

# McMaster Forum Event #2: Increasing the Competitiveness of Regional Supply Chains (July 8th, 2020)

## Overview

This July 8th virtual event hosted by the McMaster Institute for Transportation and Logistics (MITL), and moderated by Ken Albright of McMaster University, was the second in a series of five events linked to the McMaster Forum. The session highlights that competitiveness is a multi-faceted topic and that perspectives on competitiveness in the supply chain depend on the organizational context. The Forum offers an opportunity to improve our understanding.

## Introductory Remarks

- Saiedeh Razavi, from MITL, welcomed participants, outlined the series of events associated with the Forum, and offered a few highlights that emerged from the first event.
- Louis-Paul Tardif, from Transport Canada, offered a summary of more detailed remarks offered at Event #1 by outlining the range of visibility projects sponsored by Transport Canada across Western, Central and Eastern Regions. Reinforced the role of partnership and highlighted the new “Canadian Centre on Transportation Data.”

## Total Logistics Cost in Canada (David Jacques, Transport Canada)

- The purpose of the research has been to determine, over time, how much is spent on logistics in Canada. Characterized as essentially an accounting exercise using information collected from a variety of sources (e.g. Statscan surveys, data reported by Ports and others).
- Total estimated costs: \$187.6 B composed of \$127.7 B Transport, \$52.6 B carrying costs and \$7.2 B admin costs
- Aggregate transport costs appeared to decline during the Great Recession of 2008-2009 and then rebounded rapidly to 2014 before levelling off.
- The share of carrying costs has been increasing recently (in inflation-adjusted terms).
- Components of transport costs: \$103 B trucking, \$15B rail, \$5 B freight forwarders, \$2.9 B marine, \$1.6 B Air
- Adjusted for inflation, the total logistics cost has hit new highs in recent years but has been more stable as a percentage of GDP (recently about 8.4%) – could decline in current environment.
- Noted that recent Niagara Survey results yielded higher relative logistics costs, though comparable on transport costs. The fact that the service sector is not included in the Niagara Survey is one explanatory factor.
- Several advanced countries appear to have lower relative logistics costs than Canada (which ranks 52<sup>nd</sup>) but there are also many countries with beyond 15 or 20% of GDP linked to logistics.

## Planning for an Integrated Economic Zone (Marcy Burchfield, Toronto Region Board of Trade)

- While TRBOT itself is now 175 years old, there has emerged a recent focus on the wider region; goods movement became an active policy issue in 2016 at TRBOT and a “Movement of Goods Council” is convened by TRBOT. The work of the Economic Blueprint Institute (EBI) is the new data and research arm of the TRBOT
- The TRBOT “Integrated Economic Zone” refers to the “Toronto-Waterloo Innovation Corridor,” which includes five contiguous census metropolitan areas the Toronto, Oshawa, Hamilton, Guelph, and Kitchener-Cambridge-Waterloo. The geography aligns with the Innovation Corridor Business Council, a coalition of the region’s 11 largest chambers of commerce that come together to jointly advocate for better connectivity. While Niagara Region is not directly included in the Innovation Corridor, EBI is collecting data to include areas adjacent to the Corridor to inform issues like goods movement.
- Up until March, EBI’s research and data analysis focused on the need for an economic strategy for growth, but the COVID-19 has caused a pivot and reframing to a recovery strategy
- Central point is that the economy is a regional economy and there is a need to collectively address pain points and competitiveness issues - the need for a multi-modal strategic visions for goods movement is noted.
- The region is well-connected but there is a lack of co-ordination on logistics management among modes – noted that MTO is emphasizing multi-modal for the long term.
- A lot of emphasis in the work is related to “economic structure” – state, scale and make-up of production especially; the scale and location of transportation and warehousing jobs is presented.
- Noted that the Toronto Pearson Employment Zone is highly dependent on the automobile.

- A new partnership between TRBOT and Transport Canada described – It is around data sharing and improving the predictability of supply chains in the region – dashboard a likely outcome; there is a lack of granular, sector-specific data for the movement of goods.

### Supply Chain Trends and the Potential Impacts on Shippers and Carriers (David Short, Challenger Motor Freight Inc.)

- Challenger is a full-service firm with asset and logistics capabilities. The firm operates 1000 trucks and 3000 trailers with significant capabilities related to warehouse, intermodal, air and ocean and offices in the US.
- The basic objective is to use technology to allocate the shipments of partners with available carrier capacity.
- Inventory to Sales Ratios have risen dramatically in the current COVID environment after rising gradually since about 2012. Low interest rates imply that the costs to hold inventory are lower and just-in-time delivery is less cost effective than it would have been otherwise.
- Rates are influenced by how close customers are located to where the trucks generally go.
- Empty miles a challenge: noted that only half of what is trucked out to Vancouver from Ontario comes back in terms of loads and this puts a lot of downward pressure on the rates that can be charged. Meanwhile, air is taking a lot of e-commerce shipments moving east from Vancouver.
- Average length of haul has been decreasing and warehousing closer to end markets has been increasing as goods are staged closer to end markets.
- 400-500 miles is a key radius defining the range that a driver can cover in a day – important demarcation.
- The rise of Omni-Channel is emphasized – customers want data from every entity they deal with.
- There is a 60,000 person driver shortage in the United States which is expected to worsen in the next 10 years
- The job of driver is not appealing for many as the lifestyle can be difficult and it has not attracted many women
- Electronic Logging devices will be mandatory in Canada by June 2021 and this will impact capacity; noted that about 15% of competitor firms are not fully compliant with the new regulations.
- “Fictitious pickups” becoming more of a concern and certain shipment types are theft prone (e.g. food and beverage, cannabis products).
- Concern is expressed about security deficiencies for ELDs deployed in small fleets – malware could simultaneously “shut down” multiple vehicles; have been working with the U of Waterloo to make sure that Challenger trucks cannot be hacked.

### Discussion Session led by Ken Albright, McMaster University

- David Jacques noted that Logistics Costs work is being updated every year but some of the policy implications are still being evaluated; was hesitant to say that it is good for logistics costs to go down since it depends on the perspective from which it is viewed.
- Marcy Burchfield noted that Peel Region freight movements are a very important contributor to TRBOT Pearson Airport Hub but they consider that this hub crosses into the City of Toronto and Vaughn – suggested that the Hub could use its own kind of “district plan.” Peel is noted as a leader in local logistics planning and seen as an outlier relative to some areas within the Integrated Economic Zone.
- Marcy notes a big strategic concern that we are at the centre of the fastest growing region in North America (100,000 additional population per year) and the conflicts between land uses and the relationship with congestion must be managed well through proactive (and less reactive) planning.
- In terms of public policy and land use planning, Marcy noted that there needs to be flexibility to make course corrections in response to new and better data and that the information has to flow properly between the organizations that need it.
- David Short notes an opportunity for northbound consolidated shipments coming across the border because most US carriers would prefer to drop their load (i.e. in Niagara) and immediately pick up a US load.
- David S. notes that Challenger is seeing nearshoring and onshoring but also notes high infrastructure requirement to support – may result in more local drayage (containers on trucks).
- David S., on strategic concerns, notes that margins are very tight (about 3%) and their business is capital intensive; some concern about the emergence of non-asset based competitors who might cause rates to go up.
- Dina Carlucci from John C. Munro Hamilton International Airport responded to a question about airport-related infrastructure and noted the need to improve access between the airport and Hwy 403 through improved capacity and lighting. Capacity improvements to Hwy 403 also seen as desirable.