



# TRANSPORTATION AND LOGISTICS

**SECTOR PROFILE** 

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The scope of the project was limited to research and an analysis conducted over a short time period. Analysis is primarily based on data and information provided by the City to KPMG, as well as secondary sources from research and third-party databases. KPMG neither warrants nor represents that the data and information contained in this Report is accurate, complete, sufficient or appropriate for use by any person or entity other than the City or for any purpose other than set out in the Engagement Agreement. The City is solely responsible for its decisions to implement any opportunities/options and for considering their impact.

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The procedures we performed do not constitute an audit, examination or review in accordance with standards established by the Chartered Professional Accountants of Canada, and we have not otherwise verified the information we obtained or presented in this report. We express no opinion or any form of assurance on the information presented in the report and make no representations concerning its accuracy or completeness.

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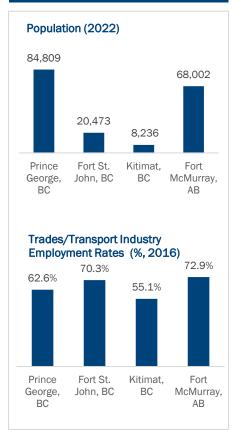


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### **Sector Overview**



Communities in BC see opportunities in truck and freight transportation.



Sector Profile				
	Prince George, BC	Fort St John, BC	Kitimat, BC	Fort McMurray, AB
Leading employers	<ol> <li>Red Spade Enterprises</li> <li>TRL Limited</li> <li>Excel Transportation</li> <li>PWTransit</li> <li>Landtran Logistics</li> </ol>	<ol> <li>Troyer</li> <li>Rosenau Transport</li> <li>Canadian Helicopters</li> <li>Mustang Transport</li> <li>Oculus Transport</li> <li>Manitoulin Transport</li> </ol>	<ol> <li>Kitimat Taxi Co.</li> <li>Bandstra</li> <li>BC transit</li> <li>TNC Agencies Canada Ltd</li> </ol>	<ol> <li>Diversified transport</li> <li>4 seasons transport &amp; towing company</li> <li>Intelcom transport</li> <li>Shipexpedite</li> <li>Big foot logistics Inc.</li> </ol>
Sub-sectors leading in the community	Rail transportation; Truck transportation; and Logistics park with development of Truck terminals and cargo courier facilities	N/A	N/A	N/A
Area of opportunities	Business opportunities in Transportation depots; Truck terminals; Warehousing and storage; Freight forwarding; and Retail and supply support	N/A	N/A	N/A

Source: Environics; third party data, KPMG analysis

### **Sector Overview**



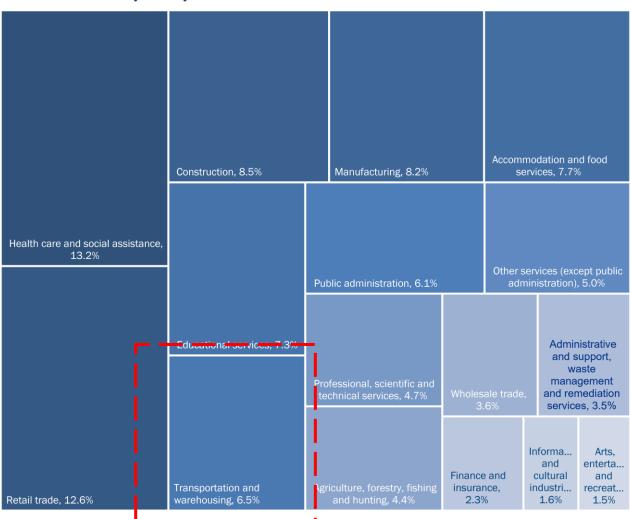
Sector Profile							
	Prince George, BC	Fort St John, BC	Kitimat, BC	Fort McMurray, AB			
Road Connectivity	Port of Prince Rupert (population 12,300) is 717 km (~8 hours)  Edmonton (population 10,10,899) is 730 km (~7.5 hours)  Calgary (population 13,06,784) is 783 km (~9 hours)  Port of Metro Vancouver (population 6,62,248) is 788 km connected Via Highway 16 (~9 hours)	Edmonton (population 10,10,899) is 663 km (~7hours)  Calgary (population 13,06,784) is 969 km (~9 hours)  Vancouver (population 6,62,248) is 1221 km (~14 hours)	Terrace (population 12,017) is 74 km (~1 hour)  Prince Rupert (population 12,300) is 218 km (~2.5 hours)  Prince George (population 89,490) is 643 km (~7.5 hours)  Vancouver (population 6,62,248) is 1492 km (~16 hours)	Lac la Biche (population 7,673) is 289 km (~3 hours)  Edmonton (population 10,10,899) is 434 km (~5hours)  Calgary (population 13,06,784) is 739 km (~7.5 hours)			
Rail Connectivity	Port of Metro Vancouver is connected via CN rail 82 rail hours from Chicago Connected to Jasper-Port Prince Rupert trade route via CN rail	Connected to CN rail and VIA rail network	Connected to CN Railways	Connected to Via Rail			
Air Connectivity	Prince George International Airport (YXS) is the fourth longest runway in Canada International airports near Prince George include – Kelowna, Edmonton, Vancouver, Calgary, and Victoria	Fort St. John Airport have daily, scheduled flights to Edmonton, Calgary and Vancouver.  International airports near Fort St John include – Edmonton, Calgary, Fort McMurray, Kelowna and Vancouver	Northwest Regional Airport (YXT) is located 50 km north of Kitimat. YXT is the largest flight service and passenger load west of Prince George and north of Okanagan region.  International airports near Kitimat include – Kelowna, Edmonton and Vancouver	Fort McMurray International Airport is the largest airport in northern Alberta. International airports near Fort McMurray include – Edmonton, Calgary, Saskatoon, Regina, and Kelowna			

CITY OF PRINCE GEORGE

## **Prince George – Businesses by Industry**



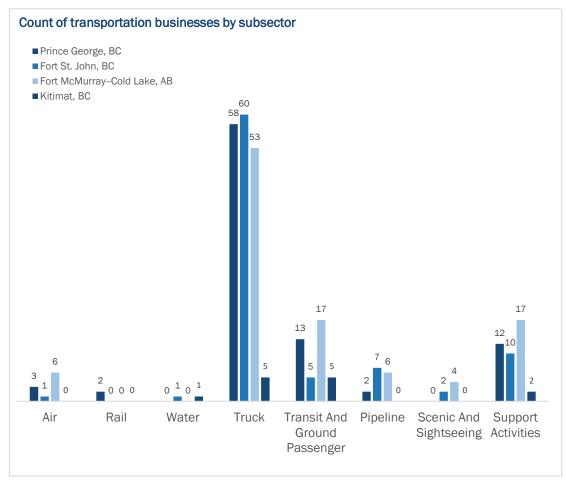
% of total businesses by industry



The Transportation and Warehousing industry ranks seventh among industry categories in Prince George, forming about 7% of overall businesses.







Prince George has the second highest number of transportation businesses (90) following Fort McMurray (103).

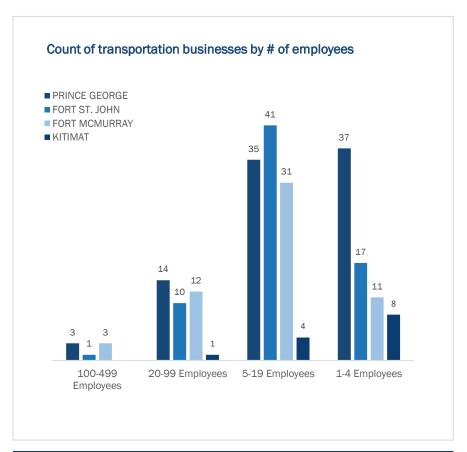
Truck transportation, representing transportation of goods, has the highest number of businesses in the sector profile.

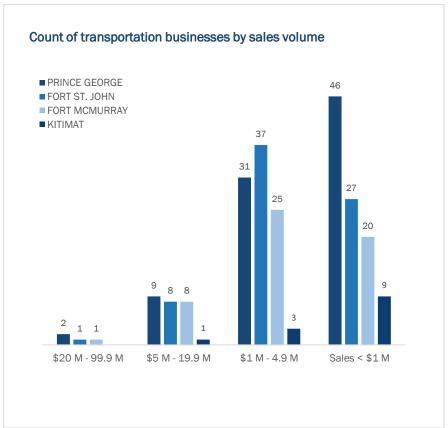
### Key transportation connections to Prince George include:

- Road access to regional markets and resource-related projects for reduced fuel and lack of congestion
- Air YXS offering international passenger and cargo capability only an hour from Vancouver
- Marine North America's closest port to key Asian markets, by up to three days
- Rail High capacity in the CN Intermodal Terminal that are efficient and cost effective

## **Transportation Businesses by Size**





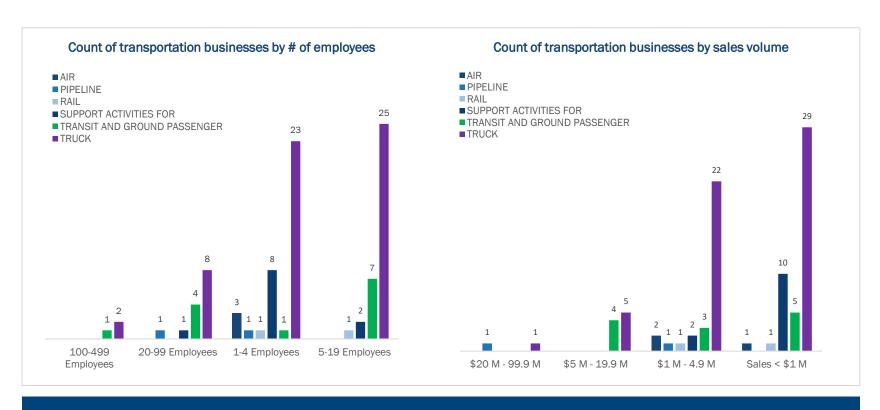


Prince George has the highest number of businesses among the four comparing sectors (89), leading in terms of mid-size (20-99 employees) and small businesses (1-4 employees).

Most of the transportation businesses are on the smaller side (<\$5M in sales) across Prince George and the benchmark communities .



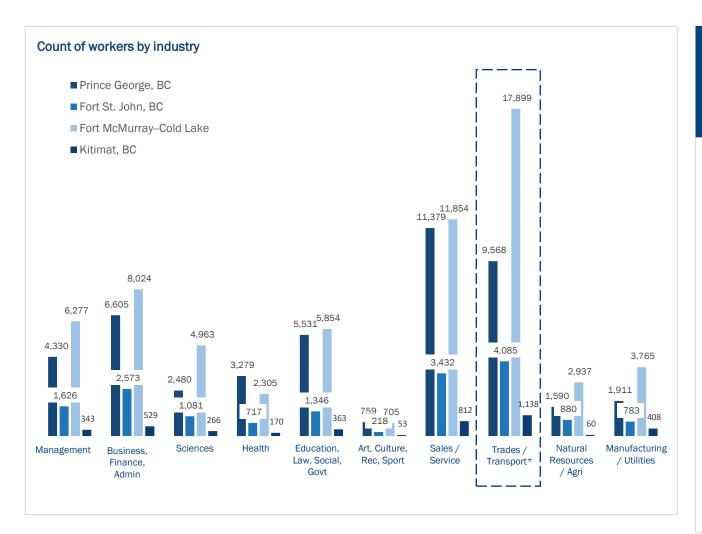




Truck transportation is the largest transportation subsector in Prince George in terms of business size and sales volume, larger than all the other logistics and transportation businesses combined.

## **Number of Workers By Industry**





### 20%

of Prince George's workforce are employed in the Trades/Transport industry

Prince George has the second highest number of workers in its total workforce (47,432), following Fort McMurray (64,583). The distribution of workers across different industries is similar for the comparison group.

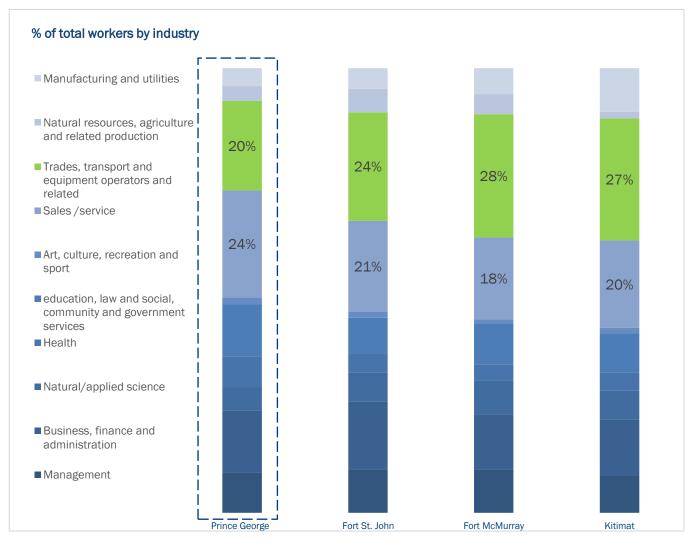
Prince George and Fort
McMurray have the highest
number of workers in the
trades/transport industry. The
trades/transport industry is the
second largest employer for
Prince George after the
sales/service industry.

Trades/transport employs ~24% the workforce across the comparable communities.

<sup>\*</sup>Include trades helpers/construction labourers, contractors, and construction/mechanical tradespersons, transportation operators, etc. Source: Environics; third party data, KPMG analysis

## **Number of Workers By Industry**





Trades / transportation / equipment operators represent the second highest industry by size in Prince George (20%), while it is the largest for other benchmark communities.

Overall industry distribution is similar across each community.

## **Prince George - Labour Force Access**





Surrounding communities within a 2 hour drive have transportation industry labour pools of ~5,000 employees in addition to Prince George's ~7,600.

The total labour pool of ~22,000 surrounds the city of Prince George, providing a sizeable labour force.

## **Demographic Profile of Transportation Workers**





#### **Profiling**

- In order to understand the demographic profile
  of the transportation labour forces in Prince
  George and benchmark communities, sample
  populations from a minimum of four leading
  transportation employers have been selected
  for each community.
- This sample population has been identified by collecting mobile/GPS location data via location-enabled apps found at each of the leading transportation companies.
- With this sample population, we can attempt to infer that these are transportation industry workers and create demographic profiles.

#### Prince George, BC

- 1. Red Spade Enterprises
- 2. TRL Limited
- 3. Excel Transportation
- 4. PWTransit
- 5. Landtran Logistics

#### Kitimat, BC

- 1. Kitimat Taxi Co.
- Bandstra
- 3. BC transit
- 4. TNC Agencies Canada Ltd

#### Fort St John, BC

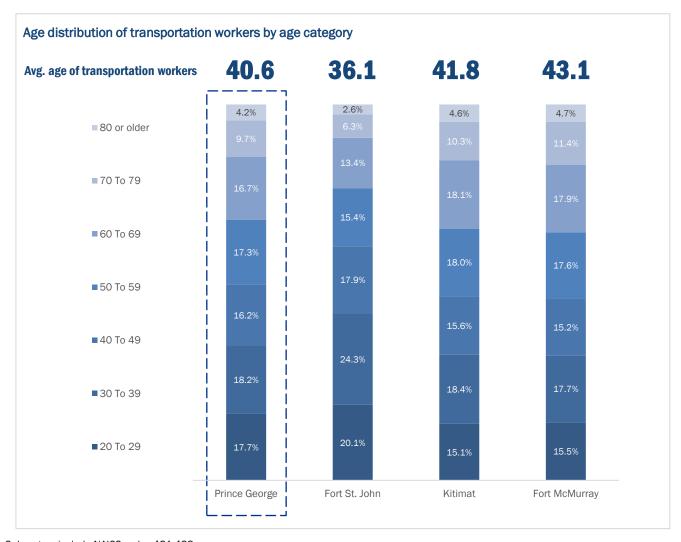
- 1. Troyer
- 2. Rosenau Transport
- 3. Canadian Helicopters
- 4. Mustang Transport
- 5. Oculus Transport
- 6. Manitoulin Transport

#### Fort McMurray, AB

- 1. Diversified transport
- 4 seasons transport & towing company
- 3. Intelcom transport
- 4. Shipexpedite
- 5. Big foot logistics Inc.

## **Demographic Profile - Age**





Compared to the other benchmark communities, Prince George's transportation worker age appears to be on the younger side.

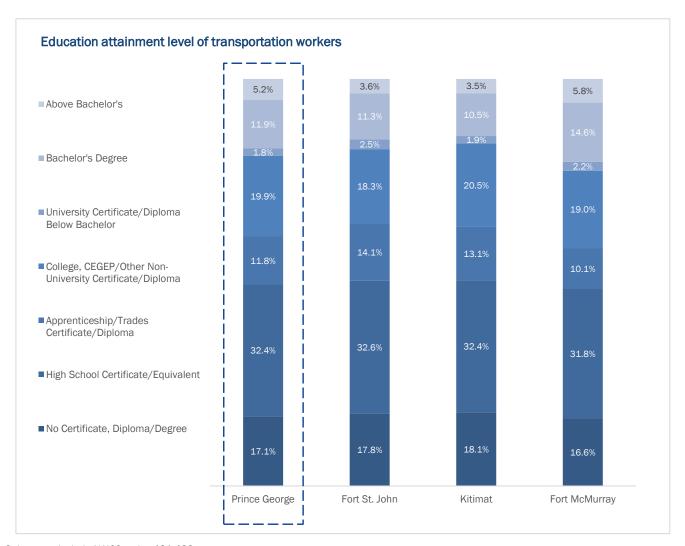
Prince George sits in the middle of Fort St. John and Fort McMurray in terms of the average age of transportation industry workers (40.6 vs. 36.1 and 43.1 respectively).

52% of Prince George's transportation workers are aged 20-49 vs. 62% for Fort St. John.

Note: Subsectors include NAICS codes 481-488 Source: Environics; third party data, KPMG analysis

## **Demographic Profile - Education**





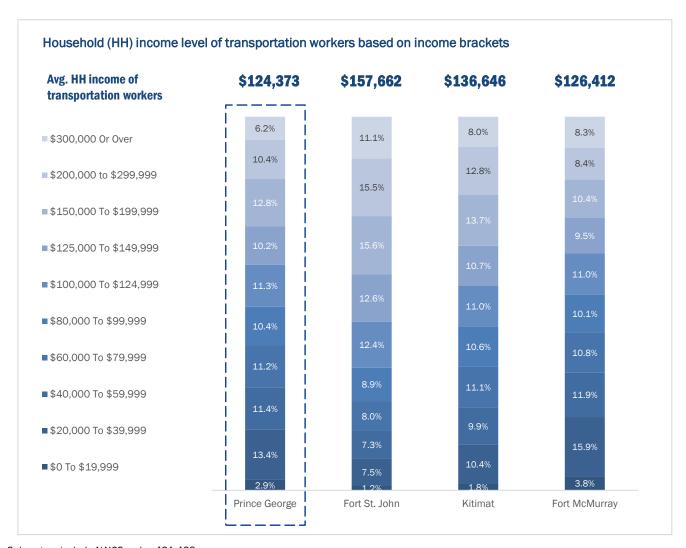
High School Certificate / Equivalent makes up the highest proportion of transportation worker education attainment across all four communities.

Prince George has the second highest number of education holders with a Bachelors Degree or above (17.1%) compared to Fort McMurray (20.4%).

Note: Subsectors include NAICS codes 481-488 Source: Environics; third party data, KPMG analysis

### **Demographic Profile - Income**





Prince George has the lowest average household income of transportation workers (\$124,373) compared to Fort St. John, which is the highest among the benchmark communities (\$157,662).

About half of Prince George's transportation workers are earning below \$100,000.

It appears that Fort St. John has a larger proportion of transportation workers earning over \$150,000 compared to the other communities.





## **Appendix**

- BC Trends
- Canada Trends
- Global Trends



## **British Columbia – Overview of Transportation & Logistics**

BC has been a key gateway of Canada's trade, accounting for 38% of overseas exports in 2018.

#### Capacity of Trade corridors call for expansion

01

Over the past decade, overseas exports increased by an average of 5.6% annually to a new high of \$146 billion in 2018, with British Columbia (BC) being a key gateway of Canada's trade, accounting for 38% of overseas exports. While capacity has expanded significantly as a result of investments by governments, port terminal operators, and railways, these investments have not been able to keep pace with the increase in overseas trade. As a result, there is a continued need to extend the capacity of Canada's trade corridors through strategic investments and data sharing in the transportation supply chain.

#### Congestion in Lower Mainland of BC

02

Capacity constraints in Canada's Western supply chain, particularly in the Lower Mainland of BC, are creating challenges for the movement of key commodities. Any congestion around the Port of Vancouver affects shippers far beyond BC, such as natural resource and agriculture developers in western Canada and risks undermining Canada's reputation as a reliable and efficient exporter. Currently, heavy rail and road traffic servicing the Port of Vancouver, which is Canada's largest and busiest port, handling approximately 43% of all traffic at Canada Port Authorities in 2018.

## **British Columbia - Trucking Trends**



Nearly 26,000 trucking companies are operating in B.C., providing efficient and flexible door-to-door transportation throughout the province. According to Statistics Canada, truck transportation was a \$2.3 billion industry in BC in 2016.

01

#### **Rising Fuel prices**

A perceived threat to oil supplies at the onset of Russia's war in the Ukraine caused gas prices to jump by almost 60 cents per liter, with even higher costs expected. Further, the refusal of governments to cut fuel taxes is reducing profitability in the industry. This could put the industry into an irreversible descent.

02

#### **Truck Driver shortage**

BC is facing cutthroat competition for drivers who are in short supply. The province's truck driver shortage increased 302% between 2015 and 2019, leaving 3,710 vacant positions. As of December 2022, on average, two of three (2/3) carriers faced 14.7 days of truck downtime every six months because of the driver shortage. Further Mandatory entry-level training (MELT) for new truck drivers announced in 2021 will increase training costs and will intensify the truck driver shortage.

03

#### Electric trucks and fuel-saving devices

The provincial government is providing incentives for motor carriers to adopt fuel-saving technology. The recently renewed CleanBC Heavy-duty Vehicle Efficiency Program offers rebates for up to 30 to 50% of eligible equipment costs, to a maximum of \$15,000 pre vehicle or \$100,000 per fleet.





There are 36 certified airports in B.C., providing domestic and international air service to businesses buying goods from B.C. as well as for delivering materials and merchandise to buyers in B.C.



#### Digitalizing cargo at airports

Kale Info Solutions is to implement its Airport Cargo Community System (ACCS) at YVR. Kale's system will enable advance shipment notifications to be sent from shippers, agents, and truckers to cargo handlers and airlines at the airport, bringing real-time updates and transparency on estimated arrival times, as well as details on actual cargo on board, facilitating communication between all stakeholders concerned.



#### Diversifying as a Global hub

YVR is seeking a partner for investment, completion of construction and lease-up of a 300,000 sq ft facility that is set to boost air cargo business.

YVR has selected Cushman & Wakefield as its exclusive advisor to secure a partner for the Airport Commerce Centre near the airport's main terminal on Sea Island.



## British Columbia - Government Initiatives & Climate Change (1/2)

#### **Trucking permits**

01

B.C. has facilitated the reduction of fuel use in the following ways: allowing the use of long-combination vehicles on designated highways means less truck traffic and lower GHG emissions, providing a weight exemption, up to a maximum of 225 kg, allows vehicles to carry an auxiliary power unit – eliminating the need for engine idling to power air-conditioning and other truck cab comfort, and expanding the divisible load permit program makes each vehicle more productive.

02

#### Weigh2GoBC

Weigh2GoBC allows commercial vehicles to bypass inspection stations using a network of Weigh-in-Motion and Automatic Vehicle Identification Transponder technologies. This provides savings in fuel use and reduces GHG emissions and costs.

03

#### Low carbon fuel standard

B.C.'s renewable and low-carbon fuel requirement mandates a 10% reduction in the carbon content of fuels by 2020, and 5% renewable content in gasoline (4% in diesel).

04

#### **Border crossings**

Working with partners in Washington State, the Province of B.C. designed and constructed new lanes to accommodate more efficient cross-border travel. Under the FAST program for commercial transport, border services scan pre-approved documents for expedited crossing, while all trade data declarations and verification are processed later.



## **British Columbia - Government Initiatives & Climate Change (2/2)**

05

#### Global Positioning Systems (GPS) at Port Metro

At Port Metro Vancouver, real-time monitoring tools help port users optimize operations, reducing wait times and idling. The Province provided \$560,000 to Port Metro Vancouver to equip over 1,700 trucks within the port's system with GPS units. These GPS units provide data to help track information in real-time for trucks en route to and from container terminals.

06

#### Canada Place

To improve air quality at Canada's busiest port, the Province invested \$3 million to enable cruise ships to plug in at Port Metro Vancouver. Shore power allows ships to turn off their diesel-fueled engines and use cleaner power while docked.

07

#### Port of Prince Rupert

The Province of British Columbia provided \$100,000 to the Port of Prince Rupert to support the installation of shore power to reduce emissions from berthed container ships. Now, when cargo ships come into this port, they can turn off their engines and plug into clean power.



## **Canada – Overview of Transportation & Logistics**

In 2021, the transportation and warehousing sector accounted for 3.6% of Canada's total GDP and engaged more than 5.2% of Canada's workforce. Within Canada's transportation and warehousing sector, truck transportation is the most widely used mode of transport to move goods in the country. It accounts for over 28% of the sector; rail transportation is the next most frequently used (11.4%). For domestic transportation, trucking was the preferred mode of transport for most goods in 2018, where 77.7% of the volume of goods transported within Canada was moved by truck, while 22.2% was moved by train and 0.1% by air

01

#### **International Trade**

While Canada has a broad and growing global trade network, opportunities exist to increase and diversify trade, particularly overseas, where the country has recently entered into trade agreements such as the Comprehensive Economic and Trade Agreement and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership.

02

#### Global growth opportunities

Intensifying global competition is leading to increasing demand by shippers to have their goods move efficiently, reliably and securely to wherever their customers exist, making for complex needs and supply chains. While the United States (U.S.) remains Canada's top trading partner, accounting for approximately 75% of all Canadian goods exports, growth opportunities are shifting to the Asia-Pacific market, with China, India and other Asian countries being potential drivers for Canada's Gross Domestic Product growth in the coming years.

03

#### Rail as an alternative means of shipping

Amid increasing production of crude oil in western Canada and a shortage of pipeline capacity, the rail system is providing an alternative means of shipping Canadian oil to market. The volume of oil shipped by rail, which has fluctuated widely in recent years, has increased significantly in 2019, and is expected to continue to provide an important alternative means of reaching export markets until additional pipeline capacity becomes available.

## **Canada - Transportation & Logistics**



01

#### Packed warehouses are causing high real estate prices owing to huge demand

Across the nation, the availability rate for industrial real estate in major markets has shrunk to 2.2%, from almost 3% a year ago, according to Altus Group. In Toronto and Vancouver, it's around 1%. In some municipalities near the Port of Vancouver, there is not a single square foot of vacant industrial space.

#### **MELT**

02

The Insurance Corporation of British Columbia (ICBC), took a dramatic step in prioritizing on-road best practices with its deployment of mandatory entry-level training (MELT), for all Class 1 license candidates.

Developed with input from the Ministry of Transportation and Infrastructure and the Ministry of Public Safety and Solicitor General, MELT's training guidelines exceed the National Safety Code Standard's Class 1 basic training conditions, requiring 140 total hours.

03

#### **ELD Enforcement**

The launch of certified electronic logging devices (ELDs) is causing some supply chain delays throughout Canada (including integration and equipment access), causing some provinces to push back against fines or official warnings.



## **Global – Overview of Transportation & Logistics**

The logistics, and transportation industry is expected to reach USD 13.3 trillion by 2027. The surge is owing to improved prospects in e-commerce logistics, mitigating threats arising from container shortage, closure of major ports causing port congestion, shortage of truck drivers, and restricted capacity in the air freight market. Some of the focus areas of this sector include:

#### **Intelligent Logistics**

01

Data management systems are embedded in most of the global sectors including manufacturing, supply chains, transport, freight, and others. The future of logistics, transportation, and supply chains will be defined by the data, analyzed with the aid of artificial Intelligence, and powered by Machine Learning, and Robotics. Internet of Things (IoT) and 5G wireless networks will be empowering a circular economy of logistics, empowering visibility and efficiency.

02

#### Sustainability

A responsible, meaningful logistics solution achieved by decarbonizing transport operatives, utilizing the recyclable materials involved to cut the wastage of resources, utilizing solar, wind, and other renewable energy resources, and installing hybrid assembly lines and efficient working space are the measures to stop wastage and pollution.

#### Workforce Diversity and driver shortage

03

The industry lags significantly in this area as compared to other industries. Further, the industry is facing major driver shortage issues owing to various factors such as - average truck driver age is 46, which means they reach retirement age more frequently than other workforces, the work conditions that require long solitary hours, and general assumptions about the role, may turn away others from the work, especially women. Some recommended efforts to combat these challenges have included increasing driver pay and home-time, initiatives to change the image of truckers, and other supply chain improvements.

## **Global - Transportation & Logistics**



01

#### Rising adoption of automated systems

An increase in the adoption of advanced technology for transportation such as high-speed rail systems and high-speed aircraft are being built in several countries which has created a huge opportunity for this market. For example, in 2020, the US government released a proposal for the development of the high-speed rail network by investing US \$240 billion nationwide that has potential to create around 2.6 million jobs in the country.

02

#### Growing e-commerce

The thriving e-commerce industry, along with the increasing availability of high-speed network connectivity, represents one of the key factors positively influencing the market. In addition, the shifting consumer preference toward online purchasing is driving the market. Online retail channels offer convenient home delivery services that are supporting the growth of the market.

03

#### **Green logistics**

Businesses are focusing on adopting green logistic solutions to reduce the environmental impact and improve the green credentials of their businesses (e.g., increase usage of commercial EVs for transportation). The focus of customers on sustainability is further propelling the need for green logistics. According to Forbes, 68% of shoppers plan to base future purchases on their own evaluation of which brands are committed to sustainability.

04

#### Real-time analytics and tracking

RFID chips and other advanced technologies, allows managers and industry leaders to have access to better real-time analytics and tracking. Latest logistics monitoring systems integrated with advanced technologies, such as blockchain, Augment Reality (AR), Artificial Intelligence (AI), and the Internet of Things (IoT). These systems track real-time information and provide predictive alerts of warehouse management, transportation, and delivery of the products.



## **Global – Transportation & Logistics Futuristic Trends**

01

#### Cloud-based systems and integrations

Ongoing development and distribution of new cloud-based systems and integrations allows logistics businesses to streamline their workflows, store and transfer information quicker and more securely, and even have better control over their finances.

02

#### **Autonomous vehicles**

Robotic transportation systems such as autonomous trucks are already beginning to run under a "supervised autonomy,". If they are appropriately designed and tested, autonomous vehicles have the potential to be safer, less expensive, and easier to manage than manually driven vehicles. In turn, that makes operating expenses lower, keeps the roads safer, and allows vehicle operators to find new, higher-level positions in their respective companies.

03

#### 3D Printing

3D printing can deliver products instantly with the help of a connected 3D printer. The supply chain will soon become much faster and more closely connected thanks to 3D printing, forcing logistics companies to adapt this technology.

04

#### Blockchain

The logistics industry is benefitting from decentralized ledgers and smarter inventory management. Blockchain technology, while difficult and expensive to implement in many cases, has the power to increase security, efficiency, and reliability of all forms of tracking and data management. Because blockchain technology is so flexible and still growing in terms of capabilities, its future potential seems almost unlimited.