

McMaster Forum Event #4: Infrastructure Improvements and the Supply Chain (August 19th, 2020)

Overview

This August 19th virtual event, which was moderated by Chad Schella of Canada Post, offered a good overview of how infrastructure is intimately intertwined with supply chains. Presentations from the federal, provincial and municipal levels highlighted unique perspectives on the process of moving supply chain performance forward in Hamilton-Niagara and some of the related opportunities from the infrastructure perspective.

Introductory Remarks

- Saiedeh Razavi, from MITL, welcomed participants, outlined the series of events associated with the Forum, and offered highlights that emerged from the prior Forum event
- Louis-Paul Tardif, from Transport Canada, noted that infrastructure is an important focus of a recently released Federal 2030 plan and that supply chain visibility is a cornerstone of Transport Canada interests (i.e. fluidity, resilience, variability); After a series of initiatives across the country, the main focus is now in the economic heart of Canada with the Greater Toronto Hamilton Area including Hamilton-Niagara; The pieces for Smart Freight Centre have been put into place and also the Canadian Centre of Transportation Data will promote greater transparency

Advancing Supply Chain and Logistics in Hamilton Niagara – CBSA Perspective (Fred Gaspar, Canada Border Services Agency)

- Front and centre - quality and robustness of supply chain and logistics (more so than in the past)
- Overview of CBSA - comprehensiveness and selectiveness - we engage in choice
- Security and prosperity protected - Fred responsible for goods movement
- Also have export controls in a lot of areas - responsible for revenue integrity
- 3 prongs of a triangle -- done through a wide variety of physical infrastructure
- Widely dispersed delivery model for services which makes things challenging
- Trusted traders - certain facilitated services - e.g. auto industry
- If your Amazon package is late, the CBSA may have played a role
- E-commerce has absolutely exploded -- air cargo dried up out of China -- we started seeing use of the marine mode as a substitute and it caused CBSA complications
- 87% is courier and postal - this is a big change since it used to be brokers and intermediaries ordering large amount of goods for distribution
- Mail volumes are way up ("mops, brooms and back scratchers") - unprecedented
- Challenges
 - Dynamic ongoing discussion with Canada Post -- product needs to move, the more volume the more risk in terms of what gets through that should not
 - Legacy systems that respond to how things used to work - need to adapt
 - Variable resource demands versus a finite model - too many patchwork solutions at present
 - Tradeoffs are inherent and meanwhile there are social distancing protocols that complicate how staff can operate
- Modernization
 - Who, what, where - leads to effective targeting - advanced data and analytics needed
 - Keep swine fever and certain pork products out of the country
 - Try to screen out the low risk - e.g. via trusted trader
- E-commerce Strategy
 - Deal with the volume by leveraging data, technology and harmonization with partners, where does the risk lie?
 - Goods are often transshipped through a 2nd country and to a third
 - Need to address from just-in-time model -- cut down the amount of time that we need with the data - the right information at the right time -- need to work with partners to find solutions e.g. AI

- Courier Analytical Portal
 - Pilot program in Hamilton -access systems of couriers to look at their data (with the right controls) -- can lead to streamlining - low hanging fruit
 - Models that are mutually beneficial are the ones that stand the test of time
 - CBSA login is coming - your business number - what you have in the system, outstanding duties and taxes -- powerful info at disposal to minimize the "back and forth"
- Postal Modernization Initiative - automated system and improved tech (Toronto and Montreal mail centres) - let's take our common interests take them to the fore
- Cargo pre-clearance (similar to air passenger pre-clearance)
 - Screen products before they arrive at the border (arrive pre-cleared)
 - Trucks will hopefully not have to wait as long
 - Deliver CBSA officers into the commercial stream in a pre-clearance environment for the first time ever
 - e-manifest - portal for the transmittal of data, replace paper-based processes
- Methodical traceable means that indicate they have secured their supply chains
 - Understanding when failures do happen (trusted traders)
 - Recognize custom standards of other countries (export controls help us to understand risk profiles of goods)
- Future Solutions
 - Legacy systems are very heavy - committed to move away from paper
 - Analytics data driven decision-making (blockchain, AI, analytics)
 - Move through the risk environment iteratively -- best way for lumbering government

Economic Development and Transportation Planning Updates Focused on Supply Chain and Logistics Infrastructure (Norm Schleeahn and Steve Molloy, City of Hamilton)

- (Norm's Section) Despite pandemic, this has been one of the busiest industrial development periods of the last 30 years
- Hamilton is a multi-modal city with relatively lower traffic congestion
- City wide there is: 1.5M sq. feet of developments associated with L3 Harris, DHL, and Panattoni Development
- The **Hamilton International Airport** has invested \$38M in infra: runways, taxiways and LED lighting for airfield
- New DHL sort facility - will process 15,000 packages per hour
- Panattoni has broken ground on a 270,000 square foot facility
- **Airport Employment Growth District (AEGD)** - 555 hectares - last two years has been active and over 600 acres has been purchased - could be 3500-4500 employees associated; 7 million sq feet of development applications
- Several re-development opportunities around the **Port of Hamilton** - strategic investments on their lands to encourage multi-modal
- \$60M into Pier 10 to allow berthing of seaway vessels -- covered storage facility to reduce truck trips from off-site locations, P&H added a second flour mill
- Max Aicher (steel products) - 24 ha of land for new business
- All redevelopment involved in moving product through truck, rail or water
- Stelco acreage - up to 8M sq feet of new buildings in the north end
- Overall: Talk of potential development in Hamilton has been transforming into reality
- (Steve's Section) AEGD - a lot of development in the last 18 months but the form of development is "larger parcel" than was anticipated
- Mini-review of the transportation network in vicinity is taking place - minor network adjustments
- Steve's work considers individual land parcels, sites plans and zoning and the interplay with traffic impact studies
- Transit to serve these developments is an important focus
- How do we avoid interim issues/bottlenecks as things unfold? Will help to take care of those organizations that have invested heavily in Hamilton.
- Some Environmental Assessments are underway in the vicinity of AEGD
- Potential to widen or add HOV lanes to Red Hill Valley Parkway or Lincoln Alexander Parkway -- future public engagement
- A-line - "Port to the Airport" is a significant focus at present

- A lot of construction is expected by the 2024-2025 time period
- GRIDS 2 - 2041 planning horizon - impacts of pop and growth -- what is required to support growth?
- Pronounced AM and PM peaks have disappeared in Hamilton this year - telecommuting offers great opportunity along with other demand management tools - to achieve sustainable and efficient outcomes

Greater Golden Horseshoe Transportation Plan (Michael Casey, Ontario Ministry of Transportation)

- Michael Casey's new role at MTO is to be responsible for multi-modal transportation and policy -- he looks forward to engaging on related policy issues
- 2020 traffic patterns: peak traffic changes are being followed closely; Commute distances have declined on average - a shift with local roads placed relatively under more burden than provincial highways
- Greater Golden Horseshoe (GGH) Transportation Plan (to 2051)
 - A priority for current government
 - Seeking an integrated system to support competitive economy and support communities
 - Southwest Ontario Plan was released in Jan 2020
 - Plan will provide direction for highways and transit, and move toward readiness for connected and autonomous vehicles
 - Platform for building partnerships and working toward common objectives
- GGH region accounts for 2/3 of Ontario GDP - Over \$1 trillion in goods moves annually over GGH highways
- Significant and growing demand but with a reprieve experienced in 2020
- Expect projections for future to hold but there is not much space for new transportation infrastructure in the GGH
- Technology change could alter our use of the transport system (e.g. what are the barriers to working from home?)
- We are in a period of significant economic restructuring in Ontario but goods movement will remain an essential driver despite changes
- Nearing release of final GGH plan (commenced work in 2017) -- long range scanning to 2071 to look at resiliency - how would the system react to different scenarios?
- Gap analysis - where will problems exist without new investment? Opportunities?
- Working with municipalities to look at transportation improvement options with consideration of "best bang for the buck."
- By early winter, a draft of the plan for engagement is expected
- Goals and objectives: Are linked to how we evaluate infra and policy solutions (e.g. connected, integrated, prosperous) tied to performance measures -- (e.g. how far can you travel within an hour?)
- A number of objectives for the plan tie to goods movement (a core element to be addressed)
- Gap analysis shows that current infra will not be sufficient, especially around intermodal hubs
- "Strategic Goods Movement Network" is being identified - multi-modal and multi-jurisdictional and data-driven-routes and connections to key facilities - which routes are the most important for goods movement?
- The network will help co-ordinate what we need from infra and policy perspectives - (e.g. minimize conflicts with transit, common standards across jurisdictions)
- Accounting for pandemic - has enhanced focus on certain things and accelerated others - (e.g. digital permitting (contactless), ancillary infrastructure to support needs of trucking sector)
- Seeking to finalize a plan that works across major shocks to the system

Discussion Session led by Chad Schella , Canada Post

- (Michael Casey) With regard to congestion and telecommuting, travel peaks are down and trip distances are shorter - congestion problems are less; But lacking info on the "hit" that companies are taking from work at home -- where's the "sweet spot" between travel benefits and any negative impacts on companies? Telecommuting important to leverage in those sectors where it works.
- (Steve Molloy) – Notes that transit has come back a little bit recently but generally there is a need for more data to come in on some of the pandemic-induced changes and implications (echoed by Norm)
- (Michael Casey) - Expects that the current transit downturn will not be a systemic shift for the long-term

- d. (Norm Schleeahn) Regarding the next major phase of development for AEGD -- preliminary looks are taking place especially since there has been a shift of developer interest to the airport - infra and servicing needs to be put in place first - Part of upcoming Ec Dev Action plan and part of GRIDS2 planning
- e. (Steve and Norm) Regarding transportation pain points in City of Hamilton: Hwy 5&6 at Waterdown which is also an area of significant development (e.g. Stryker, L3); Connection of AEGD via Hwy 6 and Hwy 403; Red Hill Parkway and Lincoln Alexander and need for improvements.
- f. (Michael Casey) with regard to GGH plan notes that plan to be presented in likely in early winter with consultation thereafter. Some engagement on plan in early autumn via Engage Ontario on-line survey
- g. (Saiedeh Razavi) Offered concluding marks in relation to the this and the prior three sessions and set the stage for the final roundtable event (September 33rd, 2020)

Supplement: Previously Held Discussion Session with Fred Gaspar (CBSA)

- **Regarding Data driven decision-making, is there an opportunity to use data to allocate CBSA resources better?**
 - Fred notes that there are many "known unknowns" and suspects that through improved use of data, knowledge about current "unknowns" will increase and they will be better managed
 - Generally, historical trends have been used to allocate and it has worked ok but there is more that could be done
- **From CBSA perspective, what elements are unique to Hamilton-Niagara when it comes to infrastructure?**
 - Economic power of airport and its unique position
 - Significant cost advantage over Pearson
 - e-commerce and courier firms very interested in this type of environment
 - International product in and out of Canada -- good opportunity
- **What is CBSA's greatest manpower challenge as it relates to identifiable modes for e-commerce?**
 - Problems are distinct depending on the mode
 - Fentanyl - low dosage retail volumes risk -- i.e. large number of packages
 - With the marine mode probably pre-cursor chemicals smaller number of shipments but huge volumes per shipment
 - Different posture for the two contexts in terms of - intelligence, detection tech, inspection models, safety protocols for officers
 - Bad actors are really good at responding to newly found gaps or openings
 - CBSA cannot press too hard on one part of the spectrum relative to another
 - CBSA approach is to apply a baseline of oversight across modes and sometimes there are marginal resources that are deployed in a more ad hoc manner (responding to intelligence and audits)
- **Challenges/Opportunities in Hamilton-Niagara region?**
 - Noted the challenge of delivering on a mandate in the context of another agency's infrastructure - open and frank discussions have helped for things to go well between CBSA and Canada Post
 - A lot of traffic at Ambassador Bridge - makes Queenston/Niagara crossings quite interesting; degree to which Hamilton is well- positioned with regard to fluidity and relative to other road and rail networks - time is money
 - Shorten lag time between warehouse and Canada Post facility - Hamilton has a low-cost environment and a road network advantage in relation to serving the GTA