

McMaster Forum Event #1: Supply Chain Oriented Insights from Recent Hamilton-Niagara Initiatives/Research (June 17th, 2020)

Overview

This June 17th virtual event hosted by the McMaster Institute for Transportation and Logistics (MITL), and moderated by Justin Terry of Transport Canada, was the first in a series of five events linked to the McMaster Forum (which was originally scheduled to take place in-person in March 2020). The first few minutes of the event were dedicated to introducing participants to the Forum, offering an overview of strategic priorities, and reminding people of outcomes from the March 2019 McMaster Forum. Subsequently, there was a series of three presentations that highlighted some of the recent work that has been taking place in the region to assist supply chains. Whether collected via survey, through sensors or other means, data collection and analytics were quite central to some of these recent initiatives in Hamilton-Niagara Region and this is consistent with a theme that emerged from the 2019 Forum process. Due to time constraints, the event concluded with a brief discussion session and some brief thoughts from each of the main presenters.

Introductory Remarks

- **Saiedeh Razavi, Director of MITL**
 - a. Welcomed all Forum participants, outlined Forum objectives and process and gave a preview of the June 17th proceedings
 - b. Noted that Forum series has been created to promote and foster collaborative, integrative and innovative approaches to advance supply chain logistics in Hamilton-Niagara Region
- **Louis-Paul Tardif, Transport Canada:**
 - a. Transport Canada has spent several years studying multimodal integration in supply chains
 - b. Transport Canada is seeking greater transparency for data that it hosts and the newly founded Canadian Centre on Transport Data is testament to this focus
 - c. There is currently a Hamilton-Oshawa Port Authority Supply Chain Visibility initiative underway and MITL will play a role this summer in getting relevant marine oriented data sets in a form suited for public release by October 2020
 - d. Looking at creating as near a real time database as possible that will be living, assisting the Port Authority, and the region, to evolve toward a multi modal supply chain concept
 - e. Transport Canada fully supports the partnership initiatives within Hamilton-Niagara that ultimately should lead to improved functioning supply chains in the region
 - f. Looking forward to discussing these and other aspects at the September roundtable virtual event that will conclude the current Forum series of events

Key Learnings from 2019 Forum (Mark Ferguson, MITL)

- 2019 Forum process for Hamilton-Niagara outlined, including 24 stakeholder organizations that were interviewed and March 27, 2019 Forum event was held at McMaster
- Primary issues: high costs in the supply chain, shortages (e.g drivers), congestion linked to road and rail, infrastructure concerns and others
- Takeaways: the needs for collaboration and a collaborative environment; an integrated, multi-modal focus; funding to plan; focus on SME development; harnessing technology and data

Niagara Trade and the COVID-19 Effect (Blake Landry, Niagara Region)

- Reinforced that Niagara region is a trading region and trade with the US is very important. Niagara region actually has a significant trade surplus
- 90% of Niagara region exports by value stay within North America

- Manufactured goods constitute 90% of Niagara region exports by value but only 54% of imports by value -- machinery is an important component
- There is a general theme that imports are more geographically diversified than exports as it relates to Niagara Region
- The Welland Canal, and under-utilized employment lands nearby, seen as an important opportunity to better leverage in the future -- new short line rail investments in the vicinity are helping in this regard along with Niagara Region collaborations with other agencies
- Importance and uses of late 2019 business survey results obtained in partnership with MITL outlined
- Also, Niagara Region has carried out two surveys with its businesses in 2020 in relation to the COVID crisis. The second survey has revealed that there are trends toward: reshoring of supply chains, stockpiling rather than just-in-time, finding ways to avoid future disruption, protectionism, higher capital requirements to operate and others.
- Full survey results and report are available at:
<https://niagaracanada.com/covid-19/updates/economic-rapid-response-team-completes-second-survey-of-niagara-businesses/>

Better Understanding the Supply Chains of Niagara Region Firms (Mark Ferguson, MITL)

- A sampling of results from an extensive Pre-COVID (Fall 2019), on-line survey of Niagara businesses that originate freight movements was presented (103 complete survey responses and 98 partial responses)
- Among a wide range of results and findings are a few main outcomes:
 - a. Logistics elements emerge as a significant cost of doing business and there is worry among businesses about these high costs
 - b. Traffic congestion (especially in the Greater Toronto Area) is rated as the most important desired improvement but "pricing solutions" are not favoured by firms
 - c. Niagara firms are more internationalized on the sourcing side than the revenue side but less difference in the manufacturing sector
 - d. Outsourcing logistics appear as a strong differentiating variable -- firms that master this appear more accomplished
 - e. Firms that have accomplished some export diversification (beyond the United States) are more optimistic about it and have a higher opinion of what it can do for a firm
 - f. SMEs predominate in Niagara region (and indeed much of Canada) and it seems clear that intangibles such as ambition and momentum really affect the trajectory of businesses
- The report underlying this presentation is available at:
<http://mitl.mcmaster.ca/portfolio/exploring-goods-movement-and-export-diversification-niagara-region-firms>

Data-Driven Precision Policy in Transportation Planning (Omar Shams, City of Hamilton and Amir Sayegh, Geotab)

- Good overview offered of the various aspects and issues that are play as the City of Hamilton seeks to update the Truck Route Master Plan. 2010 was the first year that this plan was unified within the amalgamated City of Hamilton and now there is great interest to use an evidence-based/data driven approach to assist with the current update.
- Relevant data sources include: some from City of Hamilton, MTO commercial vehicle survey, Geotab, Census, and qualitative stakeholder inputs
- Noted that the City of Hamilton is paying close attention to how disruptive supply chain technologies (e.g. drones and others) may play a role and how this might affect planning processes in the future
- Geotab is highlighted as a key partner and provider of an important "big data" source to assist in planning
- Commercial vehicles with Geotab technology built in can be thought of as "sensors on wheels"
- Noted that 8 million commercial vehicle trips with connections to Hamilton have been identified in the data and this type of information forms the basis for a "dynamic, always on, truck master planning technology."