

Kootenay Regional Workforce Table



Regional skills training plan 2013 — 2020

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Kootenay Regional Skills Training Plan

May 31, 2013

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(photo of worker at the Waneta Expansion Project, working on the Draft Tube forms, taken November 2011)

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Executive Summary

The Kootenay Region of British Columbia, including the West and East Kootenays, is diverse and large. In the East Kootenays, a boom has been underway in coal mining. In the West, an economic recovery is being fuelled by large hydro-electric construction and expansion projects. In addition, forestry and tourism are important and thriving industries throughout the region. This economic activity and other large projects in the proposal stages coupled with the projected retirement of many workers signal an ongoing need for skilled labour in the region.

The BC Jobs Plan has led to the creation of Regional Workforce Tables (RWT) to bring people together to discuss how to best align existing regional training to meet local employment opportunities, and to ensure British Columbians have access to training and job opportunities in their home communities. The Kootenay Regional Workforce Table (KRWT) is composed of 20 key leaders representing a range of communities and organizations in the region. They came together to produce this Regional Skills Training Plan.

The KRWT based this Regional Skills Training Plan (the Plan) on secondary data available in the spring of 2013. The research also involved conducting focus groups and interviews with interested parties throughout the region to obtain their views on training gaps, issues and potential solutions. This Plan summarizes key findings emerging from the research and interviews; more extensive detail is available in background documents prepared for the KRWT.

Occupational Demand Outlook to 2020

Capital investment, industry growth and employment increases are on the horizon for the Kootenay region. Major projects focus on mining, power and sawmill upgrades; recreational resort expansions and recreational/retirement residential development.

To make occupational demand projections, the KRWT used BC government labour market information as well as data from sector reports. According to BC LMI 2010-2020, employment in the Kootenays is forecast to grow from 78,560 jobs in 2012, to over 83,000 in 2020, an increase of nearly 4,700 jobs. New job creation in the region is projected to outpace labour force growth, resulting in labour supply/demand gaps. Furthermore many jobs will arise as the result of retirements of existing workers. Approximately 18,000 job vacancies will be created due to age-related attrition. In addition to increasing hiring requirements, the loss of experienced workers may create productivity gaps.¹

Section 2 provides a list of 26 occupations projected to be in high demand, between 2013 and 2020. Many of these occupations are trades and vocational related. Tourism and community service related occupations will also be important to fill, though no specific demand projections are available for them. Other conclusions from the demand analysis include:

- The economic downturn of 2008/2009 hit the Kootenays hard. A portion of the labour force is under-employed and could potentially, with minimal training, be good candidates for higher skilled jobs as they come available.

¹ Even though the labour demand information is a compilation of best available, some of it is based on a past perspective of the Kootenays, its industries and its economic growth. As a result, the forecast may be conservative.

- As the fastest growing and youngest population in Canada, maximizing the talent available in the local Aboriginal workforce can help fill labour gaps.
- Immigration has and will continue to be a key driver of BC's population and labour force growth. Attracting and retaining more newcomers to the Kootenay region is another opportunity to increase the workforce required to address labour demand.

Existing Regional Training and Potential Gaps

The KRWT commissioned an inventory of current and publicly accessible training available in the Kootenay region relative to the high demand occupations. The research indicates the region can likely supply sufficient training for many of the high demand occupations and the job openings projected in those occupations between 2013 and 2020.

Regional training institutions (COTR, Selkirk, & other providers) currently provide training for 18 of the 25 high demand occupations. In addition, College of the Rockies (COTR) and Selkirk have a range of other training that is relevant for many of the other 17 high demand occupations. Some challenges may occur, however, that will require close collaboration between industry and educators to either avoid or overcome. These include:

- **Potential shortages of training** - The number of apprentices employers take on and the number of training seats colleges provide are closely linked. If employers stop sponsoring apprentices, shortages of training may occur.
- **Ensuring students who need to leave the region to complete training return**- For some programs, students must leave the region to complete their training. Employers, educators and others need to work together to ensure these students return.
- **Aggressive recruitment from other regions** - Kootenay employers are competing for workers with employers outside the region, particularly for trades workers in the oil and gas industries. This competition means local employers may have to increase wages or offer other incentives to keep strong performers.

Other training issues from the interviews and focus groups

Additional themes that emerged through interviews and focus groups with people in the Kootenays include:

- **Need for targeted training for SME's**- Businesses need help with succession planning, as well as in developing and fostering skills such as customer service, project management, supervisory skills and even work readiness. Generally, more people need to be encouraged to think of entrepreneurship as a career path.
- **Lack of awareness about available careers, training and supports** - Many people, particularly youth, are unaware of the career options available to them in the region. While programs and funding is available, many individuals and businesses are unaware of it and fail to take advantage of the training.
- **Inflexible funding models** -When funding is available, it is often restrictive and has rules and policies that limit participation.
- **Lack of work experience/apprenticeship opportunities** - Employers indicate a clear preference for experienced journey persons and other workers. But, opportunities to

gain work experience are limited in the region, particularly for apprentices and immigrants.

- **Population with low essential skills** - Essential skills (particularly literacy and numeracy) are issues for certain portions of the population such as younger and older workers (often hidden and speculated to be larger in numbers than previously thought and/or growing in size as a group).

Summary Goals and Actions

The KRWT has developed goals and actions that it believes are realistic and achievable. They are based on the evidence the KRWT collected through research activities. A summary of the goals and actions is provided below:

Goal 1: Enhance and build regional industry/education/community collaboration	
Purpose:	
Action 1.1	Support / enhance programming for high school/youth career awareness
Action 1.2	Research best practices in industry/education partnerships
Action 1.3	Explore ways to mitigate barriers and create and offer/facilitate more workplace-based experience as part of training programs
Action 1.4	Work with Aboriginal, immigrant and other organizations to facilitate training and mentoring for under-represented groups in the labour force
Goal 2: Enhance training related to small and medium sized enterprises (SME's)	
Purpose:	
Action 2.1	Offer more entrepreneurship training to address a variety of business needs and work regionally to publicize the training
Action 2.2	Develop a regional approach to participating in provincial and federal employment business development initiatives
Goal 3: Help lower skilled people upgrade and upskill	
Purpose:	
Action 3.1	Undertake research to better understand the nature of the skills problem and the numbers of people affected
Action 3.2	Review additional ways to bring training to lower skilled people and raise their awareness of the training options available
Goal 4: Continue to ensure that local training is aligned to workforce needs	
Purpose:	
Action 4.1	Review joint planning/monitoring between Selkirk and COTR annually/update labour market information as new material comes from the provincial government and industry
Action 4.2	Make greater use of agile teaching/training delivery models
Action 4.3	Establish (or re-establish) active industry advisory committees for college programs

related to key high demand trades

Action 4.4 Develop a joint Kootenay Applied Research and Innovation Centre

This Training Plan is a first step and serves as a framework for the future. Other groups outside the scope of this research have training needs as well, including community service providers. With continued and greater collaboration and engagement on the part of all parties, and especially employers, the Kootenays can ensure that its residents, businesses, training providers and communities are positioned to meet the challenges and realize the benefits from the coming economic activities forecast for the region.

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1 > Introduction and Background to the Project

The Kootenay Region of British Columbia, including the West and East Kootenays is diverse and large. In the East Kootenays, an economic boom has been underway in coal mining. In the West Kootenays, an economic recovery is being fuelled by large hydro-electric construction and expansion projects. In addition, forestry and tourism, based around four season resorts, ski hills and golf courses, are important and thriving industries in the Kootenay Region. This economic activity and other large projects in the proposal stages coupled with the projected retirement at large employers signal an ongoing need for skilled workers in the region. The British Columbia Trade Occupations Outlook 2010-2020 identifies that trades jobs make up 15.6 percent of all jobs in the Kootenay region. This is second only to the Northeast. With such a dependence on this type of skilled workforce, it is critical that we work collaboratively with other stakeholders to ensure that we meet the regional needs for skilled tradespeople and other workers.

In the East Kootenays, expansion of coal mining has seen Teck Resources, Coal Operations, located in the Elk Valley, increase its workforce from 3,000 to 4,500 employees since 2010. The Labour Market Task Force Report for Mining in BC indicates there will be 15,000 job openings in mining in BC in the next ten years. (Note that regional growth is uneven, however. In 2013 in Kimberly, for example, many stores were closing in the downtown, as a result of a large mine closure a decade earlier.)

According to the 2012 BC Checkup published by the Institute of Chartered Accountants, the West Kootenays' economic recovery is being fuelled by a number of large hydro-electric construction and expansion projects, and the \$900 million expansion at Red Mountain Ski Resort. These projects will last for at least until 2016 and employ several hundred people.

These and many other large projects that are in the proposal stages, as well as the projected retirements at large employers such as Teck Resources, Trail Operations, signal an ongoing need for skilled workers throughout the Kootenays.

A critical shortage of skilled labour exists for many of these industries despite indications that "population and job growth in the region are expected to remain below average" through to 2013, according to the Guide to the BC Economy and Labour Market. Population for the Kootenays is 146,264 people, the fifth largest region in BC and home to just over three percent of the BC population. "Goods-producing industries such as forestry, mining, and agriculture play a much bigger role in Kootenay than is the case in the province as a whole. Thirty-one percent of the region's workforce is employed in goods industries." (Guide to BC Economy and Labour Market)

The BC Jobs Plan has committed to the creation of Regional Workforce Tables (RWT) to bring people together to discuss how to best align existing regional training to meet local employment opportunities, and to ensure British Columbians have access to training and job opportunities in their home communities. The goals of the Regional Workforce Tables are to:

- Outline regional economic opportunities and labour market needs;
- Identify opportunities and make recommendations to align existing training and labour market programs to meet employment opportunities; and
- Continue to ensure that local training programs are aligned with economic demand.

An Open House Forum for the Kootenay region was held on June 19, 2012 at College of the Rockies in Cranbrook with 2 follow up meetings in Kimberley and Castlegar. These events brought together key stakeholders from across the region to provide input on the development and implementation of a Regional Workforce Table in the Kootenay region.

The Province of BC subsequently supported the implementation of an official Kootenay Regional Workforce Table (KRWT). The KRWT is composed of approximately 20 key leaders representing a range of communities and organizations in the region. Membership includes representation from Aboriginal people, industry, employers, educators, chambers of commerce, community service providers and economic development organizations in the East and West Kootenays. The Kootenay Regional Workforce Table is supported by the College of the Rockies acting as the Secretariat, with support in the West Kootenays provided by Selkirk College.

The major deliverable of the KRWT is this detailed Regional Skills Training Plan for the Kootenay region, which will be presented to regional stakeholders, including government. Key components of the research for the Training Plan included:

- Determination of high demand occupations in the Kootenays, and the skills and training required to fill employment demand;
- Identification of current training offerings in the region, gaps, and opportunities for more effectively aligning programs with regional needs.
- Outreach through community focus groups and interviews with interested parties in the Kootenays, soliciting their views on training gaps, barriers and proposed solutions.

The key deliverables of the Kootenay Regional Workforce Table remain as outlined above and are summarized in the document. In addition, the Table has identified additional issues that have come to light during the research process. Notably, some of these issues may inhibit participation and/or delivery of training in the region and as such may warrant action in coordination with implementation of the Regional Skills Training Plan. The issues are outlined in Section 4 and the KRWT recommends them as potential areas for further study and/or intervention.

Process for Developing the Training Plan

The Kootenay Regional Workforce Table is supported by the College of the Rockies and Selkirk College acting as the Secretariat. The KRWT is funded through the Labour Market Partnerships (LMP) program, with the secretariat as the lead sponsor of an LMP agreement with the provincial government to fund activities that the KRWT carries out. Funding is provided through the Canada-British Columbia Labour Market Development Agreement. Additional funding for the outreach groups was provided by Columbia Basin Trust.

The inaugural meeting of the KRWT Task Force took place in November 2012. The KRWT met monthly and concluded its work at the end of May of 2013. It hired an external contractor, Ingenia Consulting, to support the research and development of a Regional Skills Training Plan for the Kootenay region.

The Training Plan builds on initiatives already underway in the region. The KRWT conducted the following activities to develop the Plan:

- Determined the training and employment needs for the Kootenay region as a whole, for the short, medium and long term. This included:
 - Identifying the sectors and/or industries that are key economic drivers for the region and/or create the most significant job opportunities,
 - Analyzing the labour demand generated by these opportunities,
 - Identifying the skills and training required to fill employment demand in the region.
- Identified existing public, private and not-for-profit training programs and opportunities in the region, gaps in available training, and potential options for more effectively aligning existing training with employment opportunities to ensure people living in the Kootenays have access to these opportunities.
- Reached out to labour demand-side stakeholders (employers, industry, local governments), labour supply-side stakeholders (educators, school boards, service providers) and Aboriginal people on an ongoing basis to get their input into the Training Plan. The Secretariat and consultants made two week-long trips in the East and West Kootenays in February 2013 to conduct focus groups with interested parties. The consultants also conducted 43 telephone/in-person interviews with those unable to attend scheduled sessions. Representatives from the Ktunaxa Nation, Akisqnuq First Nation, the Lower Kootenay Band and the Métis Nation of BC participated in meetings and interviews.
- Coordinated with existing training and labour market initiatives and identified opportunities for working together, as well as gaps.

2 > Labour Market Demand in the Kootenays: 2013-2020

This section summarizes information from background research the RWT sponsored to support the development of the Training Plan. It begins with a brief overview of basic demographic information on the region. The section then discusses the occupational demand that is expected to result from the major projects and retirements in the Kootenay region.

It is important to note that the labour market demand summary provided in this section is based on secondary data and research, which in itself provides a snapshot in time. Some of the data is from 2010; in particular, the BC government's Labour Market Information data. The scope of the Kootenay Training Plan made no provision for the production of new labour market information. Even though the labour demand information is a compilation of best available, some of it is based on a past perspective of the Kootenays, its industries and its economic growth.

2.1 Population Characteristics

As the least populated southern region in BC, the Kootenay region has a population of 146,264, a 2.9 percent increase from 2006. The major population centers in the region include Cranbrook (25,050), Nelson (10,230), Castlegar (7,820), Trail (7,680), Kimberly (6,652), Creston (5,305), Fernie (4,450), Golden (3,701), Sparwood (3,664), Elkford (2,500) and Invermere (2,955). Just over 20 percent of the dwellings in the Kootenays are owned by out-of-province residents, a figure which has risen 24 percent since 2007. The Kootenay region's population continues to grow, but at half the speed of the rest of the province. Contributing to this slow growth is the relatively low level of immigration from outside of Canada to the region. According to Statistics Canada 2011 Census, 66 percent of BC's population growth between 2006 and 2011 came from international migration.

Table 1 - Population Characteristics: BC and Kootenay

Characteristic	BC	Kootenay
Population (2011) (% of Total BC)	4,400,057 100%	146,264 3%
Population Growth (2006 - 2011)	7%	2.9%
Aboriginal Peoples (% of Population - Statistics Canada Census 2006)	4.8%	4.9%
Immigrants (% of Population - Statistics Canada Census 2006)	30.5%	10%
Immigrant Arrivals: 2007 - 2011 (% of Total BC) (Citizenship and Immigration Canada, Landed Immigrant Database)	100%	0.8%

Source: Statistics Canada Census 2011 unless otherwise stated

As a result of its lifestyle, the Kootenay region has become a home for retirees and has the oldest age demographic in BC. Since 2000 all of the region's population growth has come from people over 56. This demographic shift means it may be difficult to replace workers in the future. In addition, the Kootenays face a lower than provincial average population in the 15-34 year age range, indicating a new younger workforce to draw on is smaller than required.

Table 2 - Age Demographics: BC and Kootenay

Age groups	All BC	Percentage	Kootenay Economic Region	Percentage
0 to 4 years	219,665	5.0%	7,110	4.9%
5 to 9 years	218,915	5.0%	7,275	5.0%
10 to 14 years	238,780	5.4%	7,645	5.2%
15 to 24 years	554,990	12.6%	15,340	10.5%
25 to 34 years	564,760	12.8%	14,705	10.1%
35 to 44 years	594,635	13.5%	17,455	11.9%
45 to 54 years	705,215	16.0%	23,870	16.3%
55 to 64 years	614,380	14.0%	25,380	17.4%
65 to 74 years	371,615	8.4%	15,385	10.5%
75 years and over	317,095	7.2%	12,100	8.3%
Total - All Age Groups	4,400,060	100.0%	146,265	100.0%

Source: Statistics Canada 2011 Census

<http://www12.statcan.gc.ca/census-recensement/index-eng.cfm>

The Kootenay's Aboriginal population may represent one potential, local solution to an aging population and decreasing labour force. The Aboriginal Human Resources Council of Canada² reports that Canada's Aboriginal population is growing at a rate six times faster than the non-Aboriginal population and so represents a potential labour supply opportunity for the region.

2.2 Education Levels in the Population

Analysis of the education data from 2006 for the Kootenay region (Table 3) reveals some strengths and challenges for the population. For example, in line with the strength of primary industries in the region, the percentage of population with trades skills (21.2 percent) is much higher than the provincial average (15.5 percent). Given the current and future demand for trades workers, the prevalence of trades workers in the region provides a solid foundation for attracting individuals to the trades and for organizations to support apprenticeships.

² <http://www.aboriginalhr.ca/en/products/publications>

As a challenge, the region has a slightly higher population aged 24 to 54 years without high school completion than the rest of the province. These workers could face limits in their careers given the ever-increasing need for education and training in the workplace.

Table 3 - Education Level: BC and Kootenay

Characteristic	BC	Kootenay
Population 24 - 54 years <i>without</i> High School Complete	11%	12.8%
Population 24 - 54 years with Certificate or Diploma	31.5%	39.4%
Population 24 - 54 years with University Degree	24%	14.3%
Population 24 - 54 years with Trades Skills	15.5%	21.2%

Source: Statistics Canada Census 2006

2.3 Labour Market Demand

The Kootenay labour market outlook is tied predominantly to mining, forestry, wood manufacturing, construction and tourism, since these are some of the most important economic drivers in the region. The most up-to-date and/or region-specific labour market information was available for mining, forestry, wood manufacturing and construction. The BC LMI information provided insights into job openings due the expected retirement rate of the regional labour force, as well as expected major capital expenditure. BC LMI also considers regional gross domestic product (GDP), investment, income, capital stock and housing starts. The inclusion of these macroeconomic employment drivers assist with projecting labour demand for industries such as education, healthcare, tourism, social and community services, etc.

The major capital projects in the region valued at \$500 million or above are listed in the table below. To accommodate for the uncertainty in forecasting labour market information, this analysis uses very conservative figures for major project expenditure in the region.

Table 4 - Major Capital Projects for Kootenay Region

Major Capital Projects Currently Proposed, Under Construction, or On Hold in Kootenay Region (December 2012)

MINING SECTOR:

PROJECT	STATUS	ESTIMATED COST
Bingay Main Coal	Proposed	480 Million
Lodgepole Coal Mine	On Hold	150 Million
Line Creek Coal Mine Phase 2	Proposed	140 Million
Crown Mountain Coal	Proposed	100 Million

FORESTRY SECTOR:

PROJECT	STATUS	ESTIMATED COST
Sawmill Upgrades Elko	Proposed	50 Million
Interfor Sawmill Improvements	Construction Started	19 Million

POWER SECTOR:

PROJECT	STATUS	ESTIMATED COST
Waneta Hydroelectric Expansion	Construction Started	900 Million
Glacier/Howser Energy	On Hold	295 Million
Marten Ridge Wind Energy	Proposed	172 Million
Hugh Keenleyside Dam Spillway Gate Upgrades	Construction Started	90 Million
Fosthall Creek Hydropower	Proposed	50 Million
Crowsnest Pass Power	Proposed	30 Million
Cascade Heritage Power Park	Proposed	24 Million

TOURISM SECTOR:

PROJECT	STATUS	ESTIMATED COST
Fairmont Hot Springs Golf Course Resort	On Hold	1 Billion
Jumbo Glacier Resort	Proposed	900 Million
Red Mountain Ski Resort Expansion	Construction Started	900 Million
Wildstone Golf and Residential Development	Construction Started	750 Million
Fernie Alpine Resort	Construction Started	250 Million
Panorama Mountain Village	Construction Started	250 Million
Kimberley Ski Resort Expansion	Construction Started	200 Million
Whiskey Jack Resort Development	Construction Started	200 Million
Blackstone Resort Development	Proposed	100 Million
Spirits Reach Resort Development	Construction Started	80 Million
Elk Park Ranch Housing Development	Construction Started	60 Million
Halcyon Hot Springs	Construction Started	52 Million
Eagle Ranch Golf Resort	Proposed	20 Million

Bighorn Meadows	Construction Started	20 Million
Kutenai Landing Village Development	Proposed	15 Million

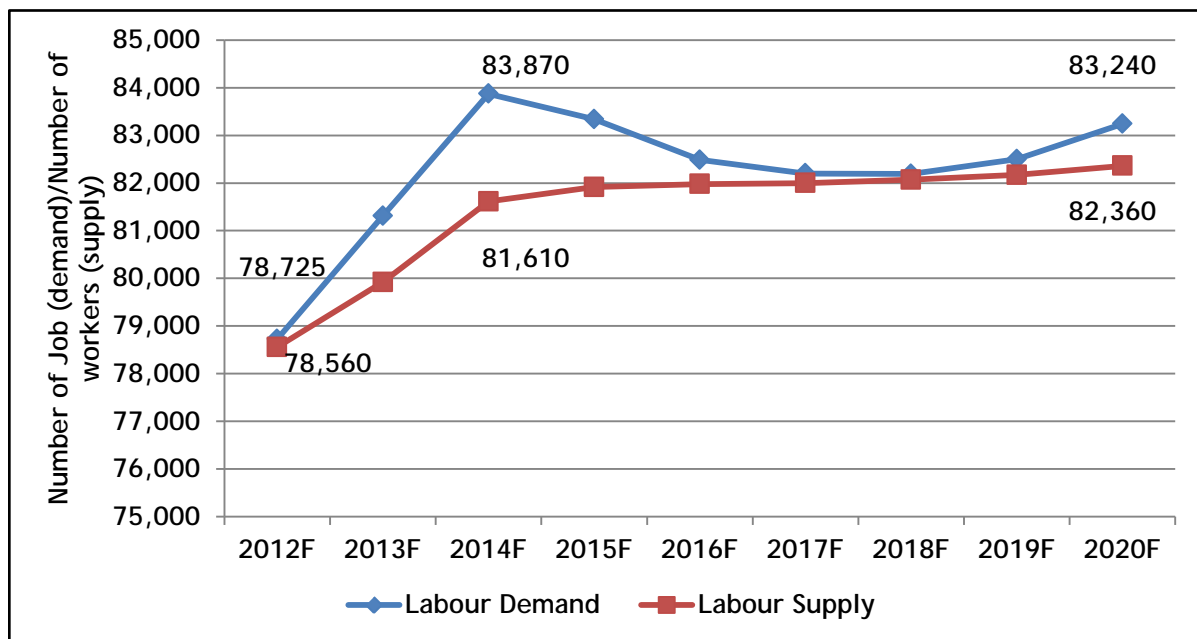
Source: Major Projects Inventory, December 2012. Ministry of Jobs, Tourism and Skills Training

For more information on the major projects listed above in Table 4, please visit the following link:

http://www.jtst.gov.bc.ca/ministry/major_projects_inventory/pdfs/December_2012.pdf

The Kootenays' labour market is tied to the activity of its key industries. The major expected projects in these industries are conservatively forecast and as a result, so too are the estimates of the expected job openings these industries will create. As a result, the labour shortage projected on the next page is likely conservative.

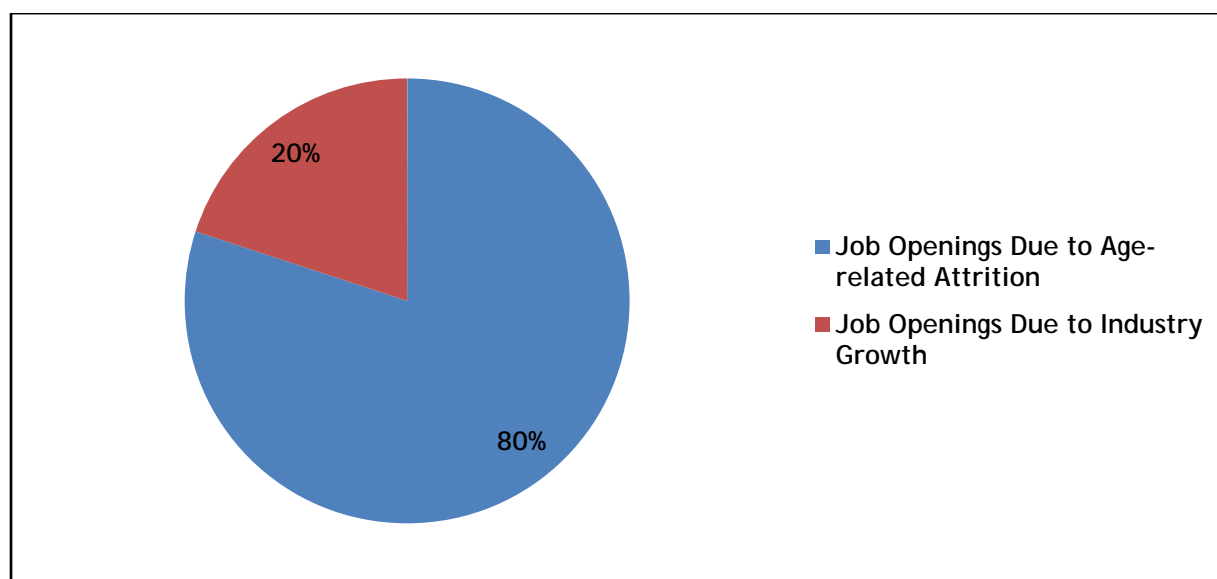
Figure 1 - Kootenay Labour Demand and Supply Projections to 2020



"F" refers to forecasted employment as opposed to actual employment.

As Figure 1 shows, labor demand in the Kootenays is forecast to grow from 78,560 jobs in 2012, to over 83,000 in 2020, an increase of close to 4,700 jobs. Labour demand is driven by industry growth and position vacancies due to age-related attrition such as retirement and death. In the Kootenay region, age-related attrition is the dominant driver of labour demand, resulting in 18,100 job openings. This represents 79 percent of the 22,800 expected job openings.

Figure 2 - Drivers of Labour Demand in Kootenay Region to 2020



2.4 Occupational Demand 2013 - 2020

Table 5 outlines the occupations in the Kootenay region predicted to have the greatest number of job openings due to industry activity and age-related attrition from 2013 to 2020. These occupations are in the primary industries that drive the regional economy.

Table 5 - Kootenay Occupational Demand

Occupation (NOC)	Number of Job Openings Due to Growth and Age-related Attrition 2013 - 2020 ³		Considerations from other LMI Studies
	3-digit estimate	4-digit estimate ⁴	
1. Motor vehicle and transit drivers (741)	595		
<i>Truck drivers (7411)</i>		440	410 (mining)

³ BC LMI 2010 - 2020

⁴ Job openings for occupations at the 4 digit level were estimated using 2010 employment estimates for the Kootenay region at the 4 level National Occupational Classification - Stats (NOC-S) as reported at www.bcstats.gov.bc.ca/StatisticsBySubject/LabourIncome/OtherData/RegionalEmploymentProjections.aspx. An assumption was made that the employment estimate for the 4-digit NOC-S was similar for the corresponding 4-digit National Occupations Classification (NOC) for each 3-digit NOC included in BC LMI 2010-2020. This allowed an estimation of percentage or ratio of NOC at the 4-digit level for each 3-digit NOC. That same percentage or ratio was then applied to the 3-digit NOC labour demand estimate to estimate 4-digit NOC demand. For example: in 2010 it is estimated that Heavy-duty Equipment Mechanics (NOC-S: H412) made up 41% of Machinery and Transport Equipment Mechanics (NOC-S: H41) according to BC Stats. Therefore, it is estimated that Heavy-duty Equipment Mechanics (NOC: 7312) will experience 41% of the Machinery and Transport Equipment Mechanics (NOC: 731) job openings projected in BC LMI 2010-2020 or 145 positions.

Occupation (NOC)	Number of Job Openings Due to Growth and Age-related Attrition 2013 - 2020 ³		Considerations from other LMI Studies
	3-digit estimate	4-digit estimate ⁴	
2. Heavy equipment operators (7421)	395		595 (mining)
3. Machinery and transportation equipment mechanics (731)	360		
<i>Heavy-duty equipment mechanics (7312)</i>		145	280 (mining)
<i>Construction millwrights and industrial mechanics (7311)</i>		175	215 (mining) 105 (solid wood)
4. Carpenters and cabinetmakers (727)	340		
<i>Carpenters (7271)</i>		315	
5. Electrical trades and telecommunications occupations (724)	275		
<i>Industrial electricians (7242)</i>		80	150 (mining)
<i>Electricians (except industrial and power) (7241)</i>		120	
6. Managers in construction and transportation (071)	250		
<i>Construction managers (0711)</i>		145	
<i>Residential homebuilders and renovator managers (0712)</i>		80	
7. Chefs and cooks (624)	245		
<i>Cooks (6242)</i>		205	
8. Primary production labourers (861)	235		
<i>Mine labourers (8614)</i>		20	125 (mining)
<i>Logging and forestry labourers</i>		40	600 (solid wood)
9. Trades helpers and labourers (761)	220		
<i>Construction trades helpers and labourers (7611)</i>		210	
10. Contractors and supervisors, trades and related workers (721)	205		
11. Machine operators in pulp and paper processing and wood manufacturing (943)	180		
<i>Sawmill machine operators (9431)</i>		95	110 (solid wood)
<i>Lumber graders and other wood processing inspectors and graders (9436)</i>		45	
12. Machine operators in mineral and metal processing (9411)	55		
<i>Machine operators in mineral and metal processing (9411)</i>		20	155 (mining)

Occupation (NOC)	Number of Job Openings Due to Growth and Age-related Attrition 2013 - 2020 ³		Considerations from other LMI Studies
	3-digit estimate	4-digit estimate ⁴	
13. Metal forming, shaping and erecting trades (726)	160		
<i>Welders and related machine operators (7265)</i>		100	170 (mining)
14. Plumbers, pipefitters and gasfitters (725)	125		
<i>Plumbers (7251)</i>		70	
15. Longshore workers and Material Handlers (745)	110		
<i>Material Handlers (7452)</i>		105	115 (mining)
16. Supervisors, processing occupations (921)	100		
<i>Supervisors, mineral and metal processing (9211)</i>		26	75 (mining)
<i>Supervisors, forest products processing (9215)</i>		50	145 (solid wood)
17. Central Control and Process Operators in Manufacturing and Processing (923)	80		
<i>Central control and process operators, mining and mineral processing (9231)</i>		47	180 (mining)
18. Supervisors, mining and oil and gas (822)	80		
<i>Supervisors, mining and quarry (8221)</i>		80	180 (mining)
19. Managers in primary production (except agriculture) (0811)	75		270 (mining)

2.4.2 Tourism and Hospitality Labour Demand in Kootenay: 2013-2020

This section examines the potential occupational growth that might come from tourists who invest in the Kootenays, as well as potential growth for the hospitality industry in general.

As an important caveat to the analysis, accurately determining the labour demand of the tourism industry can be difficult. First, many of the occupations needed in tourism also work in other sectors. As well, the Kootenays poses an additional challenge because people from outside of BC own over 20 percent of the dwellings in the region. The question then arises: are these property owners considered tourists when they come to stay at their recreational home? Or, should they be considered residents of the Kootenays? Thus, to come up with an accurate estimate of tourism occupational demand, the analyst must make judgments related to these two issues.

The BC LMI 2010-2020 provides a conservative estimate for employment growth for the

Kootenay region. In light of the number of major projects and expansions identified in the Major Projects Inventory, the estimates for the growth of tourism and hospitality jobs seem low. Job opening calculations for travel and tourism related occupations 2013-2020 using BC LMI 2010-2020 are:

- Occupations in travel and accommodation (NOC 643): 104 (average of 15 positions per year)
- Tour and recreational guides and casino occupations (NOC 644): 41 (average of 6 positions per year)
- Occupations in food and beverage (NOC 645): 124 (average of 18 positions per year)
- Other occupations in travel, accommodation, amusement and recreation (NOC 667): 47 (average of 7 per year)

Further, Kootenay-based tourism employers report more difficulties finding qualified staff than tourism employers in other regions in the province.⁵ Employers in the region have undertaken several recruitment strategies including international recruitment. Data collected by go2 (a British Columbia tourism and hospitality organization) shows that the Kootenay region is responsible for 5.5 percent of the total tourism sector’s labour market opinions (LMOs)⁶ in 2012. The region, however, has only 3.1 percent of BC’s tourism labour force. Tourism occupations with the greatest LMO activity include cooks/chefs, program leaders/instructors in recreation and sport (mostly ski instructors), restaurant managers and food service supervisors.

The *BC Tourism Labour Market Strategy*⁷ suggests that BC’s tourism industry employment will grow annually by 1.6 percent. Assuming that the Kootenay region will have the same growth rate and that all occupations will grow at approximately the same rate, we can estimate potential labour demand due to industry growth. Table 6 shows the results of these calculations. Note that the estimate excludes job openings due to age-related attrition or employee turnover, a significant issue for some occupations within the tourism sector.

Table 6 - Kootenay Tourism and Hospitality Employment in 2010 and Estimate Job Openings Due to Industry Growth 2013-2020

Tourism and Hospitality Occupation	Estimated Kootenay Employment in 2010	Estimated Job Openings Due to Industry Growth
Cashiers	1,640	185
Food counter attendants, kitchen helpers and related occupations	1,520	170
Janitors, caretakers and building superintendents	1,210	135
Light duty cleaners	1,020	115

⁵ 2011 employer survey conducted by Go2. www.go2hr.ca

⁶ A labour market opinion (LMOs) is the application Canadian employers must use if they wish to hire a temporary foreign worker (TFW). The LMO identifies how the hiring a TFW in a particular occupation may affect the Canadian labour market and the extent to which an employer has attempted to hire that occupation within Canada.

⁷Available at <http://www.go2hr.ca/research/bc-tourism-labour-market-strategy>

Tourism and Hospitality Occupation	Estimated Kootenay Employment in 2010	Estimated Job Openings Due to Industry Growth
Cooks	1,010	115
Food and beverage servers	900	100
Restaurant and food service managers	450	50
Program leaders and instructors in recreation, sport and fitness	370	41
Accommodation service managers	300	35
Chefs	180	20
Bartenders	170	20
Hotel front desk clerks	170	20
Operators and attendants in amusement, recreation and sport	170	20
Bakers	170	20
Bus drivers and subway and other transit operators	170	20
Food service supervisors	160	20
Travel counselors	110	10
Maîtres d'hôtel and hosts/hostesses	100	10
Taxi and limousine drivers and chauffeurs	100	10
Outdoor sport and recreational guides	70	10
Casino occupations	60	5
Tour and travel guides	50	5
Cleaning supervisors	40	5
Conference and event planners	30	5
Executive housekeepers	30	5
Airline sales and service agents	30	5
Other attendants in accommodation and travel	20	5
Pursers and flight attendants	10	1
Ticket agents, cargo service representatives and related clerks	10	1

Source: BC Stats used the B.C. Labour Market Scenario Model (BCLMSM) as a benchmark for industry employment to produce *British Columbia Regional Employment Projections Kootenay Development Region: 2010 - 2015*.

2.5 Job Openings in Key Community Support Service Occupations 2013 - 2020

In addition to construction and natural resource occupations, several community occupations may face shortages due to employment growth and age-related attrition. These occupations, outlined in Table 7 are especially critical in the Kootenays given that a significant portion of the economy is focused on servicing seniors and recreation. Well-trained nurses and teachers, available childcare and other services ensure the community is attractive to workers and their families.

Table 7 - Community and Support Service Occupations with Greatest Job Openings: 2013-2020

Occupation	Job Openings Due to:		Total
	Industry Growth	Age-related Attrition	
Retail salespersons and sales clerks (642)	165	730	895
Cleaners (666)	150	635	785
Nurse supervisors and registered nurses (315)	325	390	715
Assisting occupations in support of health services (341)	355	345	700
Paralegals, social services workers and occupations in education and religion (421)	310	385	695
Clerical occupations, general office skills (141)	210	445	655
Secretaries, recorders and transcriptionists (124)	105	400	505
Administrative and regulatory occupations (122)	90	410	500
Childcare and home support workers (647)	160	325	485
Secondary and elementary school teachers and educational counsellors (414)	30	375	405
Financial and insurance administrative occupations (123)	45	345	390
Other technical occupations in health care (except dental) (323)	145	200	345
Cashiers (661)	70	250	320
Auditors, accountants and investment professionals (111)	20	220	240
Financial and insurance clerks (143)	20	200	220

Occupation	Job Openings Due to:		Total
	Industry Growth	Age-related Attrition	
Psychologists, social workers, counsellors and probation officers (415)	60	145	205

Summary

- Capital investment, industry growth and employment increases seem to be on the horizon for the Kootenay region.
- Retirements (age-related attrition) will drive labour demand regardless of industry activity. This issue, coupled with BC's oldest population that includes residents no longer participating in the labour force, will lead to labour shortages.
- The loss of experienced workers is likely to create productivity gaps as well. A company may be unable to replace one retiring worker with one newly training worker on a one to one basis. In some instances, if people are inexperienced, more than one will be needed to do the same amount of work.
- Major projects focus on mining, power and sawmill upgrades; recreational resort expansions and recreational/retirement residential development. If new mining projects and expansions come to fruition however, the region is likely to experience an acute lack of skilled workers.
- Investment in the region's recreational facilities and resorts is likely to increase tourism and recreational employment opportunities.
- The economic downturn of 2008/2009 hit the region hard. A portion of the labour force is currently under-employed and therefore could take on more skilled jobs as they come available.
- As the fastest growing and youngest population in Canada, optimizing Aboriginal talent also offers a local labour supply solution.
- Immigration has and will continue to be a key driver of BC's population and labour force growth. Attracting and retaining more immigrants to the Kootenay region is another opportunity to increase labour force required to address labour demand.

3 > Training Supply and Availability in the Kootenay Region

As part of the background for preparing the Regional Training Plan, the KRWT examined training supply and availability in the Kootenay region. This section summarizes the highlights from this research. It also discusses its implications for identifying gaps in regional training available for high demand occupations identified in the labour demand section.

The KRWT prepared an inventory of publicly available information on training programs offered within the Kootenay region. Information in the inventory includes the names of training organizations as well as detailed information about the type of training programs offered. Training programs in the inventory are programs that prepare individuals to work in the high demand occupations identified by the labour demand analysis presented earlier in this report. The inventory excludes companies' in-house training. The complete inventory is contained in a set of profiles, one for each high demand occupation, which can be found in Appendix A.

A summary of the inventory of training, related to high demand occupations and available in the Kootenays, is presented in Tables 8, 9, 10, 11 and 12. This summary information has been compiled from the profiles in Appendix A.

Table 8 lists the public and private training organizations that provide training in the region related to high demand occupations.

Table 8 - List of training providers included in research for training relative to high demand occupations

PUBLIC TRAINING ORGANIZATIONS	Selkirk College
	College of the Rockies
PRIVATE / OTHER TRAINING ORGANIZATIONS	Ashland Training Centre
	Mountain Transport Institute Ltd.
	Southern Interior Construction Association - Construction Training
	British Columbia Aboriginal Mine Training Association

Source: The RWT and web research

Table 9 shows the projected number of job openings⁸ in each high-demand occupation for the period 2013 to 2020. It also identifies the training providers offering training related to each occupation. A notation of "O" in the Table indicates the training from the training provider for the occupation is offered either on an "On Demand" basis or "Occasionally" offered/scheduled, in order to meet the demand in the region. The occupations listed as "O" are short term programs offered through the Continuing Education or Contract Training departments. The purpose of this section is to identify gaps in training, and to identify the capability or capacity.

⁸ Job openings refer to the number of new jobs created due to economic and industry growth plus job vacancies due to workers retiring from the workforce. However, COTR & Selkirk have programs that could be offered to meet the on-demand training.

Table 9 - Summary of local training available in Kootenay region for high demand occupations

In-demand occupation	Projected demand 2013-2020 Base/Other ⁹ (4 digit NOC)	Training providers		
		Selkirk	COTR	Private / other training providers
Carpenters	315	✓	✓	SICA Construction Training www.sicaconstructiontraining.ca
Central control and process operators, mining and mineral processing	47/180	✓	0	
Cooks	205	✓	✓	
Construction managers	145	0	0	
Construction millwrights and industrial mechanics	175/320	✓	✓	
Construction trades helpers and labourers	210	✓	✓	SICA Construction Training www.sicaconstructiontraining.ca Ashland Training Centre www.ashlandtrn.com
Contractors and supervisors, trades and related workers	205	0	0	
Electricians	120	✓	✓	

⁹ Number of Job Openings as per: Base - BC LMI 2010-2020 Other-Sector Reports

In-demand occupation	Projected demand 2013-2020 Base/Other ⁹ (4 digit NOC)	Training providers		
		Selkirk	COTR	Private / other training providers
Heavy duty equipment mechanics	145/280	✓	✓	
Heavy equipment operators	395/595	0	✓	
Industrial electricians	80/150	✓	✓	
Logging and forestry labourers	40/600	✓	✓	
Lumber graders and other wood processing inspectors and graders	45	✓	✓	
Machine operators, mineral and metal processing	155	✓	0	
Managers in primary production (except agriculture) (demand from mining)	75/270	0	0	
Material handlers	105/115	0	✓	
Mine labourers	20/125	0	✓	
Plumbers	70	0	✓	
Residential homebuilders and renovation managers	80	✓	✓	
Sawmill machine operators	95/110	0	0	
Supervisors, forest products processing	50/145	0	0	
Supervisors, mineral and metal processing	26/75	0	0	

In-demand occupation	Projected demand 2013-2020 Base/Other ⁹ (4 digit NOC)	Training providers		
		Selkirk	COTR	Private / other training providers
Supervisors, mining and quarry	80/180	0	0	
Truck drivers	440/410	✓	0	Mountain Transport Institute www.drivemti.com
Welders and related machine operators	100/170	✓	✓	

Source: The RWT compiled based on websites and discussions with training providers

3.1 Commentary on the Results of the Training Availability Analysis

The review of training supply leads to various conclusions about the availability of training for the high demand occupations coming to the Kootenays. The sub-section below reviews some of the findings and their implications for individuals seeking training in the region.

Results and Gap Analysis for High Demand Occupations

The analysis shows that regional institutions provide regular training for 18 of the 25 high demand occupations shown in the Kootenay Region and occasional training for many of the remaining occupations.

Table 10 - High Demand Occupations with training available in the Kootenays

Occupations with training available
Carpenters
Central control and process operators, mining and mineral processing
Construction millwrights and industrial mechanics
Construction trades helpers and labourers
Cooks
Electricians
Heavy equipment operators
Heavy duty equipment mechanics
Industrial electricians
Plumbers
Residential homebuilders and renovation managers
Truck drivers (Class 1)
Welders and related machine operators
Logging and forestry labourers
Lumber graders and other wood processing inspectors and graders
Machine operators, mineral and metal processing
Material handlers
Mine labourers

Source: The RWT compiled based on websites and discussions with training providers

Lack of local training may result in shortages in some high demand occupations

Table 11 shows the potential shortages that could result for workers in occupations where training is currently unavailable in the region.¹⁰

Table 11 - Potential Training Gap for High-Demand Occupations

High demand occupations with potential shortage of training in the region	Estimated shortage of workers between 2013-2020
Contractors and supervisors, trades and related workers	205
Construction managers	145
Sawmill machine operators	95
Supervisors, mining and quarry	80
Managers in primary production (except agriculture) (demand from mining)	75
Supervisors, forest products processing	50
Supervisors, mineral and metal processing	26

Source: The RWT compiled based on websites and discussions with training providers

The largest potential training deficiency is for heavy equipment operators, which may be largely for haul truck operators. COTR now offers Haul Truck Training, which is scheduled to start in the Fall of 2013. The duration of the program will be approximately 4 weeks. Table 11 also shows potential shortages for supervisory and managerial occupations in construction, forest products processing, and mining.

For these 14 high demand occupations the research indicates that regularly scheduled training is unavailable. However, Selkirk College and COTR offer other training which may be relevant for some occupations, through their Contract Training and Continuing Education departments.

For example, COTR offers several heavy industry course bundles which provide participants with a combination of certifications (e.g., Standard First Aid for Mining with Stable Immobilization, WHMIS, Confined Space, etc.) relevant to jobs in specific industries. COTR also offers new Faller Training, Forestry Skills Boot Camp, and Log Scaling for the Forestry Industry. COTR has developed a 4 week Haul Truck Operator Program scheduled to start September 2013. Selkirk offers a similar range of programs, although they have not generally been linked to (or combined for) a specific occupation or can be modified to provide appropriate training for relevant high demand occupations.

¹⁰ For illustrative purposes, Table 11 assumes that no other sources of training exist for these types of workers outside of the region, which in reality is not the case. The mandate of the KRWT, however, is to examine regional sources of training and their ability to meet regional demands.

Since 2008, no regular funding has been available from either the Ministry or the ITA for new programs that do not fit traditional funding models. Consequently, public training providers respond to emerging needs from industry through their Continuing Education and/or Contract Training departments, and the resulting programs tend to be delivered on a cost recovery basis and carry high tuitions.

Shortages may eventually occur in some occupations even where local training is available

Table 12 shows that of the 12 occupations where training is available in the Kootenays, current levels of graduation may result in future shortages of workers for six high demand occupations. This scenario could change, since the training system tries to be efficient and maintain a close match between the number of students seeking training and the supply of training seats. In the case of apprenticeship training, a direct relationship exists between the number of apprentices (new and existing) that Kootenay employers send in for training in the region and the number of apprenticeship training seats regional training providers offer annually. The more apprentices that employers send for training, the more apprenticeship training seats institutions will make available. Of course, the reverse is also true.

Table 12 - High-demand occupations with possible shortage of workers

High demand occupations with training in the region	Estimated shortage of workers between 2013-2020
Truck drivers	248
Construction trades helpers and labourers	210
Construction millwrights and industrial mechanics	175
Plumbers	70
Cooks	60
Heavy Duty Equipment Mechanics	20

Source: The RWT compiled based on websites and discussions with training providers

The potential shortage could be most acute for truck drivers, an occupation where workers are in demand throughout BC and Alberta.

Some students need to leave the region to complete training

In some occupations, only part of the training is available in the Kootenays. For example, industrial electricians are able to complete their first two years of technical training at COTR. To finish their final two years, levels three and four, they must go elsewhere in the province. Often, students who leave for schooling start their careers elsewhere as well.

Mining and forest industries are competing for the same trades

Mining and forestry companies compete for six of the high demand occupations with training available in the Kootenays; construction millwrights and industrial mechanics, plumbers, heavy duty equipment mechanics, industrial electricians, electricians and welders and related

machine operators. Competitors from outside the region, especially those in the oil and gas sector, also need these trades. This competition means local employers may have to pay better wages or offer other incentives to keep strong performers in some trades.

3.2. Results and Gap Analysis for Tourism and Hospitality Occupations

Table 13 shows training availability in the Kootenays for the top 10 high demand tourism and hospitality occupations. In 2013, training was available in the Kootenays for seven of these occupations.

Table 13 - Training Availability for Top Ten Tourism and Hospitality Occupations in the Kootenays, 2013 to 2020

Tourism and Hospitality Occupation	Estimated Job Openings 2013 - 2020	Training Available in the Region
Cashiers	185	
Food counter attendants, kitchen	170	✓
Janitors, caretakers and building superintendents	135	✓
Light duty cleaners	115	✓
Cooks	115	✓
Food and beverage servers	100	✓
Restaurant and food service managers	50	✓
Program leaders and instructors in recreation, sport and fitness	41	✓
Accommodation service managers	35	✓
Chefs	20	✓

Source: BC LMI 2010 - 2020 and compiled by the RWT based on websites and discussions with training providers

Estimating the overall training supply in the Kootenays for each occupation can be challenging. The KRWT recommends additional research on these occupations to support improved matching between labour market demand and training allocation.

Summary of interviews/focus groups for the Training Plan

Below, in summary form and organized by theme, are training-related issues and barriers that emerged from the focus groups and interviews conducted during the research phase for the Training Plan.

Table 14 - Key training related issues and barriers from interviews and focus groups

Training Related Issues
Skills shortages for certain occupations, particularly trades-related
Need for workforce and business succession planning, as retiring workers and business owners leave the labour force
Essential skills (particularly literacy and numeracy) issues for certain portions of the population; for example, younger and older workers (often hidden and speculated to be larger numbers than previously thought and/or growing in size)
Skills deficiencies particularly in soft skills like customer service, work readiness, work ethic, teamwork, communication, supervisory skills, train the trainer
Inflexible and overly restrictive funding models for training assistance limit participation <ul style="list-style-type: none"> • In some cases, neither workers nor employers are able to qualify or benefit, in particular the new/modified programs operating under WorkBC. Participants cited examples of recently laid off, low skilled workers (with 15-20 or more years of successful employment history) who were unable to qualify for re-training assistance. • Rules prohibit training organizations filling courses with students funded from different programs to meet minimum participant requirements, so programs don't run
Lack of awareness of available training programs and support for training
Pool of available workers is often of poor quality with skills and attitudinal issues or other barriers (poor work ethic, addictions)
Lack of awareness amongst high school students of career options available
Lack of culturally sensitive training; little penetration beyond large companies

Barriers to Training
Challenges of being a small population spread across a large geographical area (critical mass issue); cost prohibitive to have all programs in all locations
Lack of awareness of occupations in demand and specific numbers of workers required, as well as ways to prepare for work in the occupations and connect to jobs
Cost of training too high, people from smaller towns face travel and accommodation costs that increases costs. Funding support unable to meet demand
Negative attitudes towards the trades, particularly amongst many parents and students
Lack of local experts to put on training; would help reduce need for participant travel
Lack of work experience/apprenticeship opportunities, particularly for younger workers re-training, and immigrants; employers only want to hire experienced workers
Rigidity in the training system -- difficult to offer training for two-three years, then stop as market becomes saturated and switch to offering training for a different occupation. Funding model is rigid. It is expensive to move and provide equipment and difficult to find instructors who will move from location to location

These issues came up in both the East and West Kootenay regions on more than one occasion and provide valuable insights to strengthen the secondary research outlined in Sections 2 and 3.

Anecdotal information and data from the focus groups, in particular from employers, indicates a need for further research to more accurately reflect and assess current priority training issues and barriers.

4 > A Regional Skills Training Plan for the Kootenays: Goals and Actions

This section outlines specific goals and actions for the Regional Training Plan that the KRWT believes are realistic and achievable. They are based on the evidence the Table collected through research activities described in the previous sections of this document. Timeframes for the different goals and actions may vary but the intent is to move forward on all of them by 2018.

Goal 1: Enhance and build regional industry/education/community collaboration

Rationale:

Collaboration, partnerships and private sector funding are needed to maintain relevance and awareness of workforce training, help small and medium sized businesses, share costs, and enhance practical learning of students through co-ops, work placements and apprenticeships. Such collaboration will ensure that all members of the community can participate in the labour force.

Action 1.1	Support/ enhance programming for high school/ youth career awareness
	<p>The research indicated the need for increased career awareness activities at the high school and even elementary school levels and with youth outside of the school system. Examples of activities to pursue to achieve this goal include:</p> <p>Provide speakers, role models, mentors from the local business community and from high demand occupations to participate in career awareness activities and programming in schools. Put more focus on opportunities where students can match their interests to specific careers and career training.</p> <p>Make industry and business entrepreneur participation strategic, consistent, and sustainable:</p> <ul style="list-style-type: none"> • Organize and coordinate industry participation so it is easy to access. • Concentrate on a few ways to participate, deliver on the commitment, and expand as support allows • Consider creating a document for educational institutions that outlines the objectives, scope, and nature of industry participation in career awareness initiatives; including a means to solicit participation. The document would allow companies to define specifically what they are prepared to give, their reasons for becoming involved, and the benefits they expect from participating. Use the document to initiate relationships with schools, school boards, parent advisory councils and so forth. • Regularly monitor and evaluate participation outcomes to ensure they are meeting objectives; adjust as necessary

Expand offerings of trades and entrepreneurship awareness programs in schools, such as, but not limited to:

- Junior Achievement-- As the largest youth business education organization in Canada, Junior Achievement (JA) has been inspiring and preparing more than 4 million youth to succeed in an ever-changing global economy. JA programs are delivered by over dedicated business mentors who provide instruction in financial literacy, work readiness and entrepreneurship.
 - ACE IT (Accelerated Credit Enrolment in Industry Training) -- a program that enables students to begin an apprenticeship and take their first level of technical training while still in high school; can be done in tandem with SSA.
 - SSA (Secondary School Apprenticeship) -- a program that enables high school students to begin an apprenticeship with an employer sponsor and earn work-based training hours towards an apprenticeship program; can be done in tandem with ACE IT.
 - YES2IT (Youth Exploring Skills to Industry Training) -- a program to increase awareness of trades amongst students in grades 6 to 9 by providing a fun, hands on experience with local trades persons and developing skills used in a variety of trade careers.
 - Project Heavy Duty -- a week long program that provides high school students with an opportunity to learn and operate different types of heavy equipment on a job site, e.g., crawler/dozers, excavators, graders, rock trucks and a variety of logging equipment.
 - Discover Trades BC -- a provincial initiative to promote trades to high school students. The website, www.discovertradesbc.ca, is the capstone feature of this initiative that also includes teaching materials for Planning 10.
 - Increase funding commitments for positions such as "Transitions Coordinator" who link high schools and colleges in a variety of ways.
-

Action 1.2

Research and build on best practices in industry¹¹/education partnerships

Strong industry/education partnerships can help make certain that workforce training is relevant and viable. The KRWT recommends a review of existing primary and secondary research and examples of successful industry/education partnerships, to determine their applicability to the Kootenay region. Some potential sources/examples include:

- The report, *Collaboration for Rural Business Growth: Exploring the common best practices and barriers to success* (2012) which analyzes college/industry partnerships across Canada and the United States and includes 27 case studies detailing successful collaborations.

¹¹ For purposes of this document, industry is defined as employers. Learn from and build on best practices and have a broad public and private education partnerships. A concerted effort to reach out to involve and engage labour and unions, to include these groups as we move forward.

Action 1.3

Explore ways to create and offer/facilitate more workplace-based experience as part of training programs

Offering students some part of their training in workplaces rather than entirely in a school or college setting offers at least four benefits. First, workplace training can provide a high quality learning environment, enabling trainees to acquire practical skills on modern equipment and learn under instructors familiar with the most recent working methods and technologies. Students are also able to develop key soft skills, like customer service or dealing with conflict, in a real world environment.

Second, having trainees in the workplace facilitates a two-way flow of information between potential employers and potential workers, making later recruitment more effective and less costly. Third, an employer that offers a work placement sends a signal that the training provider's program is of value to them and meets a labour market need. Fourth, trainees in the workplace can make a productive contribution.

Workplace based training also has its challenges; in times of economic downturn, employers may be reluctant to take on trainees, may believe they lack necessary skills to be productive on the job from the onset or may have reduced capacity to provide a quality experience for the trainee. Further, some basic skills may need to be taught in a safe and secure classroom environment. Nonetheless, done well, a workplace based component to training can greatly assist students. Partnerships and cooperation between industry and training providers can help this process. Some actions to increase it in the Kootenays are outlined below.

- Investigate expanding the COTR Mining Apprentice Program (MAP)¹² model to other sectors like forestry and/or to smaller companies.
- Create work experience/apprenticeship training components for non apprentice occupations. For example, work with employers to identify high demand occupations where they need experienced workers. Then, create work experience programs that job seekers can take as a way to prepare themselves for these positions. Define specific outcomes/goals for the work experience assignment, assess to ensure these goals are met, and consider offering some type of a certificate of completion from COTR and/or Selkirk.
- Explore ways to develop more bridging programs that target under-represented groups and enable them to get work experience. Such programs could develop creative ways to engage unemployed and underemployed populations. Mentorship programs are one example of a way people can acquire critical on-the-job training that is frequently a requirement for certification.

- ¹² The MAP program is a collaborative initiative between Teck Resources and COTR to train 11 heavy duty equipment technicians and 11 industrial electrical apprentices a year. See the Appendices for further details on the program.

Action 1.4

Work with Aboriginal, immigrant and other organizations to facilitate training and mentoring for under-represented groups in the labour force

As noted in the labour demand section of this Plan, the Aboriginal demographic is much younger than the mainstream demographic. This presents an opportunity to draw on this pool to help meet demand for labour, to create new businesses, or to buy existing ones. As well, immigrants and other under-represented groups, such as women and people with disabilities, could also fill labour and business gaps.

Focus group and interview participants said a lack of cultural sensitivity could discourage learners. To address these concerns, the KRWT encourages the recognition of the diversity and different cultures in the Kootenays. Training organizations, industry business and the communities should work together to forge and expand partnerships and ensure that training is sensitive to diverse needs and expectations.

To supplement existing offerings in the Kootenays, explore programs such as the City of Calgary's on-line cultural education module that may be able to be ported over and modified if necessary for use in the Kootenays.

Goal 2: Enhance training related to small and medium sized enterprises (SME's)

Rationale:

Many businesses in the Kootenays are small and seasonal. Nonetheless, SME's are key economic drivers and employers throughout the region are often the anchors of communities. Not surprisingly, the needs and concerns of these businesses came up frequently in the research. Often, companies are unaware of the training options and funding available to them. In other cases, training dollars are tied to unemployed individuals, with funding criteria which may be of little benefit to small business owners or the individuals themselves.

Ideas and suggestions related to training ranged from encouraging more of an "entrepreneurial mindset", to ensuring that existing businesses remain sustainable, to helping retiring owners with their succession plans. Many business-related programs already exist in the Kootenays that address these needs; as is often the case, better coordination between providers and more publicity to increase awareness of offerings may address in part, some of these issues. Other potential actions are outlined below.

Action 2.1 Offer more entrepreneurship training to address a variety of business needs and work regionally to publicize it

Provide/expand/publicize opportunities to assist in starting, sustaining, and transitioning (buying/selling) businesses. Programs should be available for young people, trades persons, contractors, retiring business owners, Aboriginal people, immigrants, and so forth. Consider some of the following actions:

- Ensure that established businesses are aware of sector resources existing programs that help them better manage, sustain and grow their businesses.
- Help SMEs to train/develop employees for project management and supervisory roles. Consider mentorship programs and train-the-trainer type programs to build capacity. Identify and build on existing courses and apply best practices where available.
- Develop entrepreneurship modules for trades training programs and make apprentices aware of the business opportunities available to trades people.
- Create a matching mechanism to bring together potential buyers (young people, immigrants) and sellers of businesses. An existing regional example is the Invest Kootenay website (www.InvestKootenay.com) where a business owner can register and post notices to sell their business and connect with investors
- Work with Chambers of Commerce, Community Futures and others to identify and build on and publicize targeted, specific courses that address needs.
- Consider developing a regional entrepreneurial fair in addition to the usual career/employment fair.

Action 2.2 Develop a collaborative regional approach to SME employee training

To help SME's access employee training, a more coordinated, regional approach needs to be developed to keeping SME's aware of the options available to them. One possibility would be the development of a centralized web resource, listing programs available and appropriate contacts. A different method would be to use funding to support outreach staff, whose job it would be to be informed of training programs/supports of interest to SME's and visit businesses, Chambers of Commerce and other business groups on an ongoing basis. They could focus on awareness and coordination, leveraging relationships in the region and help develop solutions relevant to employers.

Federal and provincial governments provide a range of programs designed to help SME's accessing employee training, or provide wage supports or other incentives for hiring. SMEs, focused on the daily operations of their businesses are often unaware of and/or lack the time to find out about these programs, fill in the forms and deal with the necessary administrative hurdles to access them.

Goal 3: Help lower skilled people upgrade and upskill

Rationale:

Focus group and interview participants raised concerns about a surprisingly large/potentially growing group of people with literacy and/or life skills challenges that prevent them from connecting to or remaining in the labour market often referred to as “multi-barriered”. Many felt that people with these challenges were largely hidden; either out of the labour market, recently unemployed after a long history of employment and unable to re-train, or about to become unemployed and unemployable. To assist these individuals, training providers need to gain better understanding of the scope and nature of the problem.

Action 3.1 Undertake research to better understand the nature of the skills problem

Carry out specific, Kootenay-focused research to identify the number of people with multiple barriers, their training needs, their location within the region. Potential to work with the Columbia Basin Alliance for Literacy on this.

Action 3.2 Review additional ways to bring training to lower skilled people and raise their awareness of the training options available

Develop a communications strategy that identifies and communicates existing training available in the region.

Investigate expanding the BC Aboriginal Mine Training Association (BC AMTA) model to non-Aboriginals. In this model, the provider offers individual assessments to learners in three areas of essential skills. Based on their scores, individuals then take specific, appropriate training that addresses their identified needs.¹³ Industry could also consider working with BC AMTA to expand their programming into other sectors, such as solid wood or tourism.

¹³ Further details on the BC AMTA program are available in the Appendices.

Goal 4: Continue to ensure that local training is aligned to workforce needs

Rationale:

Labor market information (LMI) research indicates potential training gaps for certain occupations. Many of the focus groups cited the need for training delivery to overcome barriers to training time, distance and travel costs. Companies need consistent, quality training that meets their needs. The goals and actions below are means to address some of these issues.

Action 4.1 Update labour market information

Forecasts related to labour demand and supply can provide valuable information to training providers and industries. Each time the BC government releases new BC Labour Market Information forecasts, (normally once per year, although this can vary) it will be important to update the labour demand and supply forecasts underpinning the Training Plan. Industry input, new sector council reports and other sources of LMI should be taken into consideration.

Action 4.2 Joint planning / monitoring between Selkirk and COTR

With training resources limited and often similar demands from the East and West Kootenays, it is important for regional colleges to work collaboratively. The KRWT recommends that Selkirk and COTR review, on an annual basis, planning for all training programs, including on-demand offerings provided through contract training/continuing education departments of each college. They might also consider including other private training providers and in-house company trainers, as appropriate, to confirm needs, encourage cooperation and leverage resources. A further action would be to consider sharing of wait lists for popular courses, particularly in high demand occupations.

Another element of cooperation would be to create institutional partnerships to develop and/or deliver programs while respecting the needs/priorities/resources of individual institutions. Rather than both institutions developing programs, create one program that considers the needs of the East and West Kootenays; structure the content and format of the program so that each institution can tailor it to the needs of the recipients in their regions.

Action 4.3 Make greater use of agile teaching/delivery models

In focus groups and interviews, many participants raised issues of time, distance and cost as barriers to training. For many, classroom training in a location far from home was unsuitable and often cost and time prohibitive. Repeatedly, people asked for more distance learning, local instructors and more mobile training, delivered closer to home.

Training providers could respond to this need by providing more courses via video conference, e-learning and other distance techniques (NAIT in Alberta has used video courses for trades training, for example.) They could also deliver training using social media for example, entrepreneurship training for mothers working from home. Training providers could also consider more mobile training, be it the classroom or the instructor that moves.

While the use of new delivery models will be useful, increased funding, from more sources, with more flexibility will also be necessary. Funders tend to have very specific deliverables and restrictions on what they will cover - they may pay for delivery but not capital/ infrastructure or infrastructure but not delivery of courses. For example, when Selkirk ran a Foundation Carpentry class in Nakusp it had to find additional money to cover the costs to buy tools and equipment, and pay for local administrative support and instructor mileage. Further, government funding does not cover course/program development nor purchasing equipment to run a new program.

Other funding restrictions will not allow providers to combine regular fee payers and students supported by special programs into one class. In small communities this is especially problematic because the training provider may need to mix student groups to get a full or near to full class. Training providers often must piece together funding sources to support programs and some gaps are not able to be filled. More flexible funding, moneys from sources other than government to support new equipment, process, curriculum development and delivery is required to increase the responsiveness of training providers.

Training providers must also overcome internal barriers and address staff re-training/change management needs and issues to effectively offer more training through alternate modes. These include:

- Shifting attitudes in some instructors that trades people prefer to work directly with equipment and tools and that is the only way to teach them. Times are changing as the next generation comes into the workplace already experienced with new ways of learning using computers, Internet tools and other technologies. Colleges and trades training programs need to respond to these changes more quickly than they have. As a March 2013 report from the Canadian Apprenticeship Forum on technologies and the trades notes,¹⁴ “The introduction of increasingly high-tech equipment and machinery requires skilled tradespeople to have competencies well beyond hands-on mechanical skills. We are also seeing the learning environment itself changing, requiring apprentices to interact with technology as part of their training process.”
- When colleges receive new funding, they may need to use some of these moneys to build new curriculum and tools, (and not solely expanding physical plant) so they can maximize their investments in physical facilities.
- When dollars are available to spend on curriculum development, colleges should at times resist the urge to always carry out the entire process themselves. They could consider working with external suppliers and vendors to come up with new tools.

Action 4.4 Establish (or re-establish) active industry advisory committees for college programs related to key high demand trades

To ensure training remains responsive to industry requirements, training providers and industry need to set up or re-establish regular, efficient and sustainable communication processes. Industry must outline their employment and skills needs to training providers so that they make appropriate adjustments to their programs. Training providers must keep industry abreast of programming available in the region and the means of accessing it.

Examples of high demand trades where active industry advisory committees might be helpful include millwright, electrician, heavy equipment operator (haul truck driver).

Industry and training providers must regularly discuss issues related to scheduling, recruitment, training seats available, levels offered, training locations, program content, gaps and so forth.

¹⁴ Canadian Apprenticeship Forum, *The Impact of Technology on Apprenticeship Training in Canada*.

Action 4.5 Develop a collaborative approach to Applied Research and Innovation Solution

The KRWT recommends that COTR and Selkirk continue their efforts to set up a Chair in applied research, and work and collaborate with local industry and the provincial and federal governments to secure funding for a Kootenay Applied Research and Innovation Initiative.

A regional Applied Research and Innovation Initiative (based at a college) can be a gateway and a resource, service, and research and development training ground for industry and business for applied research projects which industry partners, students and college faculty undertake jointly. This collaboration could evaluate project potential, secure support, administer policies, procedures and financial reporting, and provide guidance on Intellectual Property and commercialization issues.

Benefits of collaboration:

Facilitates technology advancement and transfer of innovation into the classrooms of COTR and Selkirk

Provides a continuous supply of highly qualified, skilled people into the Kootenay workforce

Provides students with work on real world projects, where they develop valuable skills and experience guided by private sector partners.

Enables small businesses and industry to conduct research needed to develop new products, improve services and processes and grow.

Develop a collaborative approach to applied research and innovation

COTR and Selkirk are both NSERC eligible and should apply funding where appropriate.

5 > Other Workforce Planning Related Issues

The Kootenay Regional Workforce Table, by its Terms of Reference, is primarily examining training related issues. Focus group and interview participants, however, identified issues, barriers and recommendations related to broader workforce and economic development in the Kootenays. Below are some of the major points they raised. The KRWT recommends further investigation and research and provide solutions to the following issues:

Table 15 - Other issues and barriers related to workforce and economic development

Other issues and barriers
<p>Retention</p> <ul style="list-style-type: none"> ○ Loss of workers, especially with trades skills, to areas with higher wages such as Northern BC and Alberta ○ Students and graduates from training programs leaving to jobs outside the region ○ Loss of workers recruited from outside the region because of the lack of meaningful employment for family members or their failure to integrate into the community
<p>Challenges outside of the work place, including lack of:</p> <ul style="list-style-type: none"> ○ Affordable childcare limiting participation in training and choices about employment in a particular location ○ Affordable rental housing, particularly for seasonal workers ○ Appropriate and affordable transportation options to get to training or jobs, in part as the result of frequent adverse road and driving conditions and infrequent public transit
<p>Business environment</p> <ul style="list-style-type: none"> ○ Lack of industrial land and cost of commercial investment/development ○ Limited information for businesses looking to re-locate into the region ○ High rents by landowners, especially retail ○ Lack of basic services. This includes high speed Internet, couriers, infrastructure to support business activities and attracting workers and businesses, among others ○ Employers paying lower wages/lack of benefits

6 > Conclusion and Next Steps

In this final section, the KRWT offers some observations and recommendations for moving ahead on the Regional Skills Training Plan.

1. The Kootenay labour market demand outlook is positive. Economic activity and growth in the resources, tourism, support and services sectors coupled with large scale projects proposed over the next 10-15 years signal an ongoing need for skilled and unskilled labour in the region. The number of job openings in the Kootenay Region is forecast to be 22,800 by 2020.
2. Numerous factors will drive and impact the availability of skilled and unskilled labour in the Kootenay Region; including:
 - An age demographic that is older than the BC average (higher than the provincial average for ages 55-64 close to retirement, and lower than the provincial average for youth ages 15-24 and 25-34); Consequently, higher age related attrition,
 - A significant out of province population,
 - Competing demand for limited labour pool by heavy industry, tourism, services, and support sectors,
 - Youth population exodus; and,
 - Fast growing and younger Aboriginal population.
3. Occupations in primary industries, tourism and hospitality, support and services industries will have the greatest number of job openings in the Kootenay Region.
 - Primary Industries: heavy equipment and haul truck operators, machinery and transportation equipment mechanics, construction and transportation managers, electricians and other trades.
 - Tourism and Hospitality Industries: cashiers, food counter attendants and related occupations, building maintenance and janitors, light duty cleaners, food and beverage servers and managers, accommodation service managers.
 - Support and Services Industries: retail, cleaners, and clerical.

The data presented in the KRWT Training Plan indicates impending shortages in a number of occupation areas however some employers indicated that they are currently experiencing greater shortages across occupations. Additional research is required to provide a more accurate assessment of high demand occupations.

4. This KRWT Training Plan preliminary analysis has shown that Kootenay regional institutions provide training on a regularly scheduled, occasional or on-demand basis in most of the high demand occupations.

Labour shortages could still occur in some occupations where local training is available. For example the numbers of graduates may not completely fill the demand and may result in future shortages; the number of apprenticeship training seats may not meet student

and/or employer demand; and, the impact of industry competition from outside the region for high in-demand occupations could draw workers away from the region.

5. In rural regions such as the Kootenay, the current funding model for training presents challenges and barriers to effectively align and deliver training to meet employer and labour demand. Impacts are more pronounced due to lower population levels and greater geographic distances. Solutions to address restrictive funding criteria and specialized population delivery are required.
6. The SMEs in the Kootenay Region are critical to the growth and sustainability of communities, the economy, and the labour force. Therefore business related training issues and supports such as business workplace development and succession need to be addressed.
7. The KRWT has contributed to the process of building relationships and partnerships across diverse industries, education and training institutions, Aboriginal communities and organizations, and labour related groups. It has engaged stakeholders from across the Kootenay Region and conducted helpful research.

There is clear, demonstrated support from the KRWT stakeholders, in particular industry, to move forward. There is a desire to act cooperatively and in partnership to find solutions to high demand occupation skills, needs and training gaps.

8. The KRWT Training Plan is a first step. It has provided initial research results and a framework. More research is needed, to build upon this work and provide more detailed understanding of the labour and training needs in the Kootenay Region.

RECOMMENDATIONS FROM THE TABLE FOR THE NEXT STEPS

1. KRWT to complete its mandate. Circulate the final report and report back to all initiative stakeholders and participants on this worthwhile initiative and next steps.
2. Immediate actions to take within the next 90-120 days:
 - A. Youth engagement and awareness of the high demand occupations and employment opportunities in the Kootenay Region.
 - B. Work with industry and industry organizations to increase awareness of the need to increase the number of industry first year apprenticeship seats/positions
 - C. Propose training program alignments to meet occupation and employer needs. Take action and, where advantageous, build partnerships to deliver.
 - D. Continue the work initiated by the KRWT. Establish a group structure and/or regular communications channels among employers, education and training institutions, Aboriginal communities and organizations, and labour stakeholders to work to address labour and training issues.
 - E. Selkirk and College of the Rockies representatives to engage in joint planning and delivery of programs.

3. Medium to long term actions:

- A. Conduct regular updates LMI/labour, occupation and training related research and data compilation for the Kootenay Region, filling in KRWT Training Plan research and analysis gap components and updating and ensuring accuracy.
- B. Continue to engage with the Kootenay Region Aboriginal communities and organizations, and the BC Aboriginal and Mining Training Association (BCAMTA), to strengthen relationships and Aboriginal industry employer and training solutions.
- C. Continue to work collaboratively with ITA, industry, colleges and trades associations etc. to increase the number of industry apprenticeship seats/positions and support apprentices throughout their apprenticeship journey.
- D. Selkirk College and College of the Rockies will continue to lead a collaborative approach to applied research and innovation across the region.

7 > Appendices

Appendix 1: References

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Appendix 2: Sample Kootenay Training Programs with Workplace component

MAP (Mining Apprenticeship Program)

- MAP is a collaborative initiative between Teck and the College of the Rockies (COTR) to train 11 Heavy Duty Equipment Technician (HDET) apprentices and 11 Industrial Electrical apprentices each year. The program began in the mid-2000's.
 - COTR employs the apprentices and is the registered sponsor with the Industry Training Authority (ITA) for each apprentice
 - Teck provides the work based training part of the apprenticeships by rotating the apprentices through a series of eight month assignments in each of the five Teck mines in the region
 - Teck also designates a certified tradesperson in the relevant trade to supervise the apprentices' work
- Teck maintains its own internal apprenticeship program and has even increased the number of apprentices it sponsors since MAP was initiated
 - A grievance was filed to prevent MAP when it was first launched, however arbitration ruled in favour of allowing the program to continue
 - COTR apprentices work companionably alongside Teck apprentices and are paid equivalent wages to Teck apprentices
- The program has a 99 percent completion rate
- Teck hires almost all of the apprentices (98 percent) once they become Red Seal certified
- MAP is seen as a win by all involved
 - MAP provides a way for more, younger apprentices to be trained and transitions them to full time employment with Teck
 - Without MAP, a young person seeking an apprenticeship with Teck would need to first obtain an entry level job with the company and then work four to five years before being eligible to apply to the internal apprenticeship program
- There is some awareness of MAP amongst other companies and colleges
 - As of May 2013, the model has not been applied in other sectors

Bachelor of Business Administration (BBA) in Sustainable Business Practices, COTR

- The BBA degree is a four year Business degree that integrates the principles of sustainability (economic, social and environmental) into business operations and management
- Employers can participate in the program through the Capstone Project
 - In the Capstone Project, students identify, develop, implement, and evaluate a solution intended to solve a real problem or introduce a specific change in a participating business, organization or community
 - As part of the project, students work for 90 hours in the participating organization
 - Students document the project and their learning experience which is then communicated to the College and participating organization through a formal presentation and a website or professional portfolio
- The program can be taken on a full time or part time basis; 60 percent of the program is available on line
- A one year, post-graduate certificate program is also available

BC Aboriginal Mine Training Association (BC AMTA)

- BC AMTA is a federally registered charity that provides training and assistance for Aboriginal candidates for careers in the full cycle of mining including exploration, development, operations, and reclamation.
 - The organization has offices in: Vancouver, Kamloops, William Lake, New Aiyansh, and Cranbrook; around 60-65 Aboriginal Clients are registered with the Cranbrook office
- A TOWES assessment is the first key step for Clients who become registered with BC AMTA
 - TOWES (Test Of Workplace Essential Skills) is a nationally accepted assessment tool, owned by Bow Valley College, which measures an individual's proficiency level in three essential workplace skills -- Numeracy, Document Use and Reading Text
 - Many mining employers require job applicants to have Grade 12 (or Grade 10) completion plus a TOWES score of 3 or higher in each of the three work place essential skills of Numeracy, Document Use and Reading Text
 - Clients who score higher than 3-3-3 (e.g., 3 for Numeracy, 3 for Document Use and 3 for Reading Text skills), are referred directly into a training program or qualify to apply for posted employment positions
 - Clients who score below the 3-3-3 requirement are referred for immediate essential skills upgrading; 75% of BC AMTA Clients score below the 3-3-3 requirement
- BC AMTA Clients can access three tiers of training to prepare for employment with mining companies
 - Tier 1: Pathways to Success (P2S)
 - Provides essential skills upgrading (ESU) plus life skills, culture, and job readiness training with curriculum tailored to individual client needs
 - Training is delivered at the BC AMTA office or online
 - Intakes are flexible (clients can join any time) and the program takes approximately five weeks to complete on a full time basis (seven hours per day, four days per week)
 - Clients also work on achieving grade 12 equivalency, or grade 10, depending on employment requirements of the job(s) they are interested in, while they are completing P2S
 - Tier 2: Mine Specific Certificate Training
 - Provides training in a range of certification programs, such as Underground Miner, Exploration Field Assistant, Aboriginal Environmental Monitor, Construction Craft Worker, etc.
 - Tier 3: Trades Related Training
 - Provides seats for Clients in foundation (or pre-employment) trades programs where Clients can obtain training equivalent to level 1 of an apprenticeship program; credited towards an apprenticeship is granted by the ITA once the Client obtains a sponsor and is registered with the ITA as an apprentice
 - Facilitates completion of apprenticeship training for Clients who have completed partial apprenticeships, so long as the Client can obtain work with an employer
- BC AMTA supports Clients with employment counselling, career exploration and planning, and case management
 - Clients are assigned a coach that assists and monitors their progress through essential skills upgrading and training. BC AMTA maintains a support role after a Client has obtained employment
 - Clients living in rural areas can access coaching services over the phone or on line using Skype video calling