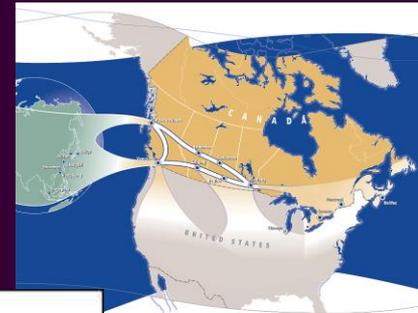


Comparative Analysis of Urban Planning and Gateway Development

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Calgary Asia Pacific Gateway and Corridor
Roundtable

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Outline

- Context – setting the stage
- Objectives for today
- Background – urban planning and freight
- Issues
- Possible Solutions
- The Way Forward

City of Calgary Spatial Evolution 1900-2001

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Context

- Thinking about the shape of the city – the connections
- the process of its development
- How does freight fit in?

Context ...

- Extensive effort directed at understanding transportation land use relationships
- Dense vs. Dispersed
- TOD, TDM, SG, EIEIO

- The 'unknowns' are particularly evident for non-residential land uses and freight movement

- More complex environment

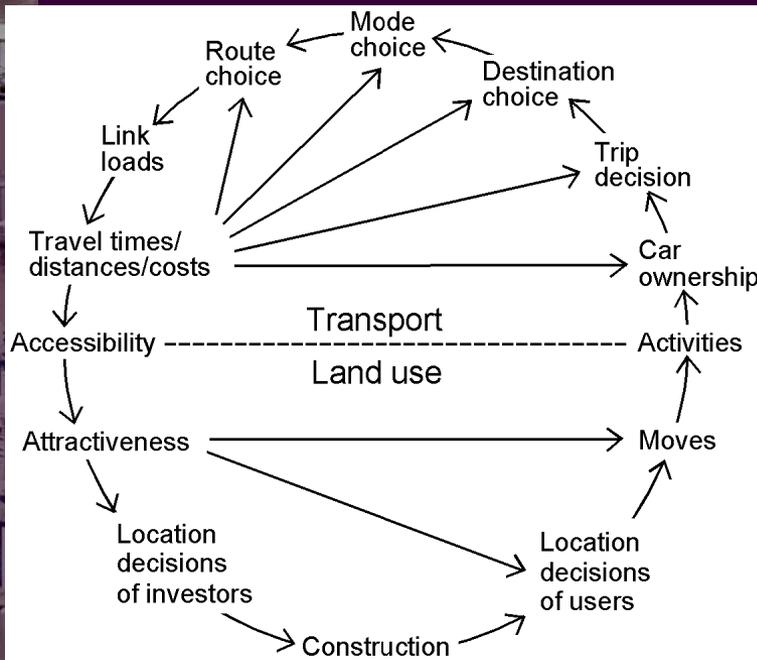


Figure 1 The land use – transport feedback cycle (Source: adapted from (Wegner & Fürst, 1999))

Accepted wisdom on freight in the city?

1. Evolved from a spatial to temporal emphasis
 - Not so much how far...but when
 - Scheduled economy (from "stock" to "flow")
2. Dominated by trucking (and growing)
 - Which the public fear, misunderstand etc.
3. Impacted severely by congestion (and worsening)
 - Overall productivity losses, wasted time
4. Is a major source of negative impacts on urban life
 - Air quality, Noise, stress (fear), visual intrusion,
5. Suffers from "strategic invisibility" (Rodrigue, 2003)
 - So relevant, efficient – forget about it till it fails
 - Politically neutral at best – despite essential nature
6. Is becoming more dispersed
 - Changing consumer buying patterns
 - Consolidation = larger footprint



Factors

- Globalization, just-in-time delivery, distributed manufacturing processes, changing consumption, and advanced logistics practices (Guiliano, 2004).
 - Increasing volumes, longer average truck trip lengths, smaller average load sizes and increasing empty kilometers of travel.
- 15 to 30% of commercial city traffic could be eliminated through load consolidation and grouping of trips (Giuliano, 2004).

- can we increase the efficiency of the freight distribution system through organization of the location of the major freight generators and freight providers?
- an area where public agencies, via planning (land use) can affect sustainability outcomes positively (Anderson et al., 2005).

Modal split of freight transport energy consumption in OECD countries with projected annual growth rates in parentheses

	North America	European OECD	Pacific OECD
Trucks	24 (+2.0)	30 (+2.2)	25 (+1.9)
Railways	7 (+1.6)	3 (+0.1)	3 (+1.8)
Marine Shipping	2 (-0.7)	1 (+0.1)	5 (+0.2)

(Source: Lenzen et al., 2003 in Chapman 2007)



On the CAPGCI

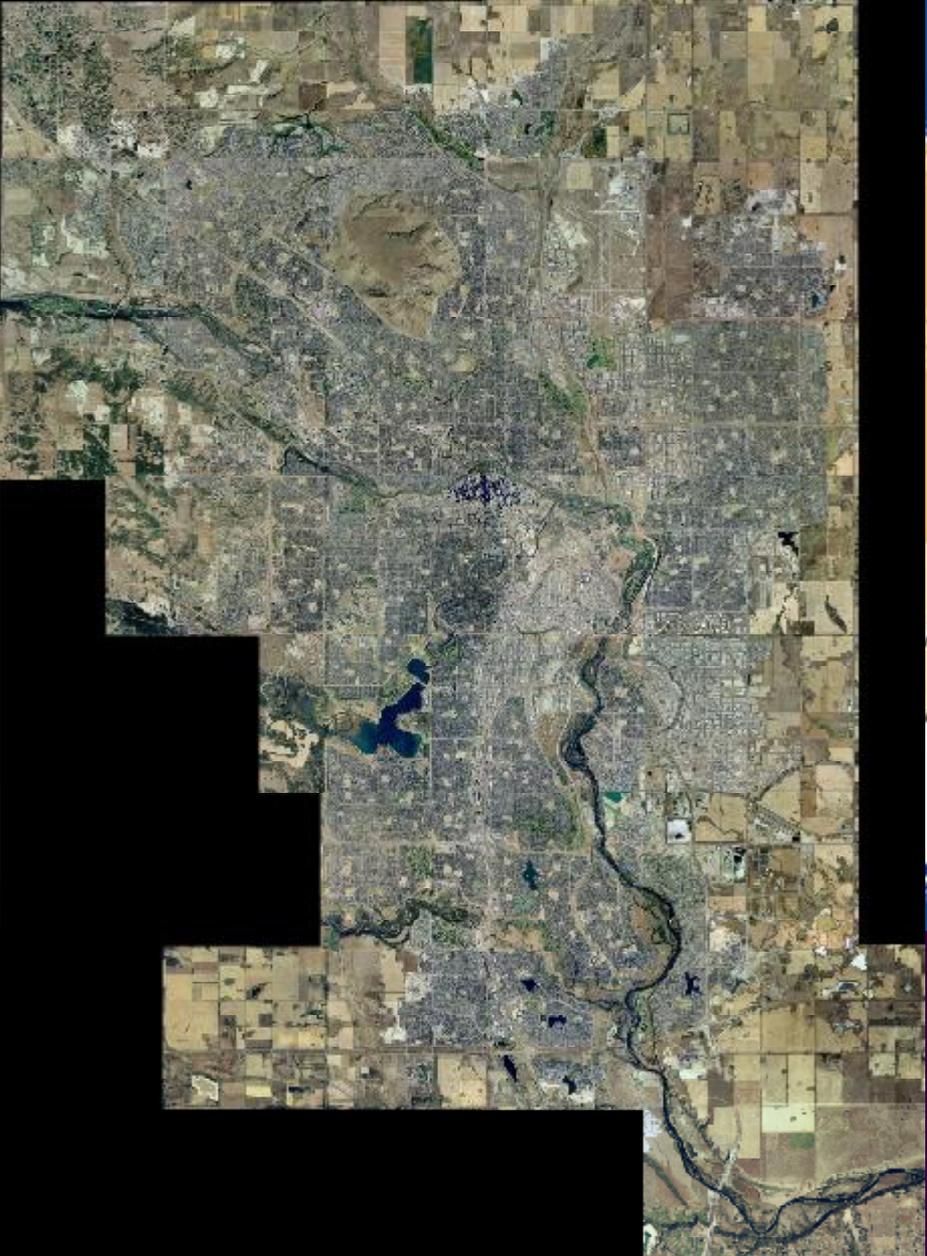
- "...will improve traffic flows, reduce emissions from idling vehicles, and improve quality of life in those communities through which increasing trade volumes must move." (Transport Canada, 2006 pg 12)
- Balancing the national significance of the overall initiative against the local, sometimes negative, impacts is a challenge
 - theme examining Land Use / Urban Planning / Environment
 - NIMBY – CAVE



Today's objectives...

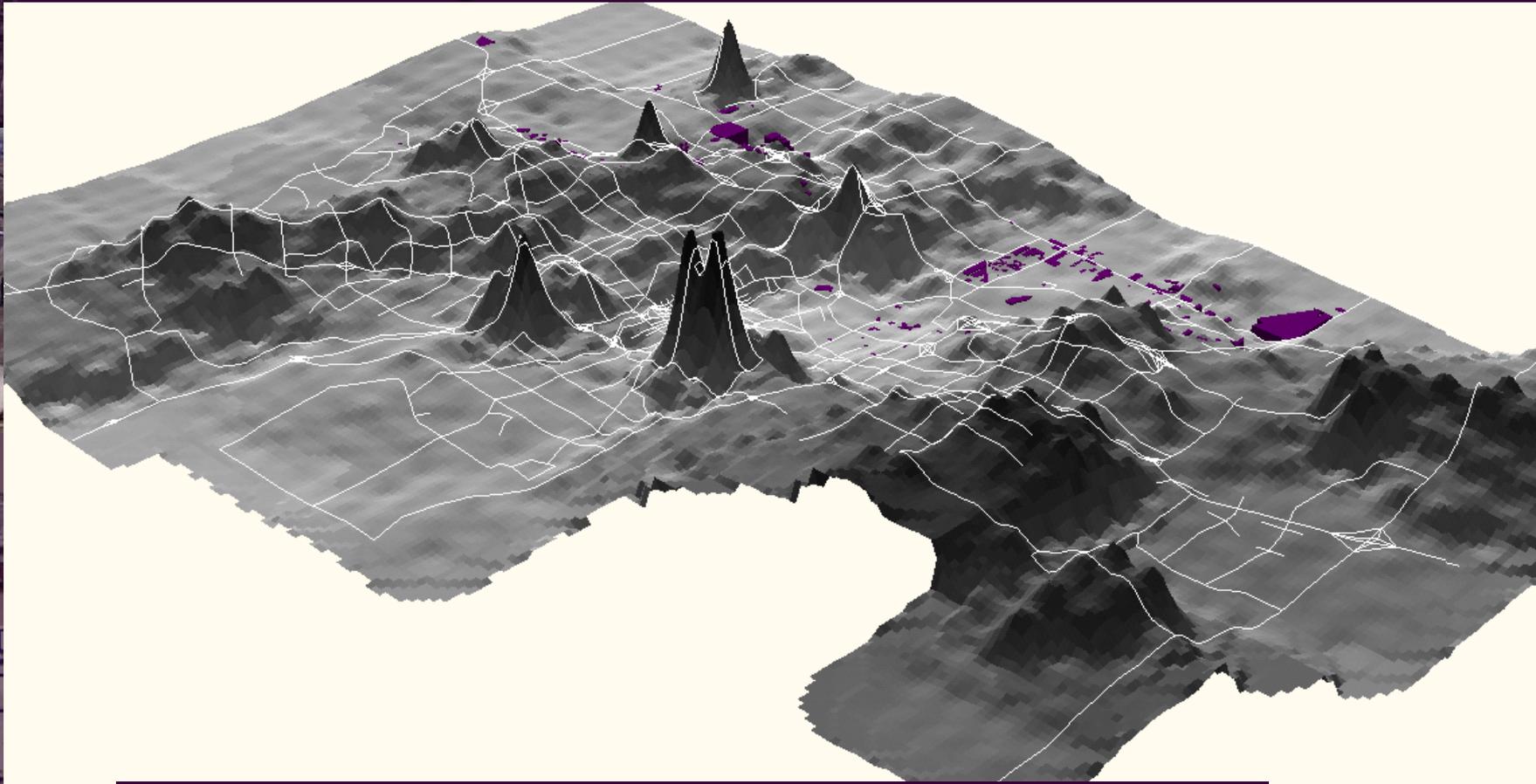
Motivated by the following questions,

- How do the corridor/gateway initiatives relate to land use and how will planning play a role?
 - Shaping the city and its competitiveness
- What are the environmental considerations in this discussion?
 - Working towards sustainability?



- Emphasis on major centres
- Gateway and hinterland cities
- Emphasis on local land use impacts vs. new business exclusively
- Not just about attractiveness but longer term implications

Calgary's Distribution, Logistics, Warehousing



Surface = difference between congested and freeflow travel times – 1995 average





Urban Planning

- On the treatment of urban freight activity previously...
- “The objective of public authorities is more focused on **regulating** and **restricting** their use rather than on understanding and planning/ accommodating their needs. **Freight issues are an afterthought** and not an integrated part of urban and transportation planning”. (Gordon, 2004, p.1)
- “Freight Plans” or “Goods Movement Studies” are carried out periodically by cities and there is little methodological consistency between them (Ambrosini and Routhier, 2005).
 - Focus on “the plan” – long term
- Silos of “planning” and “transportation department”



Issue – dispersed locations

- increasing size and fewer distribution centres (DC's)
 - Negatives – size = big lands, infrastructure needs, big noise
- limits the location of these facilities in traditional gateway regions and certainly not within core urban areas (Hesse, 2004)
 - relocation of logistics activity centres to periphery
 - outside the influence of planning restrictions
- increasing flows and distances associated with commercial movements
 - “freight sprawl”

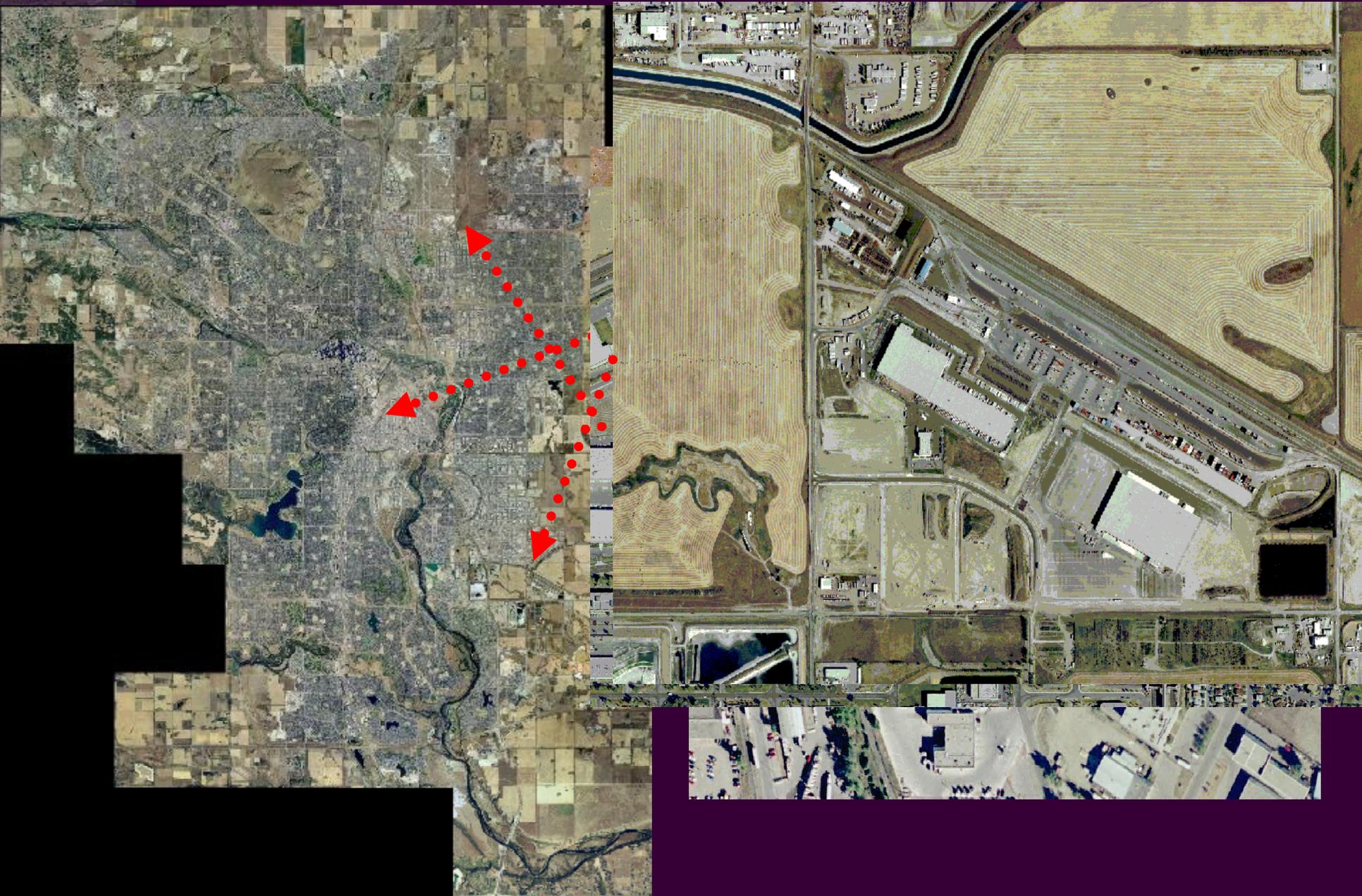
- Comparing developments in Berlin-Brandenburg, Germany (Hesse, 2004)
 - regional distribution complexes
 - Competitive land development market - speculation

- Challenge: achieving public sector policy goals in the face of increasing private sector influence in the decision making around infrastructure provision.

Integrated freight centre

Magna Park

Development	Policy oriented (transport, economic development)	Capital oriented
Occupier firms	Logistics, distribution, related services, others	Logistics, distribution
Major players	Public agency (state-based), local municipality	Private developer (international)
Contracts	Lots for sale	Rent or lease
Location	Partly integrated	Isolated
Traffic access	Multimodal (road, rail, partly water)	Road traffic



Issue: Public, Private ,Planning Perspectives

- “Described as a “beam me up, Scottie” attitude, “people want the goods and not the bads”. So despite its noble and usually silent role, urban goods movement can be perceived as at best an afterthought and at worst blight on the urban transportation landscape. (Moving the Economy, 2004, p.1).
- this lack of awareness and appreciation is identified as one of the key barriers to effective sustainable solutions.
 - As environment climbs in the public mind, will they become aware?

- 
- Review of EU experience (city logistics solutions)
 - many pilots, but no wholesale change (Deblanc 2007)
 - “Freight villages” struggling
 - Mixed results – good points (fewer vehicles, better load factors, fit with environmental goals) and bad (additional costs and extra steps in chain)
 - Private waiting for public investment (subsidy) related to new services and solutions –
 - Public sector waiting for private firm innovation
 - Challenge of meeting public policy agenda - must influence bottom line positively



Key things to be aware of....

- Dealing with a largely private, flexible and very competitive global logistics sector
 - Our “plans” and goals may be sidestepped (Rodrigue, 2007)
 - Flexibility a source of uncertainty for some stakeholders
- Variability of urban freight transport operations
 - to meet sustainability objectives we must take into account these variations (Anderson et al.,2005).
 - Studied 3 cities (UK), 7 companies 3 types of operation
 - explored response to Low Emission Zones, congestion charging, size limits
 - Same company – different operational response to policy in different cities



Solutions: New Perspectives on Planning

- Meyer and Miller (2001) transition to a more “decision oriented” or “sustainable development” oriented approach to transportation planning.
 - move from the focus on “the plan”– to planning as an “ongoing process” – dynamically contributing a valuable support to decision makers.
- “Flexible Transportation Planning” (Gifford, 2003)
 - Not about better models or who should be at the table but getting people on the same page
 - Values of stakeholders are key
 - Steps of intelligence gathering, decision support, design and implementation and monitoring.
- Emphasis on “ongoing” rather than sporadic is vital!
 - Source of traditional friction – next quarter vs. next quarter century
 - Allows cities to be more responsive to change

- 
- Urban Planners need to implement a “freight filter” Gordon (2004) to addresses the impact of land use and policy decisions on the movement of goods.
 - Each major land use decision and development should include analysis of the impacts on freight movement.

 - Better tools and data – of course
 - Common definitions – how big is big?
 - Broaden definition of urban logistics – “soccer mom as the last mile solution”
 - Big box retail vs. corner store

 - Stable funding not only for infrastructure but for planning as well
 - Integrated models yes but also need ongoing surveying of logistics sector



Solutions – altering perspectives

- need to educate stakeholders, professionals, politicians and the public about urban freight and logistics
 - establishment of “freight stakeholder partnerships” (Moving the Economy, 2004)
 - Freight Quality Partnerships (UK)
 - Gateway councils
 - STOP TALKING ONLY TO EACH OTHER -
- Move away from “us” and “them” mentality
 - Coordinated and integrated across the spectrum

- 
- Community engagement throughout the process
 - building their understanding – incorporating their perspectives
 - safety, mobility, community cohesion, displacement, property values, noise, aesthetics that can form part of the “local pain” aspect of corridor development (Hesse 2006)
 - Lessons from the Alameda Corridor project – employment, business development, tours, newsletters

 - Good Corporate Neighbour Program (U.S.)
 - Recognizing and rewarding
 - Important role of “champions”



The Way Forward

- Land Use, transport and the environment cannot be separated out
 - complex issues demanding hard work
- build spirit of cooperation, interest and enthusiasm
 - But grounded in the realism of global competitiveness and community challenges
- Examples of being “on track” in the Canadian context
 - federal to local initiatives
 - Political leadership and changing orientation – (PIR)
 - Motivated public? – going green



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