Logistics Hubs: What Makes them Succeed or Fail?

CILTNA Transportation Workshop

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Presentation Overview

Logistics Hubs 101

Case Studies

Key Success Factors
Definitions:

• **Logistics** - management of inventory, in motion (transportation) and at rest (warehousing)

• **Logistics Hub** - geographic grouping of:
  – Freight transportation players (e.g. freight forwarders, shippers, transport operators, customs), and
  – Related services (e.g. cargo consolidation / deconsolidation, storage, distribution, value added services such as labelling, maintenance and repair).
Key Factors Affecting Locational Decisions

- Transportation infrastructure
- Proximity to market
- Land availability
- Public support
- Industry support
Freight Hubs Generally Align with Population/Markets
• What makes a logistics hub? **Critical mass**
• What generates critical mass? **Private sector** (cargo owners/carriers/other service providers)
• What attracts private sector? **Value proposition**
• What creates value? **Alignment of interests**
Public Policy & Planning Interests

**Public benefits**
- Regional economic development
- Optimize system utilization
- Growth and competitiveness

**Negative Externalities / Risks**
- Congestion
- Emissions
- Road maintenance (heavy trucks, etc)
- Other social costs, etc.
- Opportunity Cost
- Political considerations

Public sector role largely limited to laying groundwork for value proposition
T & L Companies / Shipper Interests

- T&L companies and shippers choose where to locate their operations on the basis of transportation and non-transportation factors.
  - Transportation factors = optimizing the performance of the supply chains in which the businesses operate, a balance of transit time, total logistics cost and reliability.
  - Non-transportation factors:
    - Availability of skilled labour
    - Labour cost
    - Availability of serviced industrial land (utilities)
    - Timeframe for approvals and permitting
    - Land cost
    - Business taxes and fees
    - Energy costs
    - Availability of appropriate support services
    - A region’s T&L sector marketing efforts
Simplified Example DC Location Options Analysis: Transportation Cost Advantages

- Truck costs from Distribution Centre in [City] to retail outlets in [Region] are $xxx less per trip on average than from [competing locations].

- On an annual basis, “savings” would reach $xx million.

Distance savings: 
Xxx km /store

Cost per km: 
$xx.xx

Savings / trip: 
$xxx

# of Store: 
xx

Trips / store each year: 
xxx

Total savings: 
$xx m / year
## Transportation Providers’ Interests

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Perceived Benefits of Hub</th>
<th>Perceived challenges of Hub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail Companies</td>
<td>• Additional traffic&lt;br&gt;• Consolidation of traffic&lt;br&gt;• Access to 3rd party services&lt;br&gt;• Better asset utilization</td>
<td>• Investment requirements&lt;br&gt;• Impact on existing networks / hubs (e.g. redundancy)?&lt;br&gt;• Does it make financial sense?</td>
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<tr>
<td>Trucking Companies</td>
<td>• Additional traffic&lt;br&gt;• Improvement of drayage operations to support hub</td>
<td>• Impact of hub on modal split for freight in the region?&lt;br&gt;• Will traffic consolidation increase or decrease costs?&lt;br&gt;• What are impacts on existing road network?</td>
</tr>
<tr>
<td>Port Terminal Operators</td>
<td>• Anchors traffic&lt;br&gt;• Potential additional shipping lines&lt;br&gt;• Better asset utilization (containers move inland)</td>
<td>• Investment requirements for connections between hub &amp; terminal?&lt;br&gt;• Do costs outweigh benefits?</td>
</tr>
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## Public and Private Sectors Think Differently

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Public Sector</th>
<th>Private Sector</th>
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</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Long-Term</td>
<td>Shorter-Term</td>
</tr>
<tr>
<td>Goals</td>
<td>Balance competing public policies /objectives</td>
<td>Minimize cost / increase revenues</td>
</tr>
<tr>
<td>Decision-making</td>
<td>Very public, due process; Legislative requirements</td>
<td>Internal, fast; Can act quickly</td>
</tr>
<tr>
<td>Coverage</td>
<td>Jurisdiction</td>
<td>Market / supply chain</td>
</tr>
<tr>
<td>Drivers</td>
<td>Demographic, socio-economic conditions</td>
<td>Economic growth, trade, commodity prices</td>
</tr>
</tbody>
</table>
Savannah Logistics Cluster (Port-Centric)

• In 1990s, Port of Savannah handled similar traffic to Halifax (under 0.5 million TEU)....In 2015, it handled 3.7 million TEU.... How?
CentrePort Canada, Winnipeg (Inland Hub)

“better, faster, cheaper”... ...than what?
Very large items and full vehicle loads carrying concrete and steelwork go directly to the site when required.

Deliveries of materials are made to the CCC from suppliers.

Materials are held in the CCC and stock is called-off when required and then picked and packed into consolidated loads.

On-site handling to the point of use including waste removal.

Vehicles contain combined loads delivered to site.

Vehicles can then be utilised for reverse logistics operations, with waste, damaged goods, pallets and stillage taken back to the CCC on the return journey.

Source: Transport for London
Presentation Overview

Freight Hub 101

Case Studies

Key Success Factors
Key Success Factors

Clear value proposition for industry (private sector)

• Private sector value proposition necessary, but not sufficient
• For shippers: Market access, transit time, logistics cost, reliability advantages
• For T&L providers: New business, efficiency, asset utilization, etc.

Connectivity

• Access to multiple competitive transportation options
• Willing carriers: access to rail can be an important advantage.

Land and infrastructure

• Availability of serviced and appropriately zoned industrial land
• Low cost, low tax
• Additional land available for expansion in future
Key Success Factors (Continued)

Governance

• Political support / local support necessary but not sufficient
• Private sector champion more effective than public sector
• Broad public and private sector support key to securing funding, promoting broader community support

Marketing and Related Tactics

• Dedicated marketing resource, that speaks T&L language
• Simplify: “Single Window”/ fast track response to business facilitation, including facilitation of FTZ programs
• Snowball effect: Benefits of securing anchor tenants (creating critical mass)
Common Pitfalls

Common challenges that threaten hub viability

• Insufficient consultation
• Value proposition driven by economic development not logistical benefits

Not every door is a gateway
Thank You
Global management consulting firm (formerly consulting arm of CP (est. 1969))

- Focused on transportation sector
- Strategy, economic analysis and policy
- Multimodal

Recent North American project experience:
Logistics hub feasibility studies
Canada / US multimodal strategies
Supply chain strategies
DC location options analysis
Port/rail infrastructure feasibility
Investor support / market assessments
Summary of Recent CPCS Experience

**Freight Rail**
- 100+ Strategy mandates
- 8 Transactions
- $3+ billion in deals

**Port & Terminals**
- 35+ Strategy mandates
- 30+ Transactions
- $5+ billion in deals

**Multi-modal Transport**
- 30+ Strategy mandates

**Passenger & Transit**
- 10+ Strategy mandates
- 3 transactions
- $3 billion in deals