

2017

North Central BC Manufacturing Labour Market Partnership: Engagement Report

Submitted by: Harbour Digital Media



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The views and opinions expressed in this report are those of its author(s) and not the official policy or position of the Government of British Columbia.

Background: Manufacturing in the North and Central Regions of British Columbia

Manufacturing in British Columbia is diverse. The sub-sectors included in the sector are: machinery, computer and electronics, electrical equipment, transportation (including aviation and ship building), wood products, plastics and metals, fabricated metals, food and beverage.

Manufacturing plays a key role in the economy of British Columbia. It is the fourth largest industry in British Columbia and the industry represents the fourth largest manufacturing sector in Canada (BC Stats (2015) – A Profile of British Columbia's Manufacturing sector). Manufacturing generates over 10 percent of the province's GDP and makes up approximately 75% of the goods exported from the province to other countries and provinces. The BC manufacturing sector as a whole accounts for nearly 173,000 jobs through approximately 7200 companies most of which are small or medium-sized enterprises.

In northern British Columbia, and in particular in the north-central part of the province, manufacturing activity has traditionally related to the forest industry, paper production, and value-added wood products. Other manufacturing activity involves bio-energy (e.g. gasification of biomass), metal fabrication and machining, and concrete manufacturing.

The manufacturing sub-sector in the Cariboo region includes approximately 226 companies and employs approximately 9500 individuals. While most of the manufacturers in the region employ 20 or fewer individuals, there are 15 that have more than 200 employees. The focus of HDM's engagement activities in the region will be on the 100+ companies that employ 10 or more individuals.

The Nechako manufacturing sector includes approximately 60 companies and employs approximately 4200 individuals. Nearly two-thirds of these companies employ fewer than 20 individuals but there are 14 companies that employ 50 or more individuals¹.

According to the most recent labour market forecast (*British Columbia 2025 Labour Market Outlook*²) manufacturing in the Cariboo region is expected to grow modestly over the next nine years. The North Coast and Nechako regions are expected to experience a decline of nearly 1000 manufacturing jobs over the next nine years most notably in the wood and pulp and paper

¹ Based on 2015 Business Count and Employment by Industry data from BC Stats) found at: [\[http://bcstats.gov.bc.ca/StatisticsBySubject/BusinessIndustry/BusinessCountsEmploymentByIndustry.aspx\]](http://bcstats.gov.bc.ca/StatisticsBySubject/BusinessIndustry/BusinessCountsEmploymentByIndustry.aspx)

² See <https://www.workbc.ca/getmedia/00de3b15-0551-4f70-9e6b-23ffb6c9cb86/LabourMarketOutlook.pdf.aspx>

Introduction

This engagement report highlights the work that Harbour Digital Media (HDM) and its sub-contractor Schmidt & Carbol Consulting have undertaken between September 2016 and February 13, 2017 on the development of a North Central Sector Labour Market Partnership for the manufacturing sector. This report provides a summary of activities and findings from the execution of the agreement up to and including the first organizational meeting of the proposed North Central Manufacturing Sector Advisory Board (NCMAB).

This report includes the following sections:

- A. Building a Partner Network** - This section outlines the progress that has been made to build a database of North and Central British Columbia manufacturing companies that can be used to expand the partner network and will be used as a starting point for the labour market research that will need to be undertaken as a part of the second phase of this project. This database will also provide a list of companies that will be drawn on as potential members for the proposed NCMAB.
- B. Engaging North Central Manufacturers** – This section provides a summary of the companies and organizations that have been contacted to date, the key individuals who have been involved in initial discussions and interviews, and their involvement in an initial meeting of the key partners and the creation of the North Central Manufacturing Advisory Board (NCMAB).
- C. Preliminary Themes and Findings** - This section includes a summary of discussions related to the labour market issues and needs of manufacturing companies in the North and Central regions of British Columbia. The economic development regions that are the focus of this Sector LMP include the Nechako Development Region and the Cariboo Development Region. Maps of the regions included in this project are found in Appendix 1 and 2.
- D. Conclusions** – This section includes a number of conclusions that have been reached based on the discussions and interviews HDM has had with regional manufacturers.

The approach that HDM and its consulting partner have taken to determine the labour market issues and needs of the North Central manufacturing sector is consistent with the workplan provided to the Ministry as a part of the application for this project³. The engagement strategies that HDM is using for the North Central region are similar to those that have been used successfully in the Vancouver Island/Coastal region.

There are four engagement strategies employed in this project. These are:

³ See Appendix 3 for an overview of the workplan for Phase 1 of this LMP project.

1. Building a database of manufacturing companies in the region that can be used as a starting point to engage senior managers or executives. This database is being built through working with HDM's business contacts and economic development associations and organizations in the region.
2. Contacting (via email, telephone, and face to face meetings) key company senior managers and executives to gain their support for the sector labour market partnership initiative and to identify a preliminary set of labour market issues affecting local industry.
3. Expanding the partnership network through additional contact with other companies based on research undertaken by HDM and the advice of initial sectoral partners.
4. Building a functioning advisory board of key sectoral partners and conducting an initial meeting. An initial meeting of this board was held on November 15, 2016. Details concerning the outcome of this meeting are found in section C of this report.

A. Building the Partner Network

As a starting point for this project, HDM undertook the development of a database of manufacturing companies in the North and Central economic development regions. This database will continue to be expanded throughout the engagement phase and into a potential second phase which will focus on research related to the labour market needs of the region in 2017.

To develop the database, a number of associations, companies, municipalities, and key network contacts were approached for their input and advice. These individuals and associations were contacted during the September 2017 through January 2017 timeframe. In addition, business licenses were obtained from the following cities/municipalities:

- Smithers
- Vanderhoof
- Burns Lake
- Fort St. James
- 100 Mile House
- Wells
- Williams Lake
- Horsefly
- Prince George
- McBride
- Valemount

Table 1 provides an overview of the individuals who provided input concerning the company database and valuable insights into manufacturing activity in the region.

Table 1: Key Regional Contacts

Organizations/Companies/Associations	Municipality/City	Contact (Name)
Companies		
Kevin Brown Communications	Prince George	Kevin Brown – CEO
JBM Communications	Prince George	Jennifer Brandle-McCall - Partner
Former CEO Initiatives Prince George – now General Manager Ramada Prince George	Prince George	Heather Oland
JN International Consulting	Vancouver	Jens Nilausen - Consultant
	Prince George	Marshall Smith
	Dawson Creek	Brent Hodson
Live Work Communications	Prince George	Shauna Harper - CEO
Rainwatch Consulting	Prince George	Sarah Robinson - Principal
		Kiel Giddens, Land, Community & Aboriginal Relations – Coastal GasLink Pipeline Project
TransCanada	Prince George	Tom Hoffman, Manager, External & Stakeholder Relations
Tolko	Williams Lake	Rahul Ray, Senior Environmental Planner
EDI (Environmental Dynamics Inc)	Prince George	John Turner - Chairman
Resource Works	Vancouver	Ronni-Lynn Walker, Branch Business Manager
Chinook Scaffold Systems	Prince George	Kelly Butz, CEO
Magna IV Engineering	Edmonton	Rikki Beudet, Advisor, Aboriginal Relations
Spectra Energy	Prince George	Mike Van Hellemond, Membership Development Coordinator
International Brotherhood of Electrical Workers - #993	Kamloops	Donald McInnes, Past Chairman, Board of Directors
Alterra Power	Toronto	Bartek Kienc, President
Canadian Energy Infrastructure Corp.	Calgary	Doug Hinton, VP Infrastructure
Hatch	Vancouver	
Community Organizations / Economic Development Agencies		
Northern Development Initiatives Trust (NDIT)	Prince George	Renata King – Director, Business Development
Northern Development Initiatives Trust (NDIT)	Prince George	Sara Hipson – Manager, Business Development
Prince Rupert Port Authority – Board Member	Prince Rupert	Bruce Hallor
Prince Rupert Port Authority	Prince Rupert	Brian Friesen - Manager, Marketing
Prince Rupert Port Authority	Prince Rupert	Maynard Angus - Manager, Aboriginal Affairs

Organizations/Companies/Associations	Municipality/City	Contact (Name)
Prince Rupert Port Authority	Prince Rupert	Brittany Segin - Government Affairs Officer
BC Wood	Langley	Brian Hawrysh – Executive Director
Ironworkers Local 97	Burnaby	Doug Parton, Business Manager
ITA	Richmond	Gary Herman - CEO
ITA	Richmond	Michael Christian – Director, Aboriginal Initiatives
ITA	Richmond	Cory Williams – Manager, Industry Relations
ITA	Terrace	Crystal Bouchard - Apprenticeship Advisor
ITA	Prince George	Donna Anderson – Apprenticeship Advisor
Community Futures – Cariboo / Chilcotin	Williams Lake	Karen Eden, General Manager
Cities / Towns / Municipalities		
City of Prince George	Prince George	Melissa Barcellos - Economic Development Manager
City of Fort St. John	Fort St. John	Moira Green - Director of Strategic Services
Former Mayor – Prince George	Prince George	Shari Green
District of Vanderhoof	Vanderhoof	Evan Parliament - Ex COO
City of Prince George	Prince George	Diane Bourret, Supervisor, Recruitment & Classification
Chambers of Commerce		
Prince George Chamber of Commerce	Prince George	Christie Ray - CEO
Houston Chamber of Commerce	Houston	Maureen Czirfusz - Executive Director
Terrace Chamber of Commerce	Terrace	Stacey Mann - Executive Director
Fort Nelson Chamber of Commerce	Fort Nelson	Bev Vandersteen - Executive Director
Prince Rupert Chamber of Commerce	Prince Rupert	Simone Clark
BC Chamber of Commerce	Terrace	Rod Cox – Board Member
Kamloops Chamber of Commerce	Kamloops	Deb McLelland - CEO
BC Chamber of Commerce	Abbotsford	Patrick Geisbrecht – Chair, Board of Directors
Politicians - Councilors		
MLA – Cariboo North	Quesnel	Coralee Oakes – Minister Responsible for the Liquor Distribution Branch
MLA - Shuswap	Salmon Arm	Greg Kylo
Haisla Chief / Liberal Candidate - Skeena	Haisla	Ellis Ross
MLA – Cariboo - Chilcotin	100 Mile House	Donna Barnett – Minister of State for Rural Economic Development
MLA – Abbotsford - Mission	Mission	Simon Gibson
MLA – Vancouver-Quilchena	Vancouver	Andrew Wilkinson – Minister of Advanced Education

Organizations/Companies/Associations	Municipality/City	Contact (Name)
City of Dawson Creek	Dawson Creek	Shaely Wilbur - Councillor
City of Dawson Creek	Dawson Creek	Cheryl Shuman - Councillor
City of Fort St. John	Fort St. John	Lori Ackerman - Mayor
Municipality of MacKenzie	MacKenzie	Amber Hancock - Councillor
Municipality of MacKenzie	MacKenzie	Joan Atkinson - Councillor
Town of Houston	Houston	Shane Brienen - Mayor
District of Vanderhoof	Vanderhoof	Gerry Thiessen - Mayor
Village of Burns Lake	Burns Lake	Chris Beach - Mayor
City of Prince George	Prince George	Dr. Albert Koehler - Councillor

Based on the input from the contacts listed in Table 1 above, a company database was created. This database consists of 163 companies. A listing of the companies, their location, website address, and NAICS code is provided in Appendix 4. Additional work on expanding the database and network will be required after the completion of Phase 1 in anticipation of moving forward to Phase 2 of this Sector LMP project.

B. Engaging North Central Manufacturers

Initial contacts were made with a number of senior managers and executives of North and Central BC manufacturing companies concerning their potential involvement as members of the North Central Manufacturing Sector Advisory Board. Telephone and email contact led to meetings/interviews between September 17th and October 31st, 2016 with the individuals highlighted in the following table. A set of key questions was developed for meetings with individuals and for the first meeting of the NCMAB. Interview questions are included in this report as Appendix 5. Based on a positive response during the interview process an initial meeting of six members of the NCMAB was held on November 15, 2016. A copy of the agenda for the meeting is included in Appendix 6.

Followup meetings during the December 2016 through early February 2017 resulted in the addition of two additional members to the advisory board. Additional members for the advisory board will be added during subsequent phases of the project. In order to ensure that the advisory group does not become unwieldy in terms of its size, it will be important to establish a number of sub-groups that can inform future phases of the project from their perspectives. These additional members will be drawn from the list of contacts provided in Table 1 above and will be extended to other groups in the region that have a vested interest in training and development issues.

The complete list of current advisors is listed in Table 2 below. NAICS categories and approximate number of employees are provided for each company along with a description of businesses and contact information.

Table 2: Initial Membership of the North Central Manufacturing Advisory Board

Company	Location	Description of Business	Contact(s)/Role
1. Pinnacle Renewable Energy (NAICS 321; 250 employees)	Prince George, Houston, Burns Lake, Quesnel and other locations in BC	Pinnacle Renewable Energy Inc. is the longest-established wood pellet producer in Western Canada. The company founded in Quesnel more than 25 years ago. The company produces bio-fuel from (wood pellets) from raw lumber waste wood and as such is one of BC's value-added wood manufacturers. In total, Pinnacle employs more than 250 people in those communities. (http://www.pinnaclepellet.com/)	Erin Strong, Director, Human Resources (Erin.Strong@pinnaclepellet.com)
2. Allrite Heating (NAICS 332; 12 employees)	Prince George	Allrite Heating & Ventilation is a successful mechanical contracting firm focusing on the ventilation and sheet metal portion of industrial, institutional and commercial construction projects. (http://www.allriteheating.com/)	John Worswick, Project/Office Manager
3. Wolftek Industries (NAICS 324, 325; 50 employees)	Prince George	WOLFTEK provides a full range of services to the Forest Industry in North America for the past 28 years. The company is staffed with over 45 Engineers, Technologists, Designers, Tradesmen, Sales and Administrative staff. WOLFTEK offers manufacturing, repairing, chroming, machining, fabrication, design and installation services to the resource industries spanning three primary sectors: Forestry, Mining and Oil & Gas, including recycling and energy recovery. (http://www.wolftek.ca/)	Gord Gallop gord@wolftek.ca
4. BKB Cedar Manufacturing (NAICS 321; 12 employees)	McBride	BKB Cedar Manufacturing Ltd. has been in business since September 2013. The company operates a post and rail mill in McBride where it manufactures cedar fence posts and rails, mulch for landscaping and shake blocks, which are eventually made into shakes for roofs on houses. The company has 10 employees. http://www.supplychainconnecto	Rajpal Basran, President bkbcedar@hotmail.ca

Company	Location	Description of Business	Contact(s)/Role
		r.ca/bkb-cedar-manufacturing-2721)	
5. Bid Group – includes the following BC companies: Vanderhoof Specialty Wood Products, Del-Tech, Northwest Wood Preservers (NAICS 321, 332, 333; 1000 employees)	Vanderhoof	The privately owned BID Group family of companies has been in business for over 30 years. The companies included in the group are: Powered by Comact, PHL, Deltech, SEC, A&M Manufacturing and BID Group Construction. These companies provide innovative, efficient and turn-key solutions that include engineering, project management, installation, startup, and after sales service. North America. There are over 1000 employees in the group of companies. (http://www.bidgroup.ca/)	David Fehr, owner/partner David.Fehr@bidgroup.ca
6. Hampton Affiliates (includes Babine Forest Products and Decker Lake Forest Products) (NAICS 321; 200 employees)	Burns Lake	Hampton Affiliates is a US company that is associated with two BC companies (Babine and Decker Lake Forest Products). SPF dimension lumber, decking and timbers are produced by the mills for export.	Ruben Gaytan, HR Manager RubenGaytan@HamptonAffiliates.com
7. Carrier Lumber (NAICS 321; 250 employees)	Prince George	Carrier Lumber was founded in 1951 by William Kordyban Sr. Over the past six decades it has become one of Canada's most dynamic forest products companies.	Madison Kordyban - Executive Assistant - mkordyban@carrierlumber.ca
8. Stinger Welding (NAICS 332; 30 employees)	Prince George	Stinger Welding Ltd. is a well-established, diverse and growing company which has been serving the needs of commercial and industrial businesses in Northern British Columbia, all the way to the Yukon since 1978. We offer a wide range of services; from welding, fabricating, bridge fabricating and repair to high pressure piping, heavy equipment repair and on-site mobile welding. http://www.stingerwelding.com/	Willy Manson – Owner - willym@stingerwelding.com

In addition to the companies highlighted above the following companies were also approached concerning their potential involvement with the activities of the NCMAB:

- Sinclar Group, Forest Products Ltd., Prince George (<http://sinclar.com/index.php>)
- Spectra Energy, Prince George office (<http://www.spectraenergy.com/>)
- West Fraser Mills, Quesnel (<http://www.westfraser.com/>)
- Canfor, Prince George (<http://www.canfor.com/>)

As a part of the engagement process, HDM has maintained active email and telephone contact with NCMAB members and with key contacts in the company database (see Appendix 4) throughout this phase. Project updates have been provided to NCMAB members and key contacts on September 30th, November 21st, December 7th, December 15th and January 6th. In addition, a summary of the PG Chamber of Commerce Business Development Forum (held on January 31, 2017) and the Premier's BC Natural Resources Forum (Jan 31 – Feb 2, 2017) was sent to VIMAB and contacts in the full company database.

The PG Chamber of Commerce Business Development Forum and the Premier's BC Natural Resources Forum in Prince George was a productive environment for active networking and relationship building with the North Central BC manufacturing sector and their supplier network. Attendance at these events enabled HDM to engage in discussion and networking with organizations that will directly contribute to the North Central Sector Labour Market Partnership project goals, solutions and future implementation of solutions to address identified issues. HDM met with representatives from the Industry Training Authority (ITA), applicable trade unions, Canadian Manufacturers and Exporters Association (CME), First Nations organizations, municipal councilors, provincial politicians, and regional Chambers of Commerce⁴.

C. Themes and Findings

Preliminary work by HDM with North Central manufacturers identified a number of training, development and labour market issues that impact their ability to grow and continue to be competitive in their industries.

Based on an analysis of the individual interviews and the discussions that took place at the meeting on November 15, 2016, the following themes/issues impacting companies in the sector were identified that could benefit from a broader regional training and development strategy. These issues included:

1. Attraction and Retention of Workers in Small Communities

Employers expressed concern regarding the difficulty that some of them are having in attracting and retaining skilled workers. This is particularly true for smaller and more remote communities in the region. While housing in the region is generally very affordable

⁴ See Table 1 for details concerning key regional contacts

and wages are competitive with other parts of the province, it is still difficult to attract young people to small communities. According to some of the manufacturers in the region, young people who are qualified in a trade or other occupation are not attracted to living in small north central communities. These factors are compounded by unemployment rates that are higher in the region than the provincial average (e.g. 8.8% in the Cariboo, 8.1% in Prince George, and 7.5% in the North Coast and Nechako regions compared with the provincial unemployment rate of 5.6%)⁵. Attraction and retention issues affecting manufacturers will be researched during the next phase of this Sector LMP.

At the same time, some communities do not have housing options that are attractive to families. This, in turn, leads to training challenges for companies. Individuals trained by a company often leave to go to communities which offer lifestyles that suit their individual and family needs. As a result training investments made by companies are often lost. Based on the discussions with key management staff it appears that attraction and retention of workers is a common issue for manufacturing companies in the region.

2. Internal Training

A number of employers expressed the need for government (through policies and programs) to support the manufacturing industry's efforts to internally train individuals. There was some concern expressed about the degree to which regional post-secondary institutions are able to provide the types of training that are required by industry. At the same time, a number of companies are directly involved in internal training that could benefit other companies in the region. It seems clear that, in general, companies are not aware of training that other companies in the region are providing their employees and the focus of this training. Most companies agree that there has been a ***lack of consolidation of training demand*** in the region and that there is a need for more communication in the region concerning training opportunities that companies can take utilize.

3. Cost of Training

It is a concern for some companies that they are spending scarce resources on internal training and development. While this is seen as an investment it also impacts the amount of capital they have to spend on expansion and growth. In spite of efforts to provide companies with support through funding programs such as the BC-Canada Job Grant, most companies indicated that greater investment is required for the type of skilled jobs that manufacturers in the region are seeking to fill. Some companies have difficulty finding the resources that are available through various government programs.

⁵ As reported for February 2017 by WorkBC (see the regional profiles at: <https://www.workbc.ca/Labour-Market-Industry/Regional-Profiles.aspx>)

4. *Inter-provincial Issues Related to the Trades*

Given the nature of the manufacturing operations in the region, it was not surprising that much of the discussion focused on the skilled trades. A number of companies expressed that they were having difficulty finding enough workers in the skills trades. Some companies cited difficulty in finding skilled tradespersons who can operate PLC (programmable logic controller) controlled machinery as an example of the problem.

Inter-provincial issues related to apprenticeship pay rates in different provinces was mentioned as a factor that makes attracting and retaining skilled tradespersons difficult. For example, some provinces (notably Alberta) pay higher rates to apprentices. The economic downturn in Alberta which has resulted in some trades workers coming to BC to seek employment. However, the apprenticeship pay differential between the two provinces still exists and makes it hard for some manufacturing companies in the North Central region to recruit trades workers.

There was also a general sentiment expressed by company leaders that the apprenticeship program needs to change so that it works better for industry. This could include (but was not limited to) changes that make it easier to combine tickets in the trades⁶. This change would more closely mirror the needs of industry. Other concerns related to a "lack of follow through with second year programs in the trades". In other words, first year trades training programs are sometimes initiated with the support of government, industry and post-secondary institutions but second year is left up to industry to fund and support. Research into this issue will be conducted as a part of the next phase of this project.

5. *Dealing with an Aging Workforce*

Although many manufacturers in the region have young or relatively young workforces, some are concerned about the looming retirement of a significant portion of their employees. In one case, approximately 40% of the workforce are or will soon be eligible to retire. As this Sector LMP moves into the labour market information research phase it will be important to look at past studies of this issue and consolidate the data that already exists concerning the impacts of an aging workforce on the manufacturing sector in the region. It will also be important to conduct primary research (interviews and surveys) related to this issue, to analyze the results of this research and compare it to available secondary research and report the results. This will be done in the next phase of this project.

6. *Key Skills Gaps*

Manufacturers interviewed place a high degree of importance on finding individuals who display a number of key characteristics associated with success in the workplace. These

⁶ It should be noted that this opinion is not shared universally by companies in the region.

include a desire to work hard, to learn, and to be personally responsible (e.g. workers who are punctual and respect the job that they have and their co-workers). Companies are challenged to find individuals who display these characteristics. They also indicated that training gaps in the areas of leadership and management exist and they see the need for more support for internal (and external) training to address the gaps. Others commented on a lack of technical workers such as IT professionals and PLC programmers and operators.

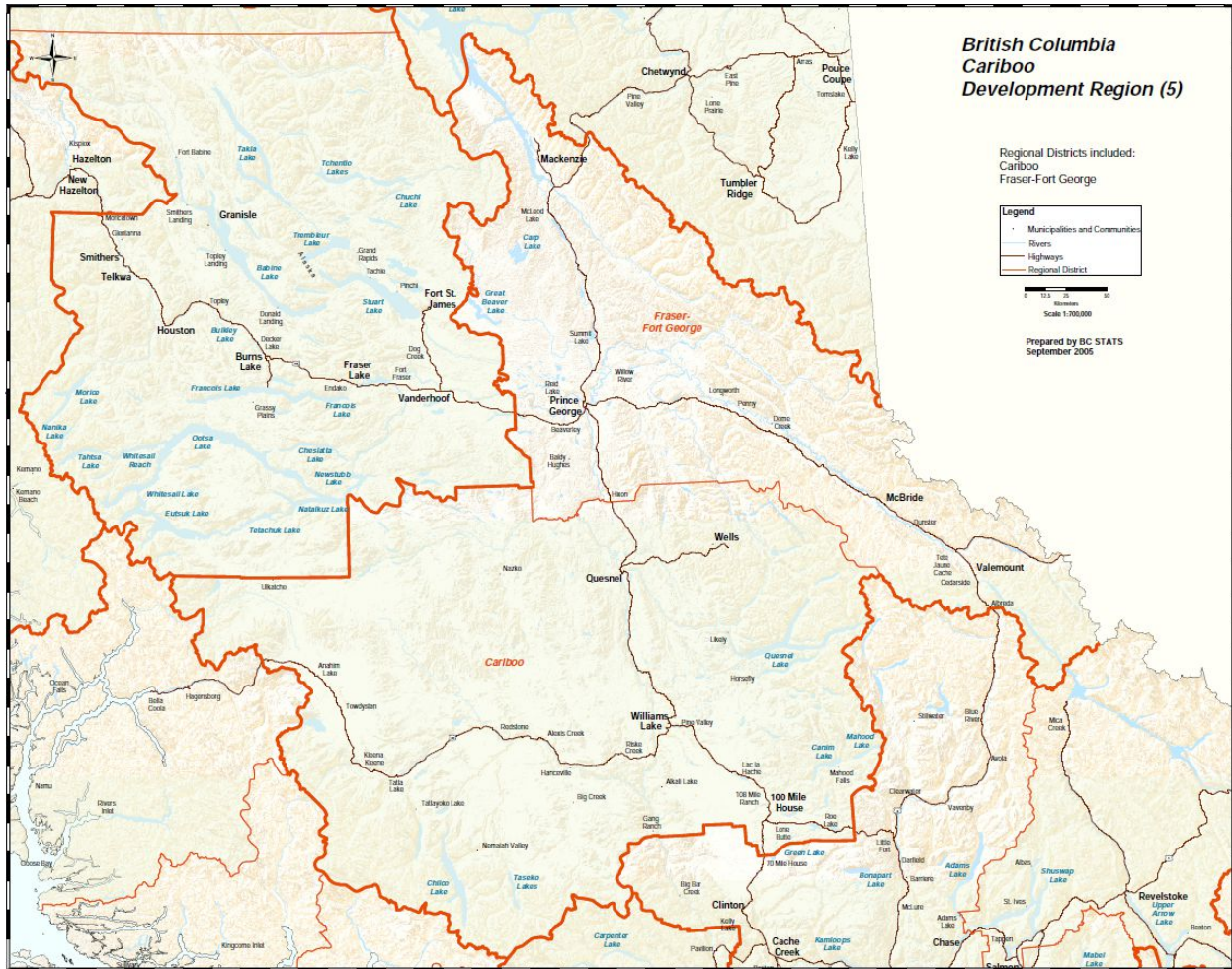
D. Conclusions

Based on the interviews and discussions that HDM has been involved in to date we have concluded that there is interest in developing a mechanism similar to the Vancouver Island/Coastal region Sector LMP. This mechanism (i.e. the North Central Manufacturers Advisory Board or NCMAB) would be used to identify common labour market issues, develop strategies, and implement actions that address the issues.

Companies involved to date indicated their commitment to the multi-phase process that was outlined and are prepared to provide their support for future phases. This is evidenced by their willingness to allow their names to be included in a government press release concerning the creation of the NCMAB. At the same time, the initial members of NCMAB have been very frank in their comments and want to see action steps taken in the short term to address the training and development issues that are impacting their businesses.

It will be important for the manufacturing partners to move forward quickly on future phases of this Sector LMP so that they can capitalize on the positive momentum that has been created. Future phases will also incorporate other work that has been on-going in the North Central region that may have a bearing on the issues identified by regional manufacturers. Specifically, the work that is underway in the Bulkley-Nechako region will be used to inform data collection and strategy development in future phases of the North Central Sector LMP.

Appendix 1: Cariboo Development Region



Appendix 2: Nechako Development Region



Appendix 3: Sector Engagement Workplan

The following workplan has been built to reflect the staged and iterative nature of the engagement work that took place in Phase 1 of the North Central Sector LMP. The workplan outlines the engagement strategies, the tasks associated with these strategies, and the timelines for completion of the tasks. The workplan also includes timelines for the draft (interim) report and for the final engagement report for this phase of the initiative.

Milestone	Tasks Description	Timeline
1. Initial engagement of key manufacturing sector partners to build the database of regional manufacturing contacts	Build contact database and schedule face to face meetings with approximately 8 – 10 potential key sector partners in the 2 northern regions(Nechako, Cariboo)	Sept 1 - 30, 2016
	Schedule and conduct meetings with manufacturers in the Cariboo region (Prince George)	Sept 11 -16, 2016
	Schedule and conduct meetings with manufacturers in the Nechako region	Sept 25 – 30, 2016
	Analyse results of initial engagement meetings	Oct 1 – 31, 2016
	Write draft interim report	Nov 1 – Nov 14 , 2016
	Participant – PG Chamber of Commerce Business Development Forum. Productive networking & establishing new relationships with project stakeholders and participants.	January 31 st , 2017
	Participant – Premier’s BC Natural Resources Forum. Productive networking & establishing new relationships with project stakeholders and participants.	January 31 st – February 2 nd , 2017
2. Establish the North Central Manufacturing Advisory Board	Develop meeting agenda and prepare meeting materials	Nov 7 - 10, 2016
	Conduct initial meeting of North Central Manufacturers Advisory Board	Nov 15, 2016
	Follow-up with other manufacturing sector companies in the region to discuss results of engagement phase and validate findings	Nov 10 – Dec 15, 2016
	Deliver draft interim report to Ministry	Dec 1, 2016
	Analyze results (including additional sector engagement strategies)	Dec 16, 2016 – Jan 10, 2017
	Write final report (engagement	Jan 15 – Feb 10, 2017

Milestone	Tasks Description	Timeline
	summary report) to Ministry	
	Deliver final engagement report to Ministry	Feb 15, 2017

Appendix 4: North Central Manufacturing Company Database

Company	Municipality/City	(Employees)	NAICS Category
A.J. Forsyth (A Division of Russel Metals Inc.)	Prince George	http://www.russelmetals.com/en/Pages/Home.aspx	332
Accurate Truck Bodies	Prince George	http://www accuratetruckbodies.com/	332
Advanced Millwright Services	Vanderhoof	http://www.advancedmillwrightservices.com/index.html	332
Allrite Heating	Prince George	http://www.allriteheating.com/	332
A-Mac Truss & Engineered Wood Products	Prince George	http://www.amactruss.com/	321
Artic Manufacturing	Prince George	http://www.arcticmfg.com/	336
Artistic Sign Services	Prince George	http://www.artisticsignservice.com/	339
ATCO Structures & Logistics Ltd	Prince George	http://www.atcosl.com/en-ca/	321
AWG Windows & Doors	Prince George	http://www.awgwd.com/	321 / 339
BC Coastal Refrigeration	Smithers	http://www.bccoastalrefrigeration.com/	332
Babcon Group	Quesnel	http://www.babcon.ca/index.html	332
<i>Babcon Industries</i>	Quesnel	http://www.babcon.ca/index.html	332
<i>Linden Welding & Fabricating Ltd</i>	Quesnel	http://www.babcon.ca/index.html	332
<i>Riverview Steel & Machining Co Ltd.</i>	Quesnel	http://www.babcon.ca/index.html	332
BC Strong Truss	Vanderhoof	http://www.bcstrongtruss.com/	321
Beamac Installation	Williams Lake	http://www.beamac.ca/	332
Bid Group	Vanderhoof	http://www.bidgroup.ca/	321
Brink Forest Products	Prince George	http://brink.bc.ca/	321
Brodex Industries	Quesnel	http://www.brodexindustries.com/	332 / 333
Bulkley Valley Machining & Fabricating 2000 Ltd.	Houston	n/a	332
BKB Cedar Manufacturing	McBride	http://www.supplychainconnector.ca/bkb-cedar-manufacturing-2721	321
C&C Wood Products	Quesnel	http://www.ccwoodproducts.com/	321
Cameo Truss	Williams Lake	http://www.cameotruss.com/en/	321
Canada's Log People	100 Mile House	http://www.canadaslogpeople.com/	321

Harbour Digital Media
763 Tulip Ave
Victoria, BC V8Z 2P6

Company	Municipality/City	(Employees)	NAICS Category
Canada Rig Mats	Vanderhoof	http://www.rig-mat.ca/	339
Canasteel Rebar Services	Prince George	http://www.canasteel.com/	332
Canfor (Cdn Forest Products)	Prince George / Vanderhoof / Quesnel / MacKenzie / Houston	http://www.canfor.com/	321
Cariboo Chrome & Hydraulics	Prince George	http://www.cariboochrome.com/	332
Cariboo Steel & Machine	Williams Lake	http://www.cariboosteel.com/index.html	332
Carrier Group of Companies			
<i>Carrier Forest Product - Fabrication Shop</i>	Prince George	http://www.carrierlumber.bc.ca/operations/cfp-fabrication-shop	332
Cascade Mechanical	Prince George	http://www.cascade-mechanical.ca/	332
CC Industries	Prince George	http://www.ccindustries.net/	
CFI Steel	Prince George	http://cfisteel.com/	332 / 333
Chemtrade Logistics	Prince George	http://www.chemtradelogistics.com/main/	325
Chinook Scaffolding	Prince George / Quesnel	http://www.chinookscaffold.ca/home.html	332
CIF Construction	Prince George	http://www.cifcon.com/index.php	339
Cobalt Industries (used to be Blackridge Industrial Services)	Prince George	http://cobalt-group.ca/	332
Conifex Timber	Prince George / Fort St James	http://conifex.com/	
<i>DBD Log Homes (?)</i>	100 Mile House	http://www.dbdloghomes.com/default.htm	321
DSL Mills & Dollar Saver Lumber	Prince George	http://www.lumber.ca/lumbermill.htm	321
Dunkley Lumber	Hixon (near PG)	http://dunkleylumber.com/	
Edgewater Holdings Ltd.	Prince George	http://www.edgewaterholdings.com/	321 / 332
Emcon Services	Quesnel	http://www.emconservices.org/index.html	336
Environmental Mats	Prince George	http://www.envmats.ca/	339
Exact Welding	Prince George	http://www.exwelding.ca/	332 / 333
<i>FabCan Metalworks (?)</i>	Prince George	http://www.fabcan.ca/	332
Farr Fabricating	Prince George	http://www.farrfabricating.ca/	332
Farr Installations	Prince George	http://www.farrinstallations.ca/	332
Fort Machine Works	Fort St. James	http://www.fortmachine.com/	332
Frost Lake Group of Companies	Prince George / Fort St James		
<i>Frost Lake Logging</i>		http://frostlake.ca/home	321

Company	Municipality/City	(Employees)	NAICS Category
<i>Frost Lake Forest Services</i>			
<i>Cobalt Resources</i>			
<i>Pine Creek Placer</i>			
FreFlyt	Vanderhoof	http://www.freflyt.ca/	336
Free Line Signs & Graphics	Bridge Lake (100 Mile House)	http://www.freelinesigns.com/	339
Hampton Affiliates	Burns Lake	http://www.hamptonaffiliates.com	321
Heartland Steel Doors	Prince George	http://www.heartlandsteel.ca/contact.html	337 / 332
Hy-Tech Drilling	Smithers	http://hy-techdrilling.com/index.html	333
Industrial Transformers	Burns Lake	https://www.industrialtransformers.ca/contact-us.html	332
Integrity Welding	Prince George	http://www.integritywelding.ca/	332
KJM Sales	Prince George	http://www.kjmsales.com/about/	332
KTS Millwork Plus	Prince George	http://ktsmillworkplus.weebly.com/	321
Kodiak Industrial Chrome & Hydraulics	Prince George	http://www.kodiakchrome.ca/	332
<i>Leading Edge Wood Products - ? (Part of Aretas Sensor Networks?)</i>	Horsefly	http://leadingedgewoodproducts.ca/index.html	321
Linden Fabricating	Prince George	http://www.linfab.com/index.htm	332
Lumisave Industrial LED Technologies Ltd.	Prince George	http://lumisave.com/	339
Mackenzie Pulp Mill Corporation	Mackenzie	http://www.paperexcellence.com/	
Mackenzie Fibre Management	Mackenzie	n/a	321
Mitch Gobbi Contracting	Prince George	http://www.mitchgobbicontracting.com/	332
Monster Industries	Houston	http://www.monsterindustries.ca/	332 / 334
Northern Capital Wood			
Northern Dynamic Metalworks	Prince George	http://www.dynamicmw.ca/	332
Northern Engineered Wood Products (NewPro)	Smithers	http://www.newpro.ca/	321
Northern Energy Contractors	Prince George	n/a	332 / 333
Northern Lights Estate Winery			
Northern Steel	Prince George	http://www.northernsteelltd.com/	331 / 332
Northern Lites Technology	Prince George	http://www.northernlitestechology.ca/	332
<i>Northern Monumental (?)</i>	Vanderhoof	http://www.northernmonumental.com/	339

Company	Municipality/City	(Employees)	NAICS Category
Norweld Mechanical Installations	Prince George	http://www.norweld.ca/	332
<i>Ole's Woodworking (?)</i>	Prince George	http://oleswoodworking.com/id6.html	321
P. Scheck Industrial Electric	Quesnel	http://www.pscheck.ca/	333 / 335
P & H Supplies	Vanderhoof	http://www.phsupplies.ca/	336
Pacific BioEnergy	Prince George	http://www.pacificbioenergy.ca/	321
Pacific Truck & Equipment dba Peterbilt	Houston	http://pacifictruck.ca/	
Pacific Western Brewing	Prince George	http://www.pwbrewing.net/	
Parallel 55	McKenzie	http://www.parallel55.com/	321
<i>East Fraser Fiber Ltd</i>	Prince George		
<i>Parallel Wood Products Ltd</i>	Prince George		
PeroxyChem	Prince George (Philadelphia HO)	http://www.peroxychem.com/	325
PG Machine Works	Prince George	http://www.pgmachineworks.com/index.html	332
Pinnacle Renewable Energy	Prince George, Houston, Burns Lake, Quesnel	http://www.pinnaclepellet.com/	321
Pioneer Parts Re-Building	Prince George	http://www.pioneerparts.com/index.html	332
Pioneer Technologies	Prince George	https://www.pioneertech.ca/	332
Polytech Manufacturing	Prince George	http://polytechmfg.ca/	326
Precision Machinery	Prince George	http://www.pgmr.ca/	
Premium Pellet (division of L&M Lumber/Nechako Lumber)	Vanderhoof	http://www.premiumpellet.com/	321
Precision Metal Works	Prince George	http://precisionmetalworks.ca/	
Prince Sheet Metal & Heating	Prince George	https://www.roofingbc.com/	332
Prolenc Manufacturing	Prince George	http://www.prolenc.com/	332
Quadra Machine Works	Mackenzie	http://www.quadramachineworks.ca/	332
<i>Randy's Image Designs (?)</i>	<i>Smithers</i>	http://randysimagedesign.com/	
Rio Tinto	Vanderhoof	http://www.riotintobcoperations.com/	
Salem Contracting	Prince George	http://salemcontracting.ca/	332
S. Desjardines & Associates	Prince George	http://www.anythingmetal.com/index.html	332
Shadow Leathers	Vanderhoof	http://shadowleathers.com/	315
Sitka Log Homes	100 Mile House	http://www.sitkaloghomes.com/index.html	321

Company	Municipality/City	(Employees)	NAICS Category
Sinclar Group		http://www.sinclar.com/contact_us.php	
<i>Apollo Forest Products</i>	Fort St James	http://www.sinclar.com/apollo/index.php	321
<i>L&M Lumber</i>	Vanderhoof	http://www.sinclar.com/our_organizations/index.php	321
<i>Lakeland Mills</i>	Prince George	http://www.sinclar.com/lakelandmills/	321
<i>Nechako Lumber</i>	Vanderhoof		321
<i>Premium Pellet</i>	Vanderhoof	http://www.premiumpellet.com/company.htm	321
<i>Winton Homes & Cottages</i>	Prince George	http://www.wintonhomes.ca/	321 / 327
<i>Tl'oh Forest Products</i>	Fort St James	http://www.sinclar.com/tloh/	321
Smithers Lumber Yard	Smithers	http://smitherslumber.com/contact	321
Spectra Energy	Terrace	http://www.spectraenergy.com/	
Starmaker Custom Welding & Fabrication	Smithers	http://www.starmakerwelding.com/	332
Stringer Welding	Prince George	http://www.stingerwelding.com/	
Superior Woodworks / Modern Countertops	Prince George	http://www.moderncountertops.ca/	337
The Tahtsa Group	Burns Lake	http://www.tahtsagroup.com/	321
<i>Pacific Timber / Sheraton Sawmills</i>	Burns Lake	http://www.pacifictimber.ca/	321
<i>Twin Timber Technology</i>	Burns Lake	http://www.twintimber.com/	321
<i>Pacific Flame</i>	Burns Lake	http://www.pacificflame.com/	321
Timberspan Wood Products	Prince George	http://www.timberspan.ca/	
Tip of the Glacier Water Company	Smithers	http://www.tipoftheglacier.com/	339
Tolko Industries	<i>Vernon HO</i>	http://tolko.com/who-we-are/divisions	321
<i>Questwood</i>	Quesnel		321
<i>Lakeview Lumber</i>	Williams Lake		321
<i>Soda Creek</i>	Williams Lake		321
Tricon Truss & Millwork	Smithers	http://www.tricontruss.ca/	321
Trinity Post & Panel		http://www.trinitypostandpanel.com/Site/#contact	321
Tyrod Industries	Prince George	http://tyrodindustries.com/	332
United Concrete & Gravel	Williams Lake / Quesnel / 100 Mile House	http://www.unitedconcreteandgravel.com/index.php/contact-us.html	339

Company	Municipality/City	(Employees)	NAICS Category
Valley View Fences	Vanderhoof / Smithers	http://www.valleyviewfences.com/	339
Vanderhoof Machine Works	Vanderhoof	n/a	332
Van Way Cabinets	Prince George	http://www.vanwaycabinets.com/	337
Wayne Modular Homes	Prince George	http://waynemodularhomes.com/	321
West Fraser Electro / Mechanical Ltd.	Prince George	http://www.west-fraser.com/index.php	336
Western Equipment	Prince George	http://westernequipmentltd.com/	339
West Fraser Mills	Smithers / Quesnel / Williams Lake / Fraser Lake / 100 Mile House	http://www.westfraser.com/	321
<i>Pacific Inland Resources</i>	Smithers	http://www.westfraser.com/	321
Williams Signs & Graphics	Prince George	http://williamssigns.ca/1-home.html	339
Whisper Creek Log Homes	Valemount	http://www.wclhdealer.com/valemount	337
Winton Engineered Wood Products	Prince George	http://www.wintonhomes.ca/	321
Wolftek Industries	Prince George	http://www.wolftek.ca/	324 / 325
3 Phase Power Systems	Prince George	http://www.3phasepower.ca/	334
HEAD OFFICES (with branch operations in the North Central regions)			
Applied Industrial Technologies	Prince George	http://www.appliedcanada.com/branches/default.asp	332 / 333
Allied Blower & Sheet Metal	Williams Lake	http://www.alliedblower.com/	332
AMC Drilling Fluids & Products (part of the IMDEX Group)	Smithers	http://www.amcmud.com/	339
A.R. Thomson Group	Prince George	http://arthomson.com/contact/	332 / 333
Armtec	Prince George	http://www.armtec.com/	331 / 332
Aretas Sensor Networks	MacKenzie	http://www.aretas.ca/	334
Atlantic Industries	Prince George	http://www.ail.ca/	332 / 336
Belterra	Prince George	http://www.belterra.ca/company/about-us.htm	326 / 339
Brunette Machinery	Prince George	http://www.brunetteinc.com/	332 / 333
Canadian Springs Water Company	Prince George	http://www.canadiansprings.com/ReachUs.aspx#!	339
Canada Culvert (owned by WGI Westman Group)	Prince George	http://www.canadaculvert.com/	332

Company	Municipality/City	(Employees)	NAICS Category
Central Door & Gate	Prince George	http://www.centraldoor.ca/	339
Chemtrade Logistics	Prince George	http://www.chemtradelogistics.com/main/	325
CG Industrial Specialities	Prince George	http://www.cgis.ca/	332
Commercial Solutions (Motion in Cda)	Prince George	http://cgis.ca/	332 / 339
Falcon Equipment	Prince George	http://www.falconequip.com/index.html	336
Finna Group (bought Northern Miltech)	Fort St James	https://www.finnagroup.com/	326
Freeport Industries	Prince George	https://www.freeportindustries.ca/	337(?) / 339
FSE Energy	Fort St James	https://www.fseenergy.com/progress-fort-st-james/	333
Haris Rebar (Owned by Nucor - North Carolina)	Prince George	http://harrisrebar.com/	332
HyPower (a division of Applied Industrial Technologies)	Prince George	http://www.hypower.com/index.htm	332 / 333
MacKenzie Pulp & Paper (owned by Paper Excellence)	MacKenzie	http://www.paperexcellence.com/mills/mackenzie/	321
Mount Polley Mines (Imperial Metals)	Williams Lake	https://www.imperialmetals.com/	331
Norbord Inc	100 Mile House	http://www.norbord.com/	321
Ainsworth	100 Mile House		
Exco Industries - Div of Ainsworth / (250) 395-6240 - Steel Fabricating	100 Mile House		
Norcan Fluid Power	Prince George	http://www.norcanfp.com/	333 / 339
Pacific Northern Gas (PNG)	Vanderhoof / PG	https://www.png.ca/contact/	??
Praxair	MacKenzie / Williams Lake	http://www.praxair.ca/en-ca	339
Redwood Plastics	Prince George	https://www.redwoodplastics.com/contact-us/	
Norbord		http://www.norbord.com/contact-us	321
Simson Maxwell	Prince George	http://www.simson-maxwell.com/	332
SMS Equipment	Houston / Prince George / Chetwynd / Williams Lake	http://www.smsequip.com/contact-us.html	332 / 333
Taseko Mines (Gibraltar Mines @ Williams Lake)	Williams Lake	https://www.tasekomines.com/	331
Trans Canada Pipelines	Burns Lake	http://www.transcanada.com/contact-us.html	
Varsteel	Prince George		

Company	Municipality/City	(Employees)	NAICS Category
Wajax Industrial Components	Prince George	http://www.wajax-industrial-components.ca http://www.wajax.com/	332 / 333
Wilkinson Steel & Metals	Prince George	http://wilkinsonsteel.ca/	332

Appendix 5: Interview Approach and Key Questions for NCMAB Members

INTRODUCTION

1. Introduce self and partner.
2. Provide each interviewee with an overview of the Sector Labour Market Partnership (LMP) Program, an initiative of the Ministry of Jobs, Tourism, and Skills Training (funding is part of the federal-provincial labour market agreement)
 - a. Phase 1 (September 2016 – February 2017) of a potential 5 phase project to engage the North Central manufacturing sector in a discussion about its labour market needs.
 - b. Subsequent phases will determine the sector's labour market needs, develop strategies to address those needs, implement the strategies, and evaluate the effectiveness of the strategies.
3. Describe HDM's role in the Sector LMP program.

WHAT DOES PHASE 1 INVOLVE?

1. An initial discussion with potential manufacturing sector partners to discuss the LMP program and to identify others in the industry who might be approached to participate as a member of the North Central Manufacturing Advisory Board (NCMAB). Input from these discussions will be used to determine the membership of the board.
2. Participation in the initial Board meeting (2 hours in Prince George on November 15, 2016) to discuss sectoral issues related to employment, skill shortages, training capacity, sector-specific job requirements and trends, training providers.
3. In addition, Board members will be asked to review a draft of the Phase 1 report to ensure that it accurately reflects the discussions that have taken place and the issues it raises. This report is due to the Ministry by December 1, 2016.

ASSESS COMPANY INTEREST IN BEING INVOLVED

1. Does this process sound of interest to your company?
2. Would you or your company be interested in being involved in the Phase 1 activities we described?

The following questions were used for both interviews of potential NCMAB members and as discussion starters for the first meeting of the NCMAB.

KEY QUESTIONS

Company Background

1. Tell us about your company – number of employees; the type of manufacturing you are engaged in (a brief company profile)

Burning Issues

1. What are the 'burning issues' your company has identified in the following areas:
 - a. Employment – growth or decline;
 - b. Skill shortages – which skills/certifications are in short supply; which occupational groups are in short supply? (comment on any soft/hard skill shortages that are apparent for your company);
 - c. Capacity – i.e. the capacity to train new workers internally/externally to meet skill shortages; and
 - d. Company or sub-sector specific job/training requirements.
 - e. Training providers – the ability of companies to source training solutions that are tailored to their specific skill requirements.

Trends

1. Which of the following trends are consistent with your understanding of the current state of skill and training requirements for the manufacturing sector in North-Central BC?
 - a. Increasing sophistication of manufacturing processes is raising the skill requirements of the industry.
 - b. Increasing diversity in the nature of manufacturing operations combined with the accelerating rate of technological change increases the need for employers to provide training.
 - c. Rising skill requirements increase the need for workers with more advanced soft skills and essential skills, who are adaptable and oriented towards continuous learning.
 - d. Some companies require workers whose expertise and skill sets cross traditional trades.

Strategies

1. What strategies is your company using to address skill shortages?
2. What do you see as the impacts of training and development on your company's productivity?

Appendix 6: NCMAB Meeting Agenda

Agenda

**Sector Labour Market Partnership Program
North Central Manufacturing Advisory Board
Prince George Chamber of Commerce
November 15, 2016
10:00 am – 12:00 noon**

1. Introductions
2. Meeting Objectives
 - a. To review the Sector Labour Market Partnership program requirements and expectation
 - b. To begin the process of identifying key skills training issues affecting the sector
 - c. To identify other companies that should be approached for input and feedback
 - d. To provide an opportunity for individuals and companies to network and become aware of best training practices
3. Brief Sector LMP program overview
4. Overview of Vancouver Island/Coastal Region Sector LMP project
 - a. Progress to date – Phase 1 and Phase 3 – Background research
 - b. Work related to Phase 3
5. Roundtable discussion
 - a. Overview of each company - overview of what they do; who their customers are
 - b. Identification of key issues affecting training, skills for each company – skills gaps and training needs discussion
 - c. Identification of key companies and individuals who should be approached to provide feedback
6. Expectations of your future involvement
 - a. Timelines
 - b. Review of summary documents
 - c. Meetings
7. Next Steps and Closing Comments