



# The Use of Containers in Canada

Presentation to  
Calgary Roundtable  
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# Structure of report

- Background
- Intro to container industry
- State-of-play
  - Ports and terminals
  - Railways and trucking
  - Regional issues
- Key issues
- Business opportunities

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# Containerization

- Global context
  - Since 1960s
  - 90% of general cargo containerized
  - Made globalization possible
  - 325m TEUs in 2005
  - Largest ports >20m TEUs
  - Slot charters, alliances
  - Mergers and acquisitions
    - Maersk 564 ships; 1.5m TEU capacity
    - Hapag / CP Ships 133 ships; 400,000 TEUs
  - Total TEUs in service 20m
  - Onboard ship capacity 9.85m

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# Future developments

- Larger vessels > 10,000 TEUs
- China Effect
- All water services via Panama
- Suez services
- M&As
- New owners of terminals e.g Macquarie
- Expansion of Panama Canal

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# Canadian ports & rankings, 2005

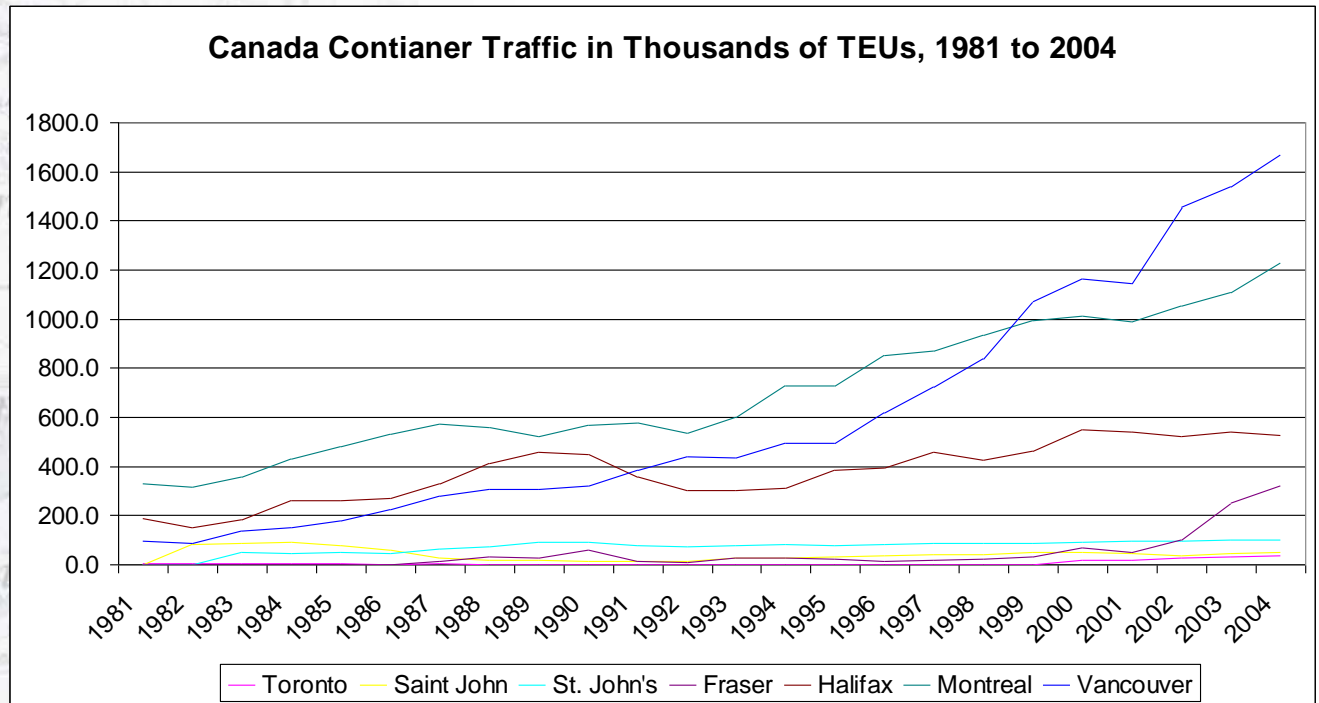
Port	TEUs	Rank
Vancouver	1,767,379	51
Montreal	1,254,560	66
Halifax	550,462	109
Fraser River	372,844	126
St. John's	110,995	196
Saint John	49,950	237
Via US ports	500,000 est.	
<b>Total</b>	<b>4,606,190</b>	

**Source:** *Containerisation International*

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# Canadian Container traffic



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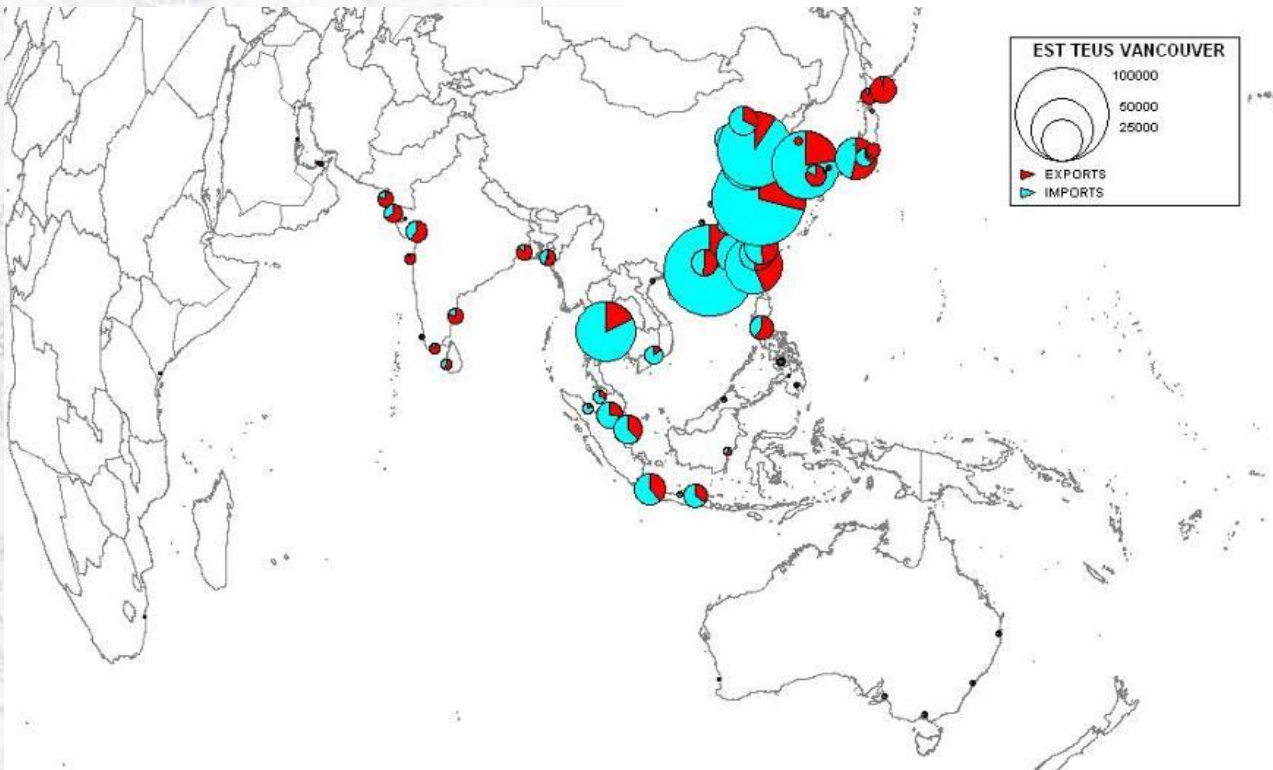
# Vancouver

- 1.76m TEUs in 2005
- 460,000 TEUs by truck
- 3 terminals
  - DeltaPort
  - Vanterm
  - Centerm
- At capacity
- Empties a big issue
  - Handled 142,000 as of Sept. '06

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# Vancouver

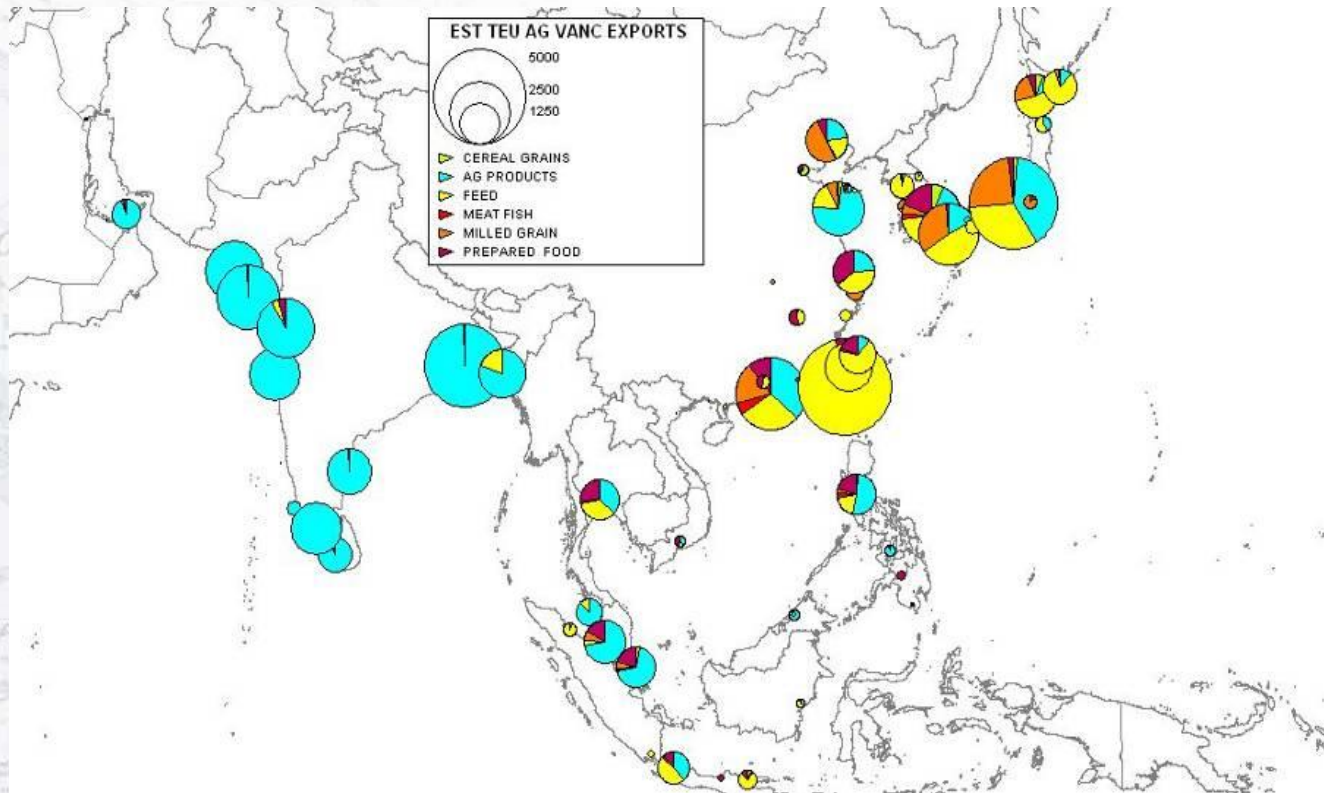


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# Pulse shipments via Vancouver



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# Montreal

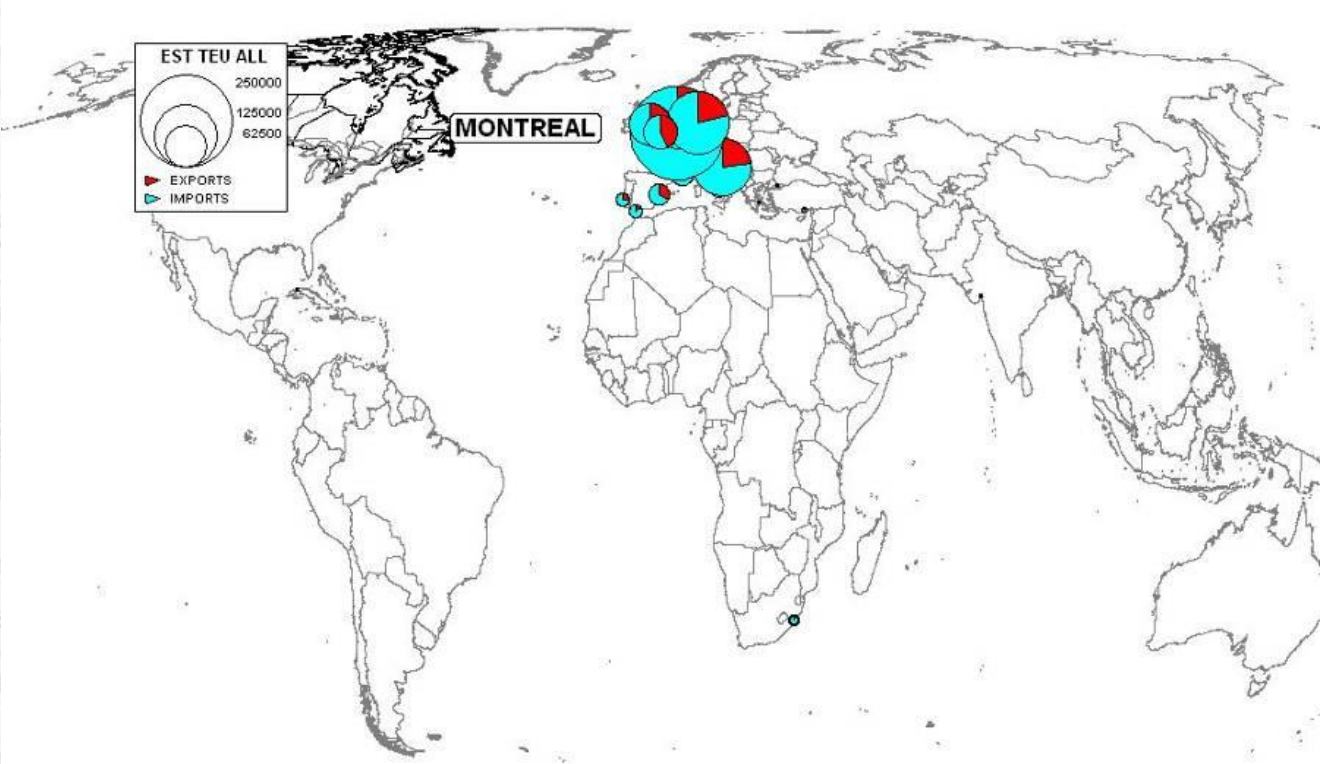
- 1.2m TEUs in 2005
- 4 terminals
  - Cast
  - Racine
  - Termont
  - Bikerdike
- 57% to US mid-west
- Trucking to New England – 250,000 TEUs
- 124,000 empties

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# Montreal

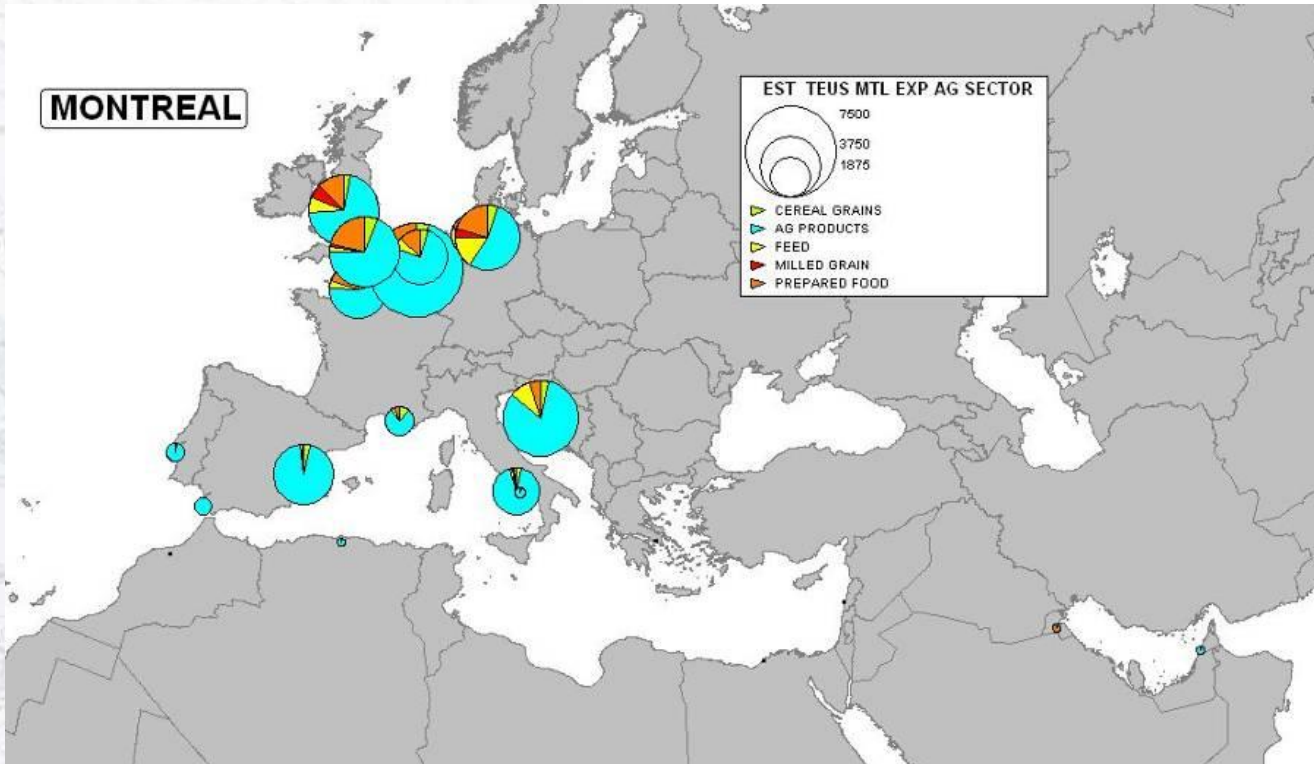
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# Montreal Agricultural shipments



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# Halifax

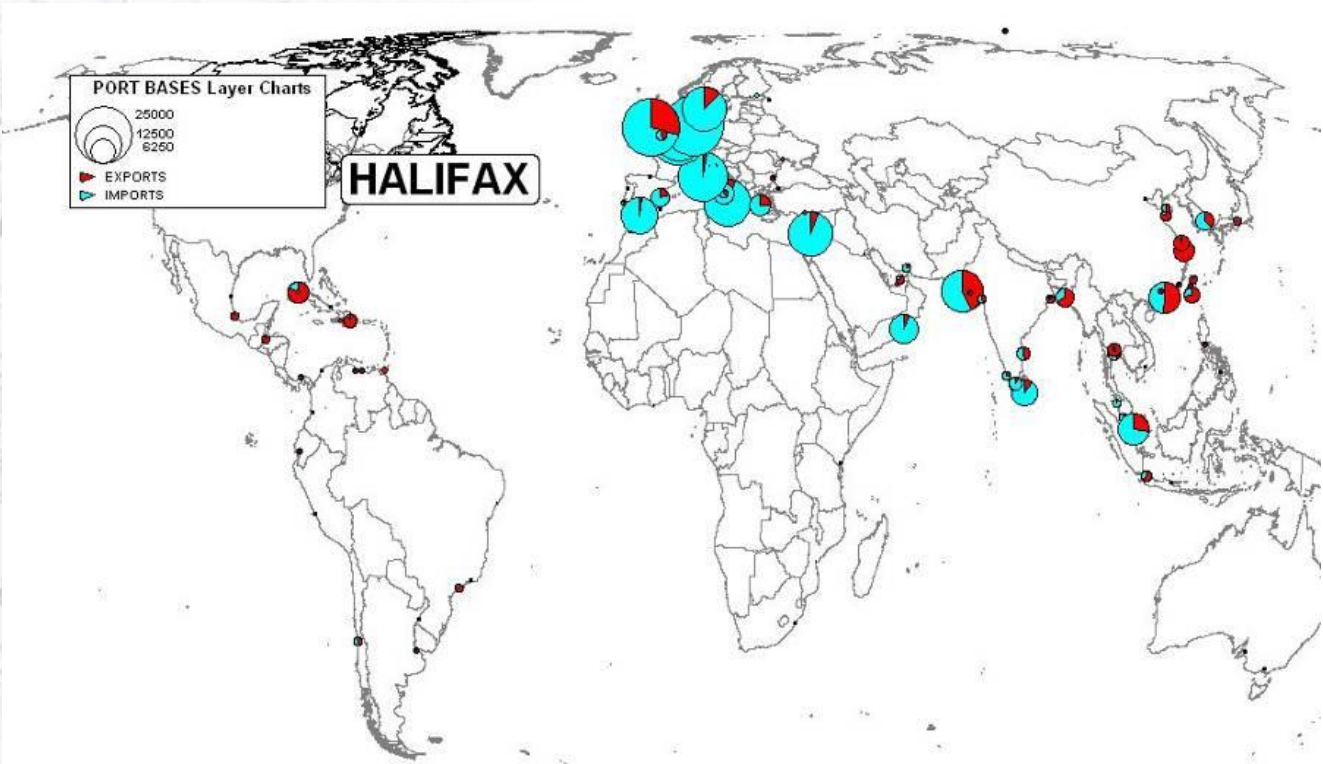
- 550,000 TEUs in 2005
- 2 terminals
- 75-80% by rail inland
- 120,000 TEU by truck
- Markets geographically spread
- 80,000 empties – in and out

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# Halifax

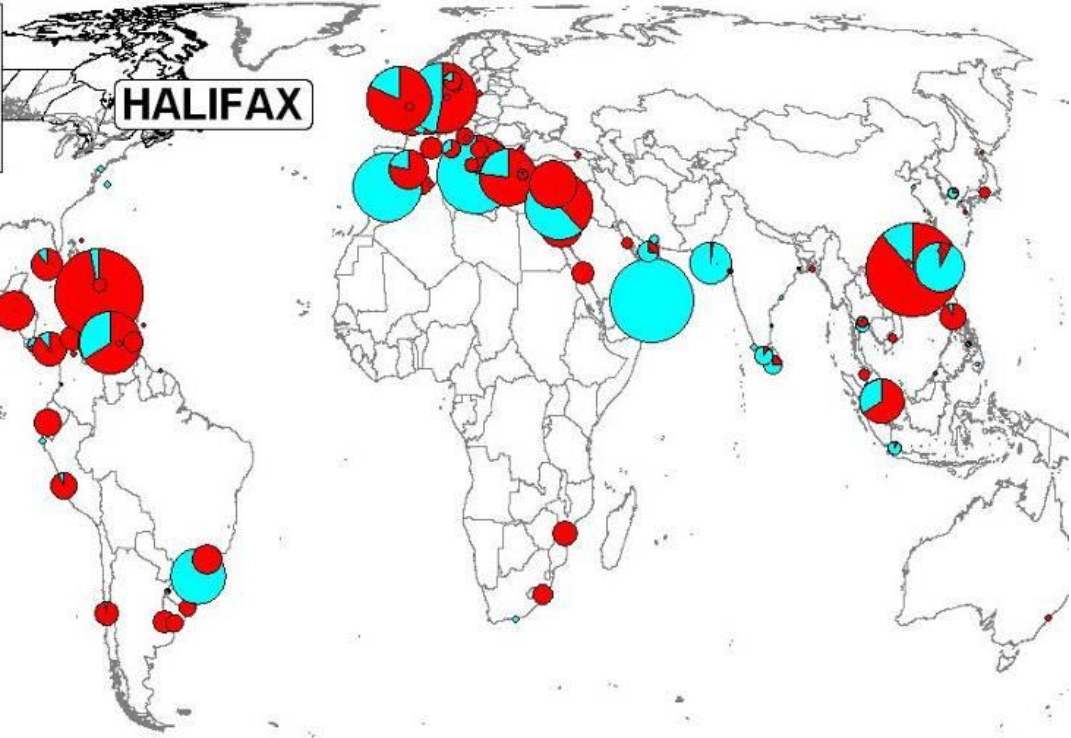
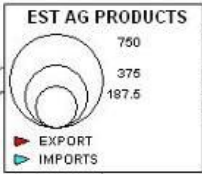
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# Halifax cereal and grain markets



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# Railways & trucking

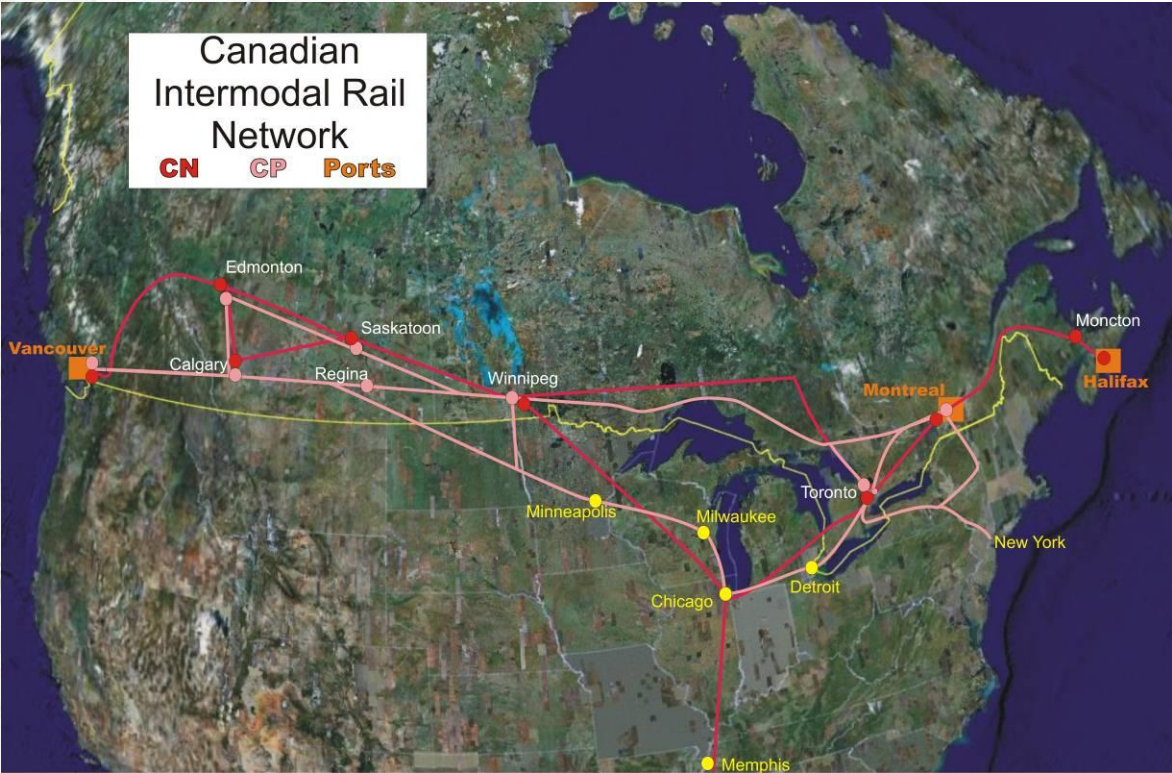
- Lines of Business
  - Bulk
  - Carload
  - Intermodal

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# Intermodal network



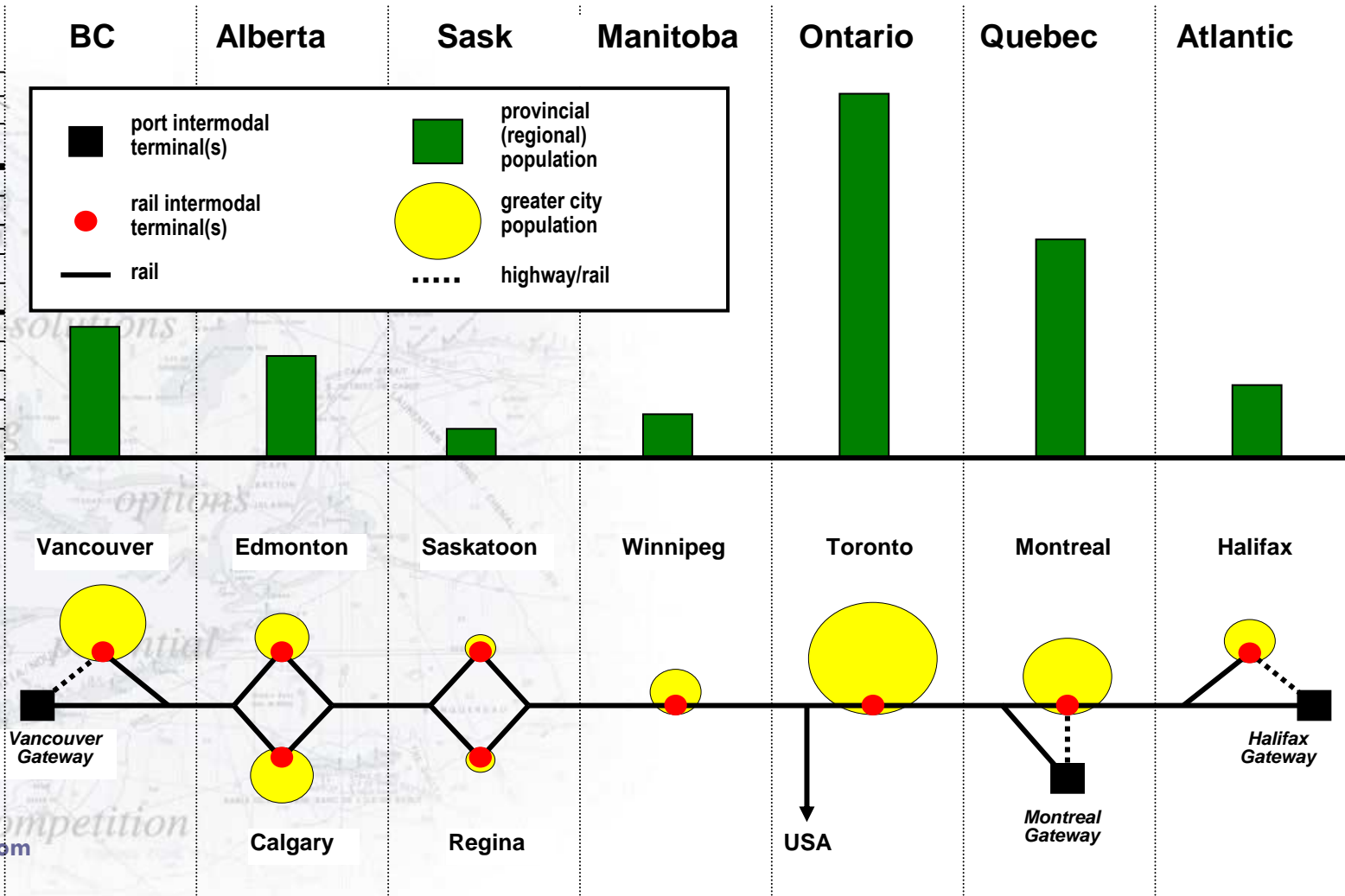
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# Operations - Terminals



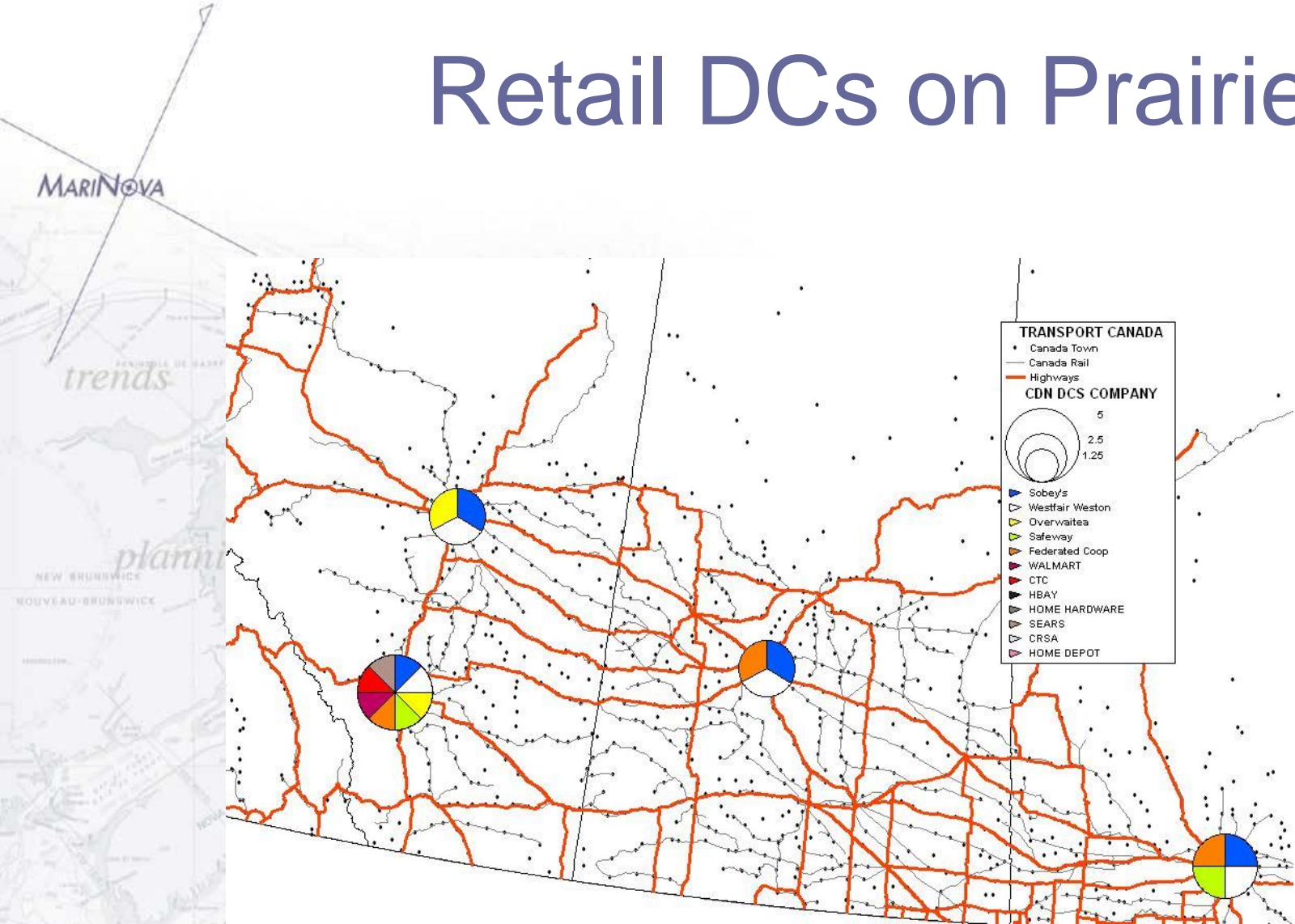
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solutions  
planning  
options  
competition



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# Retail DCs on Prairies



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# Railway Intermodal Flows

## Montreal/Halifax Import Loads

CN&CP  
2005 UNITS

Destination	Equip	PQ & East
BC	20	3,487
	Other	6,876
<b>BC Total</b>		<b>10,363</b>
AB	20	5,039
	Other	5,792
<b>AB Total</b>		<b>10,831</b>
SK	20	972
	Other	620
<b>SK Total</b>		<b>1,592</b>
MB	20	1,343
	Other	1,235
<b>MB Total</b>		<b>2,578</b>
ON	20	54,104
	Other	52,693
<b>ON Total</b>		<b>106,797</b>
US	20	37,089
	Other	71,356
<b>US Total</b>		<b>108,445</b>
<b>Grand Total</b>		<b>240,606</b>

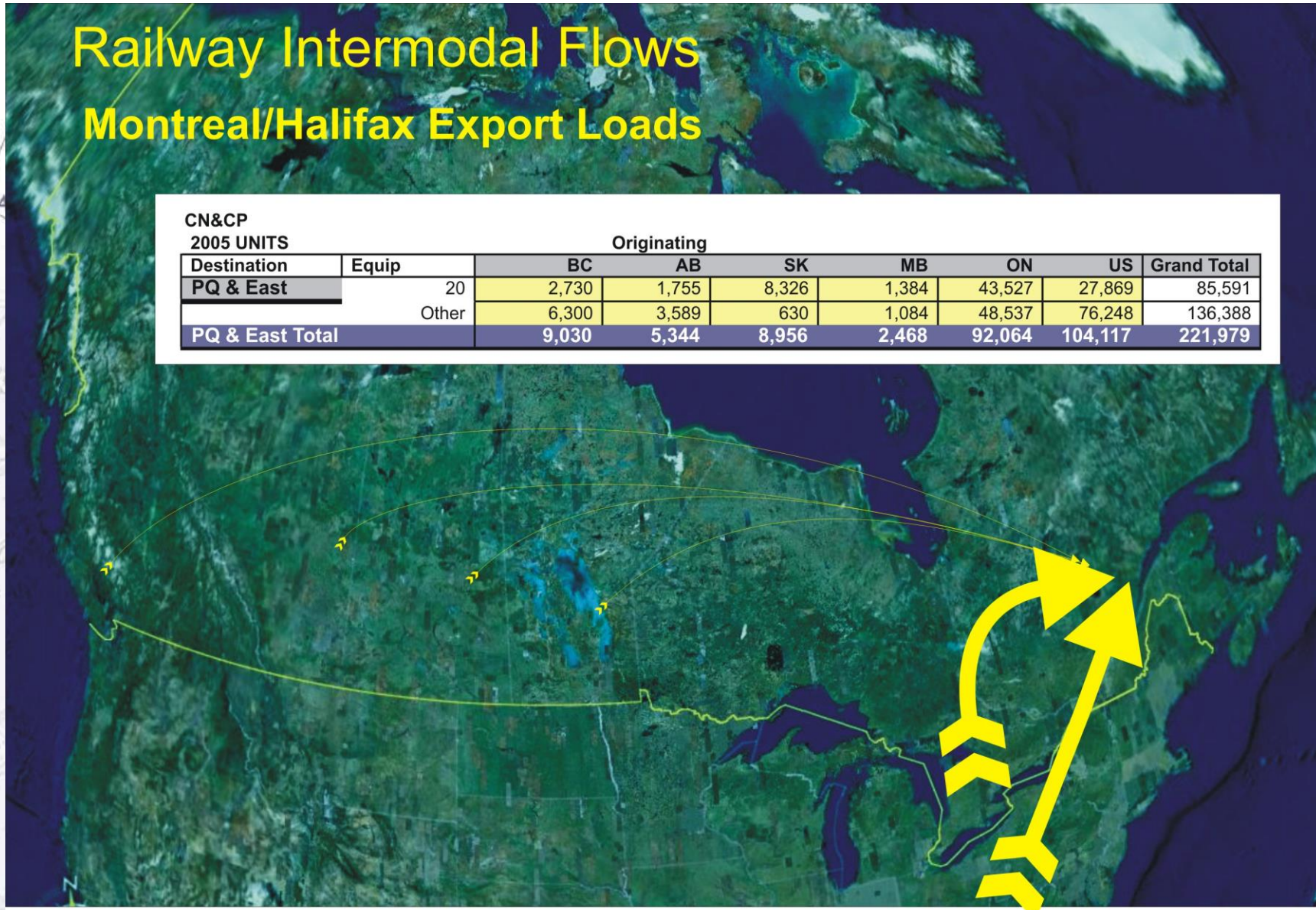
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# Railway Intermodal Flows

## Montreal/Halifax Export Loads

CN&CP		2005 UNITS							Grand Total
Destination	Equip	Originating							
		BC	AB	SK	MB	ON	US		
PQ & East	20	2,730	1,755	8,326	1,384	43,527	27,869	85,591	
	Other	6,300	3,589	630	1,084	48,537	76,248	136,388	
<b>PQ &amp; East Total</b>		<b>9,030</b>	<b>5,344</b>	<b>8,956</b>	<b>2,468</b>	<b>92,064</b>	<b>104,117</b>	<b>221,979</b>	

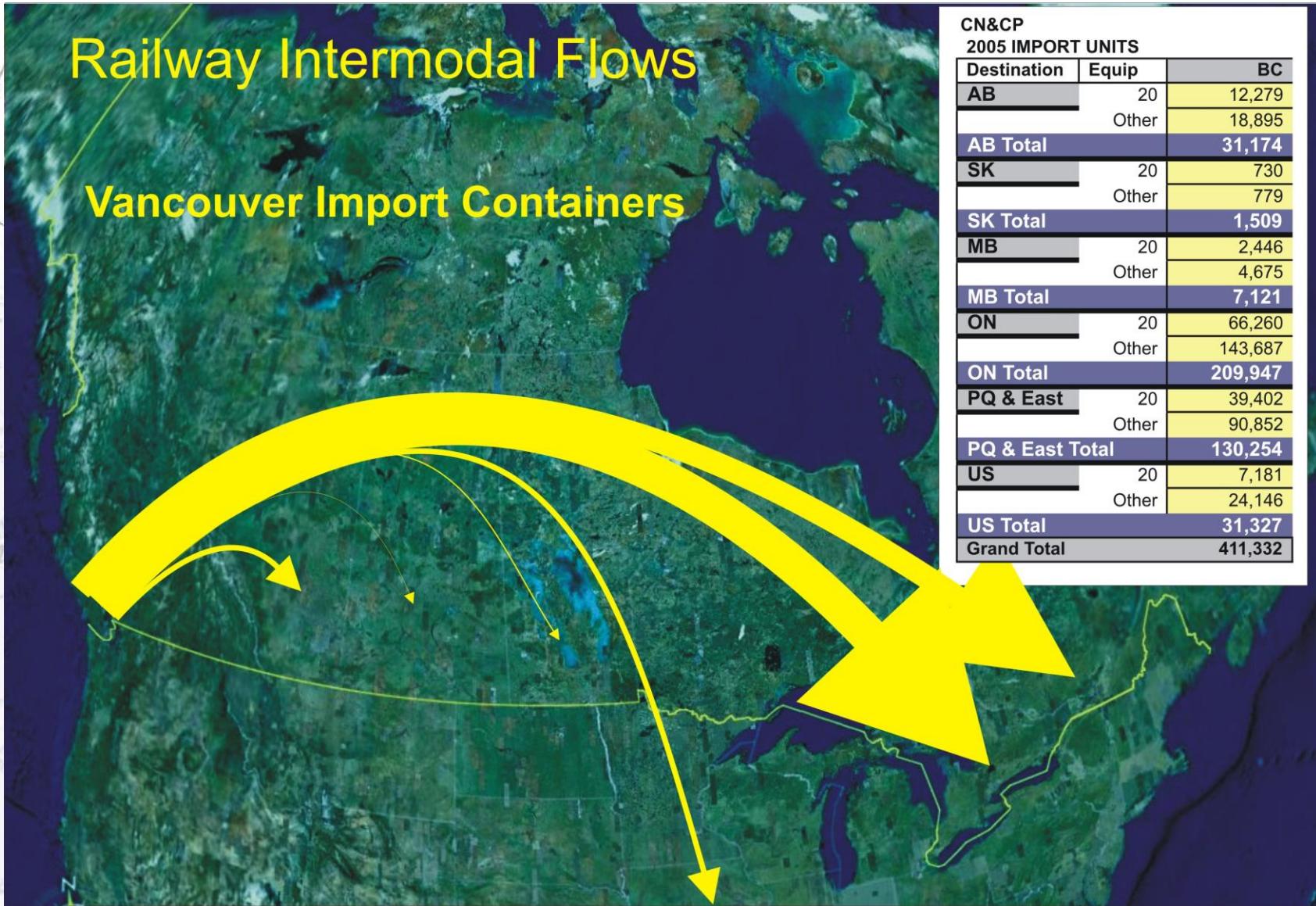


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# Railway Intermodal Flows

## Vancouver Import Containers



CN&CP 2005 IMPORT UNITS		
Destination	Equip	BC
AB	20	12,279
	Other	18,895
<b>AB Total</b>		<b>31,174</b>
SK	20	730
	Other	779
<b>SK Total</b>		<b>1,509</b>
MB	20	2,446
	Other	4,675
<b>MB Total</b>		<b>7,121</b>
ON	20	66,260
	Other	143,687
<b>ON Total</b>		<b>209,947</b>
PQ & East	20	39,402
	Other	90,852
<b>PQ &amp; East Total</b>		<b>130,254</b>
US	20	7,181
	Other	24,146
<b>US Total</b>		<b>31,327</b>
<b>Grand Total</b>		<b>411,332</b>

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# Railway Intermodal Flows

## Loaded Exports Vancouver

### EXPORT VANCOUVER

CN&CP

2005 UNITS

Destination	Equip	Originating							Grand Total
		AB	SK	MB	ON	PQ & East	US		
BC	20	5,808	4,200	1,440	25,093	13,946	4,842	58,816	
	Other	24,223	1,024	3,832	39,641	27,506	7,100	110,202	
<b>BC Total</b>		<b>30,031</b>	<b>5,224</b>	<b>5,272</b>	<b>64,734</b>	<b>41,452</b>	<b>11,942</b>	<b>158,655</b>	



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# Railway Intermodal Flows

Empty Import/Export Containers

## CN&CP 2005 UNITS

Destination	Equip	Originating						Grand Total
		BC	AB	SK	MB	ON & PQ & East	US	
BC	20	3	12,237	474	1,966	30,665	3,070	48,415
	Other	31	52,195	5,437	14,796	54,408	22,414	149,281
<b>BC Total</b>		<b>34</b>	<b>64,432</b>	<b>5,911</b>	<b>16,762</b>	<b>85,073</b>	<b>25,484</b>	<b>197,696</b>
AB	20	170	91	7	54	1,641	178	2,141
	Other	165	449	75	125	4,550	1,198	6,562
<b>AB Total</b>		<b>335</b>	<b>540</b>	<b>82</b>	<b>179</b>	<b>6,191</b>	<b>1,376</b>	<b>8,703</b>
SK	20	609	3,206	-	250	4,238	-	8,303
	Other	18	231	-	44	1,082	-	1,375
<b>SK Total</b>		<b>627</b>	<b>3,437</b>	<b>-</b>	<b>294</b>	<b>5,320</b>	<b>-</b>	<b>9,678</b>
MB	20	362	277	20	-	1,260	15	1,934
	Other	104	67	21	-	1,154	58	1,404
<b>MB Total</b>		<b>466</b>	<b>344</b>	<b>41</b>	<b>-</b>	<b>2,414</b>	<b>73</b>	<b>3,338</b>
ON & PQ & East		128	247	57	77	8,851	1,379	10,739
	Other	190	278	43	123	17,087	1,402	19,123
<b>ON &amp; PQ &amp; East Total</b>		<b>318</b>	<b>525</b>	<b>100</b>	<b>200</b>	<b>25,938</b>	<b>2,781</b>	<b>29,862</b>
US	20	5	6	-	22	7,248	2,477	9,758
	Other	2	-	-	-	4,626	18,506	23,134
<b>US Total</b>		<b>7</b>	<b>6</b>	<b>-</b>	<b>22</b>	<b>11,874</b>	<b>20,983</b>	<b>32,892</b>
<b>Grand Total</b>		<b>1,800</b>	<b>69,284</b>	<b>6,134</b>	<b>17,457</b>	<b>136,810</b>	<b>50,697</b>	<b>282,169</b>



# Railway Intermodal Flows

CN&CP 2005 UNITS		Originating						US	Grand Total
Destination	Equip	BC	AB	SK	MB	ON & PQ & East			
<b>BC</b>	20	-	28	-	199	3,910	93	4,230	
	Other	-	270	144	703	21,425	1,265	23,807	
<b>BC Total</b>		-	298	144	902	25,335	1,358	28,037	
<b>AB</b>	20	17	1	-	1	7,379	10	7,408	
	Other	150	11	1	531	47,848	989	49,530	
<b>AB Total</b>		167	12	1	532	55,227	999	56,938	
<b>SK</b>	20	2	-	-	-	1,553	193	1,748	
	Other	5	2	-	9	5,152	422	5,590	
<b>SK Total</b>		7	2	-	9	6,705	615	7,338	
<b>MB</b>	20	2	-	-	-	2,811	2	2,815	
	Other	3	1	1	-	10,319	-	10,324	
<b>MB Total</b>		5	1	1	-	13,130	2	13,139	
<b>ON &amp; PQ &amp; East</b>		24	3	4	1	104	19	155	
		281	242	13	305	1,959	455	3,255	
<b>ON &amp; PQ &amp; East Total</b>		305	245	17	306	2,063	474	3,410	
<b>US</b>	20	8	1	-	2	311	41	363	
	Other	4	1	2	1	5,934	1,434	7,376	
<b>US Total</b>		12	2	2	3	6,245	1,475	7,739	
<b>Grand Total</b>		496	560	165	1,752	108,705	4,923	116,601	

Repositioned Domestic Loaded Import / Export Containers

# Central Canada - West

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**CN&CP Units**      **Rail Profile Central/Eastern to W Canada (Marine Container**

Destination		Export Loads	Empties	DRP Use	
<b>BC</b>	20	42,526	30,665	3,910	
	other	74,023	54,408	21,425	
<b>BC Total</b>		<b>116,549</b>	<b>85,073</b>	<b>25,335</b>	<b>25%</b>
<b>AB</b>	20	5,044	1,641	7,379	
	other	5,813	4,550	47,848	
<b>AB Total</b>		<b>10,857</b>	<b>6,191</b>	<b>55,227</b>	<b>55%</b>
<b>SK</b>	20	973	4,238	1,553	
	other	620	1,082	5,152	
<b>SK Total</b>		<b>1,593</b>	<b>5,320</b>	<b>6,705</b>	<b>7%</b>
<b>MB</b>	20	1,345	1,260	2,811	
	other	1,240	1,154	10,319	
<b>MB Total</b>		<b>2,585</b>	<b>2,414</b>	<b>13,130</b>	<b>13%</b>

<b>TOTAL</b>	<b>131,584</b>	<b>98,998</b>	<b>100,397</b>	<b>330,979</b>
	<b>40%</b>	<b>30%</b>	<b>30%</b>	

Note loads

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# Railway Business Environment

- Empty container storage
- Empty line haul rates
- Loaded line haul rates
- Container ownership
- Terminal capital requirements
- Loaded container storage
- Empty storage
- Terminal logistics

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# Interviewees

- Shippers
  - Discontent on Prairies – access to boxes
- Shipping lines
  - Need more than \$500
  - Equipment velocity – empty or full???
  - Need boxes in Far East
- Retailers
  - Transloads
  - Balanced (almost)

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# Key issues

- Commercial issues
  - Rates
  - Timing
  - Container equipment
  - Logistics
  - Disconnects
- Import and export markets not the same

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# Policy and regulatory issues

- Cabotage relaxation
- One aspect – one incidental move towards the port of entry
- 30 day restriction NOT an issue
  - Equipment velocity and rates for cargo are the issues

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# Opportunities

- Shippers association
- Shippers' Ownership of containers
- Co-ops and Pools
- Source load vs. Port Load
- Purchase of container chassis
- Use of plastic liners rather than food grade containers

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# Business Opportunities

- Use 40 ft containers
- Shared bookings
- Shipment co-ordination
- Transloads further inland
- Satellite terminals
- Inland terminals

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# Conclusion

- 26 lines serve Vancouver-Asia market
  - Pricing controls the supply
  - Potential Container Supply is available if:
    - Either increase rates to compete with Asian head haul
    - Or take control of grain containers

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