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Logistics Locations: Context and Industry Perspectives

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OUTLINE

- Context
 - Setting the stage

- Case Study – GTA
 - Surveying Logistics Industry on Location Factors

- Discussion and Direction

CONTEXT

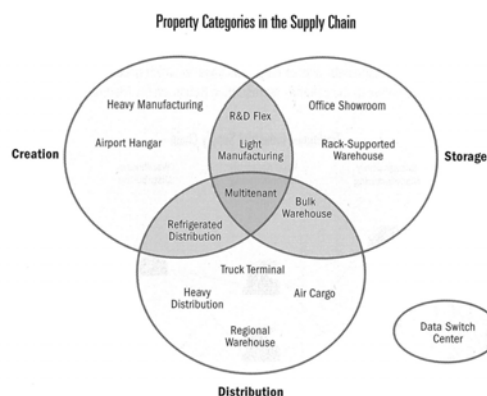
- Understanding goods movement and land development a critical aspect of regional economies and the urban environment
- Within Gateways in particular - complex questions on many levels

CONTEXT

....thoughts..

- National Gain – Local Pain
- The 3 Ls – not what you think..
- Location, Logistics, Love

CONTEXT



- locational profiles of supply chain properties (DCs) have changed both at a large-scale level and within metropolitan regions (Hesse, 2002)
- highway and air access strongly correlated with changes in U.S. warehousing (Bowen, 2008)

CONTEXT

Supply Chain considerations

- Supply chain strategies and real estate linked more than ever (MacDonald, 2007)
 - Risk of flexible chain vs. fixed investment of real estate
 - Property decisions central to success of supply chain
 - Market dynamics changing – shorter horizons – rent, lease vs. buy (Hesse, 2003)
 - Consolidation of warehousing/DC's

CONTEXT

Supply Chain considerations

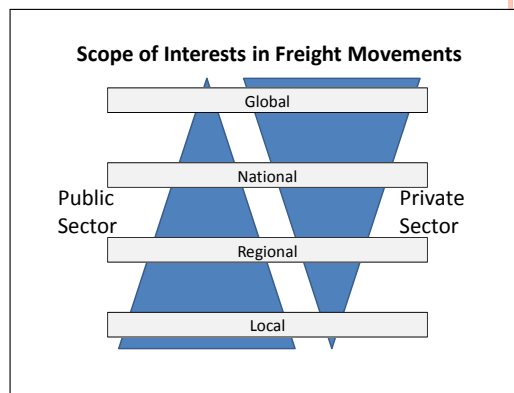
- Increasingly dependent on major hubs/ gateways
 - Especially trucking and air (shorter selling cycles – need for close in fulfillment)
- In NA context, not only key Ports (gateways) but increasingly attention being paid to inland cities (Urban Land Institute, 2004)

CONTEXT

- Firms seek large sites with good access to major highways/airports among other factors
 - Serving local markets
 - Vital external connections – inbound - outbound
- new highway developments exert development pressures
- Related traffic increases and the traditional “bads” that come with the goods

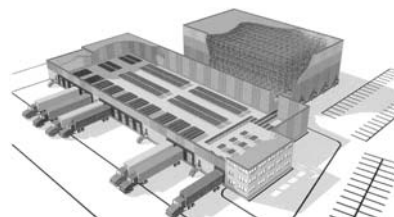
CONTEXT – SETTING THE STAGE

- Public versus Private Stakeholders in Freight Planning
- **The disconnect**



Source: National Highway Institute, 2009

CONTEXT



- Review of traditional urban planning and goods movement
- Confirmatory conclusions around
 - Lack of understanding around supply chain and goods movement
 - Limited incorporation into local land planning
 - Lack of land use considerations long term
 - Restrict and control vs understand and accommodate

CASE STUDY OBJECTIVES

Address the Disconnect – (planning vs. logistics)

- Identify the relative importance of location factors for logistics firms at the regional/local level
- Discuss challenges for logistics firms in a land use/planning context

STUDY AREA



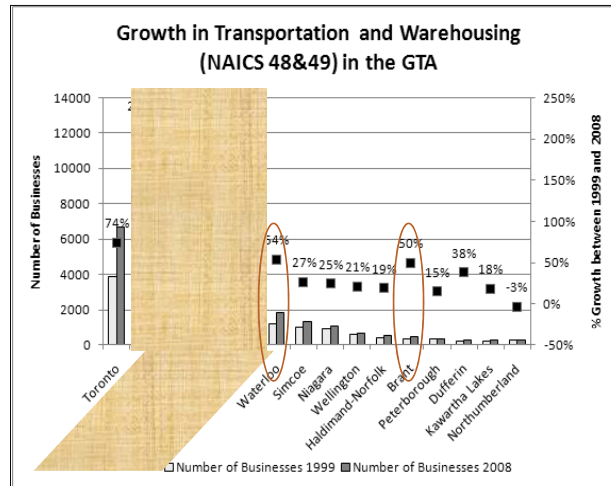
CASE STUDY GTA

- 2007 – GTA 750 M sq. ft. of industrial space – (50% of Canada's total)
- Greenbelt driving up price of land – spurring interest in lands in proximal regions (KW, Brantford, Milton, Barrie) (Cushman & Wakefield LePage 2007)
 - Leaping across the belt
- According to Development Industry Clients seeking outlying (from GTA) locations
 - Proximity to border routes
 - Cheaper land to build bigger, more modern and efficient designs

LOGISTICS ACTIVITY IN THE GTA

Profile Canada Business Directory - Establishment Counts			
		GTAH % of Ontario	GTAH % of Canada
Freight Transport Arrangement	<i>All Businesses</i>	76%	42%
	<i>Businesses with sales over \$20 million</i>	84%	50%
Local Trucking with Storage	<i>All Businesses</i>	52%	22%
	<i>Businesses with sales over \$20 million</i>	40%	15%
Ground Courier	<i>All Businesses</i>	62%	28%
	<i>Businesses with sales over \$20 million</i>	82%	41%
General Warehousing	<i>All Businesses</i>	56%	27%
	<i>Businesses with sales over \$20 million</i>	90%	50%
Refridgerated Warehousing	<i>All Businesses</i>	57%	15%
	<i>Businesses with sales over \$20 million</i>	0%	0%
Special Warehousing	<i>All Businesses</i>	75%	22%
	<i>Businesses with sales over \$20 million</i>	100%	33%
Marine Cargo Handling	<i>All Businesses</i>	32%	11%
	<i>Businesses with sales over \$20 million</i>	0%	0%

WHERE IS ACTIVITY HAPPENING?

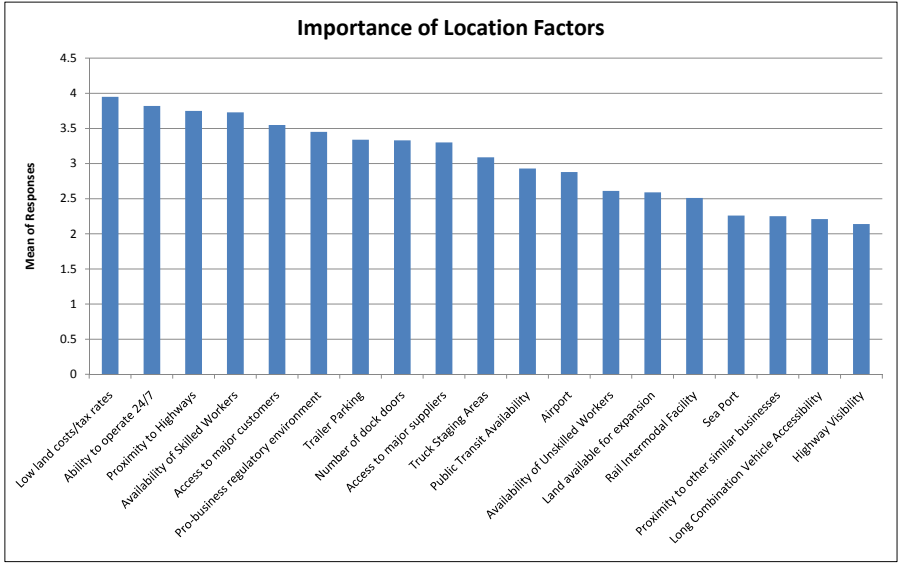


Source: Canadian Business Patterns, 2008

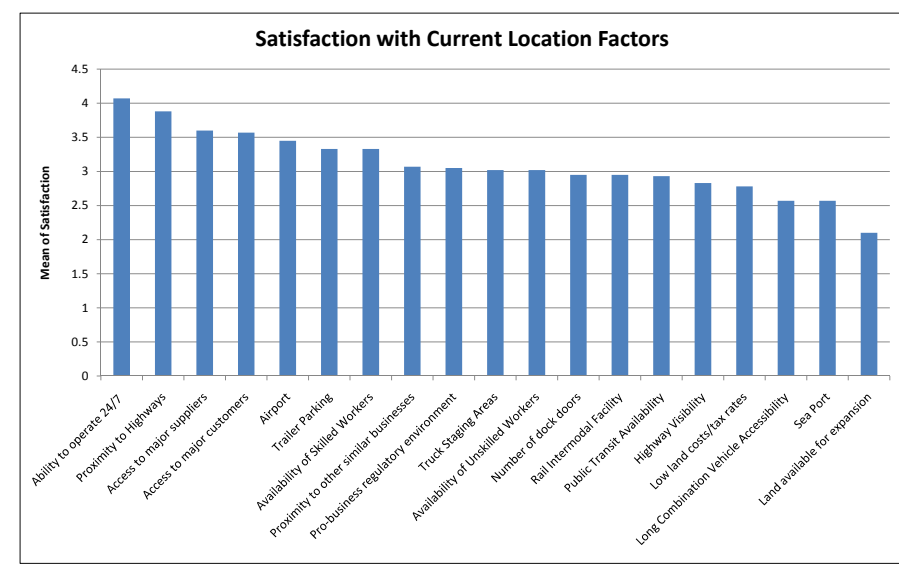
METHODS

- Online survey administered
- Solicited responses through:
 - Supply Chain Canada website
 - CIFFA membership list
- 42 completed surveys received
- Respondent Locations:
 - 82% were within Ontario
 - 76% within the GTAH

RESULTS: IMPORTANCE OF LOCATION FACTORS



RESULTS: SATISFACTION WITH LOCATION FACTORS



EXPLORING THE RELATIONSHIP BETWEEN IMPORTANCE AND SATISFACTION

	Low Satisfaction with Factor	High Satisfaction with Factor
Low Importance	Neutral effect	Slightly Retain
High Importance	Push Factors	Retain Factors

*These location factors have a mean importance close to 3 meaning that they have neither high nor low importance.

RESULTS – ISSUES MENTIONED

- No Truck Routes (mentioned by 2)
- Operating restrictions at night (mentioned by 4)
- Too many auto parking spots required by bylaws (mentioned by 4)
- Problems with parked trailers classified as outside storage (mentioned by 2)

Table 2: Summary of Findings		
Spatial transaction Costs	Increasing trend of a responsive supply chain, driven by tight delivery time requirements, including fines	Confirms
	Proximity to Airports is critical for freight forwarders	Confirms
	Proximity to courier hubs for speed of cut-off times for delivery	Elaborates
	Fuel costs will not influence facility locations because of willingness to pay fuel surcharges	Not Mentioned
	Decrease in reliance on air for international transportation	Not Mentioned
Relative location to Customers and Suppliers	Firms will do optimization studies for site selection, then not implement results	Not Mentioned
	Proximity to customers more important than to suppliers	Confirms
	Proximity to Airports is critical for freight forwarders	Elaborates
	Proximity to courier hubs for speed of cut-off times for delivery	Not Mentioned
Congestion	3PLs will centralize multi-client facilities	Not Mentioned
	Chronic congestion will cause facilities to be located closer to their customers	Confirms
	One respondent moved from Oakville to Guelph, a primary consideration was to avoid traffic on QEW	Confirms
Intermodal	Toronto isn't a city like New York, where the operational environment dictates that deliveries be handled by local companies	Not Mentioned
	Rail services are unreliable	Confirms
	Rail serves primarily inbound transportation	Not Mentioned
	Proximity to rail intermodal facilities not very important	Somewhat Contrary
Site Characteristic Needs	Proximity to Hamilton airport not critical, cut-off times are at night, international movements are through Pearson	Not Mentioned
	Parking requirements don't take into account actual needs of businesses	Confirms
Zoning/Operational Requirements	Problems with trailers as 'outside storage'	Confirms
	Road Geometry problems, especially in Toronto	Confirms
	Mississauga and Toronto 'Don't want us here'	Elaborates
Labour	Want flexibility to increase/decrease shifts and traffic and business increases/decreases	Elaborates
	Planners do a poor job in segregating uses, leading to potential conflict	Elaborates
	Labour force will tie a firm to its location, except for some carriers who hire O/O	Elaborates
	Hours of Service regulations, truck driver demographics will result in an increase in the number of facilities	Not Mentioned
Agglomeration	Local Sales force can be a deciding factor in keeping facilities open	Not Mentioned
	'Unskilled' labour is valuable due to the amount of training that is required	Somewhat Contrary
	Need to be close to marketplace is crucial in keeping firms within the built environment	Elaborates
	Locating in periphery will reduce costs, but is associated with an increase in transportation costs and responsiveness	Elaborates
	Logistics Campuses as a way to share/reduce transportation costs	Elaborates

DISCUSSION

- Results of survey suggest problems that can be addressed by municipalities
 - Challenge of jurisdictional responsibility
- Understanding highways, congestion, and strategic plans are critical to site selection and facility design
 - Yet interviews reveal that a willingness to pay Fuel Surcharges enables Business As Usual
 - Optimization studies often are not implemented despite evidence of significant bottom line savings

Supply chain revisited

November 06, 2009

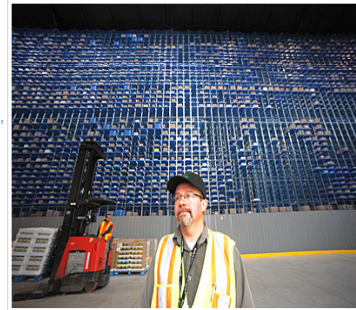
Dana Flavelle

In semi-darkness, the high-speed cranes zip between soaring shelves at Sobeys' new warehouse: sorting, storing and picking the cases of apple juice, noodles and paper towels that will be transferred from suppliers to its network of 340 supermarkets across Ontario.

Amid the whirring, clicking and unmanned machines that push and pack boxes, Canada's most highly automated grocery warehouse has the feel of a *Terminator* movie.

The high-tech distribution centre in Vaughan is Sobeys' latest weapon in the war for the grocery shopper in Ontario. But this one aims to boost profits, as well as sales, by cutting costs while providing better service, the company says.

"We're doing this because we're in an increasingly competitive business," Bill McEwan, president and chief executive of Canada's second-largest supermarket operator, said during an exclusive warehouse tour Thursday.



Sobeys' new, state-of-the-art warehouse is the grocer's latest weapon in the battle with key rival Loblaw's for market share.

"The entry of global discount merchandiser Wal-Mart into Canada's fresh food business two years ago has forced all supermarket chains to sharpen their pencils, especially on the supply-chain side."

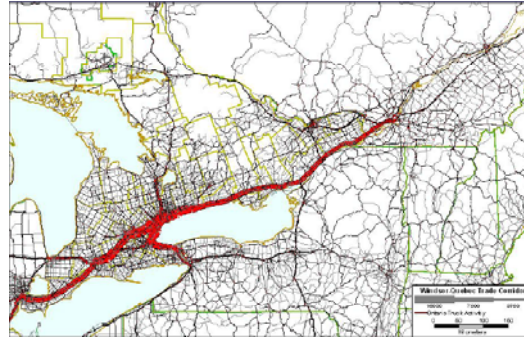
• New warehouse replaces two older facilities in Whitby and Milton, eliminates 500 jobs.

CONCLUSIONS

- trends towards suburban and exurban location choices...But
 - Brownfields, intensification, mixed use, City Logistics?
- How do these considerations fit into broader policy considerations
 - Sustainability, Livability, PTG, Greenbelt, the Big Move etc.
 - National level strategic planning

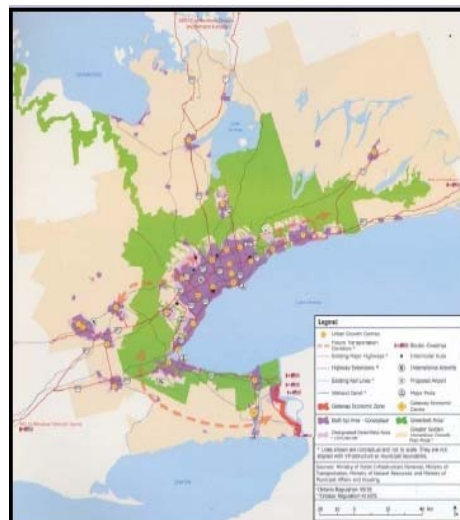
DIRECTIONS

- Projected growth in freight flows
- Importance of broader global connections
- Getting freight through the region..



(MTO, 2007)

- Under “Greenbelt”
- Land use pressures
- Love?
- New strategic “economic corridors” and gateways



(MTO, 2007)

DIRECTIONS

- Gateways like AP face similar challenges to those explored here
 - Potentially more intensive in terms of local regional considerations

- Reflecting trends towards moving further inland
 - Growth in Wholesale Trade (NAICS 41) between 1999 and 2008 - Abbotsford 21%, Vancouver -1%
 - Growth in Transportation and Warehousing (NAICS 48&49) between 1999 and 2008 - Abbotsford 101%, Vancouver 46%

DIRECTIONS

Research..

- Establish Logistics Profile Across Canada
 - Employment, facilities, infrastructure

- Survey firms specifically on international perspectives
 - Strategies and time frames

- Governance and Institutional Challenges unfolding
 - Develop guidelines, dialogue, education to get at the disconnect

ACKNOWLEDGEMENTS

- Supply Chain Logistics Canada for survey facilitation

- THANKS..