

2022 FALL MEMBER FORUM SUPPLEMENT

This supplement is designed to support the engagement of members in a fulsome, productive conversation with speakers and fellow members. Please take the time to review the information in this supplement. We hope it will provide value to members and enhance the discussion on the issues driving economics and trade in Canada and around the globe.

Statistics on Transportation Workforce¹

- Canada's transportation sector has an older-than-average workforce
- Men account for more than three-quarters of the transportation workforce, and they make up more than 90 per cent of workers in 5 of the top 10 occupations, i.e. truck drivers, taxi and limousine drivers, truck and bus mechanics, air pilots and aircraft mechanics.
- Women make up the majority of pursers and flight attendants (79 per cent of the labour force) and airline tickets and service agents (67 per cent).
- Indigenous people in the transportation sector account for 3.9 per cent of the sector's labour force—the same share as the entire economy
- The sector attracts fewer immigrants among its ranks than other industries.
- Between 2021 and 2040, more than 260,000 transportation workers are expected to retire.
- Combining labour supply and demand, the transportation sector is projected to face a labour shortage of 91,473 positions by 2040.

	Difference between labour supply and demand					
	2021		2030		2040	
	Level	%	Level	%	Level	%
Transportation Sector	-32,436	-6.0	-102,311	-17.0	-91,473	-14.9
Trucking	-8,816	-3.4	-23,749	-8.7	-19,373	-6.9
Ground & Transit	-17,651	-15.1	-30,159	-24.3	-35,819	-28.2
Air transportation	-4,904	-8.4	-43,197	-43.2	-36,288	-37.0
Rail transportation	502	2.0	-2,434	-8.8	-4,942	-16.7
Water transportation	460	5.8	-191	-2.3	-431	-4.7
Support Services	-2,027	-3.0	-2,582	-3.7	5,380	7.9

Summary of Labour Market Projections

Source: The Conference Board of Canada; Statistics Canada.

¹ Derived from The Conference Board of Canada Report "Workforce Capacity Needs in Canada's Transportation Sector: Current Situation and Outlook to 2040"



The Working Future: More Human, Not Less

by Bain & Company

The relationship between workers and firms has shifted somewhat dramatically. As a result, businesses now require "a new mental mode, one that rehumanizes the way we think about work." This becomes increasingly critical for businesses as the US saw the most rapid reshuffling of the workforce on record over the past three years. There are five key themes identified:

Motivations for work are changing:

- 1. Gains in living standards over the past 150 years allow us to spend less time working but are raising expectations about what a job should provide.
- 2. Beliefs about what makes a "good job" are diverging: As attitudes toward work fragment, the average worker is no longer a useful approximation. We've identified six worker archetypes, each with different priorities.
- Automation is helping to rehumanize work: Distinctly human advantages—around problemsolving, interpersonal connection, and creativity—are growing in importance as automation eliminates routine work.
- 4. Technological change is blurring the firm's boundaries: Remote and gig work are rising, challenging firm cohesion.
- 5. Younger generations are increasingly overwhelmed: Young people, especially in advanced economies, are under mounting psychological strain that spills over into their work lives.

Bargaining Tech: Strategies for Shaping Technological Change to Benefit Workers

by Jim Stanford and Kathy Bennett

The report prompts readers to understand technology as a fundamental human endeavour. The report considers the potential for workers to use collective bargaining to shape the direction and effects of technological implementation in the industry.

Shifting Skills, Moving Targets, and Remaking the Workforce

by BCG et al

The authors note that during times of disruption, the focus is usually on jobs created and destroyed. But they also change. For the vast majority of workers, their job is much less likely to go away than to evolve into something new. The authors have created a Skill Disruption Index by analyzing millions of online job advertisements posted between 2016 and 2021. The index allows us to compare how rapid and significant changes are in specific roles. Looking at the data across job families reveals four significant trends in skill change.

- Digital skills in non-digital occupations: Roles across industries increasingly demand technical fluency and abilities. These skills include data analysis, digital marketing, networking, and digital skills in manufacturing
- 2. Soft skills in digital occupations: These include skills involving organization, time management, verbal communication, leadership, positive thinking, listening, critical thinking, and building effective relationships.
- 3. Visual communications: This has increased significantly across all occupations. Skills in D3.js, Canva, Adobe Analytics, MS Visio, and Alteryx are in demand.
- 4. Social media skills



Some numbers related to where transportation jobs rank on the Skills Disruption Index²:

- Sailor/deckhand/marine oiler rated 44
- Light-truck delivery driver rated 43

Turning Around the Productivity Slowdown

by Kweilin Ellingrud

Productivity is difficult to measure. At the start of the pandemic, those who remained with jobs saw their productivity climb. However, this has not been sustained past a few quarters. As workers are rehired, productivity might decrease for several reasons, e.g. the lag time to get the new workers trained and acquainted with their roles. Productivity should be on top of mind as it remains one of the fundamental components of a healthy economy. However, business investment in automation and technologies calls for optimism, though its full capacity has yet to manifest significantly in productivity measures.

Global Talent Trends 2022: Rise of the relatable organization by Mercer

This detailed report provides a deep analysis of trends that arose in the past two years and how the winning organizations are becoming more relatable. They are rethinking processes, ways of working and digital investments that deliver a new vision for work, working and the workplace.

- Talent attraction and retention are on top of mind for executives, with 66% saying they save a labour shortage crisis. Over 55% of executives share the following workforce concerns:
 - o Difficulty hiring the right talent at the right price quickly enough
 - High employee absences impacting productivity
 - Digital exhaustion and remote worker fatigue
 - o Loss of talent due to pandemic or unrest
 - Managing a more cross-border workforce

The Scorecard

by Coalition for a Better Future

This scorecard will track Canada's progress on key economic, social and environmental indicators for the next decade. These will be updated annually, addressing 21 key metrics across six themes and three goals. The six themes are relevant to the transportation industry:

- Scale through innovation
- Canadian global champions
- Economic resilience
- Climate change
- Living standards
- Human capital

The first progress report will be available in March 2023, with the analysis conducted by the University of Ottawa.

COVID-19: Future Implications and Lessons Learned from COVID-19

by Brian David Johnson for Association for Supply Chain Management

This report identifies ongoing supply chain threats that industries need to be aware of. It begins by noting that growing geopolitical tensions, economic fluctuations, social unrest, and the adoption of emerging

² The Skill Disruption Index measures the amount of skill change in an occupation on a scale from 1 to 100, with 100 (high level of disruption) representing the occupation that has changed the most out of all occupations in the database. That occupation is data engineer, and close to 75% of the top skills sought for that occupation have changed over the five-year review period.



technologies by consumers, industry, and governments will give rise to a range of existing and novel threats to global supply chains and organizations.; the pandemic accelerated these threats. Highlights from the report include:

- Al will be a solution to multiple threats and challenges, but novel complications will accompany this
- With increased digitalization of supply chains, other challenges also arise, including cyberattacks and ransomware
- Interconnectedness means that organizations need to be aware of economic and geopolitical threats at all levels

Researchers noted climate change and workforce talent shortage are substantial future threats that saw little industry discussion, exposing specific blind spots in supply chain strategies and planning.

Automation Trends

by Port Technology

This report looks at all things automation in ports and terminals. It also highlights DP World's long-term outlooks for port automation. Key points are noted below:

- Benefits of automation that are not commonly addressed include sustainability, inclusivity, accessibility and diversity, skills enhancement, and increased job satisfaction.
- In the future, we will see more of the self-maintaining and the self-directing of automated equipment. This will enable optimal reliability, further improve efficiencies, and thus contribute towards a more sustainable business.
- Using digital technologies can significantly increase transparency and, together with AI, forms an important basis for operational and strategic decisions.
- Implementation of industry 4.0 is one of the reasons why smart ports in Asia are so successful. A
 revolution of the entire terminal ecosystem makes automation, AI, real-time data, and
 connectivity to the internet of things the foundation of their everyday workings.



Where are the Robots?

by Jim Stanford

This report takes a different approach to the topic of changing dynamics of the workforce because of technological changes. The author notes that there is little evidence that the introduction of new technologies in Canadian workplaces has accelerated. However, it is impractical to dismiss the paramount fears, as millions of Canadian workers experience pervasive work-life insecurities. The report also examines how Canadian workers would benefit from more investments in technology and not less.

Action. Collaboration. Transformation by National Supply Chain Efficiency Taskforce

The report focuses on areas of action, collaboration, and transformation as overarching themes to improve Canada's supply chain. Twenty-one actions have been recommended to realize tangible results for Canadians. These are further divided into short- and long-term recommendations. The Task Force consulted extensively to gain a broad perspective, including those of WESTAC members. The report emphasizes the need to improve reliability and build resilience in the transportation supply chain.