

# **FINAL REPORT**

## **TRENDS AND PATTERNS IN SKILLS AND LABOUR SHORTAGES**

**Submitted to:**

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## EXECUTIVE SUMMARY

In September 2005, federal, provincial and territorial Deputy Ministers responsible for transportation agreed to create a Transportation Skills Development Task Force under the Policy and Planning Support Committee (PPSC).<sup>1</sup>

The Skills Task Force has formed a sub-committee to gather information regarding skills development issues challenging Canadian provinces and territories. To the this end, the sub-committee has completed a survey of its membership on trends and patterns in skills and labour shortages . This report provides the results of that survey and provides suggestions to Deputy Ministers of Transportation on opportunities for collaborative action to address common issues.

A low birth rate and aging of the population are major labour force challenges facing Canada. “Baby Boomers” are reaching retirement age and beginning to leave the workforce in large numbers. Meanwhile, the number of young people entering the labour force has plateaued and is expected to decline in the future due to declining birth rates. At the same time, continued economic growth, especially in the energy sector in Western Canada, is creating strong employment opportunities resulting in a tight job market, with Canada’s unemployment levels the lowest they have been in 33 years. Canada is moving from a surplus to a deficit in labour supply.

The survey results show shortages in every part of the transportation sector. On the operations side, shortages are noted for airplane pilots, long distance truck drivers, bus operators, and locomotive engineers. On the infrastructure supply side, a shortage of construction engineers and technologists (primarily civil) is a strong theme.

Within the public sector, the dominant pattern noted is the large number of people retiring, or projected to retire in the near future thereby creating knowledge gaps unless proper succession planning measures are taken.

The shortage of skilled trades workers that exists across the country is the dominant private sector pattern. This shortage exists in all modes of transportation and affects nearly all of the sector's occupations. The shortage of skilled trades in the construction sector is beginning to affect the ability of some government transportation departments to complete infrastructure maintenance/improvement projects and hence provide safe and efficient

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<sup>1</sup> Representatives from the governments of British Columbia, Alberta, Manitoba, Ontario, New Brunswick, Nova Scotia, Newfoundland, the Yukon and the Northwest Territories sit on the Skills Task Force, along with Transport Canada.

## Trends and Patterns in Skills and Labour Shortages

transportation systems. The shortage could also hamper future economic growth if there are insufficient workers to undertake new projects that support economic growth or efficiently move products to market.

The following are opportunities for collaborative action by the PPSC to address these problems:

**Retirement of baby boomers and succession planning** - Unchecked, this trend could adversely affect the ability of governments to achieve their mandates. Thus far, it appears that departments have been dealing with this problem individually. One opportunity for the PPSC would be to collaboratively address this issue by identifying good succession practices and principles that would assist transportation departments in identifying how best to work through the transition.

**Addressing Institutional Barriers to skills training** - This area could be examined in some detail by the PPSC to identify what governmental changes would be required to remove institutional barriers, such as bottlenecks to trades certification and improved standards for truck and bus driver certification, and what the benefits would be.

**Improved/enhanced programs for training skilled trades workers.** –The PPSC could examine ways and means to increase participation in apprenticeship programs and promotion of financial/information resources on training and employment opportunities with a view to increasing the supply of these workers.

**Improved information programs and packages for attracting people to the transportation sector** - Comprehensive promotion, recruitment and training strategies are required to increase the number of new or prospective entrants to the industry.

**Immigration Programs and new Canadians** - Many transportation occupations would benefit from adding qualified workers from other countries. The PPSC could look at ways of expanding immigration programs, including integration support, to improve the supply of qualified foreign workers. This could also include examining ways and means for new Canadians to have their current skills recognized within Canada and/or take the training necessary to meet any deficiencies with respect to Canadian requirements.

**Worker Productivity** -The PPSC could work collaboratively with other industry stakeholders to identify where and how productivity gains could be made in one or more specific areas to reduce the demand for workers.

# **Trends and Patterns in Skills and Labour Shortages**

## **1.0 Introduction**

Like many developed countries, Canada is facing a shortage of skilled workers related to demographic changes; changing consumption, employment and trade patterns and reduced population growth. In this context, many jurisdictions across Canada are facing a shortage of skilled transportation workers.

In September 2005, federal, provincial and territorial Deputy Ministers responsible for transportation agreed to create a Transportation Skills Development Task Force under the Policy and Planning Support Committee (PPSC).

The Skills Task Force has formed a sub-committee to gather information regarding skills development issues challenging Canadian provinces and territories. To this end, the sub-committee has completed a membership survey of trends and patterns in skills and labour shortages. This report provides the results of that survey provides suggestions to Deputy Ministers of Transportation opportunities for collaborative action to address common issues.

The purposes of the survey, analysis and report are as follows:

- To determine what skills development issues are challenging individual jurisdictions, and to identify common concerns;
- To identify what actions are being undertaken or have been undertaken by jurisdictions to address skills development challenges;
- To determine where PPSC activities might best be directed to maximize effectiveness and prevent duplication of effort;
- To identify opportunities for concrete, collaborative action to address skills development challenges that are common to all federal/provincial/ territorial jurisdictions.

Ray Barton Associates was engaged to assist in the refinement of the survey questionnaire, compile a report on survey findings and provide recommendations for possible collaborative action. The Policy and Planning Support Committee was responsible for questionnaire distribution and collection.

The following eight jurisdictions participated in the survey by providing completed questionnaires: British Columbia, Alberta, Manitoba, Ontario, Nova Scotia,

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Transport Canada<sup>2</sup>, Yukon and Northwest Territories. Appendix A presents the survey questionnaire.

In the survey, each jurisdiction was first requested to identify its top three challenges in each of the following areas:

- Air transportation
- Road transportation
- Rail transportation
- Marine transportation
- Urban Transit (subways, city bus, trams, etc.)
- Logistics/Supply Chain
- Transportation related construction/infrastructure
- Provincial/Territorial Ministries responsible for transportation.

The analysis of the responses to this part of the survey is provided in Appendix B

Each jurisdiction was then asked to identify the three issues presenting the greatest challenges in their jurisdiction and initiatives being undertaken to address these challenges.

Chapter 2 provides a summary analysis of the top challenges noted by the respondents. Chapter 3 provides an analysis of the emerging trends and patterns drawn from the responses, while Chapter 4 provides recommendations for PPSC collaborative action.

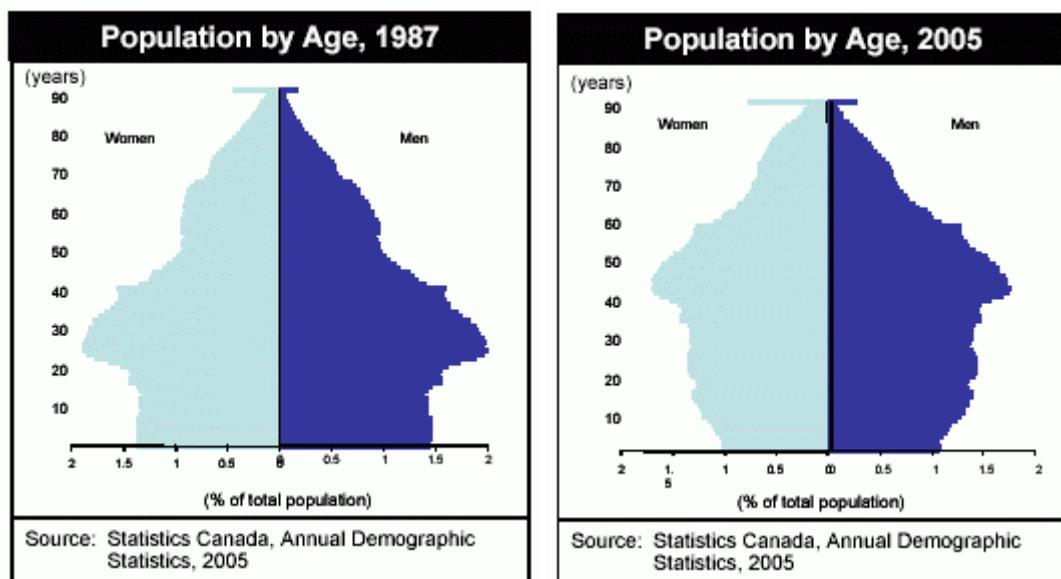
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<sup>2</sup> Provided one response for headquarters and another for the Regions

## 2.0 Top Challenges

### 2.1 Introduction

A low birth rate and aging of the population, which will accelerate in the years ahead, present many challenges for Canada<sup>3</sup>. One significant and pressing challenge involves the workforce, which is already experiencing the impact of these changes. “Baby Boomers” are reaching retirement age and are beginning to leave the workforce in large numbers. Meanwhile, the number of young people entering the labour force has plateaued and is expected to decline in the future as a result of the low birth rate that has occurred in recent decades. This is illustrated below by comparing the population charts for 1987 and 2005. This trend has also been noted in other industrialized countries, such as Germany and the United States.



These changes are creating challenges for Canada’s transportation sector, including the provincial and federal transportation ministries, the companies that provide the transportation services (e.g. airlines, trucking fleets, etc.) as well as the companies that construct and maintain the transportation infrastructure.

In light of these changes, each jurisdiction that participated in this project identified their top three labour force challenges. Exhibit 2.1 provides a tabular summary of the identified top challenges, while the remainder of this chapter

<sup>3</sup> From Labour Force Projections for Canada 2006-2031. Canadian Economic Observer, June 2007. Statistics Canada – Catalogue no. 11-010.

## Trends and Patterns in Skills and Labour Shortages

provides an analysis of each jurisdiction's response. Challenges noted are presented by mode of transport, within the transportation ministries, among transport companies and infrastructure providers.

### **2.1 British Columbia**

#### *Long Haul Truck Drivers (private sector)*

The province faces a shortage of long haul truck drivers, as do most jurisdictions across Canada. The higher level of economic growth currently being experienced in B.C. further exacerbates the problem.

The BC Trucking Human Resources Planning Committee, led by industry and funded by Service Canada, has developed a strategic plan to help the trucking industry attract and retain more professional, qualified drivers. Central to the plan are improved driver training and certification, improved financing mechanisms for driver training, improving information for trucking companies on best human resource practices and retention strategies and better information on career opportunities in the trucking industry.

#### *Longshoremen (private sector)*

Existing longshoremen are being promoted to foremen, and there is a shortage of skilled labour to fill the vacancies. As well, container traffic to all west coast ports is forecast to rise by 300% by 2020, increasing the demand for these workers.

#### *Aircraft Inspectors and Mechanics (private sector)*

Too few qualified workers are being trained in BC. Many of the courses offered in the province are not being filled, leading to fewer graduates. This is a national trend as Canada-wide enrolment in the aerospace training programs has declined by 20%.

The shortage of qualified local candidates for aerospace occupations has compelled some companies to recruit from outside BC and Canada. Key labour markets for these workers are the UK, Germany, France, the Netherlands, South Africa, the US, the United Arab Emirates and the Philippines.

**Exhibit 2.1: Overall Top 3 Challenges by Jurisdiction**

Challenges	Jurisdiction								
	B.C.	YK	NWT	Alta	Ont	Man	N.S.	T.C. (HQ)	T.C. (Reg)
Recruitment and retention of qualified truck drivers	✓				✓	✓			✓
Shortage of skilled labour for longshoremen	✓								
Shortage of aircraft inspectors and mechanics	✓								
Shortage of skilled labour, trade workers					✓	✓		✓	
Informing residents of specific transportation occupations available					✓				
Shortages of professional engineers and technicians		✓			✓	✓			
Shortages of mechanics/technicians, heavy equipment operators	✓				✓	✓			
Recruiting and retaining certified journeymen (e.g., heavy duty mechanics, airport electricians)			✓						
Replacing management personnel and superintendents			✓						
Declining labour force size due to aging workforce								✓	
Building pool of qualified and experienced inspectors in all areas									✓
Building a pool of knowledge for policy thinking and program delivery									✓
Recruitment and retention of marine sector employees						✓		✓	
Recruitment and retention of railway engineering equipment and operations staff									✓
Security related training for rail and transit sectors									✓
Skill development to support implementation of safety management Systems in civil aviation									✓
Skills development in environmental engineering field.		✓							
Recruitment/retention of maintenance and engineering technicians.	✓								
Effective transfer of institutional knowledge to new employees		✓							
Recruitment of skilled rail and marine employees									✓
Recruitment of qualified and experienced rail inspectors									✓
Pending retirements of high percentage of Ontario region staff									✓

## **2.3 Alberta**

### *Aging workforce and strong economic growth creating widespread demand for workers (both private and public sectors)*

With the upcoming retirement of baby-boomers, the labour force will have to be replenished with younger workers. Alberta is also experiencing an economic boom that will require additional labour over and above replacing retiring workers. Alberta's Occupational Demand and Supply Outlook, 2005-2015, projects a shortfall of 86,000 workers to fill the 400,000 new jobs that are expected to be created in Alberta over this period.

As well, the departure of baby boomers will create knowledge gaps. This is especially important in the rail industry, where it will be important for outgoing workers to mentor and share their knowledge with incoming workers.

### *Skilled Trades Shortage (both private and public sectors)*

Virtually all trades are in high demand in Alberta and many are relevant to the transportation and logistics sector. These include heavy equipment technicians, automotive service technicians, parts technicians and warehousing personnel.

### *Information on employment opportunities (both private and public sectors)*

Informing the public about what type of jobs are available is seen as a must. In addition to informing, there is a need to target and promote a greater representation of Aboriginals, women and foreign workers in Alberta's workforce.

## **2.4 Manitoba**

### *Shortages of professional drivers*

Similar to other jurisdictions, Manitoba is experiencing a shortage of professional drivers. However, their shortages extend beyond long distance domestic and international truck drivers to regional/local drivers, highway and transit trained bus drivers and trained taxicab operators.

### *Heavy equipment, truck and transport mechanics/technicians*

Again similar to other jurisdictions, this shortage extends beyond truck and bus mechanics to include heavy-duty equipment technicians certified to maintain service and repair equipment such as cranes, graders, tractors and paving equipment.

### *Professional engineers and engineering technologists*

The Manitoba Department of Transportation is experiencing difficulty attracting qualified engineers in all areas, noting it is difficult for them to compete with the wages and perks of the private sector. The department is also experiencing difficulty finding enough qualified civil technologists that have suitable experience to become project managers and supervisors that can immediately transition into positions left vacant by retiring personnel.

## **2.5 Ontario**

### *Long Haul Truck Drivers (private sector)*

Similar to most other jurisdictions in Canada, one of Ontario's top challenges is the shortage of qualified long haul truck drivers. This is a nation wide problem with the Canadian Trucking Human Resources Council (CTHRC) estimating an annual requirement for 37,000 drivers a year. Both the Ontario Trucking Association and the Private Motor Truck Council of Canada confirm this shortage. A significant portion of Ontario's trucking industry is long haul into the U.S., where the driver problem is the greatest.

### *Shortages of civil engineers and civil technicians (private and public sectors)*

Difficulty is being experienced in attracting and retaining staff in the construction industry (particularly for Contract Administration work). There is a need for college-trained staff with a civil background and interest to work in the industry for the long term.

### *Shortage of skilled labourers, mechanics, heavy equipment operators (Private and Public sectors)*

The provincial government is having difficulty attracting and retaining qualified staff. Companies contracted by government for snow removal are having difficulty attracting operators and drivers in winter.

## **2.6 Nova Scotia**

### Aging Workforce (public and private sectors)

Nova Scotia's labour force is strongly affected by changing demographics; the aging population will lead to increased retirements in the coming years. Workers over the age of 45 now represent about 51% of Nova Scotia's labour force; while for Canada overall the rate is 48%, suggesting Nova Scotia has an older population than the average Canadian province.

Current projections of the decline in the size of the labour force associated with age suggest a 20% decrease in labour supply. This could mean that Nova Scotia is faced with a situation where the number of jobs will exceed the number of people willing to participate in the labour market. The period between 2006 and 2016 is seen as a transition period between an era of labour surpluses to one of chronic shortages.

### Out migration of younger workers (public and private sectors)

The problem of the aging population is compounded by the out migration of younger workers. In 2006, the participation rate by workers in the age group 25-49 decreased by approximately 8,300 workers as many workers in this age group left the province to work in Ontario or Alberta. This was partially offset by increased participation by those aged 50 with an increase of approximately 4,000 workers.

### Shortage of skilled trades workers (public and private sectors)

There is a general shortage of skilled trade workers, particularly with experience in transportation. Qualitative observations from industry indicate that it is currently an issue, and that it will continue to be one in the future.

The shortage will continue to affect the industry for some time based on continued out-migration from the Province and the shifting demographics (aging workforce). The industry will also have to compete with other sectors (e.g. manufacturing) for the same skilled labour force.

## **2.7 Yukon**

### Aging workforce (public sector)

Many of Yukon's transportation engineering staff are long-term employees and are currently approaching retirement. Approximately 30% of staff is projected to retire within the next five years.

The imminent retirees are predominantly in supervisory/management positions. Current demographics make recruiting equally experienced replacements very difficult, if not impossible. Younger employees typically do not have enough experience to replace the retirees and be fully effective in doing the work revised by those positions.

### Availability of qualified engineers and technologists (public sector)

Recruiting engineers with 5 to 10 years experience in the field of transportation infrastructure design and construction has proven to be very challenging. Engineers with this level of experience are not prepared to move to more remote areas such as Yukon to accept jobs at a remuneration level similar to positions offered in southern Canada

A large number of current applicants are new Canadians with little or no engineering experience with Canadian standards and practices. A high level of fluency in written and spoken English is very important.

### Effective transfer of institutional knowledge to new employees (public sector)

New employees are typically young engineers straight from university or new Canadians with little or no Canadian experience. These employees require training and mentoring to achieve the experience and institutional knowledge to be fully productive. The current workload of the long-term employees who could be training and mentoring leaves little time for structured training and mentoring.

## **2.8 Northwest Territories**

### *Shortage of skilled trades workers (private sector)*

Recruitment and retention of certified journeymen (e.g. heavy-duty mechanics, airport electricians) is difficult across the NWT transportation sector. Occupations that demand journeyman status are difficult to fill, for example, it is easier to find equipment operators because they do not require journeyman status. Also, the demand for skilled trades is high across the country, and particularly in Alberta. The problem is projected to continue for many years if planned construction projects go ahead.

### *Succession planning (public sector)*

It is difficult for the Department of Transportation to maintain succession planning for operations management personnel and superintendents. Many employees in entry-level positions do not have a high level of education, and are therefore hindered in advancing their career. It is difficult to find people with the technical skills who are also able to manage people, finances, and do long-term strategic planning successfully.

## **2.9 Transport Canada (National)**

### *Aging workforce (public sector)*

An aging workforce resulting in a high level of retirements over the next five years is creating a need to build a pool of qualified and experienced inspectors within Transport Canada.

**Transport Dangerous Goods (TDG)** One third of the current TC TDG inspector workforce must be replaced within the next five years. This task will include the recruitment of technical/scientific personnel and enhanced training, including on the job training. It has proven extremely difficult to recruit candidates who possess the necessary technical/scientific skills. As a result there has been a move away from hiring trained individuals to on-the-job training.

**Marine** It is estimated that approximately 56% of the marine inspector workforce will be eligible to retire by 2013. Finding experienced mariners is a difficulty recognized worldwide. Major training investments will be required to address skill gaps with existing employees and new recruits. Marine industries have been increasing their salary levels in order to retain their highly skilled workforce – thus creating issues for the Canadian government departments in attracting this highly sought skilled workforce with non-competitive salary levels.

**Rail** Approximately one half of TC inspectors will retire within five years. TC has traditionally hired inspectors with many years of industry experience. Since the industry workforce is aging, there is no longer a pool of experienced workers to draw from.

### *Building a pool of knowledge resources for policy thinking and program delivery at Transport Canada (public sector).*

Transportation policy thinking and program delivery at Transport Canada would benefit from having a pool of knowledgeable transportation experts with both academic qualifications as well as broad practical experience in road traffic, commercial vehicle and/or urban transit operations and management.

There is an urgent need to develop a pool of broad knowledge resources from a variety of transportation, policy and technology disciplines, along with a digital knowledge base to capture the department's history and experience.

## Trends and Patterns in Skills and Labour Shortages

### Shortages of workers in all modes (private sector)

Building a sustainable pool of qualified and trained employees for heavy-haul truck drivers (Class 1/A); marine sector employees; as well as railway engineering, equipment and operations staff is a challenge.

**Road** Recruitment and retention of quality drivers is a challenge. In the short term, the driver problem may well prove to be more manageable than research suggests, as a high Canadian dollar relative to the U.S. dollar, the high cost of fuel and the slowing American economy all could curb growth in the Canadian industry in the short term. National standards for driver training and licencing need to be implemented to ensure the driver supply meets industry requirements.

**Marine** The Marine Industry is facing work force shortages due to retirements, difficulties accessing certification, and the amount of time required for training that will lead to proper certification and/or career progression. This shortage is exacerbated by global growth in the marine mode, low numbers of entrants into the industry, reduced access to training through school closings, high costs of training, and in some occupations increased training requirements.

**Railway engineering, equipment and operations** A large number of railway employees will be retiring in the next few years leaving a huge gap in terms of resources, skills and experience. This is occurring throughout the railway industry, affecting all railway trades.

### Security-Related Training for Rail and Transit Sector Employees (private sector)

Rail and transit security training for employees is required in the following areas:

- Security and emergency management practices;
- Intelligence and information-sharing;
- Understanding partnerships between various levels of government, roles and responsibilities of key players in the rail and transit sectors;
- Legislation, regulations and voluntary measures; and
- Security technology for the rail and transit sectors.

### Skills Development to Support the Implementation of Safety Management Systems (SMS) in civil aviation (private sector).

The implementation of Safety Management Systems (SMS) in all regulated civil aviation organizations is expected to be completed by 2010. Skills related to self-assessment and follow-through skills in terms of processes utilized will continue into the future.

## **2.10 Transport Canada (Regional)**

### Prairie and Northern Region (PNR:) Recruitment of skilled rail employees (public sector)

Prairie and Northern Region is finding it challenging to staff skilled positions for rail employees, particularly within the Calgary Office.

### Pacific Region: Recruitment of Qualified and Experience Rail Inspectors (public sector)

Approximately half of current TC rail inspectors will retire within five years. Historically these would have been replaced by people who retire from CN and CP. This pool no longer exists and the people working for the railways now are younger and not likely to change careers in the near future.

### Ontario Region: Demographics and Retirement Eligibility (public sector)

Almost every Branch in the Region is facing a high level of retirement eligibility. Just over one-third (34%) of all staff will reach retirement eligibility over the period 2007-2012. The management group has a retirement eligibility rate of 40% over this same period.

### **3.0 Emerging Trends and Patterns**

As noted earlier, Canadian demographics are having a profound effect on Canada's labour force. The upcoming retirement surge of "baby boomers" combined with declining birth rates is limiting the labour pool. At the same time continued economic growth, especially in the oil and resource sectors in Western Canada, has been creating strong employment opportunities. This has resulted in a tight job market with Canada's unemployment levels the lowest they have been in 33 years. Shortages are noted in almost every sector of the economy, from unskilled labour through to highly qualified professionals. The transportation sector is no exception to these shortages.

Increased labour force participation rates, especially by those aged 50 and over are currently offsetting some of the impact of these demographic changes. However, even if this trend holds, the overall participation rate is projected to drop sharply by 2031. Canada is seen as moving from a position of a surplus to a deficit in labour supply.

It is expected that retirements, particularly of "boomers", will exceed the number of people entering the labour market even if participation rates continue their current upward trends<sup>4</sup>. On the positive side, a continued increase in the participation rate of baby boomers has the potential to delay the decline in the overall participation rate by a few years. This provides a window of opportunity to develop other strategies and means for preparing for the forecast decline in the participation rate<sup>5</sup>.

Only three provinces are expected to experience a larger labour force in 2031 compared to 2005 – Ontario, Alberta and British Columbia. The remaining provinces are forecast to have smaller or similar sized labour forces by 2031. A rise in the birth rate or in immigration would have only a marginal impact on the evolution of the overall participation rate in both the short and medium term<sup>6</sup>.

Adding to the difficulty of the aging workforce, strong economic growth in Western Canada, mainly fuelled by the energy sector, is creating high demands for labour and skilled trades. This is drawing workers from Eastern Canada further exacerbating their shortages, but also creating shortages of workers in other Alberta industries. Many industries cannot compete with the pay scales of the oil and gas sector and are losing experienced personnel as a result.

On the operations side of the transportation sector, shortages are noted for airplane pilots, long distance truck drivers, bus operators, and locomotive

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<sup>4</sup> From Labour Force Projections for Canada 2006-2031. Canadian Economic Observer, June 2007. Statistics Canada – Catalogue no. 11-010.

<sup>5</sup> Ibid

<sup>6</sup> Ibid

## Trends and Patterns in Skills and Labour Shortages

engineers. However, the labour shortages noted for each sector extend well beyond those operating the planes, trucks, buses and trains. *Virtually every skilled trade in the transport sector is noted as experiencing shortages.* Many training programs for these trade occupations are experiencing declining enrolment. For example, enrolment in aerospace training programs is down by 20%.

On the infrastructure supply side, a shortage of construction engineers and technologists (primarily civil) was a strong theme with six of the nine respondents noting this as a challenge. Within the public sector, this shortage is affecting nearly every transport department as they strive to replace retiring workers. Within the private sector, this shortage is affecting the ability to deliver projects. The construction industry is also experiencing shortages. It was noted that due to a lack of construction workers, the City of Winnipeg will need to scale back or defer some of its 2008 program.

### **3.1 Public sector trends and patterns**

Within the public sector, the dominant pattern noted by respondents is the large number of people retiring, or projected to retire in the near future. Examples cited include the Ontario Region of Transport Canada, where 34% of their staff will qualify for retirement over the period 2007-2012. In Nova Scotia, nearly 20% of the Department of Transportation is eligible for retirement by December 2008.

This wave of retirements, and limited succession staff, is creating problems for many government agencies. This includes finding qualified replacement staff, especially technical staff, such as engineers and technologists as noted above.

New entrants to the workforce typically require several years of experience to be fully effective in their positions, creating a need for training and mentoring to develop the experience and institutional knowledge required to be fully productive. An added requirement for many of these personnel is to be trained to new post 9/11 security requirements.

The shortage of skilled trades workers, such as heavy equipment operators required by public agencies (e.g. snow plow operators) is another widespread challenge. This shortage is reported across the country and in all modes. It is exacerbated by the attraction of these workers to the energy sector in Northern Alberta and more recently to areas of Saskatchewan.

### **3.2 Private sector trends and patterns**

The shortage of skilled trades workers that exists across the country is the dominant pattern emerging for the private sector. This shortage exists in all modes of transportation and affects almost all of the sector's occupations. It is due, at least in part, to the reluctance by some of those entering the workforce to choose employment in the transportation sector. The lifestyle requirements of some occupations, such as long hours, weekends and shift work, are not attractive to today's youth workforce.

Many occupations in transportation are highly technical and require post-secondary training. Financing of this training can be a problem for potential candidates. Respondents noted an enrolment decline of 20% at some of the institutions that train workers for these trades.

The shortage of skilled trades in the construction sector is affecting the ability of government transportation departments to complete infrastructure maintenance/improvement projects.

Lack of awareness of employment opportunities for occupations in the transport sector is also seen as a problem. Comprehensive recruitment and training strategies are seen as one way to increase the number of new or prospective entrants to the industry.

## **4.0 Opportunities for PPSC Collaborative Action**

This Chapter identifies opportunities for the PPSC to take collaborative actions addressing specific skills development challenges common to all jurisdictions. These focus on challenges that governments are well positioned to address due to their specific mandates and responsibilities.

Addressing the overall challenges facing Canada's aging workforce is going to require changes in many areas, involving several government agencies at both the federal and provincial/territorial levels as well as private sector actions. Some of these include:

- ✓ Removing bottlenecks to certification;
- ✓ Improved certification programs (especially for truck and bus drivers);
- ✓ Development of comprehensive recruitment and training strategies to increase the number of new or prospective entrants in various industries;
- ✓ Increased recruitment levels and implementation of changes in human resource practices to improve worker retention;
- ✓ Increased career awareness materials;
- ✓ Further encouragement of apprenticeship programs;
- ✓ Improved access to training funds; and
- ✓ Reviewing immigration policy with a view to improving the supply of skilled labour from abroad; move to bottom

As a result of the scope of the problem and the scope of the initiatives required to address the problem, many institutions need to work collaboratively to address the problem. In fact, there are sector councils currently working on some of these issues. The ones related to transportation include the Construction Council, Canadian Aviation Maintenance Council, Canadian Supply Chain Council, Motor Carrier Passenger Council, and the Canadian Trucking Human Resources Council. A marine sector council is also being established.

There are three major themes that run through the survey responses and provide the best opportunities for collaborative action. They also impact on the ability of transport departments to provide safe and efficient transportation systems.

### **Theme 1: Retirement of baby boomers and succession planning**

Thus far, it appears that departments have been dealing with this problem individually. Unchecked, this could affect the ability of governments to achieve their mandates.

## Trends and Patterns in Skills and Labour Shortages

One opportunity for the PPSC would be to collaboratively address this issue examining what can be done to postpone the retirement of key staff. The “baby boomers” are working longer than previous workers and many indicate they wish to keep on working in some (often reduced) capacity. Changes need be made to accommodate retaining these workers thereby reducing the expected surge in retirements and providing time for the hiring, training and development of their replacements.

The second part of this initiative would be to identify and implement good succession practices and principles that would assist transportation departments in identifying how best to work through the transition. This could take the form of round table discussions involving personnel from transportation departments, their HR counterpart departments, and other departments as may be required sharing their problems and successes with enhanced recruitment programs, and skills development initiatives such as those indicated by Nova Scotia and Ontario for engineers.

## **Theme 2: Shortages of skilled workers**

This shortage is prevalent in virtually every occupation in every mode of transport and is already affecting the ability of some organizations to maintain transport infrastructure or undertake new projects. There are a number of initiatives that the PPSC could undertake to help alleviate this shortage.

### **Addressing Institutional Barriers**

The survey responses identified a number of institutional barriers that face workers moving into skilled jobs. One example is technicians, including aircraft mechanics and aircraft inspectors, who are retiring from the defence sector and experiencing difficulties obtaining similar positions in the civilian sector. Educational institutions not recognizing prior coursework elsewhere was also noted as problem. Institutional changes are required to improve the quality of truck driver training and skill levels (training to national standards that meet industry needs). The PPSC could work with relevant government departments to identify such barriers and how they can be removed.

### **Improved/enhanced programs for training skilled trades workers.**

There is a nation-wide need to increase the supply of skilled workers. PPSC could investigate ways and means of increased educational facilities where required along with the promotion of financial/information resources about training and employment opportunities to attract people to these occupations.

### **Improved information programs and packages for attracting people to the transportation sector**

Lack of awareness of employment opportunities for occupations in the transport sector was identified as a problem by the survey respondents specifically in the areas of logistics and warehousing, aviation and truck driving. Comprehensive promotion, recruitment and training strategies involving governments, the private sector and educational institutions are required to increase the number of new or prospective entrants to the industry.

### **Immigration Programs and new Canadians**

Many transportation occupations would benefit from adding qualified workers from other countries. The truck driving occupation is one of these with some provinces using their provincial nomination program as a way of bringing in qualified workers on a temporary basis. The PPSC could look at ways of expanding this program and similar ones, including integration support, to improve the supply of foreign workers.

As well, there are numbers of new Canadians whose foreign training is not recognized in Canada and they cannot get the necessary approvals to work in their fields. The PPSC, working with other organizations as required, could examine to what extent this worker group could supply skilled workers and ways and means of having their current skills recognized within Canada and/or take the training necessary to meet any deficiencies with respect to Canadian requirements.

### **Theme 3: Worker Productivity**

In light of the changes in the labour force, future economic growth will have to rely less on population growth and more on higher productivity, which could offset the consequences of a slowdown in the work force. The PPSC could work collaboratively with other industry stakeholders to identify where and how productivity gains are feasible in one or more specific areas to reduce the demand for workers.

## **APPENDIX A**

### **SURVEY QUESTIONNAIRE**

## **Introduction**

In 2005, to explore the issue of transportation skills development and skills shortages in Canadian jurisdictions, the Council of Deputy Ministers responsible for transportation agreed to create a Transportation Skills Development Task Force under the Policy and Planning Support Committee.

The Transportation Skills Development Task Force is now conducting this survey with the objective of identifying the nature and extent of skills shortages in the transportation sector in jurisdictions participating in the PPSC. Survey results will be used to outline trends and patterns in these skills and labour shortages and make recommendations for possible collaborative action.

Your participation in this survey is greatly appreciated.

Should you have any questions regarding the survey please contact:

Ryan Bailey at (416) 212-1929

Paul Squires at (250) 356-9660

Sharon Thomas at (613) 949-0125

**Please return completed questionnaire on or before December 14 to Sharon Thomas ([thomass@tc.gc.ca](mailto:thomass@tc.gc.ca))**

## **PART 1: KEY ISSUES**

Using the table below, please identify the top **transportation skills development and/or labour supply** challenges (no more than **three** in each category) in each of the following areas of transportation in your province or territory (in the opinion of your government).

Please describe each challenge in quantitative and qualitative terms (2 to 4 sentences per challenge). **Please indicate the occupations involved, nature of the shortage, why the shortage exists and what actions can be taken to address the shortage.** Please be as specific as possible. For example, state “bush pilot” rather than “pilot” if only that type of pilot is the concern.

Provide a nil response for those areas your province/territory does not consider to be of particular concern with respect to skills development.

Trends and Patterns in Skills and Labour Shortages

<b>Air Transportation</b>
<i>Not of particular concern for this jurisdiction</i> _____
<i>Challenge 1:</i> <i>Challenge 2:</i> <i>Challenge 3:</i>
Please note any useful reference documents, reports or websites:
<b>Road Transportation</b>
<i>Not of particular concern for this jurisdiction</i> _____
<i>Challenge 1:</i> <i>Challenge 2:</i> <i>Challenge 3:</i>
Please note any useful reference documents, reports or websites:
<b>Rail Transportation</b>
<i>Not of particular concern for this jurisdiction</i> _____
<i>Challenge 1:</i> <i>Challenge 2:</i> <i>Challenge 3:</i>
Please note any useful reference documents, reports or websites:
<b>Marine Transportation</b>
<i>Not of particular concern for this jurisdiction</i> _____
<i>Challenge 1:</i> <i>Challenge 2:</i> <i>Challenge 3:</i>
Please note any useful reference documents, reports or websites:
<b>Urban Transit (subways, city bus, trams, etc.)</b>
<i>Not of particular concern for this jurisdiction</i> _____
<i>Challenge 1:</i> <i>Challenge 2:</i> <i>Challenge 3:</i>
Please note any useful reference documents, reports or websites:
<b>Logistics/Supply Chain</b>
<i>Not of particular concern for this jurisdiction</i> _____
<i>Challenge 1:</i> <i>Challenge 2:</i> <i>Challenge 3:</i>
Please note any useful reference documents, reports or websites:
<b>Transportation related construction/infrastructure</b>

## Trends and Patterns in Skills and Labour Shortages

<p><i>Not of particular concern for this jurisdiction</i> _____</p> <p><i>Challenge 1:</i> <i>Challenge 2:</i> <i>Challenge 3:</i> Please note any useful reference documents, reports or websites:</p>
<p><b>Provincial/Territorial Ministries responsible for transportation</b></p> <p><i>Not of particular concern for this jurisdiction</i> _____</p> <p><i>Challenge 1:</i> <i>Challenge 2:</i> <i>Challenge 3:</i> Please note any useful reference documents, reports or websites:</p>
<p><b>Other ...please specify:</b></p> <p><i>Not of particular concern for this jurisdiction</i> _____</p> <p><i>Challenge 1:</i> <i>Challenge 2:</i> <i>Challenge 3:</i> Please note any useful reference documents, reports or websites:</p>

## **PART 2: YOUR TOP CHALLENGES**

Given your analysis above, what three skills development/labour supply issues present the greatest challenge to the **transportation sector** in your province or territory (in the opinion of your government)?

Please name three specific, actionable issues, providing the quantitative and qualitative details for each including

- Description or nature of the challenge and how it manifests itself in your jurisdiction (no more than a paragraph - provide more details than in Part 1)
- Current extent of the challenge
- Anticipated extent/nature of the challenge in 10-15 years (please provide details concerning projections/forecasts)

## Trends and Patterns in Skills and Labour Shortages

### **Top Challenge 1**

<b>Name:</b>
<b>Nature:</b>
<b>Extent:</b>
<b>Future nature/extent of challenge in future:</b>

### **Top Challenge 2**

<b>Name:</b>
<b>Nature:</b>
<b>Extent:</b>
<b>Future nature/extent of challenge in future:</b>

### **Top Challenge 3**

<b>Name:</b>
<b>Nature:</b>
<b>Extent:</b>
<b>Future nature/extent of challenge in future:</b>

**PART 3: INITIATIVES BEING UNDERTAKEN TO ADDRESS THESE CHALLENGES**

What specific, government-led activities are being undertaken by your jurisdiction to address the transportation skills development/labour supply challenges in Questions 1 and 2?

Please complete the table below for each active initiative, providing a concise overview of each.

Please copy and repeat use of the table below as many times as required.

<b>Title of Initiative</b>	
<b>Contact Information for Unit</b>	
<b>Brief Description of Initiative (one or two sentences)</b>	
<b>Results (indicators of success)</b>	
<b>References, background reports or reference websites</b>	
The Skills Task Force maintains a Compendium of Successful Skills Initiatives ( <a href="http://www.comt.ca/english/reports-e.htm">http://www.comt.ca/english/reports-e.htm</a> ). May we telephone the contact above to discuss including this project in the compendium? <input type="checkbox"/> Yes <input type="checkbox"/> No This project is already in the compendium. Please update using this information.	

**Comments:**

**Please return completed questionnaire on or before December 14 to  
Sharon Thomas ([thomass@tc.gc.ca](mailto:thomass@tc.gc.ca))**

## **APPENDIX B**

### **ANALYSIS OF SURVEY RESPONSES TO PART 1 OF QUESTIONNAIRE: KEY ISSUES**

## B.1 Air Transportation

Canada's aviation and aerospace industry employs approximately 137,000 workers<sup>7</sup>. An aging workforce, a general lack of skilled workers and a growing demand for air travel all underlie the challenges identified for air transportation. These challenges are outlined below.

### *Shortage of commercial pilots*

The top challenge reported for air transportation is a shortage of commercial pilots, with 5 respondents noting this challenge. This was followed by shortages in several other categories of aviation and airport occupations.

The air pilot shortage is a North American wide issue. The high costs for training and short supply of entry-level positions coupled with higher than average attrition because of retirement at 60 will cause on-going shortages in the sector.

### *Aging workforce*

Mandatory retirement for pilots at age 60 is causing higher than average attrition rates. Increasing the retirement age is currently being considered by Air Canada as well as by other agencies and companies.

### *Increasing demand for pilots*

Demand for air travel is increasing. As a result, significant increases in new aircraft purchases by medium and large sized air operators in Canada are anticipated. This will increase the demand for pilots and other aviation workers.

### *Fewer people taking pilot training*

While the demand for pilots is increasing, the number of pilots being trained in Canada at both the private pilot level and commercial pilot level has been steadily decreasing. For the period 2002 to 2006, the number of newly trained private and commercial level pilots decreased approximately 30% from about 4500 to 3100.

In addition, the number Canadian pilots qualifying for a commercial licence has been eroded by foreign students who return to their home country after training who are a significant larger portion of the commercial pilot graduates. This reduces the number of graduates available to work in Canada to less than 2000.

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<sup>7</sup> Source: Canadian Aviation Maintenance Council.

## Trends and Patterns in Skills and Labour Shortages

### Barriers to entering the occupation

There are significant barriers to entry in the form of costs and service requirements for some positions, especially pilots. Presently, individuals qualifying for a commercial licence enter the aviation market owing a significant amount in loans (approx. \$75K). Finding a suitable assignment for a newly trained pilot is also a problem as these positions are typically low paying.

Most occupations in air transportation are highly technical and require post-secondary training. Financing of this training can be a problem those interested in taking this training.

### Other air transportation occupations with shortages

The shortages in the aviation sector extend beyond pilots to the other technical occupations including aircraft inspectors, air traffic controllers, aircraft installers and aviation, mechanics, and airport managers and technical staff.

BC notes that many of the courses for Aircraft Maintenance Engineers in the Province are not being filled, which translates to fewer graduates. However, Canada-wide, enrolment in aerospace training programs has declined 20%.

Transport Canada Prairie and Northern Region indicates training for other aviation maintenance personnel is difficult to find except in large centres and the job opportunities for newly trained personnel often require relocation to very remote parts of Canada.

### Lack of recognition of technical qualifications across industries

Most occupations in air transportation are highly technical and require some post-secondary training. Overcoming the lack of qualification recognition across different industries is a challenge. For example, technicians, including aircraft mechanics and aircraft inspectors, retiring from the defence sector have had difficulty obtaining similar positions in civilian sectors. Furthermore, educational institutions do not always recognize previous coursework at other institutions.

### Shortage of airport managers

Ontario noted challenges in the recruitment of skilled/qualified municipal airport managers along with their ongoing training, and ongoing training for municipal staff as their main air sector challenges.

### Succession Planning

Yukon reports difficulty in maintaining succession planning, since many employees in entry-level positions do not have a high level of education, and are

### Trends and Patterns in Skills and Labour Shortages

often unable to advance in their career. It is difficult for them to find people with the technical skills who are also able to manage people, finances, and long-term strategic planning successfully. The Department does have a Career Development Program that has seen some success in retaining and promoting staff through educational support.

### Training needs related to new safety management systems

A special challenge noted by Transport Canada is the skill requirement in civil aviation industry to support the implementation Safety Management Systems: In 1999, Civil Aviation identified the implementation of Safety Management Systems (SMS) in aviation organizations as an evolving direction. Canadian Aviation Regulations were promulgated in 2005 for airline operators and maintenance organizations. Successful implementation of SMS will require new safety management philosophy, policies, processes and practices to create the necessary safety culture. This will require new skills at all levels of the organization throughout the various industry sub-sectors including air carriers, maintenance organizations, manufacturers, airports, flight training schools, etc.

### Addressing the problems

The shortage of qualified local candidates for aerospace occupations has compelled some companies to recruit from outside BC and Canada. Key labour markets for these workers are the UK, Germany, France, Netherlands, South Africa, the US, the Emirates and the Philippines.

It was also noted that Air Canada and other groups and companies are considering increasing the retirement age for pilots beyond 60. One respondent noted that recently retired commercial pilots can be retrained or brought back into the industry in other roles as one means of addressing shortages elsewhere in the industry.

Another respondent noted that the aviation industry needs to develop a comprehensive recruitment and training strategy to increase the number of new or prospective entrants to the industry.

## B.2 Road Transportation

Canada's trucking industry currently employs just over 450,000 workers<sup>8</sup>, including 283,000 truck drivers<sup>9</sup>. The truck driving occupation has the largest number of workers of any occupation in Canada. An aging workforce, coupled with an increasing demand for trucking and inadequate training and licencing programs for new drivers underlie the challenges identified for this sector.

The challenges identified for this sector follow.

### Recruitment and retention of qualified truck drivers

The top challenge reported for road transportation is the recruitment and retention of qualified long distance truck drivers with 7 of the 8 responding jurisdictions noting this as a top challenge. Factors contributing to this shortage and measures to alleviate it form the majority of the remaining top challenges reported for road transportation. These are discussed below.

### Aging population

As with many other occupations, the truck driver average age is increasing. This means an increasing number of truck drivers retiring and contributing to the shortage. Ontario and Manitoba both noted that the shortage extends to bus drivers and mechanics the bus industry as well (intercity, school, municipal transit).

### Industry growth and economic expansion in Western Canada

Industry growth emanating from deregulation of the trucking industry and free trade has also contributed to the demand for trucker drivers nationwide. British Columbia and Alberta, with strong, growing economies are facing the greatest shortages for trucking industry workers.

The British Columbia Trucking Association (BCTA) reports a shortage of 1,700 truck drivers a year for the foreseeable future with a demand for 4,500 drivers a year and only 2,800 new Class 1 licensees entering annually.

In Alberta, from 2006-2011, above average new job growth (3.0% or greater) is expected for truck drivers, ranking in the top ten of employment growth occupations. Some estimates suggest that more than 12,000 additional drivers per year will be needed in the next few years.

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<sup>8</sup> Trucking in Canada 2005. Statistics Canada Catalogue Number 53-222-XIE

<sup>9</sup> Number of drivers is from the 2006 Labour Force Survey.

## Trends and Patterns in Skills and Labour Shortages

### Perception of industry and working conditions

A negative perception of the industry, poor compensation for drivers, poor working conditions and quality of life, and low attraction of young people into the industry are also cited as contributing to the shortage. This contributes to the high driver turnover, although in the past few years, industry has taken steps that have significantly reduced turnover.

### Barriers to obtaining funding for training

The following were noted as barriers to obtaining financial assistance for truck driver training:

- Barriers for funding driver training through EI programs for excellent candidates who do not meet predetermined target groups.
- Student loan programs being primarily applicable to occupations with a longer training period than truck driving.

In Ontario, new Canadians form a significant portion of new truck drivers. Obtaining security clearance for these drivers for international trips, where the demand for long distance truck drivers has been the greatest, is reported as an issue.

### Need for national standards for training and licencing

Many of those obtaining their Class 1 licence do not meet other industry requirements for commercial drivers. In some cases those obtaining a Class 1 licence do not receive any training as they can test for a Class 1 licence without any type of prior training. These individuals then find they cannot find work as truck drivers as they do not meet industry requirements for the position beyond the basics of driving the truck.

### Other trucking industry positions are also experiencing shortages

This shortage of qualified people in the trucking industry extends beyond the truck driver into several other industry occupations. Survey results noted shortages of technicians within the industry, including truck and transport mechanics and transport trailer technicians. Other occupations noted were dispatcher and operations personnel. It was noted by Manitoba that this shortage is seen as manageable at present, but without a concerted strategy, will become a major issue.

## Trends and Patterns in Skills and Labour Shortages

This shortage in other industry occupations exists for the same reasons noted for professional drivers above plus increasing employee expectations regarding working hours and pay that the industry is not able to meet.

### Shortage of road safety personnel

Transport Canada notes the shortage of industry personnel also extends to road safety professionals in both the public and private sectors with little being done in Canada to address the situation.

#### Addressing the shortage of qualified drivers

Developing and adopting national standards for driver training and testing is seen by many as one of the major initiatives that would improve the quality of drivers entering the industry and hence help alleviate the shortage. The Canadian Trucking Human Resources Council (CTHRC) is actively addressing this issue in collaboration with representatives from provincial and territorial ministries of education/training, colleges and universities, employment/labour and transportation, as well as from the trucking industry, insurance, labour and the federal government.

Further encouragement of apprenticeship programs and the promotion of financial/information resources about training and employment opportunities were identified as ways that could help mitigate the shortage of truck drivers. Improving programs to allow fleets to bring in qualified foreign truck drivers was also noted as one way of addressing the shortfall.

Industry is also actively addressing the shortages by raising its standards for hiring new and existing drivers throughout the country. Insurance companies are assisting by recognizing properly trained new entrants versus newly licensed / non-trained individuals. Industry has also increased in-house training and mentoring programs to improve driver retention.

The Canadian Trucking Human Resources Council (CTHRC) has conducted considerable research on this issue and is currently working with industry and governments to develop and implement the training and licencing standards required.

## **B.3 Rail Transportation**

Approximately 34,000 were employed in the railway sector in 2005, down from 43,000 in 1999. Again, the aging rail workforce is the underling challenge.

### Aging workforce affecting nearly all railway occupations

The major challenge for the rail sector is the replacement of older workers as they retire. The average age of employees in the rail industry is very high and a large number of retirements are expected over the next few years. This will leave gaps in terms of resources, skills and experience. The growth of entry workers from entry level positions to more advanced positions will be important to maintaining continuity. British Columbia noted the Pacific gateway initiative would increase the need for skilled railway workers in that province.

Occupations noted include locomotive engineers, conductors, heavy-duty mechanics, skilled trades in bridges and structures. Ontario noted challenges with locomotive engineers and maintenance workers for their GO Transit operations.

### Need for rail security training programs

Development and implementation of formalized training programs for rail security and emergency preparedness was noted as a challenge by Transport Canada. Employee training is critical to the success of a rail operator's security and emergency preparedness program. Consultations with rail stakeholders have revealed a major need in this area, and have specifically identified staff training as a priority measure in reducing risk to industry operations. The challenge is to help operators develop formalized training programs that achieve a level of national consistency and meet each operator's individual security needs.

### Loss of skilled workers to the petroleum industry

Atlantic Canada noted concern that the demand from Western Canada from occupations with similar skill sets (Carmen are trained in welding) may create a shortfall as workers leave for higher wages.

### Working conditions

Many of the railway engineering trades are required to work long, irregular hours often in difficult work environment/conditions associated with outside work. The new/younger generation may not be so inclined to occupy positions that will have a significant impact on their quality of life (e.g., they may be less inclined to work week-ends and be less mobile). Operators must design incentives that align more closely with the demands of a younger generation of workers (i.e. request for shorter hours, nine to five environment, etc).

## Trends and Patterns in Skills and Labour Shortages

### Shortline railway workers

Nova Scotia noted that two of the shortlines in the Province belong to larger parent companies with access to corporate training programs for railway rules and operating practices (also in-house training for conductors and train engineers). For occupations with training not done in-house (i.e. Carmen, welders, maintenance of way employees) – training may be an issue if the railway cannot attract new skilled and/or trained/experienced employees.

Manitoba notes a lot of competition for skilled labour between shortline railways and Class 1 railways. Class 1 operators have a larger network, are situated in larger urban areas, and provide more career choices when potential employees are searching for a career in the railway industry.

### Improved training programs for attracting rail workers

As one means of addressing the rail sector's problem, the railways, through the Railway Association of Canada and their educational partners, have introduced railway industry work at the community college/CEGEP level and in industrial training centers, focusing on required railway skills. Continued provision and enhancement of these programs (e.g., provision of bilingual programs) is required. Development of additional apprenticeship programs by the railways was also noted as a way to address the shortfalls.

## **B.4 Marine Transportation**

### Shortage of skilled workers

Demographic trends indicate that employees in the marine industry, at many critical levels, will soon be leaving the workforce at a time when it is experiencing a growing need for crews and officers to meet increased global demand for marine capacity. This combination of growth in marine activity and attrition rate has placed marine industries in a difficult and highly competitive environment for highly trained and experienced mariners.

Should the current trend continue it is estimated that the number of mariners will not be sufficient to meet industry needs. Domestic and International Marine industries, and marine related organizations (classification societies, pilotage authorities, etc.) are having difficulties attracting personnel.

### Declining enrolment at training institutions

The number of enrolled and graduating students at Canadian Maritime Institutes has been declining. This decline could be attributed to various factors such as, the low birth rate in Canada in last decades, or students' reluctance in choosing a career that would require them to be offshore for several months, thus creating issues in work-life balance.

### Bottlenecks to certification

The required learning path and the current system of certification are creating a bottleneck preventing access to certification, especially with Engineer Officers.

### Increasingly technological work environment

It is expected that technology advances will change the whole marine industry, creating a demand for installation and service work.

Specific regional challenges noted follow.

### West Coast

On the West Coast, an aging demographic has seen an increasing number of retirements of longshoremen in recent years that is not likely to diminish over the next five years. Promotion of skilled workers to foremen ranks has further diminished the pool of trained, experienced senior longshore workers. This has been compounded by the loss of casuals leaving the Industry over the last ten years. Recruitment and retention continue to present challenges, and have strained the capacity of the various training programs as new workers enter the Industry.

## Trends and Patterns in Skills and Labour Shortages

### East Coast

On the East Coast, Nova Scotia reports they do not have a shortage of labour or skills at the macro level for longshoremen due to high wages, low minimum requirements for employees and the occupation as a family tradition for many longshore workers and their relatives. The exception to this would be for Gear Repair and Maintenance Men (skilled trades people) where shortages same as skilled trades community at large.

Development and retention of crane operators is noted as a problem due to the specialized nature of the work and the limited opportunities for training which occurs on employer equipment and ships calling into the Port

Attracting women and other equity groups as longshore workers, to meet federal employment equity goals was also noted as a challenge.

### Northern Canada

Northern Canada has difficulty recruiting and training Marine engineers, who must be educated outside NWT, as the Department offers seasonal employment, less perks, and potentially less-interesting work (e.g. working on smaller, less sophisticated boats) than other jurisdictions. A solution could be to encourage NWT youth to consider this as a career path that would allow them to return to their community and to engage in other seasonal work.

### Manitoba

A shortage of Transport Canada certified marine captains is a growing concern for Manitoba Marine Operations. Ferry services may be adversely affected if additional marine captains are not found.

## B.5 Urban Transit

### Recruitment and retention of skilled trades

Attracting qualified personnel for operating positions such as operators, mechanics and skilled trades (journeymen) is the common difficulty reported for Urban Transit, with Nova Scotia, Manitoba and Alberta noting this problem.

### Increasing demand for transit in Western Canada

In British Columbia and Alberta economic growth is creating an expended need for these occupations. Manitoba noted a shortage of professional bus and transit operators.

### Aging workforce

For jurisdictions other than British Columbia and Alberta, the aging workforce is noted as a major contributing factor for the need to attract new personnel.

### Lack of Skilled trades

Alberta noted that a lack of construction workers has created difficulty for contractors with some of their smaller projects not receiving any bids as a result.

### Loss of workers to petroleum industry

Loss of trade's workers to the petroleum industry was also cited as one of the reasons for difficulties in recruiting and retaining trades workers.

### Lack of national consistency in training

The lack of a nationally consistent approach to the development and delivery of employee training in the transit sector makes it difficult for the federal government to assess and evaluate training programs currently being deployed. With staff training integral to risk reduction, it is important that transit operators develop formalized training programs that achieve a level of national consistency and meet each operator's individual security needs.

*Industry actions*

In response to these challenges urban transit operators have augmented their recruiting and training programs for drivers and other positions. The Canadian Urban Transit Association is designing a new testing and selection tool for transit systems operators and the Motor Carrier Passenger Council of Canada is developing a professional certification program promoting bus operator as a wise career choice.

In Nova Scotia, the Halifax Regional Municipality has a demand for trained professionals including transit planners, schedulers and managers and has offered development training in these areas to staff to encourage employee growth and professional development. Staff also takes advantage of industry training opportunities such as those offered by the Canadian Urban Transit Association.

## **B.6 Logistics/Supply Chain**

### Lack of awareness of employment opportunities

Attracting workers to this industry, including professional logisticians, was the most common challenge noted for this sector. Lack of awareness about this field of work was cited as a major contributing factor to the difficulty of attracting workers, such as warehousing operators and parts technicians. B. C. notes employment in their warehousing sector has grown by approx. 40,000 jobs over the past 5 years, and the province employs roughly 120,000 workers in warehousing.

### Shortage of drivers

Manitoba indicated a shortage of truck drivers for this sector. This issue is noted previously under Road Transportation.

### Shortage of professional logisticians

Manitoba notes the logistics industry is unable to attract and retain professional logisticians. Qualified logisticians must possess sales and market knowledge, as well as knowledge of carriers and the transportation industry, which is hard to come by.

#### Improving awareness of occupations in this field

To address this situation the Government of Alberta and industry intend to promote the benefits available to individuals entering into these occupations and other apprentice positions. WESTAC, the Western Transportation Advisory Council, has hosted a workshop on skills shortages in transportation and actively promoted career information and job openings on its website. Manitoba also noted a need to increase awareness of employment opportunities in this field.

## **B.7 Transportation Related Construction/Infrastructure**

### *Shortage of engineers and technologists/technicians*

A shortage of construction engineers and technologists (primarily civil) was a strong theme for this sector, with 6 of the 9 respondents noting this as a challenge. This includes construction estimators and construction managers.

### *Shortage of skilled trades*

Many respondents also noted a widespread shortage of skilled labourers, mechanics and heavy equipment technicians and operators. Transport Canada indicated this worker shortage extends beyond the road sector into the marine/ports area with planned gateway improvements.

It was noted that due to lack of construction workers, the City of Winnipeg will need to scale back or defer some of its 2008 program.

### *Aging workforce*

The aging workforce again was cited as one of the reasons contributing to the shortages.

### *Lack of adequate training programs*

Nova Scotia noted difficulty in recruiting due to lack of adequate training programs related to road-building and limited resources available to advertise within the industry. Migration of workers to other parts of the country was also noted as contributing to the problem.

### *Improved awareness of employment opportunities*

Manitoba suggests the development and delivery of an awareness program drawing attention to the good wages and interesting work in the construction trades could help. Also, modifications could be made to the Provincial Nominee Program (PNP) to allow heavy construction firms to more easily sponsor foreign workers to Canada. Alberta Advanced Education and Technology is working with industry to promote trades occupations.

## **B.8 Provincial/Territorial Ministries Responsible for Transportation**

### *Shortage of engineers, technicians/technologists*

Experienced engineers, particularly civil engineers, was the occupation most frequently noted as experiencing recruitment difficulties. Related occupations where recruiting difficulties were noted include civil technicians and technologists

### *Aging workforce/workforce planning*

The aging workforce was noted as creating large numbers of retirements in the near future. As an example, one department noted approximately 20% of the Department's will be eligible to retire within a year. The potential loss of up to 20% of the Department's workforce means planning the Department's future workforce is a critically important task. This involves succession planning, recruitment and retention and knowledge transfer.

### *Private sector vs. public sector compensation levels*

Difficulty competing with salaries paid by the private sector was noted by several jurisdictions as one of the reasons behind the difficulties in recruiting people into public sector employment.

### *Shortage of skilled trades*

The shortage of skilled heavy equipment operators (such as snow plows) and other skilled workers required by this sector was noted by two jurisdictions. Nova Scotia has partnered with the federal Department of Indian Affairs to market job and training opportunities to various areas of the province. To date this has been a very positive initiative.

### *Difficulty in hiring safety inspectors*

Transport Canada reported difficulty in hiring inspectors in all modes as well as the transportation of dangerous goods area.

### *Transfer of institutional knowledge to new staff*

In addition to noting difficulties in recruiting experienced people, the skills and skill development of existing and new employees is a common problem reported by the Ministries. It can take up to several years for a person to attain the institutional knowledge required to perform the job effectively.

## APPENDIX C

### SUMMARY TABLES OF TOP CHALLENGES BY JURISDICTION

### **EXHIBIT C.1: AIR TRANSPORTATION CHALLENGES**

Challenges	Jurisdiction								
	B.C.	YK	NWT	Alta	Ont	Man	N.S.	T.C. (HQ)	T.C. (Reg)
Air Pilot Shortage	✓			✓				✓	✓
Aircraft inspector shortage	✓								
Air traffic controller shortage	✓								
Barriers to entry for some positions				✓				✓	
Lack of qualification recognition amongst different industries for technical positions.									
Shortages of aircraft mechanics				✓					
Recruitment of qualified municipal airport managers					✓	✓			
Succession planning to address aging workforce								✓	
Skills to support civil aviation and new safety management systems									✓
Training for aviation maintenance personnel in North									✓
Shortage of certified journeymen (e.g., airport electricians)			✓						
Management personnel and superintendents			✓						

## EXHIBIT C.2: ROAD TRANSPORTATION CHALLENGES

Challenges	Jurisdiction								
	B.C.	YK	NWT	Alta	Man	Ont	N.S.	T.C. (HQ)	T.C. (Reg)
Retention and recruitment of qualified drivers (especially long haul)	✓			✓	✓	✓	✓	✓	✓
Shortages of personnel for trucking industry positions (dispatchers, mechanics, admin, etc)				✓	✓				
Customs clearance for new Canadians given security concerns (relates to truck drivers)						✓			
Truck driver not recognized as a skilled occupation by Federal Government.								✓	
Lack of national standards for licensing and training of drivers for the trucking industry							✓	✓	
Truck Loggers (related to pine beetle crisis)	✓								
Finding journeyman certified trades people				✓					
Promoting career awareness for truck drivers					✓				
Shortage motor vehicle mechanics	✓								
Staff retention				✓					
Retaining management/superintendents				✓			✓		
Anticipated shortage of road safety professionals in both the public and private sectors								✓	

### EXHIBIT C.3: RAIL TRANSPORTATION CHALLENGES

Challenges	Jurisdiction								
	B.C.	YK	NWT	Alta	Ont	Man	N.S.	T.C. (HQ)	T.C. (Reg)
Replacing work force as older workers retire				✓			✓	✓	
Replacement of retiring skilled trades	✓				✓		✓	✓	
Replacement of retiring conductors				✓					
Replacement of retiring engineers				✓	✓				
Difficulties staffing short line railways.						✓			✓
Retaining locomotive mechanics, welders, etc.							✓		
Employee training for security and emergency preparedness.								✓	
Training workers for the changing skill sets required									
Limited training facilities external to railways and/or nearby locations	✓								✓
Intercity passenger rail/high speed rail operators.	✓				✓				✓

#### **EXHIBIT C.4: MARINE TRANSPORTATION CHALLENGES**

Challenges	Jurisdiction								
	B.C.	YK	NWT	Alta	Ont	Man	N.S.	T.C. (HQ)	T.C. (Reg)
Ability of operators to attract qualified marine professionals						✓			✓
Location of training for marine engineers			✓						
Replacing retiring workers								✓	
Declining enrollment at Canadian Maritime Institutes								✓	
Developing technology will create a demand for installation and service work								✓	
Shortages in skilled trades of Gear Repair and Maintenance.							✓		
Succession of Port Management personnel							✓		
Municipal/Intraprovincial passenger ferry					✓				
Replacement of retiring Longshoremen	✓								
Deck officers leaving for other occupations	✓								

### EXHIBIT C.5: URBAN TRANSIT CHALLENGES

Challenges	Jurisdiction								
	B.C.	YK	NWT	Alta	Ont	Man	N.S.	T.C. (HQ)	T.C. (Reg)
Difficulty attracting qualified bus drivers				✓		✓	✓		
Recruitment/retention of qualified journeymen				✓		✓			
Taxi, Limousine drivers and chauffeurs	✓								
Attracting school bus drivers (occasional problem)			✓						
Attracting trained and licenced mechanics							✓		
Developing trained transit professionals (planners, schedulers and managers)							✓		
Development of formalized training programs with national consistency for security and emergency preparedness								✓	

**EXHIBIT C.6: LOGISTICS/SUPPLY CHAIN CHALLENGES**

Challenges	Jurisdiction								
	B.C.	YK	NWT	Alta	Ont	Man	N.S.	T.C. (HQ)	T.C. (Reg)
Shortage of professional logisticians						✓			
Shortage of CMV drivers (refer to Road transportation)						✓			
Attracting journey persons necessary for industry's needs (parts technicians, warehousing operators)				✓					
Improving awareness about this field of work	✓								
Shortage of people with logistics/supply chain skills								✓	
Concerns over enforced speed limiters for trucks in mountainous terrain		✓							
Vulnerability to just-in-time delivery when problems occur		✓							

**EXHIBIT C.7: TRANSPORTATION RELATED CONSTRUCTION/INFRASTRUCTURE CHALLENGES**

Challenges	Jurisdiction								
	B.C.	YK	NWT	Alta	Ont	Man	N.S.	T.C. (HQ)	T.C. (Reg)
Shortages of civil engineers and/or civil technicians	✓	✓	✓		✓			✓	✓
Shortage of skilled labourers, mechanics, heavy equipment operators, etc.					✓	✓		✓	✓
Recruitment and retention of construction industry staff					✓				
Recruitment of replacement staff for retiring engineers and technologists.		✓							
Effective transfer of institutional knowledge to new employees		✓							
Shortage of construction workers across marine/ports sectors (gateways)								✓	
Construction managers	✓								
Aging workforce							✓		
Lack of adequate training programs related to road building							✓		

**EXHIBIT C.8: PROVINCIAL/TERRITORIAL MINISTRIES RESPONSIBLE FOR TRANSPORTATION**

Challenges	Jurisdiction								
	B.C.	YK	NWT	Alta	Ont	Man	N.S.	T.C. (HQ)	T.C. (Reg)
Recruiting civil engineers, technicians/technologists			✓		✓	✓		✓	
Recruiting experienced engineers								✓	
Aging workforce creating large number of retirements	✓				✓		✓	✓	
Recruiting qualified, experienced people for headquarters positions			✓						
Labour supply		✓							
Staff skills development		✓							
Recruiting heavy equipment operators	✓						✓		
Recruiting safety inspectors								✓	
Shortage of marine engineers and naval architects								✓	
Training safety inspectors with the new regulatory and/or security regimes								✓	
Difficulty competing with private sector				✓		✓	✓	✓	✓

## **APPENDIX D**

### **SKILLS INITIATIVES UNDERWAY**

## D.1 Skills Initiatives

Most jurisdictions have initiatives underway to address some of their specific challenges. These are highlighted below. A listing of the specific initiatives underway is presented at the end of this section.

### Improving the supply of skilled workers

Between 2004 and 2010, BC is adding 25,000 new student spaces at colleges, university-colleges, universities and institutes across the province.

In Manitoba, the Apprenticeship Futures Commission is identifying the levels of success in meeting the needs of apprentices, employers and the provincial economy, and provides recommendations that will contribute to the future, strategic direction for skilled trades in Manitoba.

### Skills development strategies

Alberta's "Building and Educating Tomorrow's Workforce (BETW) is aimed at improving the supply of skilled and motivated workers; to add more highly skilled, educated and innovative people to the workforce. Individual sector strategies are being developed with the Transportation and Logistics Workforce Strategy is expected to be completed in the spring of 2008. A separate, more aviation-focused strategy is being developed for the Aerospace and Defence Industry that has implications to transportation.

Skills Nova Scotia Action Plan 2006-2007 (initiative of the Department of Education) This document highlights provincial programs, services, and initiatives that are helping to build and maintain Nova Scotia's workforce. This framework is Nova Scotia's guide to ensuring we develop new programs, use existing programs more effectively, create strategic partnerships and find innovative solutions to meet labour market demands. Specific goals include: Meeting the skill needs of Nova Scotia's Labour Market and Providing better labour market access and support to Nova Scotians

### Employee training/development programs for engineers and technicians

Manitoba has several initiatives underway in this area. The Internationally Educated Engineering Qualifications Program (IEEQ) at the University of Manitoba provides a route for immigrants with engineering credentials obtained outside of Canada to meet part of the licensing requirements for professional engineering practice in Manitoba.

### Trends and Patterns in Skills and Labour Shortages

Their Engineering Student Co-operative Work Placement (MIT) provides high school, college and university students valuable engineering related work experience. Through the program the department develops a qualified and experienced labour pool and is able to retain many students for future public sector vacancies.

Ontario has several initiatives underway in this area. The Engineering Development Program (EDP) is a four-year development program for recent civil or geotechnical engineering university graduates providing qualifying experience for PEO license and opportunity to compete for more senior positions.

The Transportation Technician (TT) Initiative provides recent civil engineering technologist graduates with practical broad-based experience through rotations in the various disciplines and corporate functions, prepares participants for more senior technical positions within the Ministry and Builds a pool of qualified candidates to support succession planning within the technical

The Infrastructure Opportunities Partnership (IOP) is a partnership between 6 organizations representing government, consultants and contractors. An employer partnership consists of an owner, consultant and contractor in a geographic area. In this partnership, Civil engineering students complete 3 four-month summer work terms – one with each partner – while completing their bachelor's degree

The Nova Scotia Department of Transportation has a Sponsorship Program for Bachelor of Engineering Students. The objectives of this policy are to recruit new civil engineering/civil engineering technologists students to this organization, improve retention efforts of new graduates, and support students in their final two years of an engineering program or for the two years of a civil engineering technologist program by offsetting some of the education costs. The program covers the costs of tuition and books and provides paid co-operative and summer work terms with the Department. In return, when the student graduates, they will work in an entry-level position with TIR.

### Training for new Canadians

Ontario's Internationally Trained Engineer (ITI) Initiative will provide foreign-trained engineering professionals, who have completed all necessary steps for licensure in Ontario, with the opportunity to acquire the one-year of mandatory Canadian experience. MTO will offer the qualified candidate an unclassified contract for a period of up to 15 months. A similar initiative is the Ontario Public Service Internship Program for Internationally Trained Individuals. This program supports internationally trained professionals in labour market integration by providing them with relevant work experience in their field.

## Trends and Patterns in Skills and Labour Shortages

Manitoba Provincial Nominee Program (MPNP) – Employer Direct Priority Assessment Stream's objective is to promote Manitoba as an immigration destination for entrepreneurs and skilled workers. The MPNP works directly with Manitoba industry to develop effective strategies to help meet specific labour market requirements. The program helps employers recruit and/or retain a foreign worker with the required skills for a position that they may have been unable to fill with a permanent resident or citizen of Canada.

### Training professional truck drivers

The B.C. Trucking Association provides Funding support for individuals who wish to train for careers as professional truck drivers, commercial transport mechanics and diesel engine mechanics. \$3,000 Entrance Awards are available for "Earning Your Wheels" professional driver training or "Red Seal" commercial transport mechanic or diesel engine mechanic training.

Employment Manitoba financially supports individuals to participate in professional truck driver training at various training institutions. An individual is eligible to receive assistance if they are unemployed and a current employment insurance recipient; receiving income assistance benefits; has low income or are about to lose their job.

Employment Manitoba is also currently assisting Manitoba Public Insurance (MPI) with the development of their truck driver training program. The MPI program will allow individuals to participate in truck driver training who would not otherwise be eligible for support through Employment Manitoba.

### Air sector

The Manitoba Aviation Council has developed a human resource development strategy from a two-phase study by the industry, ITP and Western Economic Diversification that identified four broad areas of need: airport technical training, aviation operations, air pilot development and maintenance. In its framework, MAC has identified, among other goals, to provide training to fulfill industry regulatory and safety requirements; and to promote the industry as a viable career.

### First Nations recruitment

Yukon's Northern Strategy Training Program uses current hiring processes tailored to First Nations recruitment of labourers and heavy equipment operators. Rigorous orientation, assessment and training programs are used to teach and evaluate employees as they progress through their training plans.

## Trends and Patterns in Skills and Labour Shortages

### Intelligent transportation systems

Through Transport Canada's Knowledge Building and Technology Transfer in Intelligent Transportation Systems three Centres of Excellence provide much needed, targeted funding directly to Canadian universities to help promote and encourage professors from a variety of academic and professional disciplines to embrace Intelligent Transportation Systems research and help build the talent pool of transportation knowledge workers in Canada.

### Security training initiatives

**Transit security** Transport Canada is supporting the training of rail and transit security personnel by way of the Transit-Secure Contribution Program. Through this program, the government has allocated funding for various training initiatives to passenger rail and transit operators in the six highest-volume urban transit systems in Canada.

**Railway security** On 15 November 2007, the Government of Canada and the Railway Association of Canada signed a Memorandum of Understanding (MOU) on Railway Security. This MOU recognizes that rail and transit operators need to develop effective security training programs in order to address outstanding security concerns and gaps, and identifies a series of measures that operators should take in order to meet needs in this area.

**Aviation** Safety Management Systems, Quality Assurance, Interviewing Techniques. The Canadian Aviation Maintenance Council (CAMC) in partnership with HRSDC has developed learning tools and curricula to cater to the skills shortage in Safety Management Systems. Transport Canada's role in the project is as technical advisors by contributing subject matter knowledge and learning curriculum developed to date, to foster the development of partnerships, and to act as one of the stakeholders assisting to render the project a success.

### Succession planning

Transport Canada's Changing of the Guard program is aimed at maintaining skills in legislative and regulatory drafting, socio-economic and scientific analysis, communication, and public consultation. The program focuses on technical/scientific personnel to reinforce training programs for inspection, investigation and enforcement.

Transport Canada Ontario Region is undertaking a Classification/organizational design review and Developmental Strategy. The hiring of the right individuals will be critical since many branches will be balancing current and future needs. The requirements of the job and work descriptions are being reviewed to ensure the asset skills needed for the position are matched. The creation of feeder groups, student hiring and student bridging, developmental programs, and succession

### Trends and Patterns in Skills and Labour Shortages

planning are the different strategies used to ensure the Region will have qualified internal candidate pools over the next several years. Civil Aviation will provide/develop internship opportunities for students and use bridging mechanisms to take advantage of Canada's growing populations. They will work with post-secondary institutions to provide input into programs to ensure future feeder groups exist for projected requirements of the Branch.

**British Columbia**

<b>Title of Initiative</b>	Expansion of post-secondary education seats
<b>Contact Information for Unit*</b>	BC Ministry of Advanced Education
<b>Brief Description of Initiative (one or two sentences)</b>	Between 2004 and 2010, BC is adding 25,000 new student spaces at colleges, university-colleges, universities and institutes across the province. Our goal is to ensure that students will be able to take their post-secondary education closer to home, and to build their futures in a province that is second to none. BC also want students who earn a B average or better in high school to be able to attend one of B.C.'s universities if they wish.
<b>Results (indicators of success)</b>	<b>Expanded supply of skilled workers</b> -- The new seats will expand B.C.'s supply of skilled workers for employers in priority areas like technology, health care, college-trades and vocational programs.
<b>References, background reports or reference websites</b>	<a href="http://www.gov.bc.ca/keyinitiatives/post_secondary_student_spaces.html">http://www.gov.bc.ca/keyinitiatives/post_secondary_student_spaces.html</a> Ministry of Advanced Education Service Plan - <a href="http://www.gov.bc.ca/keyinitiatives/post_secondary_student_spaces.html">http://www.gov.bc.ca/keyinitiatives/post_secondary_student_spaces.html</a>

**British Columbia**

<b>Title of Initiative</b>	Flemming Sondergaard Memorial Training Entrance Awards
<b>Contact Information for Unit*</b>	BC Trucking Association
<b>Brief Description of Initiative (one or two sentences)</b>	<p>Funding support for individuals who wish to train for careers as professional truck drivers, commercial transport mechanics and diesel engine mechanics.</p> <p>Financial assistance is now available through the Flemming Sondergaard Memorial Education Endowment Fund. \$3,000 Entrance Awards are available for "Earning Your Wheels" professional driver training or "Red Seal" commercial transport mechanic or diesel engine mechanic training.</p>
<b>Results (indicators of success)</b>	
<b>References, background reports or reference websites</b>	BC Trucking Association - <a href="http://www.bctrucking.com/about/sondergaard.php">http://www.bctrucking.com/about/sondergaard.php</a>

**ALBERTA**

<b>Title of Initiative</b>	"Building and Educating Tomorrow's Workforce (BETW): Alberta's 10 Year Strategy". BETW has three key goals for Alberta: to improve the supply of skilled and motivated workers; to add more highly skilled, educated and innovative people to the workforce; and to create highly productive work environments that are able to maximize the use of innovation and technology. Individual sector strategies are being developed and at the present, the Transportation and Logistics Workforce Strategy is expected to be completed in the spring of 2008. A separate, more aviation-focused strategy is being developed for the Aerospace and Defence Industry that has implications to transportation.
<b>Contact Information for Unit*</b>	Alberta Employment, Immigration and Industry Workforce Supports Division Labour Force Development Branch 6 <sup>th</sup> Floor, Centre West Building 10035 – 108 Street Edmonton, AB T5J 3E1 Main Number: (780) 644-4306 Fax: (780) 422-6400
<b>Brief Description of Initiative (one or two sentences)</b>	The initiative is designed to provide a definition of the transportation and logistics sector and lay out the challenges to the sector in the next 10-15 years and anticipated impacts on labour demand. Four themes, which are to inform, attract, develop and retain people, will be developed to maintain an appropriate supply of labour to fulfill this demand.
<b>Results (indicators of success)</b>	The workforce strategy, while not yet completed for the transportation and logistics sector, has been successful in providing a roundtable for industry to share their perspectives on labour challenges and the strategies necessary to ensure that an adequate supply of labour exists in Alberta.
<b>References, background reports or reference websites</b>	<a href="http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/3282.html">http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/3282.html</a> <a href="http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/4089.html">http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/4089.html</a>
The Skills Task Force maintains a Compendium of Successful Skills Initiatives ( <a href="http://www.comt.ca/english/reports-e.htm">http://www.comt.ca/english/reports-e.htm</a> ). May we telephone the contact above to discuss including this project in the compendium?	
<input type="checkbox"/> Yes	

**Ontario**

<b>Title of Initiative</b>	Engineering Development Program (EDP) (Ongoing)
<b>Contact Information for Unit*</b>	Ministry of Transportation (Ontario) Division Services Office Garden City Tower 4th Flr 301 St Paul St St Catharines ON L2R7R4  Phone: 905-704-2600 Fax: 905-704-2626  Key Contacts: Frank Marcella or Kristine Clark
<b>Brief Description of Initiative (one or two sentences)</b>	Four-year development program for recent civil or geotechnical engineering university graduates  Qualifying experience for PEO license and opportunity to compete for more senior positions  Practical, multidisciplinary learning experiences through rotational assignments in regional and head office locations
<b>Results (indicators of success)</b>	75 participants since 2001 > 90% retention rate 12 have successfully competed for promotions within MTO
<b>References, background reports or reference websites</b>	<a href="http://www.mto.gov.on.ca/english/engineering/job/edp.htm">http://www.mto.gov.on.ca/english/engineering/job/edp.htm</a>
The Skills Task Force maintains a Compendium of Successful Skills Initiatives ( <a href="http://www.comt.ca/english/reports-e.htm">http://www.comt.ca/english/reports-e.htm</a> ). May we telephone the contact above to discuss including this project in the compendium?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> This project is already in the compendium. Please update using this information.	

**ONTARIO**

<b>Title of Initiative</b>	Transportation Technician (TT) Initiative (ongoing)
<b>Contact Information for Unit*</b>	Ministry of Transportation (Ontario) Division Services Office Garden City Tower 4th Flr 301 St Paul St St Catharines ON L2R7R4  Phone: 905-704-2600 Fax: 905-704-2626  Key Contacts: Frank Marcella or Kristine Clark
<b>Brief Description of Initiative (one or two sentences)</b>	Provides recent civil engineering technologist graduates with practical broad-based experience through rotations in the various disciplines and corporate functions.  Prepares participants for more senior technical positions within the Ministry  Builds a pool of qualified candidates to support succession planning within the technical
<b>Results (indicators of success)</b>	140 recruits since 2001 64 have applied to and been successful in other permanent positions. Retention rate is 90%
<b>References, background reports or reference websites</b>	<a href="http://www.mto.gov.on.ca/english/engineering/job/tti.htm">http://www.mto.gov.on.ca/english/engineering/job/tti.htm</a>
The Skills Task Force maintains a Compendium of Successful Skills Initiatives ( <a href="http://www.comt.ca/english/reports-e.htm">http://www.comt.ca/english/reports-e.htm</a> ). May we telephone the contact above to discuss including this project in the compendium?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> This project is already in the compendium. Please update using this information.	

**ONTARIO**

<b>Title of Initiative</b>	Internationally Trained Engineer (ITE) Initiative (2 Year Pilot – replaces former “Pathways Program”)
<b>Contact Information for Unit*</b>	Ministry of Transportation (Ontario) Division Services Office Garden City Tower 4th Flr 301 St Paul St St Catharines ON L2R7R4  Phone: 905-704-2600 Fax: 905-704-2626  Key Contacts: Frank Marcella or Kristine Clark
<b>Brief Description of Initiative (one or two sentences)</b>	Will provide foreign-trained engineering professionals, who have completed all necessary steps for licensure in Ontario, with the opportunity to acquire the one-year of mandatory Canadian experience  MTO will offer the qualified candidate an unclassified contract for a period of up to 15 months.
<b>Results (indicators of success)</b>	The goal is to create a maximum of ten (10) internship placements for the period of April 1, 2007 to June 30, 2009, in the Ministry and for participants TO achieve PEO License. The target for 2007/08 is 5 ITE's.
<b>References, background reports or reference websites</b>	
The Skills Task Force maintains a Compendium of Successful Skills Initiatives ( <a href="http://www.comt.ca/english/reports-e.htm">http://www.comt.ca/english/reports-e.htm</a> ). May we telephone the contact above to discuss including this project in the compendium? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> This project is already in the compendium. Please update using this information.	

**ONTARIO**

<b>Title of Initiative</b>	Ontario Public Service Internship Program for Internationally Trained Individuals
<b>Contact Information for Unit*</b>	Ministry of Transportation (Ontario) Division Services Office Garden City Tower 4th Flr 301 St Paul St St Catharines ON L2R7R4  Phone: 905-704-2600 Fax: 905-704-2626  Key Contacts: Frank Marcella or Kristine Clark
<b>Brief Description of Initiative (one or two sentences)</b>	To demonstrate government leadership in the recognition and support of internationally trained professionals in labour market integration by providing them with relevant work experience in their field.
<b>Results (indicators of success)</b>	In 2007-08, 70 internships will be available through the OPS Internship Program for Internationally Trained Individuals. MTO has placed submissions for 3.
<b>References, background reports or reference websites</b>	The Skills Task Force maintains a Compendium of Successful Skills Initiatives ( <a href="http://www.comt.ca/english/reports-e.htm">http://www.comt.ca/english/reports-e.htm</a> ). May we telephone the contact above to discuss including this project in the compendium? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> This project is already in the compendium. Please update using this information.

**MANITOBA**

<b>Title of Initiative</b>	Apprenticeship Manitoba
<b>Contact Information for Unit*</b>	Apprenticeship Manitoba 1010 - 401 York Avenue Winnipeg MB R3C 0P8 Phone: (204) 945-3337 Fax: (204) 948-2539 Toll-Free: 1-877-978-7233 (1-877-97-TRADE) Email: <a href="mailto:apprenticeship@gov.mb.ca">apprenticeship@gov.mb.ca</a>
<b>Brief Description of Initiative (one or two sentences)</b>	<p>Apprenticeship is quality, low-cost, post-secondary training that leads to certification as a journeyperson in a skilled trade. Most trade programs take approximately 2-4 years to complete and they combine approximately 80% paid-on-the job training with 20% technical/in-school learning.</p> <p>The Senior Years Apprenticeship Program is offered to students in high school and allows students to start apprenticeship training while still in high school. It combines regular high school instruction with paid, part-time and on-the-job training.</p> <p>Trade programs in the transportation industry include: truck and transport mechanic; transport trailer technician; aircraft maintenance journeyperson; heavy-duty equipment technician, concrete finisher; and crane and hoisting equipment operator.</p> <p>In 2007, The Apprenticeship Futures Commission was created, which will identify the levels of success in meeting the needs of apprentices, employers and the provincial economy, and provide recommendations that will contribute to the future, strategic direction for skilled trades in Manitoba. A series of consultations with the public and stakeholder groups provide an opportunity for the Commission to shape recommendations and present valuable feedback required to enhance and grow the apprenticeship and related training systems.</p>
<b>Results (indicators of success)</b>	Overall, apprenticeships have increased by 52% since 1999.
<b>References, background reports or reference websites</b>	<a href="http://www.gov.mb.ca/tce/apprent/index.html">http://www.gov.mb.ca/tce/apprent/index.html</a> <a href="http://www.apprenticeshipfuturescommission.mb.ca/">http://www.apprenticeshipfuturescommission.mb.ca/</a>

**MANITOBA**

<b>Title of Initiative</b>	Employment Manitoba – Professional Truck Driver Training
<b>Contact Information for Unit*</b>	Employment Manitoba Centre Downtown Centre 391 York Avenue Winnipeg MB R3C 0P4 Employment and Training Inquiries: 204-945-8341
<b>Brief Description of Initiative (one or two sentences)</b>	Employment Manitoba financially supports individuals to participate in professional truck driver training at various training institutions. An individual is eligible to receive assistance if they are unemployed and a current employment insurance recipient; receiving income assistance benefits; has low income or are about to lose their job.  Employment Manitoba is also currently assisting Manitoba Public Insurance (MPI) with the development of their truck driver training program. The MPI program will allow individuals to participate in truck driver training who would not otherwise be eligible for supports through Employment Manitoba.
<b>Results (indicators of success)</b>	As of April 1, 2007, Employment Manitoba has supported 35 individuals to participate in Professional Truck Driver training at various training institutions. 19 are employed/self-sufficient, with 16 currently in progress.
<b>References, background reports or reference websites</b>	<a href="http://www.gov.mb.ca/employment/index.html">http://www.gov.mb.ca/employment/index.html</a> <a href="http://www.gov.mb.ca/tce/lmi/index.html">http://www.gov.mb.ca/tce/lmi/index.html</a>

**MANITOBA**

<b>Title of Initiative</b>	Engineering Student Co-operative Work Placement (MIT)
<b>Contact Information for Unit*</b>	Harmony McKinney-Bumstead Construction Support Services Manitoba Infrastructure and Transportation (204) 945-8235 Email: <a href="mailto:Harmony.McKinney-Bumstead@gov.mb.ca">Harmony.McKinney-Bumstead@gov.mb.ca</a>
<b>Brief Description of Initiative (one or two sentences)</b>	Students are recruited through three streams: <ol style="list-style-type: none"><li>1. High school students are recruited that live in high-demand regions in Manitoba (currently south-west Manitoba) that are interested in pursuing an engineering career and are given summer positions and varying experience in civil engineering.</li><li>2. College students enrolled in Red River College's Civil Engineering Technology program are offered 6 month co-op work terms with the government in order to gain valuable experience in various construction projects.</li><li>3. University students enrolled in civil engineering are offered co-op work placements for the summer term, in order to gain quality work experience before graduating.</li></ol>
<b>Results (indicators of success)</b>	130 students were provided with valuable work experience in 2007. Because MIT focuses on providing students with a wide variety of engineering experience, and meets with the students regularly to review progress and discuss future placements, the department develops a qualified and experienced labour pool and is able to retain many students for future public sector vacancies.
<b>References, background reports or reference websites</b>	<a href="http://www.umanitoba.ca/civil/undergraduates/coop.shtml">http://www.umanitoba.ca/civil/undergraduates/coop.shtml</a>

**MANITOBA**

<b>Title of Initiative</b>	Internationally Educated Engineers Qualification (IEEQ) program
<b>Contact Information for Unit*</b>	IEEQ Pilot Program Phone: (204) 474-8961 Fax: (204) 474-7676 <a href="mailto:ieeq@umanitoba.ca">ieeq@umanitoba.ca</a> <a href="http://umanitoba.ca/faculties/engineering/ieeq/">http://umanitoba.ca/faculties/engineering/ieeq/</a>
<b>Brief Description of Initiative (one or two sentences)</b>	<p>The Internationally Educated Engineering Qualifications Program (IEEQ) provides a route for immigrants with engineering credentials obtained outside of Canada to meet part of the licensing requirements for professional engineering practice in Manitoba.</p> <p>Offered by the University of Manitoba, this is a 12-month program consisting of course work and a paid co-op placement, which is significantly shorter than the typical three-year time frame internationally-educated engineers needed to meet Canadian qualification standards.</p> <p>On October 1, 2007, the Government of Manitoba announced permanent funding for the IEEQ Program. This funding commitment will allow the U of M to end the pilot phase of the program and transition to an ongoing IEEQ program with expanded capacity in future years.</p>
<b>Results (indicators of success)</b>	Since the IEEQ program began in 2003, 24 internationally-educated engineers have completed the program with an additional 11 expected to complete it in 2007. A total of 17 graduates have registered as engineers in training, while seven have registered as professional engineers. A total of 18 are currently employed in the engineering field and 12 are enrolled in the program for 2007.
<b>References, background reports or reference websites</b>	<a href="http://www.gov.mb.ca/labour/immigrate/asset_library/en/settlement/pdf/engineer_guide_april06.pdf">http://www.gov.mb.ca/labour/immigrate/asset_library/en/settlement/pdf/engineer_guide_april06.pdf</a> <a href="http://umanitoba.ca/faculties/engineering/ieeq/">http://umanitoba.ca/faculties/engineering/ieeq/</a>

**MANITOBA**

<b>Title of Initiative</b>	Industry Partnerships Manitoba Aviation Council (MAC) 2007/08 Human Resource Development Plan
<b>Contact Information for Unit*</b>	Bill Zuk – Executive Director 1 Allen Dyne Road Winnipeg, Manitoba R3J 0Y8 Phone: (204) 774-2580
<b>Brief Description of Initiative (one or two sentences)</b>	The human resource development strategy proposed by MAC is a direct result of a two-phase study by the industry, ITP and Western Economic Diversification that identified four broad areas of need: airport technical training, aviation operations, air pilot development and maintenance.  In its framework, MAC has identified the following goals.  1. To provide service in an effective, cost-efficient and safe operation; 2. To increase efficiency and competitiveness in all aspects of aviation industry operations; 3. To incorporate latest technology in equipment and systems; 4. To provide training to fulfill industry regulatory and safety requirements; and 5. To promote the industry as a viable career.
<b>Results (indicators of success)</b>	MAC evaluates its programs to Level 4 (business results). MAC submits quarterly reports outlining deliverables to date, evaluations, and outstanding issues.
<b>References, background reports or reference websites</b>	

**MANITOBA**

<b>Title of Initiative</b>	Job Referral Service – Red River Floodway Expansion Project and Wuskwatim Generating Station Project
<b>Contact Information for Unit*</b>	Employment Manitoba Centre Downtown Centre 391 York Avenue Winnipeg MB R3C 0P4 Employment and Training Inquiries: 204-945-8341
<b>Brief Description of Initiative (one or two sentences)</b>	The Manitoba Floodway Authority and Manitoba Hydro are partnering with Employment Manitoba to develop a job referral service. Potential employees must register through a Manitoba Employment and Training Services Centre, and their skills and experience will be matched up with project contractors who require skilled labour.  For both projects, qualified skilled labourers are needed for many occupations, including construction-related infrastructure, equipment operators, diesel mechanics and truck drivers.
<b>Results (indicators of success)</b>	
<b>References, background reports or reference websites</b>	<a href="http://www.gov.mb.ca/jrs/floodway/index.html">http://www.gov.mb.ca/jrs/floodway/index.html</a> <a href="http://www.gov.mb.ca/jrs/wuskwatim/index.html">http://www.gov.mb.ca/jrs/wuskwatim/index.html</a> <a href="http://www.gov.mb.ca/employment/emp_centre_locations.html">http://www.gov.mb.ca/employment/emp_centre_locations.html</a>

## **MANITOBA**

<b>Title of Initiative</b>	Manitoba Provincial Nominee Program (MPNP) – Employer Direct Priority Assessment Stream
<b>Contact Information for Unit*</b>	Immigration Promotion & Recruitment (Manitoba Provincial Nominee Program) Phone: 204-945-2806 <i>International:</i> 001-204-945-2806 Fax: 204-948-2256 E-mail: <a href="mailto:immigratemanitoba@gov.mb.ca">immigratemanitoba@gov.mb.ca</a>
<b>Brief Description of Initiative (one or two sentences)</b>	The MPNP Employer Direct stream's objective is to promote Manitoba as an immigration destination for entrepreneurs and skilled workers. The MPNP works directly with Manitoba industry to develop effective strategies to help meet specific labour market requirements.  The MPNP Employer Direct stream is a priority assessment stream that helps employers recruit and/or retain a foreign worker with the required skills for a position that they may have been unable to fill with a permanent resident or citizen of Canada.
<b>Results (indicators of success)</b>	Approximately 70% of the 10,000 immigrants that arrived in Manitoba in 2006 were received through the MPNP. The goal is to attract 20,000 immigrants annually by 2016.
<b>References, background reports or reference websites</b>	<a href="http://www.gov.mb.ca/labour/immigrate/pnp/employerdirect/index.html">http://www.gov.mb.ca/labour/immigrate/pnp/employerdirect/index.html</a> <a href="http://www.gov.mb.ca/labour/immigrate/partners/employers.html">http://www.gov.mb.ca/labour/immigrate/partners/employers.html</a>

**NOVA SCOTIA**

<b>Title of Initiative</b>	Sponsorship Program for Bachelor of Engineering Students
<b>Contact Information for Unit</b>	Barbara Baillie Director of Special Projects <a href="mailto:bailliba@gov.ns.ca">bailliba@gov.ns.ca</a> 902-563-2256
<b>Brief Description of Initiative</b>	<p>The Nova Scotia Department of Transportation &amp; Infrastructure Renewal is committed to supporting efforts in recruiting new engineering and civil engineering technology graduates.</p> <p>The objectives of this policy are to recruit new civil engineering/civil engineering technologists students to this organization, improve retention efforts of new graduates, and support students in their final two years of an engineering program or for the two years of a civil engineering technologist program by offsetting some of the education costs.</p> <p>Transportation and Infrastructure Renewal will cover the costs of tuition and books and provide paid co-operative and summer work terms with the Department. In return, when the student graduates, they will work in an entry-level position with TIR. Students participating in the sponsorship program will provide TIR with at least six months of service for the first \$1000 to \$6000 contributed towards their education and one month of service for each additional \$1000 - to a maximum of 36 months of service.</p>
<b>Results</b>	<ul style="list-style-type: none"><li>• Two final year civil engineering students who were working for the Department in the summer of 2007 were accepted into the program.</li><li>• The Department will be going to the local Universities and Community Colleges in November 2007 to promote the program.</li><li>• The Department will be awarding sponsorships to 2 (two) -1st year and 2 (two) - 2nd year civil engineering technologists and 2 (two) - 3rd year civil engineering students.</li></ul>
<b>References, background reports or reference websites</b>	N/A

**NOVA SCOTIA**

<b>Title of Initiative</b>	Skills Nova Scotia Action Plan 2006-2007 (initiative of the Department of Education)
<b>Contact Information for Unit</b>	<b>Skills and Learning Branch</b> Department of Education PO Box 578 Halifax, Nova Scotia B3J 2S9 (902) 424-7764
<b>Brief Description of Initiative</b>	<p>This document highlights provincial programs, services, and initiatives that are helping to build and maintain Nova Scotia's workforce. This framework is Nova Scotia's guide to ensuring we develop new programs, use existing programs more effectively, create strategic partnerships and find innovative solutions to meet labour market demands.</p> <p>Goal 1: Meet the skill needs of Nova Scotia's Labour Market Objectives:</p> <ul style="list-style-type: none"><li>• Research, develop and distribute high-quality labour market information</li><li>• Co-ordinate targeted initiatives that satisfy emerging skill needs</li><li>• Work to enhance and improve the apprenticeship system in Nova Scotia</li><li>• Improve mobility of skilled workers within Canada</li><li>• Improve Nova Scotia's competitive edge in attracting and retaining highly skilled international workers</li><li>• Design and implement labour policy to promote safe and healthy work environments, fair employment standards, and stable labour-management relations</li><li>• Improve opportunities for youth to develop the leadership skills required for successful labour market participation</li></ul> <p>Goal 2: Provide better labour market access and supports to Nova Scotians</p> <p>Objectives:</p> <ul style="list-style-type: none"><li>• Provide career- and employment-related services to Nova</li></ul>

## Trends and Patterns in Skills and Labour Shortages

	<p>Scotians to help them develop their skills and find sustainable jobs</p> <ul style="list-style-type: none"><li>• Assist low-income Nova Scotians, including income assistance recipients, to access education and training</li><li>• Promote equity, fairness, and diversity throughout labour market programs and services offered in Nova Scotia</li><li>• Develop and implement prior learning assessment and recognition (PLAR) processes and tools</li></ul> <p>Goal 3: Strengthen Nova Scotia's system of lifelong learning opportunities</p> <p>Objectives:</p> <ul style="list-style-type: none"><li>• Increase the opportunities for Nova Scotia's children to develop a curiosity for learning and an ability to learn before entering Nova Scotia's education system</li><li>• Improve the core skills of children in Nova Scotia's education system</li><li>• Expand cooperative and work experience opportunities for students in Nova Scotia's secondary education system</li><li>• Increase the opportunities for Nova Scotians to access basic adult education</li><li>• Make education and training more relevant to the emerging skill needs of the learners and employers</li><li>• Increase the post-secondary education and training system's capacity to respond to emerging labour market needs</li><li>• Promote lifelong learning through the development of a learning culture</li></ul>
<b>Results</b>	Annual progress report not yet available
<b>References, background reports or reference websites</b>	Action plan available at: <a href="http://www.ednet.ns.ca/pdfdocs/skills_learning/skills_action_plan06-07.pdf">http://www.ednet.ns.ca/pdfdocs/skills_learning/skills_action_plan06-07.pdf</a>

**YUKON**

<b>Title of Initiative</b>	Northern Strategy Training Program
<b>Contact Information for Unit*</b>	Barbara Larman, Human Resources Training Consultant, Highways & Public Works, Yukon Government @ 1-867-667-3560 or Stu Purser, A/Safety Officer, Highways & Public Works, Yukon Government, Transportation Maintenance Branch @1-867-667-8197
<b>Brief Description of Initiative (one or two sentences)</b>	Using current hiring processes tailored to First Nations recruitment of labourers and heavy equipment operators. Use rigorous orientation, assessment and training programs to teach and evaluate employees as they progress through their training plans.
<b>Results (indicators of success)</b>	Certification at three levels of operating ability and retention of employees for the longer term. Trained First Nation people, who are job ready as opportunities become available so that local residents of communities can work in their communities, make a living and be with their families. This initiative also eliminates the need for qualified people from outside the community being compensated in addition to salary for community allowance, per diems and housing to come to the community to work when local residents are unemployed within their own community.
<b>References, background reports or reference websites</b>	N/A
The Skills Task Force maintains a Compendium of Successful Skills Initiatives ( <a href="http://www.comt.ca/english/reports-e.htm">http://www.comt.ca/english/reports-e.htm</a> ). May we telephone the contact above to discuss including this project in the compendium?	
<input type="checkbox"/> X Yes <input type="checkbox"/> No <input type="checkbox"/> This project is already in the compendium. Please update using this information.	

**TRANSPORT CANADA**

<b>Title of Initiative</b>	Knowledge Building and Technology Transfer in Intelligent Transportation Systems
<b>Contact Information for Unit*</b>	Susan Spencer Director Intelligent Transportation Systems Policy Branch Transportation Technology and Innovation 613- 990-9681
<b>Brief Description of Initiative (one or two sentences)</b>	1) Three Centres of Excellence provide much needed, targeted funding directly to Canadian universities to help promote and encourage professors from a variety of academic and professional disciplines to embrace Intelligent Transportation Systems research and help build the talent pool of transportation knowledge workers in Canada. 2) Transportation industry secondments are used to attract selected, recognized transportation leaders and/or experts with strong practical and operational experience from the provincial, municipal or private sector organizations to work on shaping transportation policy and programs at Transport Canada. 3) Send TC staff on sabbatical to act as knowledge ambassadors by working directly in provincial and private sector organizations or at centres of excellence to gain either practical operational experience academic knowledge or.
<b>Results (indicators of success)</b>	1) Three Centres of Excellence in ITS are fully operational across Canada, producing both PhD and Masters graduates. 2) A fully functional program is in place with at least two experts from our partners working on secondment for TC. 3) A fully functional program is in place with at least two TC staff members working on sabbatical at our partners.
<b>References, background reports or reference websites</b>	

**TRANSPORT CANADA**

<b>Title of Initiative</b>	Transit-Secure Contribution Program
<b>Contact Information for Unit*</b>	Annette Aucoin: Manager – Contributions Program, Rail and Transit Security, Transport Canada (613) 990-2887 <a href="mailto:Aucoian@tc.gc.ca">Aucoian@tc.gc.ca</a>
<b>Brief Description of Initiative (one or two sentences)</b>	Transport Canada is supporting the training of rail and transit security personnel by way of the Transit-Secure Contribution Program. Through this program, the government has allocated funding for various training initiatives to passenger rail and transit operators in the six highest-volume urban transit systems in Canada.
<b>Results (indicators of success)</b>	Through the four rounds of Transit-Secure funding initiated since the program was established in 2006, financial support for a number of different security training programs has been approved. Operators that received funding in this area are in the process of developing their security training programs.
<b>References, background reports or reference websites</b>	<a href="http://www.tc.gc.ca/Vigilance/sep/rail/Contribution_Program/menu.htm">http://www.tc.gc.ca/Vigilance/sep/rail/Contribution_Program/menu.htm</a> <a href="http://www.tc.gc.ca/mediaroom/releases/nat/2006/06-h138e.htm">http://www.tc.gc.ca/mediaroom/releases/nat/2006/06-h138e.htm</a>
	The Skills Task Force maintains a Compendium of Successful Skills Initiatives ( <a href="http://www.comt.ca/english/reports-e.htm">http://www.comt.ca/english/reports-e.htm</a> ). May we telephone the contact above to discuss including this project in the compendium? <input type="checkbox"/> Yes

**TRANSPORT CANADA**

<b>Title of Initiative</b>	Memorandum of Understanding – Railway Security
<b>Contact Information for Unit*</b>	Aaron McCrorie: Director - Programs, Rail and Transit Security, Transport Canada (613) 991-6477 <a href="mailto:Mccrora@tc.gc.ca">mailto:Mccrora@tc.gc.ca</a>
<b>Brief Description of Initiative (one or two sentences)</b>	On 15 November 2007, the Government of Canada and the Railway Association of Canada signed a Memorandum of Understanding (MOU) on Railway Security. This MOU recognizes that rail and transit operators need to develop effective security training programs in order to address outstanding security concerns and gaps, and identifies a series of measures that operators should take in order to meet needs in this area.
<b>Results (indicators of success)</b>	As the MoU was signed by the government and the RAC on 15 November, it is too early to assess the success of this initiative.
<b>References, background reports or reference websites</b>	<a href="http://www.railcan.ca/sec_new/en_new_details.asp?newId=1173">http://www.railcan.ca/sec_new/en_new_details.asp?newId=1173</a> Memorandum of Understanding Railway Security - RDIMS Document No # 3711184 v2.
The Skills Task Force maintains a Compendium of Successful Skills Initiatives ( <a href="http://www.comt.ca/english/reports-e.htm">http://www.comt.ca/english/reports-e.htm</a> ). May we telephone the contact above to discuss including this project in the compendium? <input type="checkbox"/> Yes	

**TRANSPORT CANADA**

<b>Title of Initiative</b>	Training in Safety Management Systems, Quality Assurance, Interviewing Techniques
<b>Contact Information for Unit*</b>	Kim Current Director, Aviation Learning Services Transport Canada 613 990-3729
<b>Brief Description of Initiative (one or two sentences)</b>	a) Ongoing training being developed and in some cases being delivered to Transport Canada staff to answer the growing needs in these specific areas. b) The Canadian Aviation Maintenance Council (CAMC) in partnership with HRSDC has developed learning tools and curricula to cater to the skills shortage in Safety Management Systems. Transport Canada's role in the project is as technical advisors by contributing subject matter knowledge and learning curriculum developed to date, to foster the development of partnerships, and to act as one of the stakeholders assisting to render the project a success.
<b>Results (indicators of success)</b>	Conversion from prescriptive to performance –based activities Risk management process being utilized for decision-making More safety analysis Continued safety promotion and education Initiating safety management documentation and information management Continued safety performance monitoring
<b>References, background reports or reference websites</b>	

**TRANSPORT CANADA**

<b>Title of Initiative</b>	Changing of the Guard
<b>Contact Information for Unit*</b>	Christiane Lamoureux Transport Canada A/Manager, Resources, Planning & Special Projects <a href="mailto:lamourc@tc.gc.ca">lamourc@tc.gc.ca</a> (613) 990-1149
<b>Brief Description of Initiative (one or two sentences)</b>	Maintain skills in legislative and regulatory drafting, socio-economic and scientific analysis, communication, and public consultation; Focus on technical/scientific personnel; Reinforce training programs – inspector, investigation and enforcement
<b>Results (indicators of success)</b>	Well rounded workforce that serves the program's needs
<b>References, background reports or reference websites</b>	TDG Human Resources Plan
The Skills Task Force maintains a Compendium of Successful Skills Initiatives ( <a href="http://www.comt.ca/english/reports-e.htm">http://www.comt.ca/english/reports-e.htm</a> ). May we telephone the contact above to discuss including this project in the compendium?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> This project is already in the compendium. Please update using this information.	

## **TRANSPORT CANADA**

<b>Titre de l'initiative</b>	Conseil canadien des ressources humaines en camionnage (CCRHC)
<b>Coordonnées des personnes-ressources dans l'unité*</b>	<p>Marie-Eve Dorval, Analyste, RHDSC (819) 994-6550 <a href="mailto:marieeve.dorval@hrsdc-rhsc.gc.ca">marieeve.dorval@hrsdc-rhsc.gc.ca</a></p> <p>Linda Gauthier, Directrice, CCRHC (613) 244-4800 <a href="mailto:lgauthier@cthrc.com">lgauthier@cthrc.com</a></p>
<b>Brève description de l'initiative (une ou deux phrases)</b>	<p>Le CCRHC est financé par le programme des conseils sectoriels (RHSDC). Le CCRHC a pour mandat d'aider l'industrie canadienne du camionnage à recruter, former et à maintenir en place les employés dont elle a besoin pour répondre aux exigences actuelles et futures.</p> <p>Les CCRHC a été créée POUR l'industrie PAR l'industrie afin de mener des recherches et mettre sur pied des solutions aux défis auxquels fait face l'industrie. Le CCRHC est le leader en matière de pratique des ressources humaines au sein de l'industrie. Le CCRHC gère différents projets qui couvrent toute une gamme de sujets, dont :</p> <ul style="list-style-type: none"> <li>• Le CCRHC établit des normes nationales de profession.</li> <li>• Le CCRHC sensibilise l'industrie à l'importance des compétences essentielles.</li> <li>• Via le CCRHC, les représentants de l'industrie et des gouvernements ont mis leurs efforts en commun afin d'évaluer la problématique entourant la pénurie de chauffeurs de sorte de trouver des solutions en matière d'émission de permis, d'accréditation de formations et d'immigration.</li> <li>• Le CCRHC développe des outils et produits RH propres à l'industrie du camionnage, tels que des curriculums de formation, des programmes de reconnaissance des compétences, de l'information sur la main-d'œuvre du secteur, de l'information sur les possibilités de carrière dans l'industrie, etc.</li> </ul>
<b>Résultats (indicateurs de succès)</b>	<p>Depuis 2002 :</p> <ul style="list-style-type: none"> <li>• Le taux de roulement a diminué de 36% à 22%.</li> <li>• 25% des employeurs offre maintenant davantage de formation.</li> <li>• Les employeurs offrent désormais des avantages et incitatifs pour attirer des chauffeurs et les garder.</li> </ul>
<b>Références, rapports circonstanciels ou sites Web de référence</b>	Le moteur de l'économie canadienne, phase 2 ( <a href="http://www.cthrc.com">www.cthrc.com</a> )

**TRANSPORT CANADA**

<b>Title of Initiative</b>	Marine Sector Advisory Committee
<b>Contact Information for Unit*</b>	Andy Hofstaetter (HRSDC) <a href="mailto:andreas.hofstaetter@hrsdc-rhdsc.gc.ca">andreas.hofstaetter@hrsdc-rhdsc.gc.ca</a> (819) 997-4175  Sonia Gauthier <a href="mailto:sonia.c.gauthier@hrsdc-rhdsc.gc.ca">sonia.c.gauthier@hrsdc-rhdsc.gc.ca</a> (819) 994-1723  Lucie Abalain <a href="mailto:lucie.abalain@hrsdc-rhdsc.gc.ca">lucie.abalain@hrsdc-rhdsc.gc.ca</a> (819) 934-3305  Phil Mickle <a href="mailto:phil.mickle@hrsdc-rhdcc.gc.ca">phil.mickle@hrsdc-rhdcc.gc.ca</a> (819) 994-3921
<b>Brief Description of Initiative (one or two sentences)</b>	This project is at its initial stage. We are presently evaluating if we will partner with the marine sector and if we do, we are unsure if it will be through a Sector Council or a Skills Table.
<b>Results (indicators of success)</b>	N/A
<b>References, background reports or reference websites</b>	<a href="http://www.lmiworks.nl.ca/locindinti/mcs_report.pdf">http://www.lmiworks.nl.ca/locindinti/mcs_report.pdf</a> <a href="http://www.lmiworks.nl.ca/locindinti/pps_jan05.pdf">http://www.lmiworks.nl.ca/locindinti/pps_jan05.pdf</a> <a href="http://www.lmiworks.nl.ca/locindinti/InTheSameBoat.pdf">http://www.lmiworks.nl.ca/locindinti/InTheSameBoat.pdf</a> <a href="http://www.bcmarine.org/~bcmarine/wmc/documents.php?type=6">http://www.bcmarine.org/~bcmarine/wmc/documents.php?type=6</a> <a href="http://www.marinecareers.ca/mr.pdf">http://www.marinecareers.ca/mr.pdf</a>
The Skills Task Force maintains a Compendium of Successful Skills Initiatives ( <a href="http://www.comt.ca/english/reports-e.htm">http://www.comt.ca/english/reports-e.htm</a> ). May we telephone the contact above to discuss including this project in the compendium?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> This project is already in the compendium. Please update using this information.	

**TRANSPORT CANADA ONTARIO REGION**

<b>Title of Initiative</b>	1) Classification/organizational design 2) Developmental Strategy
<b>Contact Information for Unit*</b>	Calvin Wong A/Regional Director, Human Resources Transport Canada, Ontario Region 4900 Yonge Street, Suite 300 Toronto, Ontario M2N 6A5 Telephone: 416-952-0302 Facsimile: 416-952-9588 E-mail: wongc@tc.gc.ca
<b>Brief Description of Initiative (one or two sentences)</b>	1) The hiring of the right individuals will be critical since many branches will be balancing current and future needs. Many branches such as Security and Emergency Preparedness (SEP), Marine, Surface, and Civil Aviation are shifting from requiring only highly technical skills, to skills associated with quality management, auditing and oversight - that will enhance the technical skills. These branches will be reviewing the requirements of the job and work descriptions to ensure the asset skills needed for the position are matched. There may also be a need to restructure their branch to ensure there is an appropriate balance of resources to manage their business priorities such as in Civil Aviation. 2) The creation of feeder groups, student hiring and student bridging, developmental programs, and succession planning are the different strategies used to ensure the Region will have qualified internal candidate pools over the next several years. Civil Aviation will provide/develop internship opportunities for students and use bridging mechanisms to take advantage of Canada's growing populations. They will work with post-secondary institutions to provide input into programs to ensure future feeder groups exist for projected requirements of the Branch.
<b>Results (indicators of success)</b>	Having the right people in the jobs and being able to create sufficient qualified pools to fill anticipated vacancies.
<b>References, background reports or reference websites</b>	Ontario Region Integrated Business and HR Plan 2006-2009