

NORTHWEST REGIONAL WORKFORCE TABLE



REGIONAL SKILLS TRAINING PLAN
2013 — 2018



Funding provided through the Canada-British Columbia Labour Market Development Agreement

Executive Summary

Northwest British Columbia¹ is currently in the early stages of an economic boom which major projects in the mining, oil and gas sectors will create. This area of the province also has some of the highest unemployment rates in Canada, particularly among Aboriginal people who make up approximately 40 per cent of the region's population. This new activity has tremendous potential to offer significant new employment opportunities to people in the region. It is clear, however, that in the Northwest there is a shortage of the skilled workers needed to support these major projects.

The BC Jobs Plan 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 Northwest RWT is led by a task force composed of approximately 20 key leaders representing a range of communities and organizations in the region. They have come together to produce this Regional Skills Training Plan for the Northwest region. Funding is provided through the Canada-British Columbia Labour Market Development Agreement.

The RWT based this Regional Skills Training Plan (the Plan) on data and statistics developed in the fall of 2012. The RWT met with and interviewed people throughout the region to obtain their views on training gaps and issues to inform the development of the plan. Extensive detail on the labour market research is available in the Training Plan Supporting Documents; key findings emerging from the research and consultations are summarized in this plan.

Jobs are coming to the Northwest

As a result of major project development in a number of key resource sectors, the Northwest region is set to experience new job growth in a range of occupations over the next decade. A conservative or base labour market forecast by the BC government predicts that Northwest BC is poised to gain 6,000 jobs between 2010 and 2020. In the optimistic case that projects additional investment in mining and Liquefied Natural Gas (LNG) export facilities and pipelines, jobs are expected to more than double to 13,000 during the same period.

Through labour market analysis and review of existing data, the RWT has identified 34 occupations that will be in particularly high demand over the next decade as the major projects are built and then move to the operation phases. The major projects that are driving labour demand occur in two phases – construction and operations. Each phase requires different skill sets. Trades lead the way, comprising more than 40 per cent of the high-demand occupations under the conservative base scenario. Labourers (14 per cent), semi-skilled workers (15 per cent), truck drivers and heavy equipment operators (14 per cent) also represent significant proportions of the expected baseline demand for jobs by 2020, with the remainder made up of managers and supervisors (seven per cent) and technologists and technicians (six per cent).

The optimistic scenario, in which additional capital investment and major projects move forward, trades occupations are projected to increase to 50 per cent of the total anticipated demand, and labourers increase to 26 per cent. The higher expectation for trades and labourers will be driven by a higher level of construction activity under the optimistic scenario.

¹ For purposes of the report, Northwest BC encompasses the BC economic development regions of North Coast and Nechako.

Skills Mismatch and Training Capacity Gaps

It is critical that those in the Northwest region have the skills and training to take advantage of these employment opportunities. However, the research carried out demonstrates that a mismatch exists between the skill level of much of the current regional labour force and the occupations required to support the major projects. Many high-demand occupations are highly skilled and require two to four years of training. It is unlikely that local labour supply will be available to fully meet demand in the short-term.

The RWT has identified 34 key occupations which will be in high-demand from 2012-2020. These occupations include:

- Carpenters
- Central Control and Process Operators, Mining and Mineral Processing
- Concrete Finishers
- Construction Managers
- Construction Millwrights and Industrial Mechanics
- Construction Trades Helpers and Labourers
- Cooks
- Crane Operator
- Drillers and Blasters
- Electrical Power Line and Cable Workers
- Forestry Technologists and Technicians
- Heavy Duty Equipment Mechanics
- Heavy Duty Equipment Operators (except cranes)
- Industrial Electricians
- Industrial Instrumentation Technicians and Mechanics
- Insulators
- Iron Workers
- Labourers in Wood, Pulp and Paper Processing
- Logging and Forestry Labourers
- Longshore Workers
- Machine Operators, Mineral and Metal Processing
- Masonry and Plastering Trades
- Material Handlers
- Other Trades Helpers and Labourers
- Petroleum, Gas and Chemical Process Operators
- Power System Electricians
- Primary Production Managers
- Pulp and Paper Production and Wood Processing Operators
- Sawfilers/Sawfitter
- Power Engineers
- Steam Fitters and Pipe Fitters
- Telecommunication Line and Cable Workers
- Truck Drivers
- Welders and Related Machine Operators

The RWT examined the availability of training in the Northwest region for these high-demand occupations. It found that training for 21 of the 34 occupations is currently available in the Northwest and that sufficient capacity currently exists to meet the anticipated demands. For the remaining 13 occupations, research demonstrated that some training gaps may occur within the region. Generally, demand projections for these occupations are quite small—sometimes between five to 30 people between 2010 and 2020. It may not make sense for local institutions to develop training for such small numbers. Further, some companies may need assistance with supervisory training. Given that some firms train supervisors in-house, it is unclear if local training providers will need to produce significant numbers of seats to support this anticipated gap.

For certain occupations where training is currently unavailable, regional training providers could collaborate and combine stand-alone courses to create a targeted training program. Students could also obtain training elsewhere in the province, especially in the case of Industry Training Authority (ITA) supported programs. Before developing new local training programs, providers must address uncertainty in the numbers of workers that need training, since some proposed major projects may be delayed or cancelled entirely. Close collaboration between training providers and industry and good labour market information will help keep training in alignment with changing labour market needs.

Other Challenges and Issues

Interviews and information gathering sessions were completed with community and industry representatives across the Northwest to get their perspectives on training gaps and issues to inform the goals and actions of this plan. Additional themes that emerged from these discussions include:

- **Lower skilled people need specific, targeted help** –Interviewees repeatedly emphasized the need for upgrading programs and labour market information for low skilled people to help them take advantage of the opportunities the major projects present.
- **Need for Aboriginal specific actions** - Much of the industrial activity will take place on the traditional territories of Aboriginal people. Aboriginal people interviewed believe that an effective training plan should include targeted actions that address the unique training needs of Aboriginal people.
- **Collaboration is essential** – Industry, training providers, the Industry Training Authority, and other interested parties must collaborate and communicate regularly and frequently to ensure that training plans and activities are aligned to meet employment opportunities within the region.
- **Shared Responsibility** – Communities, families and individuals, as well as government and industry, work together to increase employment participation rates under a shared responsibility model. Young individuals require encouragement and support from their families and the community to meet minimum educational standards and achieve high school graduation.

Training Plan Principles, Goals and Actions

With the foregoing research and analysis in hand, the RWT defined five principles that would guide the development of the Regional Skills Training Plan for the Northwest:

Principle 1: A regional approach that respects community needs

Principle 2: Recognition of the essential role of Aboriginal people in the Northwest labour force

Principle 3: Building on existing activities and experience

Principle 4: Creating a flexible labour force with transferable knowledge and skills that can move from industry to industry within the region

Principle 5: Encourage and support collaboration

Summary Goals and Actions

A summary of the goals and actions identified by the RWT to support effective alignment of regional training with employment opportunities is provided below. These goals and actions are further detailed in the Regional Skills Training Plan.

Goal 1: Provide students with a vision of a bright economic future in the region

Purpose: To provide students with an incentive to stay in school by increasing awareness of the jobs the major projects will bring and providing early access to training for high demand trades and technical occupations.

- Action 1.1** Establish a Northwest version of the Northern Opportunities dual credit initiative
- Action 1.2** Establish industry liaison and cooperation programs for middle and senior high schools
- Action 1.3** Partner with community organizations and industry to acquire the hardware and software to strengthen the integration of technology into classroom learning

Goal 2: Help lower-skilled workers upgrade to gain access to construction and operations jobs the major projects will create

Purpose: Maximize employment opportunities for lower skilled workers from the region and provide employers with skilled local labour.

- Action 2.1** Develop a *Major Projects Labour Market Information* initiative to inform people, specifically un- or under-employed individuals, about the projects and jobs coming to the region
- Action 2.2** Building on existing regional literacy and numeracy upgrading programs, develop action plans to increase literacy and numeracy in lower-skilled people
- Action 2.3** Provide information about competency-based approaches for assessing knowledge and training skills for jobs and workers

Goal 3: Increase Aboriginal people's participation in high-demand occupations

Purpose: Ensure Aboriginal people derive full individual and community benefits from economic activity taking place in the region

- Action 3.1** Work with Aboriginal people in the region to identify training and workforce development opportunities
- Action 3.2** Develop and implement two-way cultural awareness training in job skills training programs
- Action 3.3** Build on existing regional efforts in job-search training to enhance opportunities for successful applications from Aboriginal people

Goal 4: Encourage collaboration among industry and regionally-based training providers

Purpose: Ensure that training available in the Northwest region continues to reflect and adapt to regional employment needs.

- Action 4.1** Enhance coordination and collaboration among regional training providers and relevant organizations to fill training gaps where appropriate
- Action 4.2** Identify existing training programs or courses that could be adapted to support training for high-demand occupations
- Action 4.3** Work with existing groups to share best practices on innovative training programs that successfully meet industry needs

Goal 5: Keep people informed and encourage collaboration to achieve Training Plan goals

Purpose: Increase awareness of Training Plan and maximize its benefits

- Action 5.1** Identify opportunities to keep people in the region informed of the status of the Training Plan

The Northwest region faces a pivotal point in its history—in the 1950s and 1960s, new industries helped build strong communities and provide a good living for people in the region. Approached carefully and thoughtfully, the major projects of the decade ahead can offer the same benefits. A strong, coordinated regional skills training system is critical to success.

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Acknowledgements

The Northwest Regional Workforce Table (NWRWT) task force is made up of approximately 20 key leaders representing a range of stakeholder groups in the Northwest. The task force is co-chaired by Heather Adel (Economic Development Officer, Misty Isles Economic Development Society), Rose Klukas (Economic Development Officer, District of Kitimat), and Murray Slezak (Social Performance Team Leader, Shell Canada). The task force is supported by a secretariat (Northwest Community College) which is responsible for the administrative, logistical, research analysis and outreach functions for the NWRWT.

The Regional Skills Training Plan for the Northwest and its supporting documents were prepared by Ingenia Consulting.

The plan benefitted from comments, insights and generous support of many people in Northwest BC and elsewhere. They are too numerous to mention, but through this acknowledgement, we recognize their contributions and express our appreciation.

The NWRWT would also like to thank the British Columbia Ministries of Jobs, Tourism and Skills Training, Advanced Education, Innovation and Technology, and Social Development for their strong support.

I > Introduction and Background to the Project

The best way to predict the future is to invent it.

Alan Kay

Northwest British Columbia (encompassing the economic development regions of North Coast and Nechako – see Figure 1) is currently in the early stages of an economic boom which major projects in the mining, oil and gas (Liquefied Natural Gas – LNG) sectors will create. Details on this activity are available at <http://investnorthwestbc.ca/>. However, this area of the province also has some of the highest unemployment rates in Canada. This is particularly true among Aboriginal people who make up approximately 40 percent of the region's population. It is clear that there is a critical shortage of the skilled workers in the Northwest needed to support this economic development.

Figure 1 – Economic Development Regions of British Columbia



Source: The Mining Industry Human Resources Council; Statistics Canada

The BC Jobs Plan 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 was held in Terrace, BC on January 30, 2012 with more than 80 regional representatives from industry, labour, employers, First Nations, educators, training service providers, economic development organizations and other community members in attendance. The goal of this event was to start a dialogue among key regional stakeholders to get input for the development and implementation of a Regional Workforce Table in Northwest BC. Based on the input and support received at this meeting, the region moved forward to implement a Northwest Regional Workforce Table.

The Northwest RWT is led by a task force composed of approximately 20 key stakeholders representing a range of communities and organizations in the region. Membership is drawn from those interested in participating at the Open House forum and in subsequent follow-up meetings, including representation from the Northwest Transmission Line Steering Committee (now called the Northwest Labour Market Partnership), Aboriginal people, industries, employers, educators, regional districts and municipalities, community service providers, economic development organizations, and labour. See the Appendices for a full list of task force members.

The RWT produced this Regional Skills Training Plan for the Northwest region for presentation to interested parties, including government.

Process for Developing the Training Plan

In order to fulfill its objective of planning how to best align existing regional training to meet regional employment opportunities, the Task Force identified the development of a Regional Skills Training Plan for Northwest BC as its key deliverable. As part of the process to develop this plan, the RWT conducted the following activities throughout summer and fall 2012:

- Determined the training and employment needs for the northwest region as a whole, for the short-, medium- and long-term; including
 - Identifying sectors and/or industries considered 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 ways to support and complement existing training and workforce initiatives in the region, to avoid duplication and encourage collaboration.
- 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 Northwest 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 development of the Training Plan. Multiple trips throughout the region were made to meet with interested parties, including a three-day visit to Haida Gwaii. Individuals from the Gitksan, Gitwangak, Gitanyow, Haida, Kitselas, Nisga'a and Tahltan First Nations as well as 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 Demand in Northwest BC 2010-2020

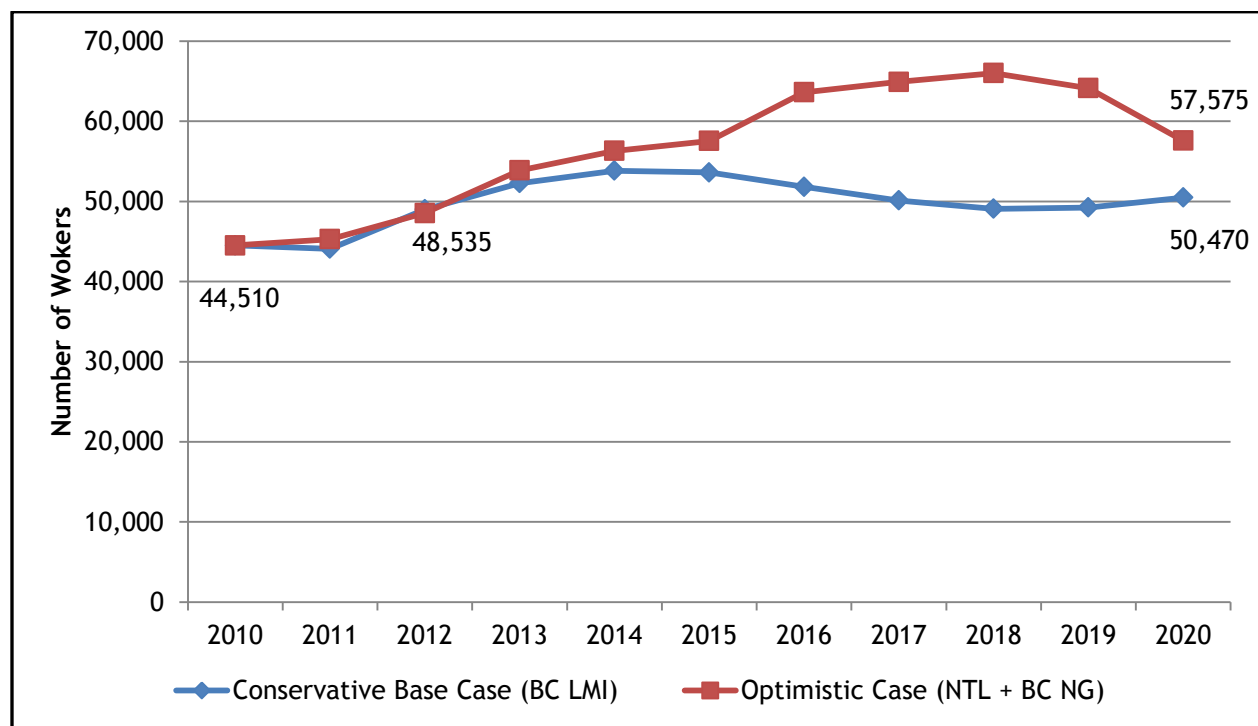
*If you are planning for a year, sow rice.
If you are planning for a decade, plant trees.
If you are planning for a lifetime, educate people.*

Chinese proverb

As a result of major projects and retirements, the Northwest will see a major increase in labour demand...

As can be seen in Figure 2 below, even using conservative estimates (base case) for labour demand related to the major projects from existing industries, Northwest BC is poised to gain 6,000 jobs between 2010 and 2020². In the optimistic case that projects additional investment in mining and Liquefied Natural Gas (LNG) export facilities and pipelines, the job gains would more than double to 13,000. Under this scenario, employment peaks at 66,000 workers and then falls to just over 57,500 due to the completion of major construction projects between 2018 and 2020.

Figure 2 - Northwest BC Projected Labour Demand Outlook 2010-2020



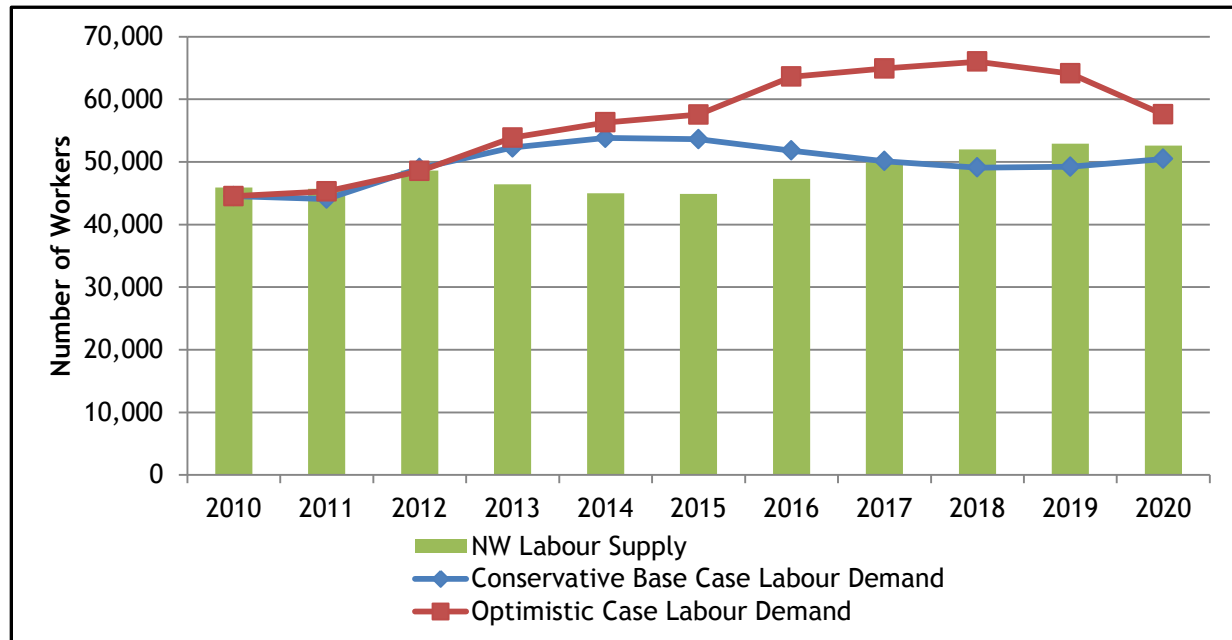
The Conservative Base Case scenario is based on projections from the BC Labour Market Information 2010-2020 report. The Optimistic scenario is based on projections made in the Northwest Transmission Line (NTL) Human Resource Strategy and the BC Natural Gas (BC NG) labour demand reports.

² Figure 2 does not include job openings due to retirements. It only includes labour demand due to increased industrial activity.

Labour shortages occur regardless of the labour demand scenario

Even in the conservative base case scenario, job growth outpaces labour supply in Northwest BC. As Figure 3 below indicates, the supply shortfall is projected to start as early as 2013. In the conservative base case, the gap between labour supply and demand continues until 2017 and then tapers off as major construction projects come to completion. In the optimistic case, additional capital investment and major construction projects will result in labour supply/demand gaps that will extend to the end of the decade. In the optimistic case, labour supply/demand gaps could impede economic growth.

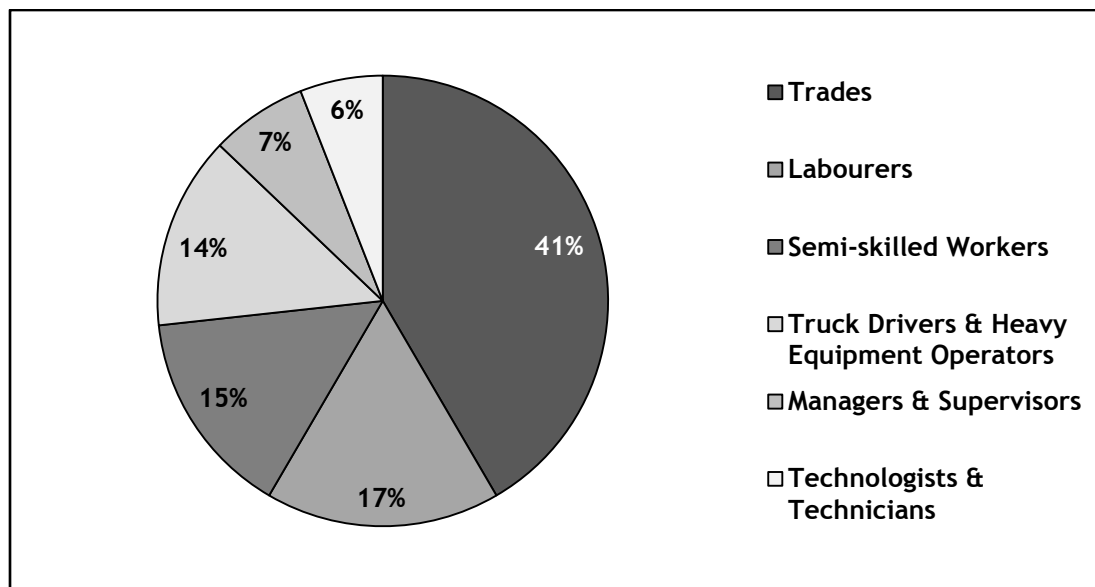
Figure 3 - Northwest BC Labour Demand/Supply Gaps 2010-2020



Many of the high-demand occupations are in trades

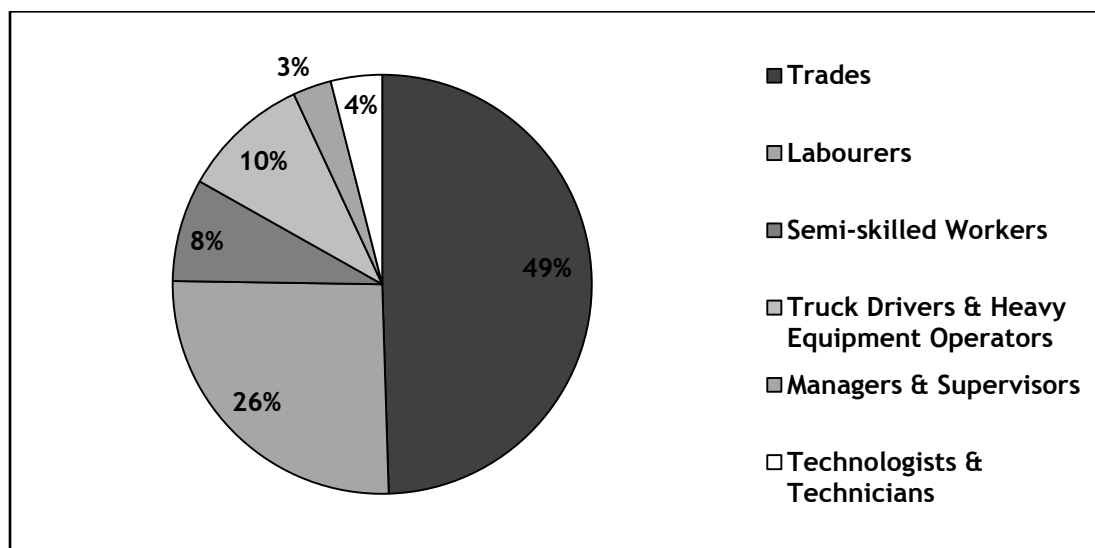
As can be seen in Figure 4, using conservative estimates for labour demand, many of the high demand occupations are in trades. A detailed list of the high-demand occupations and the projected demand for them is included in the Appendices.

Figure 4 - Base Scenario 2010-2020: NW BC High-demand Occupations by Qualification³



In the more optimistic forecast, where additional major projects are approved to commence construction, the percentage of in-demand occupations that require trades certification increases. Furthermore, as major projects commence commercial operations, the percentage of skilled operators, maintenance trades and technical service skills will also increase. Major projects require a significant number of semi-skilled and skilled labour as well as technical services to construct and operate facilities. The reason for the additional demand is due to the increase in industrial construction and operations activity.

Figure 5 - Optimistic Scenario 2010-2020: NW BC High-demand Occupations by Qualification



³ Definition for occupational qualification categories included in Appendices.

But many workers in the Northwest lack formal education or qualifications

As illustrated in the table below, the current education level of the Northwest population ⁴ indicates strengths and challenges given the projected demand for trades in the region.

- Strength: Compared to the rest of the province, more people in the Northwest region have trades skills. This figure likely indicates many people are familiar with trade occupations and some workers are already trained or could be upskilled or provided with credentials for high-demand occupations.
- Challenge: The Northwest has a lower than provincial average high school completion rate; in BC in general, 11 percent have not completed high school. In the Northwest, however, that figure is over 20 per cent. The majority of the high-demand occupations identified in this plan will require at least high school completion.

Table 1 - Education Levels in Northwest BC

Characteristic	BC	North Coast	Nechako
Population 24 – 54 years without High School Complete	11.1 %	23.0%	20.3%
Population 24 – 54 years with Certificate or Diploma	31.5%	33.1%	31.1%
Population 24 – 54 years with University Degree	24.1%	11.8%	12.1%
Population 24 – 54 years with Trades Skills	15.5%	18.7%	21.4%

Source: BC Stats based on Statistics Canada Census 2006 (latest available)

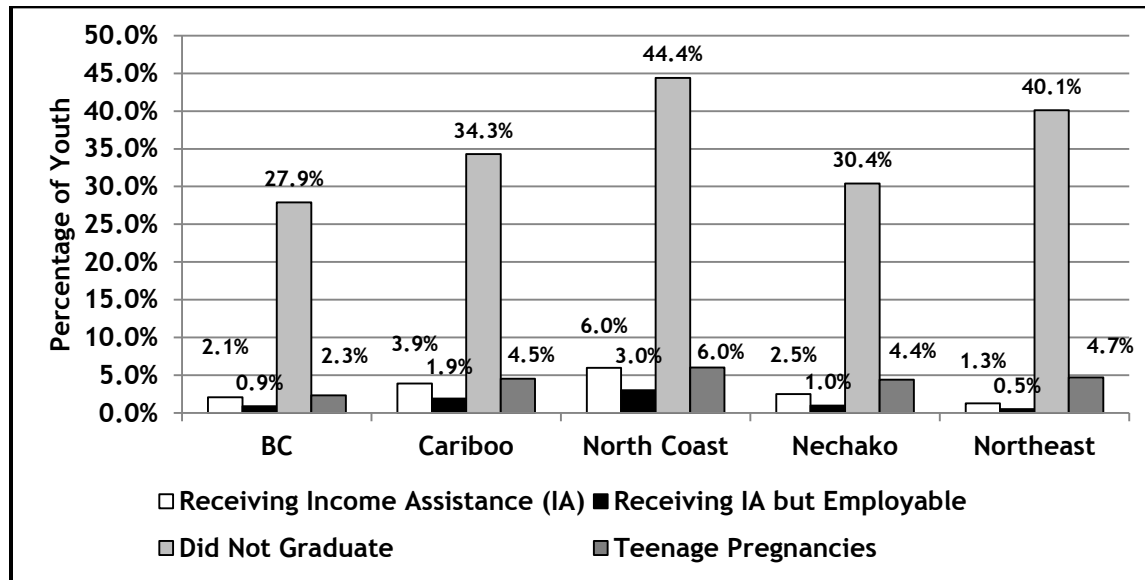
⁴ Divided into economic development regions, on the basis of which the BC government provides these statistics.

Many young people face potential barriers

Northwest BC's younger population represents a potential source of labour supply in the future, but only if current barriers to successful employment participation are addressed. These barriers (see Figure 6 below) include:

- Low high school graduation rates leads to reliance on income assistance supplemented by part time unskilled seasonal work

Figure 6 – Potential Barriers to Youth⁵ Participation in Employment Opportunities



Source: BC Socio-Economic Profiles 2011 by Development Region. Compiled by BC Stats from Vital Statistics Agency, Ministry of Health, Ministry of Social Development and Ministry of Education, Employment Insurance Statistics, Statistics Canada

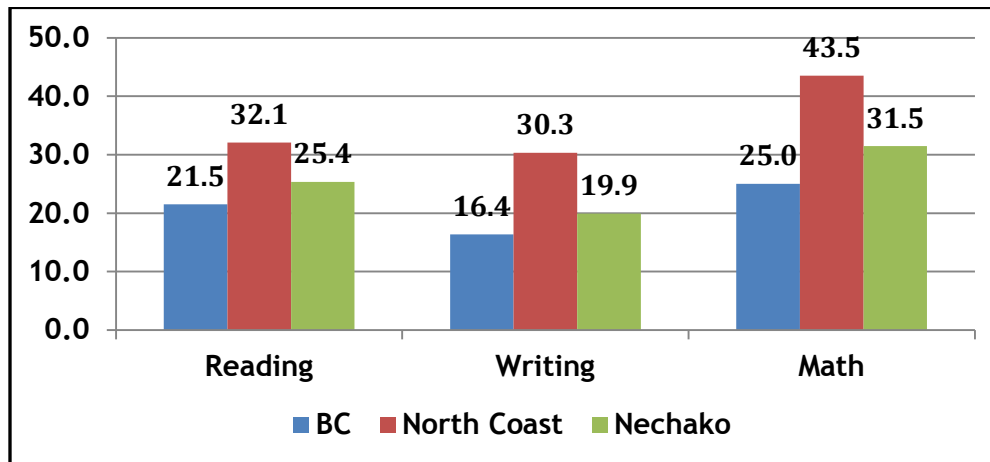
Figure 6 also illustrates the gap in high school completion rates in Northwest BC versus the province as a whole. It is important to note that the data in this chart uses varying age group categories; for example, the data on Income Assistance (IA) is for youth ages 18-24 year olds; graduation data is for 18 year olds; teenage pregnancies is for 15-19 year olds.

⁵ Youth are defined as 15-24 year olds.

Many children are struggling with math and reading skills

According to the BC Ministry of Education (2008/09 – 2010/11) the percentage of Northwest grade 7 students who are not meeting expectations in reading, writing and math is greater than the provincial average (see Figure 7). These base skills are needed to successfully complete high school and further training; these figures may represent a signal of further struggles ahead for these students when they attend high school.

Figure 7 - Percentage of Grade 7 Students Not Meeting Expectations



Source: BC Ministry of Education. Student Test Results in BC – Average 2008/09 – 2010/11. Prepared by BC Stats for BC Socio-Economic Profiles 2011 by Development Region.

In Summary

The Northwest, with rates of unemployment at over 10 per cent in October 2012, will be the site of a number of major projects. Even using conservative estimates, the projects that are underway and are planned will generate thousands of jobs. At present, the data show that many residents lack the formal qualifications and skills needed to be hired in many of the high-demand trades occupations and even basic labour jobs require certifications. Further, young people in the region continue to face difficulties with math and reading and low high school completion rates, potentially entrenching the educational problems.

3 > Training Availability to Match High-Demand Occupations

In addition to the considerations outlined above, the availability within the Northwest of relevant training for the high-demand occupations generated by the major projects will be a critical factor in supporting access to these employment opportunities for people in the region. With this in mind, the RWT conducted additional analysis on training related to the high-demand occupations. This section highlights the results of that analysis. Greater detail on this analysis is available in the Training Plan Supporting Document.

The RWT prepared an inventory of publicly available information on training programs offered within the Northwest region (see Tables 2-4). The inventory lists organizations that offer programs in the Northwest that prepare individuals to work in the high-demand occupations. The inventory also includes organizations delivering literacy, essential skills and employment readiness related programs, since many individuals in the Northwest require skills upgrading.

Identifying relevant and required training for an occupation can be complex. Some occupations are designated as regulated professions and trades. In BC, the Industry Training Authority (ITA) is the governing body for approximately 100 trades occupations. The ITA sets the standards for training content and certification in those occupations and governs sixteen of the in-demand occupations forecast for the Northwest region. The inventory includes ITA approved organizations and training programs for these occupations.

For occupations outside of regulation or governance by a professional body, employment requirements serve as the primary guidelines for determining training content. Some occupations have definite employment requirements while for others, no consensus or a range of acceptable requirements exist.

A summary of the inventory of training available in the Northwest related to high-demand occupations is presented in Tables 2, 3 and 4. The summary information has been compiled from detailed profiles assembled for the RWT for each of the high-demand occupations. These profiles are contained in the Training Plan Supporting Document. Note the inventory excludes stand-alone programs for certifications such as First Aid, forklift driving, and others.

Table 2 shows the organizations that provide training in the region for the high-demand occupations, current as of September 2012.

Table 3 shows the projected demand (conservative and optimistic scenarios) for each of the high-demand occupations and the organizations that provide training for them. The RWT compiled this list based on a review of websites and discussions with training providers.

Table 4 shows organizations providing programming in the region related to grade 12 upgrading, essential skills, employment readiness and employment services, current as of September 2012.

Table 2 - List of Training Providers Included in Research for Training Relative to High-Demand Occupations

PUBLIC TRAINING ORGANIZATIONS	British Columbia Institute of Technology (BCIT)
	College of New Caledonia (CNC)
	Northern Lights College (NLC)
	Northwest Community College (NWCC)
FIRST NATION TRAINING ORGANIZATIONS	Kitimat Valley Institute (KVI)
	Metlakatla Development Corporation - First Nations Training and Development Centre
	Native Education College (NEC)
	Wilp Wilxo'oskwhl Nisga'a Institute (WWNI)
PRIVATE / OTHER TRAINING ORGANIZATIONS	Ebus Academy
	Fort Outreach
	Fox Professional Driver Training Centres Ltd.
	Hecate Strait Employment Development Society
	Kitimat Community Services
	Kitimat WorkBC Employment Services Centre
	Nechako Northcoast Construction
	Northwest Training Ltd.
	Terrace and District Community Services Society (TDCSS)
	UA Piping Industry College of BC (UAPIC)
	United Steelworkers Northern Skills Training Program (USW)

Source: Information provided by RWT task force members and online research

Table 3 - Summary of Training Availability in Northwest BC for High-Demand Occupations

High-Demand Occupation	Projected Demand 2010-2020 Base/ Optimistic ⁶	Training Providers			
		NWCC	CNC	NLC	Private / Other Training Providers
Carpenter	550 / 650	✓	✓		✓ WWNI
Central Control and Process Operators, Mining and Mineral Processing	90 / 110		✓		
Concrete Finisher	40 / 235		✓		
Construction Managers	120 / 155				
Construction Millwrights and Industrial Mechanics	300 / 340	✓	✓		
Construction Trades Helpers and Labourers	410 / 1,900	✓	✓		✓ WWNI
Contractors and Supervisors, Heavy Construction Equipment Crews	85 / 130				
Cooks	340	✓	✓		
Crane Operators (5 programs)	30 / 160				
Drillers and Blasters	15 / 160	✓	✓		
Electrical Power Line and Cable Workers	30 / 100				

⁶ Number of Job Openings as per: Base - BC LMI 2010-2020 / Optimistic - NTL + BC Natural Gas LMI

High-Demand Occupation	Projected Demand 2010-2020 Base/ Optimistic ⁶	Training Providers			
		NWCC	CNC	NLC	Private / Other Training Providers
Forestry Technologists and Technicians	80 / 95		✓		
Heavy Duty Equipment Mechanics	185 / 395	✓	✓		
Heavy Equipment Operators (except Crane)	515 / 1,100	✓	✓	✓	✓ NEC, WWNI
Industrial Electricians	145 / 800	✓	✓		
Industrial Instrumentation Technicians and Mechanics	30 / 50				
Insulators	20 / 415				
Iron Workers	20 / 930				
Labourers in Wood, Pulp and Paper Processing	255 / 1,075		✓		
Logging and Forestry Labourers	80 / 90		✓		✓ WWNI
Longshore Workers	25				
Machine Operators, Mineral and Metal Processing	75 / 160	✓	✓		
Material Handlers	375	✓	✓		✓ WWNI, HSEDS, KVI
Other Trades Helpers and Labourers	30 / 140	✓			✓ WWNI

High-Demand Occupation	Projected Demand 2010-2020 Base/ Optimistic ⁶	Training Providers			
		NWCC	CNC	NLC	Private / Other Training Providers
Petroleum Gas and Chemical Process Operators	40 / 225				
Power System Electrician	5 / 60				
Primary Production Managers	120				
Pulp and Paper Production and Wood Processing Operators	190 / 240		✓		
Saw Filers/Sawfitter	130		✓		
Power Engineers	55		✓	✓	✓ KVI
Steamfitters and Pipefitters	75 / 750		✓		✓ UAPIC
Telecommunications Line and Cable Workers	5 / 85				
Truck Drivers	120	✓			✓ FOX, KVI, HSEDS
Welders and Related Machine Operators	145 / 770	✓	✓		✓ UAPIC

Source: Online research and discussions with training providers

Table 4 - Summary of Employment Related Programming Available in Northwest BC through Private Training Providers

Organization	Location and Website	Grade 12 Upgrading	Essential Skills	Employment Readiness	Employment Services
Ebus Academy	Vanderhoof http://www.ebus.ca	✓			
Fort Outreach	Fort St. James www.fortoutreach.com				✓
Hecate Strait Employment Development Society	Prince Rupert www.hseds.ca	✓	✓	✓	✓
Kitimat Community Services Kitimat WorkBC Employment Services Centre	Kitimat www.kitimatcommunityservices.ca		✓	✓	✓
Kitimat Valley Institute	Kitimat www.kvic.ca			✓	
Metlakatla Development Corporation - First Nations Training and Development Centre	Prince Rupert www.metlakatla.ca	✓			
Native Education College	Prince Rupert Satellite Campus www.necvancouver.org	✓			
Northwest Training Ltd.	Terrace www.northwestcareers.bc.ca			✓	✓
Terrace and District Community Services Society (TDCSS)	Terrace www.tdcss.ca			✓	✓
UA Piping Industry College of BC	Kitimat Satellite Campus esp.uapicbc.ca		✓		
United Steelworkers Northern Skills Training Program	Northern Skills Training Program www.uswl-424.ca/northern-skills-training		✓		
Wilp Wilxo'oskwahl Nisga'a	Gitwinksihlkw wni.bc.ca	✓	✓		

Source: Online research and discussions with training providers

3.1 Results of the Training Availability Analysis

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

A great deal of relevant training is already available in the Northwest region

The analysis shows that regional institutions already provide programs for over 50 per cent of the occupations forecast to result from major projects activity. Table 5 shows that training is available in the Northwest for 21 of the 34 high-demand occupations. Notably, 11 (denoted with a *) are occupations where the demand for workers is projected to be the highest.

Table 5 – High-Demand Occupations with Training Available in the Northwest

(2006 NOC ⁷ 4-digit level)
Carpenter*
Central Control and Process Operators, Mining and Mineral Processing
Concrete Finisher
Construction Millwrights and Industrial Mechanics*
Construction Trades Helpers and Labourers*
Cooks*
Drillers and Blasters
Forestry Technologists and Technicians
Heavy Duty Equipment Mechanics*
Heavy Equipment Operators (except Crane)*
Industrial Electricians*
Labourers in Wood, Pulp and Paper Processing*
Logging and Forestry Labourers
Machine Operators, Mineral and Metal Processing*
Material Handlers*
Other Trades Helpers and Labourers ⁸
Pulp and Paper Production and Wood Processing Operators*
Saw Filers/Sawfitter
Steamfitters and Pipefitters
Truck Drivers
Welders and Related Machine Operators

⁷ National Occupational Classification (NOC) is the nationally accepted reference for classifying jobs in Canada. It organizes over 40,000 job titles into over 500 occupational classifications. The NOC included in this report is the 2006 version.

⁸ Other Trades Helpers and Labourers (2006 NOC 7612) -- This unit group includes trade helpers and labourers, not elsewhere classified, who assist skilled tradespersons and perform labouring activities in the installation, maintenance and repair of industrial machinery, refrigeration, heating and air conditioning equipment, in the maintenance and repair of transportation and heavy equipment, in the installation and repair of telecommunication and power cables and in other repair and service work settings.

Further, an analysis of Table 4 shows that the Northwest BC region has a well-developed network of organizations providing basic education upgrading (grade 12), essential skills, employment readiness and other employment services for individuals. At least 12 different organizations, as well as public colleges in the region, offer a range of programming in this area. This illustrates that workers wishing to upgrade their job skills can do so in the Northwest.

To ensure the training available in the Northwest fully meets industry needs, close coordination between industry and training providers is essential. Industry will want to ensure that training programs cover the complete scope of an occupation. In particular it will be important to verify the content for programs that have no specific occupational standards or regulating bodies, such as Construction Trades Helpers and Labourers.

Furthermore, many training providers currently deliver stand-alone courses for certifications or other skill/knowledge requirements common to several of the high-demand occupations. By reviewing course content and specific occupational requirements with employers, training providers may be able to bundle courses together to provide training for the full scope of an occupation.

No occupational standards exist for over half of the high-demand occupations

The Industry Training Authority (ITA) governs 16 of the high-demand occupations identified in this plan. These occupations have standards for training content and certification. Standards facilitate consistency of program content across training providers and enable employers to understand the skills a new worker will have acquired upon graduation. Training for nine of the 16 ITA established trades areas is currently available in the Northwest region.

In contrast, provincial or national occupational standards and assessment are unavailable for training for 18 high-demand occupations. As a result, program content may and does vary between training providers. Of the 18 occupations in this category, training for 10 occupations is delivered in the Northwest; training for the remaining eight is available outside of the region. Developing industry-defined standards for these occupations would help ensure that different training providers are delivering consistent training.

The foundation for building on existing training for new occupations is in place

Discussions with training providers across the region confirmed that as a whole, training providers are willing to be flexible and responsive to industry and employer needs. However, the process of obtaining funding for and configuring program offerings is highly complex and requires significant lead-time for planning. It is estimated that the typical minimum timeframe is 12 months to develop a new program.

Training providers determine the mix of programming offered through consultation with multiple stakeholders. They must consider a wide range of internal and external variables. Internal variables include available facilities, equipment, faculty availability, collective agreements and so forth. Examples of external variables are labour market information, industry needs, student and community needs and other regional local factors. The number of students is another consideration; small communities are often challenged to have enough students to meet thresholds for class sizes.

Institutions offering provincially recognized trades training have additional processes to consider. As noted, the ITA coordinates trades training at the provincial level and works to ensure that training supply meets training demand. Colleges must carefully balance available resources, particularly facilities, equipment, instructors and funding. The importance of the availability of instructors and the state of facilities and equipment cannot be understated. Instructors for high-demand trades can be extremely hard to find, since trades people can earn much higher salaries than colleges can afford to pay instructors.

Given these constraints, lead time for planning is critical. Current, regular, and specific labour market information helps all training providers plan effectively and develop programs that meet the demand for skilled labour. Training providers can plan best when employers indicate the number of people needed in an occupation and at what time.

Training gaps could potentially arise without careful planning

Table 6 shows no training was available in the Northwest for 13 of the 34 in-demand occupations, which might lead to a training gap for a total of 585 anticipated jobs up to 2020.

Table 6 – Potential Labour Supply Gap for High-Demand Occupations

OCCUPATION (2006 NOC 4-Digit Level)	TRAINING GAP Base: BC LMI 2010-2020 (# of Job Openings) 4-digit estimate
Construction Managers	120
Primary Production Managers	120
Contractors and Supervisors, Heavy Construction Equipment Crews	85
Power Engineers	55
Petroleum Gas and Chemical Process Operators	40
Crane Operators (5 programs)	30
Electrical Powerline and Cable Workers	30
Industrial Instrumentation Technicians and Mechanics	30
Longshore Workers	25
Insulators	20
Iron Workers	20
Power System Electrician	5
Telecommunications Line and Cable Workers	5
Total	585 from 2010-2020

Training providers must consider many factors before developing new training

Gaps may exist in local training; Northwest training organizations should carefully consider the value and need of locally providing this training capacity. These considerations include:

- **Training availability outside the Northwest** - With one exception, training programs for all of the occupations shown in Table 6 are available in other areas of the province; the exception is Power System Electrician for which training is available in Alberta.

- **Number of workers needed for the occupation** - To 2020, the requirement for some occupations on the high demand list is so small (5 to 20 people over eight years) that it may make limited financial sense for training providers to set up a program. As well, industry may prefer to train certain occupations in-house. For example, interviews with specialized building contractors revealed that instrumentation mechanics training for the LNG plants is highly technical and specialized. Firms may train these mechanics on their own, at least initially.
- **Timing of an occupational need** - Some types of occupations are associated with the permanent, ongoing jobs resulting from major projects and investments. Table 6 shows anticipated demand for workers for occupations related to ongoing operations, including Stationary/Power Engineers, Petroleum Gas and Chemical Process Operators and Industrial Instrumentation Technicians and Mechanics. Given these plants have yet to be built and can require four to five years for construction, training for these positions is currently unavailable in the Northwest. Going forward, training providers and industry can determine when and if new training programs are needed for these occupations. Once again, close coordination between training providers, industry and organizations such as the ITA will ensure that training is aligned with regional needs.
- **Meeting the needs of local industry** - In interviews, representatives from various industries mentioned the importance of having some local courses and training facilities available. In fact, some firms were willing to contribute funding to help training institutions develop programs that met their need for a particular trade. Others said that they might want local training providers to offer introductory level courses and then provide their staff with in-house training for higher level skills. Others wanted the option to rent classroom space or use modern equipment in college facilities. In developing their plans, training providers must consider industry needs.
- **Matching training with current workforce education levels and local needs** - A mismatch exists between the skills of much of the Northwest labour force and the occupations required to support the major projects. Many of the high-demand occupations are highly skilled and require two to four years of training. It is unlikely that local labour supply will be available to meet demand in the short-term.

Given the skill level in the region, training providers may decide to allocate more resources to meet the needs of the majority of the local population. For example, programming might focus on getting workers ready for the positions that are in high demand during the initial stages of construction projects. The occupational forecasts show that many of these jobs will be available. They are, perhaps in the short term, a more realistic fit for the current skill level of much of the local labour supply. These jobs include:

- construction trades helpers and labourers
- logging and forestry labourers
- labourers in wood, pulp and paper processing

Local training may also be important for other occupations with higher skills requirements. For example, training providers might consider developing programming for iron workers. The occupational forecasts show the need will be considerably high for steel workers for the large industrial projects proposed for the region.

In the long term, skills upgrading of current workers and a focus on raising high school graduation rates may increase the skill level of many people. They will then be ready to take the higher level courses that prepare them for other high demand trades and operational occupations.

Some companies may need help with supervisory training

Three of the high-demand occupations fall into the management/supervisory category; the analysis showed that a training gap may exist for the group to 2020. These occupations include:

- Construction Managers – projected need 120
- Primary Production Managers – projected need 120
- Contractors and Supervisors, Heavy Construction Equipment Crews – projected need 85

Before declaring a definitive training gap exists, however, several factors must be considered. First, supervisors are often trained on-the-job, through experience and company-provided courses. Other companies send people to external training providers for formal training. Because firms use different training methods to meet their supervisory needs, determining a definitive gap is difficult. In some cases, employers contract with public and/or private training providers to develop specific in-house training programs or to deliver existing programming in-house. In other cases, employers send employees to regularly scheduled programs that public or private training providers offer. Moreover, while the RWT was unable to find advertised training available in the region for supervisors, some regional institutions will develop supervisory training on a custom basis. Training is also widely available for these occupations in other parts of BC. Training providers and industry will need to monitor the need for supervisory training and develop appropriate solutions in a timely manner.

3.2 The viability of filling the training gap locally, provincially or via recruitment of skilled workers

The RWT is tasked to develop a training plan that aligns existing training with regional employment needs. As part of its research and analysis, the RWT considered the viability of various alternatives to filling training gaps in Northwest BC. This section below describes some ideas for consideration for the implementation of the training plan.

Local training to fill gaps

While many of the high-demand occupations have training available in the Northwest, the need exists to expand and diversify the training currently available. Some potential actions may include:

- Collaborating locally to re-align programs offered through existing training providers to see how local training could be focused on priority areas. This change might mean decreasing or eliminating other training, which may take some time.
- Brainstorming sessions with local industry, educators and others in the community to identify ways to fill gaps.
- Structure training into modules that can be offered in "intensive" sessions when instructors have to be brought in from other locations.
- Maximize the use of distance education technologies (which have been used successfully in Alberta and elsewhere for trades training).
- Work with industry to develop a training schedule and plan around it.

- Provide incentives for instructors to come and deliver training in the region. For example, build training into co-op/internships/work assignments/professional development opportunities for trainers, trades people, employees in industry. Consider using people from industry to deliver pieces of training.
- Partner with industry to access and use equipment and facilities for training purposes.
- Use train-the-trainer approaches to build local capacity where outside expertise is brought in.
- Align career programming in secondary schools to match high-demand occupations, through opportunities such as dual credit programs.

Provincial training to fill gaps

Provincial training institutions could also help fill identified regional training gaps. Local training providers could partner with outside organizations that may have capacity to deliver training locally. For example, if training for a trade required in the LNG industry is already being offered in Alberta, a process could be initiated to enable BC apprentices to take their training in Alberta. This may help alleviate issues where no provincial training exist or where demand is too much for the local colleges to handle effectively.

Recruitment of workers from other parts of BC to fill gaps

Within the province, the Northwest will have to compete with the Northeast for workers, where unemployment is around four percent. Northwest projects may attract workers from the Lower Mainland or the Kootenay development regions. In the case of the Lower Mainland, the high cost of living and expensive housing may encourage workers to consider working in the north. Some may prefer employment arrangements by which they fly in and out to camps on a rotational basis, rather than moving to the Northwest entirely. The Kootenay development region has a mining industry and a rural lifestyle, so workers from that region may move to seek jobs.

Recruitment from other provinces to fill gaps

Companies could also try to recruit workers from other provinces. At present, some residents of the Northwest already work in Alberta's oil sands; as outlined in the Northern Transmission Line strategy, a concerted recruitment campaign might attract these workers back to work in the Northwest. From 2007-2010, almost three quarters of interprovincial migrants to BC came from Ontario and Alberta, with Manitoba and Quebec also contributing in a smaller way.⁹

Other provinces that might be sources of labour include Nova Scotia and New Brunswick. They have traditionally supplied skilled labour to other provinces and are already working on projects in the region, such as the Rio Tinto Alcan modernization project in 2012. These provinces do not have a history of migration to BC however, so Northwest employers need to mount strong recruitment and information drives to attract migrants. Provinces like Saskatchewan and Newfoundland that once served as a source of migrant workers are now undergoing rapid economic growth and will likely no longer export workers to other parts of Canada.

⁹ Source: BC Stats and Ministry of Finance Financial and Economic Review. July 2011

Finally, employers may look to recruit immigrants through federal and provincial immigration programs. In 2012, the federal government is making changes to immigration programs in an effort to enable companies to recruit workers with the skills they need, particularly skilled trades, to process and bring them to Canada more quickly. By 2014, the government intends to build a “just-in-time” immigration system, modeled after those of New Zealand and Australia. Another important change is the government is introducing the Skilled Trades Stream for federal economic immigration. Under the modernized Federal Skilled Worker Program (FSWP) unveiled in July 2012, Citizenship and Immigration Canada intends to create a separate and streamlined program for skilled tradespersons.

3.3 Themes from interviews and meetings

Interviews and information gathering sessions were completed with community and industry representatives across the Northwest to get their perspectives on training gaps and issues to inform the development of the goals and actions presented in this plan. A full description of the outreach activities and a list of organizations who participated in meetings and interviews are provided in the Appendices. Major themes that emerged from the interviews and meetings include:

- **Lower skilled people need specific, targeted help** – Interviewees repeatedly emphasized the need by many people for upgrading in basic reading and numeracy skills so that they can take advantage of the opportunities the major projects present. Weak reading and math skills restrict training and employment options. Further, providing information about the major project opportunities, targeted specifically to unemployed and underemployed people, was essential.
- **Transportation barriers** - The lack of a driver’s license or access to public transportation limits many people from accessing training and jobs. Transportation issues mean that many people prefer local training, since it is time-consuming and costly for them to arrange travel to outside facilities.
- **High school graduation rates must improve** - Interviewees emphasized the importance of finding ways to encourage young people to stay in school and complete their high school graduation.
- **Need for Aboriginal-specific actions** - Much of the industrial activity taking place in Northern BC is or will be on the traditional territories of Aboriginal people. Those interviewed believed that an effective training plan should include Aboriginal-specific activities that would address the specific training needs of their communities.
- **Collaboration is essential** – Industry, training providers, and organizations such as the ITA must collaborate and communicate frequently to ensure that training plans are aligned to meet regional needs. Such collaboration is essential where training for high-demand occupations is unavailable in the Northwest.
- **Partnerships must be win-win** - To address many issues effectively, industry, governments, training institutions, unions and other groups must build on and develop mutually beneficial partnerships. They need to develop these relationships with the explicit understanding that agreements must make sense for all sides and help them achieve their respective goals.
- **Shared Responsibility** – Communities, families and individuals must assume responsibility as well as government and industry to increase employment participation rates under a shared responsibility model. Young individuals require encouragement and support from their families and the community to meet minimum educational standards and achieve high school graduation.

4 > Principles for the Regional Skills Training Plan

It is said by our elders that each individual has a voice inside. This voice speaks to you, guides your behaviour, gives you inspiration and even laughs at you from time to time.

Steven L. Point, Xwe li qwel tel, Sto:lo, Former Lt. Governor of British Columbia

Outlining principles to underlie the Regional Skills Training Plan ensures that its recommendations and implementation activities occur within a consistent philosophical framework. The following principles will be used to guide decisions, actions and investments relating to the implementation of the Training Plan:

Principle 1: Regional approach that respects community needs.

The Training Plan supports a regional approach to addressing the training and development needs of the regional workforce. Within that regional context the Training Plan encourages local delivery of those solutions to the greatest extent possible. Different communities have different needs which must be met through community-centered, locally-based programs, where practical and possible.

Principle 2: Recognize the essential role of Aboriginal people in the Northwest labour force

Aboriginal people make up a major portion of the Northwest workforce. Meeting the education, training and development needs of the Aboriginal people requires broad and deep attention. An understanding of the education and training issues of Aboriginal people must provide the context for the development, design and delivery mechanisms of Training Plan activities.

Principle 3: Build on existing activities and existing experience

The Training Plan compliments, supports and builds on existing initiatives underway in the Northwest. It integrates the experience and knowledge gained from successful activities and programs already in use in the Northwest and other regions.

Principle 4: Create a flexible labour force with transferable knowledge and skills that can move from industry to industry within the region

As construction on major projects is completed, workers need to have skills that can transfer to mining, liquefied natural gas or industry operations jobs. Strong literacy, technological literacy and numeracy skills are the foundation for success in today's workplace and will become even more important in the future.

Principle 5: Encourage and support collaboration

Where possible and practical, the Training Plan seeks to achieve full coordination and collaboration with existing and future regional initiatives to ensure effective leveraging and maximal use of resources.

Within the Appendices, a proposed model of the Northwest training system has been developed by the RWT (pg. 44-45). This model was used to analyze training issues in the Northwest, and as a starting point for thinking about the goals and actions identified in the Training Plan.

5 > Regional Skills Training Plan: Goals and Actions

If the wind will not serve, take to the oars.

Latin proverb

This section outlines specific goals and actions for the Northwest region over a five-year period. The Plan only includes actions that the RWT believes are realistic and achievable, and which are based on the evidence collected through the previous research. Please see the prior sections of this document, which describe the research and engagement activities the RWT completed between August and November 2012.¹⁰ The Goals and Actions outlined are to begin in the short term (one year), medium (three years) and long term (five years). Others can be ongoing throughout the five year period of the plan.

Optimally, the Plan would remain a flexible “living” document which addresses needs and issues as they arise and would be adapted to emerging economic, social and political realities and new labour market information.

Goals and Actions for the Northwest Regional Skills Training Plan

Goal 1: Provide students with a vision of a bright economic future in the region

As the research for the Training Plan demonstrates, high school dropout rates in the Northwest are among the highest in BC. In 2010, over 40 per cent of youth between the ages of 15 and 24 had not completed high school. Changing these statistics and connecting students to the high-demand occupations requires significant planning and effort.

Educational institutions and industry in the Northwest must act to strengthen the connection between high schools and the high-demand occupations that the major projects will require. Working together, they can provide students with a vision of the brighter future available to them in the region. Through the major projects many can obtain long-term, well-paid and interesting jobs in trades and technical fields, positions that will make a difference to youth, their families and their communities.

Industry and training providers should collaborate to support existing programs and establish new activities to make high school relevant to at-risk students and to enrich learning for all. Below are actions to help meet this goal.

¹⁰ For more detail on the research activities involved in the development of the Northwest Regional Skills Training Plan, please see the Training Plan Supporting Documents report.

Action 1.1	Establish a Northwest version of the Northern Opportunities dual credit initiative
Details	<p>Northern Opportunities' byline is "Trained in the North, to Stay in the North." Developed in Northeast BC, Northern Opportunities (NOpp's) is an innovative partnership with a goal of providing students with a seamless learning pathway that starts in secondary school, continues into post-secondary trades, vocational and academic training and culminates in a career. The partnership is comprised of school districts, Northern Lights College, area Aboriginal organizations, high schools, local industry and communities. The NOpp's advantage is found in its collaborative delivery of dual credit training programs.</p> <p>Dual credit programs combine secondary school, college studies and work-based training enabling youth to simultaneously earn a secondary school diploma and advanced credit training in post-secondary and/or industry certification.</p> <p>Interested parties in the region will work with NOpp's to build on and enhance existing dual credit programs in the region and establish a Northwest version of the initiative. Potential partners could explore the feasibility of establishing or enhancing current initiatives that prepare students for the high demand occupations identified in the labour market research.</p>
Potential Partners	Training providers, school districts, industry, Northern Opportunities
Timeframe	Short term
Action 1.2	Establish industry liaison and cooperation programs for middle and senior high schools
Details	School districts, school principals and companies with the major projects need to develop collaborative programs in middle and senior high schools. Specific activities will include:
Action 1.2a	<p>Explore the development of a liaison program, whereby industry representatives visit schools on a regular basis and:</p> <ul style="list-style-type: none"> • provide information about the industry, available jobs and opportunities for learning more through job shadowing, internships, summer jobs, co-op programs • work with teachers to provide information about job requirements, and assists in developing and presenting linkages between course work and the work place • help students find entry level jobs
Action 1.2b	Explore the development of industry co-op and internship programs for occupations outside the trades.

Action 1.2c	Build on any existing and develop additional stay-in-school programs to improve the retention of at-risk students in school and to improve the potential for students going on to post-secondary education and training. The programs need to be customized to satisfy the needs within individual schools. The core aspects of such programs are: <ul style="list-style-type: none"> • Work experience in conjunction with specific course work • Recognition for overcoming challenges and barriers and remaining in school, and academic achievement (not necessarily highest grades). • Comprehensive educational support programs that provide academic tutoring, group mentoring, student and parent advocacy and support and scholarships. Students could also be made aware of provincial scholarships and awards that encourage student participation in trades and technical programs, and starting in 2013/14, of student financial aid support for specific, targeted in-demand trades and technical skills programs.
Action 1.2d	Teacher professional development Work with industry to provide opportunities during summer months for teachers to become familiar with latest trends in high-demand occupations. In this way, they can continue to deliver meaningful and up-to-date courses.
Potential Partners	Major industries operating within the school districts and surrounding areas, RCMP (for liaison program), school districts, provincial government, labour
Timeframe	Medium term

Action 1.3	Partner with community organizations and industry to acquire hardware and software to strengthen the integration of technology into classroom learning
Details	Up-to-date equipment and software for technology help students be better prepared for jobs. School districts can identify hardware, software and connectivity needs and then research and prepare applications for funding for those needs.
Potential Partners	School districts, industry, First Nations, community organizations (such as Rotary or Kinsmen clubs)
Timeframe	Medium term

Goal 2: Help lower-skilled workers upgrade to gain access to construction and operations jobs the major projects will create

The actions here are intended to help those with lower skills to gain work on the construction of the major projects, as well as the operations jobs that will be coming in three to five years. While all workers could potentially benefit from these programs, training organizations and others emphasized the need to target and work with unemployed and lower-skilled workers.

In consultations throughout the region, the RWT presented residents with the option of having the Training Plan focus simply on long-term operations jobs. Resoundingly, we heard that with poverty and unemployment prevalent in many communities, the training plan should also outline ways to help lower-skilled individuals obtain short-term jobs during the construction phase of the major projects. Many people would require years of upgrading to get into trades, so many would like training that would help them obtain employment quickly.

Action 2.1	Develop a <i>Major Projects Labor Market Information</i> initiative to inform un- and under-employed individuals about the projects and jobs coming to the region
Details	Many people outlined a desire for more information about the industries coming to the region and the associated occupations. Lessons can be learned from other jurisdictions, for example regional districts such as the District of Wood Buffalo (Fort McMurray), which have developed labour market information programs that include industry speakers at community forums, posters, social media and other means to inform people about the opportunities available in the region.
Action 2.1a	Mentoring programs Related to the previous action, another action will be to promote mentoring in the region to increase the effectiveness of education and training programs and to function as a training and development activity: <ul style="list-style-type: none"> • as a volunteer activity which develops mentoring skills • as leadership development in individuals • as a way to build diverse social networks which supports access to jobs and job information • as a way to increase regional collaboration
Potential Partners	Training providers, industry, Aboriginal people, school districts, service clubs, Chamber of Commerce, Northwest Labour Market Partnership
Timeframe	Short term
Action 2.2	Building on existing regional literacy and numeracy upgrading programs, develop action plans to increase literacy and numeracy in lower-skilled people
Details	Literacy programs exist in the Northwest, as do other upgrading programs. However, the low rates of high school graduation in the region and anecdotal information from educational leaders indicate that enhanced programs in literacy and numeracy are needed. New approaches to increasing skills more quickly could be explored. While some industries may believe that these issues fall solely within the scope of training providers, others may welcome opportunities to encourage workplace literacy and enhance the productivity of their existing work force. Help may be available to support this work, as organizations exist to sponsor literacy programs throughout the province.
Potential Partners	Training providers, industry, non-profit charitable organizations and programs, provincial government, volunteer organizations with existing literacy programs
Timeframe	Medium term

Action 2.3 Provide information about competency-based approaches for assessing knowledge and training skills for jobs and workers	
Details	Create opportunities to inform people about competency based standards and assessment and the ways they can be used to support students, workers, training providers and employers. Invite the Industry Training Authority (ITA) and other industry sector groups to present and share information about the research they are undertaking on competency development at conferences, educational meetings and other forums. Where possible, provide information on competency efforts related to high-demand occupations.
Potential Partners	Training providers, regulatory bodies (such as the ITA), industry
Timeframe	Medium term

Goal 3: Increase Aboriginal people's participation in high-demand occupations

Aboriginal people make up a major portion of the population in Northwest BC and yet are underrepresented in many jobs, in particular trades and technical occupations. This goal and associated actions are intended to recognize and respect the role of Aboriginal people in the Northwest labour force. Supporting them with individualized and holistic training programs is one path to success. It also means educating industries working within the traditional territories on Aboriginal values and educating Aboriginal people on the values of these industries and the workplace.

Action 3.1 Work with Aboriginal peoples in the region to identify training and workforce development opportunities	
Details	Aboriginal people have specific requirements and need training and development programs tailored to these needs. As part of implementing this Training Plan, a sub-group working specifically on Aboriginal training issues will be created to establish specific areas for regional cooperation. Partnerships to support this work could include industry, Aboriginal communities, local governments and the federal government. Specific details could be worked out as a part of an implementation plan.
Potential Partners	Aboriginal people, training providers, community organizations, provincial and federal government, industry
Timeframe	Short term

Action 3.2 Develop and implement two-way cultural awareness training in job skills training programs	
Details	Incorporate two-way cultural awareness training (between Aboriginals and industry) into all trades, technical, and other training programs to enhance the success of training programs and workplaces.
Potential Partners	Aboriginal people, training providers, industry, labour, Industry Training Authority (ITA)
Timeframe	Short term

Action 3.3	Build on existing regional efforts in job-search training to enhance opportunities for successful applications from Aboriginal people
Details	Establish teams (made up employers and aboriginal leaders) to co-lead job-search training programs for Aboriginal people. This would increase the knowledge and understanding of employer requirements for jobs. At the same time, employers could gain a better understanding of the culture and values of potential Aboriginal employees.
Potential Partners	Aboriginal people and organizations, industry, training providers, unions
Timeframe	Short term

Goal 4: Encourage collaboration between industry and regionally-based training providers

Training is available in the Northwest region for many high-demand occupations. However, the development of other occupational training programs, particularly related to the operation of new facilities, may be required. This goal and associated actions are intended to ensure that training is coordinated efficiently with all relevant partners in the region and beyond.

Action 4.1	Enhance coordination and collaboration among regional training providers and relevant organizations to fill training gaps where appropriate
Details	Aligning educational training plans of regional training providers will require cooperation among numerous organizations. Training providers will work together to design and implement a process that ensures training is offered for each high-demand occupation either within the region or elsewhere in the province. The Industry Training Authority (ITA) coordinates training plans for trades programs across the province and this process may be leveraged to ensure consistent coordination.
Potential Partners	ITA, training providers, provincial government
Timeframe	Short term

Action 4.2	Identify existing training programs that could be adapted to support training for high-demand occupations
Details	Training providers will review current training programs offered and identify areas of under-utilization where there is potential to realign training to skills for high-demand occupations. Training providers must work with industry to define standards for training content for these high-demand occupations. Training providers must also explore opportunities to coordinate and bundle together single courses offered throughout the region to create a new training programs for the high-demand occupations.
Potential Partners	Training providers, industry
Timeframe	Medium term

Action 4.3	Work with existing groups to share best practices on innovative training programs that successfully meet industry needs
Details	<p>Innovative and practical programs already exist in the Northwest that provide training for lower-skilled and unemployed individuals to specific jobs in many industries. It is important to share key lessons from these experiences to training for other industries and occupations. In this way, training providers throughout the region can take advantage of existing knowledge in the development and implementation of new programs. This action will encourage the following activities:</p> <ul style="list-style-type: none"> • Identify existing innovative practices in Northwest BC training and education programs that help individuals acquire skills to find jobs in high- demand occupations (such as the School of Exploration & Mining) • Explore opportunities to replicate successful training programs developed for one industry to another • Identify and secure instructors for high-demand occupations
Potential Partners	Training providers, industry, provincial government
Timeframe	Medium term

Goal 5: Keep people informed and encourage collaboration to achieve Training Plan goals

Throughout implementation, keeping people informed about progress and issues is important. These activities also present opportunities for greater collaboration and better understanding of regional needs and innovative solutions.

Action 5.1	Identify opportunities to keep people in the region informed of the status of the Training Plan
Details	<p>Seek out opportunities, such as regional conferences, summits, presentations, trade shows, etc., in order to disseminate information produced through this plan. At these events, build in sessions that allow training providers and others to identify projects or issues of common interest and ways to collaborate on future activities throughout the region to further Training Plan objectives.</p>
Potential Partners	Training providers, industry, governments, unions, community leaders, Chamber of Commerce, Northwest Labour Market Partnership
Timeframe	Short term

6 > Observations

They always say time changes things, but you actually have to change them yourself.

Andy Warhol

In this section, the RWT offers some general points and observations related to the Regional Skills Training Plan.

- The Northwest has experienced economic hard times and high unemployment for years. As a result, many residents are wary of forecasts predicting massive investments and numerous new jobs. This pessimism about new projects proceeding may lead to delays and inaction on initiating training programs to meet labour demand. Some major projects have already gone ahead, as forecast.¹¹ Others will too, as companies continue to spend billions of dollars on investments in the Northwest.
- Many people now in the workforce will be retiring in the next 15 to 20 years. The infants in the Northwest will be taking their places; the children in high school now will be their supervisors. Strengthening the ties between industry and high schools through dual credit and other initiatives is a key step towards ensuring a bright future for students in the region. With good training and jobs available at or near home, fewer will see a reason to leave the Northwest.
- The *Invest Northwest BC*¹² web portal attracts visitors from all over the world. Many arrive at the site after searching words and terms such as “liquefied natural gas” or “Northwest BC”. Very few search names of individual communities or companies. Thus, people unfamiliar with the region require up-to-date information about the cities and towns within the region (community profiles), as well as the jobs and industries in the region.
- The needs of the industry must be paramount when implementing the Regional Skills Training Plan in the Northwest. Industry will support activities for initiatives that provide measurable employment outcomes and facilitate project implementation and operations. At the same time, industry must consider the needs and aspirations of nearby communities in order to preserve their social license.
- Understanding the goals and values of people in the region is essential to success. Assuming that everyone living in the Northwest wants to participate in the new economy is unrealistic. Acknowledging these values will engender trust among regional stakeholders.
- As major projects progress through the regulatory approval process and receive final investment decisions, the Regional Training Plan must be reviewed and adjusted to reflect the appropriate labour demands.
- In 2012, industry was already bringing in temporary foreign workers to work on major projects in the region. The Northwest will benefit from understanding the nature of this inflow and taking appropriate actions to realize its benefits and mitigate its impacts.

¹¹ In 2012, these major projects have included the Northwest Transmission Line, the modernization of the Rio Tinto Alcan Smelter and the construction of the Red Chris mine.

¹² www.investnorthwestbc.com

7 > Conclusion

Nothing happens until something moves.

Albert Einstein

Northwest BC faces a pivotal point in its history. In the 1950s and 1960s, new industries helped build strong communities and provide a good living for people in the region. Approached carefully and thoughtfully, the major projects of the decade ahead can offer the same benefits. Yet at present, the region has one of the highest unemployment rates in Canada. The Regional Skills Training Plan for the Northwest, and its supporting documents, elaborates on the thousands of high-demand construction and operations jobs that are coming. The plan also identifies existing training gaps throughout the region associated with these occupations. For individuals wanting to take advantage of these opportunities, there is training currently available to provide them with access to these jobs in the short, medium and long term.

The Regional Skills Training Plan provides a solid situational analysis with important goals and actions proposed. These recommendations will align existing training and labour market programs in the Northwest with the employment opportunities that will serve the economic activity in the region. There may be other goals to be developed as well as a myriad of other actions that could be undertaken which would support the overall objective of better aligning training with employment opportunities.

All of the ambitious initiatives will need robust participation from those living and participating in the Northwest economy. Leadership for many of the actions proposed in this plan will need to come from a variety of regional organizations. Industry, training providers, employers and government need to work together to further the objectives of this plan. Many of the successful best practices within the region rely on collaboration as a cornerstone of their success. The RWT has sought to strengthen relationships and undertake analysis and research to benefit many different groups and partners.

Moving forward, the RWT will collaborate with the Northwest Labour Market Partnership (NW LMP) Steering Committee (formerly known as the Northwest Transmission Line Human Resource Steering Committee) to prioritize the actions presented and determine a path forward for implementation. A meeting of these two groups is expected to occur in January 2013 to identify next steps required for implementation and potentially join together to strengthen collaboration, avoid duplication and identify opportunities where existing initiatives underway by the NW LMP and/or other initiatives in the region can potentially be leveraged or expanded to maximize resources and ensure success. This newly formed group could potentially act as a focal point in the region to monitor implementation of the Northwest Regional Skills Training Plan to address regional skills training and workforce needs. To ensure people in the region continue to be informed about the work of the RWT, the Training Plan will be presented at the upcoming Partnerships 2020 conference spearheaded by the NW LMP, where participants will be updated on progress made on implementation of the Training Plan and invited to get involved.

The Northwest Regional Skills Training Plan is about collaboration and partnerships and it will require broad support to move it forward. We hope you will meet the challenge and help the Northwest achieve its full potential in the new economy. The opportunities are vast and the potential is endless.

8 > Appendices

These Appendices contain:

- Detailed Occupational Outlook: The High-Demand Occupations to 2020
- Definitions of Occupational Categories
- List of Task Force Members
- List of Interview and Meeting Participants
- Possible Solutions: A Model for a Regional Training Plan
- List of Sample Programs Available in the Northwest

Detailed Occupational Outlook: the High-Demand Occupations to 2020

The occupations projected to have the greatest number of job openings due to economic development activity in Northwest BC and workforce retirements from 2012 – 2020.

Table 7 - Projected High-Demand Occupations in Northwest BC

Occupation (2006 NOC ¹³)	Base: BC LMI 2010-2020 (# of Job Openings)		Optimistic: NTL + BC Natural Gas LMI (# of Job Openings)
	3-digit estimate	4-digit estimate ¹⁴	4-digit estimate
1. Machinery and Transportation Equipment Mechanics (731)	575		
Heavy-duty Equipment Mechanics (7312)		185	395
Construction Millwrights and Industrial Mechanics (7311)		300	340
2. Carpenters (7271)	550	550	650
3. Heavy Equipment Operators (7521)	515	515	1,100
4. Processing and Manufacturing Machine Operators and Related Production Workers (2-digit NOC: 94)	450		
Pulp and Paper Production and Wood Processing Machine Operators (943)		190	240
Machine Operators, Mineral and Metal Processing (9411)		75	160
5. Labourers in Processing, Manufacturing and Utilities (961)	440		
Labourers in wood, pulp and paper processing (9614)		255	1,075
6. Trades Helpers and Labourers (761)	440		
Construction Trades Helpers and Labourers (7611)		410	1,900
Other Trades Helpers and Labourers (7612)		30	140
7. Materials Handlers and Longshore Workers (745)	400		
Material Handlers (7451)		375	375

¹³ National Occupational Classification (NOC) is the nationally accepted reference for classifying jobs in Canada. It organizes over 40,000 job titles into over 500 occupational classifications. The NOC included in this report is the 2006 version.

¹⁴ Job openings for occupations at the 4 digit level were estimated using 2010 employment estimates for Northwest BC at the 4 level National Occupational Classification - Stats (NOC-S) as report at www.bcstats.gov.bc.ca/StatisticsBySubject/LabourIncome/OtherData/RegionalEmploymentProjections.aspx. Two key assumptions have been made here; first, the 2010 estimated ratio of 4-digit NOC occupation employment within each 3-digit occupation holds throughout the forecast period, and second, this employment ratio also applies to the total job openings (new job openings and replacement openings combined). 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 32% 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 32% of the Machinery and Transport Equipment Mechanics (NOC: 731) job openings projected in BC LMI 2010-2020 or 184 positions (rounded to 185).

Northwest Regional Skills Training Plan

Occupation (2006 NOC ¹³)	Base: BC LMI 2010-2020 (# of Job Openings)		Optimistic: NTL + BC Natural Gas LMI (# of Job Openings)
	3-digit estimate	4-digit estimate ¹⁴	4-digit estimate
Longshore Workers (7452)		25	25
8. Electrical Trades and Telecommunications Occupations (724)	375		
Industrial Electricians (7242)		145	800
Electrical Power Line and Cable Workers (7244)		30	100
Power System Electrician (7243)		5	60
Telecommunications Line and Cable Workers (7245)		5	85
9. Cooks (6242)	340	340	340
10. Contractors and Supervisors, Trades and Related Workers (721)	300		
Contractors and Supervisors, Heavy Construction Equipment Crews (7217)		85	130
11. Primary Production Labourers (861)	245		
Logging and Forestry Labourers (8616)		80	90
12. Managers in Construction and Transportation (071)	240		
Construction Managers (0711)		120	155
13. Metal Forming, Shaping and Erecting Trades (726)	220		
Iron Workers (7264)		20	930
Welders and Related Machine Operators (7265)		145	770
14. Other Construction Trades (729)	215		
Insulators (7293)		20	415
15. Plumbers, Pipefitters and Gasfitters (725)	190		
Steamfitters and Pipefitters (7252)		75	750
16. Central Control and Process Operators (923)	150		
Central Control and Process Operators, Mining and Mineral Processing (9231)		90	110
Petroleum, Gas and Chemical Process Operators (9232)		40	225
17. Technical Occupations in Life Sciences (222)	145		
Forestry Technologists and Technicians (2223)		80	95
18. Technical Occupations in Electrical and Electronics Engineering (224)	135		
Industrial Instrumentation Technicians and Mechanics (2243)		30	50
19. Truck Drivers (7511)	120	120	120
20. Primary Production Managers (0811)		120	120
21. Masonry and Plastering Trades (728)	80		
Concrete Finishers (7282)		40	235

Northwest Regional Skills Training Plan

Occupation (2006 NOC ¹³)	Base: BC LMI 2010-2020 (# of Job Openings)		Optimistic: NTL + BC Natural Gas LMI (# of Job Openings)
	3-digit estimate	4-digit estimate ¹⁴	4-digit estimate
22. Stationary/Power Engineers (7351)	55	55	55
23. Crane operators, drillers and blasters (737)	55		
<i>Crane Operators (7371)</i>		30	160
<i>Drillers and Blasters (7372)</i>		15	160
24. Other trades and related occupations (738)			
<i>Saw Filer/Sawfitter (7384)</i>			130

Definition of Occupational Categories

Trades:

Manual workers of a high skill level, having a thorough and comprehensive knowledge of the processes involved in their work. They are frequently journeymen and journeymen who have received an extensive period of training.

Technologists and Technicians:

Workers in these occupations have to possess knowledge equivalent to about two years of post-secondary education, offered in many technical institutions and community colleges, and often have further specialized on-the-job training. They may have highly developed technical and/or artistic skills.

Truck Drivers:

Transport truck drivers operate heavy trucks to transport goods and materials over urban, interurban, provincial and international routes. They are employed by transportation, manufacturing, distribution and moving companies, and trucking employment service agencies, or they may be self-employed. This unit group also includes drivers of special purpose trucks and shunters who move trailers to and from loading docks within trucking yards or lots.

Heavy Equipment Operators:

Heavy equipment operators operate heavy equipment used in the construction and maintenance of roads, bridges, airports, gas and oil pipelines, tunnels, buildings and other structures; in surface mining and quarrying activities; and in material handling work. They are employed by construction companies, heavy equipment contractors, public works departments and pipeline, logging, cargo-handling and other companies.

Semi-skilled Workers (referred to as Lower-skilled in this document):

Manual workers who perform duties that usually require a few months of specific vocational on-the-job training. Generally, these are workers whose skill level is less than that of skilled crafts and trades workers, but greater than that of elementary manual workers.

Labourers:

Workers in blue collar jobs which generally require only a few days or no on-the-job training or a short demonstration. The duties are manual, elementary, and require little or no independent judgment.

Managers and Supervisors:

Middle and other managers receive instructions from senior managers and administer the organization's policy and operations through subordinate managers or supervisors. Senior managers and middle and other managers comprise all managers.

Supervisors are non-management first-line coordinators of white-collar (administrative, clerical, sales, and service) workers. Supervisors may, but do not usually, perform any of the duties of the employees under their supervision.

Source: www.hrsdc.gc.ca/eng/labour/equality/employment_equity/tools/eedr/2006/data_reports/page20.shtml

Task Force Members

Below are the members of the Northwest Regional Workforce Table Task Force.

Organization	Representative(s)
Apache Corp.	Duncan Brown
BC Construction Association	Tom Harwood
BC Hydro	Gail Murray
Construction, Maintenance and Allied Workers Union	Ken Lippett
District of Kitimat	Rose Klukas
Hecate Strait Employment Development Society	Kathy Bedard
Industry Training Authority (ex-officio)	Susan Kirk
Kitimat-Terrace Industrial Development Society	Alexander Pietrella
Métis Nation of British Columbia	Colleen Hodgson
Ministry of Advanced Education, Innovation and Technology (ex-officio)	Adam Molineux Melanie Nielsen
Ministry of Jobs, Tourism and Skills Training (ex-officio)	Rick Braam Suzanne Ferguson Zosia Hortsing
Ministry of Social Development (ex-officio)	Jerenia Adolph
Misty Isles Economic Development Society	Heather Adel
Northwest Community College	Seth Downs (Secretariat) Lorrie Gowen
Northwest Labour Market Partnership	Don Ramsay
Regional District Kitimat-Stikine	Andrew Webber
Rio Tinto Alcan	Kevin Dobbin
School District #82	Art Erasmus
Shell Canada	Murray Slezak Daria Hasselmann
Terrace and District Chamber of Commerce	Carol Fielding
TriCorp	Frank Parnell Jacquie Ridley
University of Northern British Columbia	Dennis Macknak
Wilp Wilxo'oskwahl Nisga'a Institute	Deanna Nyce

List of Interview and Meeting Participants

As project manager for the NWRWT, the secretariat was responsible for outreach 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 gather information and receive input on the Training Plan. This outreach was completed through the following activities:

- Aboriginal information package mail out
- Targeted information gathering sessions with key stakeholders
- General community meetings
- Individual stakeholder interviews
- Stakeholder update communication release

The following is a comprehensive list of those regional stakeholder organizations who provided input and feedback on the Training Plan through the various phases of the project.

Organization
AltaGas
Apache Corp.
BC Construction Association
BC Hydro
City of Prince Rupert
Coast Mountains School District #82
Coast Opportunity Funds
College of New Caledonia
Construction, Maintenance and Allied Workers Union
Council of the Haida Nation
District of Kitimat
Galore Creek Mining Corporation
Gitanyow Band Council
Gitksan Chiefs Office
Gitksan Government Commission
Gitwangak Band Council
Haida Heritage Centre

Northwest Regional Skills Training Plan

Hecate Strait Employment Development Society
Immigrant Employment Council of BC
Imperial Metals
Industry Training Authority
Iskut Band Manager
Iskut Economic Development
Kermode Friendship Society
Kitimat Chamber of Commerce
Kitimat Valley Institute
Kitimat-Terrace Industrial Development Society
Kitselas Band Council
Kyah Wiget Education Society
Mayor of Hazelton
Métis Nation of British Columbia
Ministry of Aboriginal Relations and Reconciliation
Ministry of Advanced Education, Innovation and Technology
Ministry of Jobs, Tourism and Skills Training
Ministry of Social Development
Misty Isles Economic Development Society
Northern Development Initiative Trust
Northern Lights College
Northwest Community College
Northwest Community College's School of Exploration & Mining
Northwest Labour Market Partnership
Northwest Training Ltd.

Northwest Regional Skills Training Plan

Old Masset Economic Development
Omenica Beetle Action Coalition
Petronas LNG
Port of Prince Rupert
Prince George Nechako Aboriginal Employment and Training Association (PGNAETA)
Prince Rupert Chamber of Commerce
Progressive Ventures Group Ltd.
Regional District Kitimat-Stikine
Resources North Association
Ridley Terminals
Rio Tinto Alcan
School District #82
Seabridge Gold Inc.
Shell Canada
Skidegate Band Council
Smithers Exploration Group
Tahltan Central Council
Tahltan First Nation
Terrace and District Chamber of Commerce
Transportation Trades Supply and Demand Committee
TriCorp
Tri-River Métis Association
UA Piping Industry College
University of Northern British Columbia

Wilp Wilxo'oskwhl Nisga'a Institute
WorkBC Upper Skeena Region

In addition, the external consultants engaged for this project had already completed and were in the process of undertaking labour market research on Northwest BC, and as such benefited from knowledge and understanding of labour market and human resources issues developed through other project work. This includes numerous interviews on training gaps and labour force issues in the Northwest with industry representatives from sectors including oil and gas, construction, clean energy, hydro and mining, as well as representatives from the Haisla First Nation.

Possible Solutions: A Model for a Regional Training Plan

With the training gap identified, training providers, governments, industry, Aboriginal people, and employers will need to implement various training strategies and actions. This section discusses potential approaches to meeting the training needs of the Northwest. It first examines the overall training challenge from a systems perspective, and then proposes a strategic framework and potential actions.

Northwest Training Supply and Demand: A Systems Approach

The diagram on the following page provides a model of the training system in Northwest BC, as it relates to the major projects. Below is a description of how the components work together.

First, on the left, are the groups of people most likely to need training:

- Low or semi-skilled workers
- Youth (in elementary and high schools)
- Immigrants (language, workforce culture preparation)

To participate effectively in training or the workforce, these people need certain basic skills to participate. Youth acquire many of these in high school, but for some, at a later age or with limited language skills, these requirements can become barriers. The basic requirements include:

- Essential skills, literacy, numeracy
- Job and training readiness
- Knowledge of the employment and business opportunities the major projects offer
- Transportation
- Family and social supports while they are in training or away at work

Once people have all or most of these skills and knowledge, they can then effectively pursue training and or employment opportunities available with the major projects.

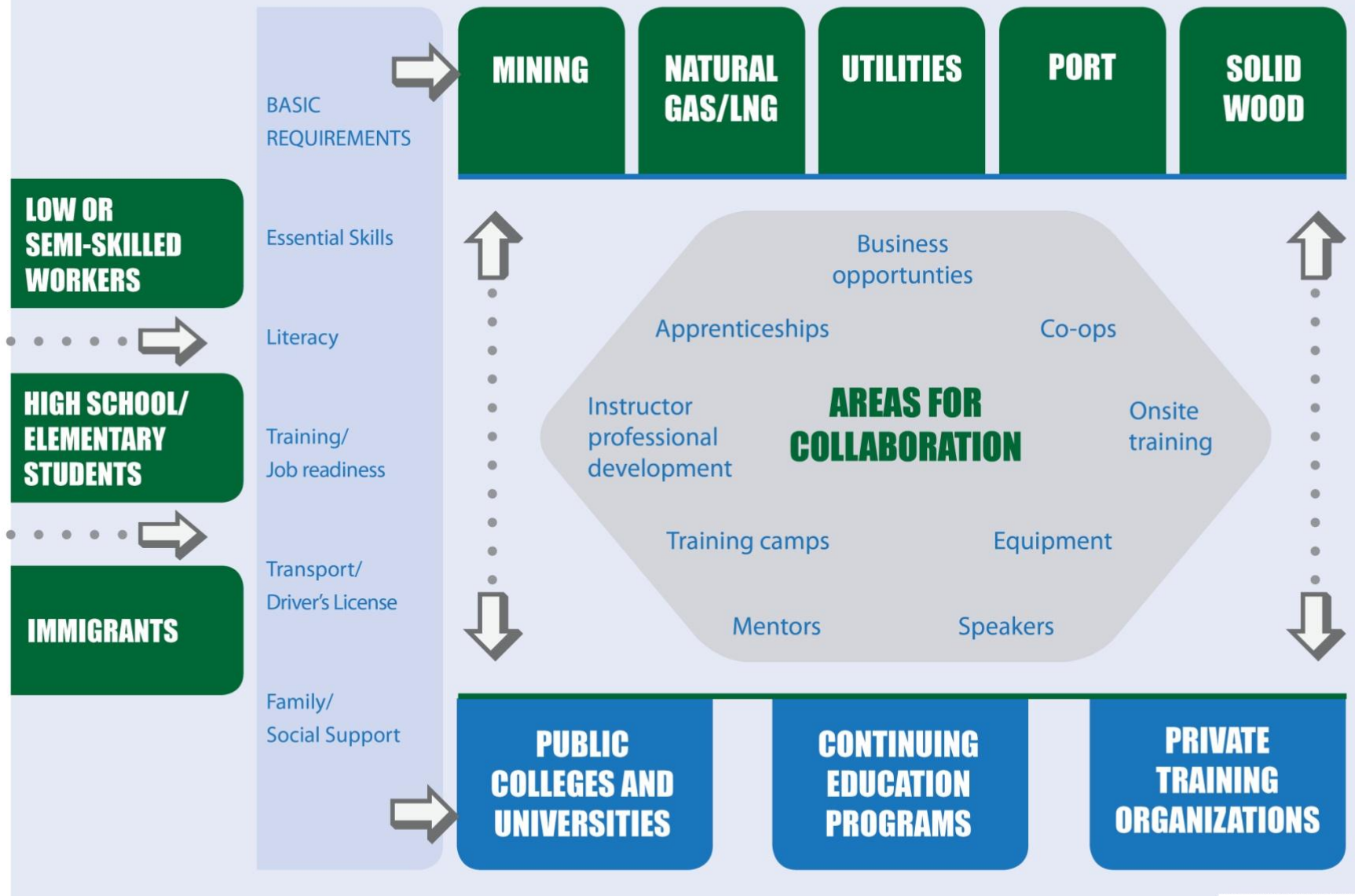
Next, along the top of the model, are the major project industries currently engaged in the Northwest, or anticipated to be a major force of labour demand in the region. This includes mining, natural gas/LNG, utilities, port and solid wood. These industries need to interact with the training providers in the region to effectively align training programs with industry needs.

Along the bottom of model is the training system, including public colleges, private trainers and continuing education programs.

Some ways these two groups (industries and training providers) might collaborate to support regional training programs include, but is not limited to, the following:

- Apprenticeships
- Co-op placements
- Instructor professional development
- Training camps or on-site training
- Equipment for training purposes
- Mentors
- Speakers in the classroom
- Input into curriculum and program development

PEOPLE, TRAINING and the MAJOR PROJECTS in NORTHWEST BRITISH COLUMBIA



List of Sample Programs Available in the Northwest

Below are some samples of innovative training programs being offered in the Northwest to support local involvement in the workforce. Many of these programs can be modeled effectively for new training programs to meet a range of industry needs. This list was developed from information gathered during the outreach activities during this project; therefore it is not an exhaustive list.

Organization	Website	Type of program
Northwest Community College's School of Exploration & Mining	http://sem.nwcc.bc.ca	<p>Mining Exploration Field Assistant Program</p> <p>Taught in a remote outdoor tent-camp, this hands-on field training provides transferable skills for resource-based industries with a focus on exploration and mining. At the end of this course, students work with an Employment Advisor who assists with job opportunities.</p>
Piping Industry College of BC	http://www.uapicbc.ca	<p>Piping Opportunities for Women (part of Women in Trades initiative)</p> <p>Tailored courses on math upgrading for apprenticeship for Aboriginal people.</p> <p>Immigrant Trades Training Opportunities</p>
Prince George Nechako Aboriginal Employment and Training Association	http://pgnaeta.bc.ca	<p>Aboriginal Employment Gateway with many programs to:</p> <ul style="list-style-type: none"> • Prepare the Aboriginal Labour Force to meet the demand for skilled workers; • Enter into innovative partnerships so employers have access to the supply of trained workers; • Collaborate with employers to establish recruitment, retention & advancement

		strategies
Prince Rupert Chamber of Commerce	http://princerupertchamber.ca	Rising Stars is a Prince Rupert and District mentorship project that pairs students from the Northwest Community College with members from the local business community for a five-month period.

