected labour force situation within the Regional District of Bulkley-Nechako. This section offers a regional strategic approach to address these labour force gaps, and reflects the importance and necessity of recognizing the influence and impact at the regional and community level. The RDBN spans over 73,000 square kilometres, includes eight municipalities and 13 First Nations. The goals and actions reflect and respect the unique qualities and assets, to strengthening a climate grounded in relationships and connectivity of communities, people, services, technology and planning.

Four key themes have emerged around which to frame recommendations. These themes are based on an understanding of national, provincial and regional trends, the responses from the stakeholder consultations, and the current and potential economic conditions within the region. The following themes represent puzzle pieces that can be properly positioned to create a collective whole. Each theme and its related goal will require initiatives that work both independent of each other as well as collectively.

Theme	Goal Statement
Collaborate	Increase collaboration between and among key stakeholder groups and communities to strengthen opportunities and impact at both the local and regional levels
Prepare	Ensure that the labour force is skilled, resilient and aligned with local labour market needs, supporting retention, partipation and economic development
Promote	Regional and local assets and quality of life strengthen capacity to attract and retain talent
Inform	Empower evidence-based decision making through reliable, current and relevant information

A final set of actions has been generated to address issues related to fly-in/fly-out work arrangements in the Regional District. While the actions suggested under the fly-in/fly-out theme cross over those reflected more broadly, these issues and actions are targeted at those employers and communities that employ and host (or are in proximity to) fly-in/fly-out workers. It is for this reason they have been placed in under their own goal statement. Many of these are also reflected in Appendix B which contains ideas that influence labour force planning but generally fall outside the scope of a targeted labour force strategy.

It is important to recognize that this strategy must be “owned” by the regional stakeholders that influence and inform local labour market planning. It is not suggested to be the sole responsibility of the Regional District of Bulkley-Nechako regional government and as such actions will require buy-in and support across the region to ensure effective implementation and impact.

The following goals and strategies are designed to support the actions of RDBN and its partner organizations, providing a framework to guide the collective activities within the region. Here is a definition of some of the terms within the table:

- Prospective Partners: The organizations identified here have not been approached regarding each recommendation; the pairing of organizations with actions is made based on the suggestion of the Project Management Committee and a basic understanding of the mandate and ongoing initiatives of the group. As the implementation of the Regional Skills Gap Analysis begins, these potential partnerships will be further investigated.
- Timing: The time periods in which the recommendations take place are noted as short, medium or long term or a combination of these. Short terms actions are expected to take place within a year, medium term actions from one to three years, and long term actions from three to five years. Ongoing actions are recommended on an ongoing basis. If an action begins in the medium term and then continues beyond the medium term, for example, it would be indicated as “medium term and ongoing”. In turn, if an activity begins in the short term and is expected to end in the medium term, it would be marked short term to medium term.

Given the urgency of the stated actions, and to ensure the momentum created through the public engagement activities completed through the Regional Skills Gap Analysis project is not lost, it is important to clarify which actions the Regional District of Bulkley Nechako are positioned to advance and which actions are best led by other organizations within the region.

It is clear that without a concerted joint effort, involving shared responsibility on the part of the identified regional organizations, the goals, strategies and recommended actions listed below are not likely to be achieved in an efficient and timely manner. While the Regional District of Bulkley-Nechako can play an important part in facilitating the workforce strategy, there are specific types of actions where RDBN is best suited to lead. As a neutral regional organization, RDBN is well suited to bring organizations together and provide avenues for regional groups to take ownership and lead implementation.

To celebrate the importance of the creation of this strategy, and to strengthen ongoing engagement and understanding, a strategy launch will be held following final approval of the strategy by the Project Management Committee and the Board of Directors of the Regional District of Bulkley-Nechako. This event will create the opportunity to present to the broader stakeholder group and to engage participants to identify their role in implementing, supporting and leading the strategy actions. The ultimate success of the implementation of the Regional Skills Gap Analysis rests with every organization that informs and influences workforce and labour market planning within the region.

In the course of community engagement, a number of important areas were highlighted that are not directly relevant to a workforce development strategy, but are in any case critical to its success. These items are listed in the Parking Lot in full in Appendix B.

The Project Management Committee identified that although the following issues are more complex than can be addressed through the Regional Skills Gap Analysis, they strongly influence the ability of the district to attract retain and build talent. The most critical issues include;

- Infrastructure for Internet Access (Broadband)
- Housing shortages in some areas of the region
- Public transportation

While not addressed in the following recommendations, it is strongly suggested that consideration be given as to how these areas may fit into other strategic planning processes or may become independent initiatives.

5.1 Recommended Goals and Strategic Actions

Goal Statement: Regional and local assets and quality of life strengthen capacity to attract and retain talent

Strategy #1: Promote the Regional District of Bulkley-Nechako as an opportune and welcoming employment destination

Recommended Actions	Potential Partners	Timing
Document and promote community and regional assets to increase awareness of lifestyle benefits and quality of life attributes.	Chambers of Commerce, RDBN, Municipalities	Short term
Initiate a social media strategy that profiles local employment opportunities and showcases business success stories. Monitor and communicate changes in new business start-ups, by number of businesses, growth, sector, and generated revenues and employment (aggregated) to demonstrate RDBN as an entrepreneurial climate.	Chambers of Commerce, CFDCs, Burns Lake Native Development Corporation (BLNDC), Municipalities	Short to medium term
Review ongoing initiatives to create a regional job bank that promotes employment opportunities in a centralized manner and ensure that the proposed or active models are fully used by the region's business community and facilitate dual career family employment barriers for families looking to relocate to the region.	NDI, WorkBC, BLNDC, SWOT	Medium term

Strategy #2: Support Small and Medium Enterprises (SMEs) to address human resource needs and future planning

Recommended Actions	Potential Partners	Timing
Support ongoing initiatives to inform small business on succession planning strategies and practices, providing tools and resources to facilitate linkages between seller and purchaser.	CFDCs, Chambers of Commerce, (Venture Connect)	Short to medium term
Create and make available a comprehensive resource for businesses regarding training programs and employer incentives that support experiential learning for students and new hires, ongoing professional development for staff and other training.	Employment Agencies, Chambers of Commerce, CNC, NWCC, Industry	Medium term
Engage with industries proactively to identify existing and emerging professional development/training needs for staff and link with the appropriate methods of delivery (contract training, tutoring, continuing education, Mooc – Massive Open Online Courses, etc.). **Contact North is an example of a remote training model that combine computer labs with support staff in rural regions to deliver online courses in northern Ontario.**	CNC, NWCC, Learn Now B.C., SD54, SD91, PGNAETA	Short term and ongoing
Support workshop development and delivery that introduces the business community to new thinking and accessibility practices to strengthen talent attraction, retention, engagement and productivity – particularly for groups that were reported to face specific challenges in seeking and maintaining employment, such as people with disabilities, youth, new Canadians and others.	CNC, NWCC, CFDCs, Chambers of Commerce, PGNAETA	Medium term

Goal Statement: Ensure that the labour force is skilled, resilient and aligned with local labour market needs, supporting retention, partipation and economic development

Strategy #1: Prepare local labour force through career engagement, learning and skills development

Recommended Actions	Potential Partners	Timing
Support access to ongoing professional development and shorter-term targeted programs that increase opportunities for individual life-long learning, life skills, and career readiness.	CFDCs, Employment Agencies, United Steel Workers (Northern Skills Training),	Medium term
Promote longer-term career planning through development of a business case targeting those that did not complete high school, to validate long term benefits of high school and post-secondary completion.	Employment Agencies	Medium term
Encourage entrepreneurship skills and opportunities through mentorship and education, using a program such as that innovated by the Medicine Hat College Entrepreneur Development Centre.	CNC, NWCC, CFDCs, Employment Agencies	Short term
Investigate continuing education courses with a focus on high demand business opportunities such as agricultural management, perhaps by partnering with other B.C. institutions. **Create learning pathway for individuals looking to enter into the agriculture sector as farm owners/managers – curriculum delivery needs to be flexible and part-time to support access and participation.**	CNC, NWCC, Beyond the Market	Medium term
Encourage more structured information-sharing between training institutions and the business community to strengthen program alignment and skills demand and to promote opportunities for corporate support for capital investment or access to technology, equipment, to strengthen program curriculum.	CNC. NWCC, Chambers of Commerce, CFDCs	Medium term

Strategy #2: Empower youth through increased career awareness and experiential learning opportunities, supported by the business community

Recommended Actions	Potential Partners	Timing
Encourage local businesses to participate in college and university internship and support programs throughout BC as a means of attracting educated talent to the area.	Chambers of Commerce, B.C. Post-Secondary Institutions	Short term and ongoing
Create direct interaction opportunities between pending graduates and local employers as a means of retaining graduating talent, and inventory existing programs to support working experiences for youth (Mentor me, Bladerunners, cooperative education, practicum).	CNC, NWCC, Chambers of Commerce, Industry, Employment Agencies,	Short term and ongoing
Work collaboratively with secondary and post-secondary institutions to develop career profiles and pathways to employment, for occupations experiencing labour force gaps, such as the certified trades.	SD54, SD91, CNC, NWCC, Trade Unions	Short term

Goal Statement: Increase collaboration between and among key stakeholder groups and communities to strengthen opportunities and impact at both the local and regional levels

Strategy #1: Foster a culture of collaboration between and among stakeholder groups and communities

Recommended Actions	Potential Partners	Timing
Introduce the findings of the Regional Skills Gap Analysis to communities and stakeholders and launch the implementation of recommendations. **A launch event is hosted by RDBN to present the strategy to the communities and organizations involved in workforce development.** **Distribute the strategy widely with a power point presentation and fact sheet to be shared by email and on the RDBN website. Visit stakeholders in person to solidify involvement as needed.**	Regional District of Bulkley-Nechako, Regional Skills Gap Analysis Project Management Committee	Short term
Create a SWOT (Strategic Workforce Opportunities Team) with representatives from partner organizations centered on the collaborative implementation of the Regional Skills Gap Analysis, including new initiatives and the alignment of existing supports to advance opportunities. **A quarterly meeting of this group with a rotating location (in addition to the bi-annual forum proposed below) is recommended. Partner organizations support involvement through in-kind contributions of staff time and travel expenses.**	Post-Secondary Institutions, Chambers of Commerce, First Nations, Employment Service Providers, RDBN	Short term and ongoing
Convene bi-annual forum with economic development, employment offices, chambers and other intermediary groups, and post-secondary and training institutions to evaluate skill and occupation needs in the region; promote awareness of ongoing services and initiatives; create a neutral space for information sharing and promote regional collaboration. Synergies can be sought with the existing annual business forum.	SWOT, First Nations, CNC, NWCC, Chambers of Commerce, RDBN	Short term and ongoing

Strategy #2: Embrace cultural diversity and recognize it as a competitive advantage

Recommended Actions	Potential Partners	Timing
Work with existing industry based First Nation liasons to increase engagement in all activities.	Industry based First Nation liasons	Short term
Increase cultural awareness within the RDBN business community by connecting First Nation advocates and industry based First Nation liasons with the business community with the goal of increasing the number of practical work experience placements for Aboriginals and their success.	Chambers of Commerce, PGNAETA, Bladerunners, Industry based First Nation liasons, First Nations Education Coordinators, Burns Lake Native Development Corporation, CNC, NWCC	Short term and ongoing
Co-create initiatives with First Nations communities and organizations, with the leadership of the SWOT.	First Nations, SWOT, Chambers of Commerce, PGNAETA, Bladerunners, Industry based First Nation liasons, First Nations Education Coordinators, Burns Lake Native Development Corporation, Carrier Sekani Tribal Council Society, Office of the Wet'suwet'en	Medium term and ongoing

Goal Statement: Empower evidence-based decision making through reliable, current and relevant information

Strategy #1: Inform to strengthen decision-making

Recommended Actions	Potential Partners	Timing
Encourage more structured information-sharing between training institutions and the business community to strengthen program alignment with skills demand, and to promote opportunities for corporate support for capital investment or access to technology, equipment, to strengthen program curriculum. **Encourage ongoing development and updating of a local training and post-secondary program inventory to support labour market development.**	CNC, NWCC	Short term and ongoing
Review ongoing activities to develop business case to validate the return on investment for local business to participate in apprenticeships and support the dissemination of relevant information through the SWOT.	SWOT, Industry (New Gold), Nechako Valley Secondary Education Working Committee, RDBN	Short term

Strategy #2: Support community engagement with fly-in, fly- out workforce

Recommended Actions	Potential Partners	Timing
Assemble and publish relevant cost of living information. This should be updated quarterly and could be posted on a regional job portal as well as the RDBN website. Promote the regional District website as a means of informing fly-in/fly-out workers and their families of regional amenities.	Chambers of Commerce, CFDCs, NDI, WorkBC, RDBN	Medium term and ongoing
Create opportunities to engage fly-in/fly-out workers to participate in sporting and social gatherings, including current residents who travel for work and non-residents who are working in the region. Some sport teams have allocated joint spaces to these workers allowing at least one person to participate when they are available to do so. This example could be celebrated and shared through communications.	Municipalities, Chambers of Commerce	Short term
Collaborate in designing and delivering a ‘get to know your region program’ for fly-in/fly-out workers. This program might include coupons to visit stores, restaurants and recreational facilities or a guided tour of the local community. This could be an expansion of the current, “Small Town Love” program.	Chambers of Commerce, Industry partners,	Short to medium term

6 Supporting Research Documentation

6.1 Research Paper 1: Key stakeholder interview assessment

The following queston summaries capture the responses to one on one individual interviews, conducted by phone and in person, and represents the perspectives of 67 individuals who work in RDBN. The vast majority of those interviewed are also residents of the Regional District.

1. **Where do you draw your labour from (within this community; across the region; beyond the region)**

Where possible, employers report that they prefer to hire locally, often within their home communities or within a reasonable distance. The degree to which the hiring stays local is based on the availability of candidates that meet the skill and experience requirements of the position. Employers report that local candidates are more likely to stay in the position longer. Few problems are reported in hiring students or entry level workers. The following positions are noted as positions that tend to be hired from outside the local area:

- Leadership/senior positions (CEO/President/Managers)
- Business succession positions
- Financial staff (particularly certified such as CGA)
- Certified tradespeople
- Professional positions (Engineer)

Businesses report that they are seeking certified tradespeople from across Canada and internationally. Larger businesses report that they fill their skilled trades needs by training apprentices internally as well as recruiting, and some have recently increased the number of apprentices they train to compensate for challenges in retention. Smaller businesses report challenges securing, funding and retaining apprentices. Firms have had success hiring from Ireland and the maritime provinces of Canada, however many report that they remain short staffed.

Challenges with recruitment include the distance to major urban centres, lack of retail shopping, specifically big box stores, and fewer services and amenities in general. Advantages in recruitment include hiring people who enjoy an outdoors lifestyle. One business noted that vacancies are much fewer in neighbouring Prince George, and credited the amenities in the City as the reason for this.

2. Do you have concerns about access to labour? (difficulty recruiting)

The majority of respondents expressed serious concern about access to labour, and some have changed their hiring practices in response. Those who previously posted employment opportunities in the paper have started approaching potential candidates personally, while those who originally found workers in northern BC have expanded their search nationally and beyond over the past three years or so, with noticeable changes in the last year. Some businesses are offering bonuses to staff who refer a successful candidate, and implementing trial periods for candidates coming from outside the region.

Businesses that have no serious concerns about access to labour mentioned that they pay well, invest in training, treat their employees well, and/or hire for community and family oriented values.

When employees are hired, employers mention that basic technical skills like using Excell or financial knowledge, the ability to follow instructions, familiarity with working in the bush and spatial awareness are less than in the past. Candidates also may not be familiar with new communications technologies and how to use them appropriately for business.

3. Do you offer in-house training or professional development to your employees?

The majority of businesses and organizations interviewed have some internal training program. The minimum is an orientation and on the job training specific to the position, and for small businesses or retail businesses this is often the extent of training. However, where specific skill sets are needed, owners or managers have received training themselves and train employees in turn; this can include customer service training/certification or basic technical skills. In some cases, manufacturers will offer product awareness training, and businesses send staff to these training sessions. Where mandated, safety training is provided by employers, and additional courses are often offered, such as fire safety, bear awareness, first aid, and driver safety.

Businesses with more financial capacity, or who may be part of a larger franchise, often offer training modules to support staff in career advancement. Employers report difficulty motivating employees to take advantage of these opportunities, and a lack of candidates who are committed and motivated enough to invest in their training. This lack of motivation and interest in career advancement is a concern for managers who are hoping to cultivate leadership or future management candidates. In addition, employers offer financial support for post-secondary courses that are relevant to their position.

Employers with need for certified tradespeople often use apprenticeship programs to train qualified candidates, and prefer to train from their existing staff rather than hire apprentices. Candidates for an apprenticeship need to pass minimum academic standards to enter an apprenticeship. Some employers report staff having difficulty meeting these requirements. The available upgrading programs are reported to be challenging for workers who have not been in school for an extended period, and that there is limited access to support in completing these programs in some parts of the Regional District.

4. Do you feel there are gaps in skills within the current labour force to meet current and future labour needs of the region

Management and leadership skills, financial professions such as accounting, training in the skilled trades, and technical skills in general are frequently mentioned as lacking in the workforce. On the job experience is also frequently mentioned as a gap. An associated concern is the retirement of experienced workers in large groups, and the lack of transition time to allow younger workers to gain experience.

With respect to the skilled trades, pairing entrepreneurial support programs with trades training to encourage more tradespeople to consider starting their own enterprise is identified as an opportunity.

Another issue that employers bring forward is the need for greater understanding of the breadth of professions included in the skilled trades. Students often equate the trades with heavy mechanics, when there are many other working environments and opportunities in this group of occupations. In addition, those interviewed perceive that a significant number of young people fail to graduate high school and may not be eligible for apprenticeship opportunities.

Foundational employment skills such as work ethic, timeliness, communication skills and motivation are stated as challenges in the younger workforce as well as the workforce in general. The ability to drive, and to drive a standard vehicle, has decreased among young workers, which causes challenges in recruitment and management for businesses.

In terms of what skills should be promoted some of the experts interviewed cautioned against focusing too strongly on the skilled trades. Although the volume of students can be low in rural areas, the training available should still be diverse enough to capture student interests and support all aspects of the economy. Not every student will be interested in the trades.

Entrepreneurial skills are also identified as a need. Few people understand the opportunity of starting a business and those that do have a hard time succeeding because they lack business management skills.

a) What occupations are in most demand?

- Most people interviewed mention the skilled trades. Specifically these trades include:
  - carpentry, electrical,
  - mechanics and heavy mechanics,
  - plumbing and gas fitting,
  - millwrights,
  - machinists,
  - welders,
  - parts managers,
  - drillers and underground miners
  - pipeline workers.
- Forestry occupations in general
- Equipment operators and class one truck drivers
- Computer programmers and computer technicians with CadCAM experience
- Contractors – specifically construction
- Communications – not just marketing but corporate and community communication to the public
- Engineering is in high demand
- Retail and food and beverage service

b) Do you anticipate this changing in the next 12-24 months; 25-60 months?

Those interviewed replied unanimously that they expect the challenges in hiring in-demand occupations to worsen over time.

5. There is a relatively large population of fly-in/fly-out workers in RDBN. What factors do you think influence skilled workers to become residents/not become residents of RDBN?

Business owners and residents feel that a number of fly-in fly-out workers work in the Regional District, however there are also many workers who live in RDBN and travel to work in other areas. Therefore the responses were mixed.

Family and the lack of desire to disrupt family life are at the core of many comments. Some residents feel that the amenities in small communities are not enough to attract workers, generally because the spouse and children will not want to give up amenities. Amenities specifically mentioned include full medical care, programming for children, the variety of restaurants, the shopping experiences available, and the culture of larger communities.

Housing prices are identified as a factor in the relocation decision. However house pricing is cyclical and tends to follow industry trends in a mining community. Although housing prices are low in some areas of the Regional District, and low prices are considered to be a factor, many commented that this is not as large a factor as family and amenities.

Weather and the winter months are also described as a barrier to relocation; however, others argue that the lack of amenities and the hesitation to embrace winter can be resolved for some people if workers have a chance to gain familiarity with the community. Marketing is frequently mentioned as an area that could be better developed to combat negative perceptions. Uprooting a family is a big decision, and in general, residents and business leaders felt that workers are hesitant to make that decision.

Many of those interviewed spoke of how current residents are working in different areas of Canada, specifically northern Alberta or northern Canada (ie. Yukon, NWT). Increased air service within RDBN is identified as a way to facilitate the employment of residents in other areas should they choose to be a fly-in fly-out worker. The advantages identified for workers include increased flexibility to choose an employer, to seek better wages and they maintain a home in the place that they want to live. The disadvantages are the time workers spend away from family and the shift schedules, which are described as disruptive to family life. Therefore people who pursue this lifestyle often decide to work in a steady local job after a number of years working remotely.

6. Are educated and skilled workers leaving the region? Why? To where?

The reaction to this question is mixed. Those interviewed either firmly observe that skilled and talented youth are leaving, or state that while some do leave, many also leave and return because they enjoy the lifestyle of the Regional District.

Both groups agree that the primary reasons that youth leave are for school and for employment opportunities, and tend to leave for larger centres, particularly for post-secondary education.

Salaries in other areas of the country are described as more favourable than in the Regional District. Also the amenities of cities are described as attractive to young people, who are seeking new experiences. In addition, the profession that a young person pursues may push them to relocate. For example, opportunities in technology studies and technology careers are much more prevalent in urban centres.

In some businesses there appears to be a greater ability to retain youth. These employers state that providing training opportunities and creating a positive working environment are key ingredients to retention. Some forestry companies state that although young people tend to be more transient, many do stay, particularly if they choose to establish a family. In addition, some employers manage to attract workers back once they have travelled and decide that RDBN is the place for them. Although salaries are higher elsewhere the cost of living is high as well, which leads some youth to decide to return home where they can enjoy a greater portion of their income, more reasonable hours and to be closer to community.

7. What training programs are most needed in the local area to meet expected skills shortages? Are there opportunities for business and educational institution partnerships?

With respect to the skilled trades, the affordability and accessibility of trades programming was identified as a challenge because training often requires travel and can be expensive for students. Also, more supports for people who are coming out of school to help them adjust to the workforce and secure employment/apprenticeships are recommended. It is noted that many workers in the trades obtain a position and learn the role, and then pursue training. For those who pursue training first, it can be challenging to secure a position.

Those interviewed recommend that social skills, budgeting skills and employability skills become part of college programming, including operating basic office equipment, business writing correspondence and professionalism. An on the job training program delivered by the College, and more cooperative education placements are recommended. Overall, those interviewed felt these would be good opportunities for increased business and post-secondary institution partnerships.

With respect to training opportunities and training needs in the business community, the key recommendation from the individual interviews is to bring them all together. Potential students may not be aware of the opportunities available, while different businesses may have similar needs but are not sharing them with the colleges or each other to be able to bring a program together. Another aspect of creating interest is to engage students at a younger age to help them identify what career paths may interest them.

Financial skills are an area where local financial institutions felt they could support the college and those interviewed suggest that financial institutions could work with the college and with high schools to better share the opportunities in the field.

Business owners often mentioned that they recruit from college programs, with mixed results. Some feel that students could be better prepared for the workplace when they graduate.

A barrier to partnership identified by business and community leaders is a lack of funding for college programming, which is often decided by the federal and provincial governments.

Another challenge for colleges is choosing which businesses to work with and ensuring that each business has an opportunity to work with the colleges if they are able. There was great variation in the response from business owners. Some are very engaged in college programming, while others were not aware that there could be opportunities to work with colleges directly. Several post-secondary outreach programs are reported, such as mining site visits and work with the School of Exploration and Mining at Northwest Community College. The College of New Caledonia has started an entry level training into milling. This is provided as an example of a program targeted directly to the needs of local employers and of future workers interested in an entry level position. In another interview a similar program introducing young people to a career in forestry was suggested. In addition, expanded programs to teach truck driving are recommended.

8. Are you anticipating the need to hire additional employees in the next six months to a year?

Interview responses to this question are mixed. Most businesses appear to be in a stable state with respect to recruitment. Although many small to medium sized businesses and organizations acknowledge that finding candidates is a challenge, they are not planning on expanding the workforce. Larger companies have greater recruitment needs and although they may not be looking for large additional numbers of employees, it is reported to be a continual challenge to fill specific positions, and some of these positions have been open for a long time.

9. What typical methods do you use to recruit candidates for job openings?

The most frequently mentioned method of recruitment is through word of mouth, and targeted recruitment within the community and surrounding area. The primary reason for this is that employers want to know who they are hiring. In some interviews this was due to limited success or poor experiences hiring from resumes and interviews alone. In general, internal recruitment is often explored before external hiring.

Use of a company website, JobsBC and the local newspaper advertisements are mentioned frequently as well, but word of mouth is often preferred. Larger firms use recruitment agencies and some have internal recruitment packages where they are offered a bonus for referring a successful candidate. Smaller companies state they use social media such as Facebook, Craig's list, Kijiji and LinkedIn.

Some other ideas proposed include hiring students part time while they are in school, or during the summer, and approaching the local First Nation band's employment person.

10. Do you generally get a sufficient response leading to you filling the vacancy in a timely manner (1-3 months)?

Most responses report no significant difficulty filling entry level positions. However, many did comment that the quality of the workers is a concern, with specific reference to timeliness, work ethic, attachment to cell phones, basic mechanical skills, and work experience as areas that could be improved upon.

Other positions are more of a challenge to fill. Specifically the following areas are identified as taking longer than three months to fill:

- Leadership positions (CEO/President/Managers)
- Business succession positions
- Financial staff (particularly certified such as CGA)
- Certified tradespeople
- Professional positions (Engineer)

In resource industries the demand for workers is described as cyclical and related to larger economic conditions, this means that although conditions are not as tight today as they were in expansionary times, it is difficult to say what will happen should economic conditions change.

6.1.1 Education/ Training Institution Stakeholder Assessment

1. Has there been a change in student course interest in recent years? How have these interests changed? Why?

Stakeholders interviewed stated that course enrolment is highly variable and still depends on the interests and aptitudes of the student. With this being said, many of the educational stakeholders stated that there has been a trend towards students enrolling in more academic programming rather an applied skills and trades programming. High school stakeholders from the region stated that increasing numbers of local students are leaving the region to attend university in universities in Vancouver and Victoria.

College stakeholders did state that recently there has been a slight increase in enrolment pertaining to skilled trades in the region. Students understand that local mines and mills are looking for skilled workers. One of the largest impediments to increasing enrolment in skill trades programs is the lack of journeymen and apprenticeship placements in the region. The mills, for example, are unionized and apprenticeships are available only to unionized workers who have seniority.

2. **Where are students going after high school graduation? (e.g. labour force, post-secondary institution in their home county or further afield) What are some of the reasons for their choices?**

Stakeholders within the high school stated that the many of the students from the region go south to attend school or to Prince George. Most students want to see travel and leave home for the first time and do not necessarily think that they will be able to gain access to quality opportunities and education if they remain at home.Stakeholders felt that increasing numbers of students are attending university rather than college or an apprenticeship program. All of the educational stakeholders interviewed felt that this was to the detriment of the students and to the economy. Many of the skills gaps seen in Bulkley-Nechako are within skilled trades and students are not told that jobs in the skilled trades are high paying and worthwhile jobs.

3. Is student retention and program completion a concern for your school? If yes, what factors would encourage student to remain in school after their secondary school education?

Neither of the colleges nor the University of Northern British Columbia believed that student retention and program completion is a concern. Many of the concerns that the colleges and universities highlighted were funding issues. Student enrolment has been increasing in many programs but the institutions are restricted based on funding.

4. What training programs are most needed in the local area to prepare the future labour force?

Stakeholders highlighted a number of programs as essential to the future workforce, these include:

- Skill trades programming, including programming related to:
  - Millwrights
  - Electricians
  - Plumbers
  - Mine technicians
  - Forestry technicians
  - Environmental technicians
  - Heavy machine mechanics
- Management and leadership programming
- Liberal arts education

  It was discussed by a number of stakeholders that while ensuring that particular skills are developed is important it is also important to develop a workforce that is adaptable and able to problem solve and create jobs. Programming including general arts and science degrees and diplomas was highlighted as a gap that needs to be filled.

5. What are some of the key barriers in accessing higher education in the region?

There were a number of barriers stakeholders highlighted to people accessing higher education in the region, these include:

- Lack of financing/low income and the fear of student debt and lost income when in school
- Location and distance from educational programming. There are a number of programs available through the local colleges and the university, however, for more specialized programming students are forced to move away from the region
- Capacity to learn in a structured, classroom environment was discussed as a potential barrier for students, although there are a number of programs available to assist potential students in developing this capacity

6. How can we help adults become students again?

Stakeholders discussed the need for more flexibility and diversity in the delivery of educational programming. It is difficult, if adults have a job or dependents to leave the region for school or to attend programming if it conflicts with their work schedule. Evening and weekend programming was discussed as a way to engage adult students in addition to online course development (although online content is often difficult to access depending on the ability to access the internet from home).

Programming officials also discussed the need to assist adult learners to bridge the barriers that exist to accessing education, these can include:

- The cost
- Feeling unprepared for learning in a classroom setting
- Full-time work that does not allow adult students the flexibility to attend classes scheduled throughout the day.
- Lack of access to transportation to attend programming
- Lack of access to childcare
- Distance of the programming from their home and work

7. Are there any opportunities for businesses and training/education institutions to collaborate on their labour needs? In what areas?

Stakeholders reiterated that the business community and the educational institutions in the region must work together to better align programming with the needs of employers. Each of the colleges and the university discussed their close working relationships with many of the employers across the region and their ongoing work to try to engage with employers. Many of them have close working relationships with a number of medium sized businesses in the region but they did comment that more needs to be done to engage with the small business community as well as the large-scale employers including the mines and the mills.

8. How can the education system change to better meet the needs of current students and the future labour force? Where are the points of flexibility in the education system?

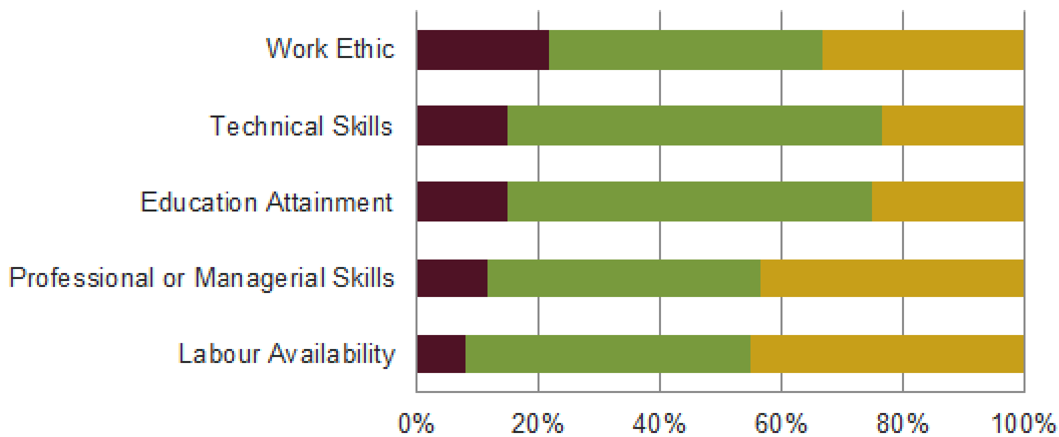
The need for greater flexibility in the educational system was highlighted throughout the stakeholder interviews as necessary to engage a wider student market. Evening and weekend classes would allow for a greater number of students to take part in programing, as well as the ability for students to continue programming on a part-time basis while they are working full-time or caring for children. In addition, online courses could also work to increase the accessibility of programming. However, this is dependent on the students' access to a high speed reliable internet connection.

6.2 Research Paper 2: Employer survey results

The following queston summaries capture the responses to the employer survey, which was conducted online and on paper surveys.The survey garnered responses from 66 RDBN employers.

1. Please rate the Regional District of Bulkley-Nechako's workforce in terms of:

FIGURE 15: RATING OF BULKLEY-NECHAKO WORKFORCE



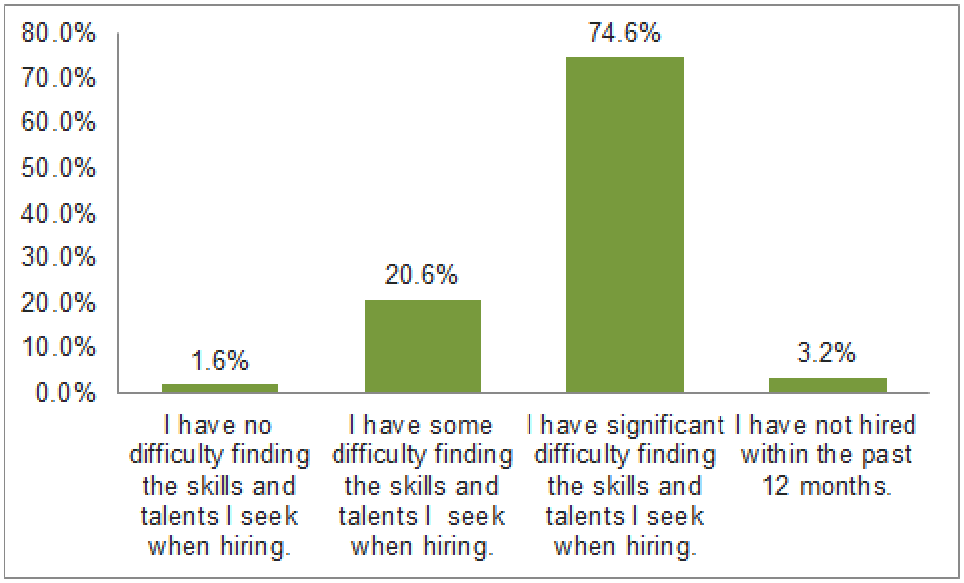
	Labour Availability	Professional or Managerial Skills	Education Attainment	Technical Skills	Work Ethic
Excellent	0.0%	0.0%	0.0%	0.0%	0.0%
Good	8.1%	11.3%	14.5%	14.5%	21.0%
Fair	46.8%	43.5%	58.1%	59.7%	43.5%
Poor	45.2%	41.9%	24.2%	22.6%	32.3%

Of the 62 employers who responded, ratings of the labour force in terms of labour availability, professional and managerial skills, educational attainment, technical skills and work ethic included no 'excellent' scores.

Overall, technical skills and educational attainment received the highest scores when 'good' and 'fair' scores were combined, approximately 74% and 73%, respectively. The lowest scoring areas are labour availability, with a 'poor' score of 45.2% and professional and managerial skills, with a score of 41.9%.

2. At this point in time, please indicate which statement is most true.

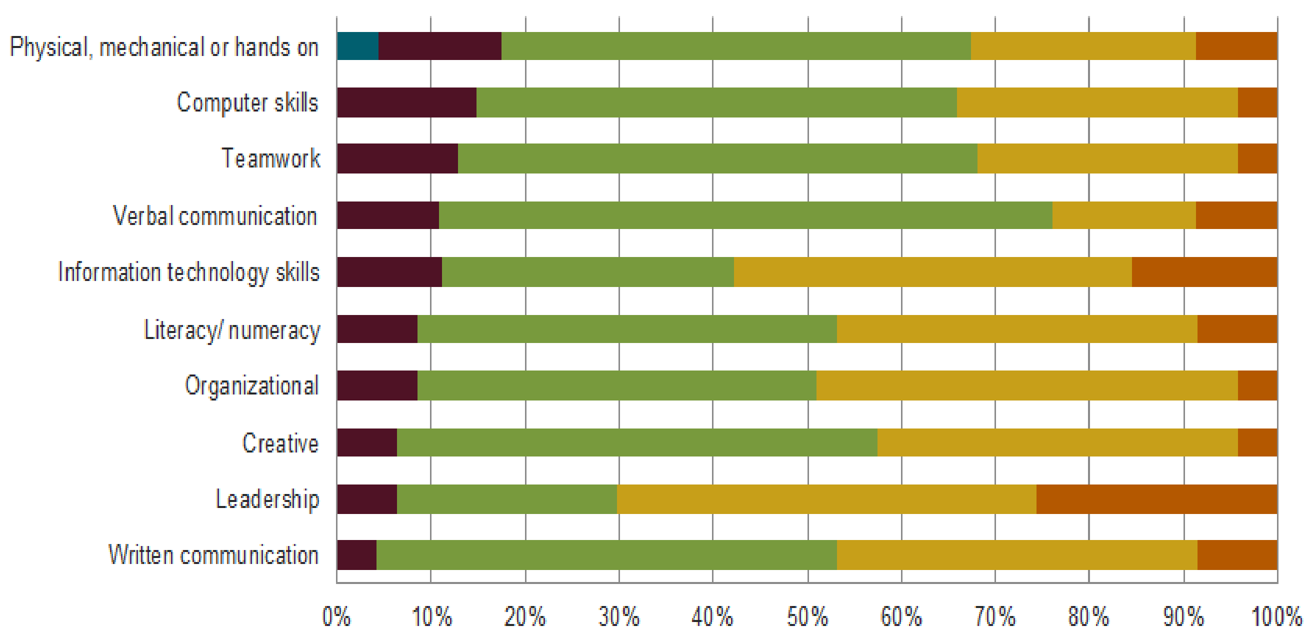
FIGURE 16: EMPLOYER'S VIEW OF SKILLS AND TALENTS OF BULKLEY-NECHAKO WORKFORCE



A total of 63 employers responded to this question, and close to 75% of these respondents have difficulty finding the skills and talents they require in the Bulkley-Nechako workforce.

3. On a scale of 1 to 5 how easy are the following skills found in Bulkley-Nechako's workforce?

FIGURE 17: EMPLOYER'S RATING OF SPECIFIC SKILL SETS IN BULKLEY-NECHAKO



	Written communication	Leadership	Creative	Organizational	Literacy/ numeracy	Information technology skills	Verbal communication	Teamwork	Computer skills	Physical, mechanical or hands on
Very easy	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%
Somewhat easy	4.2%	6.3%	6.3%	8.3%	8.3%	10.4%	10.4%	12.5%	14.6%	12.5%
Okay	47.9%	22.9%	50.0%	41.7%	43.8%	29.2%	62.5%	54.2%	50.0%	47.9%
Somewhat difficult	37.5%	43.8%	37.5%	43.8%	37.5%	39.6%	14.6%	27.1%	29.2%	22.9%
Very difficult	8.3%	25.0%	4.2%	4.2%	8.3%	14.6%	8.3%	4.2%	4.2%	8.3%

In Figure 17, 48 employers rate the skills available in the Bulkley-Nechako workforce. The only category that employers rated as ‘very easy’ to find was physical, mechanical or hands on training. This is also the skill category with the highest overall rating. Computer skills were also rated favourably as well as teamwork skills.

More available skill sets:

- Physical, mechanical or hands on
- Computer skills
- Teamwork skills

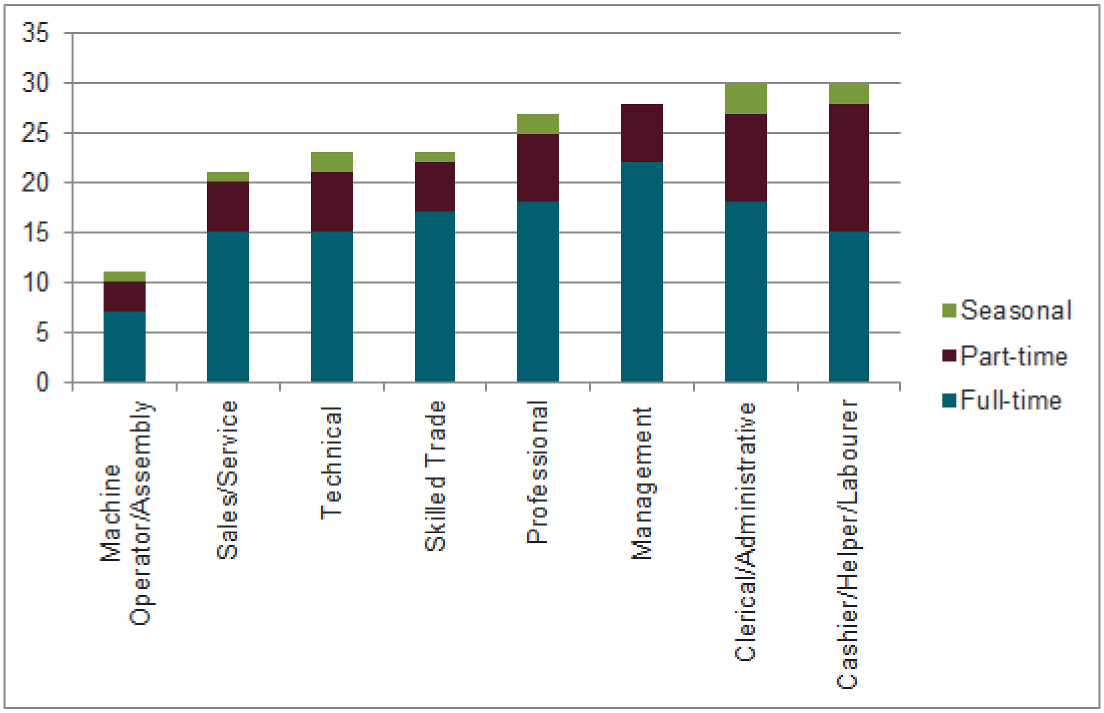
Less available skill sets:

- Leadership skills
- Information technology skills
- Literacy / numeracy

The skill sets that employers rated as most difficult to find in the workforce are leadership skills, and information technology skills. Written communication and literacy / numeracy skills were also identified as either somewhat or very difficult to find.

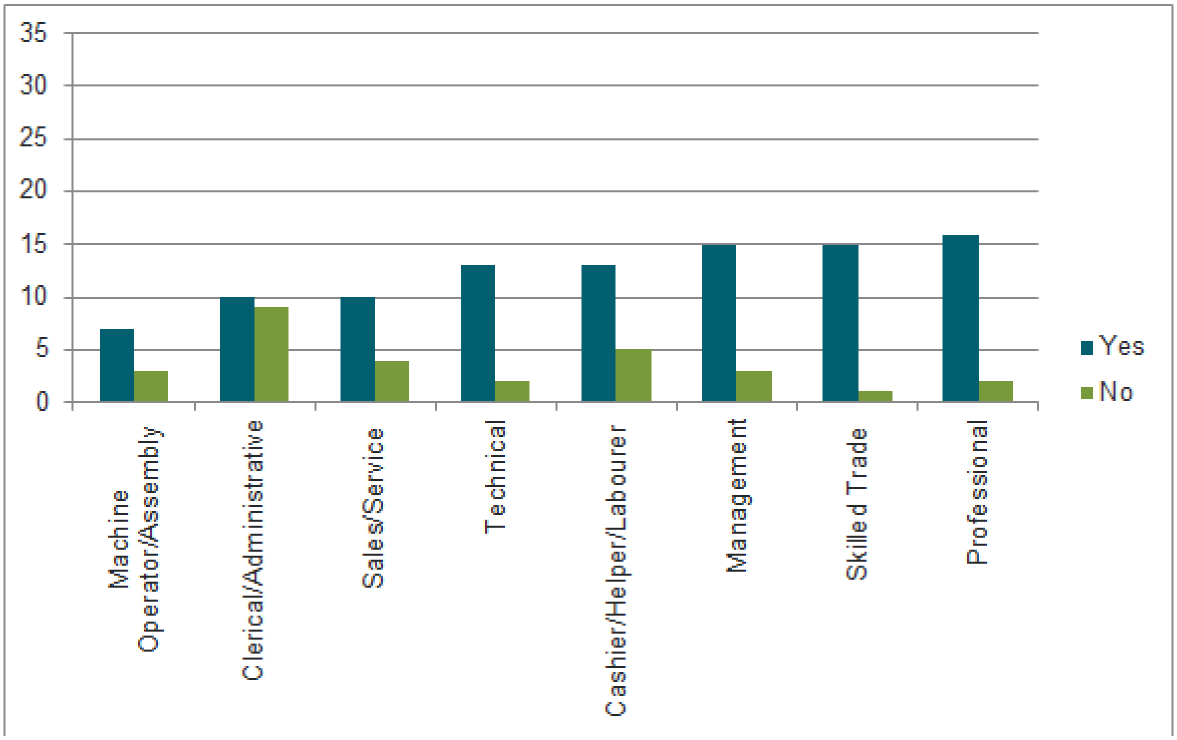
4. **Looking longer term, please use the table below to indicate the specific occupations you anticipate hiring in the next 2-5 years.**

FIGURE 18: ANTICIPATED HIRING BY OCCUPATION, NEXT 2-5 YEARS



Of the 48 employers who responded to this question, the occupation where the most hiring is expected is cashier, helper or labourer. The number of firms expecting to employ clerical or administrative occupations is similar. Although the overall number of employers planning on hiring machine operator or assembly staff is small, the number of employees that will be hired is often more than 20 per firm, which may lead to higher overall employment than pictured here; however, there will fewer employers.

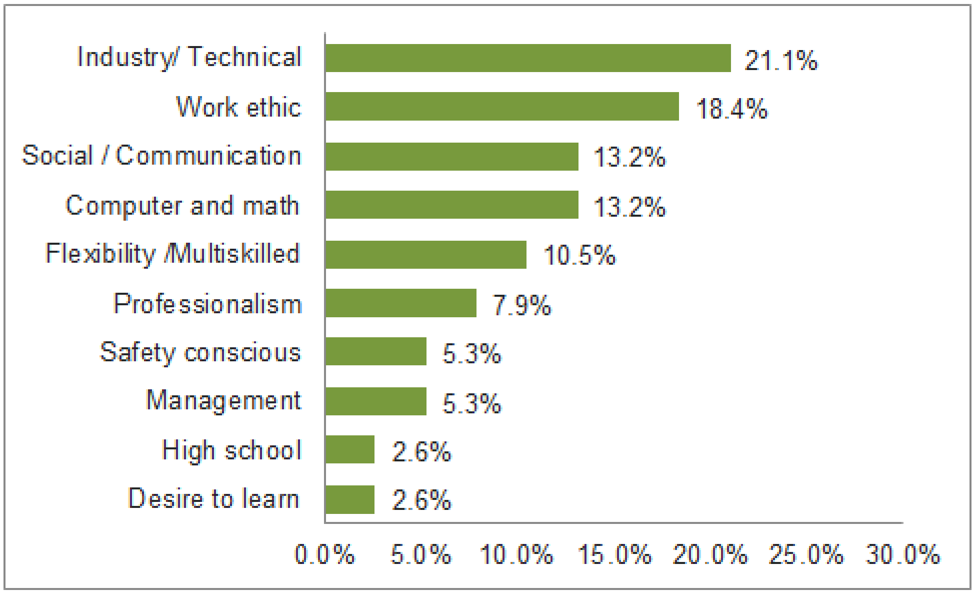
FIGURE 19: DO YOU ANTICIPATE DIFFICULTY RECRUITING QUALIFIED EMPLOYEES FOR THIS OCCUPATION?



The occupations where employers expect the most difficulty in recruiting staff will be in professional, skilled trades, management and technical occupations. In the cases of clerical or administrative, cashier, helper or labourer, and machine operator or assembly occupations, there are relatively more employers who expect to be able to find staff.

5. What skills do you look for/require in new hires?

FIGURE 20: DESIRABLE SKILLS IN NEW EMPLOYEES



When employers were asked what skills they are seeking in a new hire, the response was varied. Of 38 employers who responded, 21% discussed industry specific skills, often technical skills. Work ethic was also frequently mentioned as well as social skills, communication skills and computer or math skills.

6. Which of the following methods have you used to recruit new employees?

FIGURE 21: METHODS OF RECRUITMENT

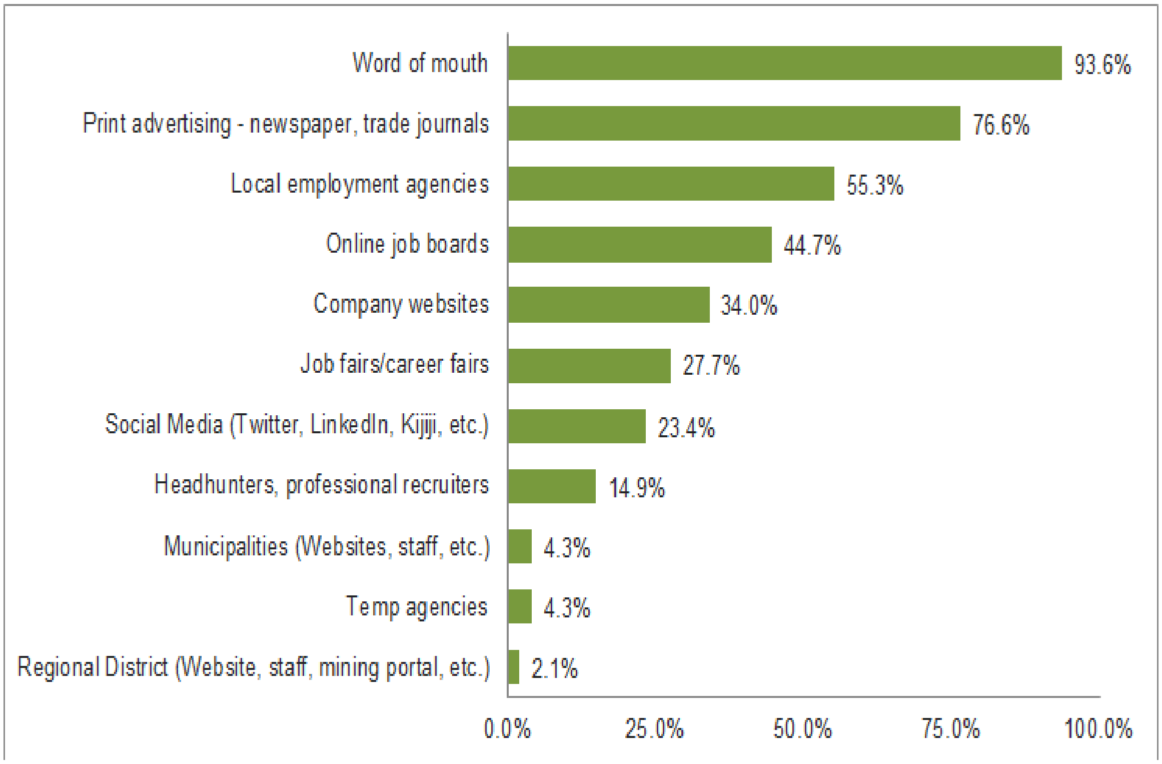
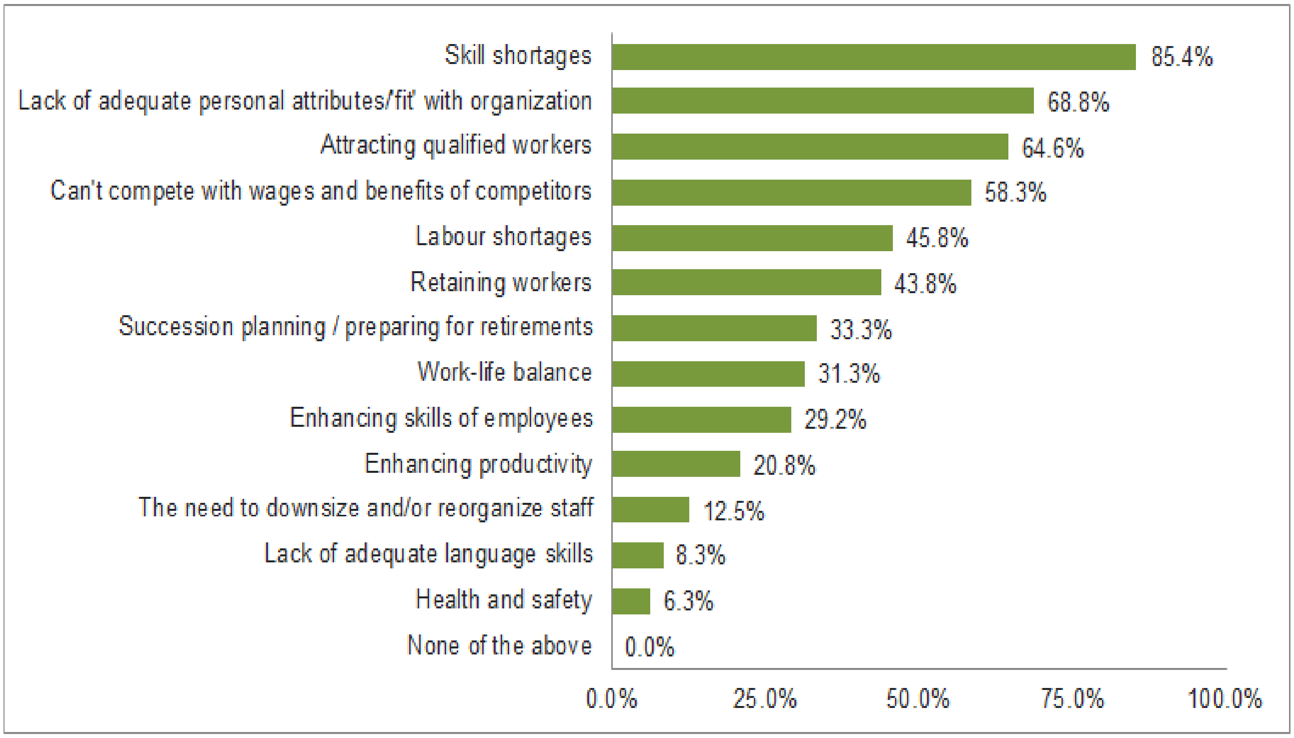


Figure 21 illustrates the ways that employers find new staff. Similar to the results of the similar question asked of residents about their job search methods, the 47 employers who answered this question selected word of mouth as the most common way of finding staff, but at a higher rate of 93%. Employers report approaching people they trust in the community to ask for referrals to good candidates.

The second most commonly used method of finding staff is to advertise in the newspaper, at 77%, followed by local employment agencies, all before the use of online posting.

7. What kinds of staffing difficulties have you experienced? (Please check ALL that apply)

FIGURE 22: DESCRIPTION OF STAFFING DIFFICULTIES

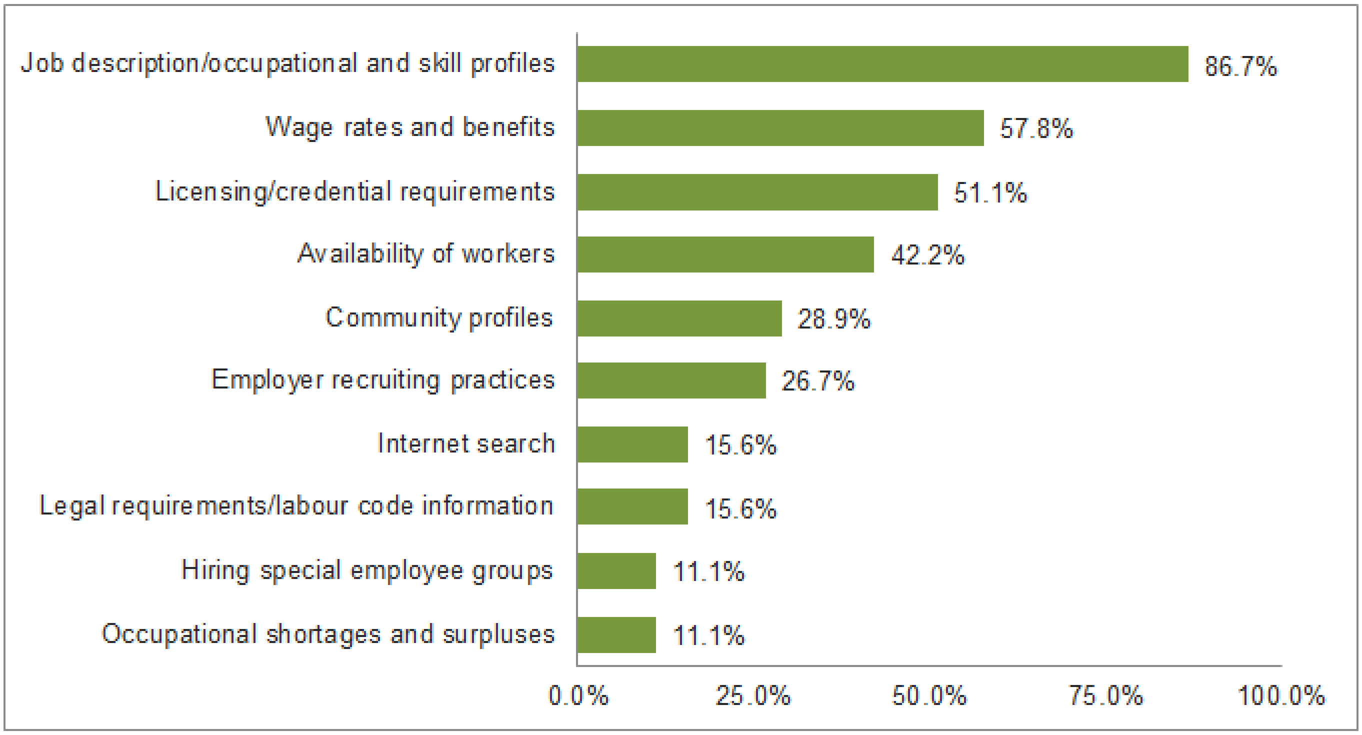


The most significant staffing difficulty reported by the 48 employers who completed this question is a shortage of skills in the labour force, at 85%. This is followed by a lack of adequate attributes or fit with the organization, at 69%, and a lack of qualifications, at 64.6%.

Relatively few employers reported challenges with health and safety, language skills or a need to downsize staff.

8. **What kind of information do you use to recruit and hire new employees? (Please check ALL that apply)**

FIGURE 23: USE OF LABOUR MARKET INFORMATION IN RECRUITMENT OR HIRING

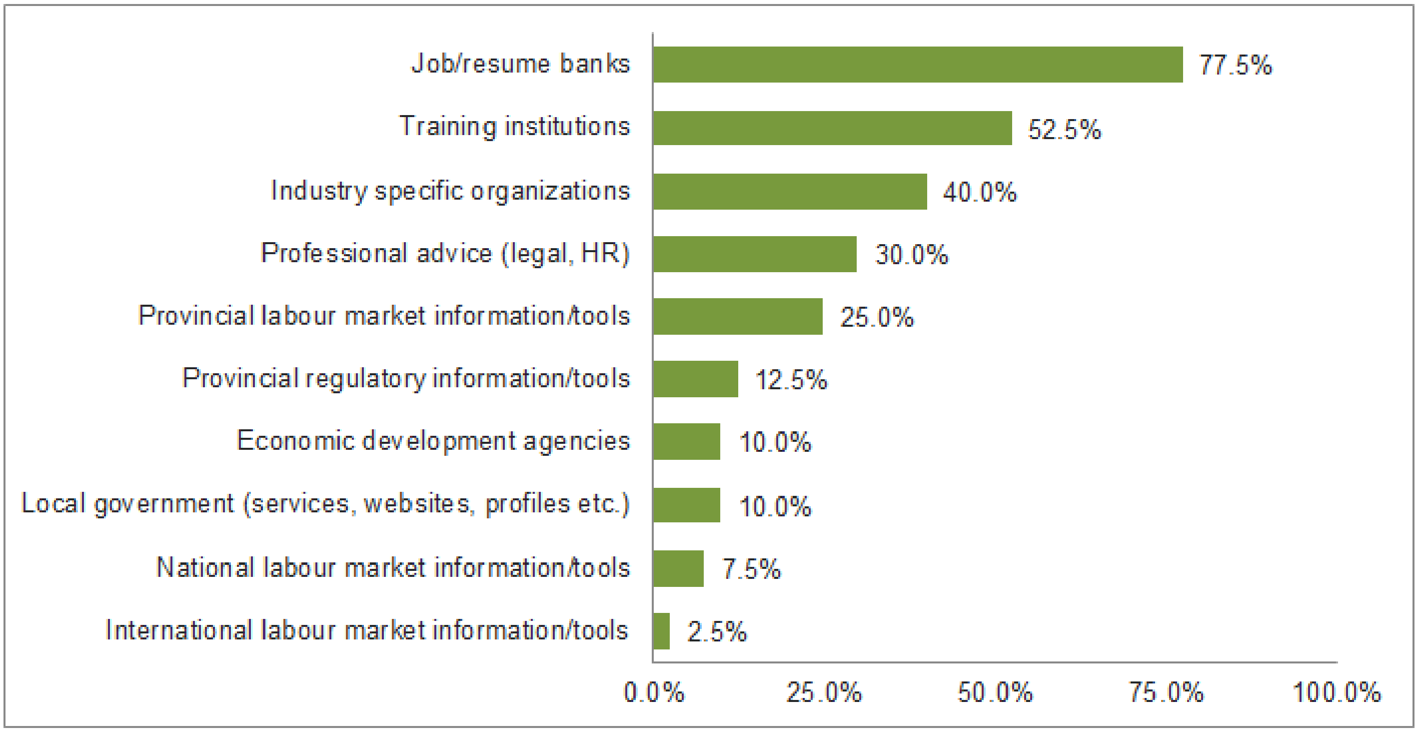


In Figure 23, the use of labour market information by 45 employers is recorded. Employers reported that job descriptions or occupational and skill profiles were the primary source of information they use in recruitment, by 86.7% of respondents. Wage rates and benefit information and licencing and credential requirements were also highly rated, at 58% and 51% respectively.

Employers did not report much use of local or regional government websites or temp agencies for information.

9. What kinds of tools and services do you use to find the information you need?

FIGURE 24: LABOUR MARKET INFORMATION TOOLS

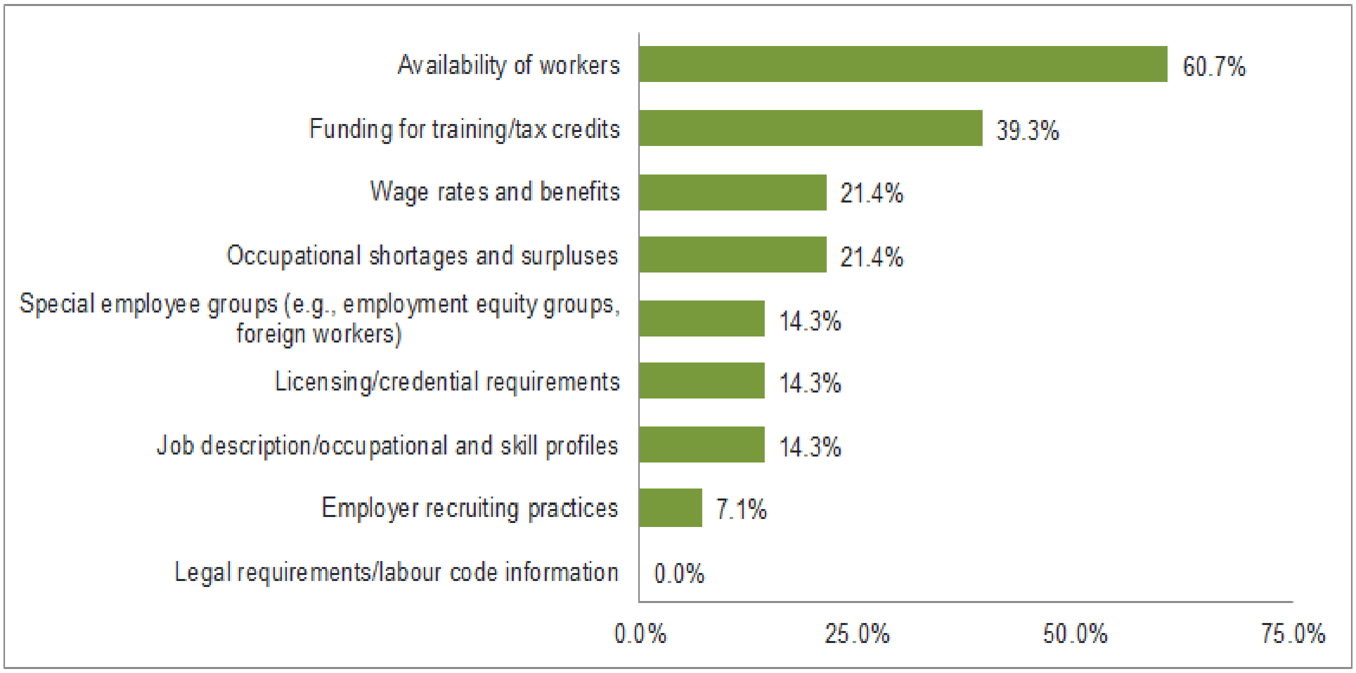


In Figure 25, the responses of 40 employers are captured. These employers tend to use job bank or resume banks as a source of information, at 78%, as well as training institutions, at 53% and industry specific information, at 40%.

Labour market information tools at the international, national or local level were not frequently identified by respondents. Of the government sources of information, approximately 13% of employers identified provincial tools as the most utilized source of information.

10. What type of information were you looking for that you couldn't find? (Please check ALL that apply)

FIGURE 25: LABOUR MARKET INFORMATION NEEDS

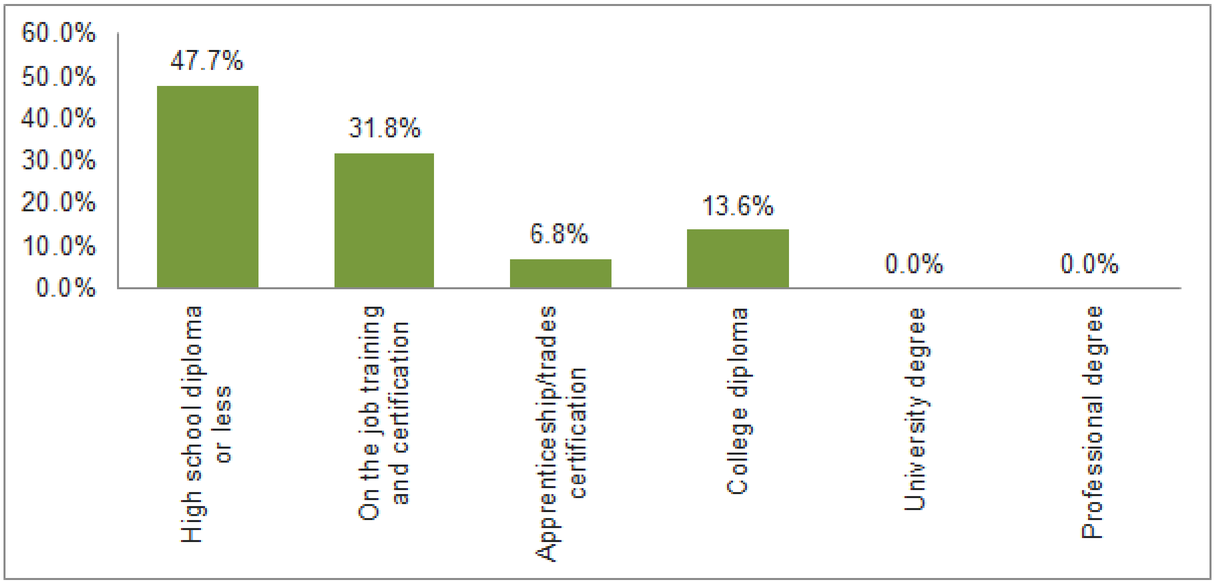


In Figure 25, employers identify information gaps that they have not been able to resolve. Of the 28 employers who provided a response to this question, the most common answer is the need for information on the availability of workers.

Several respondents added comments that they do not use any information expect for a personal reference from someone they trust in the hiring process.

11. What is the minimum education level that is required to be considered for entry-level employment within your company?

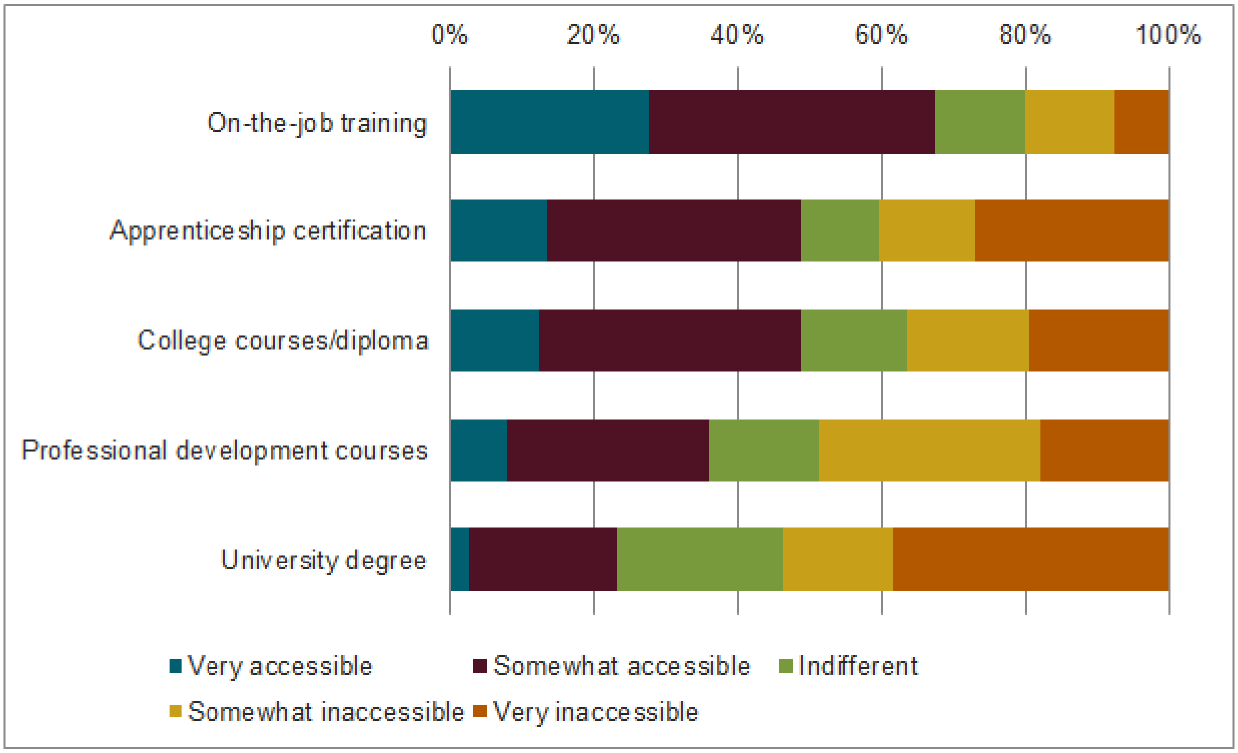
FIGURE 26: MINIMUM LEVEL OF EDUCATION



Forty-four employers responded to this question, and approximately 48% shared that a high school diploma or less is the minimum educational level for a new employee at their place of business. Some businesses may have higher requirements for other levels within their firm. However, this does demonstrate that there may be entry level positions for those with no post -secondary education in the region.

12. Please rank the accessibility of training and programming within the Regional District of Bulkley-Nechako.

FIGURE 27: ACCESSIBILITY OF TRAINING/PROGRAMMING IN BULKLEY-NECHAKO



In Figure 27, the accessibility of training programs in the region is ranked by 42 employers. 64% of employers rated on the job training as either 'very accessible' or 'somewhat accessible'. Apprenticeship training received the same positive scores as college courses or diploma, however it is also received the second highest rating as 'very inaccessible', behind a university degree.

University degree is rated as the most inaccessible training, which, when 'very inaccessible and 'somewhat inaccessible' scores are combined, totals 50.4%, followed by professional development courses, rated at 45.3% by the same measure.

13. Do you currently offer training programs/professional development for your employees?

FIGURE 28: TRAINING PROGRAMS OR PROFESSIONAL DEVELOPMENT OFFERED TO EMPLOYEES

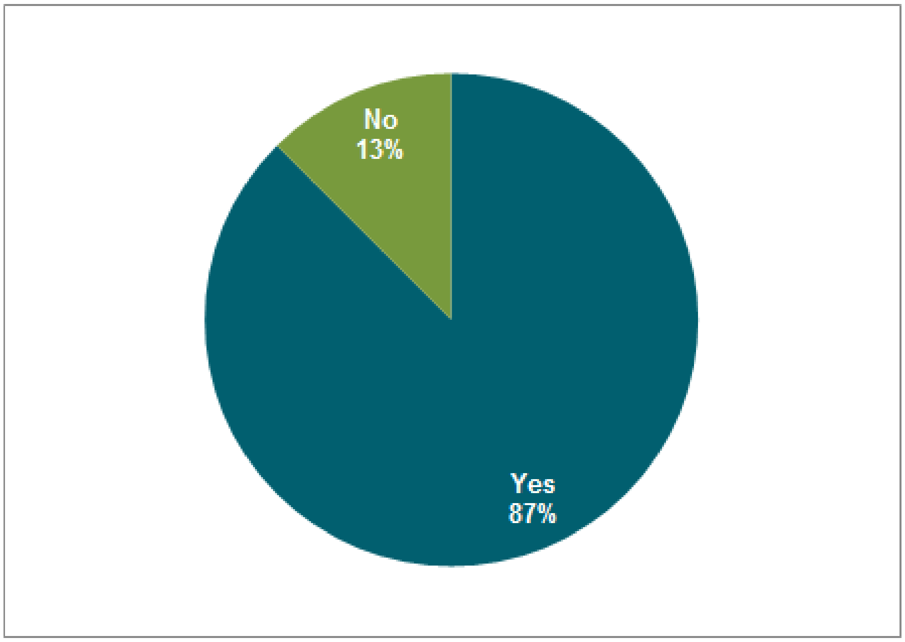


Figure 28 shows the number of employers, among the 43 respondents to this question, who have some type of training program or professional development program. 87% reported some type of program, and 13% reported no training or professional development program.

14. Please indicate which formal training method(s) your company currently uses. Please select all that apply.

FIGURE 29: FORMAL TRAINING METHODS USED

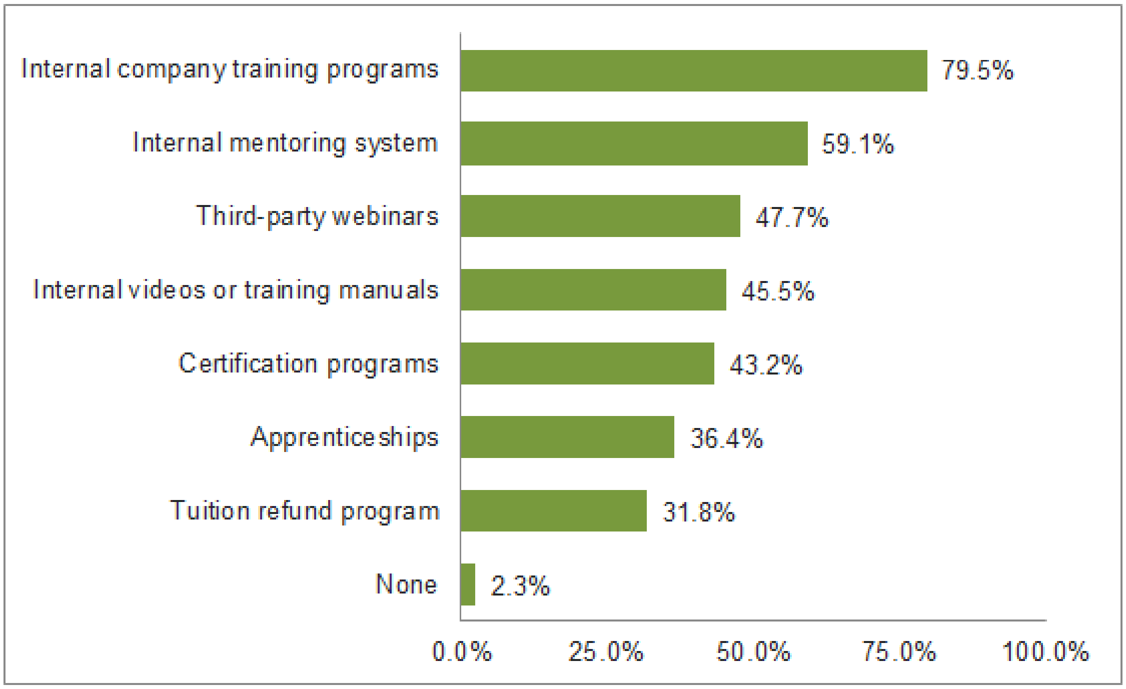


Figure 29 provides more detail on the training methods used by employers. Of 44 employers, approximately 80% use internal company training programs, which can be expected to vary in their formality, although 46% of all respondents report the use of internal training manuals or videos. An internal mentoring system was reported by 59% of employers.

Apprenticeships and tuition refund programs are less frequently reported, but still have a substantial representation, at 36% and 31% of responses, respectively.

15. In your opinion, are post-secondary institutions (colleges, universities and training facilities) engaging with the business community to inform and influence program delivery and training?

FIGURE 30: POST-SECONDARY INSTITUTION ENGAGEMENT WITH THE BUSINESS COMMUNITY

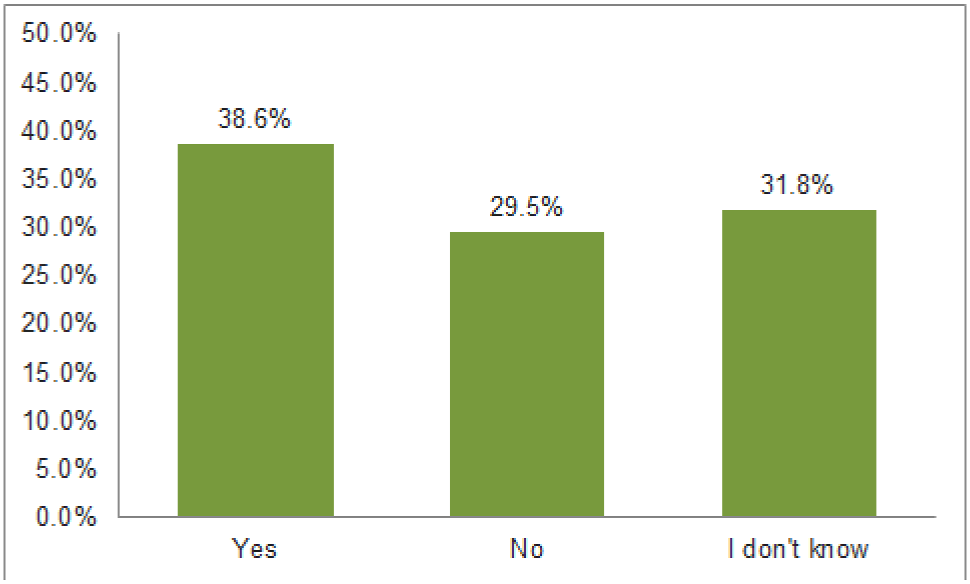


Figure 30 illustrates the perceptions of 44 employers on the level of business engagement with post-secondary educational institutions. The response is mixed. While just under 39% or respondents feel that there is good engagement in program delivery and training, close to 32% responded that they don't know. Approximately 30% do not believe that there is engagement in program delivery and training.

It is difficult to determine from these responses if the business community is simply not aware of the activities of post-secondary institutions, if these activities are limited in scope, or not occurring at all.

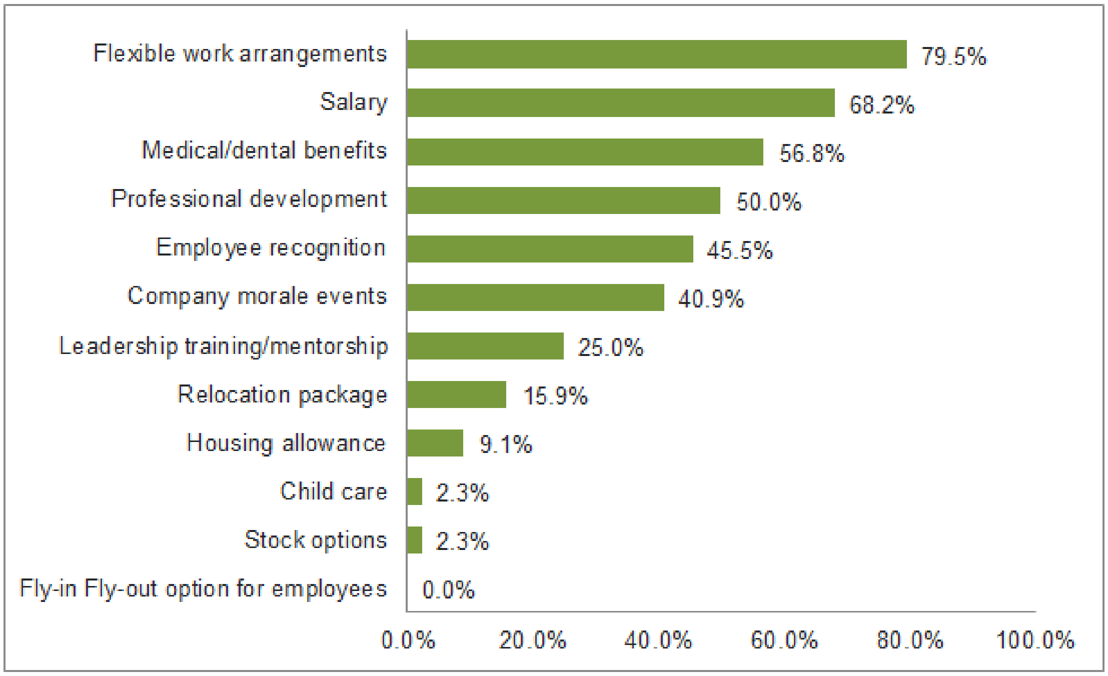
16. What gaps and/or opportunities do you see with respect to workforce development activities in the region?

Twenty-eight employers identified gaps or opportunities for workforce development activities in the region. Their responses are summarized into the following themes:

- Retention: The challenge of attracting and retaining skilled workers is at the top of the list for employers. Employers report losing skilled workers and quality employees to other areas, sometimes for the amenities in other areas, sometimes for higher wages, or both. Trades people and the mining and oil sectors are mentioned as specific issues by some.
- Overall quality: Employers are challenged by the quality of the workforce available to them. Some indicate that although they receive a number of applications the applications are not suitable. Others note that academic qualifications do not reliably indicate a competent employee. A key concern expressed is that there are few candidates with the potential to take over a business, creating issues for succession planning.
- Value local/small opportunities: A number of employers noted that there is a lack of interest or appreciation for the opportunities that are or could be available in the region. In some cases this was attributed to a lack of understanding of the needs of small business, the image of particular industries, such as logging.

17. What strategies do you employ to retain workers?

FIGURE 31: STRATEGIES TO RETAIN WORKERS

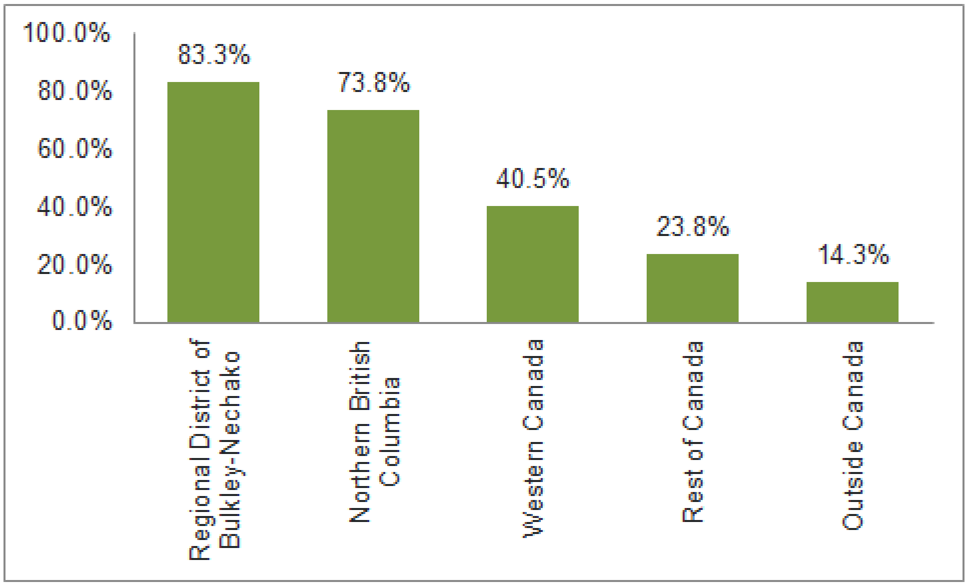


Fourty-four employers advised their current strategies to retain workers, and their responses are captured in Figure 31. Most employers offer flexible work arrangements as an incentive, approximately 80%, and a competitive salary was identified by 62% as a tactic. Medical and dental benefits are also mentioned by 57% of employers.

Some of the retention tactics that are not frequently being used by those who responded to this survey include stock options, child care and fly-in fly-out arrangements for workers.

18. Do you actively recruit from:

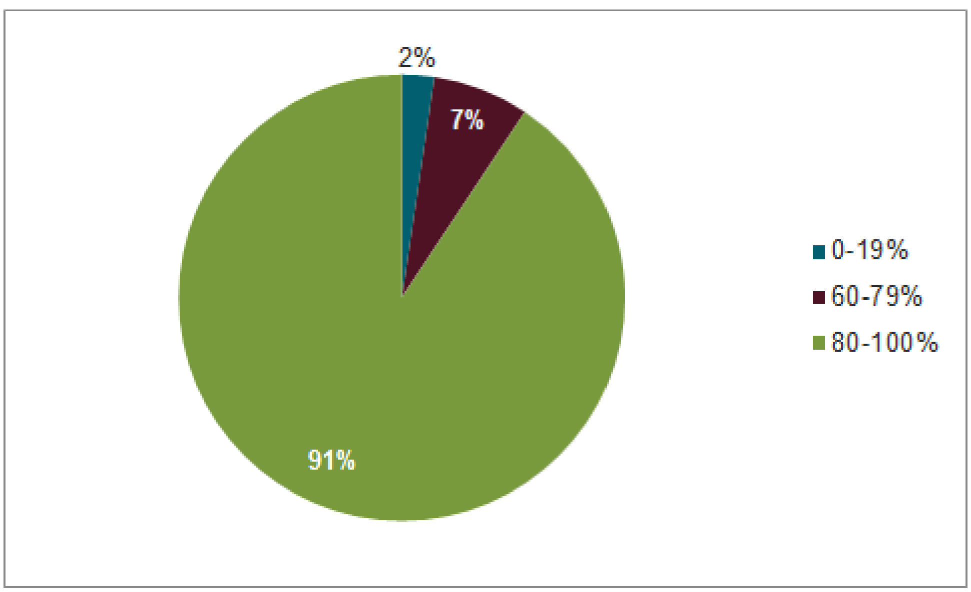
FIGURE 32: TARGET AREAS FOR RECRUITMENT



In Figure 32 the top locations for the recruitment activities of 42 employers are identified. Although a great deal of recruitment is occurring in the Regional District of Bulkley-Nechako, where 35 of the 42 respondents are sourcing staff, a considerable number of employers are simultaneously searching across the rest of northern British Columbia, close to 74% of the sample. Western Canada is a target area for 41% of respondents, the rest of Canada, 40.5%, and outside Canada, 14%.

19. What percentage of your employees reside in the Regional District of Bulkley-Nechako?

FIGURE 33: PERCENTAGE OF EMPLOYEES THAT RESIDE IN BULKLEY-NECHAKO



Of the 43 employers who responded to this question, the workforce of 91% is 80-100% local to the region. Categories between 20% and 59% had no responses, and 7% of respondents noted that only 60-79% or their workforce is from the region.

20. If many of your employees are not currently residents of the Regional District of Bulkley-Nechako where do they reside?

Only 14 employers responded to this question, as it is specific to employers who have a substantial non-resident workforce. Of the responses, northern British Columbia was the area that was mentioned most frequently. The number of the rest of the selections is too small to note.

21. In your opinion, how might more local hiring and/or more relocation of new employees to RDBN be facilitated?

Twenty-four employers provided suggestions as to how the local workforce could be developed, either in terms of more local hiring and/or the relocation of new employees. The top responses are listed as follows:

- Marketing: Improved advertising of employment opportunities, and of the advantages of living in RDBN to prospective professional employers. Targeted marketing to individuals who appreciate or are interested in a northern lifestyle was also recommended, as well as a branding program.
- Local training: Some employers feel that local training supports the retention of youth in communities, and suggestions were made to encourage partnerships between UBC and local colleges to help students live locally while pursuing university level courses. Computer skills, worksafe programs, heavy duty equipment and operator training, as well as courses of study outside of industry, to provide variety.
- Housing: Some areas of the district, affordable housing can be a real challenge, and an increase in affordable housing stock is identified as a barrier to employment.

Other responses not as commonly mentioned include improved community amenities, interventions at the high school age, improved online resources, and training specifically for First Nations people.

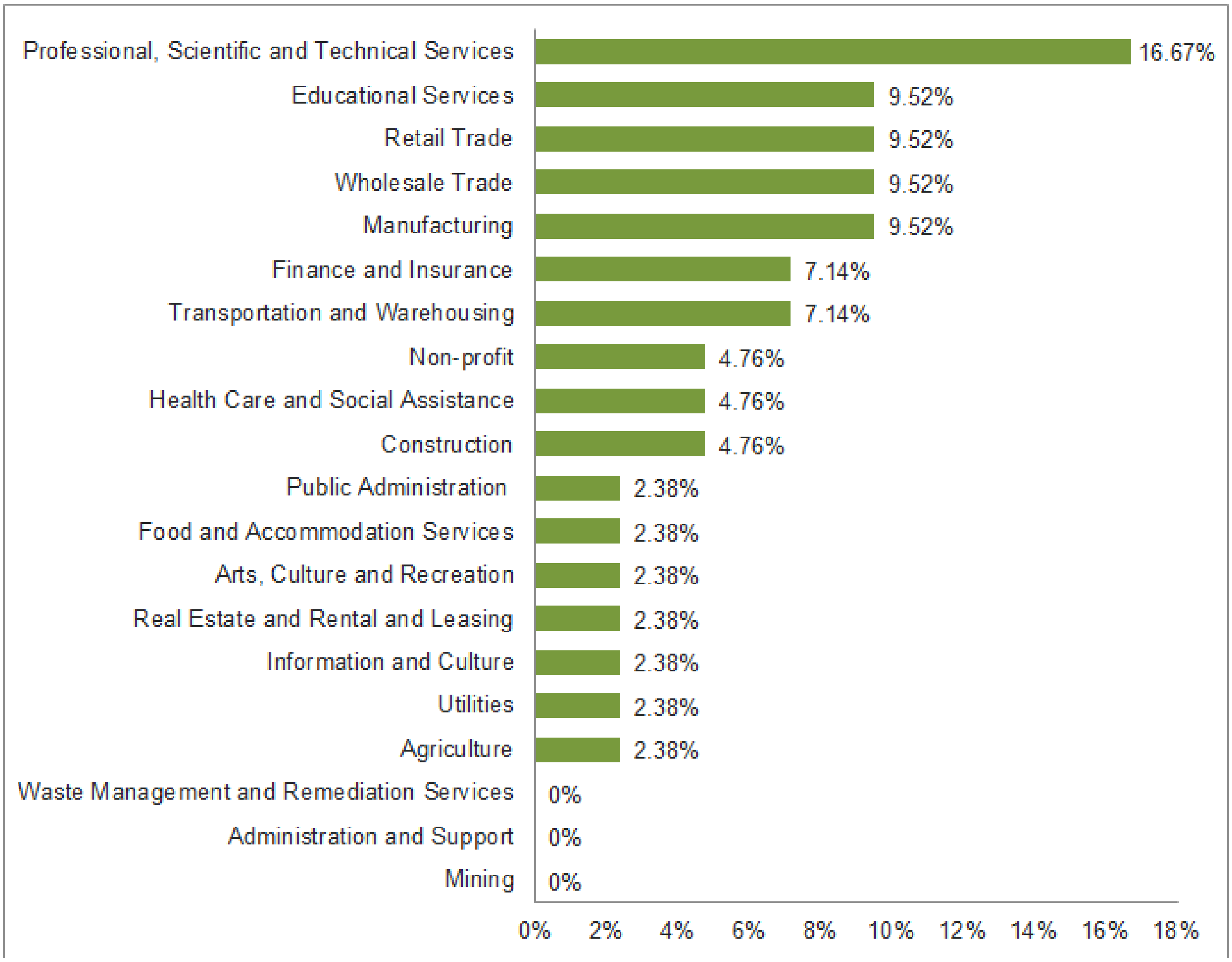
22. What is your company's main business sector of activity in the Regional District of Bulkley-Nechako?

As in the resident survey, it is important to understand what types of employers actually completed the survey. In this case, 42 employers identified their primary sector of work, and the response was quite varied.

Professional, scientific and technical firms make up the highest percentage of the sample, with seven respondents, which is close to 17% of the total respondents. The remainder of the sample is split in groups, with manufacturing, wholesale trade, retail trade, and educational services making up nearly 10% or the sample each.

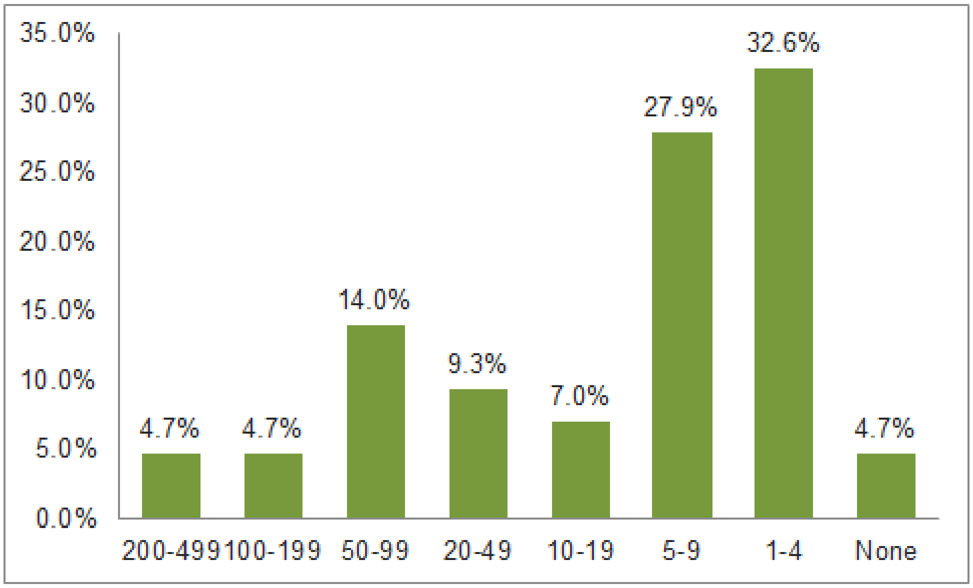
Mining, waste management and remediation services, administration and support firms did not participate in the survey.

FIGURE 34: PRIMARY SECTOR OF ACTIVITY, EMPLOYER SURVEY RESPONDENTS



23. How many full-time employees are employed at your company location in the geographic area of the Regional District of Bulkley-Nechako?

FIGURE 35: SIZE OF FIRMS, EMPLOYER SURVEY RESPONDENTS



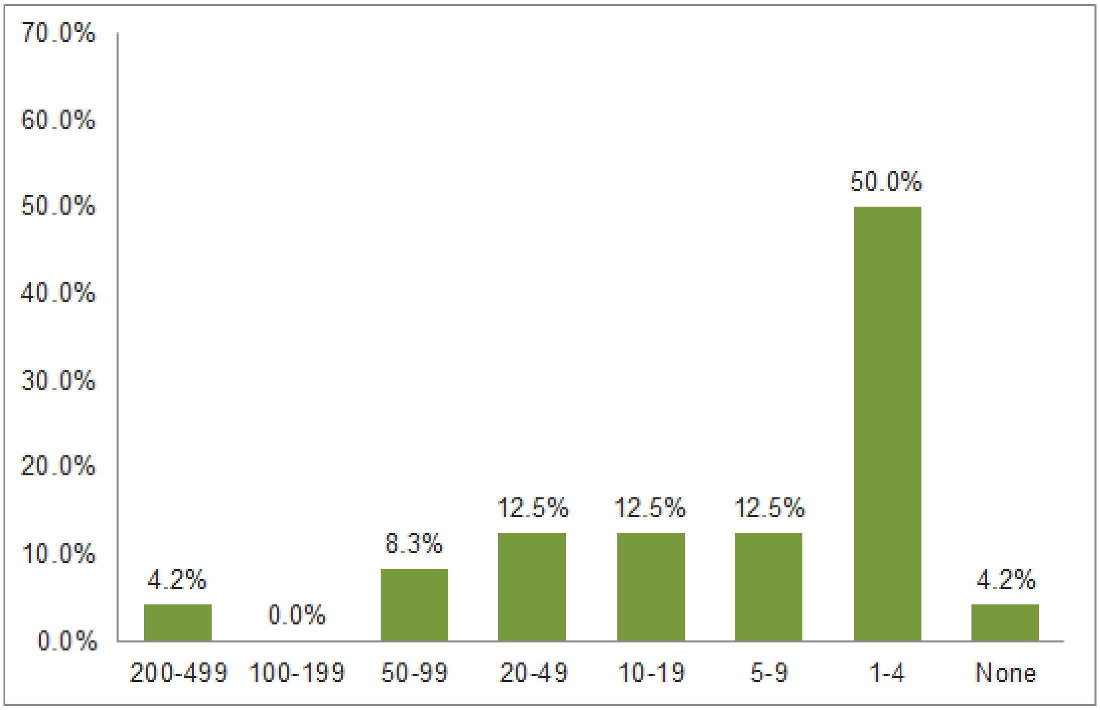
Fourty-three percent of respondents provided an estimate of the size of their workforce. Most of the firms employ less than nine staff, representing 65% of the sample. This is likely reflective of the number of small businesses in RDBN.

Every size of business, measured by number of employees, is also represented in the sample.

24. How many temporary or contract workers are employed at your company location in the Regional District of Bulkley-Nechako?

Twenty-four employers responded to this question, indicating that 50% have one to four temporary workers. The number of firms with 200 to 499 temporary employees may not be large, but represent a significant temporary workforce.

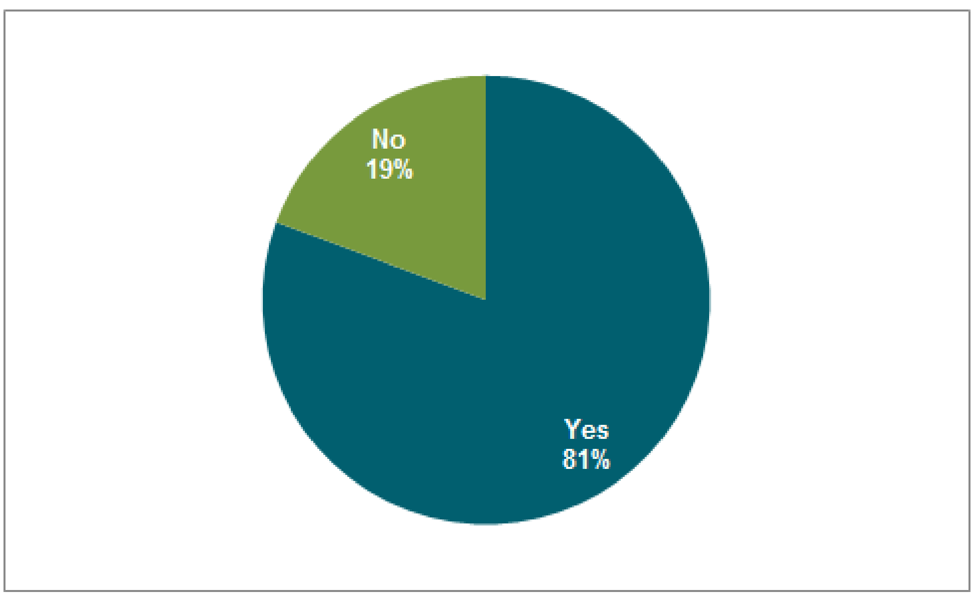
FIGURE 36: TEMPORARY EMPLOYMENT AT COMPANY LOCATION



25. If your company has more than one location, is your company's head office located in the Regional District of Bulkley-Nechako?

Of the 31 employers who responded, 81% have their head office in Bulkley-Nechako, while 19% have their head office in another location.

FIGURE 37: PERCENTAGE OF EMPLOYERS WITH HEAD OFFICE IN BULKLEY-NECHAKO



26. Why is your company's head office located in RDBN, or what is preventing your company's head office from being locating in RDBN?

Twenty employers shared their motivation for locating in Bulkley Nechako or the reson that their head office may not be located in the region. The top responses are as follows:

- Where I /Owner live: Many employers mention that the region is the home of a business owner, and that this is the primary motivation for the location of the business.
- Primary market here: Some business owners conduct a significant percentage of their business in the area, and it is the presence of clients that motivates their business location.

Other popular responses included the employer is part of the public sector and therefore provides services to residents, also the presence of a spouse and the location of natural resources in the north were noted as reasons for a head office location.

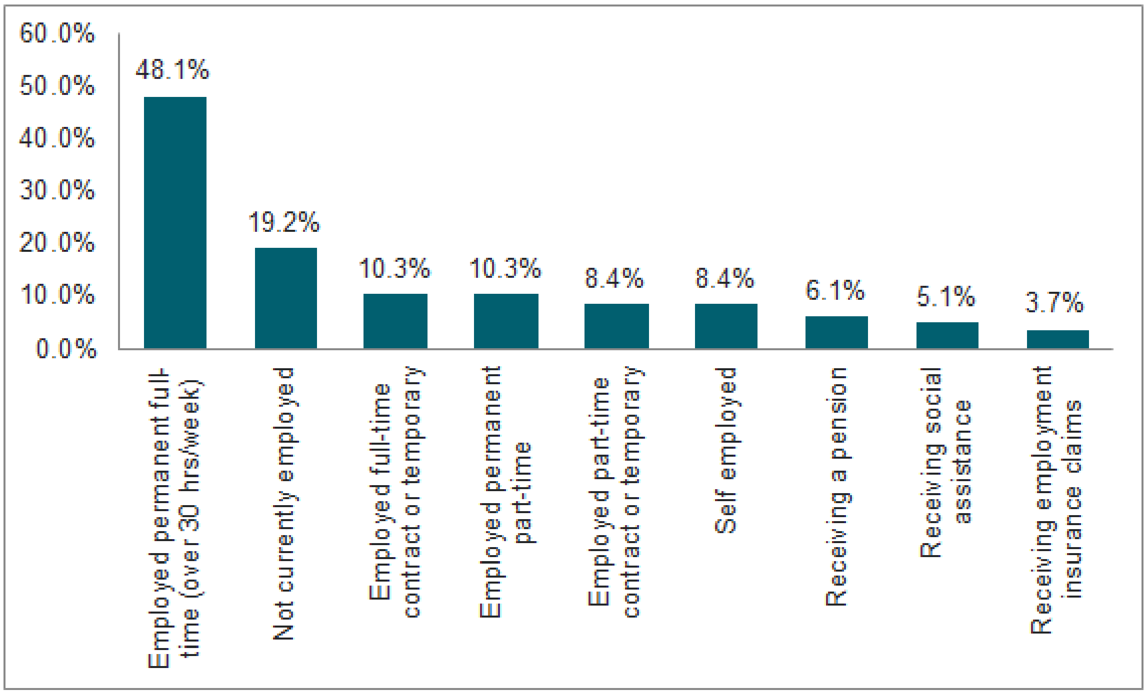
6.3 Research Paper 3: Resident survey results

The primary way that residents of Bulkley Neckako were engaged in the project was through the resident survey. Others attended focus groups, which were open to the public, and some community leaders were interviewed individually. The residents survey received 219 responses.

1. What is your employment status? Please select all that apply.

The first few questions of the resident survey establish the characteristics of survey respondents. In Figure 38, the employment status of the audience is assessed.

FIGURE 38: RESIDENT EMPLOYMENT STATUS

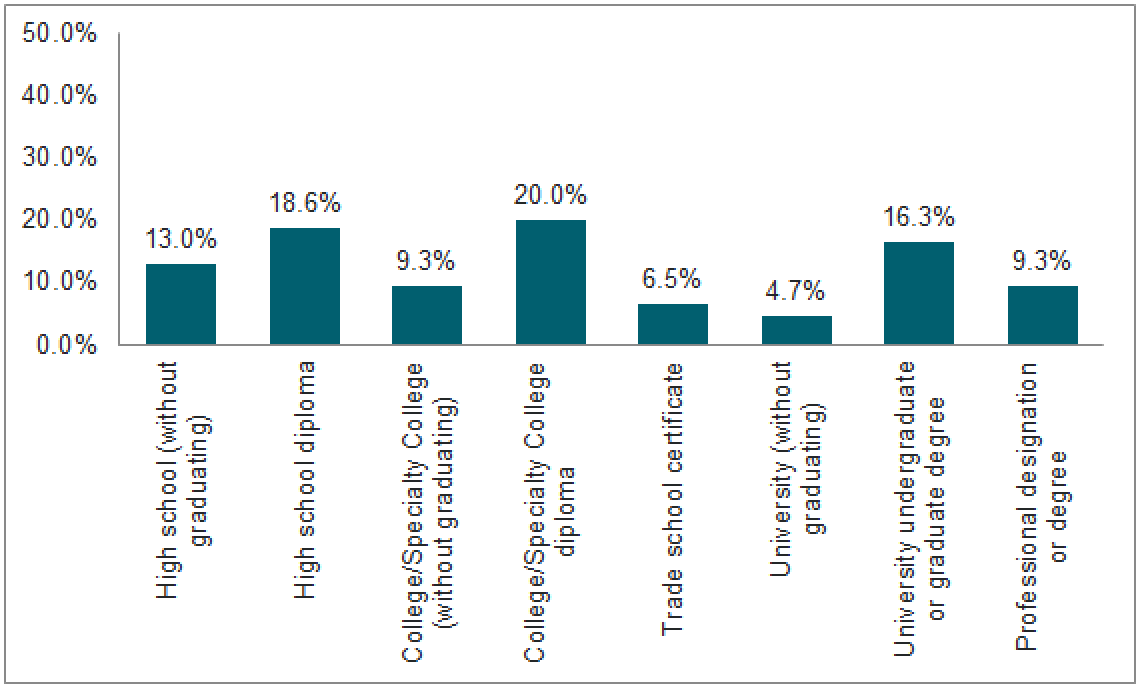


Of the 214 responses received to this question, a total of 58.4% identified that they are employed full time, 19% state no current employment, and a further 19.1%, part time employment. These proportions indicate that the perspectives of employed residents are more strongly represented than unemployed residents; however, a diversity of perspectives were captured.

2. What is the highest level of education that you have attained?

In addition to employment status, understanding the level of education of survey participants can influence the interpretation of the data. In Figure 39, survey respondents identified the highest level of education they had obtained.

FIGURE 39: HIGHEST LEVEL OF EDUCATION ATTAIINED, RESIDENT SURVEY

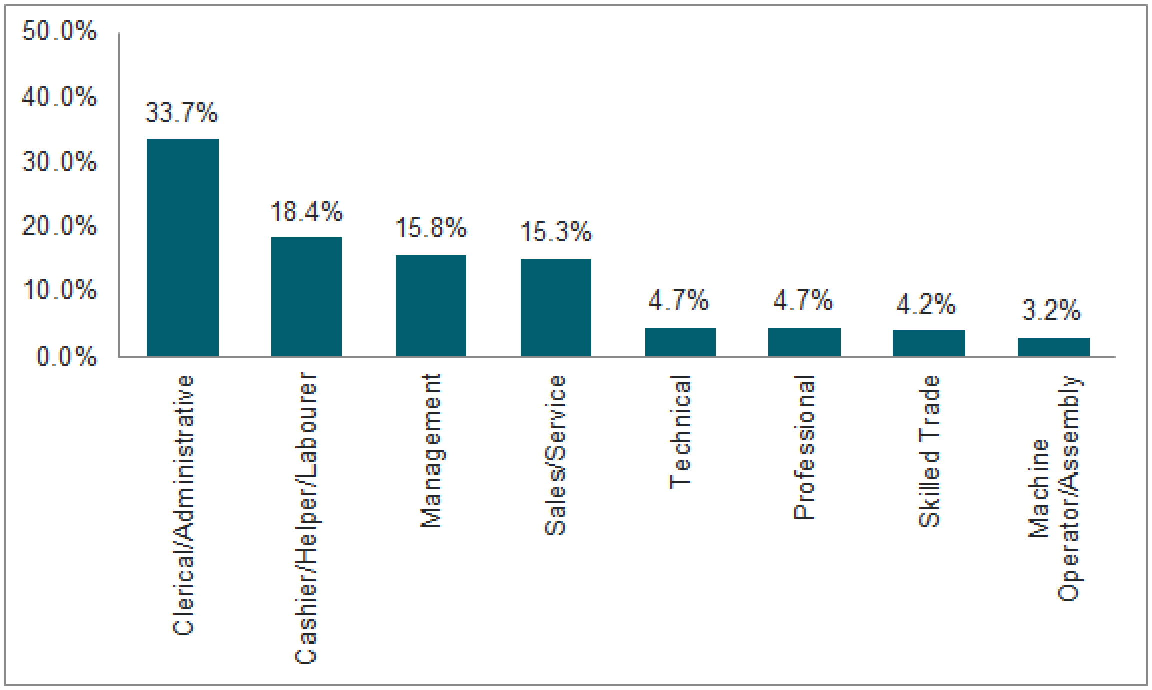


Of 215 respondents, 18.6% hold a high school diploma, 20% have graduated college, 6.5% hold a trades certificate and 16.3% graduated from university. Similar to employment status, each education group is represented in the sample.

3. How would you classify your current/most recent job?

The type of employment of survey respondents is important because it indicates the work experience of the sample. In Figure 40, survey respondents classify their current or most recent employment position.

FIGURE 40: CLASSIFICATION OF MOST RECENT EMPLOYMENT



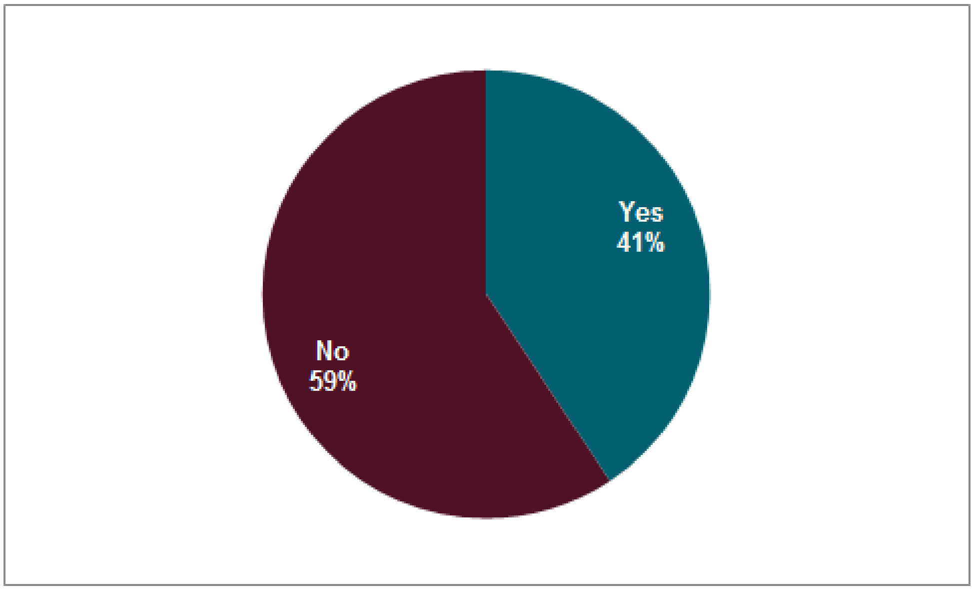
Clerical or administrative workers make up nearly 34% of those who responded to the survey, of the 190 individuals who answered this question. Cashiers, helpers or labourers make up 18% of the sample, managers, close to 16%, and sales and service make up approximately 15%. Technical workers, professionals and skilled trades people represent between 4% and 5% each, while those with machine operator and assembly experience make up 3.2% of the sample.

It is worth noting that those with clerical and administrative experience represent a larger portion of the sample than the other professions noted.

4. Are you seeking new/additional employment?

In order to understand the gaps in the workforce, it is useful to understand how many of the people who participated in the survey were seeking employment at the time.

FIGURE 41: PEOPLE SEEKING EMPLOYMENT OPPORTUNITIES

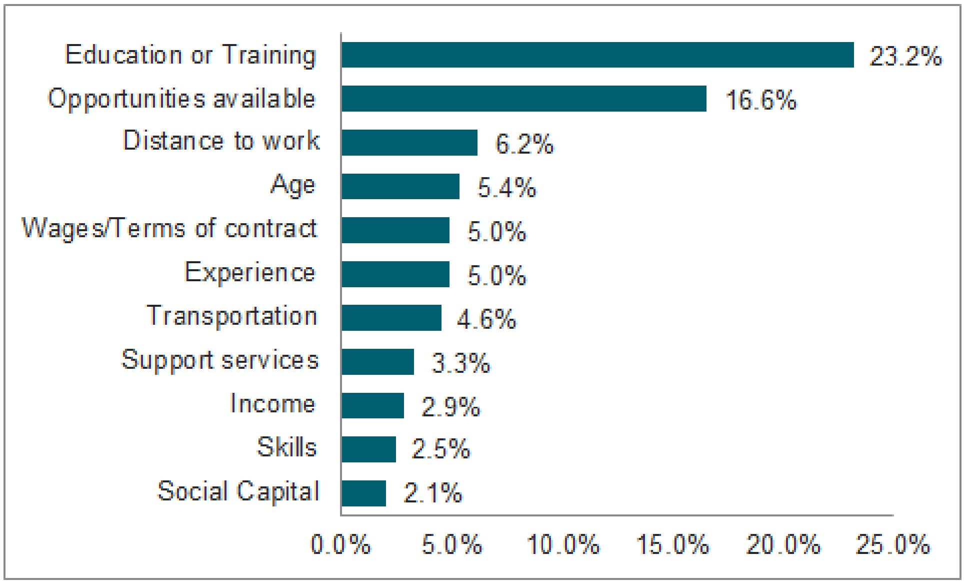


Of the 209 residents of Bulkley-Nechako who responded to this question, 59% are not seeking employment, while 41% are either unemployed and seeking employment or currently employed but interested in new employment opportunities. This means 85 of the individuals surveyed are seeking employment.

5. What are the challenges you face in getting a new or better job?

Labour market gaps can be created when there are barriers preventing workers from obtaining their next job. Figure 42 shows the most common barriers to achieving employment goals identified by residents.

FIGURE 42: BARRIERS TO NEW EMPLOYMENT



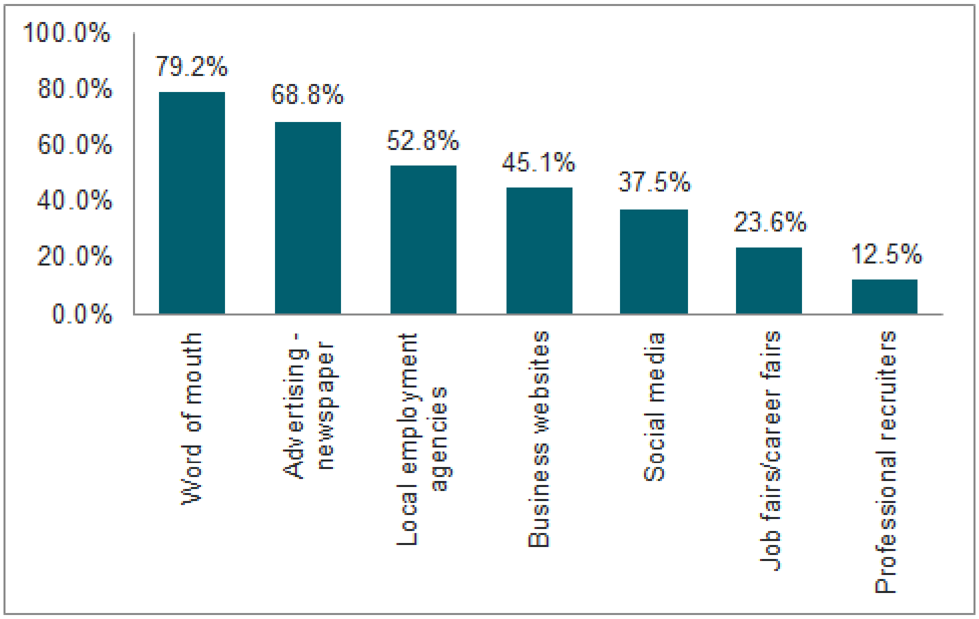
Of the 241 total comments on this question, from 121 individuals, the most frequently mentioned barrier to employment is education or training to meet the requirements of an employment opportunity. Education and training are mentioned by 23% of respondents. The second most frequently mentioned barrier is the number and variety of employment opportunities that are available in the region, mentioned by over 16% of respondents.

Many residents appear to either not have the qualifications to apply for work, are not interested in the employment opportunities that are available in the region, or have difficulty obtaining and retaining a position. Some of the challenges expressed about obtaining and retaining work include age, either due to lack of experience or too much experience, low wages, the distance to the workplace, a lack of transportation, and basic life skills, including arriving on time. Some of these barriers are related to low income.

6. If you are looking for employment, which of the following methods have you used?

The reasons for a mismatch between residents seeking employment and employers seeking employees can include communication barriers. Figure 43 illustrates how job seekers are looking for opportunities.

FIGURE 43: METHODS OF SEEKING EMPLOYMENT



The most frequently mentioned method of finding work in RDBN is by word of mouth, by 79% of respondents. Word of mouth is more popular than scanning newspapers for job ads, which are identified by close to 69% of respondents. Just under 53% of the 144 respondents to this question have used local employment agencies as a way to find work.

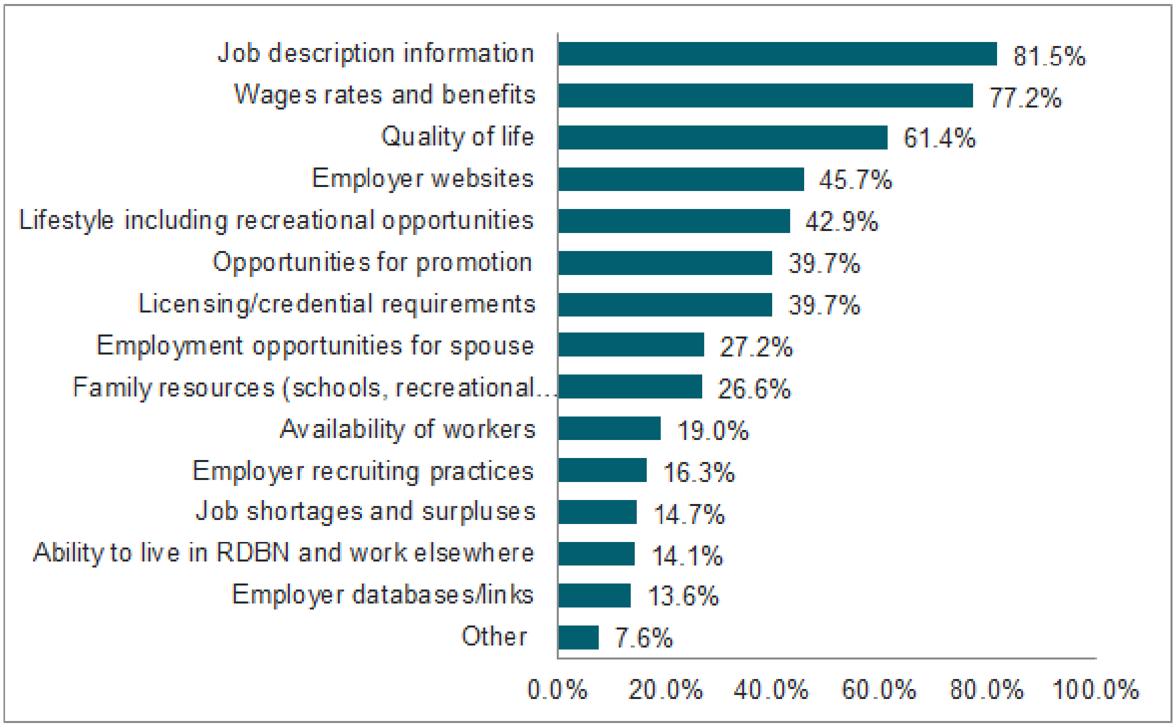
The internet is also a popular tool to find work. 45% of respondents have used business websites and approximately 38% of respondents have used social media to identify employment opportunities. In the additional comments, respondents shared that they have also gone door to door with a resume, and started their own enterprise as a way to gain employment.

Word of mouth can be effective, and is a well-known tool in the job hunt; however, it can also limit the opportunities available to an individual because the ability to access these jobs depends on social capital within the community, and the right social connections. Without a strong social network, job opportunities can be limited.

7. What kind of information do you typically use in making decisions about the type of job you are seeking (or did seek when you were active in the labour market)?

Finding an employment opportunity is important, but there are many other decisions that need to be made when seeking employment, or preparing for employment through training or formal education. In order to make good decisions, residents of RDBN need access to timely and accurate labour market information. Figure 44 shows what labour market information survey respondents are using.

FIGURE 44: SOURCES OF LABOUR MARKET INFORMATION

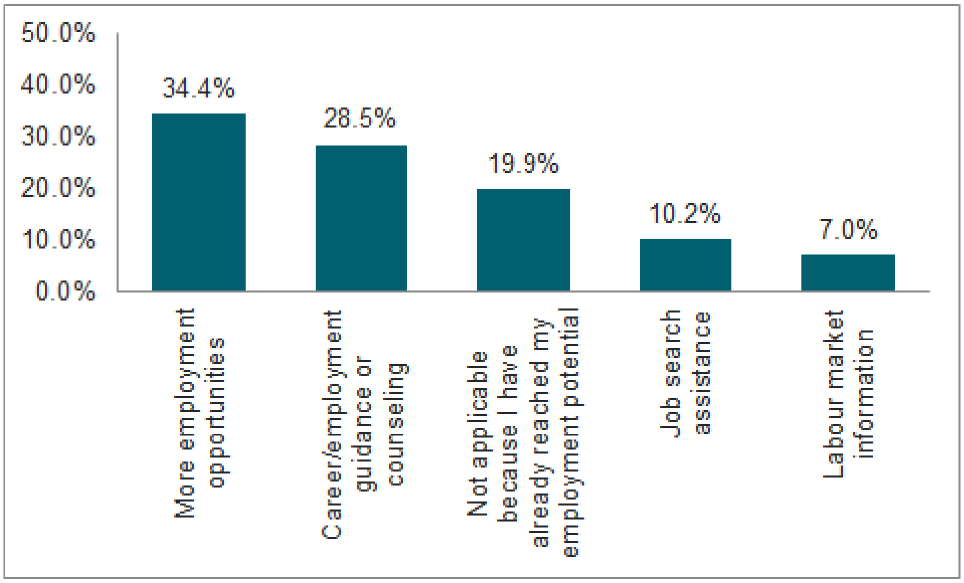


Of 184 survey respondents, over 81% use job descriptions, and seek wage rate and benefit information to help make decisions about employment. These sources of information are often centred on a particular opportunity. However, quality of life information, which is generally focused on the community where an opportunity is located, or where an employee lives, was also referenced by more than 60% of respondents.

8. Which of the following do you believe is most important to help individuals achieve their full employment potential?

This question seeks to identify what changes in the economy, or what support and/or information services, are valued by survey respondents. Figure 45 shows the ranking of commonly used labour market development tools.

FIGURE 45: WAYS TO ACHIEVE EMPLOYMENT POTENTIAL

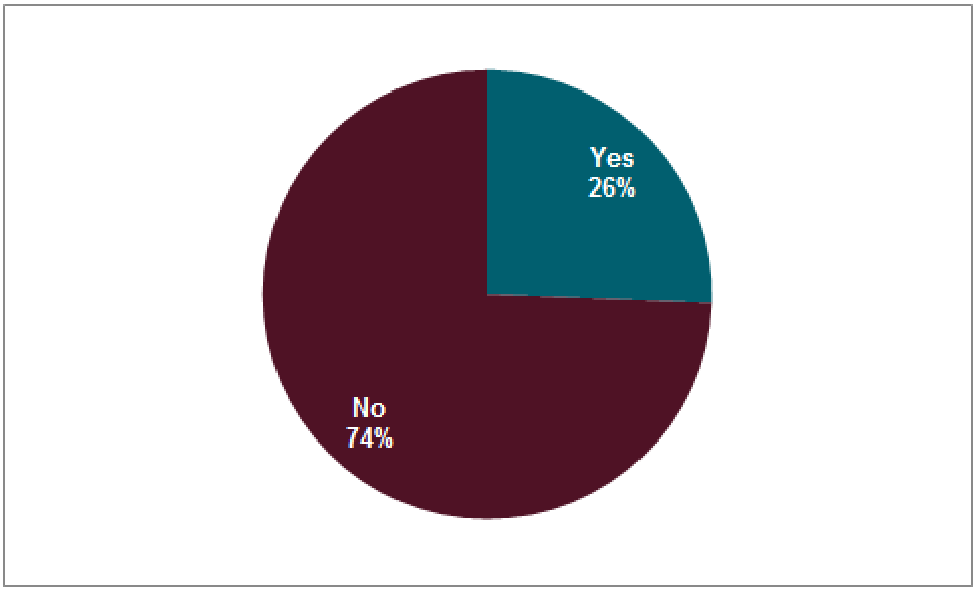


Respondents identify more employment opportunities in the economy as the most important change that can help them achieve their potential. Of 186 respondents, 34% identify more employment opportunities and over 28% identify career or employment counseling.

9. Are you currently receiving any type of training or education?

The intentions of the sample are now established; about 41% are interested in new employment opportunities, and more than 23% see training and education as a barrier to future employment. Therefore, it is interesting to learn if training or education is currently being pursued.

FIGURE 46: CURRENTLY IN TRAINING OR EDUCATION PROGRAM

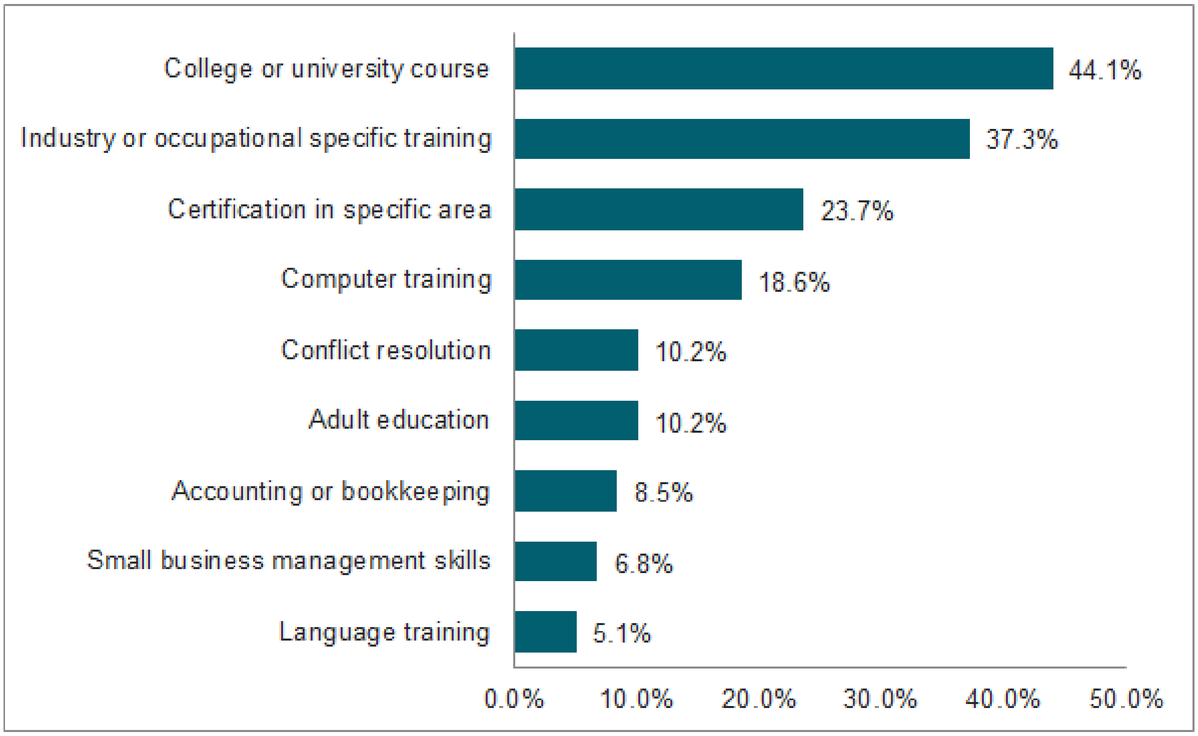


Education status is outlined in Figure 46. Of 207 respondents, 26% are currently in a training program and 74% are not. Considering the previous statements made about the desire for new employment and education level as a barrier, it is important to note that many individuals are pursuing further training.

10. If yes, please describe the type of training or education.

It is useful to know exactly what type of education residents are pursuing, to better understand their current priorities. In Figure 47, the type of training described in the previous question is probed in more detail.

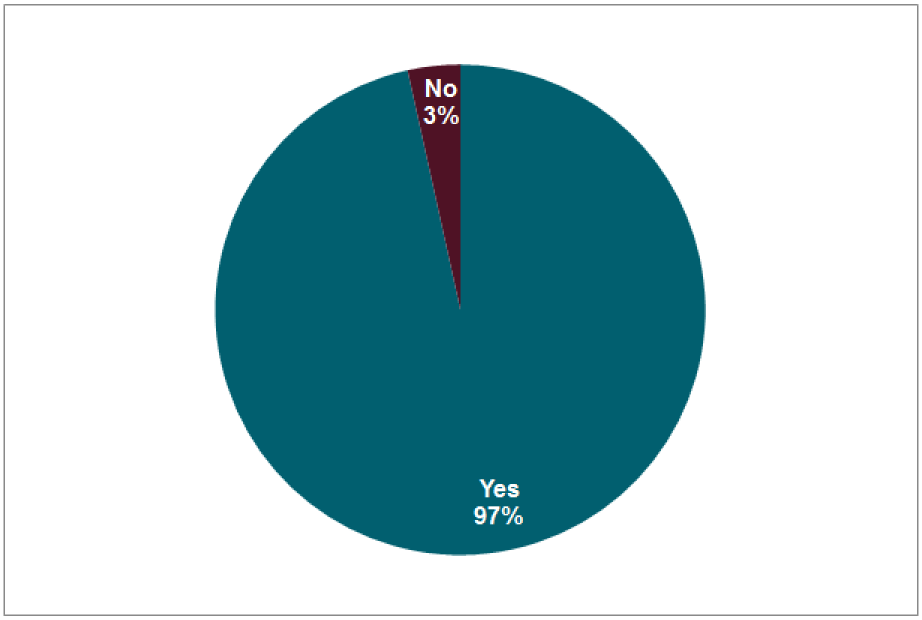
FIGURE 47: TYPE OF TRAINING OR EDUCATION PROGRAM



This question does not apply to every person completing the survey, and only 56 individuals responded to this question. Of these responses, 44% indicate a college or university level course, while 37% indicate industry specific training.

11. Are you a resident of the Regional District of Bulkley-Nechako?

FIGURE 48: PERCENTAGE OF SURVEY RESPONDENTS WHO ARE RESIDENTS OF RDBN



This question confirms if those responding to the survey are residents of RDBN. And of 202 respondents, 97% confirmed that they are residents of the region.

12. If you work in the region but are not a resident, why are you not a resident of the region? What is stopping you from becoming a resident?

100% of the 153 people who responded stated that they are a resident of the region.

13. Please indicate to what level you agree with this statement: Bulkley-Nechako is a great place to live and raise a family.

In order to identify the level of comfort that residents have about living in RDBN, their opinion of the region as a place to raise a family was requested.

FIGURE 49: LEVEL OF AGREEMENT ON BULKLEY-NECHAKO'S SUITABILITY AS PLACE TO RAISE A FAMILY

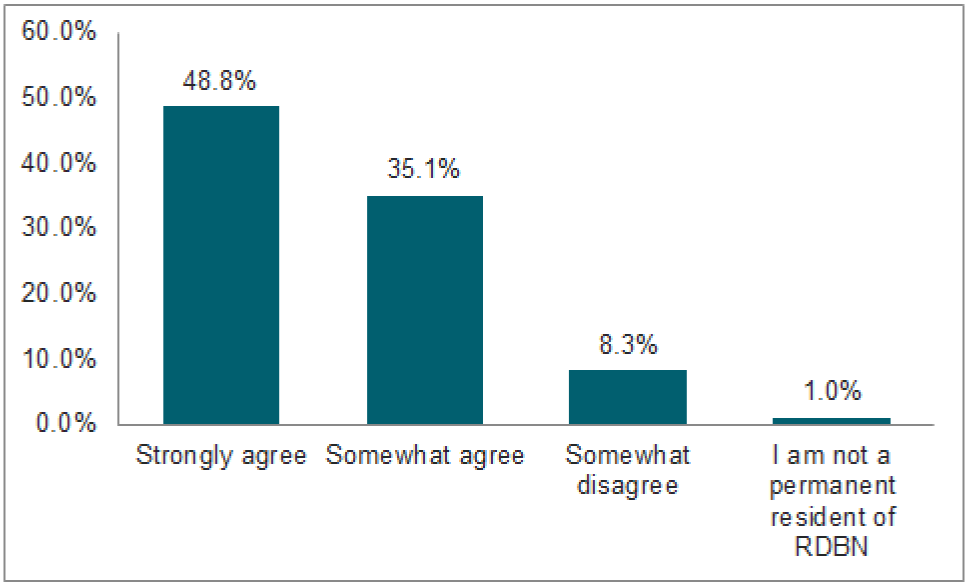
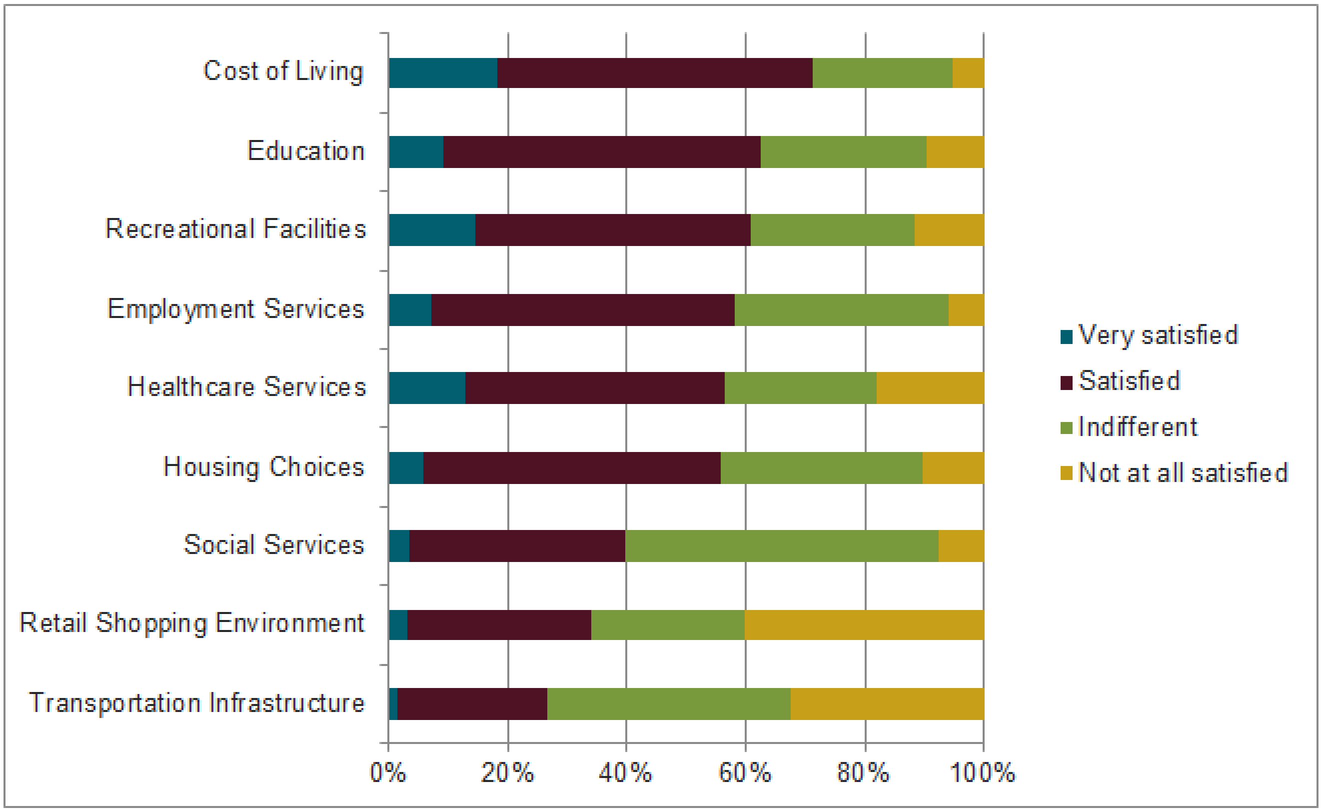


Figure 49 shows that close to half of the 205 respondents, or 49%, strongly agree with the statement that the Regional District of Bulkley-Nechako is a great place to live and raise a family. A further 35% of respondents somewhat agree with the statement.

14. Please rate the quality of the products and services in the Regional District of Bulkley-Nechako, on the scale provided.

In addition to the overall impression of RDBN as a place to live, more detailed feedback on the products and services available in the region were assessed.

FIGURE 50: QUALITY OF PRODUCTS AND SERVICES IN RDBN



Of the 206 respondents to the question, the area with the highest rating is cost of living. Recreational facilities and the quality of education in RDBN also received high scores, when the 'very satisfied' and 'satisfied' scores are combined, although education received less 'very satisfied scores than recreation, cost of living and healthcare, meaning that the services are seen as adequate, but not exceptional, by respondents.

The retail shopping environment and transportation received low scores, with a higher portion of respondents providing a 'not at all satisfied' score. Health care services also received a notable number of 'not at all satisfied' scores.

15. What do you enjoy about living in the Regional District of Bulkley-Nechako?

Many survey respondents state that they enjoy living in RDBN, and this question seeks to understand exactly what it is about the region that residents find satisfying.

FIGURE 51: REASONS RESIDENTS ENJOY LIVING IN BULKLEY-NECHAKO

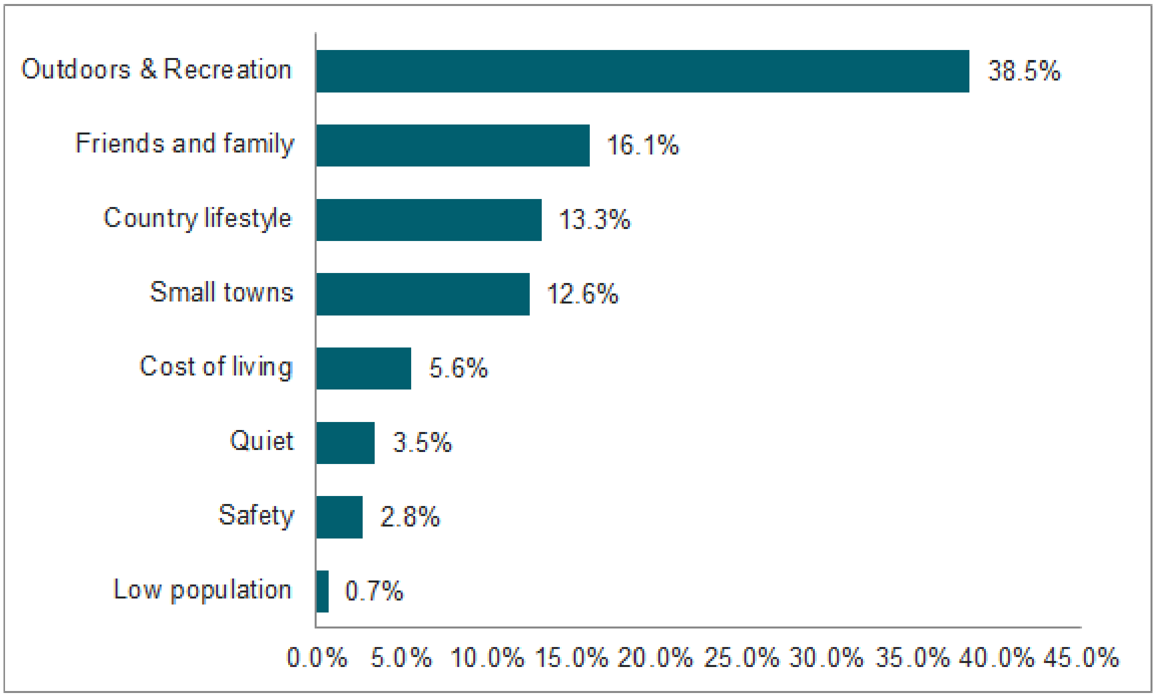


Figure 51 illustrates that recreation opportunities and the natural beauty of the area are the primary reasons that residents enjoy Bulkley-Nechako. Friends and family are the second most frequently stated reason.

6.4 Research Paper 4: Focus group results

A total of nine focus groups were held in the course of the study, in the communities of Vanderhoof, Fort St. James, Fraser Lake, Burns Lake, Houston, and Smithers. The same questions were asked in each focus group, and the answers are summarized in this section.

Opportunities and Challenges

The focus groups were asked the following two questions:

- What does RDBN have going for it (to attract and retain workers; businesses)?
- What are the top three to five challenges impacting area employers' ability to attract/retain the talent they need?

The responses to many of these questions are consistent across the region, with some communities experiencing exceptional circumstances. As much as possible, the unique conditions in specific communities are captured here.

The following topics of conversation were commonly covered by focus group participants:

- Mining and Forestry
- Quality of Life
- Regional Labour Market
- Education and Training
- First nation Communities

These topic areas are used to sort the comments, in addition to a 'general category' to capture comments that are not within the themes.

FIGURE 52: FOCUS GROUP THEMES

Mining and Forestry - Opportunities	Mining and Forestry - Challenges
▪ Resource opportunities in the mining sector are significant, with projects in approval phase and in construction/operation ▪ High paying jobs for skilled and unskilled workers ▪ Mineralized ground with future potential and active exploration activities ▪ Good transportation facilities, and access to the Asian market; including airport facilities in Smithers, Houston, and highway and train access ▪ Working with contractors to manage expectations and ensure when the time comes, they are ready	▪ Cyclical nature of natural resources industries leads to gaps in employment opportunities, starts and stops on projects, resulting in in-consistent employment ▪ Lack of skilled and experienced workers to meet demand ▪ Financing for small mining companies is limited, in turn limiting exploration activities ▪ Forestry in a down cycle, impacted by pine beetle and economic conditions ▪ Shift schedules can have a significant impact on volunteerism and family life ▪ Communities do not benefit from resource related tax revenues, which leaves limited resources to respond to needs
Quality of Life- Opportunities	**Quality of Life- Challenges**
▪ Residents enjoy recreational amenities, including immediate access to the outdoors and the wilderness for activities like hiking, ATVing, snowmobiling, fishing, hunting, etc… ▪ Many communities have excellent traditional and non-traditional recreational facilities, such as hockey and curling facilities, the ski hill and bike park in Smithers, skateboard park in Fraser lake, aquatic centre in Houston, etc… ▪ Small town living is a positive experience for many, residents are welcoming and help out their neighbours, community spirit is strong, quiet living is possible, and there is no traffic on the way to work ▪ Smithers reports good variety in retail shopping and services and a 'buy-local' culture ▪ Inexpensive housing and affordable rent in many communities, compared with other areas of the country and province, make it more possible to own a home ▪ Relatively affordable properties located on bodies of water, very desirable and expensive in other areas of Canada ▪ Many residents of the region enjoy living near extended family and close friends, and feel the Regional District is a great place to raise children	▪ Wilderness recreation requires experience, equipment, and familiarity with the local geography; it is not equally accessible to tourists or new residents ▪ Not all communities have the same availability of recreational facilities, in Fraser Lake, for example, the existence of fewer amenities was commented on; also there are fewer organized recreational activities in more remote areas of the Regional District ▪ Variety of jobs available is not as high as in urban areas, leading to challenges finding employment for spouses ▪ Variety of retail goods and services and hours of service, reported to be an issue in many communities in the region, as well as 'out-shopping'; Vanderhoof in particular has challenges with out-shopping in Prince George ▪ Housing is more of a challenge in some communities such as Vanderhoof and Fort St. James, where rents are high due to increased population; seniors housing is an issue in general across the region ▪ Cultural experiences are not as prevalent in the region as they may be in larger centres

Regional Labour Market- Opportunities	Regional Labour Market- Challenges
▪ Youth often enjoy the lifestyle of the north and want to return to it, many return home after training or work experience in other areas ▪ The history of immigration in the Regional District, specifically from the Philippines, can support the labour market ▪ Older workers are interested in re-training	▪ Youth tend to leave the region for education, or to seek an urban experience or for employment; business report specific challenges in successfully motivating and training young workers ▪ New Canadians tend to choose to live in urban centres, and there are a lack of immigration support services in the region ▪ Older worker may not be physically able to do certain jobs, and a large number of older workers is making succession planning a significant challenge in large and small businesses; businesses report a lack of candidates interested in these positions ▪ Employers challenged to attract, retain and manage workers; many commented on the lack of work ethic basic literacy and professional competencies, the expense of training costs and the likelihood of losing good workers to other businesses or areas Skilled trades people are in particular need. ▪ Graduates of post-secondary institutions and training programs are having difficulty securing employment due to a lack of experience ▪ Businesses express challenges in finding qualified apprentices, and in retaining apprentices after they complete their certification, a significant expense for small business; cultivating more of an interest in the trades among youth was discussed as an issue ▪ Labour market information such as job postings, salary ranges and occupational information are not widely available. ▪ Transportation is a challenge due to a lack of public transit and the need for a car and driver's licence to maintain employment in many cases ▪ Residents state that option for gainful employment are limited, there is the mill and the mine which are cyclical industries; and remaining employment tends to be temporary or lower pay
Education and Training- Opportunities	**Education and Training- Challenges**
▪ Post-secondary educational facilities exist in many communities in the region ▪ High schools are working to integrate more hands on programming, such as a wood working shop in Burns Lake ▪ There are existing literacy programs, adult education programs, and mentoring programs for youth that are active in many areas of the Regional District ▪ Opportunities exist for businesses to partner with educational institutions, but these are not always effectively coordinated to gather enough students to form a class	▪ Quality of some graduates and ability to perform in the workplace cited as a concern ▪ Quality of high school education has been a challenge for some students who move on to post-secondary; businesses also question skills and competencies gained at the high school level ▪ Literacy and numeracy, as well as following simple instructions, are identified as a challenge for the workforce ▪ Young people are not encouraged to consider the trades as a career path, particularly women ▪ Enhanced English as a Second Language training options would be good to support new immigrants
First Nation Community - Opportunities	**First Nation Community- Challenges**

▪ First Nations people are an integral part of the workforce, and some businesses have adapted their human resource practices to support hiring and training ▪ Funding for First Nations specific training exists to support capacity building ▪ Some First Nations are open to working with industry and other communities on joint initiatives	▪ First Nation communities report challenges in securing employment experience for members and some businesses have challenges in attracting and retaining First Nation workers ▪ Funding is often fragmented and communities have varying capacity to access programming depending on location and number of staff ▪ Relationships between communities and First Nations are reported to need continual re-building
General- Opportunities	**General- Challenges**
▪ Communities are passionate about their future and leadership support community identity ▪ Tourism centres are a great resource ▪ Entrepreneurship is an area of great opportunity in the local economy ▪ There are occupations where employees can work from home and those that enjoy the northern lifestyle could choose to live in the Regional District	▪ Regional cooperation between stakeholders is lacking, the right people aren't sitting down together to manage these issues as a collective ▪ Need for improved broadband access and improved community infrastructure ▪ More marketing to share information about quality of life and opportunities for future residents ▪ The reputation of the "Highway of Tears" is a challenge to relocation and recruitment , as is the perception that residents may have prejudices or are not open minded ▪ Provincial support for the northern regions of the province is not perceived as strong; local political support tends to focus on industry as opposed to a more balanced approach ▪ Business financing is a challenge in the region, financing requires good records, assets and banks will assess viability by their own standards ▪ Social challenges such as alcohol and drug abuse limit the ability for people to obtain and retain employment

What actions need to be taken to address the challenges impacting local attraction/retention of labour?

- More work with the Industry Training Authority, who support trades training across the province
- Encourage programs like Bladerunners, that support First Nations youth, or Mentor-me, a program of United Way
- Introduce essential work skills with younger students, at the high school and elementary school levels
- Provide education about type of opportunities that are available in the region to students, workers, and job seekers
- Develop a technology hub to support increased adoption of technology
- More communication and partnerships between the Regional District, business, and educational institutions; bringing the right people together
- Help businesses adapt to the reality that they are a training ground, and cope with reduced ability to retain staff
- Develop relationships with major employers that lead to support for community infrastructure and community projects
- Raise the social capital of residents
- Encourage and support hiring of people with disabilities (steelworker's association does this
- Make room for aboriginal people in the workforce, create more practical work experience placements for Aboriginal workers Culturally aware and accommodate First nation people.
- Connect students with work experience as part of training

- Improve literacy, numeracy and basic financial management skills in youth and at risk populations
- Encourage entrepreneurship skills and opportunities through mentorship and education
- Continue to expose high school students to the opportunities presented by trades careers; note this is already being done, with a CNC course on the mining sector for gr. 10-11 and a grade 6/7 program underway, and there are opportunities for dual credit in high schools
- Incentives for businesses to hire young people
- Promote and attract people – being realistic and yet telling the story of what we have
- More social and community gatherings – Where do young people meet young people
- Arranging work for spouse
- More career exploration opportunities
- Strategies for employers to adapt to the changing workforce
- Support more of an entrepreneurial mindset, encouraging people to create their own opportunities; note that Junior Achievements, Pitch at school and the Credit Union are working on some programs
- Encourage people to embrace winter activities
- Training program identify similar training needs by regional businesses
- Celebrate the potential opportunities working with and for small businesses
- More collective regional identity as well as our local pride

6.5 Research Paper 5: Community information summit results

On October 24, 2013, the preliminary findings of the Regional Skills Gap Analysis were presented to a forum attended by a variety of community members, business owners, employment support agencies and representatives of educational institutions.

The group evaluated preliminary themes and created action items in small groups. The results of the forum are presented in a table format, with the priorities ranked most highly at the top of the chart.

Theme and Ranking	Comments on Actions
Increasing opportunities for local education/training access **Vote: 49**	Create courses – relevant short term tiered approach
	Accountable funding to student institutions, consistent and long term at all levels
	Transportaiton to get students to and from campus for training and education opportunities in the medium term
	Housing near campuses
	Inter-agency and ministry collaboration as well as industry and educational institution collaboration beginning in the short term and continuing over the long term.
Ensure alignment of education/training programs with business needs **Vote: 48**	Eduction programs shold focus on transferrable core employability areas (literacy, numeracy) and employers should take more responsibility for specialized job specific training /mentorship via apprenticeships.
An improved apprenticeship program that connects the employee /trainee with the employer **Vote: 37**	Partnership building between employers, educators, provincial and federal government
	Leaders from local government write letters and advocate for changes by ITA and Industry that facilitate apprenticeships.
	Connect industry with ITA to better plan for apprenticeship placements
	Promote apprenticeship programs in local high schools
	Coordinated training delivery within the different communtiies (between communtieis and post-secondary), this will eliminate some of the competition between communities for trades training
Promote the region's assets to strengthen local employers' success in recruiting and retaining suitable employees **Vote: 33**	In the short term, encourage small business to take root by providing reduced rent on vacant buildings
	Promote the region's assets and work on the others such as decent shopping and service training
	Too many monopoly-like businesses, introduce competition
	Affordable housing is critical to the future of our communities
	Improved medical services
	Viral advertising
	Social media
	In the medium term, fair share of natural resource revenues to rebuild our infrastructure.
	In the long term, develop community vitality
Continue to strengthen relationships with first nations people to enhance labour force participation **Vote: 33**	Pre-employment programs for literacy numeracy
	Life skills coach training imbedded
	Employers and potential employee meet to explain expectations
	More complete transition to the world of work
Develop a retention strategy targeting youth AND inspiring work ethic and shifting priorities for younger generation of the workforce **Vote: 26 and 28**	Keep the adults here and provide better amenities (health care) because if the family stays the youth will likely stay.
	Create a positive community environment in high schools
	Help make youth aware of employment and other opportunities in the region
	Support employers in providing training for employees to help retention
Develop an attraction strategy to ensure local employers have access to a skilled labour force that meets talent demand **Vote: 28**	Government teaming up with employers to hire "unskilled" or not fully skilled employees to provide an income supplement, where the employer pays minimum wage and the government tops up wages to be more competitive and compensate for loss of employer time in training
	Employers working with training institutes to mentor or support apprenticeship students as they exit their trainings to provide employment

Advance regionl and local economic development initiatives to create and sustain local jobs **Vote:21**	Improved local communication among EDOs to promote what opportunities there are here.
	Foster entrepreneurship at the high school level and post-secondary; educate communities, colleges, schools and financial institutions where a job sustains a person, a business can sustain many people and families
	Identify upcoming niche markets and promote them in the area
	Have industry and resource projects tell the community what they need to prepare
	Find out, beyond industry what other jobs or needs there are such as auto mechanics and supply stores. They may not be many in number but they are important to communities
	Need an avenue to communicate local jobs, as well as local services and store opportunities ie. Day care needed, or café needed or fishing guides needed
Improve information about the labour market **Vote: 7**	Not prioritized by the group

6.6 Research Paper 6: First Nations communities discussion

The interviews with First Nation Communities are summarized by question, and are followed by some brief comments about First Nation workers and communities from the individual interviews. Although a significant effort was invested in reaching out to each First Nation community by formal letter, offer of personal interview and repeatedly by phone, only six stakeholders were interviewed. Those interviewed include First Nation representatives, and stakeholder representatives that work with First Nation people and communities as their primary area of responsibility.

6.6.1 First Nation Communities and Liaison Interviews

1. What do you perceive as significant challenges for RDBN currently? In the future?

One of the most frequently mentioned challenges is the strength of relationships between First Nation communities and non-First Nation communities. There needs to be continuity in relationships to build trust and co-authoring initiatives is the only way to work with First Nation communities. Understanding engagement protocols has been an important step for First Nations, and several communities are developing them.

The education levels in First Nation communities and in the region in general are not high enough to meet the need for certain types of employment. And yet, many band members have difficulty finding and maintaining entry level employment, even after graduating from a training program.

In general, it is difficult to find talent to meet the needs of the projects currently happening in the region. Even the basic employment skills such as timeliness, safety and proper supervision do not always happen. This causes delays and failed initiatives or businesses.

The needs across the region are very different, as are the needs of First Nation communities and members across the region. The relationships between communities and local First Nations will be very different; there are different cultures and traditions across the Regional District.

One of the great challenges is that many people want to do something positive to support the community but really are at a loss as to what to do that will make a difference, or don’t have the tools and understanding to be effective.

2. **What changes could the training sector support that would make a positive impact on the region?**

The College (CNC) is doing a lot to support relationship building by having an engagement protocol and by offering cultural workshops. The “Mentor me” program has been quite successful. There is also a soup and bannock meal on Wednesday, another way of bringing culture into the school.

More daycare and babysitting would be helpful for students. Also, some counselors who understand First Nations cultures would be helpful, and this is being investigated.

It was suggested that helping students get to a job site and see it, so that they are prepared for the experience once they are hired and have students spend time in a camp with other students would be beneficial.

3. **Is student retention and program completion a concern? If yes, what factors would encourage students to complete and graduate?**

Financing for post-secondary programs is a significant concern. While students living on a reserve may receive some support for training costs the application process to receive support from the band can be lengthy, and may not include funds for living expenses. Funding can also run out before all requests for funding in a particular year are granted, and there is a priority placed on supporting students who are already in a program until they complete. Band members living off reserve may not benefit from the same funding opportunities. Community members are often using food banks, for example. If a course is only available in a larger city, the expense of accommodations can be substantial; students often also have family responsibilities that limit their ability to travel for training.

High school completion is a concern, and if students complete they often don’t complete grade 10 math by substituting other credits to graduate. This can limit education options later in life.

Some communities find that retention in trades training programs is not bad. If a student is determined to complete the program they generally complete it. Students sign up but not show up for the course. If students attend classes they generally complete it.

4. **What training programs are most relevant in the local area to prepare the future labour force?**

There are a variety of training support programs available to First Nation workers, however each program has its limitations. There is not much flexibility for communities to meet needs as they arise. For example, a program may cover tuition costs.

Bladerunners is a good program, as is Mentor me and Trades Access (BCIT) is starting in September 2013. More life skills training programs would be useful, as would safety certifications, grade 10 and 11 math upgrading.

Community Futures programs are cited as an organization dedicated to supporting entrepreneurship.

5. **What are some of the key barriers for aboriginal students accessing higher education in the region? What about employment?**

The relationships between the business community and First Nations communities are sometimes very good and other times non-existent. Increase the number of these relationships and their quality would greatly improve employment prospects. A better way to share information about First Nation work culture would help retention and further develop these relationships as well. It is reported that many businesses do not post jobs that are available, creating additional barriers to hiring.

Addictions and mental health concerns are frequently identified as a barrier for all aspects of participating in the economy, and leading a balanced life. A lack of local facilities and services is identified to handle the needs in communities and in First Nations. In addition, a lack of unity from different groups in the community in advocating for these services is preventing them from being established. Life-skills programs would also support people as they work towards training. Some communities are pursuing this but it is expensive and funding is not in place.

Transportation is one of the greatest challenges facing band members. Transportation to and from reserves can be significant and many First Nations people do not have access to a means of transportation or a driver's licence, or both.

Many residents decide not to pursue post-secondary because it is not part of the culture or family life of many residents. This is true in First Nation communities as well as other residents of the Regional District. Some communities have relied on traditional, seasonal activities to support their livelihood for generations; activities such as harvesting mushrooms, hunting etc.. it is a significant transition into the world of shift work, which is not always culturally accepted.

One of the barriers to First Nations training is First Nations employment during studies. It can be difficult for students to find and keep employment to sustain their living expenses. Some students are successful in securing work while others struggle to obtain and retain employment. There seem to be specific businesses that have First Nation workers and others that don't. If the manager or owner has good relationships with the First Nations community that seems to make a difference in terms of their success in hiring and retaining staff.

A less discussed issue is the relationships between First Nation students of different communities on campus and in the workplace. The relationship between youth from different First Nation communities can be strained and cause rivalries that can ultimately affect performance.

First Nations people tend to have difficulties when separated from their community. This can lead to worker retention challenges if workers need to live on site for a job. Hiring workers in pairs or groups so that community members can support each other living away from their community can help with this issue.

6. Are there any opportunities for businesses, training/education institutions and First Nations to collaborate on their labour needs? In what areas?

Help band members get their first job, or their first job in a new field. Funding programs that support employers who are willing to hire inexperienced workers would address some of the challenges band members face in securing employment.

First Nations business development is an important area that could use support. There are not many First Nation run businesses in our communities, and there are a lot of talented people who operate out of their homes. Some of the challenges in this area include the confidence to start a business, financial knowledge and management experience.

One job posting website for our whole region would be helpful, as not all of the postings are received at the band office.

More remote learning opportunities would help First Nation communities offer training on-site. Not many communities have the capability for this technology. More simulation equipment is recommended to support learning to use equipment without the potential cost of learning mistakes on the job.

Natural resource projects often commit to hiring First Nation people as part of negotiations, which supports training towards guaranteed employment. This is the new standard to support First Nations employment; it prevents the disappointment of going through training and not securing a job.

There are new opportunities emerging with respect to community forest licences and economic development corporations. If everything moves forward as planned, First Nation managed harvesting and processing projects could result that support local employment.

7. Finally, are there one or two key priorities that you'd like to convey to the project management committee?

Here are comments on this question directly from those interviewed.

- If I had to pick a priority it would be for businesses to meet with students and youth and see what opportunities there might be for them to hire First Nation people. It would be nice to see more First Nation people employed with municipalities and with the Regional District. There are a few at the college, but there could be more. An effort needs to be made in this area.
- A regional coordinator that can act as a liaison and learn First Nation cultures and concerns over an extended period would greatly support relationship building, they could also coordinate requests for information and participation from bands so that they are not overwhelming.
- There are many bad feelings between these communities and First Nations, and it will be a long process to get over these past experiences and build new relationships.
- If people at all levels of this conversation and on both sides could just try to be polite and understand each other, it would make a big difference.
- Invest in addressing workforce challenges for the long term; the long term initiative will be the successful initiative.
- Build relationships between businesses and First Nations people, help workers understand the need to speak clearly, dress well, and answer questions promptly. Employers need to listen to their staff, build trust with employees and understand their cultural background and associated responsibilities. It is a long term challenge to help First Nations people to adapt to the workplace and help employers understand the culture of First Nations people and create a workplace that workers can be confident and comfortable in.
- The Regional District needs to appreciate that First Nation communities are over-taxed, with limited staff and limited capacity they may be dealing with 8 resource companies all pushing for agreements. There is often simply not enough capacity to take on initiative that are not intrinsic to the needs of the community and the community feels ownership for.

6.6.2 Individual Interview Comments

The perspective from individual interviews is captured as follows.

The skills of First Nation workers were mentioned often in business interviews, with great variation in response. Some companies appear to have great success in hiring and training First Nation workers. These firms report a positive relationship with local communities and in some cases, specific agreements to hire First Nation workers. Some of the individuals criticised post-secondary institutions for granting certificates to students who had not demonstrated sufficient competency, creating a group of certified workers that have difficulty securing work. Other employers reported no success in hiring First Nation workers, stating performance, timeliness and work ethic as challenges. It should be noted that the similar challenges were mentioned with respect to non-First Nation workforce. Some employers are unsure how to approach hiring and managing First Nation employees, and feel they may not be taking advantage of this part of the workforce.

Another local business owner who is not First Nation, suggested that there are professions or courses of study that are relevant to First Nation's current interests that could be better explored through local courses of study. For example, access to land and other legal considerations, natural resource and pipeline negotiations, environmental protection and remediation, or water management and environmental monitoring. A challenging question was put forward, how can these current needs and/or interests be addressed through training?

6.7 Research Paper 7: Fly In / Fly Out Community Assessment

Fly-in/fly-out is a work arrangement in which "workers are flown into a mining facility from adjacent communities to spend a fixed number of day on-site followed by a fixed number of days at home" (McDonagh, 2010, p.1). Put in another way, fly-in/fly-out is a term used to describe workers that work in one region and reside in another. For the remainder of this chapter fly-in/fly-out workers will be referred to as mobile workers which supports the notion that they 'commute' across regions to work but that they are able to shift between employers and job sites with relative ease.

This work arrangement, which began several decades ago, has been growing in Canada. Perhaps one of the most notable instances is in the Alberta Oilsands where the number of non-resident or fly-in/fly-out workers in the Regional Municipality of Wood Buffalo has increased from 3,568 in 1996 to 26,284 in 2008.[44] The phenomenon is being experienced across Canada's north in communities in Yukon Territory, Northwest Territories, Nunavut, Newfoundland and Labrador, Quebec, Ontario, Saskatchewan, Alberta and British Columbia. Other nations with strong resource economies, notably Australia, have also been experiencing a growing trend in fly-in/fly-out work arrangements.

Labour shortages and strong and rapid growth in demand for labour in the construction, mining and petroleum production sectors have further encouraged fly-in/fly-out as a solution to delivering labour to remote areas. In Canada, the overall Northern metal and non-metallic mineral output is expected to grow by 91% from 2011 to 2020.[45] Northern British Columbia, where output is expected to increase by 300%, is expected to see the fastest expansion of all the Northern regions.[46]

Fly-in/fly-out work arrangements have positive and negative implications for employers, employees, 'host' and 'source' communities. This chapter of the report will look at the motivations, from the employer and employee perspective, of fly-in/fly-out work arrangements as well as the implications for 'host' communities or those communities home to the resource extractive industry and hosting mobile workers from other regions. The chapter will include a literature review as well as findings from an online employee survey completed by mobile workers in the Regional District of Bulkley Nechacko.

[44] Storey, K. (2010). Fly-in/fly-out: Implications for Community Sustainability. Sustainability 2010, 2, 1161-1181.

[45] The Conference Board of Canada. The Future of Mining in Canada's North: Report January 2013, Ottawa, 2013

[46] Ibid

6.7.1 Employer Motivations

Flexibility and downside risk

Employers in the resource sector operate in volatile and uncertain environment. The global economy, commodity prices, competition from other countries and local operating costs all influence their production levels and profitability. At the same time, the resource they are extracting is a limited resource. Because the resource deposits will eventually be exhausted, mining and resource companies often choose to halt of slow production when profitability declines. They have a vested interest in maximizing their return from a limited resource.

Employers assume downside risks when they support workers to move to their place of work. Should employees lose their jobs, employers might become responsible for retraining or resettlement. This is a significant financial risk to a company that frequently increases and decreases its workforce when needed.

Greater access to labour force

Fly-in/fly-out work programs increase the flexibility of the labour force for these employers allowing them to increase or decrease their workforce as needed. As the communities in which they operate are typically smaller, it is difficult for these communities to increase the required labour supply in a short timeframe. By operating a fly-in/fly-out program companies are able to source workers from across Canada and around the world. This opens greater opportunities, especially when seeking highly skilled workers.

6.7.2 Employee Motivations

Describing the typical mobile worker

Understanding the typical mobile worker will assist in understanding their motivations for seeking this type of employment and the barriers present to attracting them to reside in their host employment community. Several surveys conducted with mobile workers provide a profile of who is attracted to this type of work arrangement. Overwhelmingly, those surveyed are male over the age of 40. A James Cook University research study of mobile workers residing in Cairns, Queensland interviewed 197 workers transiting through the Cairns airport to and from work sites in Queensland and Australia's Northern Territory. 98.7% of those completing the survey were male with an average age of 41.2.[47] While the study does not claim that their survey is representative of the entire mobile workforce, 78.9% of respondents in a similar workforce study conducted by URS Australia were men with an average age of 40.7.[48] A study conducted in Yukon by Ecofor natural and cultural resource consultants interviewed 113 mobile workers, 89% of which were men with an average age of 47.[49] While the most prevalent age bracket for the study in Cairns was 30-39, the most prevalent age bracket in Yukon was 45-54. Both Australian studies and the Yukon study found that respondents were typically married, or in a long-term relationship, with children.

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[47] Welters, R., Lynch, P., Pryce, J., Blackman, A., Murphy, L. (2013). FIFO workforce in Cairns: Perspectives from Cairns based FIFO workers employed in North-West Queensland and Groote Eylandt in Northern Territory. James Cook University.

[48] Ibid

[49] Herkes, J., Mooney, J., Smith, H. (2013). Exploring residency in Yukon: A review of the barriers, benefits and incentives to residency in Yukon explored within the current context of commuter mines. ECOFOR natural and cultural resource consultants.

The James Cook University study of mobile workers residing in Cairns found that 17% of respondents held jobs in the managers and professionals category while 43% of respondents held jobs in the machinery operators and labourers category. This is in contrast to the survey conducted of workers in the Regional District of Bulkley-Nechako of which 60% of respondents identified as holding management or professional jobs. Additionally, 47% of responses in the Bulkley-Nechako survey hold a university degree. While this may suggest the survey conducted in Bulkley-Nechako is not representative of the mobile workforce it might also be a reflection of the capacity of the local workforce and the nature of the jobs being 'imported'.

Employee barriers to residency

In understanding an employee's barriers to residing in their place of work it is important to understand both what motivates them to seek this type of employment and what prevents them from desiring to reside in their place of work.

Time with family

In surveys conducted with mobile workers, respondents indicate they enjoy the time off associated with work arrangement. Frequently, fly-in/fly-out work arrangements typically have extended periods of time at work followed by an extended period of time at home. In Yukon, surveyed workers followed a 'two week in/two week out' schedule. In Cairns, 40.1% of respondents followed a 'seven days in – seven days out' while 49.7% followed 'eight days in – six days out'.[50] Work schedules might be dependent on the distance traveled by the workers, although this is not certain. Time off associated with the work arrangement was the most common response to benefits of working in a fly-in/fly-out work arrangement in the Yukon. Half, 50% of responses, in the Yukon study enjoyed the time associated with the work arrangement.[51] This time off allows workers to spend more time with friends and family, when they are at home, than the typical worker. In some instances, these days off allow workers to accomplish more tasks around the home or even start their own business.[52] It should be noted, however, that some mobile workers feel a sense of isolation and disconnected from their family while at work.

Additionally, the time spent traveling to and from work takes away from their time with family while off shift. This travel time can be significant. In Bulkley-Nechako, approximately 50% of respondents indicated they traveled more than six hours to their work. When selecting responses self-identifying as fly-in/fly-out workers, all 18 respondents travel at least five hours to work. Eight respondents (44%) notes traveling at least 10 hours to work. Given that most respondents (76%) live in southern British Columbia and that 75% of respondents living in southern British Columbia travel by plane and company bus to the work site, air services to Bulkley-Nechako or Prince George might be limited.

Salary and Compensation

Mobile workers frequently earn more than other workers, or earn more than they could in their region of residence. In Cairns only 6% of mobile workers surveyed earned less than $80,000, compared to 84% in the broader Cairns region.[53] In Yukon, workers responded that pay and having their employer cover basic

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[50] Welters, R., Lynch, P., Pryce, J., Blackman, A., Murphy, L. (2013). FIFO workforce in Cairns: Perspectives from Cairns based FIFO workers employed in North-West Queensland and Groote Eylandt in Northern Territory. James Cook University

[51] Ibid

[52] Ibid

[53] Ibid

living costs while they were at work were benefits of a fly-in/fly-out work arrangement. Fly-in/fly-out work contracts usually cover costs of transport to and from the worksite as well as costs for food and accommodations eliminating and 'additional' cost to the worker and, perhaps, allowing the worker to save a considerable amount of money.

While overall compensation for mobile workers may be considered a benefit, it should be noted that the resource extraction industry is associated with higher wages regardless of the work arrangement. A survey of mining wages across conducted across Canada in 2012 estimates that wages in the mining sector were 20% - 30% higher than wages in the same occupations in other industries.[54] To some degree, this minimizes the benefit of higher wages offered to fly-in/fly-out workers.

Social Connections

Feeling a sense of 'place' in their home community is one of the primary barriers to mobile workers taking up residence in their place of work. This sense of place includes relationships with family and friends as well as social connections to clubs and activities they partake in at home. Given that the typical mobile worker is in a relationship with children, the sense of place felt by spouses and children is also a significant barrier to relocation. Family or friends was selected by 28.8% of respondents as a barrier to moving closer to work by workers in Bulkley-Nechako.

Cost and availability of housing

In a study of the mobile workforce in Yukon, it was found that a significant number (more than 70%) of respondents selected 'housing prices' as a barrier to residence. In addition, more than 40% selected 'housing availability' as a barrier. Interestingly, respondents in Bulkley-Nechako did not comment on the cost or availability of housing. This might be because housing is less expensive in Bulkley-Nechako than in other regions in British Columbia. As can be seen in the figure below, shelter costs in Bulkley-Nechako are lower than other communities in British Columbia when measured by cost of ownership or cost of rent.

FIGURE 53: COMPARISON OF SHELTER COSTS IN BRITISH COLUMBIA

	Bulkley-Nechako	Prince George	Kelowna	Vancouver
Median monthly shelter costs for owned dwellings	$676	$986	$1064	$1119
Average monthly shelter costs for owned dwellings	$817	$1011	$1207	$1462
Median monthly shelter costs for rented dwellings	$627	$749	$1001	$1004
Average monthly shelter costs for rented dwellings	$659	$785	$1089	$1089
Median value of dwellings	$200,418	$229,925	$415,710	$752,016

Source: Statistics Canada 2011 National Household Survey adapted by Millier Dickinson Blais

[54] CostMine. 2012 Survey Results of Canadian Mine Salaries, Wages and Benefits. 2012

Access to amenities

Survey respondents in both Bulkley-Nechako and Yukon suggested relatively small size and lack of amenities in the host community were barriers to residence. In Bulkley-Nechako 13.7% of respondents suggested the host community was too small. Following this line of argument, 20.5% suggested the host community lacked amenities in general while 15.1% said the host community lacked recreation facilities. Similarly, almost 60% of respondents in Yukon suggest the host community's distance to a larger centre was a barrier to residency. Limited access to quality education, child care, health care, policing and municipal services are amenity tagged barriers to workers considering residency

Climate

While weather was selected as a barrier to residency by almost 70% of respondents to the Yukon based survey, only 8.2% of respondents working in Bulkley-Nechako suggested climate was a barrier to residency. Weather is a subjective factor and it could be argued the climate in Bulkley-Nechako is more appealing than the climate in Yukon.

Cost of living

While Cost of living, including the cost of food, energy and fuel, was cited by between 45% to 50% of workers in Yukon as a barrier to residency, this was not a factor for workers in Bulkley-Nechako. Again, this might be these basic items cost no more in Bulkley-Nechako than elsewhere. While cost of fuel might be higher in Bulkley-Nechako (according to www.gasbuddy.com on the day the comparison was conducted) other costs of living investigated including the purchase of consumables was very similar in Bulkely Nechako to other regions. As an example 'consumables' were estimated to cost $18,586/year in Bulkley-Nechako and $13,964 in Vancouver. On a weekly basis this is $357/week in Bulkley-Nechako versus $269/week in Vancouver.

Other barriers to residency

The employee survey conducted with mobile workers in Bulkley-Nechako also suggested that job security (6.8%) and no desire to move (4.1%) were also considered to be barriers to local residency. Fly-in/fly-out workers have the flexibility of being able to reach a number of work sites from their current place of residence. This might not be true if they were living in Bulkley-Nechako. These workers are employed by a volatile industry and they understand their jobs are not secure. In fact, workers surveyed in Cairns were twice as likely, compared to the rest of the population, to think they will lose their job in the next 12 months.[55] Workers that aren't sure about the permanency of their job are much less likely to move for that job.

6.7.3 Potential incentives to move

In the survey conducted with mobile workers in Bulkley-Nechako, 55% of respondents stated they would not consider moving. This is higher than the approximately 35% of respondents in Yukon who stated they would not move.[56] It is apparent that a large percentage of these workers will not consider moving to

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[55] Welters, R., Lynch, P., Pryce, J., Blackman, A., Murphy, L. (2013). FIFO workforce in Cairns: Perspectives from Cairns based FIFO workers employed in North-West Queensland and Groote Eylandt in Northern Territory. James Cook University

[56] Herkes, J., Mooney, J., Smith, H. (2013). Exploring residency in Yukon: A review of the barriers, benefits and incentives to residency in Yukon explored within the current context of commuter mines. ECOFOR natural and cultural resource consultants

Bulkley-Nechako. However, both surveys indicate what incentives would be required for workers to consider relocating.

Financial incentives

In the survey of employees in Bulkley-Nechako, 18% of respondents would consider relocating if they were paid more money. While not directly commenting on income, survey respondents in Yukon commented that they would consider moving if provided a housing allowance (45% of responses), travel allowance (more than 35% of responses) or tax incentives (more than 35% of responses). These responses are aligned with the barriers to residency stated earlier. It is likely that many workers own a home in the current place of residence and might incur financial risks to move. A housing allowance might help them overcome this financial hurdle. Similarly, many commented that connections to friends and family are a barrier to moving and a travel allowance may allow them to travel home and maintain these important connections.

Job opportunities

As previously mentioned, fly-in/fly-out workers are employed in volatile industries. Before relocating, they need to know there are other employment opportunities to them should they lose their job. Additionally, they would need to know their spouse could also secure employment in their new place of residence.

Increased amenities

Many workers stated they were not interested in moving to a smaller town with fewer amenities. Therefore, it makes sense that these workers would consider moving if more amenities were available. In the Yukon survey, approximately 25% of respondents stated they would consider moving if they were offered a higher quality of life.[57]

6.7.4 Implications for host communities

According to McDonagh, the use of fly-in/fly-out work arrangements has led to “the severing of industry ties to the community.” (p. i)[58] Given this strong statement is expected that there are many negative implications for communities hosting fly-in/fly-out operations. However, there are positive implications that will also be mentioned here.

Infrastructure and human footprint

Purpose built resource communities have struggled to keep up with the pace of development. Rapid population growth, such as that experienced in the urban service area of Fort McMurray requires considerable infrastructure investment including water treatment, waste water treatment, roads, hospitals and schools. It is difficult to assign the budget, complete necessary plans and find engineers and construction workers to build these municipal infrastructure projects.

Fly-in/fly-out worker arrangement can mitigate these infrastructure pressures and requirements by placing many of the required workers outside of the municipality’s built infrastructure. However, these camps and work arrangements also place pressure on local infrastructure. Many workers don’t live in camps but rent accommodations or live in hotels in the built up area. In addition, worker camps might require potable water to be trucked in, resulting in pressure on municipal water treatment facilities.

Those focused on long term planning and the environmental footprint of the built environment see fly-in/fly-out work arrangements as a more sustainable option to development. Worker camps can be removed when resource operations cease. Permanent structures in a built up urban environment would be much more difficult to dismantle, repurpose or relocate.

[57] Ibid

[58] McDonagh M. (2010). The end of boomtowns: The rise of fly-in/fly-out mining camps and implications for community and regional development in the Canadian north. School of Community and Regional Planning, UBC.

Social cohesion

The Australian Workers' Union and others have noted that host communities with large mobile worker populations have concerns with safety, cost of housing and access to goods and services by existing residents. Mobile worker populations have been associated with alcohol and drug abuse and higher incidents of crime.[59] This causes existing residents to raise issues related to safety and security.

As not all mobile workers live in camp facilities, these workers can also contribute to price inflation. This is most directly felt in the cost of housing as mobile workers consume available rental properties.[60] Occasionally, mobile workers purchase homes in the locality only for the duration of their employment contributing to instability in the local housing market.

Fly over effect

Perhaps the most discussed concerns with host communities is the 'fly-over' effect where economic growth and opportunities pass over local municipalities. There are several contributors to the fly-over effect that result in missed opportunities.

- Aside from their ability to levy property and business taxes, local municipalities and regions receive provincial per capita funding based on their permanent resident population. Mobile workers that do not consider the local municipality to be their regular place of residence are not counted in the per capita funding model. With respect to the infrastructure concerns listed above, municipalities do not receive required funding to build or improve necessary municipal infrastructure.[61]
- Fly-in/fly-out workers spend much less in the local host community than full-time residents. Mobile workers may purchase some basics such as groceries and drugstore items as well as access food and accommodation services; however, they are likely to do the bulk of their spending in their home community. Additionally, worker camps might source their supplies outside of the local community and ship in these goods from larger urban centres. This lack of spending by mobile workers and worker camps inhibits the longer-term economic viability of local business owners and limits the potential for growth.[62]
- Given that employers are able to source the skills they need from distant communities anywhere in the country or outside the country, it is less likely these employers will invest in local worker training programs or other social infrastructure to develop local workers.[63] This reduces the likelihood youth will remain in the community and hampers the long term sustainability of the community.

6.7.5 Fly In / Fly Out Employee Survey Results

Employers of fly-in fly-out workers were specifically approached and several employers supported the effort to reach out to employees. An online survey was conducted to better understand the perspectives of the fly-in fly-out workforce. The survey garnered a total of 36 responses.

1. Do you work/have you worked in the Regional District of Bulkley-Nechako?

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[59] Storey, K. (2010). Fly-in/fly-out: Implications for Community Sustainability. Sustainability 2010, 2, 1161-1181.

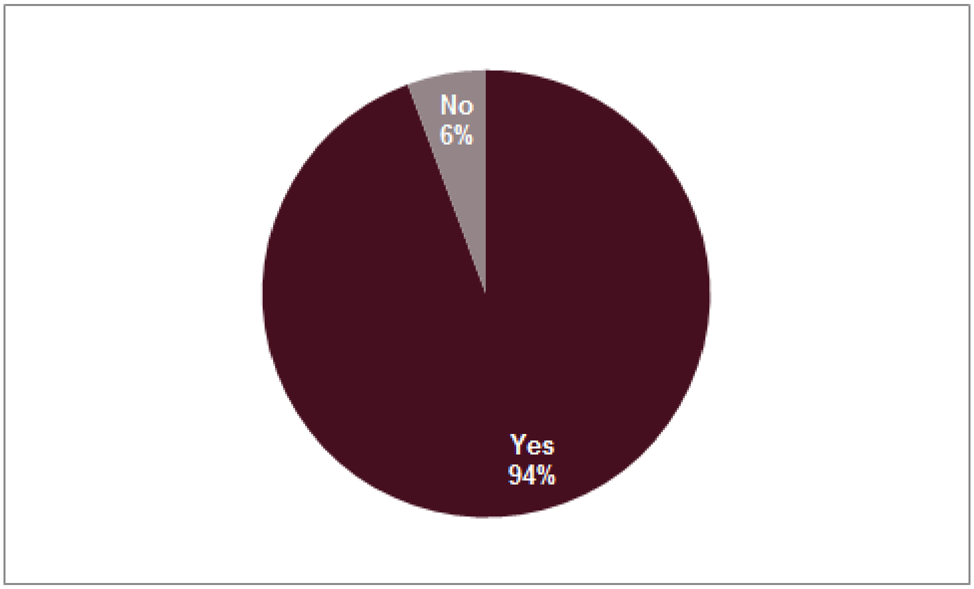
[60] Inquiry into the use of 'fly-in,fly-out' (FIFO) workforce practices in regional Australia. Australian Workers' Union. October, 2011.

[61] Storey, K. (2010). Fly-in/fly-out: Implications for Community Sustainability. Sustainability 2010, 2, 1161-1181.

[62] McDonagh M. (2010). The end of boomtowns: The rise of fly-in/fly-out mining camps and implications for community and regional development in the Canadian north. School of Community and Regional Planning, UBC

[63] Inquiry into the use of 'fly-in,fly-out' (FIFO) workforce practices in regional Australia. Australian Workers' Union. October, 2011

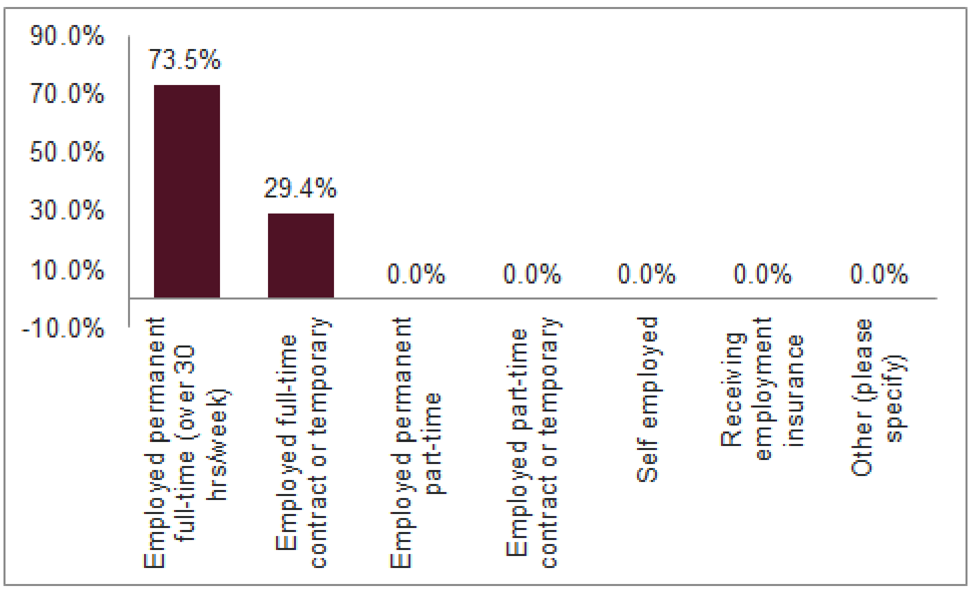
FIGURE 54: PLACE OF WORK, PAST OR PRESENT, OF SURVEY RESPONDENTS



Thirty-two responses confirm that 94% of the employees who took the survey are currently employed in Bulkley-Nechako or have previously been employed in the region.

2. What is your employment status?

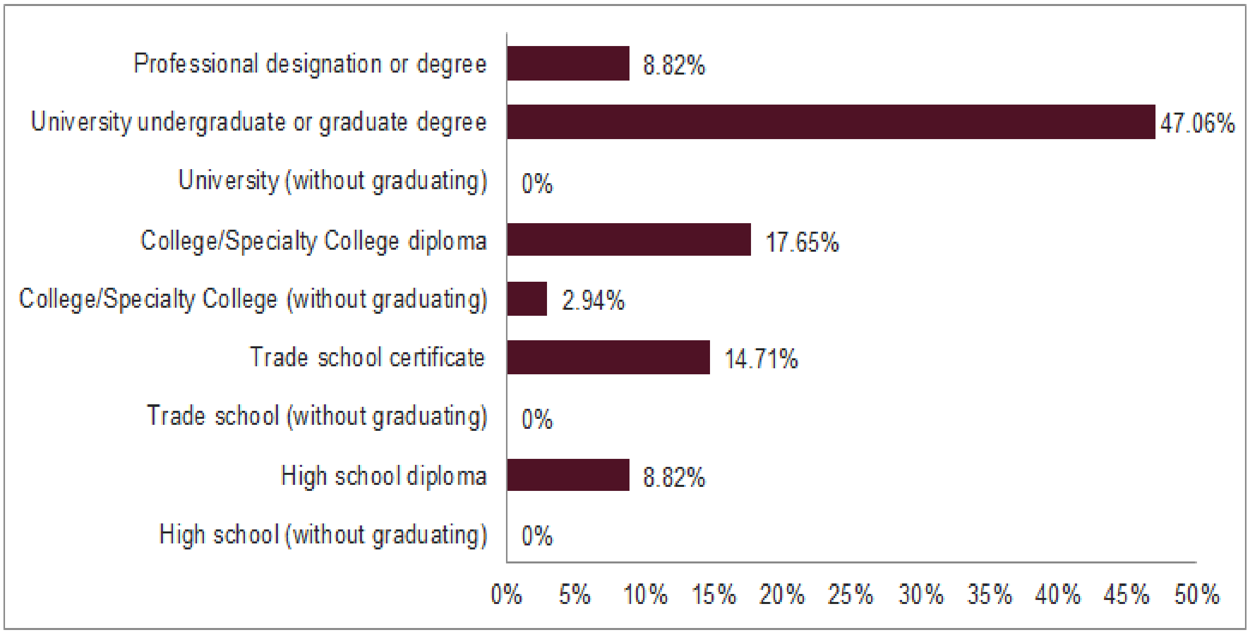
FIGURE 55: EMPLOYMENT STATUS OF SURVEY RESPONDENTS



Of the 34 employees responding to the survey, 74% were employed full time on a permanent basis, while 29% were employed full time on a contract basis.

3. What is the highest level of education that you have attained?

FIGURE 56: HIGHEST LEVEL OF EDUCATIONAL ATTAINMENT



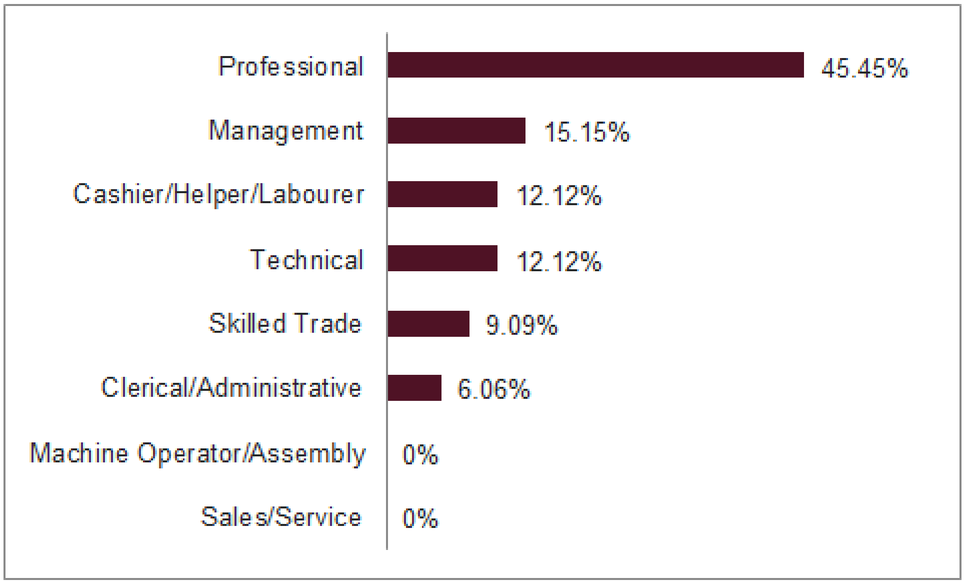
Of the 34 respondents to this question, 47% are university graduates, 18% are college graduates and 15% have a trades certification. A further 9% have a high school diploma and 9% have a professional designation or degree.

This level of education is above the overall level of education in RDBN as a whole.

4. How would you classify your current/most recent job?

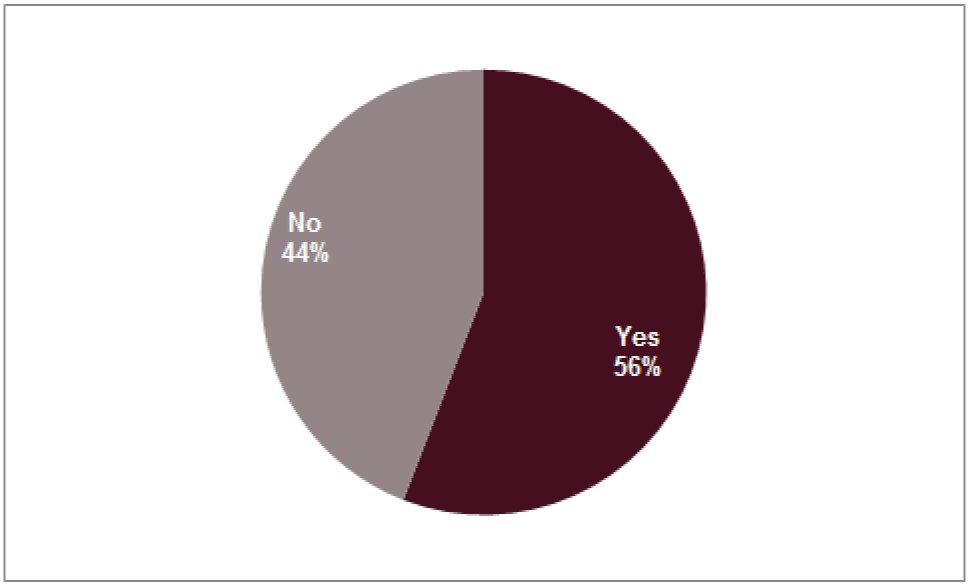
Of the 33 individuals who responded to the survey, more than 50% are either professional workers or managers. Labourers, cashiers or helpers represent 12%, technical workers a further 12% and skilled trades of 9%.

FIGURE 57: DESCRIPTION OF RECENT EMPLOYMENT



5. Are you a fly-in fly-out (FIFO) worker?

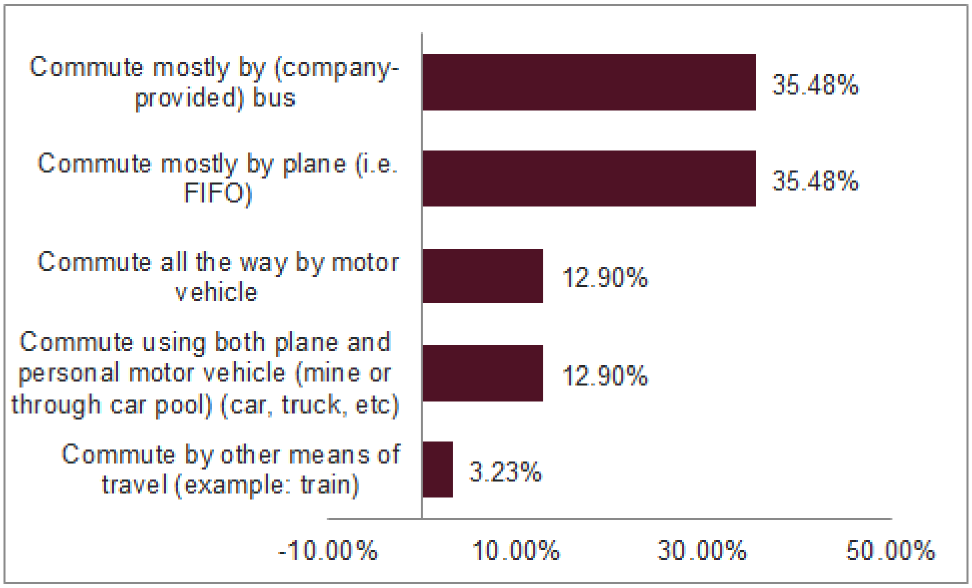
FIGURE 58: STATUS OF WORKERS AS FLY-IN FLY-OUT



Of the 34 respondents, 56% are fly-in fly-out workers. Part of the reason for the large percentage of workers who do not identify as fly-in fly-out could be that they are driving from outside the Regional District.

6. How do you get from home (your base when you're not on roster) to work?

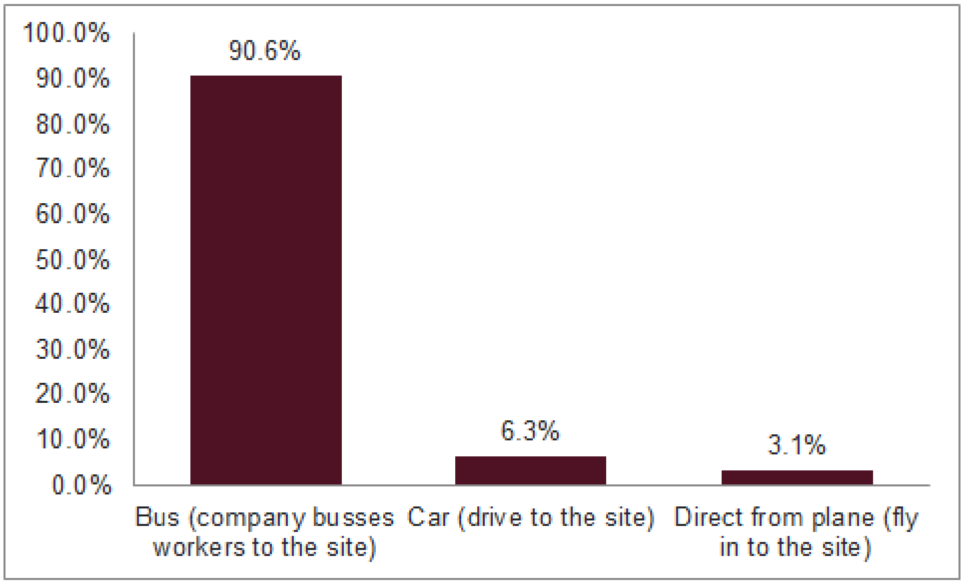
FIGURE 59: COMMUTING PATTERNS OF FLY-IN FLY-OUT WORKERS



Of the 31 respondents, 48% complete most of their commute by vehicle, either their own vehicle or a company bus. A further 35% of workers complete the majority of their commute by plane, while 13% commute by both plane and personal vehicle.

7. How do you get to the workplace accommodation site?

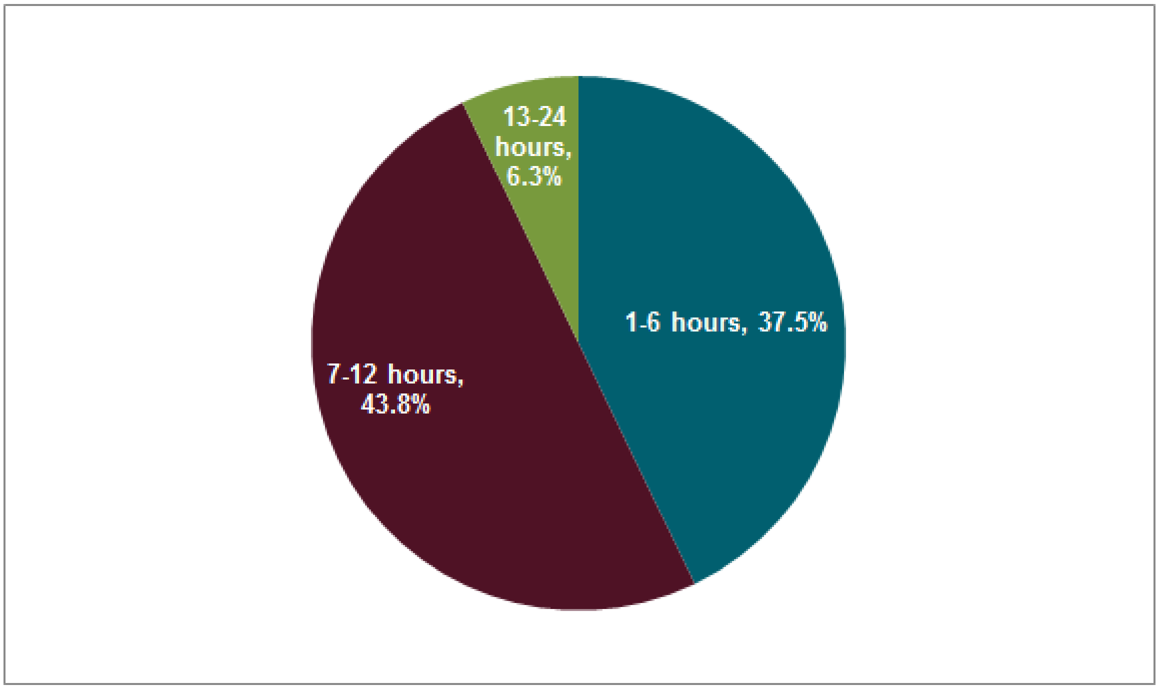
FIGURE 60: MEANS OF ARRIVING AT THE WORKSITE



Of the 32 respondents, 91% reach their final destination by bus.

8. How long does it take you to travel from home/place of residence to the workplace accommodation?

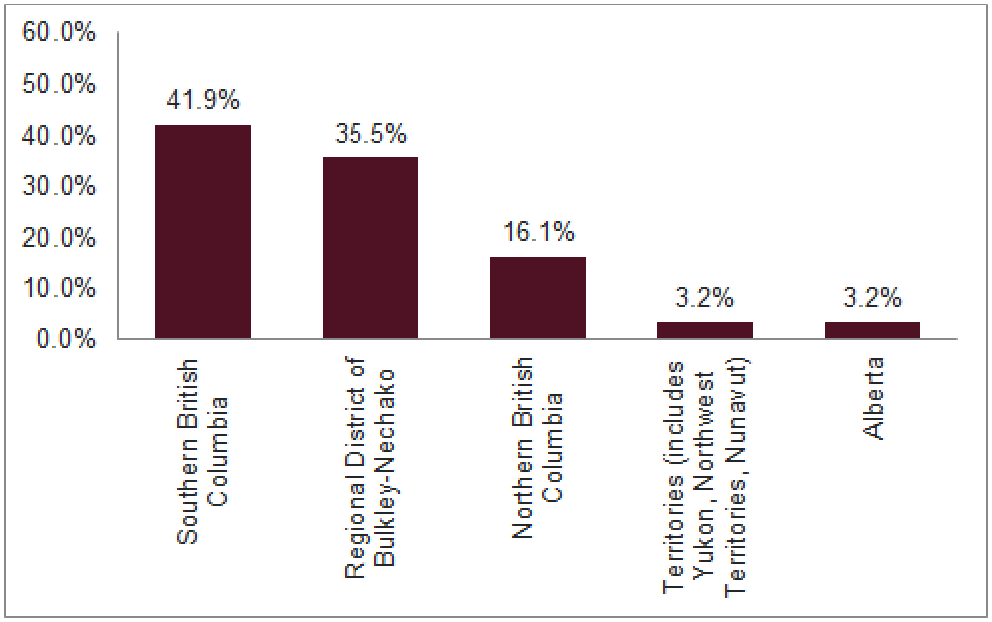
FIGURE 61: LENGTH OF COMMUTE



Of the 32 respondents to the question, 50% travel for seven or more hours to arrive at the worksite, and 6% of these travel for three or more hours.

9. Where is your home/place of residence? Please choose one of the following options.

FIGURE 62: HOME OR PLACE OF RESIDENCE OF EMPLOYEES



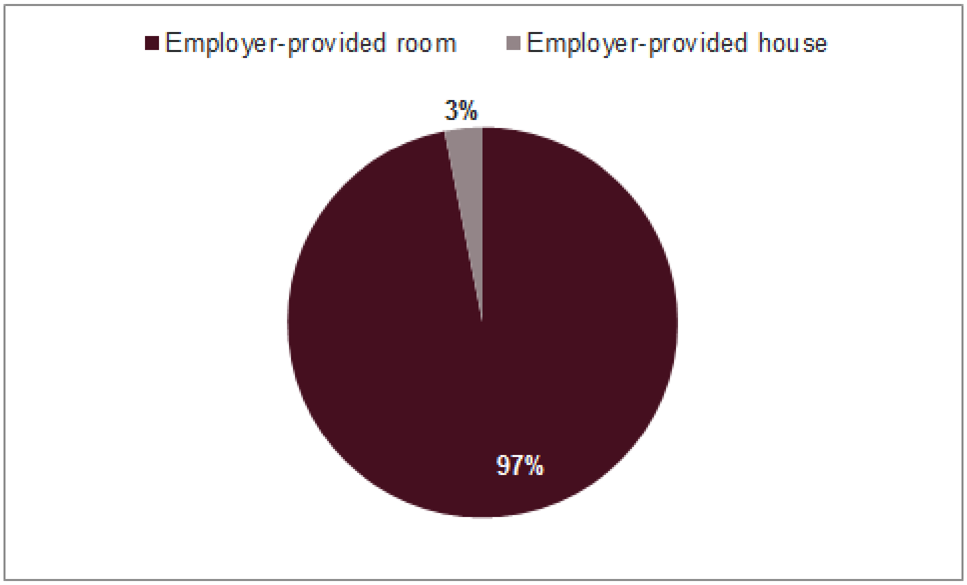
Thirty-one workers responded to share where their home is located, and 42% live in southern British Columbia and 16% live in other areas of northern British Columbia. Of those who responded, 36% live in the Regional District, indicating that a substantial portion of employees surveyed live within the study area.

Those surveyed were asked to specify what community they reside in. The locations mentioned most frequently are all in British Columbia, including Quesnel, Vancouver Island, Prince George, Vanderhoof, and Burnaby.

10. Where do you stay (sleep) while on roster?

Of the 32 individuals who responded to this question, 97% stay in a room provided by their employer, and only 3% stay in a home provided by the employer.

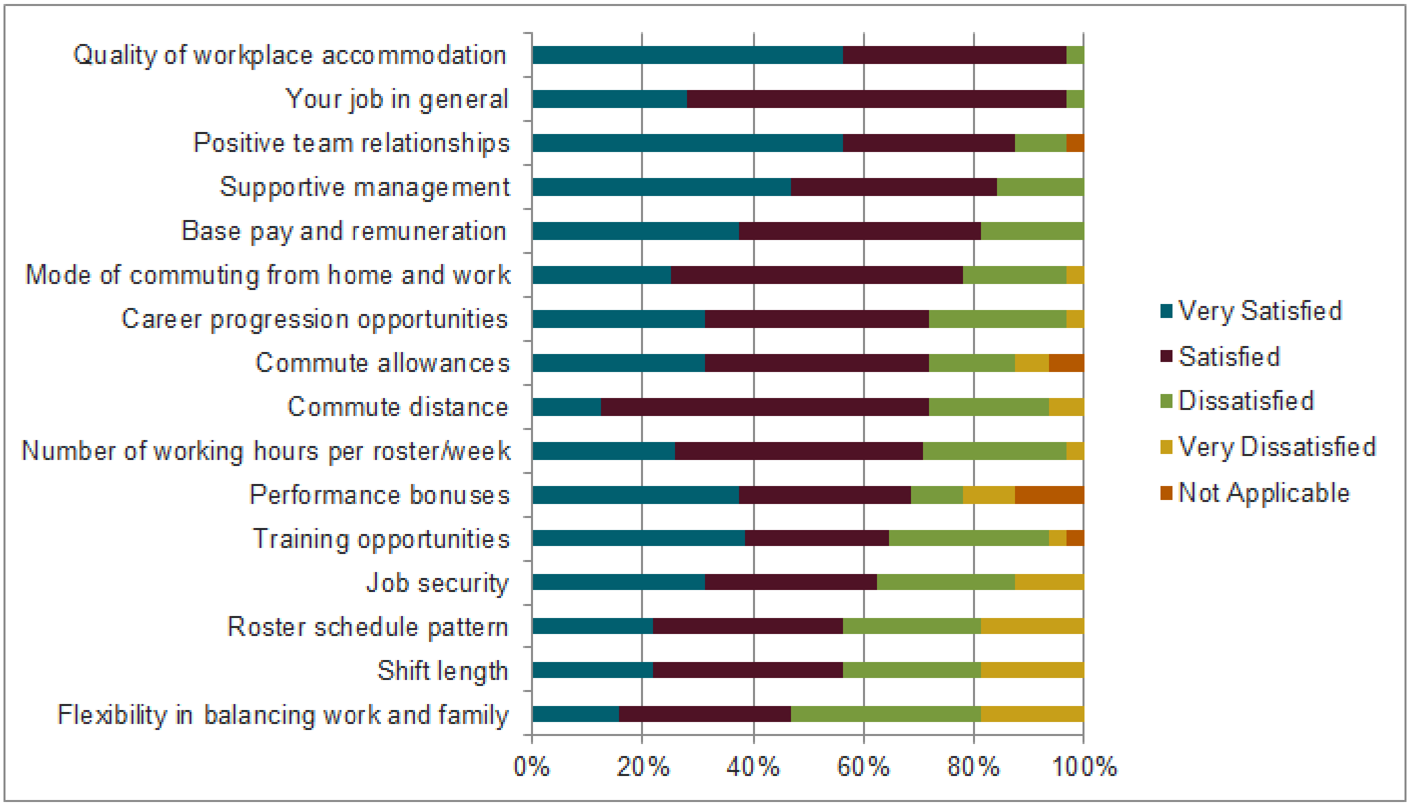
FIGURE 63: LOCATION OF ACCOMMODATIONS DURING WORK



11. How satisfied are you with the following aspects of your current job?

Of the 32 respondents, the areas where employees are most pleased with their job is the quality of workplace accommodation, the job in general, and positive team relationships. The areas where workers are most dissatisfied with the fly-in fly-out work lifestyle are the flexibility in balancing work and family and scheduling, as well as job security.

FIGURE 64: DEGREE OF CONTENTMENT WITH EMPLOYMENT



12. If you work within the Regional District of Bulkley-Nechako but are not a resident, please state why you have chosen to not locate(relocate) to the area?

Eleven employees responded to this question. The low response rate may indicate a lack of interest in becoming a resident in the region or simply uncertainty about what to say in response to the question.

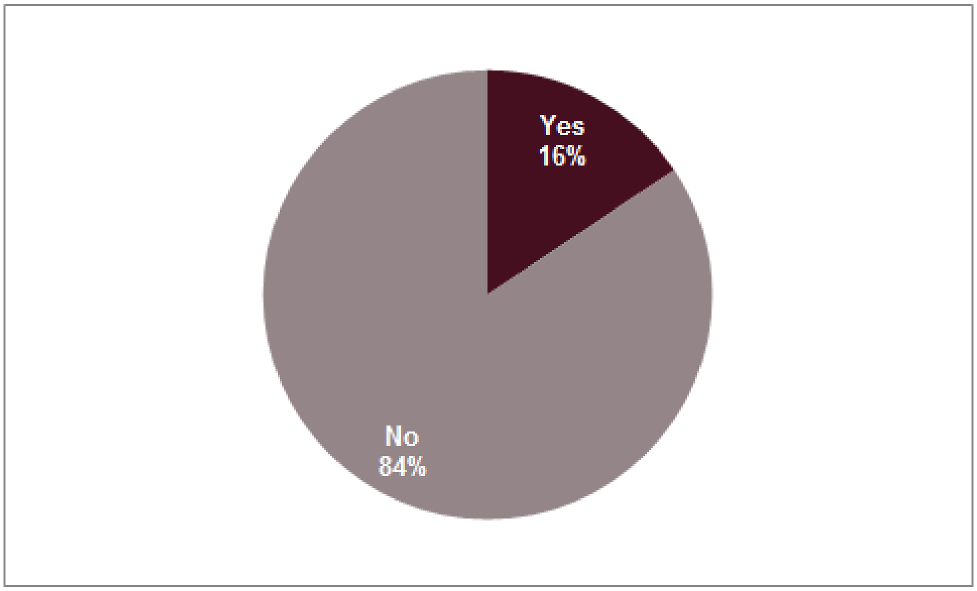
Themes emerging from the comments include:

- **City amenities** (4): Some workers prefer the amenities that are available in large urban centres, such as selection of restaurants, more recreational facilities and programs, to the life of a small town.
- **Family** (4): The location of a spouse and other family is a significant tie to place that is often stated as a reason to stay in a particular community, whether it is another small town or a larger city centre.
- **Temporary work** (3): Job security is a concern for many workers, as their contracts may not be long term; this creates a disincentive to relocate.
- **More recreation at home** (2): In this case, respondents spoke about types of recreation not available in RDBN, such as larger mountains, specific ski hills, and ocean based sports.
- **Ocean** (2): Interestingly a few people simply mentioned they enjoy living by the ocean; places like the ocean are often calming and familiar, eliciting an emotional connection.

The responses to this question do not necessarily indicate gaps that can be addressed directly; RDBN is not going to develop an ocean, for example. This list should rather be viewed as the key issues that need to be addressed to convert temporary workers into permanent residents.

13. Have you ever contemplated moving closer to your work site?

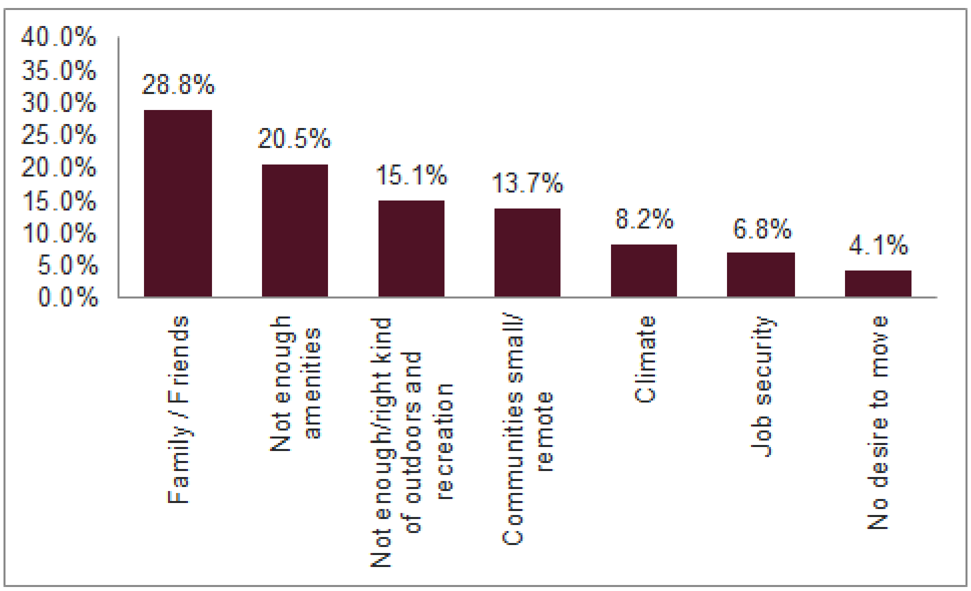
FIGURE 65: CONTEMPLATED LIVING CLOSER TO WORK SITE



Of the 32 respondents, 16%, or approximately six people, have considered moving closer to the work site. This is quite positive, meaning that a number of workers are somewhat open to the possibility of residing in the Regional District.

14. What are the top five barriers/potential barriers to moving to a community closer to your work site?

FIGURE 66: BARRIERS TO MOVING

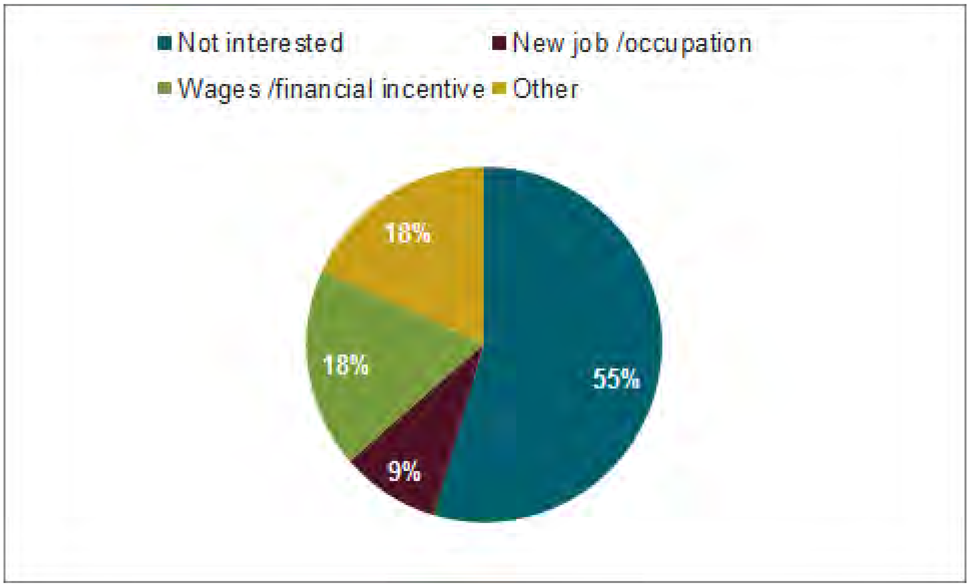


Of the 26 responses received to this question, close to 30% of respondents state that friends and family are a barrier to relocation. The quantity of amenities in the communities are stated as a barrier for approximately 20% of respondents, and 15% are seeking a greater variety or different type of recreation.

The responses to this question suggest that RDBN has a lot to offer that temporary workers value, such as amenities and an environment that supports families and community relationships. Employees report a disconnect in the type of amenities that are available, which should be viewed critically; those responding to the survey may not have enough experience connecting with the community, or experiencing the outdoors to make a fair comparison.

15. What would need to change for you to consider relocating closer to your work site?

FIGURE 67: FACTORS THAT MAY INFLUENCE RELOCATION



Although 55% of the 22 respondents state they would not consider relocating, 18% state that wages or financial incentives would make a difference, and a further 9% state that new employment may encourage relocation.

Appendix A: Training and Education Programs

FIGURE 68: COLLEGE OF NEW CALEDONIA, DESCRIPTION OF COLLEGE PROGRAMMING

Program	Cost/Tuition	Delivery mechanism	Availability	Location	Notes
FASD Advanced Diploma Online	$550.70 per course	Online courses	Fall/Winter	Burns Lake Campus	
Adult Education Centre	N/A	Flexible course schedules (incl. daytime and evening classes) One-on-one, self-paced or group lecture Individual student and employment	Registration Ongoing, classes offered all year	Burns Lake Campus	Designed for the adult learner, the AEC can help Improve reading, writing, math and computer skills, broaden your job options, prepare for exams, complete prerequisites for post-secondary programs, finish high school graduation requirements
Focus program	N/A	Classroom Lectures Work Experience	Registration is ongoing.	Burns Lake Campus	Specialized employment program for adults affected with Fetal Alcohol Spectrum Disorder (FASD). It is offered in a learning environment that is both structured and individualized.
Administrative Assistant Certificate (ABT)	$3,756 (Burns Lake), $3,471 (Vanderhoof)	Classroom Lectures, Computer Lab Work Experience	Fall/Winter	Burns Lake Campus Vanderhoof Campus	1 year program
Social Service Worker Diploma	TBD (Burns Lake), $7,419 for Prince George	Classroom Lectures Practicum	Fall/Winter/Summer	Burns Lake Campus	2 year program
Targeted Initiative for Older Workers (TIOW)	Free program. Training stipend of $70/day in attendance	Classroom Lectures	Fall	Burns Lake Campus	12-week program designed to provide and upgrade skills to work effectively in today's workplace. Accepted students will receive a daily training allowance based on attendance.
Carpentry, Foundation	Entire program: $2,149 (Burns Lake)	Classroom Lectures Practicum	Fall/Winter	Burns Lake Campus	1 year program
Industrial Mechanic (Millwright) / Machinist	Entire program: $1,995 (Burns Lake) $3,225 (Fort St.James);	Classroom Lectures Practicum	Fall/Winter	Burns Lake Campus Fort St James Campues	1 year program
Mineral Processing Operator Certificate (MPOC)	TBD (Burns Lake), $4000.00 (Fort St.James);	Classroom Lectures Field orientation Practical Experiences	N/A	Burns Lake Campus Fort St James Campus	1 semester long program at Fort St. James
Professional Cook Level 1	$2,389	Classroom Lectures Practicum	Fall/Winter	Burns Lake Campus	1 year program
Professional Cook Level 1 & 2	$1,456	Classroom Lectures Practicum	Fall/Winter	Fort St James Campus	1 year program
Aboriginal Early Childhood Education Certificate (AECE)	Entire program: $6,173	Classroom Lectures Practicum	Fall/Winter/Summer	Fort St James Campus	1 year program
Career & College Preparation (CPP) Program	N/A	Classroom Lectures	Fall	Fort St James Campus	This program offers adults from Nak'azdli Band an opportunity to enhance their literacy competencies in order to transition into gainful employment and/or further post-secondary education in trades, vocational or academic programs

Program	Cost/Tuition	Delivery mechanism	Availability	Location	Notes
Community Trades Access Program	N/A	Classroom Lectures	Fall	Fort St James Campus	The object of this program is to deliver a Community Trades Access program to Nak'azdli community members to ensure individuals will be active in the future trades market, and assist in filling the projected BC 'Trades Gap'
Welding Levels A-C	Tuition (C Level) $2584.50	Classroom Lectures Practicum	Fall/Winter	Fort St James Campus	1 year program
Chambermaid/Building Service Worker Entry Level Training (ESA)	Free to Qualified Participants	Classroom Lectures	Fall	Fort St James Campus	6 Weeks This Essential Skills Access (ESA) program is free to eligible participants who are seeing the training necessary for entry level work as a chambermaid and/or building service worker.
Environmental Field Assistant (ESA)	Free to Qualified Participants	Classroom Lectures	Fall	Fort St James Campus	13 Weeks Gain the practical environmental monitoring skills required to assist environmental monitoring professionals: biologists, environmental technicians, hydrologists, engineers, etc.
Health Services Office Assistant	Free to Qualified Participants	Classroom Lectures	Fall	Fort St James Campus	7 Weeks Our program is designed to give you a comprehensive overview of the skills and competencies you will require to be
Job Options	N/A	Classroom Lectures Lab	Fall	Fort St James Campues Vanderhoof Campus	10 Weeks This fulltime employment and skills training program can help you gain the skills, confidence, and experience you need to find employment.
Business Administration Certificate	$315 per 45 Hr. Course	Classroom Lectures	Continuous Intake Fall/Summer	Vanderhoof Campus	Part time
Social Service Worker Certificate	Tuition $2,985.05	Classroom Lectures Practicum	Fall/Winter	Vanderhoof Campus	1 year program
Building for the Future – Foundation Carpentry	Free	Classroom Lectures Practicum	Fall	Vanderhoof Campus	Take the first step to entering a trade and sign up for this foundation level carpentry program! You'll cover the basics including shop equipment, safety, survey instruments, drawing and specifications, concrete footings and walls, framing residential houses and much more!
Electrical - Foundation Level	Tuition $1,536.80	Classroom Lectures Practicum	Winter	Vanderhoof Campus	1 semester in length, this foundation level program prepares you for the electrical apprenticeship program, or for positions such as counter and warehouse personnel in wholesale
Pipe Trades - Foundation Level	Tuition $3,849.48	Classroom Lectures Practicum	Fall/Winter	Vanderhoof Campus	1 year program. This 26-week foundation level program is focused on the successful student seeking employment as an apprentice in one of the four pipe trades: pipefitter/steamfitter, sprinkler installer, gas fitter, or plumber.
Family Childcare Training	Free to Qualified Participants	Classroom Lectures	Fall	Vanderhoof Campus	4 Weeks
Light Warehousing	Free to Qualified Participants	Classroom Lectures	Fall	Vanderhoof Campus	15 Weeks

Source: College of New Caledonia, adapted by Millier Dickinson Blais Inc.

FIGURE 69: NORTHWEST COMMUNITY COLLEGE DESCRIPTION OF COLLEGE PROGRAMMING

Program	Cost/Tuition	Delivery Mechanism	Availability	Location	Notes
Applied Earth & Environmental Studies	$2,530.50	Classroom Lectures Computer Lab Field-Based Studies	Winter	Houston Campus Smithers Campus	Geostudies or Geosciences options—is a one year program that emphasizes the practical application of earth and environmental studies. Hands-on curriculum includes community-based projects and field-based studies
Career & College Preparation (CCP)	No tuition fee	Classroom Lectures One on One Distance Ed Online	Fall, Winter, Summer	Houston Campus Smithers Campus	For students who need to complete program prerequisites, fulfill high school graduation or GED requirements, upgrade for employment, prepare for further education and training or take specific courses required to enter university, career, technical, trades, health and business programs at NWCC or other post-secondary institutions.
Cultural Heritage of the Skeena and Bulkley Valley Field School	$506.10	Field Based Studies	N/A	Smithers Campus	Through anthropological and archaeological study you will experience insightful interpretations of how First Nation peoples lived, and continue to live, emphasizing links from the past to the present
Essential Skills for Work (ESWK)	No tuition fee	Classroom Lectures Work Placement	Fall, Winter	Houston Campus Smithers Campus	ESWK is a unique, community-based program with a strong cultural component that integrates employment exploration and preparation skills with personal self-investigation and development.
Health Care Assistant	$1,550.38	Classroom Lectures Practicum	Fall	Smithers Campus	This six-month, full-time, program combines class lectures with hands-on practicum sessions allowing students to begin learning and practicing personal care skills they can transfer directly into the work setting.
Kiel-Hartley Bay's Seaweed Camp Field School	$253.05	Videoconferenced Lectures Field Based Studies	Summer	Smithers Campus	Students will explore the complex role of Indigenous plants in human cultures and study the integration of scientific botanical and Indigenous knowledge about plants founded in practice and tradition. The field trip will take students to Kiel, Hartley Bay's seaweed camp located on Princess Royal Island in Tsimshian territory.
Professional Cook Apprenticeship 3	$380.10	Classroom Lectures Lab	Winter	Houston Campus	Professional Cook Apprenticeship Level 3 students complete the final six weeks of apprenticeship technical training and are prepared to write the Inter-Provincial (Red Seal) examination
Program	Cost/Tuition	Delivery Mechanism	Availability	Location	Notes
Professional Cook Diploma	$1,163.16	Classroom Lectures Lab	Winter	Houston Campus	The Professional Cook Diploma program is for students who have completed the Professional Cook Certificate (Apprenticeship Level 1 & 2) program, want to develop more specialized skills in food preparation and delivery, and want to build the management, supervision and business applications associated with restaurant operation
Social Service Worker (SSW)	$3,289.65	Classroom Lectures Work Placement	Fall/Winter	Smithers Campus	The programs integrate university credit courses with social service career courses, and combine classroom theory with the practical skills necessary for employment in a broad range of social services occupations. Practicum opportunities available in Northwest communities allow students to practice what they learn in workplace settings and gain valuable practical experience.

Source: Northwst Community College, adapted by Millier Dickinson Blais

FIGURE 70: COLLEGE OF NEW CALEDONIA PROGRAM ENROLMENT

Program	Location	Full-time Enrolment (2009-2010)	Full-time Enrolment (2010-2011)	FT Enrolment (2011-2012)	FT Enrolment (2012-2013)
FASD Advanced Diploma Online	Burns Lake Campus	9.24	6.4	6.46	10.18
Adult Education Centre	Burns Lake Campus	n/a	n/a	n/a	n/a
Focus program	Burns Lake Campus	n/a	n/a	n/a	n/a
Administrative Assistant Certificate (ABT)	Burns Lake Campus Vanderhoof Campus	n/a / 13	10.66 / 10.3	10.87 / 9	8.52 / n/a
Social Service Worker Diploma	Burns Lake Campus	n/a	1.93	14.38	11.77
Targeted Initiative for Older Workers (TIOW)	Burns Lake Campus	n/a	n/a	n/a	n/a
Carpentry, Foundation	Burns Lake Campus	6	n/a	n/a	16
Industrial Mechanic (Millwright) / Machinist	Burns Lake Campus Fort St James Campus	n/a	n/a	11 / n/a	n/a
Mineral Processing Operator Certificate (MPOC)	Burns Lake Campus Fort St James Campus	n/a	n/a	n/a	n/a
Professional Cook Level 1	Burns Lake Campus	8	12	n/a	13
Professional Cook Level 1 & 2	Fort St James Campus	10	n/a	n/a	14
Aboriginal Early Childhood Education Certificate (AECE)	Fort St James Campus	n/a	n/a	n/a	n/a
Career & College Preparation (CPP) Program	Fort St James Campus	n/a	n/a	n/a	n/a

Program	Location	Enrolment (2009-2010)	Enrolment (2010-2011)	Enrolment (2011-2012)	Enrolment (2012-2013)
Community Trades Access Program	Fort St James Campus	n/a	n/a	n/a	n/a
Welding Levels A-C	Fort St James Campus	20.33	7	10.11	18.11
Worker Entry Level Training (ESA)	Fort St James Campus	n/a	n/a	n/a	n/a
Environmental Field Assistant (ESA)	Fort St James Campus	n/a	n/a	n/a	n/a
Health Services Office Assistant	Fort St James Campus	n/a	n/a	n/a	n/a
Job Options	Fort St James Campus Vanderhoof Campus	n/a	n/a	n/a	n/a
Business Administration Certificate	Vanderhoof Campus	n/a	n/a	4.5	1.5
Social Service Worker Certificate	Vanderhoof Campus	n/a	n/a	n/a	n/a
Building for the Future – Foundation Carpentry	Vanderhoof Campus	n/a	n/a	n/a	n/a
Electrical - Foundation Level	Vanderhoof Campus	n/a	n/a	n/a	n/a
Pipe Trades - Foundation Level	Vanderhoof Campus	n/a	n/a	n/a	n/a
Family Childcare Training	Vanderhoof Campus	n/a	n/a	n/a	n/a
Light Warehousing	Vanderhoof Campus	n/a	n/a	n/a	n/a

Source: College of New Caledonia, adapted by Millier Dickinson Blais Inc.

FIGURE 71: COLLEGE OF NEW CALEDONIA LAKES DISTRICT CAMPUS HEADCOUNT

Lakes District Campus Program	Enrollments (Headcount)			
	2009-2010	2010-2011	2011-2012	2012-2013
CCP (Adult Basic Education)	257	216	183	167
Focus Employment Program	15	14	15	13
Admistrative Assistant Certificate	-	11	11	9
Welding C	14	15	11	15
Welding B	7	1	3	2
Welding A	-	-	2	2
Carpentry FDN	10	-	-	17
Pro Cook	14	11	-	16
Millwright Foundation	-	-	12	-
Residential Building Maintenance Worker	15	20	34	27
Road Builder Heavy Construction FDN	-	-	15	-
Mine Industry Certificate (MINE)	-	12	12	12
University Transfer Credit Courses	156	192	103	82
Aboriginal Community Health Cert	-	12	-	-
Essential Office Skills	-	-	11	8
Targeted Initaitve for Older Workers	-	-	-	24
Health Care Assistant	21	-	-	-
Outreach & Advocacy Support Worker	-	12	13	-
Teacher Replacement Training Citation	10	18	-	-
Field Medic Essential Skills	-	-	12	12
Aboriginal Early Childhood Education	-	18	15	-
CE-Industry Courses	1549	1458	1585	1237
Pre- Apprentice Training Essential Skills	-	-	-	21
Social Service Worker Certificate	-	-	-	18
Pipeline Essential Skills	-	12	-	-
Heavy Equipment Operator	16	-	-	12
Intro to Trades Program	-	-	-	25
Developmental Standard Terms Certificate	20	18	-	-

Source: College of New Caledonia, adapted by Millier Dickinson Blais Inc.

Appendix B: Parking Lot

Although the following comments are valid and certainly affect the labour market in RDBN, they are outside the scope of activities generally included in a labour market strategy. This is not to say these actions are not important, or even urgent, just that other venues are more appropriate to address them.

- Improved public transportation between communities
- A lack of local addictions and mental health facilities and services is identified to handle the needs in communities and in First Nations
- Improvements to education and healthcare services
- Quality and variety of housing improved, availability improved in the rental market
- Seniors housing expanded and improved
- Build healthier communities, including substance abuse and mental health treatment in the region
- Build balanced communities, think of all aspects in the vitality index
- Develop brownfield sites
- Managing the impact of low income housing (Houston)
- Public infrastructure and public services made more sustainable through increased provincial support; including investing in forestry roads
- Develop more mobile health services
- Understand and mitigate effects of climate change
- A barrier to partnership identified by business and community leaders is a lack of funding for college programming, which is often decided by the federal and provincial government

Appendix C: Timeline of Recommended Goals and Actions

Goal Statement: Regional and local assets and quality of life strengthen capacity to attract and retain talent

Strategy # 1. Promote the Regional District of Bulkley Nechako as an opportune and welcoming employment destination					
Recommended Actions	**Timing**				
	Short Term		**Medium Term**		**Long Term**
Document and promote community and regional assets to increase awareness of lifestyle benefits and quality of life attributes.					
Initiate a social media strategy that profiles local employment opportunities and showcases business success stories. Monitor and communicate changes in new business start-ups, by number of businesses, growth, sector, and generated revenues and employment (aggregated) to demonstrate RDBN as an entrepreneurial climate.					
Review ongoing initiatives to create a regional job bank that promotes employment opportunities in a centralized manner and ensure that the proposed or active models are fully used by the region’s business community and facilitate dual career family employment barriers for families looking to relocate to the region.					

Strategy # 2. Support Small and Medium Enterprises (SMEs) to address human resource needs and future planning			
Recommended Actions	Timing		
	Short Term	Medium Term	Long Term
Support ongoing initiatives to inform small business on succession planning strategies and practices, providing tools and resources to facilitate linkages between seller and purchaser.			
Create and make available a comprehensive resource for businesses regarding training programs and employer incentives that support experiential learning for students and new hires, ongoing professional development for staff and other training.			
Engage with industries proactively to identify existing and emerging professional development/training needs for staff and link with the appropriate methods of delivery (contract training, tutoring, continuing education, Mooc – Massive Open Online Courses, etc.). Contact North is an example of a remote training model that combine computer labs with support staff in rural regions to deliver online courses in northern Ontario.			
Support workshop development and delivery that introduces the business community to new thinking and accessibility practices to strengthen talent attraction, retention, engagement and productivity – particularly for groups that were reported to face specific challenges in seeking and maintaining employment, such as people with disabilities, youth, new Canadians and others.			

Goal Statement: Ensure that the labour force is skilled, resilient and aligned with local labour market needs, supporting retention, participation and economic development

Strategy #1: Foster a culture of collaboration between and among stakeholder groups and communities			
Recommended Actions	**Timing**		
	Short Term	**Medium Term**	**Long Term**
Support access to ongoing professional development and shorter-term targeted programs that increase opportunities for individual life-long learning, life skills, and career readiness.			
Promote longer-term career planning through development of a business case targeting those that did not complete high school, to validate long term benefits of high school and post-secondary completion.			
Encourage entrepreneurship skills and opportunities through mentorship and education, using a program such as that innovated by the Medicine Hat College Entrepreneur Development Centre.			
Investigate continuing education courses with a focus on high demand business opportunities such as agricultural management, perhaps by partnering with other B.C. institutions. Create learning pathway for individuals looking to enter into the agriculture sector as farm owners/managers – curriculum delivery needs to be flexible and part-time to support access and participation.			
Encourage more structured information-sharing between training institutions and the business community to strengthen program alignment and skills demand and to promote opportunities for corporate support for capital investment or access to technology, equipment, to strengthen program curriculum.			

Strategy #2: Empower youth through increased career awareness and experiential learning opportunities, supported by the business community			
Recommended Actions	**Timing**		
	Short Term	**Medium Term**	**Long Term**
Encourage local businesses to participate in college and university internship and support programs throughout BC as a means of attracting educated talent to the area.			
Create direct interaction opportunities between pending graduates and local employers as a means of retaining graduating talent, and inventory existing programs to support working experiences for youth (Mentor me, Bladerunners, cooperative education, practicum).			
Work collaboratively with secondary and post-secondary institutions to develop career profiles and pathways to employment, for occupations experiencing labour force gaps, such as the certified trades.			

Goal Statement: Increase collaboration between and among key stakeholder groups and communities to strengthen opportunities and impact at both the local and regional levels

Strategy #1: Foster a culture of collaboration between and among stakeholder groups and communities			
Recommended Actions	**Timing**		
	Short Term	**Medium Term**	**Long Term**
Introduce the findings of the Regional Skills Gap Analysis to communities and stakeholders and launch the implementation of recommendations. A launch event is hosted by RDBN to present the strategy to the communities and organizations involved in workforce development. Distribute the strategy widely with a power point presentation and fact sheet to be shared by email and on the RDBN website. Visit stakeholders in person to solidify involvement as needed.			
Create a SWOT (Strategic Workforce Opportunities Team) with representatives from partner organizations centered on the collaborative implementation of the Regional Skills Gap Analysis, including new initiatives and the alignment of existing supports to advance opportunities. A quarterly meeting of this group with a rotating location (in addition to the bi-annual forum proposed below) is recommended. Partner organizations support involvement through in-kind contributions of staff time and travel expenses.			
Convene bi-annual forum with economic development, employment offices, chambers and other intermediary groups, and post-secondary and training institutions to evaluate skill and occupation needs in the region; promote awareness of ongoing services and initiatives; create a neutral space for information sharing and promote regional collaboration. Synergies can be sought with the existing annual business forum.			

Strategy #2: Embrace cultural diversity and recognize it as a competitive advantage			
Recommended Actions	**Timing**		
	Short Term	**Medium Term**	**Long Term**
Work with existing industry based First Nation liasons to increase engagement in all activities.			
Increase cultural awareness within the RDBN business community by connecting First Nation advocates and industry based First Nation liasons with the business community with the goal of increasing the number of practical work experience placements for Aboriginals and their success.			
Co-create initiatives with First Nations communities and organizations, with the leadership of the SWOT.			

Goal Statement: Empower evidence-based decision making through reliable, current and relevant information

Strategy #1: Inform to strengthen decision-making			
Recommended Actions	**Timing**		
	Short Term	**Medium Term**	**Long Term**
Encourage more structured information-sharing between training institutions and the business community to strengthen program alignment with skills demand, and to promote opportunities for corporate support for capital investment or access to technology, equipment, to strengthen program curriculum. Encourage ongoing development and updating of a local training and post-secondary program inventory to support labour market development.			
Review ongoing activities to develop business case to validate the return on investment for local business to participate in apprenticeships and support the dissemination of relevant information through the SWOT.			

Strategy #2: Support community engagement with fly-in, fly- out workforce			
Recommended Actions	**Timing**		
	Short Term	**Medium Term**	**Long Term**
Assemble and publish relevant cost of living information. This should be updated quarterly and could be posted on a regional job portal as well as the RDBN website. Promote the regional District website as a means of informing fly-in/fly-out workers and their families of regional amenities.			
Create opportunities to engage fly-in/fly-out workers to participate in sporting and social gatherings, including current residents who travel for work and non-residents who are working in the region. Some sport teams have allocated joint spaces to these workers allowing at least one person to participate when they are available to do so. This example could be celebrated and shared through communications.			
Collaborate in designing and delivering a 'get to know your region program' for fly-in/fly-out workers. This program might include coupons to visit stores, restaurants and recreational facilities or a guided tour of the local community. This could be an expansion of the current, "Small Town Love" program.			