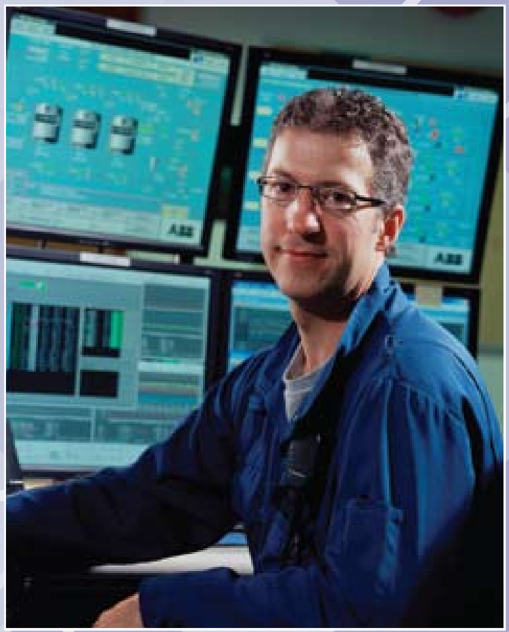
A Workforce Strategy For Alberta's
Supply Chain Logistics Industry



Building and Educating
Tomorrow's Workforce
Alberta's 10 Year Strategy

FOREWORD

A Workforce Strategy for Alberta's Supply Chain Logistics Industry was developed by stakeholders from this sector with support from the Alberta government. Stakeholder representatives were involved in a series of discussions between November 2007 and October 2008 and the input from those sessions forms the content of this strategy. Individual associations have identified actions they support and to which they will contribute with related projects and initiatives. The following organizations participated in the development of this workforce strategy:

- Agrium Inc.
- Alberta Motor Transport Association
- BJ Services Company Canada
- Brenntag Canada Inc.
- Calgary Chamber of Commerce, Transportation & Logistics Committee
- Calgary Economic Development
- Calgary Logistics Council
- Canadian Supply Chain Sector Council
- CF Canada
- Edmonton Airport Authority
- International Brotherhood of Teamsters
- Lafarge Canada Inc
- Joint Learning Initiative
- Supply Chain & Logistics Association Canada
- The Van Horne Institute
- Western Transportation Advisory Council
- Women in Logistics

BACKGROUND

While Alberta is a leader in economic growth in Canada, the province is faced with labour and skill shortages that will persist into the future. If these issues are not addressed, they will limit our province's continued economic growth and prosperity.

Building and Educating Tomorrow's Workforce (BETW) is Alberta's comprehensive labour force development strategy. This strategy, released in 2006, identifies 17 government-led priority actions to ensure the province has more workers, better trained people and innovative workplaces. These government actions address labour force issues across several industry sectors. Individual government ministries are responsible for implementing the priority actions that fall under each ministry's specific roles and mandates.

Meeting Alberta's labour force challenges over the next decade requires the participation and involvement of all stakeholders. Strong collaboration and partnerships between government and various stakeholder groups are key to successful implementation of the BETW strategy. Stakeholders include industry, labour groups, professional organizations, volunteer and community agencies, education and training providers, Aboriginal groups and, where appropriate, other orders of government. Each stakeholder has an important role to play. Therefore, industry sectors will need their own actions and initiatives to address their unique economic pressures and challenges.

INDUSTRY WORKFORCE STRATEGIES

Industry is committed to playing a lead role in building and educating their workforce. The Alberta government is working with industry stakeholders to develop workforce strategies specific to each sector. These strategies provide a framework of industry-led actions to build the labour force needed to support continued growth over the long term. It is also a starting point for industry leaders to initiate discussion among their members as to what concrete actions are most important and require immediate action.

Because the workforce strategy is a framework to help industry identify actions and initiatives, industry may choose to enhance, add or delete some of the priority actions listed in the document. It is industry's responsibility whether or not to implement these actions. Government's role is to facilitate and enable industry to implement the sector-led workforce strategy.

High levels of co-operation and collaboration among stakeholders within an industry sector are required for successful implementation of the workforce strategies. Creative solutions and a synergistic approach to implementing initiatives work best when stakeholders come together in partnership. Therefore, government is working with industry to facilitate stakeholders coming together on common projects and initiatives.

Albertans will be the beneficiaries of this important collaboration to build Alberta's workforce during the next decade.

PROFILE OF ALBERTA'S SUPPLY CHAIN LOGISTICS INDUSTRY

Sector Definition

Alberta's supply chain logistics industry is a large and multi-faceted sector that is integrated into the value chain of virtually every other industry in the province.

For the purposes of this workforce strategy, supply chain logistics is defined as the strategic planning and management of sourcing, procuring, moving and storing materials, parts and finished inventory and the associated information flows related to that process. Increasingly referred to as supply chain management, this sector includes the following seven sub-sectors:

- **Logistics Information Systems –** the information/computer systems supporting the management of material, service, information and capital flows
- **Warehousing and Distribution** – receipt and storage, order picking and shipment of products
- **Transportation/Movement** – the movement of goods and people by road, rail or air including short-haul and long-haul trucking, courier, airlines, ports, railways, terminals and inter-modal facilities
- **Inventory/Material Control** – documenting and managing the supply of products in storage
- **Purchasing/Procurement** – planning, purchasing, inventory control, traffic, receiving, incoming inspection and salvage operations
- **Management** – senior managers involved in all sub-sectors
- **Marketing/Sales** – marketing, sales of products or services, customer service and support

Importance to the Provincial Economy

Supply chain logistics is an undeniable cornerstone of the Alberta economy. Virtually every enterprise in the province relies on a highly efficient supply chain logistics industry to do business. Supply chain logistics must bring these enterprises the materials needed to create products, process goods or offer services. Goods produced must also be moved to market. It is necessary that this movement of input materials and finished products be tracked at any point in the process. Delays, stalls and bottlenecks in this sector can cause other sectors to slow down or grind to a halt, causing damage to business and the economy.

Other industries recognize their dependence on this industry. For example, workforce strategy participants for the energy, construction and manufacturing sectors all identified supply chain logistics (and in particular, transportation) as being critical to their success. This is especially important in land-locked Alberta, which depends on road and rail transport to move goods to sea ports for shipping to offshore markets. Logistical factors are among the most important considerations made by industries when looking to select new locations for development.

Measuring the economic importance of the supply chain logistics sector in Alberta is difficult because the traditional data collection systems are not aligned with the rapid changes and expanding scope of this sector. Economic data presented in this section therefore comes largely from traditional interpretations of the sector, rather than the industry as a whole.

Transportation and warehousing, which is one of the sub-sectors of the supply chain logistics industry, is the fifth largest sector in Alberta's economy. It makes a significant contribution to the provincial economy as shown in the table below:

Transportation and Warehousing Statistics (Alberta)	
Gross Domestic Product (2006)	$8.8 billion[1]
% of Alberta's Gross Domestic Product (2006)	6%[2]
Contribution to Real GDP per hour worked (2005)	$40.49
Contribution to Real GDP per worker (2005)	$82,264[3]
Percentage of Alberta's $82 billion in international exports moved to market by truck, rail or air	40%[4]

Supported by a strong infrastructure of highway, rail and air transportation, Alberta has become western Canada's distribution hub for the retail, wholesale and manufacturing/processing sectors. There are more than 368,000 registered commercial vehicles in Alberta carrying goods within the province, between provinces and internationally.[5] This strong infrastructure provides access to booming markets in northern Alberta, as well as western Canada, the United States and offshore through the Asia-Pacific Gateway and Corridor Initiative. This access to markets is crucial. Because of Alberta's small population base, the province is highly dependent on this ability to export most of what it produces.

The transportation sub-sector consists of services offered by road, rail or air. Trucking activity accounts for 33 per cent of the gross domestic product (GDP) generated by this sub-sector and is one of the faster growing modes of transportation. By value, trucks are responsible for moving $7.01 billion or 29 per cent of Alberta's non-pipeline international exports value.[6]

Alberta's more than 8,000 kilometres of rail network transports petroleum, chemicals, grain, fertilizers, coal, metals and minerals, forest products and automotive shipments. Rail provides a vital link from the resource rich north through mainline service to points across the continent. It enables access to markets in the United States and, of increasing significance, to the west coast terminals that serve as gateways to overseas markets.

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1 Statistics Canada, 2007

2 Ibid

3 In comparison, Alberta's Real GDP for all industries was $40.34 per hour worked or $74,088 Real GDP per worker.

4 *Alberta's Transportation Advantage*, January, 2000

5 Ibid

6 2004 Alberta Transportation and Trade Report, http://www.infratrans.gov.ab.ca/INFTRA_Content/docType56/Production/pol299.htm

In terms of air transportation, Alberta is home to international airports in Edmonton and Calgary, providing direct service to many North American and international cities. These two airports were responsible for the movement of more than 18.3 million passengers in 2007.[7] In addition to passenger traffic, these airports are handling increasing volumes of international air exports. In 2004 the value of these exports totalled $1.84 billion.[8] The province's smaller regional airports support these domestic and international cargo services and also play a vital role in tourism and emergency medical and firefighting services.

The warehousing and distribution sub-sector is especially important in Alberta's urban centres, which are emerging as regional and national distribution hubs due to the province's favourable geographic location and vibrant economy. In addition to warehouse and distribution centres, companies in this sector provide supply chain management services for coordinating incoming and outgoing goods at major terminals, warehouses and distribution centres.

Employment

Most of the industry's available employment data is based on two key sub-sectors: transportation and warehousing. In 2007, 5.5 per cent of all employed Albertans or 105,800 people were directly employed in transportation and warehousing with many more closely tied to the industry. This number is expected to increase by an average of two per cent per year to 117,407 by 2011.[9] The sub-sector's unemployment rate of 2.5 per cent is well below the provincial rate of 3.5 per cent, which is, in turn, the lowest in Canada.[10]

In 2007, 55 per cent of people employed in this sector worked for companies with fewer than 100 employees (26.3 per cent for employers with fewer than 20 workers and 28.7 per cent for employers with 20 to 99 employees). Companies with 100 to 500 employees employed 26.7 per cent of workers in the industry and those with more than 500 workers accounted for 18.5 per cent.[11]

A large majority (72 per cent) of workers in the transportation and warehousing sub-sectors are male, much higher than the provincial workforce average of 54.9 per cent.[12] Studies at the national level indicate that while women were "reasonably" represented in supply chain logistics jobs, they tend to occupy lower level positions (e.g., operational versus managerial) and were found to earn approximately 20 per cent less than men.[13] In terms of age distribution, 73.9 per cent of all workers in this sector are between 25 and 54 years of age, and 16.8 per cent are 55 and over.[14]

The 2006 average hourly wage of $22.90 in the transportation and warehousing industry is higher than the provincial average of $22.40 and continues to rise. As well, the supply chain management industry was one

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[7] *The Calgary Airport Authority 2007 Accountability Report and a new day Annual Report 2007*, Edmonton Airports
[8] 2004 Alberta Transportation and Trade Report
[9] *Alberta Modified COPS Outlook 2006-2011*, Industry Employment Outlook
[10] *Industry Profiles: Transportation and Warehousing Industry*, Alberta Employment and Immigration, September 2008: 3
[11] Ibid
[12] Ibid
[13] *Strategic Human Resources Study of the Supply Chain Sector*, Canadian Supply chain logistics Skills Committee, 2005
[14] *Industry Profiles: Transportation and Warehousing Industry*, Alberta Employment and Immigration, September 2008: 6

of the top three industries to experience a significant increase in the average hourly wage rate, with the average rising from $21.57 in 2006 to $22.40 in 2007.[15]

However, compensation within this industry varies widely depending on the specific occupation. For example, the average annual salary for management positions, including management bonuses, was $86,532 in 2006.[16] The following tables illustrate the variation in compensation for different management positions and occupations.

Average Annual Total Compensation for Management Positions (Canada)	
Executive Managers	$120,781
Senior Managers	$96,135
Operations Managers/Supervisors	$68,944

Average Hourly Starting Wages in Transportation and Warehousing (Alberta)[17]	
Transportation Manager	$19.71
Truck Drivers	$20.13
Material Handlers	$14.18

Career opportunities in the supply chain logistics sector are wide-ranging, far beyond traditional careers as truck drivers, mechanics and shipper/receivers. Companies in this sector need supply chain logistics specialists, computer programmers, dispatchers, regulatory compliance specialists, safety and environmental experts and air traffic control supervisors. Some additional occupations that may be needed are inventory managers, sales and marketing personnel, rail transportation managers, accountants, loss prevention and quality control personnel and human resource specialists.

Outlook

The supply chain logistics sector is heavily integrated and influenced by the industries it serves as well as by changes in the marketplace. It operates in a dynamic environment with change being driven by national and international events such as natural disasters or major global economic fluctuations. These constant changes require the sector to adapt and respond rapidly.

The fluctuating cost of fuel, as well as growing concerns about greenhouse gas emissions, means the industry is seeking ways to both minimize costs and reduce its environmental footprint. At the same time, increased fuel costs have led some companies to apply what economists call a "neighbourhood effect," i.e., factories are being located closer to both suppliers and consumers in an effort to reduce transportation costs.

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[15] *Annual Alberta Labour Market Review,* 2006

[16] TSI Group, Canadian Transportation & Logistics, Supply Chain Sector Council and Logistics Canada and Laurier Business & Economics, 2007

[17] *Industry Profiles: Transportation and Warehousing Industry*, Alberta Employment and Immigration, September 2008: 7

As Alberta's economy moves towards more value-added products, the industry is responding with increased inter-modalism and containerization, which is changing the face of the industry. While adapting to these changes, the sector is expected to grow an average of 2.1 per cent annually from 2008 to 2012, slightly below the predicted provincial average, and provide 6.7 per cent of new jobs.[18]

Market Growth

In recent years the Asian market has played a significant role in driving import and export traffic. While the recent global financial crisis has moderated traffic volumes in this corridor, the Asian market is expected to continue to play an important role in trade with Alberta. Edmonton and area may serve as a major distribution hub for this market through the Port Alberta project taking shape at the Edmonton International Airport and communities in the northeast and northwest regions of the province. Port Alberta is aiming to be the location of choice for cargo and logistics-related business through a broad spectrum of coordinated regional facilities that will include freighter aircraft parking ramps, terminals, warehouse/storage and inter-modal transfer. This single point transportation infrastructure will serve as a solid complement to the far-reaching services of the Calgary International Airport, which provides western Canada's only main deck air cargo service direct to Asia and Europe. In fact, air cargo can be shipped from Calgary to anywhere in the world within 48 hours.

The oil sands development in the Fort McMurray region has put considerable strain on existing supply chain systems. While the downturn in the global economy and accompanying oil price reductions have contributed to a slow down in activity, the region will continue to play an important role in the production of bitumen and synthetic crude oil. Another development that may impact the logistics sector is the potential for the construction of upgraders in Alberta's Industrial Heartland (AIH) northeast of Edmonton. While this region of over 317 square kilometers already has significant petroleum industry developments in place, there are a number of additional multi-billion dollar oil sands upgrader projects under consideration. Liquidity issues in the market place, combined with low crude oil prices, have forced several upgraders to defer further investment until there is greater certainty in the market. Should these projects in Alberta's Industrial Heartland proceed, they have the potential to add to the labour force pressure for workers in the supply chain logistics field in an area of the province that has traditionally experienced significant demand for workers in other sectors such as construction and energy.

In addition to the upgrader projects, the Alberta government has identified a significant opportunity to create a world scale chemical cluster within the Capital Region (Edmonton and area). The chemical cluster would stimulate the development of world class eco-industrial refining and chemical initiatives in the AIH and northeast Edmonton. Further work continues on the development of this initiative, which if brought to fruition, will place additional pressures on the supply chain logistics industry.

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[18] Ibid

Implications for the Supply Chain Logistics Sector

This anticipated activity in the province will trigger considerable growth in the transportation sub-sector, particularly for trucking and air.[19]

The Alberta Motor Transport Authority is forecasting $7 billion worth of traffic between Alberta and the United States by 2013, double the current level.[20] Carriers will be looking to larger equipment combinations and new technologies to manage this growth, while grappling with a critical shortage of qualified drivers. Intelligent logistical systems and advanced vehicle communications are being adopted by many firms to manage the growth and offer competitive advantages to their customers.

Competition in the aviation industry is expected to increase with some regional airlines expanding their services internationally. Rising costs for fuel and labour shortages will challenge the viability of smaller airlines and regional airports in the province. Consolidation in the air freight industry may continue as an avenue to cost cutting.

The rail component anticipates current volumes of transport in coal, fertilizer, sulphur, forest and agricultural commodities to remain relatively constant for the near term. It is expected to experience growth in fertilizer, petrochemicals, other manufactured products and inter-modal traffic. Railways will need to focus on productivity and operating margins and seek new innovations in order to grow the industry.

The future may also see an increase in shipping by barges on Alberta's northern waterways. To date, freight has been moved from Fort McMurray to communities and worksites in northern Canada. This may be expanded as increased development occurs in the north. There is also the possibility that in coming years large oil sands processing equipment will be built in Asia and moved by boat and barge across the Pacific and then up the Mackenzie, Slave and Athabasca rivers to mining sites in the Fort McMurray area.

The warehousing and distribution sub-sector is growing in Alberta due to a positive business environment and the province's central geographic location. This sub-sector will maintain its importance in the future as many firms are outsourcing their warehousing and distribution needs. Cost effective, state-of-the-art computer systems will be required throughout the industry for it to remain competitive.

Logistics Labour Market Trends

The Alberta Occupational Demand and Supply Outlook forecasts supply shortages in transportation officers and controllers, other transport equipment operators and related worker occupations every year between 2005 and 2015, driven in large part by an increase in construction projects. While there is considerable discussion

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[19] *The Transportation Sector in Alberta: Present Position and Future Outlook: An Update*, The Van Horne Institute and Prologue for the Alberta Economic Development Authority, April 30, 2005

[20] Ibid

about a shortage of truck drivers, many in the industry indicate it is not so much an issue of supply as it is a shortage of qualified truck drivers who hold a Class 1A licence. A 2007 study by the Canadian Trucking Human Resources Council[21] identified an escalating shortage of qualified Class 1A commercial truck drivers across Canada, and 80 per cent of employers surveyed felt this shortage will worsen over the next five years.

Nationally, strong demand is predicted for strategic business managers, supply chain specialists including planners and analysts, logistics information systems analysts (e.g., systems and data), and supply chain-specific customer/client-focused staff in sales, account management and client management.[22] When factoring in new job creation, retirement and turnover, the total new employee demand growth rate is set nationally at 12.3 per cent or 86,300 employees. Clearly, there are opportunities for employment in this sector.[23]

Challenges and Issues

Alberta's supply chain logistics industry operates in a dynamic and challenging environment that is constantly impacted by global events. It is a sector that both proactively drives and reactively responds to change. This means the industry faces a number of labour force challenges; these are listed below and divided into four central themes.

Public Perceptions of the Industry

- **Limited public profile for the supply chain logistics sector.** There is a general lack of public awareness of the industry, both in terms of what occupations and opportunities exist in the sector and its importance in the everyday lives of Albertans and Canadians. This lack of awareness limits the number of people considering careers in supply chain logistics, as well as the required support/momentum for addressing issues in the industry. Moreover, public perception of employment in the industry is often limited to outdated and negative images of long-haul truck drivers, for example, without an understanding of the breadth and diversity of options for a career in supply chain logistics.

- **Labour force data is fragmented and difficult to find.** Several studies have indicated a need for expanded collection and centralized dissemination of current, useful labour market information for the supply chain logistics industry, both provincially and nationally. The United States by comparison, has developed a Transportation Services Index that measures the importance to the economy of the movement of freight and passengers. Amendments to statistical data collection and analysis are needed to more accurately capture the scope and diversity of the industry beyond conventional fields such as transportation and warehousing, and to provide a basis for effective analysis of labour market issues and workforce development. There is also a need for more consistent use and interpretation of the data by and for the industry. Labour market information needs to be organized in a format that is more useful and relevant to the industry and easily accessible via the Internet.

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[21] *Canada's Driving Force, Phase 2: Integrated Summary Findings*, Canadian Trucking Human Resources Council, 2007
[22] *Strategic Human Resources Study of the Supply Chain Sector*, Canadian Supply chain logistics Skills Committee, 2005
[23] *Strategic Human Resources Study of the Supply Chain Sector (PowerPoint Presentation)*, Canadian Supply Chain Sector Council PowerPoint Presentation, Fall 2005

Changing Face of the Industry

- **Dynamic changes in global traffic.** Alberta's supply chain logistics sector is taking its place on the global stage, moving the horizons of trade from local and provincial destinations to points anywhere in the world. Increases in trade with Europe, South America and emerging markets are contributing to changes in the trade corridors. One example is the unprecedented increase in freight flowing through the Asia-Pacific Gateway and Corridor. This massive movement of goods from the west coast through to central Canada and the American mid-west competes with and ties up supply chain logistics and transportation capacity that may be required by Alberta businesses. Simultaneous to the increase in imports is the significant growth in exports through the Asia-Pacific gateway. This dramatic increase, particularly in the transport of grain, sulphur, potash and coal is driving the need for more workers in port facilities, rail and inter-modal elements of the industry.

- **Increased qualifications needed.** The supply chain logistics industry operates in an increasingly complex and sophisticated environment. The strategic importance of staying competitive in a global market means new entrants, as well as those advancing through the industry, need specialized training to meet industry needs. Logistics must also be identified as a bona fide profession and logistics practitioners as certified professionals. The growth in supply chain programs offered at the post-secondary level will help secure this status.

- **Pressures on system infrastructure.** While the demand is there, system capacity and maintenance of the surface transportation infrastructure is a concern. Container and hopper car congestion in west coast ports adds pressure to the rail transportation systems and related infrastructure. Increased use of transport vehicles on Alberta's highways has an impact on the building and maintenance of a high quality road network. Alberta needs to be proactive in managing increased traffic while ensuring capacity is available to move exports out of the province. However, efforts to increase the capacity (e.g., road/rail expansion or improvements) will create an additional demand on the province's already tight labour supply.

- **Work of the industry is becoming 24/7/365.** The supply chain logistics industry is increasingly under pressure to deliver every day, around the clock to respond to business trends such as just-in-time (lean production) processing. In the past, stock was delivered in large volumes to companies that stored the products in warehouse facilities. With just-in-time processes, companies do not store large inventories. They expect to receive their products when they need them and are not prepared to wait. Moreover, in an era of instant, global information flows and high-tech tracking technology, companies expect to be able to track where their orders are at any point in the process. Responding to enhanced consumer/customer demands requires sophisticated supply chain logistics information systems to communicate and acquire products on an as-needed basis. This increases the need for technical infrastructures and technically skilled supply chain workers equipped to meet business demand. An additional challenge for human resource recruitment evolves from this round the clock environment. Many young people entering the workforce are not interested in shift work; they prefer careers that maintain work-life balance and employers who address lifestyle issues.

- **Variation in government regulations and cross-border trade.** Transportation of goods often means crossing multiple municipal, provincial and international borders, each of which may have different "rules of the road" governing transportation (e.g., hours of service, weights, material storage and dangerous goods), licensing requirements, customs, security and cross-border shipments. Managing and meeting all of these requirements increases the complexity of the work and the skills required of employees to learn, follow and document procedures.

- **Increased border delays and security restrictions.** In the post 9-11 era, cross-border traffic and shipments by rail, road and air have all faced substantially increased delays in entering and leaving the United States due to increased security processes. Some drivers may not even be able to gain security clearance for cross-border transport, adding yet again to the labour crunch.

- **Increased worker safety requirements set limits on operators' hours.** In the interests of safety for transportation workers and the public, new limits have been set on equipment operator hours. This means that those operating trains, planes and trucks must adhere to safety regulations that restrict hours of work while at the same time, balance efficient scheduling. This often means logistics-related companies need to hire more workers to fulfill requirements, further exacerbating labour shortages in the transportation sub-sector.

- **Increased public environmental concerns and regulations.** Like many industries, the supply chain logistics sector is responding to heightened awareness of and concern for the environment. This is reflected in new and proposed regulations such as those governing emission levels, hazardous materials safety compliance and fuel consumption. All links in the supply chain must meet increased environmental requirements and the logistics sector is seeking green practices that will limit their environmental footprint. New regulations may increase expenses, driving some out of the industry. For example, regulations concerning mileage and emission standards for commercial vehicles may increase the costs of buying new vehicles and result in owner/operators leaving the trucking sub-sector.

Changing Face of the Workforce

- **Shortage of appropriately skilled workers.** This is a challenge faced by all sectors in the supply chain logistics industry in order to meet forecasted growth. A shortage of skilled workers poses real problems for employers who find themselves competing with other industries to attract, recruit and retain employees. In the trucking sub-sector, for example, a national shortage of qualified commercial drivers with a Class 1A license was rated the most critical issue in the prairie provinces.[24]

- **Changing skills requirements.** Changes in the supply chain logistics industry such as the emergence of Alberta's major cities as regional distribution hubs, technological innovation in intelligent transportation

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[24] *Canada's Driving Force Phase 2 Integrated Summary Findings*, Canadian Trucking Human Resources Council, 2007

systems, globalization and enhanced information systems are all raising the bar in this industry and resulting in a need for specialized skills. Business acumen, interpersonal skills, problem-solving and analytical ability are increasingly seen as an essential foundation for many roles and a qualification for advancement in this sector. In addition, workers in this industry may find themselves needing to upgrade their technical skills and knowledge in new information systems, processes and technology. To produce graduates with the necessary skills, education and training programs need to be continuously developed, enhanced and expanded in order to evolve with the industry.

- **Education/training programs lack focus and cohesion.** National research[25] has revealed wide variation in supply chain focused educational programs in Canada, both in fundamental terms of reference and in how they define the scope and diversity of the industry and its occupations. Concerns have been raised about the quality and breadth of study in these programs and their lack of national integration. The need for high quality education and training is acute in an industry where many companies do not have internal development programs.

- **An aging workforce.** All facets of the supply chain logistics sector are dealing with an aging workforce. For example, statistics available from the Canadian Trucking Human Resources Council indicate a current national retirement rate for the industry of 3.2 per cent with the number of new hires failing to keep pace with those leaving the workforce.[26] In this situation, the industry not only loses its valued workers but also their skills and expertise. Proactive succession planning, knowledge management and the upgrading of skills for current employees in the industry are potential ways of responding to this challenge.

- **Attraction, recruitment and retention challenges.** Attraction and retention of talent, especially of knowledge workers who can capitalize on the technological innovations in the industry, is vital to the future growth and stability of the supply chain logistics sector. In a labour market characterized by rising labour costs and strong competition for the same workers, employers are challenged to attract, recruit and retain valued employees. Smaller companies face particular challenges, especially when competing with larger employers offering attractive compensation packages. The cost of training to enter some components of the industry (such as commercial truck driving) can be prohibitive. However, trainees are often not eligible for funding programs and do not receive the tax credits associated with community college and university tuitions.[27]

- **Increased risk to workplace health and safety.** The labour crunch means that work once reserved for seasoned employees is now passed on to less experienced workers who, according to statistics, are at greater risk for workplace injuries. In all sectors of the Alberta economy in 2007, workers aged 15 to 24 years constituted 11.9 per cent of the workforce, but accounted for 15.1 per cent of lost-time claims and 17.6 per cent of disabling injury claims. Likewise, across Alberta, new workers with less than six months on the job accounted for well over a third (38 per cent) of lost time injuries while making up only 16.3 per cent of the workforce.[28]

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[25] *Strategic Human Resources Study of the Supply Chain Sector*, Canadian Logistics Skills Committee, 2005

[26] *Canada's Driving Force, Phase 2: Integrated Summary Findings*, Canadian Trucking Human Resources Council, 2007

[27] "Groups Join Forces to Address Driver Shortage," Canadian Trucking Human Resource Council press release, Feb 2006

[28] *Occupational Injuries and Diseases in Alberta: Lost-Time Claims, Disabling Injury Claims and Claim Rates, 2007 Summary*, Alberta Employment, Immigration and Industry

Another demographic that must be considered is the rising number of workers with limited English language proficiency. In this case, employers must be sure that health and safety programs are not only soundly managed but effectively communicated.

Socio-Economic Factors

- **Pressures on the social infrastructure.** In Alberta, affordable housing, reliable transportation, and the availability of schools, doctors, dentists and childcare all play a role in the ability of an employer to attract workers and their families. Some communities in the province are struggling with an oversubscribed social infrastructure that could place a severe limit on future growth.

PRIORITY INDUSTRY ACTIONS

Industry has lead responsibility for implementing the priority actions in the supply chain logistics workforce strategy. Industry associations and labour groups working in this sector are best positioned to implement these actions to address their labour force issues and challenges.

A number of organizations within the supply chain logistics sector have indicated their willingness to be a contributor to one or more priority actions. These organizations are either involved in or will undertake activities or projects.

The contributing organizations which will undertake specific priority actions include:

- Alberta Motor Transport Association (AMTA)
- Calgary Chamber of Commerce, Transportation & Logistics (T & L) Committee
- Calgary Economic Development – Calgary Works (CED)
- Calgary Logistics Council (CLC)
- Canadian Supply Chain Sector Council (CSCSC)
- International Brotherhood of Teamsters (Teamsters)
- Joint Learning Initiative (JLI)
- The Van Horne Institute (VHI)
- Western Transportation Advisory Council (WESTAC)
- Women in Logistics

INFORM

Information sharing will play a vital role in addressing labour force pressures in Alberta's supply chain logistics sector. The Inform theme focuses on increased access to information to support informed decision-making on the part of employers, workers, youth entering the workforce and individuals considering employment in this sector.

1.1 Support the development of a multi-pronged communications/public awareness campaign to re-brand the image of the supply chain logistics industry and encourage more people to pursue careers in the sector (e.g., national or local campaigns or an industry week to promote the human resource needs, labour market information and career awareness opportunities for the sector).

JLI

1.2 Develop career promotional campaigns directed at five target markets: women (for example www.womeninlogistics.com); youth (including secondary and post-secondary students, parents and career practitioners); Aboriginal people; internationally trained individuals; and workers moving from one career to another.

Women in Logistics; JLI, WESTAC

1.3 Maintain communications with the Canadian Supply Chain Sector Council and industry associations to coordinate and harmonize activities that address priority actions.

JLI, VHI, CLC, CED, Calgary Chamber of Commerce T&L Committee

1.4 Solicit industry champions who can effectively promote the priority actions emerging from this strategy (Presidents/CEOs and other influential people in companies, unions or industry associations, for example).

AMTA, Teamsters, VHI, CSCSC

1.5 Plan and implement a strategy to increase employer awareness of, access to, and support for existing resources such as those produced by JLI and the educational programs available through post-secondary institutions in Alberta and the rest of Canada.

VHI, CSCSC, JLI

1.6 Engage Statistics Canada in dialogue with industry representatives to modify existing data collection to more accurately and fully describe the supply chain logistics industry and its labour force demographics and needs. For example, explore the potential of adopting or adapting the Transportation Services Index used in the United States.

CSCSC

ATTRACT

The Attract theme relates to attracting workers from outside Alberta to meet some of the demand for labour in Alberta's supply chain logistics sector.

2.1 Partner with the Alberta government to promote Alberta as a destination of choice for skilled workers in underperforming economies or industries in other provinces or countries.

CED

2.2 Continue to advocate to government for streamlining, expansion and modification of federal/provincial programs such as the Alberta Immigrant Nominee Program to encourage and facilitate immigration of workers to meet labour market needs.

Calgary Chamber of Commerce T&L Committee
CED, CSCSC

2.3 Work with the government to develop resources and create a database of resources for employers in supply chain logistics to support attraction and retention of immigrants, temporary foreign workers and inter-provincial migrants.

CED, CSCSC, WESTAC

2.4 Advocate for government to identify and address social infrastructure shortfalls such as a lack of affordable housing, reliable transportation and day care in Alberta communities facing a labour shortage in order to facilitate in-migration of workers.

CED, Teamsters

DEVELOP A HIGH PERFORMANCE WORKFORCE

The Develop theme has two components. The first focuses on building the capacity of Alberta's supply chain logistics workforce to support a transition to a more value-added and knowledge-based economy.

3.1 Develop, promote and support programs that prepare under-represented groups such as women, Aboriginal people, immigrants, Albertans with disabilities, and underemployed persons for employment in the supply chain logistics sector (e.g., pre-employment and pre-apprenticeship training).

Women in Logistics, CSCSC, AMTA

3.2 Increase support for individuals employed in the supply chain logistics sector to upgrade their knowledge and skills, including supervisory, management, apprenticeship and skilled trades training (e.g., part-time training, mentoring, workplace-based training, English in the Workplace classes).

JLI

3.3 Support development, delivery and access to a variety of learning systems through a range of innovative delivery models including the Internet.

VHI, JLI

3.4 Work with government to fund supply chain logistics programs at the secondary and post-secondary level.

VHI, JLI

3.5 Work with educational institutions to ensure that training programs align with industry needs and standards and are, whenever possible, articulated along a career pathway (e.g., serve on industry advisory boards of post-secondary institutions offering training in the industry).

VHI, JLI, CSCSC

3.6 Develop a retraining program to assist late-career, mature workers to shift into a career within the supply chain logistics sector.

CSCSC, Teamsters

DEVELOP A HIGH PERFORMANCE WORK ENVIRONMENT

The second component of the Develop theme relates to developing high performance work environments in Alberta's supply chain logistics sector. Examples include improving workplaces and work arrangements, increasing capital investment and technology adoption and improving business processes.

3.7 Support forums for collaboration and cooperation among government, industry, educational institutions and other stakeholders to contribute to workforce development in Alberta's supply chain logistics sector.

VHI, JLI, CSCSC, CED, CLC, WESTAC

3.8 Support the development of regional industry clusters or networks to address common problems such as training, labour shortages, productivity etc., facing companies in the supply chain logistics sector.

CSCSC, CLC, CED

3.9 Proactively identify and plan to address emerging workforce development needs. These may be issues such as the impact of new upgraders or other major industrial expansions on the Alberta logistics industry. It might also include the use of changing technology to address environmental concerns.

JLI

3.10 Encourage and equip employers to offer a range of innovative work arrangements such as telecommuting and the use of web-based collaboration tools such as SuperNet to meet virtually and reduce travel.

VHI, WESTAC

RETAIN

The Retain theme relates to enhancing the attractiveness of working in Alberta's supply chain logistics sector so that workers – including mature workers, immigrants, Aboriginal people and those who may experience difficulty maintaining employment – continue to work in the industry.

4.1 Identify and encourage the application of effective practices to help employers improve the retention of a more diverse labour force (i.e., mature workers, Aboriginal people, immigrants, women, under-employed Albertans).

Calgary Chamber of Commerce T&L Committee
CSCSC, WESTAC, AMTA

4.2 Support employers in implementing human resource practices that encourage mature workers to maintain employment (i.e., offer part-time or flexible work arrangements, phased-in retirement plans, mentoring and training roles, etc.) to ensure retention of technical and corporate knowledge in Alberta's supply chain logistics sector.

CLC, CED, CSCSC, Teamsters, WESTAC

4.3 Work collaboratively with community agencies representing the interests of under-represented groups to identify and develop strategies to attract and retain workers from under-represented groups.

CSCSC

4.4 Develop and offer workshops in valuing diversity to supervisory and front-line staff in Alberta's supply chain logistics industry to help improve the retention of under-represented groups in the industry.

CSCSC

4.5 Survey the industry to identify and showcase positive testimonials of people working in supply chain logistics as a means of celebrating and instilling pride in choosing a career in this sector.

CSCSC, VHI

MOVING FORWARD

The Supply Chain Logistics Industry contributors will work with their members to implement the actions found in this strategy. Based on feedback, they will select the concrete actions with the greatest and most immediate impact as priorities. The Government of Alberta will work with industry contributors in a facilitative and enabling role. This includes identifying situations where it is more effective and efficient to collaborate – within and across sector industries – on similar projects. Government will facilitate these opportunities, keep abreast of emerging issues and take further action as required.

Industry contributors may face some challenges in implementing the workforce strategy, including:

- obtaining the active involvement of industry members and other stakeholders;
- working with stakeholders such as associations and labour groups within and across industries;
- eliminating fragmentation and duplication of initiatives within and across industries;
- selecting the actions and initiatives with the greatest impact to work on first;
- identifying gaps in the priority actions in order to address both current and evolving needs, and;
- ensuring sustainability of the strategy over the long term.

The Supply Chain Logistics Industry will work with government to monitor success of this strategy over the next ten years. Industry contributors are asked to report on their progress by sharing achievements and best practices. By industry and government working together, Alberta will continue to excel and all industries will benefit.

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