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**CANADA-US TRANSPORT ISSUES:
CANADIAN CONTAINER PORTS' PERSPECTIVE**

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Introduction

The container transport industry is facing a rapidly changing environment. Increased competition on a global scale throughout the 1980s has forced manufacturing firms to consider greater integration of their production processes with suppliers and markets as a means of gaining competitive advantage. Just-in-Time systems, a natural by-product of such integration, is highly dependent on precise international delivery schedules. In order for these systems to work effectively, manufacturers and carriers need to cooperate closely in order to ensure that a seamless door-to-door service takes place.

But this has also meant that shippers are dealing with fewer and fewer carriers in order to streamline that service, paving the way for the concurrent development of megacarriers. An analysis carried out by Containerisation International has shown that the largest 20 shipping lines have increased their market share of global capacity throughout the 1980s; these 20 carriers controlled 26% of the world's slots in 1980 and by 1990 that share had grown to 39%. Booz Allen (1990) predicts that by 1995 these 20 carriers will control 50% of the world's slots. Concentration in the industry will favour the further development of hub and spoke operations which will reduce the number of major ports.

Not only are a few carriers seeking dominance of the carrying capacity but they are doing so with larger vessels. The economies supporting the trend to larger vessels are clear, and such vessels need port facilities that can process large volumes of containers quickly with post-Panamax equipment. The trend to larger ships and a faster turnaround has raised the stakes for ports. The loss of a line has greater consequences, putting more pressure on ports to provide the deepest access, the best facilities and most efficient equipment.

Technological advances in the industry, such as electronic data interchange and the development of doublestack rail cars, have encouraged even greater cooperation within the industry, between shipper and carrier and between carriers on different legs of the move. The capital intensive nature of both railroads and shipping has meant

that railroads can gain the volume necessary to make doublestack rail cars and unit trains cost-effective for long-haul container moves by feeding overseas container lines operating with hub and spoke networks. Significant cost savings are possible with doublestack technology creating further competitive advantages for ocean operators which align themselves with American railroads; in 1985, Grimm and Smith estimated costs per loaded mile ran at US\$.79 for traditional TOFC (trailer on flat car) moves and US\$.56 for doublestack container moves. And such economies have been improved with increasing experience with the technology.

A port can no longer view its hinterland as its traditional regional base. As cited by Ansary (1989), Ocean Shipping Consultants have forecast for Ports Canada that North American ports' share of world containerport throughput will decline from 27% of the world total in 1980 to 23% in 2000. As each North American port competes continent-wide for cargo in a shrinking market, the competitive pressure on ports will increase even further. Events of the past five years have set the scene for this paper's preliminary analysis of the issues facing Canadian ports and their competitiveness within North America in the coming decade.

Inequalities in Industrial Support for Ports

Canadian and US container ports face different capital cost structures. Although Canada's Local Port Corporations are autonomous in their investment planning (for decisions under a specified ceiling), they face costs additional to those encountered by their American rivals in their access to government support for capital projects. Dredging is one case in point where the inequalities are clear. US ports will receive a significant boost from investment by the US Army Corps of Engineers now that the Gulf War is over. It is difficult to put these investments on a time scale but, as of October 1990, the Corps (Grier, 1990) had authorization for the major dredging investments for competitors of Canadian ports in excess of US\$100 million.

The dredging of Baltimore's Brewerton Channel, for example, will save shipping lines up to two hours of transit time, thereby reducing one of the competitive disadvantages the port has in competing for North Atlantic cargos. The Kill Van Kull dredging in New York, expected to be completed in 1995, will take the channel from 35 feet to 40 feet, with further work for 45 foot depths in planning for after 1995. Each of these projects threatens the continued movement of container goods via Halifax and Montreal. At this point in time, post-Panamax ships call at New York and, because of draught limitations, are unable to fully load. They take on minimum bunkers and, before leaving the continental shelf for Europe, make a minor detour to Halifax to top-up with containers and to load bunker exempt from provincial sales tax. This, along with competitive labour productivity and port charges, has secured a strong position for Halifax on the routes of many of the large carriers. With the dredging of New York, such a role is redundant. New York will want to secure full loads for ships calling at the port and what better target hinterland than the dense Canadian markets

of Ontario and Quebec to the North and the US Midwest cargo now moving through Halifax and Montreal. Baltimore too covets these markets.

Dredging is not the only area where the competition is heating up on the eastern seaboard. Subsidies are a factor affecting the inland leg as well. The US government has provided an infusion of US\$3.2 billion to modernize and update Conrail's infrastructure and rolling stock. The states of New York and Pennsylvania have committed US\$8 million to Canadian Pacific for capital improvements to the Delaware and Hudson (D&H) Railway. As another example there is the US\$34 million in Maryland state funds to support Baltimore's new intermodal yard.

Another factor of importance in the area of port competitiveness is the access to and source of capital for port projects. In Canada, ports are landlord operations; the federal government owns the land. US ports, particularly those in the northeast, own real estate and may operate the inland links. This gives them the opportunity to exert greater control over their destiny, engage in commercial businesses or develop real estate holdings to cross-subsidize port activity. This year, for example, the Port Authority of New York and New Jersey is attempting to increase the fares to commuters for using bridges over and tunnels under the Hudson River to support its operations.

Canadian ports are essentially limited to the Canada Ports Corporation capital expenditure fund which lends money to the ports at current rates of interest. Given the higher interest rates in Canada, the cost of port investment is significantly higher. Besides, Canadian ports face funding limits. The Local Port Corporation may only undertake capital projects up to C\$1 million on its own account; the Canada Ports Corporation may approve projects up to C\$10 million and beyond that, the approval of the Minister is required. On the other hand, American ports have access to a broader array of funding options for port investment and not all of them will cost commercial rates of interest. The Maritime Administration has completed a study on port investment and of the US\$5.6 billion spent between 1979 and 1989, 70% was for new construction. The report concluded that, in future, the port industry will have difficulty prying funds from local governments and will be faced with the necessity of generating the funds needed internally. Perhaps borrowing them at commercial rates of interest will level the field.

Canadian ports also pay their own form of property taxes - "grants in lieu of taxes" - to the municipalities in which they reside. In many American cities, the municipal government is viewed instead as a source of funds for capital improvements needed for the port. One example noted in the press was the infusion of US\$3.5 million from King County taxpayers to the Port of Seattle. In the long run, the capital investment restraints facing Canadian ports will need to be balanced by American taxpayer constraints on municipal support for US ports or it will become difficult for Canadian ports to maintain traffic at or above the critical volume necessary to be in the global game.

Finally, Canadian ports face the added strain of the current government move towards greater cost recovery. Cost recovery in

principle is necessary for market efficiency but does pose a threat to those most affected by it. The difficulty is one of reconciling the efficiency of an overall trading system with that of the benefits enjoyed by individual elements in it. One estimate of the impact of cost recovery on vessels serving Montreal predicts the cost of a container vessel serving Montreal will increase by C\$10,000 for a single voyage. In the US, there is some cost recovery of Corps' dredging costs through the imposition of a charge of .125% of the value of containerized cargo imported or exported. The charge can, on high value goods, add 5% to the total ocean freight bill if goods are exported or imported via US ports. In addition, US customs charges for its services at American ports.

Exhibit 1: Comparison of Round-Trip Operating Costs for Alternative Routes on the North Atlantic in 1985 (US\$)

	Montreal	Halifax	Saint John	New York	Baltimore	Triangular Service
Vessel Operating Costs	155,016	154,283	154,283	154,283	154,283	154,283
Fuel	152,769	104,988	126,139	160,112	201,405	208,722
Port Charges	131,628	125,049	126,300	142,323	142,433	171,106
Container Handling Charges	761,694	677,408	677,331	1,258,118	924,715	967,258
Total Operating Costs	1,201,107	1,061,729	1,084,052	1,714,837	1,422,837	1,501,368
Cost per TEU Slot	334	295	301	476	395	417

- Notes: 1) The European ports of call for all routes consist of Felixstowe, Hamburg, Antwerp and Le Havre.
 2) For the Triangular Service, the North American ports of call are Halifax, New York and Baltimore.
 3) Port charges for Montreal represent costs incurred in the summer. In the winter months these increase by US\$9,957 per call due to higher charges for pilotage and tugs.
 4) Cost per TEU slot is based on the 3,600 TEU slots which are available per round trip.

Source: Table 2, A. Ray, Operating Costs for a Typical Containership on Alternative North Atlantic Routes, Ottawa: Canadian Transport Commission, WP-20-86-21, December 1986, p. 13.

Meeting the Market Challenge - Operating Differences

Many ports examine their port costs when evaluating their competitive position. Ray (1986) examined the relative position of Halifax, Montreal and Saint John, from a cost perspective, in servicing North Atlantic trade. He found that Halifax, then Saint John and then Montreal offered the lowest costs per TEU slot of six route combinations on the North Atlantic. (see Exhibit 1). The relative competitive positions were largely due to port and container handling charges, and he concluded the most important operating cost factor was the wide variation in container handling charges. He noted that, for example, if port costs in New York were equalized with those of Baltimore, the

difference in the cost per TEU between the Montreal route and the New York route would drop from 42% to 15%. He also concluded that Montreal's future is vulnerable to further development of economies of scale from larger vessels (which would reduce per TEU slot costs) and from increased ice-breaking or pilotage charges on the St. Lawrence. The study only focused on ship operating costs and did not include the costs of marketing the service or any of the inland elements of a door-to-door offering.

In the area of port costs, Canadian container ports continue to show a significant cost advantage over their US counterparts, according to Ansary (1989):

- Halifax and Montreal offer vessel and cargo handling costs per TEU in the range of 50-65% of New York's costs; this is lower than the four east coast ports of Charleston, Norfolk, Baltimore, and New York (which includes a 50% reduction in New York's ILA assessment).
- Number of moves per gang hour are highest at Halifax and Saint John with the poorest performance of six east coast ports being recorded by New York and Baltimore.
- Port facility utilization: According to Containerisation International Yearbook (1988), Moran Container Terminal in Boston processes the highest number of TEUs per berth, with Halifax's Fairview Cove facility coming 2nd and Baltimore's Dundalk Marine Terminal 3rd. Montreal's CAST terminal and Vancouver's Vanterm rank 4th and 5th out of 11 examined. When facility utilization is looked at in terms of TEU per crane, Fairview Cove (Halifax), the CAST Terminal (Montreal) and Vanterm (Vancouver) are ranked 1st, 2nd and 3rd.
- Pilotage charges: Halifax charges are almost a third lower than those in Charleston, the next lowest cost service. Norfolk's charges are slightly more than those at Charleston for an 1800 TEU vessel. At the other end of the continuum are the ports of New York, Baltimore and Montreal. The length of the St. Lawrence River and Baltimore's Harbour and Channels put pilotage costs up dramatically and also dictate that these ports (which have the advantage of being closer to the market) have the disadvantage of a longer ocean transit time for the cargo.

Given findings of this type, it is not surprising that many ports offer incentive programs to induce shippers and carriers to use the ports. The programs offered by ports in New York, Maryland and Virginia on the east coast are particularly targetted to building their international container business. The competition in port subsidy programs has heated up.

The Port of New York and New Jersey announced in late 1989 that they are cutting rates to ship owners for handling boxes - US\$25 per import container and US\$50 per export container on boxes moving from or

to locations more than 260 miles inland. The New York Shipping Association and the International Longshoremen's Association also reduced assessments against ships calling at the port effective January 1990. In addition, the port also maintains shipper/carrier subsidy programs. In spite of these inducements, terminal charges and stevedoring costs remain high and this works against the port. New York is 350 miles closer to central Canadian markets than Halifax and such inducements, coupled with rail service improvements could work in the long term to Halifax's disadvantage as most lines calling at Halifax also call at New York.

In Baltimore, a rail rate subsidization plan is in effect; the Maryland Port Administration picks up half of the cost of reducing the rates for containers travelling to the US midwest. Discounts of US\$50 per container are offered if the container is destined for Louisville, Chicago or Detroit and drayed at either the CSX or Conrail terminals. In addition, all lines calling at any Maryland port are able to take advantage of incentives of US\$3 a container effective May 1, 1990. This is alarming because Baltimore is a port of call for many of the lines serving Halifax and, if inland service improvements are forthcoming, its distance from the US midwest could prove to be a competitive challenge to Halifax, although not in the immediate future as the port has yet to reassure carriers that it has resolved its continuing labour problems.

Canadian ports also engage in incentive programs. Montreal enhanced its rebates to container carriers this year; previously, rebates were only given to carriers whose annual volume exceeded 50,000 tons. The volume floor was eliminated with all carriers gaining a rebate increase of 15¢ a ton, to increase the rebate from 53¢ to 68¢. Halifax introduced in February 1991 a wharfage rate reduction for US-originating or -destined containerized cargos; the new rate is 5¢ a tonne with a minimum charge of C\$1 per TEU. Last year, the Port capped berthage charges (at the rate for 40,000 grt) so that the largest containerships would not be penalized.

However, port incentive schemes are not the only operating factors which attract carriers. They also look at other port charges, inland connections and the availability of electronic data interchange. Shippers, when selecting carriers, are most concerned about transit time; in fact, according to Brooks (1990) this is the sole choice criteria and puts the pressure on carriers to meet those needs. Port choice by carriers has become a delicate balancing act of weighing costs and services in order to provide shippers with a seamless service in a cost effective way. To do so, they in turn pressure the ports to lobby for more and better inland connections at a cost effective price.

To meet that challenge, many US ports are moving to incorporate on-dock transfer systems, preferably with doublestack capability; on-dock systems have long provided Canadian ports with an advantage as they reduce the number of times a container is grounded during its journey through the distribution network. Seattle's on-dock facility was only in place by early 1990. Both Boston and New York have double-stack service, but it is located off-dock. New York has on-dock

doublestack capability but does not find it economical to use. Baltimore and Hampton Roads expect to have new on-dock doublestack transfer capability in place within the next few years; Baltimore's terminal will still place some restrictions on the type of doublestack equipment which can be used.

And then of course there is the challenge of the competitive advantage that doublestack train operations afford the US hub ports, particularly for longhaul inland routes. US railroad companies were initially able to support doublestack development with some domestic intermodal service. This led to early domination of stack train ownership by the large operators with domestic intermodal business, with slightly more than one-half of the stack trains owned by American President Intermodal, one of the American President Group of Companies, and CSX/Sea-Land (see Containerisation International, June 1989). Companies like Southern Pacific, with their significant but smaller share of the stack train market, operate in conjunction with liner shipping companies like NYK in a strategic alliance in order to compete. The growth of doublestack is also evident from equipment orders; 1990 orders of new doublestack wellcars amounted to more than 20% of the total fleet in service.

Ansary concludes doublestack services offer clear operating cost advantages. US railways experienced a 25% to 30% cost savings in the switch from TOFC to doublestack. Estimates of saving for Canadian railroads to move from COFC to doublestack are estimated to be in the order to 10-15%. A study conducted by the US Department of Transportation, entitled Double-Stack Container Systems: Implications for U.S. Railroads and Ports, concluded that doublestack service can be truck-competitive in dense traffic corridors of 725 miles or more and that minimum volumes on such routes of 28,080 containers annually are required.

In 1989 KPMG Peat Marwick recommended that the Province of Nova Scotia promote the development of rail efficiencies by encouraging the development of doublestack rail cars, perhaps even providing financial assistance for such development. However, Canadian railroads have been slow partly due to the financial investment involved to adopt doublestack even though it makes sense given the distances involved between the major inland markets and the ports on the coast. Some of the reticence can be traced to the regulatory and fiscal climate in Canada.

Rail Regulatory Differences

One of the largest threats to Canadian ports arises from differences between the Canadian and US regulatory environments in which inland carriers must operate. Because the long-haul international containers move primarily on landbridge systems operated by the railroads, this paper focuses on the regulatory differences on rail side. That does not mean that truck regulation is not a concern. Any further support of the trucking industry, for example vehicle weight limits as proposed in the US national transportation policy statement, Moving America: A Statement of National Transportation Policy, will obviously

affect the road/rail share of the long-haul market, and therefore influence the hinterland servicing capability of particular ports.

Canadian railroads have only been partially deregulated since 1987, with the passage of the National Transportation Act, 1987. Their US counterparts have had since 1980 to adjust to the market test provided by the Staggers Rail Act of 1980. The intention of the National Transportation Act was to move the industry into a more market-driven economy. In such an environment, doublestack operations would offer a technological solution to problems of high costs and low freight rates by fostering economies of scale. However, the introduction of competitive line rates (CLRs) to protect captive shippers, and the fact that such rates give the competing line access to its rail lines has acted as a disincentive to railway companies to make the large investments necessary to implement doublestack. CLRs do not apply to intermodal traffic, with the exception of container traffic to and from Canadian ports. Initially designed to protect captive users, like the Port of Halifax, the existence of CLRs may in fact be hampering the upgrade of the port's inland connections.

The competitive line rate provision is not the only one which deters Canadian railways from investing in doublestack operations. The abandonment provisions found in Section 159 of the National Transportation Act limit the railways' ability to make the necessary rationalizations to improve return on capital to a level where funds are available for doublestack investment.

CN carries 90% of its traffic on only one-third of its track while CP carries 97% of its traffic on 50% of its track.¹

It is very clear that the continuing costs associated with surplus rail infrastructure will continue to drain funds which could be used for rail investment in the major traffic corridors. In the US, abandonment and rationalization were possible and gave the industry a solid base on which to build doublestack operations enabling it to retrieve lost market share from the motor carrier industry on long-haul operations. On the other hand, in Canada, rail's share of the road/rail market has dropped to 30% from the 70% it held in the 1950s (Hirst, 1991). And that is why CP and CN are both looking south for business, CP with its D&H acquisition and CN with its interest in Grand Trunk Corporation; the operating cost for Canadian railways operating in Canada has been estimated as 28% higher than a US railway operating in the US (Ansary, 1989).

Fiscal Differences

Part of the ability of ports to compete lies in their access to low cost inland transport to major cargo-originating or -destined regions. This provides ports like Montreal, Philadelphia and LA/Long

¹ N. Hirst, "The Railroads Steam South," Canadian Business, February 1991, p. 52-3.

Beach with an advantage in that they lie close to the major supplying and consuming industrial centres of North America.² But for ports like Halifax and Seattle/Tacoma, where the majority of cargo moves a significant distance inland, the competitiveness of the major inland mode becomes critical. And this includes fiscal competitiveness.

In 1990, The Conference Board of Canada, funded by Transport Canada, completed an evaluation of the corporate tax burden on the Canadian railway industry in comparison with the US rail industry. The study examined four scenarios, a matrix of two revenue streams (high and low) and two discount rates (5% and 10%). The study is particularly valuable because it examines both the corporate tax structure on income and the commodity tax structure on inputs. The corporate income tax structure was not found to be a contributing factor to the disparity between the Canadian railway industry and the American railway industry in terms of taxes payable as a percentage of accumulated net cash flow before taxes (Grant, 1990). The study concluded that

The Canadian corporate tax system applicable to the railway industry is not competitive with that of the United States... Of particular importance is the relatively high provincial fuel taxes. Railways pay these without any corresponding benefit in terms of provincial investment in railway infrastructure... [B]ecause of the relative importance of provincial taxes in the total tax paid by the railways and the continued existence of a fairly high federal excise tax on fuel, these federal initiatives have been insufficient to make the Canadian system competitive with that of the United States.³

The study has been criticized for its high estimates of American property taxes; they vary considerably from state to state. The Canada-US difference in taxes would be even greater if the property taxes were reduced because in all four scenarios the American property taxes were higher than the Canadian. This criticism does not, therefore, alter the evidence that Canadian railways are fiscally disadvantaged in comparison with their American counterparts and that the disparity can be traced, in large measure, to commodity taxes - federal fuel excise taxes on diesel, provincial sales tax and provincial fuel tax on diesel.

It has been estimated that each doublestack train running from the west coast to central Canada costs C\$10,000 more in fuel taxes alone if operated on the Canadian side of the border than if run on the US side of the border (Hirst, 1991). Estimates of the impact of fiscal differences vary, from a Canadian disadvantage of 25-28% to 45% (Hirst, 1991; CN, 1990). Nova Scotia is the only province in Canada which does not levy a fuel tax on locomotive fuel and it is highly unlikely that

² Philadelphia and Los Angeles have populations of 60 million and 20 million respectively within a 300 mile radius.

³ Grant (1990), p. vi-vii.

the other provinces can be convinced to give up this lucrative source of income.

If the differences inherent in the two fiscal regimes are added to the impact of subsidies and earlier railroad deregulation in the US, American railroads will find the business relatively easy to take away from Canadian railroads with their primary East-West orientation. With such vulnerability in mind, it is not surprising that Canadian Pacific has made North-South rail investments with its controversial acquisition of the D&H and Soo Line rail lines, much to the chagrin of the port of Halifax already feeling threatened by US port capital projects. After all, the ports of Halifax and Montreal have been facing some erosion of their Pacific trade already with the mammoth US doublestack network to US West Coast ports at a time when Canadian rail investment is hampered by insufficient capital.

A Canadian Point of View

The threat of container diversion of Canadian cargo through US ports is growing. Canadian ports have reached that critical mass of competitive size only by catering to US cargo transhipped through Canada. The extent of that dependence is illustrated in Exhibit 2. Prior to 1986, Canada maintained a net traffic surplus on both east and west coasts but, by 1987, Canadian ports enjoyed a positive traffic balance only on the east coast, which was sufficient to counterbalance the loss of Canadian cargos via west coast ports. East coast ports have initiated rate cutting and inland subsidies targetted at the traditional markets held by east coast Canadian ports and, coupled with the growth of doublestack, now threaten the Canadian east coast ports' traditional share of US midwest cargos. It would be interesting to know what that traffic balance is like today; speculation favours a dramatic decline in the net traffic through Canadian ports.

Canadian cargo diverted through US west coast ports now includes eastern Canadian cargos from as far away as Nova Scotia. Because the US Shipping Act of 1984 facilitated the development of intermodal services, it has been projected that the current trend of LA/Long Beach taking market share from US east coast ports will continue. (New York's market share losses are documented in Exhibit 3.) The problems of the Port of New York/New Jersey have been well documented; in 1989 The Journal of Commerce noted its higher labour costs, higher inland transport costs, less than convenient inland rail schedules and higher local container transport costs. As US east coast ports lose business to their west coast competitors they are looking north to Canadian ports for new business.

Exhibit 2: Canadian and American Overseas Transshipped Traffic by Coast (1) 1985-1987 (Thousands of Tonnes)

	Canadian Cargo Via US Ports			US Cargo Via Canadian Ports			Net Traffic Balance (2)		
	1985	1986	1987	1985	1986	1987	1985	1986	1987
East Coast									
Exports	352.7	421.2	446.5	986.9	1362.8	1641.3	634.2	941.6	1194.8
Imports	218.5	N/A	N/A	1629.5	1521.6	2120.5	1411.0	N/A	N/A
Total	571.2	N/A	N/A	2616.4	2884.4	3761.8	2045.2	N/A	N/A
West Coast									
Exports	268.3	666.3	672.6	328.9	395.3	180.5	60.6	-271.0	-492.1
Imports	754.6	1051.3	783.4	132.3	102.6	105.1	-622.3	-948.7	-678.3
Total	1022.9	1717.6	1456.0	461.2	497.9	285.6	-561.7	-1219.7	-1170.4
Total									
Exports	621.1	1087.5	1119.2	1315.8	1758.1	1821.7	694.8	670.6	702.5
Imports	973.1	N/A	N/A	1761.8	1624.2	2225.6	788.7	N/A	N/A
Total	1594.2	N/A	N/A	3077.6	3382.3	4047.3	1483.5	N/A	N/A

Note: May not sum to totals due to rounding.

- 1) Coastal breakdown of American traffic via Canada is based on the US customs districts of clearance, whereas, for Canadian cargo via the US, the breakdown is based on the effective US ports where the cargo was handled.
- 2) Net traffic balance consists of US cargo minus Canadian cargo.
- 3) Canadian imports via the East Coast and total figures are not available for 1986 and 1987 Canadian cargo due to the exclusion of the port of New York from the data set.

Source: R. Abbott, Canadian Cargo Transshipped Through US Ports: Trends and Characteristics in 1987, TP 9420-E, Transport Canada, Economic Research, July 1990, p. 20.

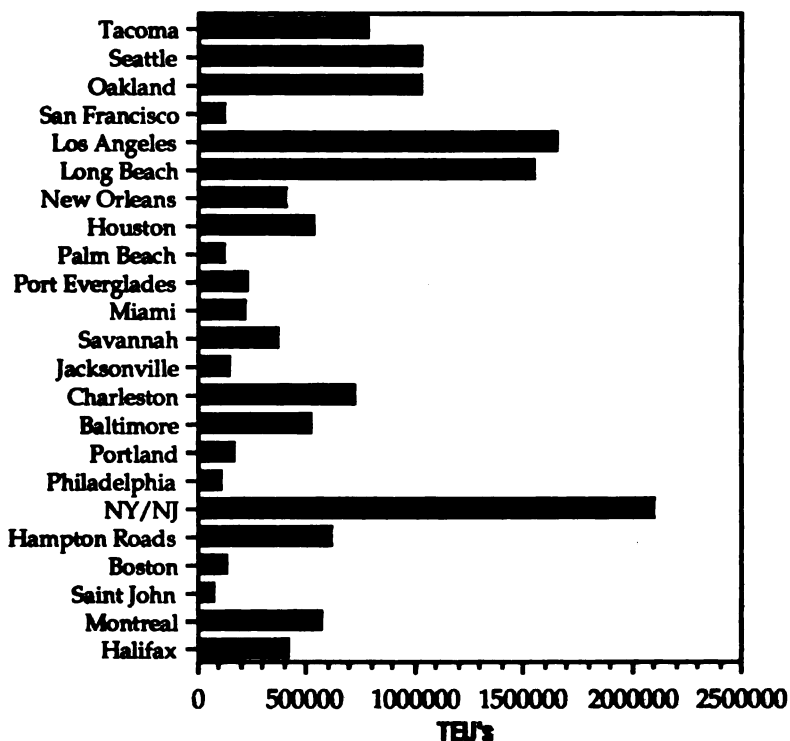
Containerports like New York and LA/Long Beach operate on a scale not known in Canada (see Exhibit 4). Canadian ports have benefitted from their ability to service American cargo needs more effectively but the sources of their competitive advantage are eroding with the increasing use of doublestack and the increasing tax burden in Canada, particularly in commodity taxes at the provincial level. Without the deep pockets of some US ports and with the requirement of commercial self-sufficiency embodied in The Canada Ports Corporation Act 1982, Canadian ports will be hard pressed to maintain traffic levels in the coming decade without a well-developed strategy for maintaining port competitiveness.

Exhibit 3: New York's Market Share (% of cargo handled)

Year	North Atlantic Ports	US Ports
1958	61.7	26.7
1984	45.5	10.5
1985	46.0	10.7
1986	45.0	10.5
1987	42.6	9.4
1988	38.3	8.2

Source: Port of New York/New Jersey as cited by The Journal of Commerce, December 29, 1989, p. 12B.

Exhibit 4: Canadian and US Containerport Traffic 1988



Source: Seatrade US Shipping Guide 1989.

External Affairs and International Trade Canada, along with the Canadian Ports and Harbours Association, Ports Canada, Transport Canada and the St. Lawrence Seaway Authority have developed a draft proposal for An International Marketing Strategy for the Promotion of Canadian Port Services. In this proposal they have identified a number of specific issues or sources of concern, as identified by either Canadian or foreign interests. The list includes:

- Goods and Services Tax (GST)
- Canadian corporate tax structure versus American
- Canadian fuel taxes versus American
- Canadian environmental issues and regulations
- labor union/management relations in the Canadian port industry
- Canadian coastal trade restrictions versus American
- Duty on foreign cruises in Canadian waters
- proposed formation of International Maritime Centres
- Canada-US Free Trade Agreement
- Canada-US-Mexico free trade talks and possible inclusion of transportation issues
- proposed Transport Canada cost recovery plans.

This paper has addressed some issues not on the above list and included some which should be. A significant amount of research into these issues has already been done. The draft proposal is clearly in development, but there is clear recognition that the issues need to be

examined. The increasing intensity of competition in the container trades signals that the window of opportunity to secure the competitiveness of Canadian ports is closing and therefore any further research to be undertaken must be completed soon. Action to ensure a level playing field is critical if Canadian ports are to benefit from the trade growth projected after this recession is over.

References

- Abruzzese, L. "Truckers Battle to Keep Cargo," The Journal of Commerce, May 8, 1990, p. 10C.
- An International Marketing Strategy for the Promotion of Canadian Port Services. Booz Allen & Hamilton Inc., "Strategic Shifts in World Liner Markets," Presentation: Halifax Port Days 1990, September 10, 1990.
- Brennan, J. Temple Barker Sloane Inc., "Intermodalism in the 1990's" Presentation: Halifax Port Days 1989, September 18, 1989.
- Brooks, M. "Ocean Carrier Selection Criteria in a New Environment," The Logistics and Transportation Review, Volume 26, Number 4, December 1990, p. 339-56.
- Canadian National, Annual Report 1990, p. 7.
- Containerisation International Yearbook 1988.
- Grier, D.V. U.S. Army Corps of Engineers Use of Foreign Trade Data in Deep-Draft Water Transportation Planning and Analysis, Presentation to the Transportation Research Forum Annual Conference in Long Beach, CA, October 1990.
- Grimm, C.M. and Smith, K.G. "Impact of Deregulation on Railroad Strategies," TRE Proceedings, 1985, p. 547.
- Halifax-Dartmouth Port Development Commission, Diversion of Canada's Overseas Trade Over U.S. Ports: Countering the Threat, December 1990, p. 6.
- Hirst, N. "The Railroads Steam South," Canadian Business, February 1991, p. 54.
- International Tax Competitiveness of the Canadian Railway Industry, The Conference Board of Canada, July 1990, p. 19.
- The Journal of Commerce, August 31, 1989, p. 1A.
- The Journal of Commerce, December 29, 1989, p. 12B.
- The Journal of Commerce, January 10, 1990, p. 1A and 8B.
- The Journal of Commerce, May 1, 1990, p. 8B.
- The Journal of Commerce, September 28, 1990, p. 2B.
- The Journal of Commerce, Jan. 3, 1991, p. 1B.; March 13, 1991, p. 1A.
- The Journal of Commerce, January 25, 1991, p. 12B.
- The Journal of Commerce, March 15, 1991, p. B2.
- The Journal of Commerce, March 20, 1991, p. 3B.
- KPMG Peat Marwick, Surface Freight Transportation: Alternatives Into the 21st Century, November 1989, p. 7.
- Marine Log, October 1990, p. 20.
- Pander, V. An Assessment of the Competitiveness of the Port of Halifax, unpublished paper, Dalhousie University, April 1990, p. 26.
- Ray, A. Operating Costs for a Typical Containership on Alternative North Atlantic Routes, Ottawa: Canadian Transport Commission, WP-20-86-21, Dec. 1986, p. 12.
- U.S. Department of Transportation, Implications for U.S. Railroads and Ports, 1990.