

**Making Sense of Labour Market Information for Prince Edward Island:**

**Moving Forward into the 21<sup>st</sup> Century.**

By

©Jean Kimpton

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## Executive Summary

Labour markets in Canada continue to be affected by three principle forces of change, namely globalization of competition, technological advances, and changes in the demographic structure of the workplace (Maxell & Saunders, 2003). Elizabeth Beale, President of the Atlantic Provinces Economic Council, stated in a public session that Prince Edward Island's aging population, decreased literacy levels and shortage of skilled workers creates a major challenge for the province moving forward (Day, 2009). Given these challenges, understanding the current labour market is essential for the government of Prince Edward Island in order to set policies and develop focused programs that will contribute to economic prosperity.

Central to making decisions about such labour market challenges and directions for the future is the availability of accurate and reliable labour market information (LMI). After a review of two seminal reports about the reliability and availability of LMI in Canada and PEI, it has been found that an abundance of data is available nationally but at a provincial level this data becomes less reliable and more segregated and falls short of provincial LMI needs. However, there is information available through both national and provincial sources that can be drawn on and utilized if there is an understanding of what information is available, where it can be found and what format it is in. This information once analyzed, can be converted into knowledge and used in meaningful ways to inform the decision making process about the future of the labour market. An evidence-based management approach to LMI highlights the areas that are key to the decision as well as what needs to be done to close the gaps.

The central issue is that LMI needs of a fast paced, fast changing economies are not being met. In fact, at a time when the reliance of this information for decision-making has been highlighted in various reports, such as the Drummond Report, the federal government announced the abolishment of the mandatory long-form census, replacing it with a new voluntary questionnaire. A voluntary questionnaire, even with attempts to increase the response rate, is predicted to be less reliable and will mean that many equity groups will likely opt-out of completing the questionnaire. As a result, there may well be an incomplete picture of the country, the workforce and our communities (Georgetti, 2010).

Although somewhat dated at time of release, the census information is central to the trends both nationally and provincially by which to monitor change and progress. This change will create more difficulty for governments at all levels to develop evidence-based public policy responses to changing demographic conditions. The Drummond report, initiated by the federal government, recommended maintaining the current collection of systems in place within Canada and to further enhance LMI. The federal government policy change relative to the long-form census means we are moving away from one of the most reliable sources of data that we currently have access to. Further, this decision may change the competitive nature of Canada if data becomes uncollectible or even more unreliable. The Province must take a clear stand with the rest of Canada to maintain this mandatory collection of information to ensure the country does not fall behind as others excel. At a minimum the form could be revamped and administered more frequently, but the mandatory importance of this collection must be seen as a crucial, critical piece of enhancing our LMI.

Although there are extreme pressures on Canada's LMI systems, there is a variety of data available that can be analyzed to assist with current decisions relative to programming and policy. Identifying the sources and the information's reliability is the first step to understanding where gaps exist and how information can be currently used and further developed to alleviate these gaps. For Prince Edward Island, the most reliable information found comes from Statistics Canada and is most used for decision making within the provincial government (WSRG, 2010). Other reports issued on LMI tended to be one time primary data collection studies that may not have a solid methodology to ensure the accuracy and reliability of the information. These one-of reports often do not meet the requirements of research and although they can provide useful insight and information in the short-term, they alone should not be relied upon for decision-making.

As we move forward into the 21st Century, requirements for accurate, timely information remain a critical piece to maintaining a competitive advantage, locally, regionally and nationally. In the short term, there is a need for the province to be proactive in the understanding and further development of our LMI requirements. As we proceed into the future, policy decisions will be critical to ensure the province has what it takes in its labour and workforce to achieve stated directions and goals outline in the Island Prosperity Plan (IPP). Now is the time for action in taking an accountable role for the information by which we base the decisions of our scarce resources to accomplish our overall economic strategy for Prince Edward Island.

Without effective action, we face a future of uncertainty in how to allocate our resources and set policy that will see our economy prosper. Both short-term and long-term considerations need to be taken into account to strengthen Prince Edward Island's

position with LMI. It will take planning, coordination, and difficult decisions to secure our future. An alternative outcome is simply not acceptable.

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To my husband Steve, I thank you for your patience, understanding, love and support over the course of this program. It is yet another journey that we have faced together. To my daughter Taylor, I appreciated your understanding when I had to be away. I am very fortunate to have had such remarkable encouragement from you both.

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## Table of Contents

Executive Summary .....	ii
Acknowledgements .....	vi
SECTION 1: INTRODUCTION .....	1
Labour Market Information .....	2
Labour Market Information Analysis Reports .....	10
Organization of Report .....	12
SECTION 2: THE STATE OF CANADIAN LABOUR MARKET INFORMATION..	14
The Knowledge Economy .....	17
Skills for the 21st Century .....	18
SECTION 3: APPROACH AND METHODOLOGY .....	21
Method .....	21
SECTION 4: FINDINGS AND ANALYSIS .....	23
Understanding the Implications of the Drummond Report.....	23
Key Findings from the Drummond Report .....	24
Prince Edward Island Analysis .....	28
Section 5: DISCUSSION AND CONCLUSION .....	34
Summary of Study Findings .....	34
National level implications of LMI.....	34
Provincial level implications of LMI.....	39
Research Implications .....	45
Recommendations .....	46
Limitations and Future Research .....	51



Conclusion .....	52
References .....	53
Appendix A: Key Findings from LMI Survey Questionnaire .....	57
Appendix B: <i>Innovative International Approaches to LMI</i> .....	58
Appendix C: <i>Best Practices</i> .....	59
Appendix D: <i>Analyzing the Prince Edward Island Work-Force</i> .....	67

## **SECTION 1: INTRODUCTION**

Interest in labour market information (LMI) has intensified over the past decade as continued globalization and the recent economic downturn have changed the way in which labour markets function. Changing market conditions and demographic factors continue to influence national, regional and provincial labour markets, which is why there is a need to understand and identify the best practices, present gaps, and potential solutions. This knowledge is the first step towards understanding Prince Edward Island's (PEI) labour market make-up, challenges and opportunities, and to disseminate this information in useful, meaningful ways that provide timely relevant knowledge for policy and programming decisions. Focusing on these areas supports a strong prosperous labour force, now and into the future.

The recent decision by the federal government to abolish the long-form census and its mandatory collection of data has caused heightened interest around the requirement of this information. The Census is much more than just a headcount. It provides the fullest and richest source of information on Canada's population, labour market and income history. This data collection includes a detailed profile of the labour market activities of Canadians, such as information on labour force participation, employment (full time/part time), unemployment income and earnings during the previous year (Georgetti, 2010). This information is critical for both employers and employees on the current status of the labour market. In addition, both provincial and local governments, as well as other key stakeholders, use the data to evaluate labour supply and potential labour shortages in specific occupations and areas, and they adjust their programs and activities accordingly. Without accurate, reliable information in these

areas Canada and Canadians will be at a disadvantage when making labour market decisions.

The purpose of this report is to understand the best practices for labour market statistics reporting as identified in the landmark national report of the Advisory Panel on Labour Market Information – the “Drummond Report”, Working Together to Build A Better Labour Market Information System for Canada: Final Report 2009, and to analyze and determine associated gaps with The Workforce Information of Prince Edward Island report researched by the newly created UPEI Workforce Strategies Research Group (2010) with the University of Prince Edward Island.

This report will provide an overview of the Canadian labour market information and identify best practices throughout Canada, the United States and Internationally. It also analyzes the current situation in Prince Edward Island’s practices and identifies associated gaps as found in the above noted reports. This review and analysis provides recommendations for opportunities for Prince Edward Island to develop a strategic plan to capitalize on the province’s current strengths in relating to both supply and demand LMI and areas for further development as identified by current gaps.

### **Labour Market Information**

The importance of labour market information has intensified since the onset of the current recession. Labour market information is knowledge, facts, data and relevant institutional information on the supply and demand of labour. In addition, this information can assist in making informed decisions or plans for individuals related to learning, training and skills development, as well as employment, job search and career development. It also assists businesses in staff recruitment, retention and related business

decisions. From a government perspective, the knowledge is key for public policy development, programming and workforce investment strategies.

There are two main types of decisions that rely on LMI, including decisions by governments, businesses and other institutions on policy, and decisions by labour market participants regarding individual transactions in the labour market (Advisory Panel on Labour Market Information, 2009). This information is critical in assisting governments and business alike in making decisions on how to move forward, set policy, and allocate resources and to workforce participants in determining their career paths

### *Labour Economics*

Labour Economics is the study of workings and outcomes of the market of labour. More specifically, labour economics is primarily concerned with the behavior of employers and employees in the employment relationship such as pecuniary aspects, such as wages, prices, and profits and non-pecuniary aspects such as working conditions. The study of labour begins and ends with supply and demand. On the demand side, employer's decisions about hiring are influenced by conditions in the market. On the supply side, workers decisions are influenced by the availability and quality of employment relationships. The major outcomes are terms of employment (wages, compensation levels and work conditions) and levels of employment (skills and education) (Carroll, 2005).

There are various elements of the labour market. Labour market readiness is an element including a focus on worker and potential workers decisions to work, compensation and incentives, education, worker mobility, diversity and labour supply. Workplace conditions, productivity, presence of unions, pecuniary and non-pecuniary

aspects as well contribute as elements of the labour market. Labour market researchers are reliant on good sources of labour market information. These sources (including both primary and secondary sources) are used to hypothesize about labour market policy and outcomes. When researchers utilize these sources three critical questions must be asked; Is the data publically available? How reliable is the data? Is the data best suited for the question being asked? This adds value and credibility by which to base decisions that affect how our economy will perform.

### *Prince Edward Island*

Prince Edward Island continues to be affected by the changes that our global labour markets have felt. With a small population base, it is critical for the province to continue to develop its required skills from within. This was highlighted in the Island Prosperity Plan as it related to developing a skilled labour force.

“Our Province exists in an even more global society and economy. All around us, a range of complex forces are constantly evolving and interacting with one another – creating both opportunities and threats for Prince Edward Island. In the past, our wealth has been drawn from resources of our land and surrounding waters. To ensure continued wealth, we must strengthen the new factors of competitiveness in today’s economy – people and technology – and apply them across the full range of our economy” (Mayne, 2008, pg.5).

Major demographic trends worldwide, such as the graying of the population in western worlds, the shortage of new entrants into the labour force and the integration of immigrant workers are creating profound changes in labour markets. Today, and in the future, human resources are the single most competitive factor that a society can have

(Department of Provincial Treasury, 2007). This new reality places Prince Edward Island in a position to create competitiveness by developing the skills and talents of its citizens. Prince Edward Island's prosperity will increasingly be determined by the effectiveness of our labour markets in allocating labour to areas of the greatest needs and in providing opportunities to all Islanders wanting to stay and work. To accomplish a diverse, vibrant and skilled labour force, labour market information must be accurate, timely, accessible, and interpretable to ensure decisions are made with the most current information.

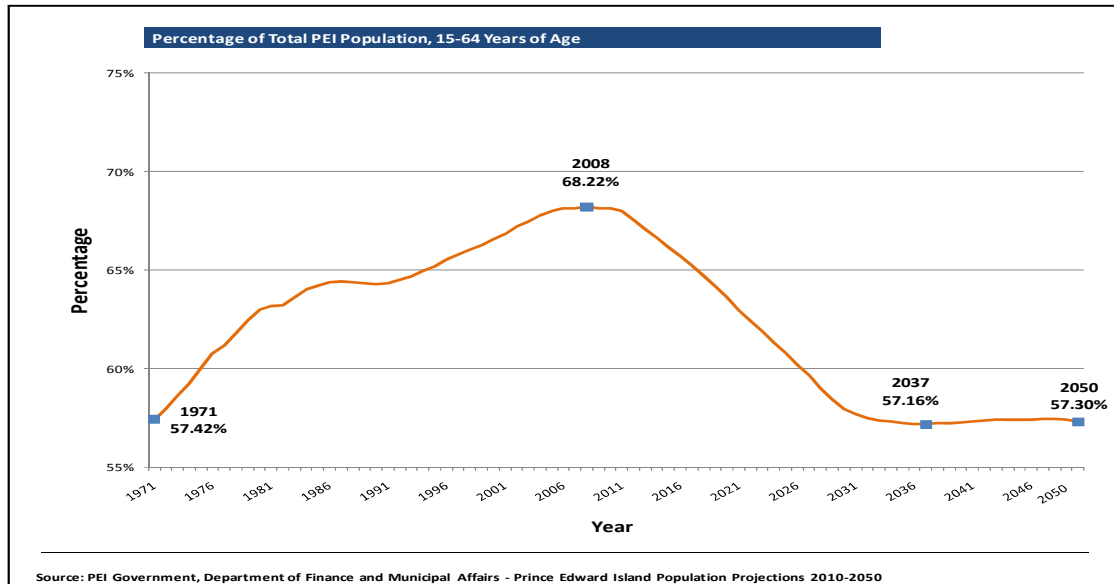
The future outlook of the PEI labour force highlights the challenges yet to be overcome. On July 1, 2009, the population of Prince Edward Island was estimated at 140,985 (Provincial Treasury, 2010). This represents a yearly increase of 1,534 persons, or 1.1% growth since July 1, 2008. Prince Edward Island's rate of growth during this period was the highest in Atlantic Canada and just slightly below the national rate of 1.24%. This growth rate was also the highest rate of growth for Prince Edward Island since 1984. The majority of this growth can be attributed to record gains in international migration. During this period, 1,793 international immigrants came to the province, the highest level on the current record keeping system since 1971 (Finance & Municipal Affairs, 2010). However, many foreign-trained professionals and trades people experience a number of barriers including language training, having credentials recognized, and a lack of Canadian experience which prohibit them from working in areas of demand

Even with international migration, this small population base creates a challenge for Prince Edward Island to ensure it has the required skill base to meet labour market demands. Elizabeth Beale, President of the Atlantic Provinces Economic Council,

identified finding solid solutions to combat a longer-term trend tied to the graying of Atlantic Canada as the region's most urgent concern (Day 2009). With an aging population, declining birthrate, fewer youth entering the workforce and many of our educated youth leaving the province, the challenge is large for Prince Edward Island. The ever changing demographics of the PEI labour force puts additional pressures on government to best utilize its available resources. Programs must be developed that serve all areas of the population while aiding the government in meeting its goal of achieving a highly skilled workforce. Skilled labour is the "life blood" of the knowledge economy and understanding the various characteristics of the labour force is central to decision making for policy and program development.

According to the Labour Force Survey produced by Finance and Municipal Affairs (2010), Prince Edward Island averaged 69,500 people in the workforce in 2009, a 1.0% decline from 2008. Employment expanded at a relatively slower rate (1.3%), which resulted in a higher unemployment rate averaging 12%, an increase of 1.2 percentage points over 2008. The participation rate increased over that period by 0.5 of a percentage point to average 68.7%. Nationally, for the same period the participation rate averaged 67.8% (Conference Board, 2009). Based on the Conference Board of Canada (Conference Board, 2009), labour market conditions in Prince Edward Island softened in 2009. In other words, the labour force increased slightly while employment remained relatively unchanged. Working age population as a percentage has crested in 2009. According to the Provincial estimates, the workforce population as a percentage of the total population peaked at 68.22 in 2008 and is estimated to continue to decline until 2037 when it will reach a low point of 57.16% (Finance & Municipal Affairs, 2010).

Figure 1: Proportion of the PEI workforce to total population



Source: Prince Edward Island Government, Department of Finance and Municipal Affairs, 2010.

Understanding Prince Edward Island's statistics is critical to be able to detect trends both favorable and unfavorable for the province. Policies and programs can then be linked to these trends to find solid solutions for the allocation of funds that best suit the requirements of the provinces current economic situation.

### *Island Prosperity Plan*

The current government of Prince Edward Island has outlined in its "Island Prosperity Plan" (IPP) (Mayne, 2008) three key pillars for investment to accomplish its goals, one of which is a 40 million dollar investment in people. Labour market development funds are focused on building the pool of skilled workers needed for the strategic sectors to tap their full potential for growth (Mayne, 2008). The province currently provides a number of labour market programs to assist Islanders in a broad range of training, retraining or other labour market interventions.



On October 5, 2009, the province assumed the responsibility from the federal government for the ongoing implementation of the Labour Market Development Agreement (LMDA). This change provides the province with approximately \$30 million annually to create programs that will increase the skills of the island labour force. With the current focus of the Province in emerging sectors, these funds add additional value to train a workforce that meets the needs of these sectors. This signals a move to diversify the economy, resulting in an increase of knowledge workers. Having good LMI will help policy planners and researchers to understand the readiness of the labour-force which will be a critical component of our economic development plan. The key to making good decisions about what companies to attract and what sectors to expand will be the ability to assess the labour force readiness for the future. To that end, labour market information is critical for Prince Edward Island policy and planning government representatives to best leverage these funds.

#### *Political/Governance/Policy Framework*

The shared responsibility for LMI in our federation among federal, provincial and territorial governments gives rise to quintessentially Canadian challenges and opportunities. But the political/governance/policy set up is still unique (Advisory Panel, 2009). All jurisdictions are involved in labour market information but the responsibilities have devolved more to the provinces over time. Whereas the provinces and territories are well placed to deliver the services their residents require, there is also, in many cases, a simultaneous need for a national perspective (Advisory Panel, 2009). A well functioning national labour market is an important source of competitive advantage for Canada.

Reducing our unemployment rate by just one tenth of a percentage point would bolster the economy by \$800 million a year (Advisory Panel, 2009).

Over the past decade, the skill demands for the Prince Edward Island economy have risen (Mayne, 2008). Business and education groups have argued that new technology and rising global competition are increasing workplace skill demands (Hilton, 2008). In July 2008, the Honorable Monte Solberg, Minister responsible for Human Resources and the Honorable Murray Coell, British Columbia's Minister of Advanced Learning and Labour Market Development, Co-chairs of the Forum of Labour Market Ministers (FLMM), announced that Don Drummond, Senior Vice President and Chief Economist of Toronto Dominion Financial Group would chair an advisory panel on labour market information.

The FLMM is comprised of the labour market ministers from the provinces, territories and the federal government. It was established in 1983 to promote inter jurisdictional discussions and cooperation of labour market issues.

In a press release by HRSDC (HRSDC, 2008), Minister Solberg stated that, "providing timely and relevant labour market information to all Canadians is critical to our government's goal of creating the best educated, most skilled and most flexible workforce in the world".

As we move forward into the 21<sup>st</sup> century, the importance of this information will increase as our economies change. The only constant in modern economies is change. Sectoral, regional and skill requirements shifts occur now with blinding speed. Economies can only perform well if they keep up and adapt. That requires accurate and timely information on which to base decisions. To really improve the functioning of

labour markets, the data has to be readily available and appropriately interpreted (Advisory Panel, 2009). Current management information systems are strained and although they are providing statistical information on our economy, they are not providing the granular level of information required to develop programs and set policy. The frameworks currently in place need to be aligned with the economic plan of the province and be redeveloped to supply the level of information required to make informed decisions. Management information systems are essential to capture the volumes of data that are required to be analyzed to make informed decisions (Brabston, Laudon, & Laudon, 2009). Prince Edward Island does not currently have its own management system in place and relies heavily on the federal government for the information on its economy.

Current research has been carried out that identifies the landscape of LMI that is available both nationally and locally. At a national level, the Drummond report identifies both Canada's position internationally and looks in-depth at the areas where we currently do well, where gaps exist, and where we could further develop to better serve our LMI needs. At a provincial level, the Workforce Strategies Research Group completed an analysis of LMI for Prince Edward Island. These in-depth reports provide the basis for this study in attempting to make sense of our labour market information.

### **Labour Market Information Analysis Reports**

#### *The Drummond Report*

In June 2009, the Advisory Panel on labour market information released a report on labour market statistics reporting in Canada, "Working Together to Build a Better Labour Market Information System for Canada". The Advisory Panel was established by

the FLMM to provide advice on how best to improve Canada's LMI system to make Canadian labour markets function better. The committee examined labour market information across the country and looked at international practices, determining best practices to support the growth of the skilled labour pool needed by all employers. The report was compiled over a twelve month period and was intended to provide valuable advice to the FLMM on the status of LMI at a national level and across the country at both a regional and provincial level and to make recommendations for improvements at all levels. This report was chosen because of its timeliness and up-to-date snapshot of our current status of LMI information as well as the strengths and challenges as we move forward.

*Analyzing the Workforce Information of Prince Edward Island*

In 2009, after assuming the responsibility for delivery of the Labour Market Development Agreement from the federal government, the Province of Prince Edward Island partnered with the University of Prince Edward Island (UPEI) under the UPEI Workforce Strategies Research Group (WSRG) to conduct research on labour market information and readiness to assist the Province by providing evidence-based analysis to support decision-making about programs and policy. The first report "Analyzing the Workforce Information of Prince Edward Island" assessed the availability of data, information, and knowledge necessary to support the work of the WSRG. The report was intended to provide an environmental scan of data availability on issues relevant to the future research agenda of the WSRG, as well as an overview of the quantitative and qualitative characteristics of the data. The report examined the availability of data through a number of levels of analysis including, international, national, regional and

provincial. Both primary and secondary sources of information were examined. The research was designed to view both the national and provincial level best practices as defined by the Drummond Report and analyze Prince Edward Island's current LMI sources and availability and its support of supply and demand information, what is lacking and recommendations to increase the level of accuracy and timeliness of our local LMI. This report was chosen as it supplied all the relevant materials necessary to compare and validate best practices across the country and provided an in-depth analysis of the workforce information of Prince Edward Island, therefore allowing a gap analysis to be completed.

### **Organization of Report**

The following sections of this report present an analysis from both a national and provincial perspective of LMI.

Section 2 provides an overview of LMI in Canada and provides current statistical information about the PEI economy. It also highlights the move to a knowledge based economy and discusses our skills requirement for the 21<sup>st</sup> Century.

Section 3 is the approach and methodology that was used in carrying out the research for this paper and describes the steps taken to complete the analysis.

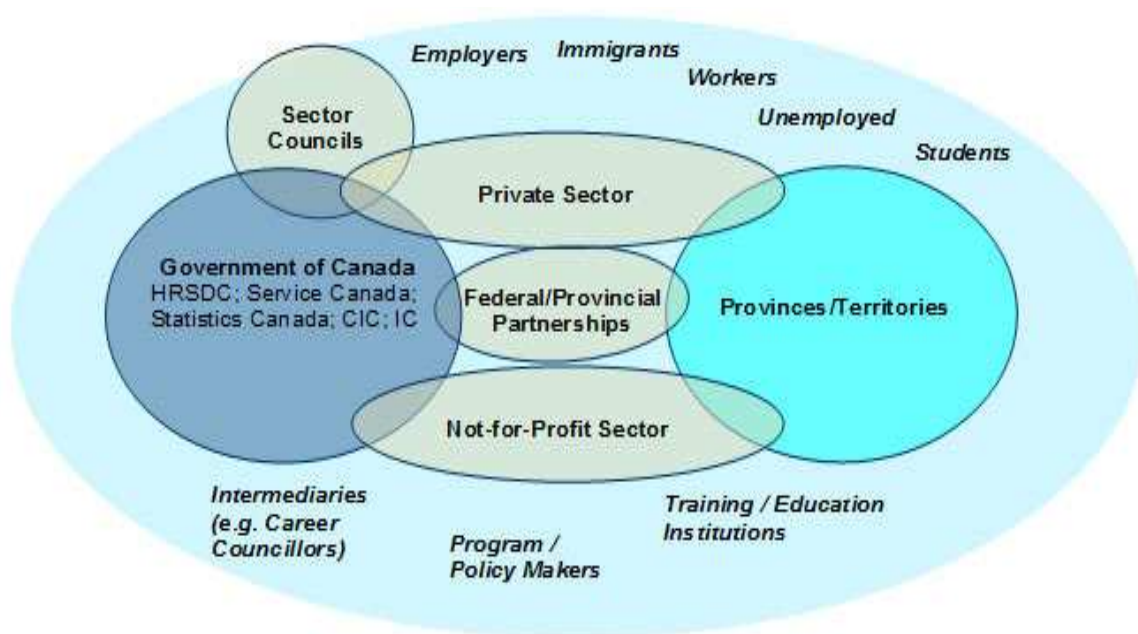
The findings of the research are outlined in section 4 as well as an analysis of the information. It identifies the key findings from the Drummond report from a national and provincial perspective and identifies best practices across the country as well as areas where improvements could be made. A Prince Edward Island analysis is completed that describes the provinces current position in regards to LMI.

The report concludes with discussion and conclusions in section 5, which summarizes the findings.

## SECTION 2: THE STATE OF CANADIAN LABOUR MARKET INFORMATION

It is evident that understanding our LMI both nationally and provincially will be the key to being able to provide the required workforce for the 21<sup>st</sup> Century. Knowledge at a national level helps to identify trends in the labour force. At a provincial and local level, this information becomes the main source by which to guide the policy and programming decisions that can either boost or hinder the economy. With the fluctuations globally, understanding the state of labour market information and the key players is essential to be able to plan for the future. There are various key players that make up Canada's LMI as identified below.

Figure 2: LMI-Key Players in Canada



Source: Advisory Panel on Labour Market Information, 2009

The following section highlights Canada's LMI and looks at the emergence of the "knowledge" economy. It concludes with a discussion on the skill requirement for the 21<sup>st</sup> century.

### **Canada's LMI**

The composition of the Canadian labour market has changed significantly in recent decades, with the number of women, older workers and immigrant being far greater than in the past. This transformation reflects changes in various demographic factors – births and deaths, immigration and emigration (or net migration). Between 1987 and 2005, as a result of declining fertility rates, aging population and rising immigration levels, the contribution of natural increase to total population growth fell from 66% in 1987 to 34% in 2005. Accordingly in 2005, net migration accounted for 66% of the increase in total population (Lapointe, Dunn, Trembaly-Cote, Bergeron & Ignaczak, 2006).

The current recession triggered by the 2008 failure of financial services was felt by all of Canada and the constant economic changing conditions of a global economy has changed the way in which labour markets function. To remain competitive, we must ensure the required skills are available to support economic growth. A ten year outlook produced by HRSDC predicts that the Canadian labour market is expected to perform well over the next decade, with no widespread labour shortages. Total employment is expected to grow to 18.1 million by 2015 – an average annual growth rate of 1.1% (Lapointe et al, 2006). Although this represents a slowdown relative to previous periods (2005, the average growth was 1.8%), the Canadian economy should still create about 1.9 million new jobs over the next ten years. This employment forecast is affected by



projected changes in economic activity and productivity. Over the next five years, Canada's real GDP is expected to advance at an average annual rate of 2.9%. It is then projected to decline slightly to 2.6% for the following five years (Lapointe et al, 2006). The major factor behind this deceleration is a slowdown in the underlying growth potential of the economy, as slow overall population growth will constrain labour force gains. The aging of the population will have an additional dampening effect on labour growth as a result of retirements. As inflation has largely remained within the Bank of Canada's target band (between 1% and 3%) for many years now, it is expected that the Bank will be able to set monetary conditions that allow demand to grow in line with this slower growth in potential. Accordingly, a sustained generalized shortage of workers is not expected to materialize in the Canadian labour market (Lapointe et al, 2006). However, given the current state of our LMI, these projections are at a more general level than what would be required to understand and forecast with any great certainty if the statement is correct.

Demographic and macroeconomic developments will lead to changes in Canada's industrial structure. First, slower population growth is expected to reduce output and employment growth for most industries, while changes in the age structure of the population will have an impact on the industrial structure by favoring service-providing industries, particularly in the health sector. Other structural trends will also have an impact on Canada's industrial mix, including the continuing shift towards a more knowledge-based economy, globalization and reduced accessibility to some natural resources. Finally, cyclical events such as the pickup in demand for aeronautical

equipment, higher oil prices and the improved fiscal outlook of governments will significantly impact growth in several industries (Lapointe et al, 2006).

Over the next ten years, more than two thirds of the new jobs created are expected to be in occupations usually requiring post-secondary education (Lapointe et al, 2006). Among the occupations that generally require post-secondary education, demand will be particularly high for those usually requiring a university degree. Employment in this category is projected to increase by an average of 1.6% annually, from 2006-2015 (Lapointe et al, 2006). This rapid growth is explained in part by the continued shift to a knowledge-based economy and by increased public spending in the health care sector.

### *The Knowledge Economy*

There is a general trend among advanced economies to shift away from the primary economy and manufacturing industries as the principle engine of growth towards the creative and high-technology service sectors characteristic of the “new” economy as the source of prosperity (Florida, 2008). There is also a great deal of evidence to suggest that the Canadian labour market has already shifted to a knowledge economy. Prince Edward Island made a deliberate policy decision outlined in the Island Prosperity Plan to diversify the economy by placing focus on new emerging sectors including aerospace, bioscience, information technology, and renewable energy. All of these sectors require an educated workforce to be successful.

Between 1990 and 2001, employment for individuals with postgraduate degrees grew from just under 1.3 million to just over 2.1 million over the same period. Since 1990, the number of jobs filled by youth with bachelor’s and graduate degrees increased by more than 30 percent, while there was an 11% increase in the number of jobs for

youth with college and trade/vocational diplomas and certificates (Association of Universities and Colleges of Canada, 2009). It is beyond the scope of this analysis to explore the actual jobs that will be required in the future and many of these jobs may not even exist at present. What we do know is that an increasing proportion of the jobs that will exist will require a level of education or training beyond secondary school, be it an apprenticeship, a diploma, a degree, a certificate, an industry credential, or a professional qualification (Miner, 2010). The federal department of Human Resources and Skill Development Canada (HRSDC) in 2007 provided what might be taken as the minimum requirement. They said “65% of all new jobs created over the next five years are expected to require some form of post-secondary education or training” (Service Canada, 2007, p.3). Other studies revealed this figure to be even higher, including a study by the Obama administration in the U.S. Holzer and Lerman (2007) predicted that fully 78% of job openings between 2004 and 2014 will require education or training beyond high school. And in the same vein, the U.S. based Lumina Foundation (Lumina, 2009, pg.5) predicted that without change to a more educated workforce, there will be a shortage of 16 million post-secondary educated adults in America by 2025. Improving educational attainment and enhancing research capacity is linked to regional competitiveness (per-capita income and productivity) (Eberts, 2010). Moving forward into the 21<sup>st</sup> Century both will need to be a critical focus for the province to develop the required skill base to remain competitive.

### *Skills for the 21st Century*

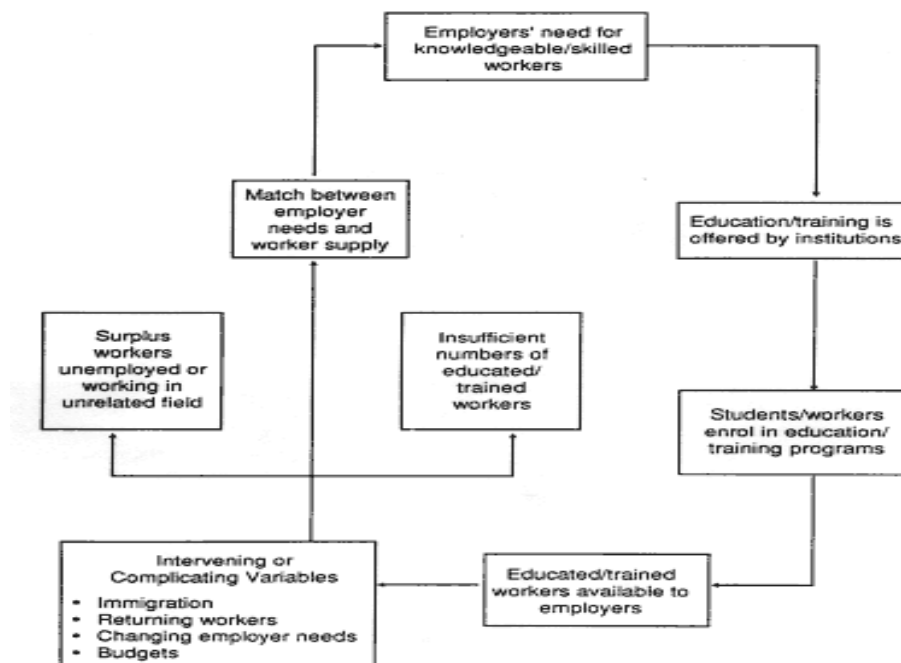
Over the past decade, business and education groups have argued that new technology and rising global competition are increasing work-place skill demands. However, the

available research does not agree that the skill demands are rising (Hilton, 2008). In research carried out by the Center for Education and National Academies, it was identified that the U.S. labour market is becoming increasingly polarized, with rapid growth in high-wage, high-skill professional jobs and low-wage, low-skill service jobs. The future economy will be not only a “knowledge” economy, but also a service economy (Hilton, 2008). This polarization raises concerns about the future availability of mid-skill jobs paying middle class wages. The Bureau of Labour Statistics (BLS) sees four broad labor market trends holding between now and 2016 (Saunders, 2005; Franklin, 2007; Hilton, 2008). Slower labour force growth will be experienced than in previous decades. This trend will mainly be due to an aging population and labour force. As well, a continued shift of employment to service-producing industries will develop over this timeframe. The fourth trend will be strong growth in labour productivity. Although various trends will affect both ends of this “barbell” economy, it was concluded that future skill demand cannot be forecasted with any degree of accuracy (Hilton, 2008). This is true not only because forecasting models are not yet capable of capturing the complex dynamic relationships between skill supply, skill demand, wages and productivity, but also because these relationships are influenced by social and political choice.

The following chart demonstrates the information required through various chains to connect the links between supply and demand. Both must be fully understood when setting policy and programs to capitalize on economic opportunities. Although it is clear that future demand cannot be predicted with any great certainty, understanding the links

and the information within each section will provide the best knowledge, given the current circumstances, by which to base decisions.

Figure 3: Supply and Demand for Educated/Trained Workers



Source: Canadian Career Development Foundation (2007)

We need to understand better the different views of the demographic shift from the perspective of demographers, sociologists, human resource specialists, union leaders, and others. What evidence is being relied upon by the participants in this debate?

Answers to this question are critical as the information is used for informing public policy on matters such as immigration levels, support for apprenticeship programs, incentives for the upgrading of employed workers' skills, and the scale of other active labour market measures (Saunders & Maxwell 2003). If the evidence is not solid, then valuable resources could be wasted on misinformed decisions and policy decisions could restrict our economic growth.

### **SECTION 3: APPROACH AND METHODOLOGY**

Labour Market Information is a critical source of knowledge for decisions regarding employment, unemployment, education, policy, programs and economic development. In today's fast paced, changing environment, we must understand what data we have access to in order to make the best decisions. With the release of the Drummond Report and the federal government devolving the Labour Market Development Agreement to Prince Edward Island, it seemed timely and relevant to research the current status of our LMI in relation to the rest of Canada.

#### **Method**

My research was designed to perform an exhaustive review of two specific reports, "The Drummond Report" and "Analyzing the Workforce Information of Prince Edward Island". From this review, an analysis of current labour market information, best practices and associated gaps are identified, as well as recommendations as we move forward into the 21<sup>st</sup> Century. The research for this report was undertaken between September 2009 and June 2010. The two reports address aspects from both a national and local perspective.

#### *Substantive Methodology*

The Drummond report was selected because of its relevance and timeliness to the present situation that is facing international, national and provincial labour markets. This landmark national report captures a snapshot of the current realities that are faced by all jurisdictions and the importance of having current, relevant, reliable information for which to base decisions on the scarce resource base allocated to develop their economies. The Workforce Information of Prince Edward Island report was chosen as a current key

piece of research to be able to analyze the landscape of the LMI currently used and available in Prince Edward Island and its relevance to decisions and policies that are required to be set out by the Province from a strategic economic perspective.

Each area of the analysis was carried out in an in-depth review, starting with the best practices identified through the – Drummond Report, an audit of Prince Edward Island’s current practices as identified in –Analyzing the Workforce Information of Prince Edward Island and identification of the gaps both nationally and provincially. The intention of this analysis was to uncover the availability and quality of data and to make recommendations on the strategic path forward to further enhance LMI knowledge of the Prince Edward Island economy. Thus, the Substantive Methodology was designed as an overview to determine: What information is available, what gaps exist and what can we do moving forward?

#### *Procedural Methodology*

Procedural Methodology included an analysis of the Drummond report, as well as an analysis of the workforce information currently available in Prince Edward Island. Sources of information for Prince Edward Island were identified both nationally and provincially as well as identification of best practices from an international, national and provincial perspective. This allowed for a gap analysis to be completed for Prince Edward Island in regards to the rest of Canada and to determine where the areas of good information existed and to identify areas where improvements could be made and further research would be required. From this process and information, recommendations both short and long term were able to be made.

## **SECTION 4: FINDINGS AND ANALYSIS**

After a thorough review of the national landmark report –Drummond Report- and a thorough in-depth analysis of the workforce information of Prince Edward Island, the analysis and findings are presented in the following sections.

### **Understanding the Implications of the Drummond Report**

The Advisory Panel on LMI is an independent group established by the Forum of Labour Market Ministers (FLMM) to provide advice on how best to improve Canada’s LMI system to make Canadian labour markets function better. The panel was appointed by the FLMM in July 2008 to provide recommendations on how labour market information can be used to contribute to Canada’s economic growth and efficiency and better respond to the needs of employers, workers and learners. The Report “Working Together to Build a Better Labour Market Information System for Canada” was released in May 2009.

Using a consultation document to guide discussions, the panel spoke with over 550 Canadians from business, labour, federal, provincial and territorial governments, intermediaries, experts and other interested parties. In addition, 12 formal submissions and 141 survey questionnaires were received. The breakdown of respondents by sector is as follows: 30% NGO, 20% academia, 18% federal government, 16% provincial/territorial government, 8% business, 1% labour and 7% other. Consultations were used to explore the following general topics: the role of LMI for the given stakeholder group (what kinds of LMI are used? for what purpose?), data issues (sources, gaps), dissemination and access issues (how easy is it to find the information you need?), interpretation of LMI (do people need help in finding and interpreting LMI?) and the role



of LMI stakeholders (are governments doing enough in the provision of LMI? what is the role of the private and civic sectors?). The findings from the LMI Survey Questionnaire are attached in Appendix A.

The group also looked at all provinces and territories within Canada to identify best practices and weaknesses that were representative of each approach taken provincially to LMI. They as well looked at other countries that had systems with a reasonable amount of comparability to learn about their best practices. The countries chosen were the United States, Australia, the United Kingdom, Germany, and Denmark. These countries were chosen for the special features of their LMI systems and for their similarity to Canada as highly developed industrialized countries with sophisticated and modern labour markets.

#### *Key Findings from the Drummond Report*

The report identifies the immediate need for more information on local labour markets to ensure the scarce resources of the provinces are best utilized towards its economic growth. Very little reliable information was determined to be available, even for fairly large cities and towns (other than the Census data, which is not timely). Labour market gaps with respect to labour market performance or needs of certain groups was lacking for women, younger workers, older workers, visible minorities, immigrants, aboriginal and people with disabilities. Most felt there was a bewildering array of LMI tabulated in ways where comparisons are generally not easily achievable and there is great difficulty in sorting through it all to find the information they required.

*International Analysis.*

One of the most distinctive features of the United Kingdom (UK) LMI system is that it has a well developed set of institutional support arrangements including; obligations of LMI providers and individuals, quality standards, policy advice and co-ordination mechanisms, political support, and research and evaluation support. In the United States, Denmark and Germany, lead agencies are responsible for labour market information. In Australia, the public sector is the primary producer of LMI both directly and through private LMI providers.

In the UK and Denmark, career guidance has been embedded in their educational systems with specific legislation. In contrast, Canada does not have specific legislation or regulation regarding the provision of LMI in educational institutions, which given the distribution of powers in Canada would have to be provincial/territorial government level. Instead the provinces and territories leave it to the discretion of the local school boards whether to offer LMI to students to guide career decision making.

In order to reach all potential users, international best practices indicate that a variety of mediums should be utilized for dissemination of LMI. LMI users can be reached through: a single web portal; video and print media; career centers and telephone. It also suggests that it is important to promote the LMI system, possibly through an on-going media campaign, so that users are made aware of all the services that are available to them. And finally, it tells us that labour data should be more freely and easily accessible over the Internet. A summary of the innovative international approaches to LMI that provide valuable lessons and could be considered for Canada are included in Appendix B.

### *Canadian Analysis.*

The report examines provincial/territorial LMI systems as they currently exist, and highlights some key features and “best practices” (see Appendix C). Both federal and provincial governments have been involved in Canada in developing active labour market policies and programs to help all participants in the Canadian labour market, actual and potential, to prepare for, find and maintain employment, as well as in providing LMI. In Canada, the coordination of LMI is far less structured than in the all other countries examined. There is a wealth of labour market information available at the provincial and national level and at five year intervals from the Census. However, despite a strong demand for more current local area data, it is not readily available except from the census which is provided in five years intervals.

### *Provincial Analysis*

All ten provincial governments provide occupational employment forecasts for their province, but information varies greatly in terms of timeliness, number of occupations, time horizon of the forecasts, sub-provincial breakdowns, quantity and quality of background information, and descriptor of occupational prospects used (Advisory Panel, 2009).

The most detailed outlooks are provided by Alberta, Quebec and New Brunswick. Alberta offers an Occupational demand and supply outlook that is the only one of its kind in North America (Advisory Panel, 2009). It projects the demand and supply of 140 different occupations over a ten year period. New Brunswick offers 3, 5 and 8-year projections for 500 occupations, but with no regional disaggregation. The Atlantic Provinces were noted as having little capacity to conduct supply and demand imbalance

estimations for all occupations in each of the provinces. In Quebec, however, the situation has been somewhat different as the provincial government has long pursued its own unique partnership approach to labour markets. Reflecting Quebec's priorities, it has always guarded its constitutional jurisdiction over labour markets.

The use of different standards and methodologies in regards to LMI across the provinces creates a problem in insuring the quality and consistency of the data being collected at a national level. With the recent decision to abolish the long-form census, which includes the statistics on education and detailed labour market characteristics, the provinces will lose critical data at a provincial level. This highlights the need for a national/provincial level of coordination.

*Prince Edward Island Analysis.*

The report identifies the challenge Prince Edward Island faces in developing an LMI system with strong capacity to respond to the various needs of users due to its small population base. The collection of data in Prince Edward Island is largely undertaken by Service Canada and Statistics Canada. The data are collected at the economic region level, which in this instance, is identical to the provincial level. This leaves Prince Edward Island with data that is not specific to the province or its sectors and looks at trends in a general sense, rather than a specific one. At present the Province of Prince Edward Island does not publish or maintain a separate LMI system.

The government of Prince Edward Island, Service Canada, and HRSDC have partnered together through LMDA to provide support for ongoing LMI through various sector councils on the Island, as well as other non-governmental and private organizations. The department of the provincial treasury does publish broader

employment and labour market information, but does not provide information more detailed than at the industry level, and does not provide employment and labour market projections.

A distinguishing feature of the LMI system in Prince Edward Island is the use of the Career Cruising website that is being used in most schools across the province to disseminate LMI for career planning ([www.careercruising.com](http://www.careercruising.com)). This system allows students to create a profile that they can carry with them throughout their education and career enabling them to update the profile as they go (Advisory Panel, 2009). This tool allows the students to be informed about LMI and provides them with knowledge to assist in their career choices. The Drummond Report states the challenge of the smaller provinces like Prince Edward Island in having the resources to develop and maintain an LMI system, but it also encourages the Provinces to take an active role in determining their own LMI needs and finding ways in which it can ensure the timeliness of this information for decisions.

The Drummond report identified that Canada's LMI system is big and complex, with many providers and many more users and requires a national coordination. It identified the responsibility of the federal government for national LMI and encourages the provinces to fill the gaps that are more specific to their circumstances and to interpret this information so that it is relevant, targeted to different users, and easy to understand.

### **Prince Edward Island Analysis**

The UPEI Workforce Strategies Workforce Group is a newly formed group within the University of Prince Edward Island whose mandate is to bolster dialogue on labour and workforce strategies with cutting –edge research and to provide the targeted research

necessary to support the labour and workforce decisions across all sectors. In January 2009, the group began work to assist with research and analysis on the workforce of Prince Edward Island. The research for this report was undertaken from January to April 2010. To manage the vast amounts of data, some criteria for selection were established for the substantive methodology of this research. This consisted of isolating key aspects of the Province of Prince Edward Island of potential relevance to future research on labour market and work force. This initial exercise necessarily included analysis of factors on both the supply-side (on the economy and economic development), as well as on the demand-side (mainly demographic and labour force information). The intention of this analysis was to uncover the availability and quality of data. As the criteria for selection was quite broad, the criteria for analysis was therefore not oriented towards the production of in-depth analysis of the data in any given area. Rather, the intent was to establish the ‘state of field’ in each area, to gain a good sense of what is available, how much is available, and whether the available data was primary or secondary in nature. Thus, the substantive methodology was designed as an overview to determine: what gaps exist, and what additional research might be required. The procedural methodology included the following: data collection; analysis of the archival surveys and primary research; identification of sources of information; identification of gaps; and identification of additional research required to fill those gaps. This allowed for an overall view of the information on which to base recommendations.

Data at all levels from international to provincial was reviewed. Key findings and recommendations can be found in Appendix D. The group identified the elements of “Prosperity”, but to date no such systematic analysis has been done on Prince Edward

Island. Gaining an understanding of “Prosperity” on Prince Edward Island requires three things: Gathering the right information on each of the elements that make up “prosperity”; having a conceptual model that shows why each is relevant and in what ways; understanding the relationships between the elements and how they interact as a whole, as sometimes the structure is greater than the sum of the parts.

The report also identifies the difference and importance between ‘information’ (the raw data that goes into the conceptual model) and ‘knowledge’ – the outcome of analyzing the information that produces a relevant guide to action. It is knowledge that is required to be able to make and implement the recommendations that come from the information.

It was determined that the availability of information and knowledge was highly variable at the different levels analyzed. There was much more information at the international and national levels than there was at the regional or provincial level and there was a much greater knowledge about the impact and cause of things at the national level than there was at the regional or provincial level.

At the international level, there are primarily two kinds of information. International organizations which provide mainly primary data and epistemic communities such as universities, think tanks, advocacy coalition and activist networks which provide mainly knowledge.

#### *International Data.*

The most relevant information produced by international organizations for research on labour issues and the workforce are as follows: International Labour Organization, International Monetary Fund, Organization for Economic Cooperation and

Development and the World Economic Forum. These organizations provide us with a global picture of what is happening in the world around us and strive to promote cooperation and development of our world as a whole.

*National Data.*

At the national level, Statistics Canada maintains the largest and most complete statistical database in the country accessible through the CANSIM portal (the Canadian Socio-economic Information Management System). In addition to Statistics Canada, there is also HRSDC which produces a number of very useful reports including the “Drummond Report”. Other sources include Office of The Parliamentary Budget Officer, National Industry Associations and Sector Councils as well as National Business Organizations. The Conference Board of Canada publishes a range of data and timely information bulletins on employment, income and productivity statistics, such as the Labour Market Transitions publication in the Executive Action Series. The national banks as well all produce a variant of the World Market Analysis. Collection and analysis of this information allows for a national understanding of our LMI and helps to evaluate the further directions that need to be taken to advance this information to remain competitive.

*Regional Data.*

Reports of regional organizations provide economic data relevant to Prince Edward Island, and sometimes overcome the unfortunate fact that Prince Edward Island LMI data is “lumped” in with Nova Scotia and New Brunswick treating ‘Atlantic Canada’ as a region. This means there is very little specific information about Prince Edward Island contained in the reports. The principal regional organizations noted by the



WSRG were; The Atlantic Canada Economic Council and the Maritime Provinces Higher Education Commission. These organizations provide us information on both the educational status of our youth and workforce but also on economic factors that are impacting our labour markets. This information needs to be clearly understood to make informed decisions that affect both the supply and demand of our labour markets.

*Provincial Data.*

As outlined earlier, sources of information and knowledge at the provincial level are comparatively few. The only publicly available overview of the Prince Edward Island economy is the Annual Statistical Review by the Provincial Treasury. The majority of the data is derived from Statistics Canada. It is a factual document that does not engage problems and offer solutions, nor is it intended to do so. Other sources include the Population Secretariat, the University of Prince Edward Island, Provincial Industry Associations and Sector Councils, Provincial Associations and Community Groups and Consultant Reports. Much of the data in these reports are now dated and the methodologies and approaches often have little commonality therefore leaving the information incomparable.

There was one area that was identified as an exception for Prince Edward Island and that was in regards to literacy. There are relevant sources of data and information on literacy at a number of different levels of analysis. At International, national and provincial levels, there is detailed knowledge derived from various research documents that guide both policy and service delivery. This same level of research and analysis is needed on our workforce to determine how to best utilize the knowledge gained to guide the process of allocating resources to develop our workforce and ultimately our economy.

All information, international, national, regional and provincial plays a role in understanding LMI. Small domain data remains a key piece, especially for the smaller provinces in understanding how best to allocate their resources and set policy. With little internal capacity to collect LMI, the province must take a serious look at what its requirements are and will be into the future and how it can best position itself to begin collecting and disseminating this valuable information.

## **Section 5: DISCUSSION AND CONCLUSION**

The purpose of this report was to examine the status of LMI both at a national and provincial level and identify areas where improvements could be made to better capture information to understand the local LMI and determine ways to best turn this information or data into knowledge for decision making and policy setting.

### **Summary of Study Findings**

The following summarizes the finding of this research and look at the implications of LMI both nationally and provincially. It also identifies the implications of this research and provides both short and long term recommendations that can be adapted to increase our knowledge of our labour market and to proactively take a role in increasing this knowledge further as we move forward into the 21<sup>st</sup> Century.

#### *National level implications of LMI*

At a national level, LMI is critical to Canada and Canadians, if we are to remain competitive in our ever changing economy. According to the Organization for Economic Co-operation and Development (OECD), Canada's LMI system is one of the best in the world (Advisory Panel, 2009). The "Drummond" report, however, clearly identifies that Canada is 'lagging' behind other countries in both structure and process in regards to LMI and there are severe pressures on Canada's LMI system. There are many producers of LMI in Canada at all levels of government and in the private sector. While responsibility for active employment measures and employment programming benefits has been transferred to the provinces as a result of the conclusion of Labour Market

Development Agreements, the federal government retained responsibility for “national” labour market development. This includes above all else, LMI.

Four federal government departments and agencies are key LMI providers: Statistics Canada, Human Resource Development Canada, Citizenship and Immigration Canada and Industry Canada. Each contributes to LMI through a specific mandate. Statistics Canada is the national central statistical agency that collects and produces data related to LMI. It conducts a mandatory census every five years and hosts some 350 surveys on virtually all aspects of Canadian life. Most data can be accessed freely but some, including most long historical time series, have to be purchased from Statistics CANSIM service.

One of the most accurate sources of information has been identified as the Census (Advisory Panel, 2009). Being conducted every five years, it often takes another two years to process the information, leaving the data at the outer limit of where it needs to be to deal with current circumstances in the economy and the labour force. There are two forms utilized to capture this data; the long-form census and the short-form census. The short form consists of 8 questions while the long form consists of 53. While writing this report, a decision was made by the federal government to abolish the long-form census. This decision comes at a time when current LMI is critical to staying competitive both nationally and locally. All provinces, but especially the smaller provinces, such as Prince Edward Island, rely on this information to make decisions on spending and policies as well as services and planning. Without this information governments in particular will not understand the services needed, where problems or opportunities arise or how the region is changing. Larger provinces and corporations that can afford to collect their own

LMI will not feel the effects as great as the small to medium provinces and businesses who will feel the effects of their decisions without reliable accurate information.

The literature reinforces that data are at the heart of economic activity in the 21<sup>st</sup> century. It drives innovation, efficiencies and productivity. Both educational data and economic demand projections are critical to capitalize on our work-force. Although timeliness of the census remains a critical downfall, the information is the most accurate picture we have of the trends both nationally and provincially. Statistics Canada also has a Centre for Education Statistics that is responsible for developing surveys, providing statistics and conducting research and analysis relevant to current issues in education, training and literacy. Lack of a common student identification number makes tracking between education, training and work difficult and often falls short of providing the much needed information to connect both supply and demand.

Human Resource and Skills Development Canada (HRSDC) is the main federal department responsible for LMI. It is responsible to produce and interpret labour market data and to provide key LMI resources at the national, regional, and local levels. HRSDC maintains foundational systems that are at the centre of LMI. The National Occupational Classification (NOC) is the standard reference on occupations in Canada. The framework is revised every five years according to the Census cycle (HRSDC, 2006). At the fast pace at which industries change and the creation of jobs not in prior existence, a more up-to-date classification system is required to maintain a solid understanding of our economies as changes occur.

The Canadian Occupational Projection System (COPS) is a system of economic models to forecast labour market conditions by industry and occupation. It incorporates

information on both supply and demand. The COPS exercise is carried out annually, however, projections are currently out of date, 2006 being the most recent, and the system needs enhancements to be able to be utilized to provide valuable current LMI data (Advisory Panel, 2009). Other systems such as Career Handbook, Essential Skills and Job Bank are as well supported by HRSDC. This information provides both supply and demand information allowing both career choices and business decisions to be based on accurate, timely data.

Citizenship and Immigration Canada (CIC) provides labour market information for potential immigrants, new arrivals, foreign students, temporary workers and refugees in order to help newcomers become established in Canada. CIC provides a variety of services using LMI including employment counseling, job-search programs, foreign credential recognition assistance, and prior learning assessment. CIC also compiles information from its administrative data files, which are published in its annual overview that is available on its website (Citizenship & Immigration Canada, 2010). This is the main source of immigration statistics used by both the government and the private sector. It also maintains the [credentials.gc.ca](http://credentials.gc.ca) website that provides information and referrals and that is linked to the [goingtocanada.gc.ca](http://goingtocanada.gc.ca) website.

Industry Canada's mission is to "foster a growing, competitive, knowledge-based Canadian economy" (Industry Canada, 2010). Its mandate encompasses three strategic objectives: "a fair, efficient, and competitive marketplace; an innovative economy; and competitive industry and sustainable communities" (Industry Canada, 2010). To meet its objectives Industry Canada relies on LMI to be accurate and timely enabling decisions to be promptly made to capitalize on opportunities to bolster the economy. It in turn

releases this information for public consumption therefore its accuracy and timeliness is critical to governments and business.

All of the organizations listed above are the systems and data that are currently in place to gather and analyze data on LMI. Each contributes to different aspects of the economy and provides an overall view at a national level of our economic functionality.

The apparent gap in the above information currently being collected is in regards to educational data. The lack of critical data by which to track our students and in turn track the available resources for the labour force is impacting the ability to be able to project future supply. Data for colleges on student enrolment, graduates, costs, and staff is five years out of date. Data collection mechanisms are needed to be modified to reflect the increased diversity of the post-secondary education system in Canada including private sector institutions and the emergence of polytechnics and baccalaureate-degree-granting colleges and institutions in order to better capture the inter-sector mobility and provide more comprehensive information.

The Drummond report highlights the gap we have in education data and the impact it is having on the supply side of the equation. This data is key to ensuring that decisions made by youth are insightful into the future demands so that they can be best equipped to enter the workforce with skills that are in demand. Without this we seriously fail at being able to connect the bridge between supply and demand.

The unfortunate finding is that this information is available but segregated to a point where little meaningful knowledge is available for decision making in regards to future skill requirements (Advisory Panel, 2009). Unlike other countries such as the UK and Denmark, there is no specific legislation or regulation regarding the provision of LMI

in educational institutions. These measures would ensure a stronger connection between the LMI that is produced and its distribution throughout the education system, giving students better information to best determine their post secondary and employment pursuits. There is as well no lead organization or agency that looks after LMI as is the case in the U.S. Instead a wealth of labour market information remains unstructured at both the national and provincial levels. This creates disconnects in information generated and confusion to the end consumer, be it researchers, policy makers, consultants, business and financial analysts or civilians at large, on the accuracy of the information.

The recommendations put forward by Drummond are as a result of the severe pressure that our national system is under to provide better LMI. As our economy changes, demographic factors intensify and new industries and jobs emerge, having accurate available LMI will be critical. Better information needs to be collected and disseminated to ensure a richer understanding of the Canadian labour market and for more effective policy design. For example, currently Statistics Canada does not report on gross flows between various labour market states such as employment, unemployment and not in the labour force, as is done in the U.S. This information is of particular importance if unemployment rises and it becomes necessary to analyze its source for policy purposes.

#### *Provincial level implications of LMI*

The provinces and territories face common challenges for developing and maintaining an effective LMI system. The biggest of these is perhaps meeting their almost insatiable need/desire for more LMI at a very highly disaggregated level of detail from an occupational, industrial and regional point of view (Drummond, 2009). The



smaller provinces, like Prince Edward Island, have an additional difficulty of obtaining detailed, accurate data even for their jurisdiction at large. This is mainly due to privacy legislation that restricts the sharing of certain information without authorized consent. As well, the size of the sample in small communities due to their total population creates an issue in obtaining the overall view of the population and representative sampling is often grouped with another Atlantic province.

The Atlantic Region is often grouped together in reports making it impossible to clearly identify issues or trends by province. With a small population base and an even smaller workforce, LMI is critical for Prince Edward Island to allocate its scarce resource base to ensure the skills of its workforce. Despite a strong demand for more current local data, it is not readily available, except every five years with the release of the Census and based on the federal government's recent decision to abolish the mandatory long-form census that too may be at risk. Provincial and local governments, as well as key stakeholders, use the data to evaluate labour supply and potential labour shortages in specific occupations and areas, and they adjust their programs and activities accordingly. For instance, the provincial ministries of education, colleges and universities can reevaluate their programs based on labour market needs and on demographic trends. The same applies to investors when they evaluate labour market supply and availability of skilled workers in a selected area. This information is also crucial to understand the integration of recent immigrants and radicalized workers in our society.

The source and the importance of immigration are key factors for the net labour force growth in recent history and our overall economic and societal performance. However, there are still many issues under researched in regards to immigration and

many issues that still emerge that provincial policy-makers are faced with little or no LMI. The long-form census is the only source of information that evaluates the integration of racialized workers in the labour market across Canada and in large cities or in rural areas (Eaves, 2010). Other information that is available is scattered throughout various organizations and agencies, and in a variety of systems and forms, furthering complicating the goal of turning this information into knowledge. The quality of some of the primary research conducted is often questionable in regards to its accuracy based on sources, methodologies and overall analysis. To be reliable, the information must be validated and the methodology well designed to support the research. Snapshots in time do not determine nor predict trends that lead to valuable insight. As with any form of projections, the relevance of the assumptions to the present situation must be clearly established to determine margin of error and therefore the amount of reliance that can be placed on the information provided.

There are three main sources of information in Atlantic Canada that assists with LMI at the regional and provincial level; Service Canada regional offices located in the provinces, Atlantic Provinces Economic Council (APEC) and the Maritime Provinces Higher Education Commission (MPHEC). As with the national level, each functions under a specific mandate.

Service Canada, which is the service delivery agency of the federal government and reports to the Deputy Minister of HRSDC, employs labour market analysts in its regional offices located in all provinces. These analysts produce forecasts of employment prospects by occupation for their province and sometimes sub-provincial regions. The methodology used to produce these forecasts appears to be based on COPS, but the exact

manner in which the forecasts are prepared appears not publicly available. There is great variation in the level of detail (e.g. time horizon, number of occupations, etc.) provided by the different Service Canada regional offices.

Atlantic Provinces Economic Council (APEC) is an independent think-tank dedicated to economic progress in Atlantic Canada. APEC is a trusted source of analysis and advice on current and emerging trends in the region's economy. Founded in 1954, APEC is an effective catalyst through which governments, businesses, labour and other stakeholders can develop the strategies to respond to a changing world. APEC monitors and analyzes current and emerging economic trends and policies. It communicates the results of this analysis to its members on a regular basis. APEC also consults with a wide audience. It then disseminates its research and policy analysis to business, government and the community at large (APEC, 2010).

The Maritime Provinces Higher Education Commission (MPHEC) was established in 1974. It is an "agency of the Council of Maritime Premiers." In carrying out its main functions (quality assurance, data and information, cooperative action, regional programs, and providing specific services to one or more provinces or institutions as agreed to by the Ministers), the Commission focuses primarily on university education. There are currently eighteen post-secondary institutions within the scope of the MPHEC, sixteen of which are publicly funded universities and two institutions (Holland College in Prince Edward Island and the Maritime College of Forest Technology in New Brunswick) offer primarily college-level programs (MPHEC, 2010).

Locally, information comes from Industry Sector Councils and the newly formed University of Prince Edward Island Workforce Strategies Research Group, as well as

other independent consultants. However, the latter is more speculative and often does not take various aspects into account that can cause the understanding of the information given to be incorrect. The methodologies and approaches used by each must have commonality to allow comparability. The various works provide insight but do not allow for a comparative analysis to be completed over time.

A characteristic feature of the LMI systems of the Atlantic region is that they have built on strong, effective collaboration between the provincial governments and Service Canada's regional offices located in the provinces. Working in partnership, the two levels of government have generally combined expertise and resources to ensure that the LMI systems are as comprehensive as possible, coordinated, and responsive to the needs of their many users. There are also needs of these provinces that are unique to this area (i.e. interprovincial commuting to the West). Although the COPS model produces estimates of employment demands by province, the capacity generally does not exist in the provincial governments to conduct supply-demand imbalance estimations for all occupations in the Atlantic Provinces. The COPS data is more useful in larger centre such as British Columbia and Ontario, as it is derived from national trends and then cascaded through the model to each and every province. Local context is therefore not adjusted for by province. The lack of this information is a barrier for analyzing skills and labour shortages. In general, the analytical capacity does not exist to assess educational system enrollment and graduate requirements by employers, among other things-such as historical employment levels and trends, labour participation trends, economic and employment forecasts, population forecasts and market intelligence. In addition there are challenges in accurately forecasting transitions, such as school leavers into the labour

market. These gaps impact a wide range of LMI users, from government decision makers to academic and policy researchers to career planners (Advisory Panel, 2009).

Another challenge to most provinces and territories is getting information into the hands of users and then having them understand and use the data for informed, evidence-based decision making. Information alone is often valuable and can help explain an event or determine its nature, but it can never help us establish relationships between things (correlation) nor determine the cause of things (causation). The province of Prince Edward Island needs to establish a deeper understanding of the information by analyzing various aspects and determining sources that are reliable to effectively use in the labour force decision-making process.

The Drummond Report identified the challenge that Prince Edward Island faces in developing an LMI system with strong capacity to respond to the various needs of users. With a small relatively small population base, even when certain labour market issues are raised, it can be both expensive and time-consuming to address the issues. In some cases data are not available, or cannot be released for confidentiality reasons. Resources are often an issue. As well, the aggregate nature of COPS data presents further challenges in PEI as the projections are for industries, and not for specific jobs within these industries. Due to the size of the government in Prince Edward Island, and the disaggregated nature of the LMI system in place, there exists little scope to estimate this information on a provincial level.

Although there are many challenges to overcome, Prince Edward Island must develop the capacity to collect and understand its local labour market information to ensure it can meet the economic development needs of today and the future. A solid

understanding of both the supply and demand must be understood for decisions to formulate that take both sides of the equation into consideration. To truly capitalize on its labour force, Prince Edward Island must bridge the gap between supply and demand with the most current data it can turn into knowledge. While some information at the provincial level is available through various sources, there is a strong need to turn this information into knowledge through analysis of the information.

The Prince Edward Island economy has changed greatly over the past decade, with new innovative industries, such as Biosciences and Information Technology, emerging. This shift highlights the requirement for labour market information in order to develop successfully. Although we are transitioning from the 'old' economy to the 'new' economy, there was no research that could be found that has been carried out nor is there a solid understanding about how this is affecting Prince Edward Island and its workforce (WSRG, 2010). Research in this area would help the province to better understand which jobs can ultimately create the most wealth for the province as a whole and which jobs lost create the most deficits. The development of a conceptual model would help us to understand the relationship between the "old" and "new" economies and the range of factors that lead to such things as "competitiveness and "prosperity" and crucially which establish the ways in which those concepts relate to each other. This in turn can help drive our economic agenda in a prosperous direction using evidence based decision making.

### **Research Implications**

The research in the area of LMI is timely given the fact that the current recession and recent decisions by the federal government regarding the abolishment of the

mandatory long-form census may be sending us backwards. As we move forward into the 21<sup>st</sup> century into potential unknowns, understanding what the current position of LMI is critical to maintaining competitiveness globally. What we have learned is that the time is now for action. With the intense demand and constant changes in the economy and labour markets, LMI is critical to ensuring our workforce.

This study provides insight into the current labour market information that is available and identifies gaps that can be developed strategically to support and further enhance this critical information for Prince Edward Island. Understanding the current climate enhances both future research in this area and the ability of decision makers to be better informed when making programming and policy decisions.

### **Recommendations**

As the province moves forward, what need to be clearly defined is what information is currently available, how this information can be better turned into knowledge and what needs to be put in place to ensure enhancement of this information. It has been demonstrated through this research that there is a level of labour market information available that is accurate and reliable that can be utilized by government, policy-makers, researchers and businesses alike. In the Drummond report, it was highlighted that the countries LMI should be maintained and strengthened. However, recent developments within the federal government have called for an abandonment of the mandatory collection of data through the long-form census process. This step is counter to any informed reporting about labour market information in Canada over the past five years. With so much uncertainty with labour market information, there must be serious considerations of the consequences of lessening the countries already tenuous

position on LMI. Maintaining or improving the current LMI should be a top priority for Canada. Further, the province of Prince Edward Island must fully understand its LMI requirements to successfully grow its economy and must take an active role in ensuring the critical information it requires for making policy decisions to assist this agenda remains available.

### *Short-term Recommendations*

From a localized perspective, the current recommendations put forward by the WSRG (see Appendix D) should be adopted to provide additional tools and insights to assist government and policy-makers. These suggestions focus on the development of a systematic framework to integrate existing information into useable knowledge; such as an economic dashboard, a Canada Quality Job Index specific to Prince Edward Island and a COPS unique scenario for the province. In addition, other projects that help develop a deeper understanding of labour market readiness such as Job Search Motivation and Youth Career paths should be conducted. These steps will ensure we have a more solid understanding of labour-force readiness to address future skill requirements.

From a labour market information perspective, there are three short-term recommendations that the province should consider.

1. *Develop a way to coordinate existing primary research currently being conducted to turn into knowledge.*

The coordination of primary research being conducted across the province regarding labour market information can provide a broader view of the issues being researched and their impacts on decision making. This coordination will assist in understanding the accuracy of the information and can provide continuity and comparability if research is



coordinated. As a small province, coordinating resources to complete broader tasks will provide the most cost effective and timely manner by which to execute this project. This step will allow the province to direct and focus research and ensure it is capturing the most current accurate information.

*2. Develop a task force of key players requiring LMI to determine indicators to be developed to assist in creating this knowledge.*

A task force will provide the focus and direction required to ensure that indicators are discussed and laid out to best capture the required knowledge relevant to Prince Edward Island. This task force should be comprised of both provincial and federal counterparts that can assist in the collection and dissemination of this information to turn it into knowledge. The task force will be charged with ensuring all interests are discussed and prioritized to capture this information in a structured, timely manner. Currently surveys carried out within the province tend to over-survey some participants while other groups are not surveyed at all.

*3. Provide more education and communication on how to find and use existing secondary LMI data to move from information to knowledge.*

The Drummond report provides a recommendation on data analysis and interpretation, stating that governments should improve LMI-related data analysis and interpretation in order to make sure the information is relevant, well targeted to different types of users and easy to understand. Providing more education and communication on how to find and use the existing secondary LMI will assist the province in that the key stakeholders and decision makers will have more accurate relevant knowledge by which to base their decisions. LMI can only be useful if it is known and used. Promoting LMI and LMI best

practices will provide a focus on LMI within the province that does not currently exist. Improving the information to our students, employers and jobseekers would prevent missed opportunities arising from a lack of basic information on labour market prospects. The province needs to better coordinate its efforts in this regard as there is little accurate, reliable information collected that does not come through the long-form census. The decision of the federal government to abolish this form leaves Prince Edward Island with little accurate information to guide our future.

### *Long Term Recommendations*

Over the longer term, Prince Edward Island must focus on the policies currently in place that guide our LMI. The province must ensure it has representation to have input into key decisions about this data and can make recommendations that will contribute to a better understanding of its labour market. In planning for future labour market information requirements, the province should consider the following recommendations.

- 1. Become highly engaged at a policy level to ensure adequate representation and appropriate policies to bolster our LMI.*

Becoming highly engaged at a national policy level will ensure the province has a voice with the rest of Canada on decisions made that can affect the accuracy and timeliness of the information provided that is used for decision making. As the debate around the census continues, the province, as with the rest of Canada must make decisions around its own requirements of LMI. With less accurate collectible data, the province will be forced to put in place a systematic way of collecting the information it requires.

Canada's LMI system has indeed been shown to be less superior to other countries; this in itself creates a problem for our country to compete globally. With the recent decision

to move from more reliable accurate information to less, the strain on individual provinces will be greatly impacted when new immigrants enter our workforce and our “baby boomers” being to leave. A solid understanding of this transition will be lost with the abolishment of the long-form census. In the long term, Prince Edward Island will suffer greatly with decreased information and an increased complexity in our changing demographics. At a provincial level, the province can develop policy that will ensure it can gain access to the information it requires. The abolishment of the long-form census is a contrary decision to both the recommendations set forth by the Advisory Panel on Labour Market Information as well as evidence based research that suggests we need more not less good LMI as we move into the 21<sup>st</sup> Century.

*2. Develop a strategic planning process for labour market supply and demand.*

The need for labour supply projections to capitalize of economic activities is paramount for the province to grow its economy. The development of a strategic plan, similar to one reviewed for this research by Northern Ontario, “Building a Superior Workforce”, would place a focus on what needs to be accomplished to generate information valuable to Prince Edward Island as it moves forward. This document would be the guide to ensure our human resource pool is strategically aligned, strategically positioned and progressively developed to meet future social and economic demands. The Island Prosperity Plan puts forth an aggressive plan to change our economic focus. Current, reliable information will be critical to bolster this agenda. As well, the “Rural Action Plan”, identified as the strategy Prince Edward Island will follow to advance its rural areas, will require key labour market information to set policies and programs to accomplish this goal. Developing this strategy will strengthen the provinces position

around levels planning and economic initiatives. A working group of government, industry and researchers should be brought together to assist in the development of this strategic plan, specific to Prince Edward Island.

3. *Examine the requirements for an Island specific labour market information system (mini Stats Can).*

A working group should be developed to examine the requirements of an Island specific Labour Market system. Implications of the abolishment of the long-form census would need to be considered by this group as they make recommendations on how the province should best proceed. Cost and structure would be key elements that would need to be investigated, as well as ongoing maintenance to ensure accurate, timely, relevant information. Reliable labour market projections are required to inform policies aimed at addressing future skills demand; ensure our education system is able to reflect changing educational requirements in a timely manner; and create a globally competitive workforce by providing students and career changers with the information necessary to make positive education and career decisions (Advisory Panel, 2009). The importance of this information to Prince Edward Island must be seen as a top priority if we are to develop into an efficient, effective, competitive economy.

### **Limitations and Future Research**

There are a number of strengths and limitations to this research that must be taken into consideration when interpreting the results of this report. The reports evaluated are recently completed and portray the current status on our LMI information both nationally and locally. However, already one year old, the information must be taken into consideration when analyzing the current status of our individual sectors. Information

included in this report was drawn from evidence based research that identifies the findings of the current state of our LMI both nationally and provincially. Additional research into a systematic conceptual framework specific to Prince Edward Island would be required to turn the current information that we have into knowledge for decision making. This framework would serve as the bases for understanding the indicators by which we can monitor the progress of our labour market.

### **Conclusion**

Labour, but particularly income and employment indicators, are critical in analyzing economic and social progress, at both the macro and micro levels. Without these, no meaningful assessment of development performance is complete. Therefore it is critical for each country and province to have timely information on labour and income aspects of the development process.

In light of changing demand and supply conditions, LMI represents a key mechanism by which to facilitate labour market adjustments. Well organized LMI can reduce job search costs for both firms and workers and helps workers reallocate themselves among different employers and industries effectively. At a national level, this report provides evidence that there is an abundance of good aggregate information available, but is less successful in getting this information to individuals, firms and educational institutions. At the provincial level however, the information is far less and knowledge on this information is even weaker. Prince Edward Island must take an active role in LMI for providing small domain data to ensure the ability of its workforce to compete on a global level.

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### **Appendix A: Key Findings from LMI Survey Questionnaire**

- Most frequently used LMI was employment (77% of respondents); a separate website survey indicated the most sought after information was: wage, job description and job requirements.
- The LMI source used most frequently is the federal government (federal government 81% - provincial, territorial government – 74%, private sector providers – 49%); note that in Quebec the provincial government (Emploi-Quebec) is more frequently used than federal sources.
- HRDSC/Service Canada (67% of respondents) and Statistics Canada (62%) were the primary federal sources.
- Monster.ca and Workopolis were cited as the most useful private sector sources of LMI.
- Respondents were more dissatisfied with federal LMI sources (52% vs 41% satisfied) than the provincial/territorial and private sector LMI sources were the rates of satisfaction and dissatisfaction roughly equal. Satisfaction was much greater in Quebec than elsewhere.
- Internet is the most common medium to access LMI (91% of respondents).
- Most frequently consulted websites were: Statistics Canada, Job Futures, Labourmarketinformation.ca (Service Canada website) and Job Bank.
- More than 40% of respondents experienced difficulty finding information.
- Labour Force Survey and the Census were the most common cited Statistics Canada LMI used.
- Need for job vacancy data are cited by 72% of respondents.
- Local area information was the most frequently cited data gap (60%), followed by labour mobility (42%) and labour market programs (39%).

### **Appendix B: Innovative International Approaches to LMI**

- Development and enforcing of legislation within the relevant Education Act (provincial/territorial jurisdiction) in Canada to ensure that LMI is incorporated throughout a student's education;
- Establishing a cooperative and participatory umbrella organization to guide federal/provincial and territorial work on LMI and identifying a lead agency;
- Exploring the feasibility of small area estimation and linking of administrative data and surveys to get local area data.
- Developing a national or continental study similar to the Euro study;
- Utilizing multiple media formats to engage LMI users;
- Creating a state of the art single portal for LMI;
- Undertaking a media campaign to promote LMI generally, as well as specific new developments like the single portal; and
- Having the statistical office provide cost-free access to its labour market data over the Internet.

## **Appendix C: Best Practices**

### **Best Practices & Key Features vs. Challenges, Limitations, & Gaps (by Province/Territory)**

#### **➤ British Columbia**

##### ***Positives***

- Extensive network and diverse range of partnerships resulting in a comprehensive and rich LMI system – enables the province to be forward looking and anticipatory in providing LMI;
- Ministry of Advanced Education and Labour Market Development (ALMD) formed to develop a comprehensive and coordinated system for long-term commitment to LMI in BC including development for new/potential immigrants;
- Cross-Ministry LMI round table committee which meets monthly to discuss provincial LMI requirements, gaps and strategic planning (formed by ALMD);
- As the new BC LMI system is developed, there will be a link to HRSDC's NLMIS;
- 10+ ministries plus key external organizations and Service Canada involved in LMI;
- **(Best Practice)** Partnerships are making many activities happen that could not otherwise;
- Regular labour market reviews and information on work trends and careers and jobs through several key reports and websites;
- “Profiles” on new immigrants to BC including community-level immigration and diversity statistical profiles and maps, annual trends reports, and profiles on youth, seniors, Asia-Pacific immigrants, and more (developed by ALMD);
- Internal Central Data Warehouse with ALMD that contains data from public postsecondary institutions except universities;
- List of high opportunity occupations (joint product of ALMD, Service Canada, Yukon);
- Provincial employment demand projections using COPS with “BC-specific” adjustments;
- ‘Made-in-BC Labour Market Demand/Supply Model’ (in progress – currently developing models for demand side, school leavers supply, and immigration supply);
- Well-established, user-friendly Internet-based dissemination tools with linkages to many other sites within province and across Canada;
- *WelcomeBC.ca* making it easier for potential newcomers to get the LMI that they need;
- Websites include the ability to manipulate and view data in a variety of different ways and technology that transforms data into a visually appealing and understandable format (e.g. maps and charts); and
- Long-term project to have website access initially through an LMI portal and then develop broader means of dissemination/access through a future service provider network.

##### ***Negatives***

- BC Work Futures website provides quantitative projections from COPS for year 2011 only, applies to BC as a whole – no disaggregation, and use baseline info from 2001 – out of date (site currently being re-developed to provide improved content, functionality, navigation and look and feel); and
- Internal Central Data Warehouse with ALMD that contains data from public postsecondary institutions except universities.

## ➤ Alberta

### *Positives*

- Encourages open sharing of data and information to support evidence-based decision making;
- Encourages collaboration among government, educational institutions, and employers and industry;
- Encourages reporting and analysis at the national, provincial, regional, and local levels;
- *Alberta Labour Market Outlook* (a power point presentation that provides a quick snapshot of Alberta's labour market conditions);
- *Annual Alberta Labour Market Review* (reports on Alberta's labour market activity over the previous year);
- *The Minimum Wage Profile* (current information on Alberta minimum wage earners);
- *Alberta Industry Profiles* (summaries of Alberta's industries);
- *Alberta Labour Force Profiles* (profiles on Youth, Older Workers, off-reserve Aboriginal People, Immigrants and Migrants, and Women);
- *Annual Regional Labour Market Review* (analyzes data from Statistics Canada's Labour Force Survey for Alberta's eight economic regions);
- *Annual Occupational Injuries and Diseases in Alberta* (examines lost-time claims, claim rates, and disability injury rates for all industries and for seven sub sectors);
- *Occupational Fatalities in Alberta* (provides an analytical summary of occupational fatalities in Alberta over time);
- Regular wage survey;
- **(Best Practice)** *Occupational Demand and Supply Outlook* (only one of its kind in North America – projects the demand and supply of 140 different occupations in Alberta over a 10-year forecast period allowing for projections of future potential occupational shortages or surpluses which can assist users to make better decisions about developing and funding programs and policies as well as personal decisions about education, jobs and careers);
- Internet, Labour Market Information Centers (45 across Alberta), Alberta Service Centers, Alberta Job Corps Offices, and government and public libraries provide access to LMI;
- *WAGE info website* has searchable features for users to select regional information on wage and salary information for occupations; and
- *Alberta Learning Information Service (ALIS) website* (an Internet gateway to online career, learning, and employment information and services).

## ➤ Saskatchewan

### *Positives*

- Core LMI products include:
  - Demographic and Labour Force data releases;
  - Population and labour force participation rate forecasts;
  - Industrial and Occupational Employment Forecasts;
  - Labour market conditions of the apprenticeship trades in Saskatchewan;
  - Major Project Inventory Roll-up by region in the province;
  - Provincial wage survey and wage rate analysis;

- Service Canada Labour Market Bulletins;
- Monthly Economic News;
- Target Group Profiles (immigration, inter-provincial and intra-provincial migration);
- Sub-provincial Regional Profiles ;
- [www.SaskJobs.ca](http://www.SaskJobs.ca) (provincial job bank); and
- [www.saskjobfutures.ca](http://www.saskjobfutures.ca) (online source of Saskatchewan-specific occupation information and personalized job charts);
- Disseminated LMI on the Internet and Career Employment Service offices across the province with staff that can answer peoples' questions and provide them with related information;
- Saskatchewan Labour Market Commission (SaskLMC) coordinates planning of multiple contributors;
- Currently enhancing work on labour demand projections using a modified COPS Demand Model, and exploring labour supply forecasting models;
- Currently designing a wage survey to obtain accurate provincial and some sub-provincial wage information; and
- **(Best Practices)** Launched Future Paths pilot project ([www.futurepaths.ca/index.php](http://www.futurepaths.ca/index.php)) for 2008-2009 school year in Saskatoon area to focus directly on the communications gap between employers and the future workforce.

### *Negatives*

- Job Futures website provides outlook for province as a whole with no disaggregation.

### ➤ **Manitoba**

### *Positives*

- Joint LMI committee with Service Canada – joint products include *Manitoba Prospects and Career Planning Guide*, and *Manitoba Job Futures*;
- Internally developed labour force statistics and economic indicators for provincial government decision makers;
- Internal inventory of provincial nominee newcomers, immigrant landings profiles, and cutting edge software to anticipate health care workforce needs;
- Advisory Council on Workforce Development (a tripartite committee of government, labour and sector councils to provide information and advice to the Minister on workforce trends, initiatives, policies and strategies for developing Manitoba's workforce); and
- **(Best Practice)** Job Futures website includes youth-targeted educational and career path information which helps the province to be proactive in meeting the needs of emerging labour market demand.

### *Negatives*

- Funding of Statistics Canada causes difficulty in finding detailed labour market statistics, education outcomes, and current and analytical data and information;
- Census data, used as a baseline, is outdated and unreliable due to Manitoba's aggressive immigration policies driving labour force growth; and

- Job Futures website provides outlook for province as a whole with no disaggregation.

### ➤ **Ontario**

#### *Positives*

- LMI reports, based on customized data from the Labour Force Survey, for four regional administrative offices of Employment Ontario;
- Currently updating Ontario Job Futures and working with counterparts in Service Canada's regional office who will provide local LMI input through its network of local analysts;
- Service Canada is developing local occupational profiles for 24 nationally identified occupations, and a limited number of occupations identified as local priorities;
- Job Futures website updated to provide outlooks for 190 occupations up to 2013;
- Exploring options to develop a supply-side model at the provincial level which is necessary to forecast imbalances;
- **(Best Practice)** Network of Local Boards (approx. 25) which facilitate planning and capacity building with stakeholders;
- Local Boards leading a pilot project to transform the local planning process and create Labour Market Planning Committees – work includes the creation of a base community profile with 10 socio-economic indicators – will result in a new model for community collaboration in labour market planning;
- Community Indicators Collaboration (an inter-ministerial initiative that represents an indirect provision of labour market information and brings together 20 ministries within the Ontario government to strengthen collaboration for sharing indicators relevant to community economic development and social planning); and
- Career Cruising software with career information for students in K-12 schools.

#### *Negatives*

- Resource constraints prohibit any significant increase in the number of local occupation profiles Service Canada can develop;
- Lack of LMI on job vacancies and wages limits the province's ability to analyze employment dynamics, including the evolution of skills requirements, the nature and magnitude of potential skills shortages as measured by unfilled vacancies, changes in prevailing wages, and variations in turnover rates across industries;
- Data gaps and challenges related to postsecondary education data have implications for a number of LMI products in Ontario including supply-side analysis, and policy issues involving postsecondary education capacity and planning; and
- Job Futures website provides outlook for province as a whole with no regional disaggregation.

### ➤ **Québec**

#### *Positives*

- **(Best Practice)** Extensive, relatively well resourced LMI system that provides reliable, up-to-date, high-quality information;

- **(Best Practice)** Network of regional offices and established LMI Internet sites at the provincial level and in several regions to encourage a better integration of LMI in the provision of its service;
- **(Best Practice)** Emploi-Québec regional offices in each of the 17 administrative regions, and in many cases each community;
- **(Best Practice)** Outlooks for 500 occupations provide information on career prospects on a five-year horizon for each of the 17 regions;
- An LMI website with links to the job matching site “placement en ligne” of Emploi-Québec and the training site "Inforoutefpt" of the Ministry of Education, Leisure and Sport;
- Survey of total compensation carried out by the Institute of Statistics of Québec (ISQ); and
- Survey of hiring and employment in Québec conducted by the Centre d'étude sur l'emploi et la technologie (CETECH) in collaboration with the ISQ.

### *Negatives*

- Faces three types of challenges in making LMI system even more effective:
  - Needs to be more responsive to changing labour market needs by developing new products and tools and maintaining national exchange networks to share best practices;
  - Needs to maintain and improve the quality and quantity of LMI available to the many users or clients by providing more reliable, up-to-date, and relevant regional and local LMI on industries, trades and occupations; adding new data on labour costs, working conditions, wages, vacancies, mobility, and the availability of workers (immigrants and older workers, etc.); and, developing a methodology for labour supply forecasting and attrition; and
  - Needs to develop and update the technological platform to facilitate access to information without jeopardizing access to any future national system for Québec users.

### ➤ **New Brunswick**

### *Positives*

- Uses much of the LMI produced by Statistics Canada, Service Canada and HRSDC;
- Labour Market Analysis Branch (LMAB) conducts primary research including wage surveys, employer surveys, labour market studies of various regions, and follow-up surveys of graduates from New Brunswick's postsecondary institutions
- Information is distributed on the provincial government website as well as in Career Information Centers located in various communities to provide in-person services to clients;
- LMI products are available in schools, libraries, and counselors' offices;
- LMAB provides formal and informal presentations, LMI workshops, face-to-face consultations, and assistance in interpreting and analyzing LMI to a wide variety of groups;
- Extensive and up-to-date LMI publications with 2-, 5-, and 8-year employment level forecasts from COPS of 500 occupations; and
- **(Best Practice)** Federal-provincial partnership relying on Service Canada's regional offices.

### *Negatives*

- LMI forecasts from COPS are for province as a whole with no disaggregation.



## ➤ Nova Scotia

### *Positives*

- Department of Labour and Workforce Development (LWD) uses Service Canada's occupational information and regional labour market analysis products that are available on the NLMIS;
- Provincial-level LMI is accessible on LWD's Career Options website;
- Educational institutions, other government departments, sector councils, and private sector entities all produce some LMI targeted for their particular needs and seek input from Service Canada and/or LWD which helps to promote consistency and objectivity;
- Developing an LMI strategy that will explore ways to further strengthen linkages with many external partners;
- Provincial COPS group produces macro labour market, industry, and occupational projections and highlights the results in four annual publications;
- Occupational level information on wages, employment prospects, employment estimates, various demographic and statistical profiles, employer contact lists, skill and educational requirements, and career path information;
- Career Options Nova Scotia provides estimated change in employment from 2008-2013 and estimated annual openings due to growth and retirements for 313 occupations;
- Innovative LMI initiatives for youths including *Parents as Career Coaches*, *CORI*, *BrightCareerFutures.ca*, and *The Audio LMI Learning Tool*; and
- **(Best Practice)** Federal-provincial partnership relying on Service Canada's regional offices.

### *Negatives*

- Business development authorities have identified gaps in LMI on skills/credentials availability. Attempts have been made in the past to "inventory" labour/skills availability, but the costly and time-sensitive nature of such information eventually derailed efforts. This information is important from the perspective of securing investors who require assurance that their labour requirements will be met;
- Career Options Nova Scotia forecasts for province as a whole with no disaggregation.

## ➤ Prince Edward Island

### *Positives*

- PEI Labour Market Information Network facilitates an integrated, value-added approach for responding to a variety of labour market information needs;
- Prince Edward Island LMI Network serves as the provincial COPS group, providing input and feedback to the COPS annual forecasts;
- **(Best Practice)** Career Cruising website being used in most schools to disseminate LMI for career planning allowing students to create a profile that they can carry with them throughout their education and career enabling them to update their profile as they go;
- **(Best Practice)** Federal-provincial partnership relying on Service Canada's regional offices.

### *Negatives*

- With a relatively small population base, PEI faces many challenges in developing an LMI system with a strong capacity to respond to the various needs of users. Even when certain labour market issues are raised, it can be both expensive and time-consuming to address these issues. In some cases, data are not available, or cannot be released for confidentiality reasons. Resources are also often an issue.
- Currently no published or maintained separate LMI system;
- The aggregate nature of COPS data presents further challenges in PEI as the projections are for industries, and not for specific jobs within these industries. Due to the size of government in PEI, and the disaggregated nature of the LMI system in place, there exists little scope to estimate this information on a provincial level;
- Job Futures website forecasts are out of date – only go to 2009.

### ➤ **Newfoundland & Labrador**

#### *Positives*

- System has wide focus of users including research and analysis, career LMI, multiple LMI committees and partnerships, and policy;
- Graduate survey and data on enrolments, graduates, and apprenticeships produced by the Department of Education;
- Population and economic data and forecasts and community accounts provided by the Department of Finance and the Newfoundland and Labrador Statistics Agency;
- Recently established Career Information positions, under a Department of Human Resources, Labour and Employment (HRLE)/Department of Education Partnership, within the secondary education system to work with students, teachers, and school boards;
- **(Best Practice)** Dissemination system includes an LMI portal, local Employment Assistance Offices, and 14 Career Work Centre Networks and 26 District Offices; and
- **(Best Practice)** Federal-provincial partnership relying on Service Canada's regional offices.

#### *Negatives*

Limited availability of information on workers mobility is an issue of key importance as the province has witnessed significant out migration of workers to Alberta in recent years. An enhancement to the current data collection would be to capture information for both “place of residence” and “place of work.”

### ➤ **Yukon**

#### *Positives*

- LMI is provided as obtained from Statistics Canada including Census information, Labour Force Survey data, and aggregate data on EI from Service Canada;
- Work Futures provides a list of occupations for career planning;
- Yukon's Work Information Network (YUWIN) provides LMI links and has both a job and bulletin board;
- Additional funding support for LMI initiatives provided by the department of Indian and Northern Affairs Canada (INAC); and
- Annual business survey conducted by Yukon's Bureau of Statistics and funded by INAC.

### *Negatives*

- No federal or territorial funding is in place beyond 2010, highlighting how critical stable funding is for maintaining an effective LMI system especially in areas with limited alternative sources.

#### ➤ **Northwest Territories**

### *Positives*

- **(Best Practice)** Local LMI is collected by NWT Bureau of Statistics by conducting surveys once between the Census years, resulting in every community having up-to-date LMI data every two or three years instead of every five years; and
- T-STAT, an online statistics retrieval system that incorporates select Statistics Canada CANSIM data, maintained by NWT Bureau of Statistics.

#### ➤ **Nunavut**

### *Positives*

- Major LMI system is a case management system developed to track clients – an apprenticeship tracking database that will provide more information is also being developed;
- **(Best Practice)** *Nunavut Community Skills Information System* (NCSIS), a community-based skills inventory and reporting system, recognized as one of Canada's most advanced employment and training applications and is perceived to be on the leading edge of a national movement to use essential skills as the basis for human resources development; and
- Targeted training programs tied specifically to economic development opportunities, such as those associated with the mining industry, have been created using NCSIS.

## **Appendix D: Analyzing the Prince Edward Island Work-Force**

### Key Findings and Recommendations

1. In general, while there are many areas in which data and information is robust, there is less data and information as we move from the general level on international and national trends to the specific issues for the regional and provincial economies within those trends.
2. While information is available at the regional and provincial levels, there is a need to build greater knowledge through analysis of the information. There is sometimes a tendency to mistake 'information' (facts) for 'knowledge' (purposeful, targeted, and relevant findings to support and inform government actions).

Recommendation: It is for this reason that we recommend that the Working Group use a systematic framework to integrate existing information into usable knowledge. This is especially important for the concept of 'Prosperity', a multi-faceted concept that includes education and skills training, work readiness, employment information, and a capacity to adjust to demographic change, among other things. There is no 'magic bullet' in research for prosperity; a systematic framework that shows the relevance of each element, and their relationship to each other is required.

3. There is relatively little knowledge about how the transition from the 'Old Economy' to the 'New Economy' is affecting Prince Edward Island and its workforce. While general information exists about industrial change, and about the number of jobs that might be lost in the 'old' and created in the 'new economy', we do not have an understanding about what this means in specific terms for Prince Edward Island.
4. Furthermore, while it is 'known' that productivity in Prince Edward Island lags the Canadian average, and methods exist to understand which jobs add the most to growth and prosperity, those methods have not been applied to an analysis of the changing workforce of Prince Edward Island. It is one thing to state 'fact' about a prosperity gap; it is quite another to build the knowledge necessary to change it.

Recommendation: It is for these reasons that we recommend that a Canada Quality Job Index, already in existence elsewhere in Canada, be built that are relevant to Prince Edward Island. Such an index would show which jobs create not only the most individual income, but which generate the most wealth for the economy as a whole, and contribute to the prosperity of the economy. Such a tool is useful for both governments, as well as for job seekers, planning a career trajectory, and for youth planning their education and skills pathways.

5. Similarly, we find that while there is a 'known fact' about 'brain drain' and the outmigration of educated and skilled youth from Prince Edward Island, there is relatively little usable knowledge about the precise cause and effects. Information exists at the aggregate level, but there is less knowledge about the specific impacts on the economy, like which skills are leaving, in which areas, and what is the impact in precise terms.

Recommendation: For this reason, we recommend further research into the issue of Youth Readiness in Prince Edward Island, to examine education and career choices of the Island youth, and the strategies appropriate to retain them.

6. We find there is little information on the issue of Job Search Motivation. While models exist to show the relationships between individual attributes, job search behavior and employment outcomes, no such studies have been undertaken in Prince Edward Island. Having information on attributes and behaviors would help service delivery as well as employers and job seekers target resources efficiently and effectively in the provision of labour market information.

Recommendation: We therefore recommend that a study of Job Search Motivation be undertaken.

7. Finally, we find that a significant factor limiting the use of labour market information is the current system of Job Classification, in particular as this relates to areas in the 'new economy' (service, high tech and creative industries). For example, while we refer to "biotechnology" as an industry, it actually spans a range of industry classifications from the science of plant genetics to the manufacturing of medical devices. Similarly, job classifications for workers in information technology can span from a database administrator in the public sector to a graphic designer for the gaming industry. Traditional job classifications are perhaps not well suited to the "new" economy.

Recommendation: We recommend that the WSRG include in its research agenda the facilitation of a new jobs Classification system.