

Action. Collaboration. Transformation.

Final Report of The National Supply Chain Task Force 2022



Government
of Canada

Gouvernement
du Canada

Canada

Letter to the Honourable Minister of Transport

Dear Minister,

The National Supply Chain Task Force is honoured to submit to you our final report, which embodies our urgent call to address Canada's transportation supply chain crisis. This report is the product of extensive consultations and engagements with a broad range of transportation organizations, stakeholders and industry experts across the country. Organizations and departments in the United States, Canada's largest trading partner, were also consulted to understand their perspectives on how to strengthen the North American supply chain.

A recurring theme in the report is the struggle of both government and industry to cope with uncertainties arising due to critical factors such as rapidly changing trade patterns, human- and climate-caused disruptions, shifting geopolitical risk, and increased consolidation in major transportation modes. As a medium-sized player in the global market, Canada is finding it difficult to overcome these challenges, which have exposed and exacerbated longstanding weaknesses in the Canadian supply chain.

To position Canada as a strong competitor in the global market and strengthen our economy, it is imperative that the Government of Canada join forces with industry stakeholders to address the transportation supply chain crisis. This report recommends taking a national approach to doing so, encouraging governments and private sector stakeholders to collaborate in building digital data hubs that will help improve our understanding of the intricate transportation network, which in turn will enhance planning and real-time decision making. It further recommends that Canada's regulatory framework be modernized to reflect the future needs of an evolving transportation system.

Additionally, the report includes a series of specific short- and long-term action items to help address operational shifts, service reliability and resilience, labour shortages, capacity constraints, infrastructure, supply chain visibility, regulatory certainty, and shifts in governance.

It has been a privilege for the Task Force to serve Canada, especially at a time when action, collaboration and transformation are so desperately needed. We owe thanks to all those who took the time to present their views, send their submissions and participate in various discussion platforms. Without them this report would not have been possible.

Submitted respectfully,

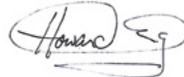
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Executive summary

Action. Collaboration. Transformation. These three words embody both the spirit of the recommendations contained in this report and our call to action to government, transportation supply chain stakeholders and all Canadians to address the transportation supply chain crisis.

Canada is a medium-sized player in a global market currently wrestling with numerous factors that are contributing to high levels of uncertainty: rapidly changing trade patterns, human- and climate-caused transportation supply chain disruptions, shifting geopolitical risk, increased consolidation in major transportation modes, and many more. Both industry and government have struggled to cope with these near-term difficulties, which have also exposed and exacerbated several longstanding structural and systemic weaknesses in Canada's transportation supply chain. As such, government, transportation and logistics providers, shippers, producers, manufacturers and retailers must act decisively and urgently together to create a supply chain system that is more agile, flexible, resilient, competitive and efficient than it is today.

Collaborative action is the key to transformation

Building such a system will require a national approach, with collaboration playing a central role. The economic deregulation of transportation policies over the past 30 years successfully unleashed the power of competitive, market-based forces across the sector (for example, the establishment of arms-length port and airport authorities to operate federally owned national ports and airports on a commercially autonomous basis). Today, Canada's transportation supply chain is a network of independently operated yet inter-related (and often inter-reliant) port and airport authorities along with countless transportation supply chain businesses that are privately held and, in some cases, publicly traded. Each has its own performance requirements and objectives, resulting in a fragmented and siloed approach. While some small, isolated efforts are being made to synchronize operations, generally each of the transportation modes (rail, trucking, marine and air) and Canada's port terminals, transload facilities, warehouses, shippers, receivers, exporters and importers all seek to optimize their own operations without considering their impacts on others in the supply chain.



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**See page 34 for the
Summary Table and
Recommended Timeline
to Complete all Actions**

With that context in mind, all government and private sector stakeholders in the transportation supply chain must redirect their energies to building digital data hubs that will allow for planning, real-time decision-making and an innate understanding of how each part of the chain is operating. Modernized and future-proof regulatory frameworks, along with intensified cooperation between and within the public and private sectors, will be needed if Canada is to remain relevant in the global marketplace.

The economic impact of Canada's transportation supply chain

That kind of transformation is vital given that Canada's transportation supply chain has both direct and indirect impacts on the prosperity and quality of life of all Canadians. International trade has contributed to more than half the value of Canada's gross domestic product (GDP) every year since 1992, peaking at more than 80% in 2000. In 2021, at the height of the COVID-19 supply chain shutdowns, trade still accounted for 61% of Canada's GDP. In 2021, Canada's international

merchandise trade amounted to approximately \$1.24 trillion, a 16.8% increase from 2020—and the highest annual value of total trade on record. In 2021 the U.S., Canada's top trading partner, accounted for \$774 billion (\$476 billion exported, \$298 billion imported), in total trade, comprising 62% of all Canadian trade that year.¹ This trade would not occur without the backbone of the transportation supply chain.

Canada's trading opportunity has never been so great. The world wants and needs Canadian natural resources and products, including critical minerals, potash, energy and grains. But we can capitalize on that opportunity only if those resources and products can be delivered competitively, efficiently and reliably. As Canada's trade volumes continue to increase, investment in critical infrastructure assets such as seaports, railways, highways and roads, and airports must also increase to meet demand. Furthermore, we must "sweat" these assets in every way possible, including through operational innovation. Building new infrastructure is only part of the solution. Data and visibility can also unlock capacity.

¹ Transport Canada, "Transportation in Canada 2021". 2021, p. 9. Available at: <https://tc.canada.ca/en/corporate-services/transparency/corporate-management-reporting/transportation-canada-annual-reports/2021/transportation-canada-2021>

Our recommendations

Of course, creating a connected, resilient and efficient system is not a simple proposition. It goes beyond the practicalities of establishing critical gateways and corridors, identifying pinch points, and planning for and financing physical infrastructure for surge capacity or redundancy. It requires all stakeholders to work collectively and singularly toward the goal of organizing and adapting a transportation supply chain that functions in the national public interest: one that is operated for the common good of the country to ensure the general welfare, safety, security and well-being of Canadians.

To that end, the National Supply Chain Task Force offers eight long-term strategic recommendations along with a number of immediate and urgent actions that each fall into one of the Action, Collaboration and Transformation streams:

Action	Collaboration	Transformation
<ul style="list-style-type: none"> • Immediately undertake actions to “unstick” the transportation supply chain. These include addressing congestion at port container terminals and prioritizing government attention on regulations, policies and procedures that are impeding the effective operation of a reliable supply chain. 	<ul style="list-style-type: none"> • Digitalize and create end-to-end transportation supply chain visibility for efficiency, accountability, planning, investment and security. 	<ul style="list-style-type: none"> • Establish a Supply Chain Office to unify the federal government’s responsibility/authority over transportation supply chain management across federal departments.
<ul style="list-style-type: none"> • Immediately address Canada’s significant transportation supply chain labour shortage. 	<ul style="list-style-type: none"> • Engage Indigenous groups (especially those in Northern and remote communities) to address their significant transportation supply chain challenges. 	<ul style="list-style-type: none"> • Develop, implement and regularly renew a long-term, future-proof (30- to 50-year) transportation supply chain strategy.
<ul style="list-style-type: none"> • Protect corridors, border crossings and gateways from disruption and interruption to ensure unfettered access for commercial transportation modes and continuity of supply chain movement. 	<ul style="list-style-type: none"> • Engage the U.S. and the provinces/territories to achieve reciprocal recognition of regulations, policies and processes to enhance transportation supply chain competitiveness and productivity. 	<ul style="list-style-type: none"> • Revise the mandate of the Canadian Transportation Agency and provide it with the independence, sufficient authority and commensurate funding needed to deliver on that mandate.

The time for bold action is now. The time for intense collaboration is now. The time for generational transformation is now. Let us begin.



Introduction

Canada's transportation supply chain² is nearing its breaking point. The major disruptions seen over the last two years have brought to light longstanding and newly emerging issues that must be addressed now — before our country's reputation as a reliable trading partner is further tarnished, as we heard from stakeholders and U.S. trading partners. Wild swings in supply and demand due to the COVID-19 pandemic, as well as climate shocks (e.g., wildfires, floods) and growing geopolitical uncertainty, have put trade norms and flows at risk. These challenges come at a time when Canada's natural resources, such as critical minerals, potash, energy and grains, are in high demand globally. But the only way to capitalize on that opportunity is to act now to ensure we can transport them to market competitively, efficiently and reliably.

The impacts of the last two years have also exposed the system's limited redundancy and resiliency, making it essential to take action immediately. Investment and planning at a national level are required to ensure Canada's transportation

supply chain can withstand shocks and adjust to fluctuating demands and global trade dynamics. This transformation requires unprecedented collaboration and enhanced cooperation between the public and private sectors, as well as within the private sector itself. All players must mobilize, innovate and address gaps, and prioritize the building of efficiencies into the national transportation supply chain so it operates successfully for everyone.

Why Canada needs a resilient transportation supply chain

Canada's transportation supply chain is a key cornerstone of our economy that directly and indirectly impacts our prosperity and quality of life. The transport sector alone comprised 3.6% (\$72 billion) of Canada's total real GDP in 2021,³ and had a total industry output of \$151.3 billion in 2019,⁴ just prior to the onset of the global pandemic. In 2020, the sector directly employed 539,100 people (down from more than 631,650 people in 2019), accounting for 3.4% of Canada's workforce.⁵

2 For the purposes of this report, the transportation supply chain refers to the network of transport and warehousing organizations, resources, activities (e.g., customs and regulatory compliance, intermodal transport, storage) and technology involved in the movement of goods from one location to another as they make their way from source suppliers and manufacturers to customers and/or end users as the final product.

3 Transport Canada, "Transportation in Canada 2021". (2021), p. 8. Available at: <https://tc.canada.ca/en/corporate-services/transparency/corporate-management-reporting/transportation-canada-annual-reports/2021/transportation-canada-2021>

4 The Conference Board of Canada, "The Economic Impact of Canada's Transportation Sector: The Footprint of Canada's Essential Sector". 2022, p. 6. Prepared for Transport Canada's internal use.

5 Ibid. pp. 6, 12.

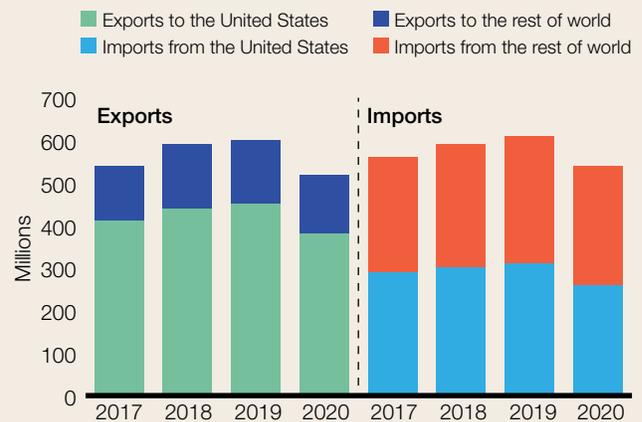
Broader impacts that the sector brings to our economy include the following:

- In 2019 the sector indirectly contributed \$11.2 billion to Canada's GDP, and indirectly boosted employment by 103,349 jobs.⁶
- International trade has contributed to more than half the value of our GDP every year since 1992, peaking at more than 80% in 2000.
- At the height of supply chain shutdowns in 2021 due to COVID-19, trade accounted for 61% of the country's GDP, and international merchandise trade amounted to approximately \$1.24 trillion—a 16.8% increase from 2020, and the highest annual value of total trade on record.
- The U.S. is our top trading partner and accounted for \$774 billion in total trade (\$476 billion exported, \$298 billion imported) last year, comprising 62% of all Canadian trade in 2021.⁷
- In 2020, road transport accounted for 50% of Canada's merchandise trade (imports and exports combined), 23% moved by water, 15% by air, and 12% by rail.⁸

Fundamentally, Canada's standard of living is directly connected to our success in international trade and, therefore, to our transportation system's performance. This includes our ability to get goods to and from international markets as well as our ability to ensure we receive the commodities, goods and essential supplies we need to thrive.

Figure 1: Import origins are more diversified than exports, where the U.S. dominates

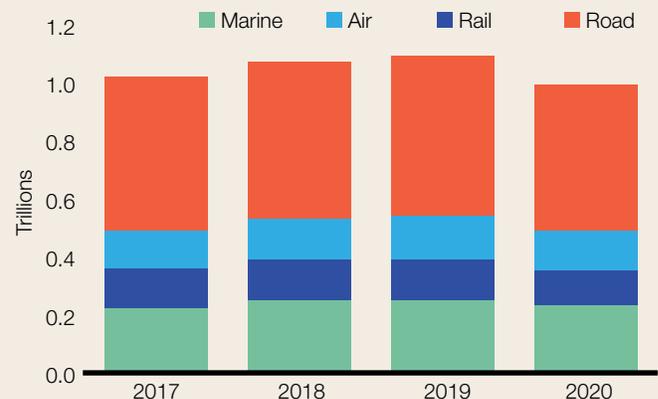
(Export destination and imports origin by value, the U.S. in contrast with the rest of the world)



Source: Statistics Canada; Table 23-10-0269-01

Figure 2: Road is most common mode of transport for international trade

(Sum of merchandise trade, imports and exports value, by mode of transport)



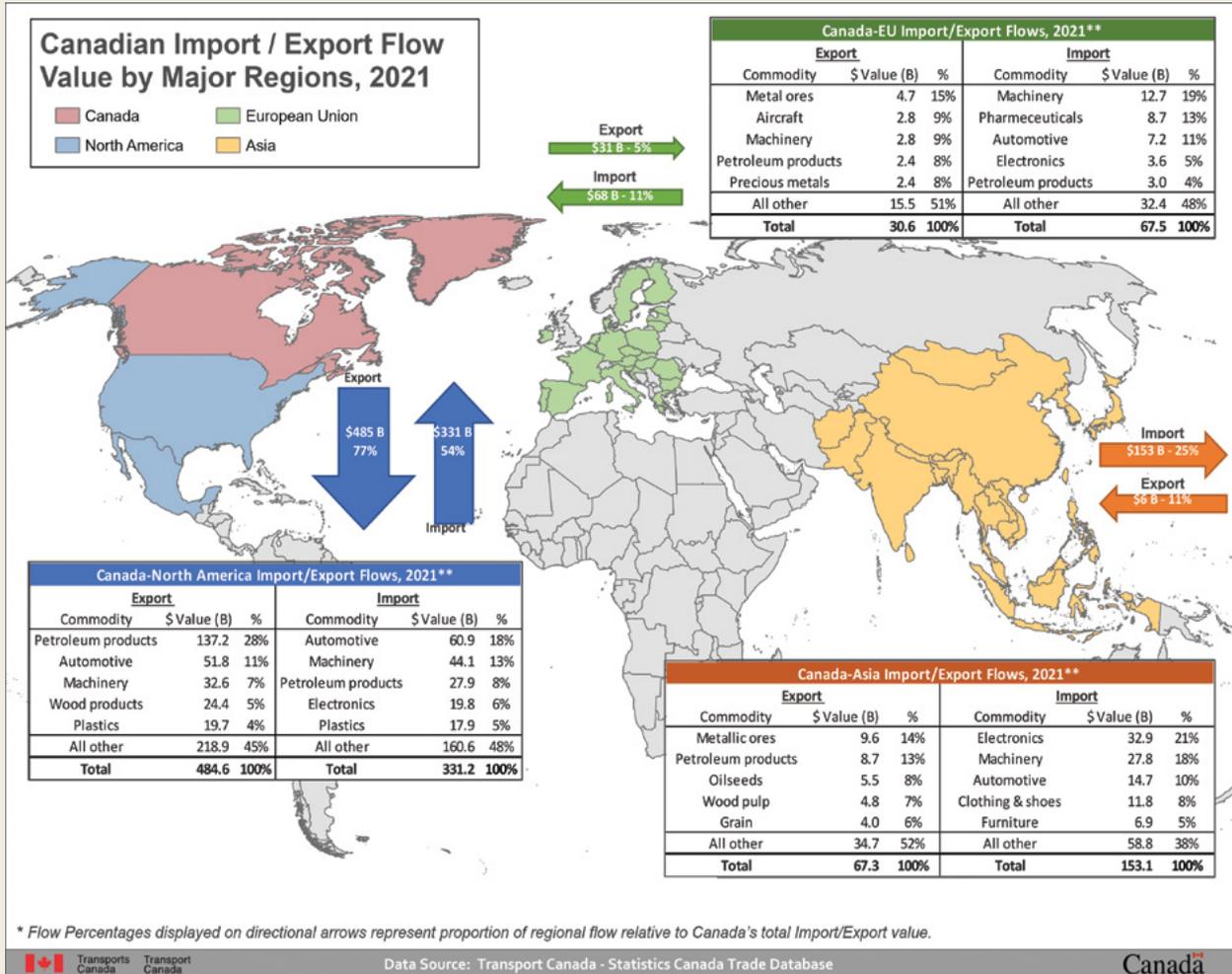
Source: Statistics Canada; Table 23-10-0269-01.
Note "Other" modes of transport are excluded.

6 Ibid., p.6.

7 Transport Canada. "Transportation in Canada 2021". 2021, p. 9. Available at: <https://tc.canada.ca/en/corporate-services/transparency/corporate-management-reporting/transportation-canada-annual-reports/2021/transportation-canada-2021>

8 The Conference Board of Canada, "The Economic Impact of Canada's Transportation Sector: The Footprint of Canada's Essential Sector". 2022, pp. 11-13. Prepared for Transport Canada's internal use.

Figure 3: Wide Variation in Canada's Import/Export Trade Flow Composition



Investment in Canada's transportation infrastructure by both the public and private sector is critical to the movement of goods in the transportation supply chain. Since the 1980s, the ratio of infrastructure investment to trade volumes has been steadily declining. While Canada's trade volumes have increased, investments in infrastructure have not kept up — and the transportation supply chain is reaching its limits. The current state of the transportation supply chain demonstrates that for the economy to continue to grow, simply maintaining the existing infrastructure is not sufficient. Both the public and private sectors need to increase investment in marine, road, rail and air transportation assets to facilitate economic growth. Analysis⁹ estimates that over the 50-year period from 2020 to 2070, investments of \$4.4 trillion (or approximately \$88 billion per year) in marine and transportation infrastructure¹⁰ will be required to meet projected growth in population (assuming a 0.7% compound annual growth rate) and in GDP (assuming a 2.1% compound annual growth rate). The majority of this needed investment is in highway and road structures and networks (\$3.3 trillion), railways (\$284 billion), and seaports (\$110 billion).

This estimate is based on historical trends and does not consider current commitments by public or private sectors entities¹¹, nor does it consider increased investment that may be required to achieve more ambitious growth targets and response to significant, evolving challenges such as climate change and the dynamic supply chain context described in the following section. In our view, this is a conservative estimate of the total investment that will be required.

This investment is not to be borne by taxpayers alone. Major transportation supply chain infrastructure assets such as railways and ports are owned and operated by the private sector which must invest alongside government to meet trade demand and growth.

The forces behind the disruptions

Like many sectors, transportation has undergone many changes since the beginning of the 21st century, with the digital revolution transforming the traditional drivers of growth in the global economy. The sector has also faced several unique challenges related to congestion, traffic growth and shifts resulting from changing global trade patterns, and investment and financial pressures.

With the acceleration of these shifts in the last two years, our transportation supply chain has been operating in an increasingly uncertain and volatile environment. While the burden has eased since the height of the pandemic-induced congestion, bottlenecks remain prevalent and continue to affect our reputation as a preferred and trusted trading partner.

The pandemic-driven supply chain pressures were further exacerbated in 2021 by rising energy prices and transport disruptions (e.g., blockage of the Suez Canal, shortage of empty containers, port congestion, and overfull warehousing space). This constrained supply in key areas such as food and industrial inputs. Trade flows also became more unpredictable and uncertain due to the Russian invasion of Ukraine in February 2022. Following this and the subsequent rebalancing of global trade patterns, the World Trade Organization (WTO) downgraded its expectations for growth of merchandise trade volumes from 4.7% to 3% in 2022.¹²

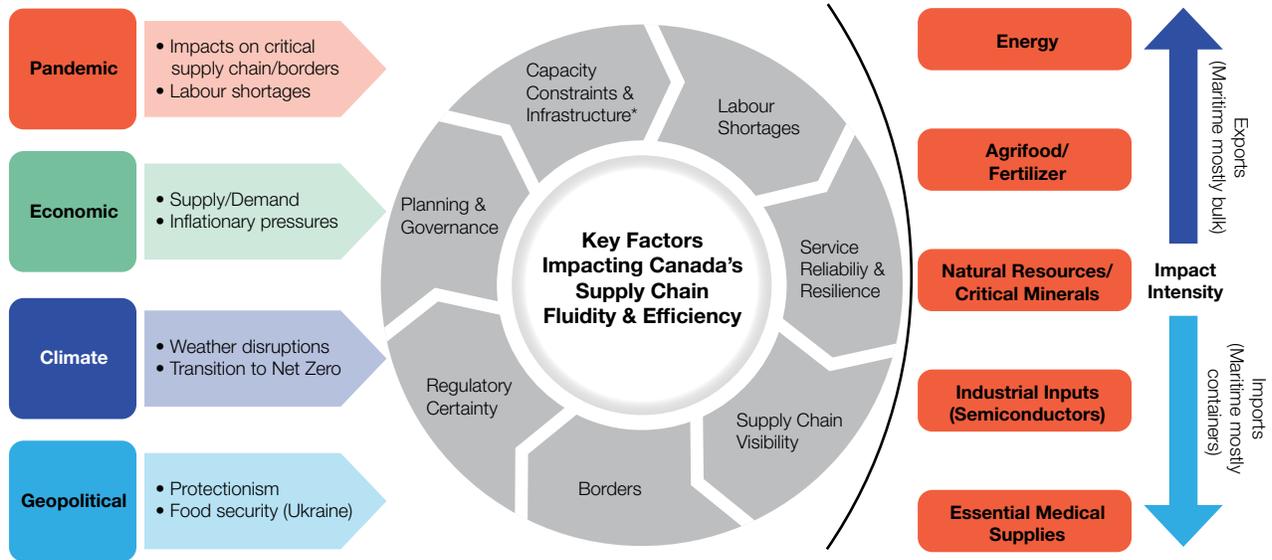
9 Analysis from Deloitte, commissioned by the National Transportation Supply Chain Task Force and considers data from Statistics Canada, Oxford Economics and Deloitte.

10 Assets considered in this analysis are "marine engineering infrastructure" (seaports, marinas and harbours, canals and waterways, and other marine infrastructure) and "transportation engineering infrastructure" (highway and road structures and networks, bridges, tunnels, railway lines, and runways) as defined and measured by Statistics Canada. Available at: (<https://www150.statcan.gc.ca/n1/pub/71-607-x/2018013/ic2-eng.htm>)

11 The estimated investment need is not an assessment of a gap between current or planned investment and total need. It estimates the total investment needed based on the relationship between trade volumes, infrastructure capital stock, population growth, and economic growth.

12 World Trade Organization, "Report on G20 Trade Measures". 2022, p. 2. Available at: (https://www.wto.org/english/news_e/news22_e/report_trdev_jul22_e.pdf)

Figure 4: National supply chain task force—diagnostic framework

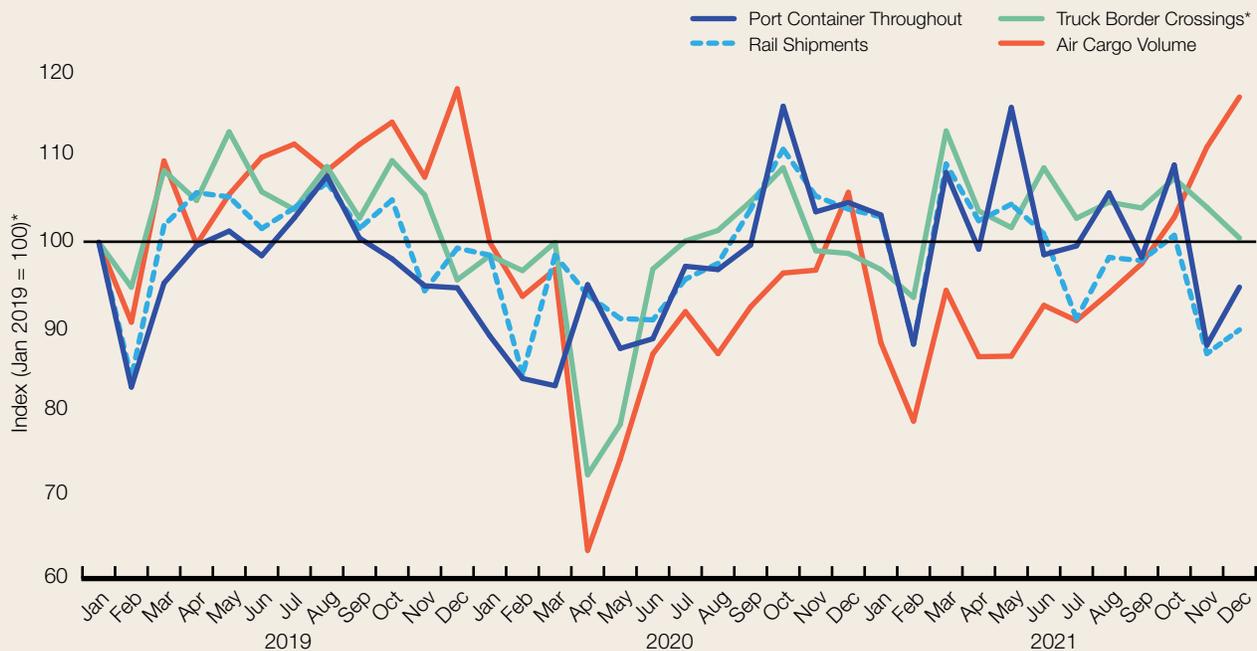


*Includes warehouses

A number of global drivers are causing reverberating disruptions and longer-term impacts to traditionally stable global supply chains. Volatility has increased dramatically in key global and domestic industries since the pandemic. Climate change also continues to intensify, and extreme weather events are happening more frequently, further increasing the risk of disruptions to the transportation supply chain — and the corresponding financial and economic impacts across Canada.

Key factors contributing to Canada’s supply chain fluidity and efficiency are wide-ranging yet highly interconnected. Bottlenecks or disruptions to one link affects the entire supply chain, meaning local pressures lead to national repercussions. The solutions needed to address these concerns throughout the supply chain must be creative and cooperative.

Canada’s trade priorities as indicated in this framework illustrate our dynamic export/import scale. Major Canadian exports of high-volume bulk commodities (such as energy, agriculture, and key natural resources) depend heavily on rail to get to port and loaded onto ships destined for international markets, or on road transport for transborder trade. Higher value, time sensitive and often imported goods (e.g., specialized industrial components, pharmaceuticals) move by air. Disruptions to the transportation of any of these major commodities are prime examples of what can go wrong within Canada’s transportation supply chain.

Figure 5: Freight flow by mode

Increased volatility in key global and domestic industries over the past three years has hit the transportation sector particularly hard. While a medium-sized player in the world marketplace, the fact that Canada's success is inextricably linked to our global trade performance means these global trends have an outsized impact on our economy and the affordability of goods here. According to Statistics Canada, transportation costs, while accounting for less than one-fifth of the consumer price basket, were a major driving force in accelerating overall price growth in 2021: transportation costs rose 7.2% compared to 2020 and led all major inflation categories.

Structural challenges also pose risks

While on the surface these pressures and their impacts seem tied to specific events, they also highlight significant structural challenges facing our transportation supply chain.

Climate change poses a risk to our long-term prosperity and must not be overlooked as another driver of instability in transportation supply chains.

As it intensifies, extreme weather events will become more frequent, amplifying the risk of disruptions that could increase financial, economic and transportation impacts in Canada. For example:

- In July 2021, wildfires blocked the main railway lines leading to the Port of Vancouver. At the peak of the crisis, railways' operations were reduced by around 30%, representing around \$163 million per day in terms of blocked shipment value. This created congestion at the port and severely impacted the export and import of key commodities such as grain, coal, forestry products, fertilizers and containerized goods.
- In November 2021, flooding in British Columbia hindered the movement of goods estimated to more than \$170 million per day due to lost train capacity, increased congestion at the Port of Vancouver and lost output (i.e., production cuts and lost imports/exports).
- In April and May 2022, flooding in Southern Manitoba affected rail and road traffic, causing delays at a key border crossings and costing up to \$200 in additional costs per truck per trip according to the Manitoba Trucking Association.

Still reeling from transportation supply chain issues and changes in consumer demand, businesses have adapted a “just-in-case” mindset to logistics. However, transportation supply chain infrastructure was not designed to operate this way. In major centres like Toronto, inland warehouses and intermodal yards are filled with containers, causing ports to be used as storage yards. The World Bank Group’s 2021 Container Port Performance Index ranked the Port of Vancouver 368 out of 370 global ports in terms of its overall performance, with only the U.S. ports of Long Beach and Los Angeles ranking lower.¹³ As recently as September 2022, Maersk advised its North American customers of vessel wait times of 30–44 days at the Port of Vancouver (the highest of all listed North American ports that Maersk calls, with the next closest wait being 20 days). It also noted delays at the ports of Prince Rupert due to inland container congestion; Montreal due to vacation-related labour shortages and to congestion issues with rail and truck availability in Vancouver, Montreal and Toronto.¹⁴

The transportation sector is feeling labour shortages acutely, particularly in rail and trucking. In its submission to the Task Force, Trucking HR Canada noted that Statistics Canada-reported vacancies for qualified truck drivers reached an all-time high of 25,560 vacant positions from January to March 2022.¹⁵ As noted by the Conference Board of Canada, the transportation sector is “more reliant on older workers compared to the total economy” and “more than 260,000 of its workers will be retiring in the next 20 years. Moreover, from 2021 to 2030, the number of workers joining the transportation workforce (immigrants, school graduates and other net new entrants) will be insufficient to offset the loss from retirees.”¹⁶

Canada’s transportation supply chain is also affected by delays caused by labour action, even if only threatened. For example, strikes at Canadian Pacific Railway (CP) in 2018 and 2022, Canadian National Railway (CN) in 2019, the Port of Montreal in 2021, and a two-day work stoppage at CP in 2022 all affected how logistics and supply chain decision-makers and international businesses view Canada’s reliability as a place to do business. Our reputation as a gateway of choice for international shippers was also severely, and potentially irreparably, damaged by high-profile blockades, including the rail blockades as part of pipeline protests experienced across the country in February 2020, and of key Canada-U.S. border crossings in January 2022 for non-transportation-related political demonstrations. These disruptions had damaging effects on both the national economy and peoples’ livelihoods. For instance, the Parliamentary Budget Officer estimated the economic impacts of the 2020 rail disruptions to be \$275 million.¹⁷ In addition, the more recent border blockades were said to have caused economic losses of \$3.9 billion in lost and deferred trade, based on testimony provided to the Standing Committee on Transport, Infrastructure and Communities on February 17, 2022.¹⁸ With many labour agreements up for renewal in 2022 at rail companies and national ports in Canada alone, further disruptions to the transportation supply chain are possible.

- 13 The World Bank. “The Container Port Performance Index 2021: A Comparable Assessment of Container Port Performance.” 2022, p.11. Available at: <https://thedocs.worldbank.org/en/doc/66e3aa5c3be4647addd01845ce353992-0190062022/original/Container-Port-Performance-Index-2021.pdf>
- 14 A.P. Moller-Maersk. “Customer Advisory: North America Weekly Reader, September 9, 2022”. 2022, pp. 1, 3. Available at: <https://view.e.maersk.com/?qs=a14377c9c7526548982df45d8e0b99dbf7b54e7662865b22a0a13652a1582c71f7617b09022d1ed0ef68e769ffabdc72c2c6bc4bcc822db53dc73176d2a4e4cfa9906b71c08814391c26614af1f9c4e418944d88ea76b7>
- 15 Trucking HR Canada. “Special Report: Threats to the Supply Chain and Economic Recovery June 2022”. 2022, p.2. Available at: <https://truckinghr.com/wp-content/uploads/2022/06/Special-Report-June-2022.pdf>
- 16 The Conference Board of Canada. “Workforce Capacity Needs in Canada’s Transportation Sector: Current Situation and Outlook to 2040”. 2021, p.3. Available at: https://publications.gc.ca/collections/collection_2021/tc/T22-250-2021-eng.pdf
- 17 Government of Canada. Office of the Parliamentary Budget Officer. “Estimate of the Impacts of the February 2020 Rail Disruption”. 2020. Available at: <https://www.pbo-dpb.ca/en/publications/RP-1920-032-S--estimate-impacts-february-2020-rail-disruption--estimation-repercussions-perturbations-transport-ferroviaire-fevrier-2020>
- 18 Standing Committee on Transport, Infrastructure and Communities (2022). “Minutes of Proceedings”. 44th Parliament, First session, meeting no. 5. Available at: <https://www.ourcommons.ca/DocumentViewer/en/44-1/TRAN/meeting-5/evidence>

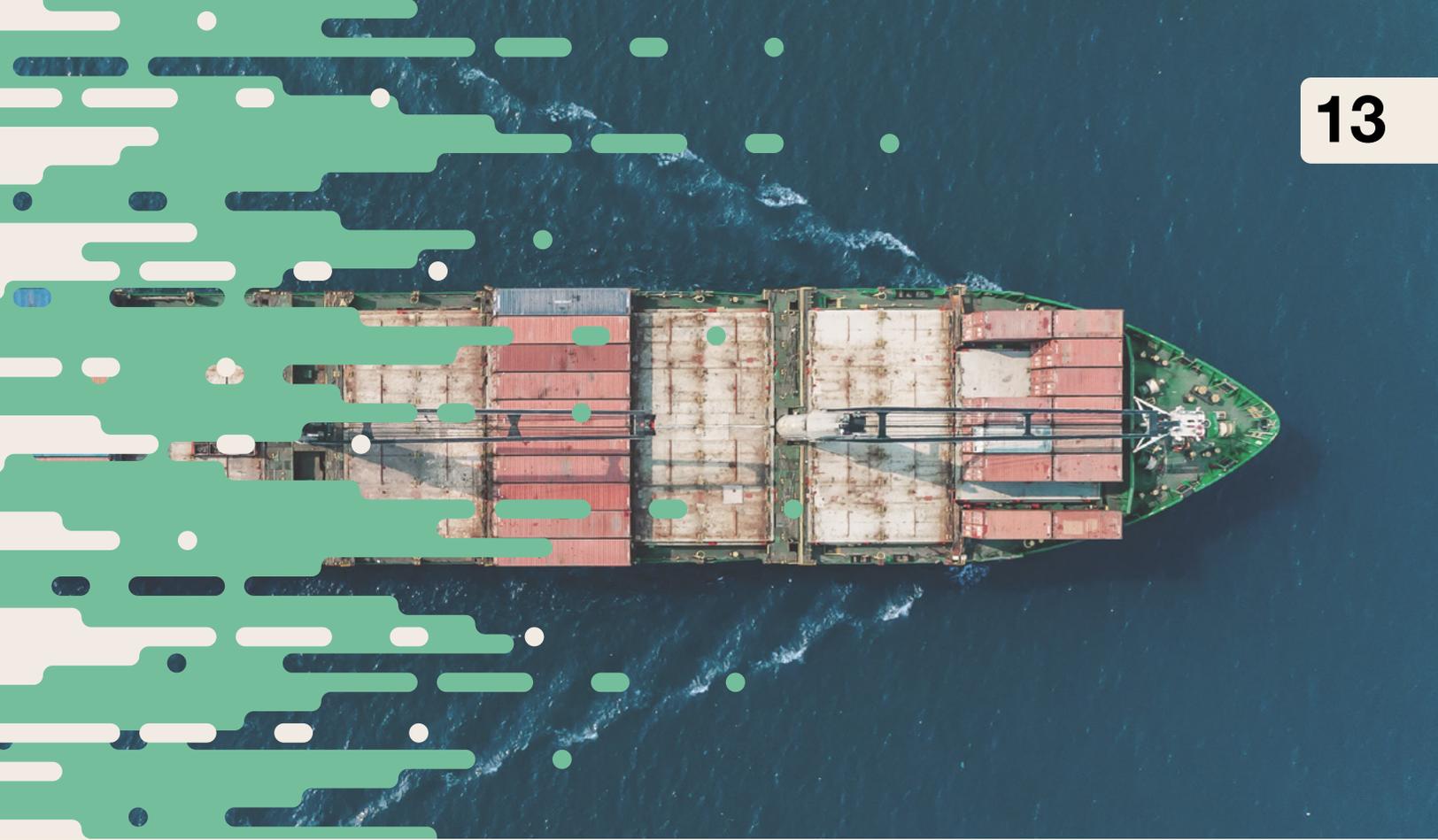
Establishing the National Supply Chain Task Force

Against this backdrop of uncertainty, the Minister of Transport and the Ministers of Agriculture and Agri-Food; Employment, Workforce Development and Disability Inclusion; Innovation, Science and Industry; Labour; and International Trade, Export Promotion, Small Business and Economic Development hosted the National Supply Chain Summit in January 2022 to stimulate dialogue with transportation supply chain stakeholders. The Summit focused on the ways in which Government and stakeholders could collaborate and act together to improve our supply chain's resilience, address existing congestion and reliability challenges, and position Canada's transportation supply chain to be domestically and globally competitive in the long-term.

Following the Summit, the Minister of Transport appointed a National Supply Chain Task Force to inform measures taken by the Government. As part

of Budget 2022, this includes a \$603.2 million investment provided over five years to Transport Canada to build a more resilient and efficient transportation supply chain.

As the members of this Task Force, we have been asked to examine sector-specific challenges and offer independent recommendations on the action that should be taken to improve the fluidity, efficiency and resiliency of our national transportation supply chain — and in doing so, support Canada's economic growth. To this end, we embarked on a consultation process that received approximately 70 written submissions and engaged over 160 transportation supply chain stakeholder organizations and business leaders to examine pressing congestion and fluidity issues in the Canadian and global contexts, and to identify short- and long-term actions to alleviate this congestion. For more information on our mandate, membership and consultations, please see Annex A of this report.



Our consultations took place during a time of flux, with the acute problems facing stakeholders continuously shifting. A summary of the industry perspectives on issues affecting Canada's transportation supply chain fluidity and efficiency that we heard during our consultations or received through submissions can be found in Annex B, grouped under the following themes:

1. Capacity constraint and infrastructure
2. Labor shortage
3. Service reliability & resilience
4. Supply chain visibility
5. Borders
6. Regulatory uncertainty
7. Planning and governance.

We are recommending actions that respond to this changing environment while simultaneously setting the stage to build a transportation supply chain that is flexible and agile now and in the future. We anticipate that acting on these key recommendations will help

reduce inflationary pressures and increase economic growth by encouraging private investment in new capacity, building resiliency, and supporting greater system optimization and redundancy.

Our guiding principles

Shaped by the insights and ideas from our stakeholder consultations, our guiding principles are the foundation on which we developed our recommendations. Canada is just one player in a complex, interconnected global network of supply chains, with each having their own structural weaknesses and all facing the same stresses brought on by the COVID-19 pandemic. This means that Canada alone is unable to influence or change many factors and issues. We firmly believe, however, that with bold action informed by our guiding principles, and with enhanced collaboration between private operators and government, we can indeed transform our transportation supply chain.

Principle 1: Our mandate is at the heart of all we do

This Task Force was mandated to examine pressing transportation supply chain congestion and fluidity issues in the Canadian and global contexts, and to identify opportunities to collaboratively support a resilient North American and global trade network.

This means our recommendations must aim to achieve two central goals: 1) stimulate and support near-term results, and 2) contribute to lasting improvements to the transportation supply chain.

Principle 2: Our work is built on the foundation of the national public interest¹⁹

Transportation supply chain issues often seem regionally focused, but because of how we move goods across our geographically diverse landscape, what affects one region affects the entire country. The transportation supply chain's purpose is to ensure businesses and consumers can maximize benefits from the seamless transportation of goods into, out of and around the country. While the impacts of events such as floods, wildfires, strikes, and protests can manifest differently across Canada, our heavy reliance on trade makes the smooth delivery of goods a national public interest. This must remain top of mind as solutions to transportation supply chain issues are designed and implemented. Also, because the transportation supply chain is multimodal, no means of carrying goods to, from and around Canada can take priority over another.

Currently, Canada's transportation supply chain is made up of a network of companies and modes that are publicly traded, privately held and independently operated — often working in silos rather than as a cohesive system. However, with Canada's economy being increasingly reliant on reliable and agile transportation, the transportation supply chain must begin to operate as a seamless, single entity. Ideally

there would be sufficient competition and capacity to produce low-cost, efficient options, as well as motivation and mechanisms for service providers to work together to improve traffic flow. Without these, intervention may be required to ensure the transportation supply chain operates smoothly.

Principle 3: Contributing to Canada's long-term competitiveness and prosperity

Global adoption of practices such as “just-in-time” delivery and of transportation systems built to maximize efficiency and minimize costs created a transportation supply chain unprepared for disruption. As supply chains become more complex, the smallest disruption to a critical component can stop the delivery of goods. At the same time, digital adoption has accelerated across all economic sectors, unleashing the potential for never-before-considered solutions to well-established problems. To successfully compete globally, Canada must keep pace with these changes.

Our current challenges and opportunities are rooted in decades of transportation policy that favoured divestiture. Coupled with the productivity gains brought by the digital age, this has been an effective model up to now. But as population growth has slowed and the impact of the efficiencies gained over the last 30 years has diminished, Canada's competitive position has weakened.

This is in part due to our current models and frameworks, which can't easily adapt to or create transformational change to respond to the competitive dynamics at play in many key sectors. We are also beholden to larger global market forces that have resulted in a high level of consolidation. A limited number of multinational operators control the market, leading to the perception of malfeasance when prices fluctuate or skyrocket.

¹⁹ [Public interest](#) is the demonstrable environmental, social and economic benefits that would accrue to the public at large as a result of a proposed action, and which would clearly exceed all demonstrable environmental, social and economic costs of the proposed action. For the purposes of this Report, the national public interest is a transportation supply chain operated for the common good of the country to ensure the general welfare, safety, security and well-being of Canadians—including by maximizing our trading opportunities.

Given the size of Canada as a market, we have limited power to affect these large-scale global trends. However, rather than approaching this issue as a reaction to a prolonged crisis, we are taking this opportunity to ask all partners throughout the transportation supply chain, “Do we need to do this?” That way, we can help players of all sizes plan for the unforeseen and ensure they have alternative means to move goods to and from market.

Principle 4: Canada’s success is a collective effort

Canada has long recognized and benefited from the power of collective action. We now need to build surge capacity into the system and across modes for the long term, but no one entity can build the infrastructure needed to carry us from crisis to growth. It is more essential than ever that all levels of government, Indigenous groups, the private sector and stakeholders in the transportation supply chain collaborate, and that they see their perspectives reflected in our recommendations.

More than physical infrastructure is needed to support Canada’s economic growth. Additional public—private collaboration is required to ensure shippers and carriers have access to good analytics and data to identify future opportunities linked to our trade commitments. Levelling the playing field so all partners can compete in the global marketplace also includes bolstering our ability to respond to emerging cyber threats and securing our transportation supply chains across all modes.

Roadblocks to private sector innovation must be removed. Stakeholders across the transportation supply chain have demonstrated their willingness to adapt and collaborate throughout an incredibly challenging time. We must ensure that governments do not place barriers that could stifle this type of much-needed innovation.

While the specific pressures and challenges may differ across the many modes in Canada’s transportation supply chain, there are central pillars for action around which we are certain all stakeholders will work collaboratively to bring critical mass to resolving common issues.

Principle 5: Reckoning with the impact of climate change

To address climate change, Canada has committed to reducing its carbon footprint and achieving net-zero emissions by 2050. International shippers now expect carbon tracking expertise in ports and across all modes of the transportation supply chain because the lowest carbon emissions possible are needed to be competitive. For example, contracts that currently pay for each move of a container should incentivize reductions in carbon emissions. We must also be prepared to service ships, trucks and airplanes using the newest fuels or battery power. Digitization is an essential tool for optimizing the existing footprint and introducing efficiencies that reduce carbon emissions. The private sector will continue to create new technologies, fuels and tools to reduce the carbon footprint; capitalizing on these innovations requires agile regulatory processes that are responsive to technological advances in a timely way.

While focused on reducing carbon, we also need to prepare for the future impacts of climate change by developing redundancies for chokepoints that can be a single point of failure. Failures could occur anywhere in the country: in the west by mountains, fire or weather; in central Canada by floods; or in the east by winter storms, ice and washouts.

In the North, where the vulnerability of its infrastructure makes adapting to climate change a key priority, significant investments into infrastructure are needed to keep rural and remote communities connected and to enable economic development. This infrastructure can also act as the foundational piece for developing sectors poised for future growth, such as the critical minerals industry. It is vital that goods move to and from the North in a timely way. The changing lengths of seasons and increased storm activity also adds unpredictability and risk in shipping critical supplies and consumer goods to remote coastal and northern communities, via ferries and ice roads. Delayed approvals for moving goods by ice road reduce the time available to build critical infrastructure and bring in needed goods.

Recommendations

The urgency of the supply chain crisis, as well as the critical need for an efficient, resilient and flexible transportation supply chain to facilitate Canada's competitiveness and prosperity, demand actions with both immediate effect and long-term strategic impact. As such, our recommendations for the Government are divided into two categories: A) immediate response actions, and B) long-term strategic actions.

For each category, we have provided a rationale and timeline for each action, an overview of the issues addressed, and the outcomes should all actions be taken. This is followed by a summary table and recommended timeline to complete all actions.

A. Immediate response actions

Our principal recommendations are strategic and will require time to fully develop and implement. In the meantime, we advise the Government to take immediate, concrete actions to begin meaningfully addressing Canada's transportation supply chain challenges. These must begin without delay and be completed within two years to have the desired effect.

Immediate response actions are grouped into two categories: **operational shifts** and **governance shifts**. Both categories are critical to addressing urgent supply chain issues and catalyzing systemic change that will address deeply rooted challenges.

To ensure accountability and timely delivery of the immediate response actions, the Task Force recommends that Transport Canada be designated the lead department responsible for executing them, in coordination with other departments and entities as required.

Operational shifts

The Government must intervene quickly and strategically in transportation supply chain disruptions that cannot be resolved by commercial operators. This may include using financial resources to create incentives, introducing penalties, or temporarily waiving regulatory and legal requirements that do not compromise safety. Current issues that require immediate intervention include alleviating port congestion and other bottlenecks, expanding access to labour, and increasing competitiveness. There are critical hot spots (such as congestion in the Pacific Gateway and the Port of Montreal) as well as areas of weakness (such as Northern transportation access) that require action today and an investment in longer term capacity to alleviate constraints. There are numerous actions the Government should take in collaboration with stakeholders to address these issues, including the following 10 operational shifts that we have identified as critical immediate actions to take.



The 10 operational shifts have been grouped according to the critical issue that they address: service reliability and resilience, labour shortages, capacity constraints and infrastructure, and borders.

Service reliability and resilience

1. Concurrently and immediately ease port container congestion.

Rationale: Congestion at port container terminals is in danger of leading to shutdowns. The extraordinarily high volume of import containers arriving at Canadian ports has clogged the transportation supply chain due to insufficient warehousing and reduced transloading capacity (many smaller warehouses and transload facilities shut down during the pandemic). Many inland facilities are at capacity because importers and freight forwarders are using them as de facto storage facilities by delaying the receipt of their containers. Temporary storage areas are required to house at least some import containers off port terminals. This situation could be relieved by the Canada Border Services Agency

(CBSA) increasing its capacity to conduct inspections and/or clear containers outside of standard locations. Emergency measures must be taken to avoid backing up the entire supply chain.

Actions:

- a. The CBSA must permit containers currently being stored at port terminals to be moved in-bond²⁰ via rail or truck to inland locations for customs clearance. This will create space at the terminals for arriving vessels to be unloaded. (See Immediate Response Action 10 for related actions.)
- b. The Government should subsidize the cost of transporting containers inland (like the United States Department of Agriculture does), until the congestion is relieved and container terminals can return to normal operations. Port authorities should be given funds and, if required, the necessary authority to facilitate this activity. Funds should be used to lease land, move containers, provide security and cover other similar costs.

²⁰ An in-bond shipment is an imported or exported shipment that has yet to be cleared by customs. The in-bond shipment process allows for the goods to be moved or stored by the government, even if they have not yet obtained approval from customs.

- c. Regulations and legislation should be revised to empower the Government to take steps to decongest ports where necessary, including levying severe penalties against importers for any container they leave at port for longer than five days.

Timing: Immediate

- 2. Expand the 30 km interswitch distance across Canada to give shippers more rail options and to address shipper—railway power balance issues. The switch zone rates should be mileage-based and set annually by the Canadian Transportation Agency (CTA). The CTA should also monitor and review the effectiveness of this change.**

Rationale: Railways are the only source of transport for many shippers, giving rail companies pricing and service discretion that is not balanced by normal market forces. An expanded interswitch distance option provides increased competition by offering shippers more choices. Note: These immediate actions are in relation to Long-term Strategic Action 5 regarding revising the CTA's mandate to increase competition and balance negotiating power between stakeholders within the supply chain.

Timing: By May 1, 2023

Labour shortages

- 3. Address immediate labour needs across the transportation supply chain.**

Rationale: The need for labour throughout the transportation supply chain is significant. Expediting the entry of skilled and general labour individuals is one way to help address this shortage.

Actions:

- Expand existing programs and examine ways to attract Indigenous workers and other under-represented populations to the sector.
- Continue to support and, if possible, expand the Temporary Foreign Worker (TFW) Program on an urgent basis as it applies to workers in the transportation supply chain.
- Expedite refugee and immigration processing for individuals who have experience in or would be eligible to work for transportation supply chain-related businesses.
- Support businesses, community settlement agencies and other organizations that can help temporary foreign workers, refugees and immigrants acclimate to Canadian work and social environments.

Timing: Immediate

- 4. In collaboration with provinces/territories, implement programs and policies that encourage the attraction and retention of truck drivers.**

Rationale: Truck drivers are required for first- and last-mile delivery of freight, as well as for transporting goods across shorter distances. Lack of truck drivers prevents the transportation supply chain from operating efficiently. Access to training programs and their associated costs (approximately \$8,000 to \$10,000) have been identified as barriers to producing truck drivers, particularly with the introduction of mandatory, entry-level training standards across the country. Because truck driving is not recognized as a skilled occupation, individuals seeking training in this field do not qualify for standard grants or loans and must typically pay for

training out-of-pocket. The Government should build on the success of the Canadian Trucking Human Resource Council's [Career Expressway Program](#) which has proven effective for placing recently trained truck drivers with pre-approved employers.

Timing: Immediate

Capacity constraints and infrastructure

5. Complete the twinning of Highway 185, which connects Quebec to New Brunswick.

Rationale: This project has already been announced and funding established. Completion of this project will improve efficiency by creating a link between two portions of the highway that are open to long combination vehicles (i.e., a truck tractor pulling two trailers). Currently drivers must disengage one trailer, transport the other 6 km, return to and re-hook the remaining trailer, and then reassemble the trailer combination to complete their journey.

Timing: Immediate

6. Expedite the approval of winter transport on ice roads.

Rationale: Trucks delivering goods to Northern Indigenous and remote communities require permission to use ice roads. Several federal, provincial, community and private entities are responsible for permitting access to these roads. Any delay in approvals that is unrelated to safety increases the time needed to move goods and resources to these communities and, in some cases, results in goods not being delivered. Because there is only a short window available to use the ice roads, truck drivers generally rush to make their deliveries. Delivering goods across ice roads is perilous and a major safety concern for drivers.

Timing: Immediate

7. Incent or create competition in sustainable pallets to increase additional domestic pallet capacity.

Rationale: Retailers require pallets to move their increasing volume of inventory. Currently, pallets are largely available only through one Australian-owned supplier with Canadian operations, and there is little or no capacity to lease, rent, build or repair pallets within the domestic market.

Timing: Immediate

8. Waive 50% of airport rent payments on a short-term basis to enable airport authorities to invest in capital improvements that enhance transportation supply chain reliability.

Rationale: Airports play a critical role in the transportation supply chain, particularly due to their outsized role in receiving medical supplies and increased business activities related to e-commerce. Capital improvements to their facilities and infrastructure will enhance supply chain reliability. However, given the debt airports incurred during the COVID-19 downturn, financial resources for investment are currently limited. As the Government of Canada waived rent payments from airports during the COVID-19 downturn, the Task Force recommends leveraging a similar approach in order to support capital projects that will increase the reliability and resiliency of the transportation supply chain. This could include requesting the airports provide a list of projects for approval and waiving a portion of rent that could then be allocated to approved projects. The Task Force recommends waiving up to 50% of rent payments for this purpose.

Timing: Immediate

Borders

9. Reopen FAST card enrollment centres and/or consider novel ways to expedite applications.

Rationale: The Free and Secure Trade (FAST) program is a commercial clearance program for known low-risk shipments and drivers travelling between Canada, the U.S. and Mexico. Initiated after 9/11, this program expedites processing for commercial carriers who have completed background checks and fulfill certain eligibility requirements.

While U.S. FAST enrollment centres have reopened following COVID-19 shutdowns, Canadian centres remain closed. As of September 15, 2022, there are approximately 11,000 FAST applications awaiting processing in Canada. Although Canadian truck drivers can access U.S. enrollment centres and CBSA is holding joint enrollment events with U.S. Customs and Border Protection (CBP), reopening Canadian enrollment centres will help reduce the queue more quickly.

Without a valid FAST card, truck drivers cannot access the FAST vehicle lanes that expedite crossing at land border ports of entry that serve commercial cargo. Most dedicated FAST lanes are in the heavily used Canada–U.S. border crossings

in Michigan, New York and Washington. If trucks that could qualify for FAST lanes end up in non-FAST commercial lanes, this also slows clearance processing times overall.

Timing: Immediate

10. Expand Canadian Food Inspection Agency and other government department services required to process commercial goods at ports, land border crossings and airports to offer 24/7 services as needed. Use automation, technology and other mechanisms to increase the efficiency of inspections (as an added benefit, this will also help address labour shortages).

Rationale: Government must act quickly to ensure it does not exacerbate delays that lead to congestion. Ensuring prompt service from all necessary government agencies will help in this regard. This recommendation is tied to the short-term actions previously detailed that relate to easing port congestion and improving efficiencies of the cargo clearance operations of the CBSA.

Timing: Immediate

Issues addressed

- Service reliability and resilience
- Labour shortages
- Capacity constraints and infrastructure
- Borders

Outcomes achieved

- Intervene rapidly and strategically to address disruptions
- Alleviate bottlenecks in key transportation corridors
- Increase service availability and reliability
- Increase the amount of labour available across supply chain sectors
- Increase competition within the supply chain
- Enable stakeholders to invest in critical infrastructure, facilities and operations that improve supply chain efficiency

Governance shifts

In addition to the immediate steps the Government must take to address severe supply chain disruptions and constraints, quick action must also be taken to invest in our long-term transportation supply chain strategy. Implementation of these three shifts in governance will be a catalyst for systems-level change required for the long-term strategic actions detailed in the next section of this report. Implementation should begin immediately with Transport Canada leading and coordinating across departments and should be completed within one to two years.

11. Establish, fund and hire staff for a Supply Chain Office.

Rationale: A Supply Chain Office is needed to provide leadership and oversight of our recommendations. This must be done quickly to maintain momentum generated by improvements to the transportation supply chain and to signify the importance of ensuring it is reliable, resilient and flexible.

Timing: Within 12 months

12. Develop a long-term transportation supply chain strategy, including initiating a review to update and modernize related regulations.

Rationale: Creating a comprehensive and long-ranging strategic plan requires sufficient time for intense consultation and engagement with various levels of government, Indigenous groups, industry stakeholders and others.

Timing: Begin immediately

13. Develop a transportation supply chain labour strategy.

Rationale: Having insufficient workers to provide services is a significant issue. Transportation supply chain problems cannot be resolved without many additional skilled and general labour workers. A national transportation supply chain labour strategy is needed urgently because the health of our economy depends on the transportation supply chain.

Timing: Begin immediately and complete within two years

Issues addressed

- Planning, governance and accountability

Outcomes achieved

- Establish clear, singular accountability within the Government for addressing supply chain challenges and planning for its long-term agility and sustainability
- Kick-start long-term strategic actions, including governance changes and strategy development, while providing immediate response to issues
- Maintain supply chain improvement momentum and demonstrate the importance of ensuring a reliable, resilient and flexible supply chain
- Begin creating a comprehensive and long-ranging strategic plan requiring in-depth consultations
- Act to address the critical need for additional workers

B. Long-term strategic actions

The Task Force recommends that the Government prioritize and invest in eight long-term strategic actions to both initiate the systemic change required to drive the long-term competitiveness, prosperity and sustainability of Canada's transportation supply chain, and to maintain appropriate governance of the transportation supply chain going forward. A functional and reliable supply chain is essential to ensuring Canada's ability to fully and competitively participate in the global market.

1. Establish a Supply Chain Office to unify the federal government's responsibility/authority over transportation supply chain management across departments.

Rationale: Dividing responsibility for the national supply chain among numerous government departments negatively affects its management. Without a cohesive view and singular accountability for the transportation supply chain, including monitoring and reporting on key performance indicators (KPIs), departmental actions could negatively affect overall productivity. An overarching perspective that spans government departments and jurisdictions is urgently needed to help establish clear accountability and to mandate action that supports a high-functioning, reliable, resilient and adaptable supply chain.

Actions: The Government should establish an independent Supply Chain Office (SCO) to provide national oversight of the transportation supply chain; to direct, monitor and manage supply chain issues; to implement the national transportation supply chain strategy; and to coordinate the legislative and regulatory impacts on supply chains across government departments.

The SCO would be responsible for:

- Developing, implementing and sustaining the national transportation supply chain strategy (as described in Long-term Strategic Action 2).
- Establishing long-term national transportation supply chain-related priorities (in line with the national transportation supply chain strategy) and ensuring funding is subject to multi-year budget allocations, disbursed based on national priorities and is not constrained by budgeting processes or provincial/regional equity principles. This includes ensuring funding is coordinated across the transportation supply chain for efficiency and effectiveness.
- Leading federal government policy and regulation related to the transportation supply chain, including coordinating across federal entities and managing government KPIs.
- Reporting on SCO activities and performance against the transportation supply chain KPIs identified in the national supply chain strategy.
- Initiating action when transportation supply chain KPIs are not being met.
- Evaluating the effectiveness of investments made by programs such as the National Trade Corridors Fund to ensure sufficient ongoing resources are available for projects (as identified in the national transportation supply chain strategy) and infrastructure investments are aligned with national opportunities and strategies, including anticipating technological change.
- Developing and maintaining risk and sustainability functions to monitor evolving transportation technologies, infrastructure and processes to inform future infrastructure investment.
- Working with industry to effectively manage the transportation supply chain, including data and information sharing as well as preparing for and encouraging the use of technologies that will improve the supply chain's fluidity and resiliency.

- Overseeing, coordinating and monitoring government–industry transportation supply chain crisis working groups in each province and at the federal level to prepare for and to mitigate unplanned disruptions (e.g., BC Floods Working Group), particularly those related to natural disasters.
- Compelling the resolution of conflicting government requirements placed on transportation supply chain stakeholders.
- Creating regulatory certainty by:
 - Establishing a major project management office to coordinate and streamline approval processes and evaluate the effectiveness of projects.
 - Ensuring departmental mandates consider transportation supply chain impacts when developing legislation, regulations and policies.
 - Developing a single “window” for regulatory reporting purposes across government by treating stakeholders as customers and asking them to comply in whichever way is easiest way for them (rather than simplest for government), and by making differences in requirements the exception rather than the rule.

Issues addressed

- Labour shortages
- Service reliability and resilience
- Supply chain visibility (data and analytics)
- Borders
- Regulatory certainty
- Planning, governance and accountability
- Capacity constraints and infrastructure

Outcomes achieved

- Establish clear, singular accountability within government for addressing challenges and planning for the long-term agility and sustainability of our supply chain
- Enable transparency of data and reporting against KPIs for government, stakeholders and the public
- Identify and mitigate risks more effectively
- Provide regulatory clarity and certainty for stakeholders and investors

2. Finalize, implement and regularly renew a long-term, future-proof (30- to 50-year) transportation supply chain strategy.

Rationale: Lack of strategic coordination has been a significant driver of the challenges facing the transportation supply chain. If not addressed, this will continue to inhibit Canada’s ability to resolve both longstanding and emerging issues for the benefit of the national public interest. A strategy is needed to provide a comprehensive response to current issues and to develop appropriate governance, planning and accountability for the long term.

Creating a transportation supply chain strategy will:

- Build a comprehensive transportation supply chain vision that is adaptable and responsive to a shifting macroeconomic environment
- Allow all levels of government, investors, commercial operators and other stakeholders to better plan, including through supply chain visibility, data and analytics
- Indicate that Canada is a reliable trading partner
- Identify and plan for strategic and long-term transportation supply chain investments

- Increase the attractiveness of Canadian transportation supply chain infrastructure projects to private investors, including Canadian pension funds
- Define the role of key players and ensure their agreement and collaboration
- Develop a technological roadmap to digitalize, automate and incorporate new technologies across the transportation supply chain

Actions: The SCO (described in Long-term Strategic Action 1) should finalize, implement and sustain the national supply chain strategy. It should assume responsibility for the strategy from Transport Canada (as described in the immediate response actions section) and continue its work — namely, consulting with other federal entities, the provinces and territories, municipalities, Indigenous groups, industry and various interest groups to complete the initial strategy.

The Canada Infrastructure Bank could be leveraged to prioritize public–private investments in the infrastructure that best advances the national public interest as identified in the strategy.

The strategy should be:

- Focused on domestic, North American and global supply chains.
- Centred on specific goals with KPIs such as improved fluidity, resiliency, efficiency, accountability and international competitiveness; safe, secure and sustainable operations (including carbon footprint by mode); a fit-for-purpose regulatory environment; innovative solutions to meet freight demand; an adaptable workforce; and an informed understanding and acceptance of freight operations.
- Established with a perspective on multiple timelines, including developing and implementing plans in short- and medium-term intervals within the 30–50 year period.
- Revisited at least every five years to make adjustments needed due to changes in economic, political, technological, social or legal environments.

The strategy should address, at minimum:

- Identification of current bottlenecks and infrastructure under-utilization.
- All modes of transport related to the transportation supply chain, including:
 - Passenger and freight transportation infrastructure.
 - Port and marine infrastructure, particularly planning, investment and prioritization for three distinct and strategic marine gateways: West Coast, Great Lakes/St. Lawrence Seaway and East Coast. Inclusion of specific ports and marine infrastructure in each gateway will be determined by the Government.
- All transportation corridors and gateways.
- Local community planning needs.
- Port modernization that provides ports with more authority (e.g., extending to inland ports), financial flexibility (e.g., raising financing maximum), autonomy (e.g., airport authorities model) and governance, including more user representation and more effective dispute-resolution mechanisms (for disputes between port authorities and their tenants or other stakeholders over whom authorities have influence).
- Relevant supply chain-related KPIs from individual government departments that can impact the transportation supply chain, such as the CBSA, Employment and Social Development Canada (ESDC) and the Canadian Food Inspection Agency (CFIA). These KPIs would measure the extent to which government departments affect supply chain performance.
- Perspectives on the recommendations of the 2015 *Canada Transportation Act Review Report* regarding the North.
- Technologies and automation roadmaps in the logistic supply chain decarbonization plan to help Canada achieve national net-zero targets.

Issues addressed

- Labour shortages
- Service reliability and resilience
- Supply chain visibility (data and analytics)
- Borders
- Regulatory certainty
- Planning, governance and accountability
- Capacity constraints and infrastructure

Outcomes achieved

- Build a comprehensive supply chain vision
- Allow for better planning by all levels of government, investors, commercial operators, etc.
- Indicate that Canada is a reliable trade partner
- Define where supply chain investments should be made
- Make Canadian infrastructure projects more attractive to private investors
- Define the role of key players and ensure their agreement and collaboration
- Reduce carbon footprints

3. Digitalize and create end-to-end supply chain visibility for efficiency, accountability, planning, investment and security.

Rationale: Canada is behind in using technology to improve and modernize its transportation supply chain processes. An intense and urgent focus on digitalization is needed to compete internationally and become a global leader. A national transportation supply chain data strategy as well as a Government-led, industry-wide data-sharing commitment are needed to improve visibility, competitiveness, resiliency and agility. This will also enable informed Government intervention where necessary to address disruptions and other critical issues. Successful implementation of a national transportation supply chain data strategy requires both government and industry cooperation, as well as a significant shift in behaviour by all industry stakeholders.

Actions: On behalf of the Government, the SCO should develop and execute a national supply chain data strategy to:

- Digitalize the transportation supply chain
- Create the environment and data structure (data governance) to enable and standardize the exchange of data from all groups involved

- Create predictability in demand forecasting for the end-to-end transportation supply chain across government and stakeholders
- Respond to the unique nature of Canada's transportation supply chain, including addressing visibility for users of all modes of transport: rail, marine (via ports or ferries, other cargo vessels), truck and air, as well as connections between and among these modes
- Engage stakeholders and ensure all parties will coordinate and share data and agree on data sharing and what level of information is required to improve the end-to-end transportation supply chain performance, without impacting business competitiveness

Change management, data governance, data security and implementation are the key elements needed to build the foundation for this data strategy

Change management

- Identify a leader who reports to the SCO and will be responsible for uniting stakeholders and delivering the digitalization project. This will ideally be a leader from the industry who has digital transformation experience, knowledge of government and

the ability to engage all transportation supply chain stakeholders.

- Ensure that each player benefits from sharing data and that exporters and importers are required to share their demand forecasting data to help all modes of transport better manage their services. This is a win-win for government and transportation supply chain stakeholders, and these benefits must be clearly communicated. However, participation will likely need to be compelled through incentives and penalties, as it must be compulsory to ensure data sharing and visibility.
- Identify existing data available and map all processes and sources of data.
- Identify stakeholders that will be involved in data sharing to define common goals and objectives. Industry must be highly involved in the project definition, and we recommend that existing roles and structures (such as chief information officers and data-sharing communities) are leveraged for their expertise.
- Provide visibility with quick wins that will reduce existing bottlenecks and demonstrate the dynamism and intent to modernize data infrastructure. This can be done with a common plan to deliver MVPs (most viable products) that will help test the process and stakeholder alignment.
- Create communication and training plans for the stakeholders, teams and customers who will be using the transportation supply chain data system.
- Ensure Indigenous communities can access digital data related to the transportation supply chain for decision-making (where appropriate), and provide these communities with financial support and assistance to build data production capacity.

Data governance

- Develop and implement an appropriate governance model that respects confidentiality and commercial sensitivity.
- Define the standards and means by which transportation supply chain operators can exchange data so as to improve efficiency and reliability.
- Define information taxonomy, data-sharing methodology and protocols (including requirements for data to be timely, interoperable and accurate), and include the necessary data to support the national public interest.
- Invest in the creation of data sharing infrastructure where data from all entities will be received.

Data stewardship

- Identify external provider(s) to develop and manage a digital data-sharing platform/ environment that leverages artificial intelligence and advanced analytics.
- Establish an external board or group consisting of representatives of key supply chain sector participants to ensure collection and distribution of digital data.
- Identify and fill key data gaps through partnerships with third parties, encourage and offer incentives to induce voluntary participation, and, if necessary, levy penalties for failing to provide compulsory data submissions.

Data security

- Ensure Canada's cyber security strategy addresses risks to transportation supply chains for critical commodities.

Implementation

- Use existing and enhanced regulatory capability to compel major stakeholders to make available the necessary capacity and forecast data, which will help better manage the national transportation supply chain.
- Create incentives such as grants and tax credits to accelerate the digitization of medium and small businesses.
- Enhance the role ports and airports play in leading the digitization of the transportation supply chain.

Issues addressed

- Service reliability and resilience
- Supply chain visibility (data and analytics)
- Planning, governance and accountability

Outcomes achieved

- Increase transparency and communication across the supply chain
- Enable industry participants to optimize operations
- Enable the identification of critical issues on a timely basis
- Provide evidence for policy and regulatory decisions

4. Immediately address Canada's significant transportation supply chain labour shortage.²¹

Rationale: By 2030, the percentage of Canadians over the age of 65 is expected to nearly double. As most people over the age of 65 are no longer in the workforce, there will be fewer and fewer people to fill vacant positions in the transportation supply chain. In addition, the number of unemployed people has reached an all-time low, sitting at 1.2 million as

of June 2022. The proportion of non-working-age people (those younger than 15 or older than 64) to the working-age population is also increasing: Canada's dependency ratio (the number of "dependents" for every 100 workers) was 44% in 2010 and 52% in 2021. It is projected to grow as high as 59% by 2028 with at least five million Canadians set to retire by the end of this decade.

²¹ The Task Force would like to acknowledge the Department of Immigration, Refugees and Citizenship's September 21, 2022 release of the "Strategy to Expand Transitions to Permanent Residency" as an encouraging step toward providing temporary foreign workers and international students with greater pathways to permanent residency and economic immigration. Available at: <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/motion-44-response.html>

Canada's labour force growth is on course to stagnate unless dramatic steps are taken. Currently, immigration accounts for approximately 100% of labour force growth. We also have a low birth rate, with the highest being found in Indigenous communities (2.6 compared with 1.5 for the Canadian population as a whole). The number of workers available to provide both skilled and general labourers will be the limiting factor in our economic growth potential. Plus, without a robust workforce, there will not be sufficient tax revenue to support the programs and benefits Canadians rely on, including healthcare and education.²²

Actions: The Government should immediately develop and execute a transportation supply chain labour strategy to address Canada's significant labour shortage. This should include, at minimum, the following streams: immigration, domestic labour participation, refugees, training and education, productivity, and automation.

Immigration

- Adapt immigration policies to prioritize individuals with transportation supply chain experience and skills (or with the aptitude for transportation supply chain positions), and to fast-track their applications.²³ Both skilled and general labour workers are needed and must be prioritized.
- Recognize international credentials and experience related to transportation supply chain positions.
- Ensure sufficient social and other supports (e.g., housing) can be accessed when immigrants arrive in Canada to fill transportation supply chain positions. It is critical that immigration policies incorporate the required investment in infrastructure and social services to accommodate and support population growth.

Domestic labour participation

- Remove barriers, educate/train and support under-represented groups (such as Indigenous people, people with disabilities and people of colour) who have the experience and/or aptitude to be transportation supply chain workers. For example, attracting Indigenous youth could be achieved by:
 - Ensuring key positions are supported with mentoring, training and opportunities for on-the-job skills development.
 - Building competencies for transportation supply chain positions by providing special access to Indigenous youth.
- Reform tax and related policy to encourage older people to remain in the workforce (or at least not discourage them from working, even on a part-time basis).

Refugees

- Educate/train and support refugees who have the experience and/or aptitude to be transportation supply chain workers.

Training and education

- Work with industry to increase awareness of the importance and value of supply chain positions.
- Collaborate with the provinces/territories to align training programs and funding to support key transportation supply chain positions across all transportation modes, and to establish programs that will be recognized across Canada (i.e., ensuring certifications, designations, etc. are transferrable).

²² Hassan Yussuff and Mark Wiseman. "Canada's Labour Shortage is the Country's Greatest Economic Threat". The Globe and Mail, July 19, 2022. Available at: <https://www.theglobeandmail.com/business/commentary/article-canadas-labour-shortage-is-the-countrys-greatest-economic-threat/>

²³ This would have the added benefit of helping address concerns that the TFW Program is an inappropriate tool to address the need for permanent positions within the transportation industry.

- Promote awareness of continuous training and upskilling as lifelong and necessary requirements to succeed in Canadian workplaces.
- Invest in supporting the adoption of and transition to automation to maintain competitiveness.

Productivity

- Apply a transportation supply chain lens to new or revised requirements to ensure changes do not negatively affect the labour supply or the ongoing participation of workers in the transportation supply chain.

Automation

- Provide small and medium-sized businesses with funding and incentives for automation to speed up adoption and enhance competitiveness.²⁴
- Review policies and regulations to adapt to the changing nature of transportation supply chain operations and decision-making brought about by automation and technological advancement.
- Help communicate to workers that automation will not limit their opportunities.

Issues addressed

- Labour shortages
- Service reliability and resilience

Outcomes achieved

- Increase both skilled and general labour workforce available for supply chain positions
- Increase ability of supply chain workers to succeed in their roles
- Increase participation of both domestic and foreign workers, including under-represented groups, in supply chain positions
- Support transition of industry and adoption of technologies by small and medium-sized businesses

5. Revise the Canadian Transportation Agency's mandate and provide it the independence, authority and commensurate funding needed to deliver on that mandate.

Rationale: In a constrained competitive environment, transportation service providers have outsized market power and seek to maximize their financial performance, often without regard to the national public interest. Because Canada relies on the transportation network for its economic well-being, it must keep market forces in check. A critical component of an

effective transportation supply chain is an independent quasi-judicial regulator, such as the CTA, which is responsible for ensuring the consistent functioning of Canada's transportation system. In particular, the regulator should have the authority to address unfettered competition that negatively affects the national public interest. This negative impact is often illustrated when there is a power imbalance between the transportation service provider and the shipper.

²⁴ According to the September 2018 "Report from Canada's Economic Strategy Tables: Seizing Opportunities for Growth" quoting a Brookfield Institute for Innovation & Entrepreneurship news release dated June 8, 2017, "Industries with the highest proportion of automatable work activities include: accommodation and food services; manufacturing; transportation and warehousing; agriculture, forestry, fishing and hunting; and mining, quarrying, and oil and gas extraction. About 62% of work activities could be automated within these industries." Canada's Economic Strategy Tables. September 25, 2018, p. 3. Available at: https://ised-isde.canada.ca/site/economic-strategy-tables/sites/default/files/attachments/ISED_C_SeizingOpportunities.pdf

Actions: The Government should immediately change the structure of the CTA to give it sufficient autonomy and enforcement authority to ensure all parties working within Canada's transportation supply chain have balanced negotiating power.

The revised mandate should reflect the intent to support the creation and maintenance of an efficient, productive and competitive transportation supply chain transportation system focused on the national public interest.

The revised structure should:

- Enhance the investigative and dispute resolution authority of the CTA (like the U.S. Surface Transportation Board and the Canadian Radio-television and Telecommunications Commission).
- Remove the requirement for Ministerial approval to be secured for the CTA to initiate an investigation.
- Improve the ability to address systemic issues in the Canadian transportation supply chain by amending the CTA's own-motion capabilities to allow for investigations longer than 90 days to provide for the collection and analysis of transportation supply chain data.
- Support a more robust and proactive use of own-motion investigations to address systemic issues in the Canadian transportation supply chain (many of them highly commodity-specific). To this end, empower the CTA to collect and use KPI metrics and evolving data (from existing sources or directly from industry) to move from a siloed industry to total end-to-end transportation supply chain visibility, starting with:
 - Order fulfillment (the number of cars supplied by the railway versus what was ordered by the shipper)
 - Origin and port inventory levels (leading indicator of performance)
 - Car cycle times (railway efficiency)
 - Out-of-car time at port terminals (port terminal efficiency)
 - Vessel time in port (measure of port congestion

and demurrage costs)

- Recovery time to average weekly performance (resiliency)
- Shortline railway switch volumes
- Weekly interchange traffic by location, shipper and railway

The Government should direct the CTA to review, establish and enforce the mechanisms needed to achieve balanced negotiating power and to make these mechanisms and related decisions accessible to the public. Such mechanisms should include:

- Prohibiting parties from contracting out of the provisions of the *Canada Transportation Act*.
- Changing arbitration rules to permit final offer arbitrations to include both service and rates.
- Requiring Class 1 railways to strengthen interchange points to handle all traffic, including unit trains (all one type of commodity and rail car) and manifest trains (mixed rail cars and freight).
- Implementing regulatory tools to achieve balance in the market power between shippers and Class 1 railways, and ensuring those regulatory powers provide timely and effective methods for enforcement and support efficient and effective rail service delivery.
- Requiring railways to prepare annual capacity plans by major commodity hauled and report their progress weekly.

The Government should:

- Continue to allow the CTA to encourage and approve cooperative working arrangements between competitors when they result in improved efficiency and productivity.
- Require the CTA to identify and compel the appropriate data and reporting timelines necessary to monitor and enforce its rulings.
- Determine whether the CTA or the Competition Bureau is best placed to address the consequences of reduced competition resulting from ocean shipping line alliances. Following this determination, direct the appropriate agency to

promote the development of Canadian exports through a competitive and reliable ocean transportation supply chain, and provide the means necessary to achieve this.

- Determine how the CTA can be empowered to resolve disputes for shortline railways, and investigate how shortline railways can be utilized to increase rail shipping capacity.

Issues addressed

- Service reliability and resilience
- Regulatory certainty
- Planning, governance and accountability

Outcomes achieved

- Enhance the CTA's ability to ensure the consistent functioning of Canada's transportation system
- Increase competition between and among modes of transportation
- Adapt the regulatory environment to an evolving and agile supply chain

6. Engage Indigenous groups (especially those in Northern and remote communities) to address their significant transportation supply chain challenges.

Rationale: Engagement of Indigenous groups is critical to building a strong transportation supply chain system.

For example:

- More than half of all Indigenous people live in rural or remote areas in Canada, including the North. Supply chains serving remote and Northern communities are often tenuous and experience failure.
- There are more than 50,000 Indigenous-owned companies in Canada that contribute in excess of \$30 billion to our economy annually. Many of these are directly involved in natural resources, transportation and cross-border trade. Addressing the need and ability of these businesses to engage effectively with other supply chain stakeholders will increase supply chain efficiency, particularly in rural, remote and Northern communities.

- Indigenous peoples are the fastest growing and youngest demographic in Canada; their increased participation in the transportation supply chain labour force could help respond to the sector's labour needs and opportunities for Indigenous communities.²⁵
- Given the continued impacts of climate change, the North has the potential to play a greater role in our transportation supply chain, which will require taking into account that this is an ecologically vulnerable and diverse area that supports many Indigenous communities.

Actions:

The Government must ensure that Indigenous groups are engaged in the development of a national transportation supply chain strategy.

- Allocate sufficient infrastructure funding to provide Northern and remote communities with versatile and reliable transportation supply chain infrastructure.

²⁵ Government of Canada, Crown-Indigenous Relations and Northern Affairs Canada, "Indigenous Peoples and Communities". Available at: <https://www.rcaanc-cirnac.gc.ca/eng/1100100013785/1529102490303>

Issues addressed

- Planning, governance and accountability
- Service reliability and resilience

Outcomes achieved

- Engage appropriately with Indigenous groups on matters related to the supply chain
- Support participation of Indigenous groups and businesses in supply chain industries
- Contribute to a resilient and secure supply chain

7. Protect corridors, border crossings and gateways from disruptions to ensure unfettered access for commercial transportation modes and continuity of supply chain movement.

Rationale: For Canada's transportation supply chain to be reliable and efficient, and for our trading partners to be confident in our ability to deliver, our transportation network must be resilient, agile and flexible. We must identify and mitigate potential risks and, when significant incidents occur, have viable alternatives and options at the ready.

Actions: To protect corridors, border crossings and gateways from disruptions, the Government should develop and execute risk-mitigation strategies for three chief types of risks to our transportation supply chains: climate-related natural disasters, human-caused mischief and labour-dispute delays.

Climate-related natural disasters

- As part of the development of the national transportation supply chain strategy, identify locations most vulnerable to climate-related or other natural disasters, develop alternative routes and options to address these vulnerabilities, and prioritize infrastructure funding to mitigate them.
- As noted under Long-Term Strategic Action 1, establish government–industry transportation supply chain crisis working groups in each province and territory and at the federal level to prepare for and be ready to mitigate unplanned transportation supply chain disruptions, particularly those related to natural disasters stemming from climate change.

Human-caused mischief

- Provide law enforcement and the judiciary with tools and resources to pre-empt blockades and/or expeditiously remove individuals or objects intending to be used to disrupt nationally critical transportation supply chain infrastructure or operations.

Labour-dispute delays

- In the national public interest of ensuring the ongoing reliability and fluid operation of Canada's transportation supply chain (i.e., to keep trade moving to international markets and goods and products moving to Canadian consumers, manufacturers and businesses), employers, unions and government must find creative solutions to avoid disrupting the supply chain. As noted previously, even the threat of strikes or lockouts negatively affects the operation of the national transportation supply chain and, in turn, Canada's reputation as a destination of choice for doing business.
- The Minister of Labour should urgently convene a council of experts to develop a new collaborative labour relations paradigm that would reduce the likelihood of strikes, threat of strikes, or lockouts that risk the operation or fluidity of the national transportation supply chain.

Issues addressed

- Service reliability and resilience
- Borders
- Planning, governance and accountability
- Capacity constraints and infrastructure

Outcomes achieved

- Enhance the resiliency, agility and flexibility of Canada's transportation network
- Be better prepared to respond to risks and significant incidents impacting Canada's supply chain

8. Engage the U.S. and the provinces/territories to achieve reciprocal recognition of regulations, policies and processes to enhance supply chain competitiveness and productivity.

Rationale: Regulations, standards and requirements imposed by different jurisdictions cause friction in the transportation supply chain. This contributes to lower productivity and higher costs, particularly when requirements are similar but not identical across jurisdictions. This is true among Canadian provinces/territories as well as between Canada and the U.S., our largest trading partner. Harmonization, while the gold standard, is unachievable in the short-term; however, reciprocal recognition is attainable and urgently required.

Actions: To address some of the friction in the transportation supply chain caused by the current cross-border regulatory environment (for both

domestic and international borders), the Government should:

- Immediately engage the provinces and territories to establish nationally consistent commercial trucking regulations (from a transportation supply chain perspective) to eliminate the need for commercial fleets to have different equipment to service different parts of the country. Removing impediments to deploy equipment more efficiently will reduce costs and improve service. For example, allowing B-trains to operate on all major corridors in Quebec and the Maritimes at 63,500 kilograms gross vehicle weight (kg gw) rather than 62,500 kg gw would harmonize the weight limit across the country.
- Use the Canada-U.S. Regulatory Cooperation Council to champion opportunities for reciprocal recognition of trade and border-related requirements.

Issues addressed

- Borders
- Planning, governance and accountability

Outcomes achieved

- Enable more efficient and fluid cross-border supply chain activities

Summary tables and recommended timeline to complete all actions

Immediate Response Actions	Recommended Timeline (complete all within two years)	
1. Ease port container congestion	Immediate	
2. Expand the 30km interswitch distance across Canada	By May 1, 2023	
3. Address the immediate labour need across the transportation supply chain	Immediate	
4. Implement programs and policies to encourage the attraction and retention of key supply chain positions, such as truck drivers	Immediate	
5. Complete twinning of Highway 185 between NB and QC (6-km stretch)	Immediate	
6. Speed up the process to approve winter transport on ice roads	Immediate	
7. Incent/create competition in sustainable pallets production	Immediate	
8. Waive 50% of airport rent payments	Immediate	
9. Reopen FAST card enrollment centres and/or consider novel ways to expedite applications.	Immediate	
10. Expand CFIA and other services required to process commercial goods	Immediate	
11. Establish, fund, and hire staff for a Supply Chain Office	Within 12 months	
12. Develop a long-term transportation supply chain strategy, including initiating a review to update and modernize related regulations	Immediate	
13. Develop a transportation supply chain labour/workforce strategy	Begin immediately and finish within two years	
	Year 1	Year 2

Long-Term Strategic Actions	Recommended Timeline (steps to be taken in first two years)	
1. Establish a Supply Chain Office to unify the federal government's responsibility/ authority over transportation supply chain management across federal departments	Within 12 months: establish office including stakeholder communication strategy	Within 24 months: complete supply chain and data strategy; initiate regulatory/legislative reform
2. Develop, implement, and sustain a long-term, future-proof (30- to 50-year) transportation supply chain strategy	Begin immediately and complete initial strategy within two years	
3. Digitalize and create end-to-end supply chain visibility for efficiency, accountability, planning, investment and protection	Within 12 months: engage stakeholders; set foundations of strategy; execute initial reg/leg changes	Within 24 months: complete strategy and begin implementation
4. Immediately address the significant transportation supply chain labour shortage in Canada	Begin immediately and complete initial strategy within two years	
5. Revise the Canadian Transportation Agency's mandate and provide it the independence, authority, and commensurate funding required to deliver on that mandate	Within 12 months: engage stakeholders; consult on reg/leg changes	Within 24 months: enact reg/leg changes; additional authorities/ budget in place
6. Engage Indigenous groups to (especially those in Northern and remote communities) to address their significant transportation supply chain challenges	Begin immediately and on an ongoing basis	
7. Protect corridors, border crossings, and gateways from disruptions to ensure unfettered access for commercial transportation modes and continuity of transportation supply chain movement	Within 12 months: stand up crisis working groups; consult on reg/leg changes; increase ability to respond	Within 24 months: enact reg/leg changes; initial strategy in place
8. Engage the U.S. and provinces/territories to achieve reciprocal recognition of regulations, policies, and processes to enhance supply chain competitiveness and productivity	Begin immediately and on an ongoing basis	
	Year 1	Year 2

ANNEX A

National Supply Chain Task Force: Mandate

Global supply chains are under pressure due to the COVID-19 pandemic, growing impacts of climate change and fallout from the Ukraine-Russia conflict. Ensuring that our supply chains are resilient and fluid is a top priority for the Government of Canada. A well-functioning global transportation system is critical to securing supply chains and enabling global trade—and is the backbone of nearly all sectors of the economy. It is therefore critically important that any measures taken to address supply chains consider the important role transportation plays and are developed in consultation with industry.

The National Supply Chain Task Force will complement measures the Government is already taking, including a series of roundtables and consultations, as well as pandemic recovery and collaborative efforts with the United States. The Task Force will provide independent advice to the Minister of Transport in the form of interim and final reports.

The Task Force will consult with industry experts and make recommendations regarding short and long-term actions to alleviate supply chain congestion. Once all members have been appointed, it will be active for 100 days to provide recommendations on actions aimed to increase competition, access, reliability, resiliency, redundancy, efficiency and investment in the national transportation supply chain, while also promoting continued international transportation services to Canada. The recommendations of the Task Force will help inform the development of the national supply chain strategy referenced in the 2022 federal budget.

As part of its scope of work, the Task Force will engage Canadian supply chain stakeholders and business leaders to examine congestion and fluidity issues both in the Canadian and global contexts.



Activities the Task Force will undertake include:

- Assessing the range of impacts on Canada's economy, including on the volume and value of trade and the capacity of infrastructure to accommodate flow trends.
- Noting collaborative opportunities to support a resilient North American and global trade network and address congestion by looking into the actions taken or considered by like-minded countries.
- Working with experts and partners to identify structural weaknesses, policy or regulatory impediments and/or market power imbalances that affect competition in modal and multi-modal sectors.
- Identifying the data, technology and mechanisms that, individually or collectively, could be scaled to improve supply chain and transportation network visibility, operational optimization, coordinated planning and resiliency, as well as contract certainty and conflict resolution options.
- Determining actions/recommendations that could be assigned to federal and other levels of government and industry to reduce congestion and improve the fluid and predictable operation of transportation supply chains.

National Supply Chain Task Force: Membership



Louise Yako,
Task Force Co-Chair

Louise Yako is the former President and CEO of the BC Trucking Association, a non-profit advocacy organization representing about 1,200 companies in British Columbia.

Ms. Yako has extensive leadership experience in public policy, association management, human resources development and safety programs. The advocacy she executed while serving as the first female President and CEO of the BC Trucking Association led to, among other things, effective reforms that improved industry safety, new and revised policy that increased industry productivity, and the industry-led development of a commercial truck operator training standard. For more than six years she was the chief spokesperson of the provincial industry and represented it nationally as a regional vice president of the Canadian Trucking Alliance. She is known for her ability to build consensus and foster partnerships.

She has also served on numerous national, provincial and regional boards and committees, including WorkSafeBC, the Greater Vancouver Gateway Council, the Canadian Trucking Human Resources Sector Council and the Asia-Pacific Gateway Skills Table.

Ms. Yako most recently served as Chair of the Vancouver Fraser Port Authority's Active Vessel Traffic Management Advisory Panel. She has a Master of Business Administration from UBC and a combined Bachelor of Journalism with Political Science from Carleton University.



Jean Gattuso,
Task Force Co-Chair

Jean Gattuso has more than 40 years of experience in the food industry, starting with his first job in sales and marketing at Standard Brands in 1979. Mr. Gattuso began his career at Lassonde Industries Inc. as Director

of Marketing for the A. Lassonde Inc. subsidiary in 1987 and quickly rose through the ranks of the organization, serving in numerous senior executive positions, leading to his appointment as President and Chief Executive Officer of A. Lassonde Inc. in 2004. He was appointed as Chief Operating Officer of Lassonde Industries in 2009 and then President and Chief Operating Officer in 2012.

Lassonde Industries brings together all Lassonde entities in Canada and the U.S. Under the leadership of Mr. Gattuso, the company has considerably expanded its market reach and manufacturing footprint. It now operates 17 plants in Canada and the U.S., employing more than 2,700 workers and reaching \$1.9B in sales in 2020.

Mr. Gattuso co-founded the Conseil de la transformation alimentaire du Québec and twice served as Chairman of the Board of Directors (2002–2003 and 2013–2016). He currently holds a number of board memberships.

Mr. Gattuso has received many awards over the course of his career, including the Golden Pencil Award in 2015, the MBA of the Year Award in 2014 and Entrepreneur of the Year 2008 from Ernst & Young in Quebec. In addition to earning a bachelor's degree in business from McGill University, he has an MBA from l'Université du Québec à Montréal.



Robert (Bob) Armstrong,
FCILT, CITP

Robert Armstrong is President of the Chartered Institute of Logistics and Transport of North America (CILTNA) and of his own consulting firm, Armstrong Trade

& Logistics Advisory Services Inc. He has more than 50 years of experience in global supply chain management, international trade, cross border logistics, and customs regulations and procedures.

As CILTNA President he has led many seminars presented by the organization's members to government and industry. He has also served as President and CEO of the Canadian Association of Importers and Exporters and President of the Association of International Automobile Manufacturers of Canada.

Earlier in his career, Mr. Armstrong spent many years in senior management with the supply chain and logistics industry, a major government relations company, and a large public accounting firm, where he was a partner. Among his many industry roles, Mr. Armstrong has specialized in the marine sector since 2005, developing several short sea shipping initiatives for the St. Lawrence-Great Lakes network. His other activities include Chairman of the Ontario Chamber of Commerce, Treasurer of the Hong Kong Canada Business Association, Director of the St. Lawrence Seaway Management Corporation, Chair of the METROLINX Goods Movement Strategy for the Greater Toronto-Hamilton Area and member of the Goods Movement Roundtable for Peel Region.



Keith Bruch,
*Former Vice President,
Paterson Global Foods*

Keith Bruch has been in sales, marketing and coaching roles throughout his 30-year career. He has worked with customers in more than 30 countries, including Japan, Morocco, the U.S., Canada and Turkey.

For more than 20 years, Mr. Bruch worked at Paterson Global Foods, where he became Vice President of Operations. He was responsible for market development, commodity trading, transportation, country and terminal assets, and organic grain business units. He developed and executed strategies for marketing activities into domestic and global markets. He also performed operations management, logistics and execution planning for country and terminal assets.

Throughout his career he has also served as President of the Alliance Grain Terminal in Vancouver, President of Alliance Seed, CEO of Nutrasun Foods, CEO of FeedMax and President of Alliance Grain (Australia). He is a former Chair of the Western Grain Elevator Association, as well as a member of several committees of the Winnipeg Commodity Exchange and the International Commodities Exchange.

Mr. Bruch has marketed and sold financial products, commodities and food products applying the principles and practices that underpin the Sandler Sales Submarine and is currently President of Sandler Training Canada.



Howard Eng,
*former President and
CEO, Greater Toronto
Airports Authority*

Howard Eng recently retired as President and CEO of the Greater Toronto Airports Authority (GTAA), a position he held for eight years. Mr. Eng started

his career in Edmonton with Transport Canada. He then joined the Edmonton International Airport where he held progressively senior management positions, culminating in his appointment as Vice President, Operations in 1993. In 1995, he joined the Hong Kong International Airport (HKIA) where he served as Executive Director, Airport Operations. During his 17-year tenure, HKIA became one of the world's largest international hubs and won more than 40 Best Airport awards. Mr. Eng returned to Canada in 2012 to assume the President and CEO position at GTAA, which has emerged as a global mega hub, joining the ranks of the top 30 international airports worldwide based on passenger numbers.

Mr. Eng is a past Chair of the Canadian Airports Council and represented Canada on the Airports Council International World and North America governing boards. He is also a past member of the World Travel and Tourism Council. In 2020, he was named the Ontario Chamber of Commerce CEO of the Year as well as the Airports Experience CEO of the Year for North American airports over 40 million passengers. Mr. Eng holds Bachelor of Science and Bachelor of Commerce degrees from the University of Alberta.



**Shauna McMillan,
P. Eng.,**
*Executive Leader and
Supply Chain Professional*

Shauna McMillan is a seasoned supply chain professional and business executive. She most recently worked for Canadian National Railway (CN) for more

than eight years, holding the position of Assistant Vice President, Sales and Industrial Products, where she led a team of sales professionals supporting the delivery of forest products, metal, mineral and frac sand products to North American customers. She developed, implemented and monitored strategic sales plans and direct sales activities, generating increased value for rail services and market share gains. Prior to that, Ms. McMillan was Chief of Staff to CN's President and CEO, and was also Director of Marketing for Intermodal and Automotive for more than four years. An active member of the community during her time at CN, Ms. McMillan served as a director on the Brampton Board of Trade until late 2021.

Ms. McMillan worked for Canadian Tire Corporation for 14 years before joining CN, honing her supply chain skills through various roles including International Transportation Manager, in which she oversaw procurement and operations for the global inbound product supply to the Canadian distribution network.

Ms. McMillan is a P.Eng. (Ontario) and holds a Master of Science, Transport Management and Supply Chain from the University of Denver. She is a certified Supply Chain Professional and is certified in Production and Inventory Management from the Association for Supply Chain Management.



Stéphane Roche,
*Partner Supply Chain
and Operations,
Deloitte, Canada*

Stéphane Roche is a senior executive with more than 25 years of experience in company transformation and digitalization. He has experience in supply

chain management for small to medium-sized businesses as well as for major companies in the industrial, aerospace, medical and service sectors. He has been with CAE in software and numeric solutions developments for more than five years and is currently the Vice President, Chief Operating Officer of Healthcare and Post-Merger Integration. Before this, he was CAE's Vice President for Global Strategic Sourcing and Corporate Transformation.

Mr. Roche's other work experience includes being Vice President of Supply Chain IGS (Transformation) at Bombardier from 2016–2019 and being Vice President, General Manager at Thyssenkrupp Aerospace in Montreal. He also worked for Pratt & Whitney for more than six years as a Value Stream Manager and Strategy and Business Development Manager.

Mr. Roche has a bachelor's degree in Mechanical Engineering from l'École de technologie supérieure (ÉTS) and is a member of l'Ordre des ingénieurs du Québec.



Gretchen Pohlkamp,
*Partner, NovaPark
Consulting*

Gretchen Pohlkamp is an innovative thinker and problem solver who has led numerous significant systems change projects in the Nova Scotia government. As a retired civil servant, she takes

on consulting projects related to land use planning and land management, as well as coaching and mentoring individuals needing help with career and life changes.

While in government, Ms. Pohlkamp created systems and integrated data to manage Crown lands effectively — acquiring, leasing and managing the provincial land holdings to improve forestry, mineral and agricultural uses of the land. She led the change from a paper-based land records system to an online guaranteed land titles system, and led the creation of the Family Division of the Supreme Court of Nova Scotia, which involved establishing services; writing legislation, regulations and court rules; and ensuring judges could be appointed within one year of project initiation.

Ms. Pohlkamp is a retired member of the Nova Scotia Barristers' Society, a part-time helper on her son's no-till farm, a detailed editor and co-author of numerous academic papers, and a community volunteer in Dartmouth, NS. She holds a Bachelor of Arts (International Relations) from the University of British Columbia, a Bachelor of Journalism from the University of Kings College in Halifax, and a law degree from Dalhousie Law School.

ANNEX B

Brief Summary of Industry Perspectives

This section provides an overview of the diverse voices the National Supply Chain Task Force heard during the consultations it held across the country. We were privileged to learn more about the unique sectoral challenges facing stakeholders from all points along Canada's supply chains, while also gaining a deeper knowledge of the regional dynamics and factors to be considered when dealing with a footprint as large and varied as Canada's. Stakeholders also shared their views on key actions being taken internationally and on global trends that could affect Canada's competitive position.

We have organized this section of the report around recurring themes that may manifest differently across sectors, regions, producers, shippers and service providers. Despite these differing impacts, issues occurring at one point along the transportation supply chain have compounding effects. For example, rail companies, trucking firms and shippers all noted that full warehouses in the Greater Toronto Area (GTA) were creating bottlenecks at West Coast ports as there is limited inland capacity to store containers.

While impacts are felt locally, these themes ultimately speak to issues that are national in scope. It is with this national view and attention to the national public interest that we developed our recommendations.

Capacity constraints and infrastructure

Infrastructure

A common theme raised by stakeholders across transportation modes and sectors of the economy is that the federal government needs to increase its overall investment in critical infrastructure to build redundancies along key trade corridors. Stakeholders also want the National Trade Corridors Fund (NTCF), Transport Canada's primary supply chain infrastructure-related contribution program, to become a permanent program with ongoing and sufficient funding, along with expanding the list of eligible investments and segmenting its funding for specific industries. In addition, marine stakeholders suggested establishing a deferred maintenance fund



for ports to ensure that existing and future assets are maintained and upgraded as per operational needs on a predicted and planned basis. Most upgrades have been postponed due to lack of funding.

Port modernization

Regulatory constraints of the *Canada Marine Act* that limit the types of investments Canadian port authorities (CPAs) can make and their ability to generate additional financing was a challenge heard from several stakeholders. Marine stakeholders noted the need to modernize the legislation regulating the Canadian maritime transportation industry to ensure our ports remain competitive. For instance, there is an emerging global trend of developing inland “dry” ports to increase intermodal capacity for inland freight distribution. In Canada, Ashcroft Terminals (300 km east of Vancouver) is a recently developed inland port of which 60% is owned by the Singapore Port Authority. However, due to regulatory constraints, CPAs are prohibited from making similar investments,

leading to scenarios where foreign-owned inland or dry ports are being developed across the country. Furthermore, CPAs are prevented from coinvesting in projects led by another CPA. They are also obliged to annually remit a gross revenue charge to the federal government and participate in federal funding programs rather than use excess revenues to directly reinvest in port infrastructure.

The Task Force also heard that the *Canada Marine Act* does not provide for cooperation mechanisms between CPAs to strengthen and maximize the use of specific trade corridors across the country. The current lack of synergy between port authorities sharing corridors prevents them from capitalizing on its potential, particularly in the face of American competitors. Stakeholders pointed to existing models of strategic alliances that should be explored, such as HAROPA in France, which is the merging of the three ports of Le Havre, Rouen and Paris: the Seine axis Major River and Sea Port.

Marine infrastructure

Several marine stakeholders mentioned the untapped potential for container shipping on the Great Lakes/St. Lawrence Seaway, as this corridor is being used at just 50% of its capacity. Industry submissions noted that increasing marine carriage on this waterway could alleviate pressures elsewhere on the supply chain, including already stretched road and rail delivery systems. For example, one standard Seaway-sized vessel can carry the equivalent of 301 rail cars or 964 transport trucks.

Stakeholders suggested greater coordination among federal and provincial governments, as well as key federal agencies such as the Canada Border Services Agency (CBSA) to decrease obstacles to this proposal. Barriers mentioned include initial launch costs, cargo handling capacity at regional ports and meeting CBSA customs requirements. Marine stakeholders have been searching for alternative routes to markets for shippers through short sea shipping solutions that move more cargo along the marine mode. The changing landscape within supply chain operations due to highway congestion, driver shortages, increased fuel costs and the need to reduce carbon footprints have led to the development of pilot short sea shipment projects. One such pilot shipment resulted in several hundred containers being carried from Hamilton to Montreal to demonstrate the value of rolling out a full-time service in the near term.

Rail infrastructure

Expanding Canada's rail network by building more infrastructure was mentioned to increase competition and build redundancy/flexibility into the rail industry. That industry has identified several areas where investment is needed, including building more rail connections to Canada's ports and airports; expanding and twinning rail lines to improve resiliency, increase capacity and ease congestion; and constructing more rail infrastructure/hubs outside of inner urban areas. In addition to supporting Class 1 railways, infrastructure investment is also needed for short line railways, which provide vital first-mile/last-mile rail services that connect customers and rural economies to global markets.

Dysfunctional project approvals process

While stakeholders called for increased ongoing funding for the NTCF, they also emphasized the need for faster approvals and speedier flow of funds. Stakeholders were not confident that solely investing in infrastructure would address supply chain congestion, fluidity or reliability. Investments cannot be realized if there is a high degree of uncertainty arising from project review and regulatory approval processes. This crosses over with the other theme of regulatory uncertainty as environmental impact assessments often affect project approvals as well. For example, the federal government announced NTCF funding for the Port of Saint John to expand its capacity by 500,000 TEUs annually. While the project provided clear benefits that would ensure enough capacity to meet increased demand driven by CP's network expansion into Atlantic Canada, it took more than a year for the project to be fully assessed and approved. Another example of lengthy approval processes is the Milton logistics hub project that would increase inland terminal capacity in the Greater Toronto and Hamilton Area, which took more than four years to receive regulatory authorization. Government expectations for project assessments and clear timelines for the administration and project approval process was a nearly universal theme raised by stakeholders throughout consultations.

Warehousing and pallets

A common theme heard from stakeholders across several sectors is the immediate need for more warehouses to store goods and prevent future shortages fueled by network disruptions. This underlying push for capital investment in warehousing, according to industry, is driven by the need to increase inventory capacity, rather than to upgrade operations to include more innovative technologies such as automation. Supply chain disruptions and product shortages have led to a shift away from just-in-time inventory practices to just-in-case stocking. However, this shift could be temporary and industries may need to find a middle-ground as the economy continues to slow, which could lead to a lot of excess inventory. We also heard there is a demand

for distribution centres outside of major cities to alleviate and counteract urban congestion caused in part by increased population growth.

The Task Force also heard that issues in Canada have extended into the pallet industry, a small but key component of the supply chain that allows shippers to stack, store and move large quantities of goods simultaneously. Soaring lumber prices, increased demand for goods and labour shortages have led to a decreased supply of wooden pallets across the country. Stakeholders highlighted their difficulties in obtaining pallets. According to industry, this is due in large part to the lack of competition in the pallet industry.

Airport infrastructure

Air cargo has always played a critical role in supporting trade and supply chain resiliency — and this was brought to the forefront throughout the pandemic as personal protective equipment was flown into the country to meet surging demand. There has also been a shift in consumer demand for rapid receipt of e-commerce goods, resulting in lower priced consumer goods being shipped by air. Based on feedback, this shift is expected to become the norm. Airport stakeholders noted that this has strained airport operations that facilitate the safe and efficient staging of aircraft and the unloading/loading of cargo. For example, increased reliance on air transportation to move goods has resulted in carriers ordering larger (double-wide) aircraft and converting existing aircraft to manage full freight capacities, which requires improvements to existing runway infrastructure.

In light of the increased demand, submissions to the Task Force identified infrastructure gaps across several areas, including lack of capacity to handle larger planes and move and store goods, and a lack of onsite maintenance infrastructure to accommodate increased traffic. Stakeholders also raised the need for better forward planning for infrastructure integration with other modes, including better leveraging of industrial and unused land surrounding airports that could be developed as significant logistic zones.

Labour shortages

A shortage of labour, a mismatch between available and required skills, lack of appropriate training programs, and insufficient training funding have been consistently raised as significant concerns by various supply chain representatives. These concerns apply regardless of mode, region or size of employer. Despite advances in automation, more efficient processes, the implementation of artificial intelligence and other novel approaches, stakeholders believe labour will continue to be a limiting factor for a reliable and efficient supply chain unless drastic measures are taken.

To attract and retain workers, stakeholders consistently suggested that the Government of Canada partner with the private sector and provinces and territories to promote education and skills training in supply chain-related occupations. While several stakeholders cited the Temporary Foreign Workers Program (TFW) as a tool that could be leveraged to fill labour gaps, others mentioned issues with the complexities and delays in obtaining work permits for these workers, as well as the high recruitment costs. Also, some positions (such as “truck drivers”) are not temporary and would benefit from a longer-term approach to filling them. In Q1 2022, 25,560 vacant truck driver positions were recorded, demonstrating the need for a longer-term solution.

A common issue raised by all stakeholders was the transportation and warehousing sectors’ heavy reliance on the continued influx of immigrants to remain operational and fill critical labour gaps. Stakeholders agreed that collaboration among all levels of government and the private sector should be prioritized to better understand labour market needs across the country and to meet current and future workforce requirements. Some stakeholders expressed there may also be an opportunity to fill labour gaps by increasing the participation of Indigenous people, persons with disabilities, refugees and other under-represented groups.

Stakeholders raised the idea of governments supporting the cost of training as well as providing employers with wage subsidies to support the onboarding of employees, particularly in the trucking and logistics sectors, where research demonstrates that a key barrier for people entering the driver occupation is the cost of training.

Service reliability and resilience

Ocean shipping

Stakeholders indicated that disruptions to services in global liner shipping markets are due to labour shortages, reduced container capacity, unpredictable service, overbooking of vessels and increased fees and premiums. These disruptions are negatively impacting the short- and long-term competitiveness of overseas trade by Canadian importers and exporters.

We heard concerns from shipping associations that the current legislative environment does not foster competitive sea-shipping and that the *Shipping Conferences Exemption Act*, which is meant to support sector competition, is no longer applicable because shipping conferences have been replaced with global alliances that are outside the scope of the legislation. In response to this gap, stakeholders have pointed to examining the possibility of introducing statutory exemptions or regulations to be administered by the Competition Bureau under the *Competition Act*.

The importance of ferries as a key part of the transportation supply chain was raised. Ferry services link Newfoundland to Nova Scotia and Vancouver Island to the mainland of British Columbia, as well as provide the only transportation connection for many remote and isolated communities all across the country. Canada's ferries face many of the same issues as other transportation modes - labour and funding shortages, lack of supply chain visibility and issues with resilience. Possible measures to help respond to labour needs were suggested, such as developing seafarer training programs and recognizing international seafarer credentials in Canada without the need for reciprocal agreements with other jurisdictions. It was noted that ferries should be taken into consideration when looking at infrastructure needs of the transportation supply chain.

Rail service

Unreliable rail service, ineffective dispute resolution mechanisms and lack of confidence that rail service providers will be able to meet shipper needs (and rail's overall ability to scale up its capacity to meet demand, seasonal or otherwise) are significant challenges raised by shippers. Industry also expressed concerns about the significant shortage of rail workers and crews, which affects suppliers' ability to rely on rail for timely delivery of products.

We heard that some railways require shippers to waive their right to seek dispute resolution remedies available to them under the *Canada Transportation Act* as a condition of entering into a rail-shipper contract. Under the Act, the Canadian Transportation Agency (CTA) determines whether a railway company or a shipper is fulfilling its stated contractual service obligations. Shippers asked that the CTA be given the necessary authority and regulatory power to adjust the power imbalance and create greater fairness and more competition in the rail system. In addition, the CTA should have more authority and independence to take a strong and proactive approach to enforcing rail level-of-service obligations. Concerns were also raised about the existing three-pronged mandate of the CTA, which includes a consumer protection focus related to air travel. At present, the CTA is dealing with a massive influx of consumer complaints related to lost luggage and delayed flights. Stakeholders questioned whether these issues would affect the CTA's ability to hear rail shipper complaints in a timely manner.

Stakeholders also said there is a pressing need for additional rail capacity to be built into Canada's transportation supply chain. Some submissions encouraged greater cooperation between short lines and Class 1 railways on select rail services and branch line operations. Short lines can further complement Class 1 railways by providing flexible service to shippers, performing time-intensive rail services and operating branch lines. It was noted that more cooperation on branch lines could result in short lines retrieving their own traffic from Class 1 yards when the Class 1 rail lines cannot deliver it, further improving performance and reliable service.

Climate shocks and disruptions

Climate change mitigation and adaptation plus human-caused disruptions in the transportation supply chain were common themes raised by stakeholders. Floods and forest fires in British Columbia and elsewhere in Canada in 2021 illustrated that the devastating and increasingly frequent consequences of climate change have the potential to block the supply chain.

Within this context, rail industry stakeholders indicated that the washouts in British Columbia clearly demonstrated that the immediate availability of construction materials is critical when natural events disrupt the transportation and supply chains network. To that end, it was suggested that the Government identify available sites where construction material can be stored and made available in case of adverse natural events.

While recovering swiftly is critical, so is the need to be prepared for and to mitigate these disruptions. Some suggested that specific infrastructure, such as ports, rail lines and border crossings, be classified as critical infrastructure to prevent human-caused disruptions to the supply chain (e.g., demonstrations, work stoppages, blockades) and to give a higher priority to addressing climate change impacts.

Industry noted that while we cannot control weather-related or other unforeseen climate-related hazards, preventing human-caused disruptions at key transportation supply chain corridors and infrastructure is of critical importance. Governments need to effectively manage these types of disputes and disruptions quickly, using all possible legal tools. Labour disputes and strikes significantly impact Canada's supply chains, including the ability to remain competitive and reliable. The simple threat of a dispute or strike causes uncertainty over the reliability of Canadian services and ultimately benefits a competitor that receives traffic originally intended for Canada, reducing our competitive advantage. For example, rotating strikes at the Port of Montreal in

2020 led to 21 container ships diverting elsewhere, which cost businesses an estimated \$600 million in lost sales.²⁶ As well, the economic impacts of the February 2020 rail blockades are estimated to be \$275 million.²⁷

Supply chain visibility

Visibility

Stakeholders across all modes identified the need to increase visibility of data and interactions across the supply chain. The lack of visibility contributes to inefficient forward planning, lagging responses to emergencies and a siloed approach to resolving issues that should be viewed as cross-cutting. The need to increase visibility is further emphasized by a sector-wide shift from just-in-time to just-in-case operations that requires built-in redundancies to navigate issues as they arise and respond accordingly.

Port stakeholders emphasized that visibility is not just about promoting the sharing of data but also encouraging cooperation and making linkages across sectors to enable better decision making. They indicated that improving visibility across the supply chain would foster growth and illuminate changes in trading patterns.

Digitization and protection of data

We heard there is a need for a “single window” reporting approach for the collection and dissemination of digitized data required by governments across all modes of transportation used to transport and receive cargo. Stakeholders also identified an immediate need for visibility of freight movements to all those who handle it across the transportation network. A lack of open, transparent and visible supply chain digital data is hindering industry's overall ability to innovate and invest for the future. Stakeholders, particularly within the rail industry, also raised the need for a holistic view of all elements of an integrated supply chain as being essential to obtain a complete assessment on system

26 Jonathan Montpetit. “Montreal Port Strike Imperils Supply Chains Across Canada, Ottawa Poised to Legislate End to Dispute,” CBC, April 26, 2021. Available at: <https://www.cbc.ca/news/canada/montreal/port-of-montreal-strike-again-1.6002057>; Nicolas Van Praet. “As Potential Strike Looms, Cargo Diverted from Port of Montreal,” The Globe and Mail, March 20, 2021. Available at: <https://www.theglobeandmail.com/business/article-as-potential-strike-looms-cargo-diverted-away-from-port-of-montreal/>

27 Government of Canada. Office of the Parliamentary Budget Officer. “Estimate of the Impacts of the February 2020 Rail Disruption”. Available at: <https://www.pbo-dpb.ca/en/publications/RP-1920-032-S--estimate-impacts-february-2020-rail-disruption--estimation-repercussions-perturbations-transport-ferroviaire-fevrier-2020>

performance. All participants in the supply chain should expect to contribute to the data elements to obtain the complete picture of current and forecasted supply chain needs, flows and timing.

Digitization was also identified as an opportunity to build resiliency as it would provide industry the insight to understand when and where to surge or transform a product and would increase consumer confidence in the supply chain, reducing future surges in panic buying.

Stakeholders articulated that without access to timely data they are unable to optimally strategize for future infrastructure investments, identify new market opportunities and improve service to customers. While some stakeholders said they were open to sharing data, they raised concerns about competition implications and advocated for government to act as the intermediary to set data standards and oversee collection. Government as the neutral third party to regulate digital data collection requirements and manage dissemination was the favoured model for implementation.

In addition to investing in the digitization of the transportation supply chain, stakeholders also stressed a need for better infrastructure investment and training in the face of increasing cybercrime. Not all stakeholders are equipped or have the knowledge to deter cyberattacks and raised the opportunity for the federal government to provide more direct support to industry through training sessions or by dedicating resources to monitor cybercrime more closely.

Borders

Increased regulatory harmonization with the U.S. was mentioned as a key step to promoting more efficient trade across the border. Stakeholders were concerned that Canada's unilateral approach to regulations dissuades investment and contributes to administrative burdens. For example, Canada introduced new Ballast Water Regulations in 2021, which established a dual system with requirements that differ based on the construction year of the vessel. These regulations place the younger Canadian domestic fleet at a disadvantage against the much older American vessels. Another example is the requirements for electronic logging devices (ELDs)

in commercial motor vehicles. Such requirements have been in place in the U.S. since 2017, while in Canada this will not be required until 2023. In this case, Canada will require all ELDs to be approved by a third-party certification body, which is not required in the U.S. This will likely result in increased administrative burden and costs for the Canadian trucking industry. Stakeholders suggested that when introducing new regulations, the federal government should apply an economic lens and consider increasing compatibility with our trading partners to lessen impacts on cross border and international trade.

We heard that the CBSA and Canadian Food Inspection Agency (CFIA) do not seem to have sufficient human resources to provide the level of service currently needed to enable the continued and speedy movement of goods. Elimination of paper-based forms and increased use of digital technologies would streamline border inspection and assessment processes related to trade goods and transportation service operators (e.g., rail crews, truck drivers, marine workers). For example, the documentation for cross-border movements could be digitalized and preauthorized away from the border to reduce congestion and expedite the movement of goods. Leveraging technology would also allow for more accessible and transparent digital data collection and sharing. Using artificial intelligence tools would provide visibility on the fluidity of the transportation supply chain and identify potential bottlenecks at Canada's borders.

Stakeholders also see the need for more investment in physical infrastructure to facilitate more modern border processes (e.g., more dedicated lanes for "trusted shippers") and to improve the overall resiliency of the system by providing more points of access. Stakeholders mentioned the opportunity for Canada to harmonize its processes and border regulations with the U.S. to provide a more cohesive service to users. Additionally, stakeholders also expressed that border processes could be made better by improving port infrastructure to allow all ports with customs requirements the ability to clear products. These enhancements would provide increased flexibility to leverage alternatives (such as the Great Lakes' ports) to ease congestion elsewhere.

Regulatory uncertainty

Stakeholders stated that the burden of multiple layers of regulation and requirements for reporting to a variety of government departments is reducing productivity and competitiveness. Related to this, stakeholders noted that differing interpretations and enforcement of regulatory requirements create an uneven playing field amongst competitors. The regulatory burden extends to uncertainty related to permitting and/or meeting other government requirements. For example, the *Impact Assessment Act* has expanded the requirements on project proponents and increased the time required for project approvals.

Multiple revisions of infrastructure investment applications are required with stakeholders expressing concern over:

1. Lack of clarity for revision requirements
2. Uncertainty surrounding permitting decisions because reasons, when given, are typically not detailed
3. Timelines for decisions are not generally established, or the “clock” for an application restarts when a revision is required

Additionally, stakeholders raised concerns that the federal government’s approach to modernizing regulations is slow and, in some instances, impedes improvements to efficiency, system velocity and overall capacity. For example, rail service providers indicated that innovative, automated technologies currently in use could replace time-consuming mandatory manual inspections, freeing up critical human resources to handle other operational needs. However, Government has yet to remove regulatory requirements for manual inspections of rail infrastructure.

Industry stated that governments need to apply a supply chain lens when developing policies, programs and regulations to strategically consider the broader impacts to the transportation supply chain and avoid inadvertently decreasing overall productivity.

Planning and governance

We consistently heard from stakeholders that the lack of clear and cohesive federal leadership on Canada’s transportation supply chain creates a veil of uncertainty for industry where businesses cannot confidently plan and invest for the future. The gap in federal leadership is seen as a lack of prioritization of the growth, health and oversight of our supply chain. Without a definitive path for the future growth of this complex economic system there is concern that this will challenge Canada’s reputation as a reliable trading partner and in turn reduce economic opportunities. In addition to a lack of direction, stakeholders were also frustrated that there is a lack of cohesion and communication across the various federal departments that touch on areas of the supply chain (e.g., labour, transportation, infrastructure, industry). The diffusion of efforts results in stakeholders having to navigate multiple layers of bureaucracy where jurisdiction is unclear.

This gap in leadership is seen across numerous areas of the supply chain, including regulatory oversight and administration, facilitation of digital data collection and sharing, consistent investment in critical infrastructure, and coordination among key supply chain actors such as port authorities.

Lack of accountability among both government and industry service providers was another key frustration raised by stakeholders. Of particular note is that stakeholders felt that governments continually produce reports and develop recommendations but fail to implement them. For example, the 2015 *Canadian Transportation Act* and 2018 *Pilotage Act* Review Reports were noted as having recommendations that industry feels would be impactful if implemented—but so far it appears to industry that not enough has been done.

To fill this gap, industry sees a need for the federal government to create a long-term national supply chain strategy that would demonstrate Canada’s commitment to investing in its future. Development of this strategy should include transportation service providers, commodity and agriculture producers, manufacturers, shippers, Indigenous groups, and the provinces and territories, among other partners. With proper planning and better-defined governance structures there is an opportunity for Canada to cement a more resilient and prosperous supply chain for the future.

ANNEX C

Stakeholder Engagement List

Below is the list of stakeholders that provided input to the National Supply Chain Task Force:

A

Aéroports de Montréal
AG Transport Coalition
AltaGas Ltd.
Aliments Whyte's
Animal Nutrition Association of Canada
Ashcroft Terminal
Assembly of First Nations
Association des employeurs maritimes
Association du camionnage du Québec
Association of Canadian Port Authorities
Association of Equipment Manufacturers
Automotive Parts Manufacturers' Association

B

BC Marine Terminal Operators Association
BC Maritime Employers Association
BIOTECanada
BlueNode
BNSF Railway
Bonduelle
Boulangerie St-Méthode Inc.
Business Council of Canada

C

Camo-route
Canada Supply Chain
Canadian Airports Council



Canadian Association of Importers and Exporters

Canadian Association of Petroleum Producers

Canadian Canola Growers Association

Canadian Chamber of Commerce

Canadian Federation of Agriculture

Canadian Federation of Independent Businesses

Canadian Federation of Independent Grocers

Canadian Ferry Association

Canadian Institute of Traffic and Transportation

Canadian International Freight Forwarders Association

Canadian Labour Congress

Canadian Manufacturers and Exporters

Canadian Meat Council

Canadian National Railway

Canadian Oilseed Processors Association

Canadian Pacific Railway

Canadian Pork Council

Canadian Produce Marketing Association

Canadian Steamship Lines

Canadian Steel Producers Association

Canadian Tire

Canadian Trucking Alliance

Canadian Vehicle Manufacturers' Association

Canfor

Canola Council of Canada

Canpotex

Cascades Canada ULC

Cereals Canada

Chamber of Marine Commerce

Chamber of Shipping of British Columbia

Chemistry Industry Association of Canada

Chemtrade Logistics

CHEP

Coalition of Rail Shippers

Coast 2000

Conseil de la transformation alimentaire du Québec

Container Consortium

Convenience Industry Council of Canada

D

Dion Herbes & Épices
Dow Canada
DP World

E

Edmonton International Airport
Empire Company
Érablières Des Alleghanys
Exceldor Coopérative
Excellence in Manufacturing Consortium

F

Fertilizer Canada
Food, Health & Consumer Products of Canada
Forest Products Association of Canada
Freight Management Association of Canada
Fruit and Vegetable Growers of Canada
Fruit D'or Inc.

G

Gartner Supply Chain
GATX Rail
General Motors Canada
Genesee & Wyoming Canada Inc.
Gibson Energy
Global Cold Chain Alliance
Global Container Terminals
Government of Alberta
Government of Manitoba
Government of Saskatchewan, Ministry of Highways,
and Infrastructure
Government of Yukon, Department of Highways
and Public Works
Great Sandhills Railway

Great Western Railway
Greater Toronto Airport Authority
Greater Vancouver Gateway Council
Groupe Bergeron-Thibault

H

Harbour Link Container Services

I

Inter Pipeline
International Longshore and Warehouse
Union Canada
International Longshoremen's Association
International Warehouse Logistics
Association—Canada

K

Keystone Agricultural Producers
Kruger

L

Loblaw Companies Ltd.
Lassonde Industries Inc.

M

Manufacturier et exportateurs du Québec
Metro Inc.
Mining Association of Canada
Montreal Port Authority

N

National Airlines Council of Canada
National Maritime Group
Nordion

O

Ontario Forest Industries Association
Ontario Trucking Association

P

Pattison Food Group
Port of Halifax
Port of Nanaimo
Port of Saguenay
Port of Saint John
Port Trois-Rivieres
Prince Rupert Port Authority
Private Motor Truck Council of Canada
Propulsion Quebec
Pulse Canada

Q

Quebec Port Authority
Quorum

R

RailState
Railway Association of Canada
Responsible Distribution Canada
Retail Council of Canada

S

Saskatchewan Mining Association
Saskatchewan Wheat Development Commission
Seafarers' International Union of Canada
Shipping Federation of Canada
Sobeys

Sollio Cooperative Group
Société de développement économique
du Saint-Laurent
Soy Canada
Southern Railway of British Columbia
Station 22
St. Lawrence Seaway Management Corporation
Sultran Ltd.
Supply Chain Canada

T

Teck Resources Ltd.
Tourism Saskatchewan
Trans Mountain
Trigon Pacific Terminals Ltd
TrinityRail
Trucking HR Canada

V

Vancouver Fraser Port Authority
Vergers Leahy Inc.

W

West Fraser Timber
Western Canadian Shippers' Coalition
Western Canadian Short Line Railway Association
Western Canadian Wheat Growers Association
Western Grain Elevators Association
Western Transportation Advisory Council

ANNEX D

Acknowledgements

The members of the National Supply Chain Task Force would like to extend our sincere gratitude to all those who took the time to meet with us to present their views, send us their submissions and participate in the various discussion platforms. This helped us understand stakeholder challenges and views on how Canada's supply chain can be strengthened in terms of its efficiency, resiliency, reliability and fluidity. Your contributions helped us focus on key issues and informed the analysis that helped shape the recommendations presented in this report.

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- Cargo Airline Association
- Federal Maritime Commission
- Future Borders Coalition
- National Association of Manufacturers
- Surface Transportation Board
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- Wilson Center for International Scholars

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