ATLANTICA AND TRENDS IN WORLD TRADE:
The Opportunity and the Barriers

BRIAN LEE CROWLEY
STEPHEN KYMLICKA

The AIMS Atlantica Papers #6
Brian Lee Crowley
Series Editor

June 2006

Atlantic Institute for Market Studies

The Atlantic Institute for Market Studies (AIMS) is an independent, non-partisan, social and economic policy think tank based in Halifax. The Institute was founded by a group of Atlantic Canadians to broaden the debate about the realistic options available to build our economy.

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a) initiating and conducting research identifying current and emerging economic and public policy issues facing Atlantic Canadians and Canadians more generally, including research into the economic and social characteristics and potentials of Atlantic Canada and its four constituent provinces;

b) investigating and analyzing the full range of options for public and private sector responses to the issues identified and acting as a catalyst for informed debate on those options, with a particular focus on strategies for overcoming Atlantic Canada's economic challenges in terms of regional disparities;

c) communicating the conclusions of its research to a regional and national audience in a clear, non-partisan way; and

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The authors of this study have worked independently and are solely responsible for the views presented here. The opinions are not necessarily those of the Atlantic Institute for Market Studies, its Directors, or Supporters.

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ATLANTICA

For some time, the Atlantic Institute for Market Studies has been promoting discussion about a geographical concept dubbed "Atlantica". The region is broadly composed of the Atlantic provinces, eastern Quebec, the northern tier of New England states, and upstate New York. These territories share a number of common characteristics — similar demographics, diversity, and migration; a shared history, and interrelated transport issues. Perhaps most important, the residents of Atlantica have generally suffered from relative economic underdevelopment and growth compared to their respective national economies.

Atlantica may not merely be an accidental aggregation of like economies or even a region reflecting a confluence of similar external forces. The regional characteristics may exist precisely because the border passes through it. Conceptually, at least, it is not too hard to understand why this may be so. Geographically, the axis of Atlantic Canada's trade would seem to be naturally north-south — as historically it used to be until national policies imposed an east-west bias. The huge northward bulge of Maine represents a major obstacle between Atlantic Canada and the country's industrial heartland. Maine and the other upper New England states, on the other hand, are a peninsula encircled by the border. Whatever local opportunities for development that might exist are frequently stymied by that frontier and drawn off southward along the interstate transportation corridors — reinforcing the relative isolation and underdevelopment of the north.

The existence and placement of boundaries, whether national or international, do matter. Borders are not merely cartographic creations. They are the intersections of government policies. Where those policies are not carefully harmonized and the implications of differences clearly understood, economic consequences ensue.

This is the sixth in a series of Atlantica Papers about the International Northeast Economic Region.

About the Authors

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Executive Summary

Global trading patterns and shipping infrastructure have undergone massive changes over the past twenty years. Atlantica has many assets whose value should increase in light of these changes, yet its economic growth has not kept pace with that of other regions. However, as the continental interior continues to experience rapid growth and other gateways become clogged, attention is turning to expanding traffic through Atlantica's corridors. Increasingly, the effectiveness of the Atlantica region is viewed as a NAFTA issue.

Of particular interest are the barriers and opportunities facing the Port of Halifax, the structure and evolution of crossborder regions, the definition of gateways and corridors, border policies and infrastructure, and the effect of trade on economic growth both regionally and continentally. Government activity on these issues recently accelerated with the launch of the $1 million *CanAm Connections* project, which will look at the relationship of the economy with transportation in the New England/eastern Canada region, and with the high-priority designation by the US Congress of an east-west corridor from Bangor, Maine, to Watertown, New York.

Several policy and infrastructure hurdles remain; however, methods exist to remove them, and complacency would be costly. The benefits to North America generally and Atlantica in particular are clear and substantial. The time to realize the full potential of the Atlantica gateway has arrived.

INTRODUCTION

World trade is growing at a substantial rate (see Table 1). Although there are areas of substantial growth, the manner in which Canada has participated has been uneven. One area of dramatic growth is in container traffic from Asia to central Canada and the United States. For example, in dollar terms, the growth of Ontario's bilateral trade with China over the 2000–04 period matched the growth in the province's trade with the next 13 countries![1] This growth in traffic has, however, placed huge strains on traditional trade lanes. Even with planned upgrades, traffic through west coast ports is expected to exceed capacity by 2010. Exacerbating the problem is the move of ocean traffic to post-Panamax ships — vessels that are too large to pass through the Panama Canal and that, because of their size, can serve only a limited number of ports. Furthermore, the lack of adequate rail and road infrastructure has caused congestion and delays in the land component of cargo delivery.

Table 1: ***Changes in World Trade, 2000–04***

	Imports		Exports	
	2003–04	**2000–04**	**2003–04**	**2000–04**
	(percentage change)			
Canada	5.9	8.1	–0.1	–0.1
North America	10.5	7.5	3.5	0.0
World	10.0	9.0	4.5	4.0

Sources: World Trade Organization 2005; Industry Canada Strategis database.

Halifax has a unique opportunity to become the east coast Canadian gateway for diverted traffic. The Port of Halifax has many advantages: the ability to handle the largest ships, a strong international presence, its location on the Great Circle route from New York to the English Channel, competitive costs, access to central North America through a class 1 rail service, the presence of on-site US customs officials, and, most important, closer proximity to Asia via the Suez Canal route than other east coast ports.

Notwithstanding all these advantages, Halifax's position as a port has slipped over the years. Ship owners also consider many other factors when choosing their ports of call, including port infrastructure, the number of rail transfers, the number of border crossings, how quickly cargo can start its land journey after unloading, and so on. Many of these factors are regional problems with regional solutions. Governments, corporations, and nongovernmental organizations (NGOs) on both sides of

1 According to Industry Canada's Strategis database; see web site: <http://strategis.ic.gc.ca/sc_mrkti/tdst/engdoc/tr_homep.html>. The growth in Ontario's imports from China outstripped the growth of the province's imports from all other countries combined. The growth in its exports to China was exceeded only by those to the United Kingdom and Norway, which were buying Ontario nickel, gold, and cobalt.

the border have committed, and continue to commit, large amounts of money to developing those regional solutions.

This paper outlines the arguments in support of the following claims:

- Atlantica is a natural economic region straddling the Canada-US border.
- Emerging trade trends require substantial capacity on the east coast to handle the Asian trade interests of the eastern seaboard and central North America.
- The opportunity to re-establish Halifax as a major gateway into North America is practical and accessible, given the will to make it so.
- Governments in the US portion of Atlantica have already begun to invest to capture the opportunity that proximity to Halifax offers — Atlantica, like other crossborder trade corridors, is rapidly becoming a NAFTA issue
- Realization of this opportunity promises to provides an impressive return on investment for Halifax and the region.

Atlantica's Critical Position

Atlantica — or the International Northeast Economic Region — is comprised of Atlantic Canada, northern New England, northern New York state, and southern and eastern Quebec. The region shares crossborder trade, industry clusters, foreign direct investment (FDI), culture, government, and civil society.[2] Equally, Atlantica could be defined by the economic regions that it is not.[3] However it is defined, there is no doubt that the Atlantica region already forms a critical piece in the North American distribution system, and that it now has an opportunity to take advantage of changing world trade patterns to enable growth for itself and its regional partners. The importance of Atlantica as a gateway can be seen in the volume of traffic through the region, shown in Appendix Figures A-1 and A-2 and Table A-1. Indeed, 43 percent of all crossborder trade under the North American Free Trade Ageement (NAFTA) crosses the border within Atlantica.

Atlantica functions economically as a unit. Of Atlantic Canada's foreign trade, 15.14 percent is with northern New England, and that trade grew at annualized rate of 19.29 percent between 1999 and 2004; Atlantic Canada's trade with the rest of the world, in contrast, grew by only 7.20 percent.[4] Furthermore, Atlantic Canada's trade with crossborder states is significantly more diversified than its trade with the rest of the world, and includes crossborder industry clusters in footwear, forest products, agricultural products, distribution services, fishing and fishing products, and power generation transmission (Policy Research Initiative 2005). Canadian investment also crosses the border in significant amounts and includes Fraser Paper (Noranda), Prexar (Aliant), Bangor Hydro-Electric Co. (Emera), Stinson Seafood (Connors Bros.), McCain Foods, Sabian Cymbals, and various enterprises owned by the Irving Corporation, including forest lands, convenience stores, farms, oil facilities and railways (Merritt 2000).

But Atlantica's regional cohesion goes beyond economics. It also includes the collaboration of provincial and state governments, through such mechanisms as meetings of the New England Governors and Eastern Canadian Premiers, the Eastern Border Transportation Coalition, and numerous crossborder city agreements. These organizations have produced agreements and cooperation on a wider range of topics than any other Canada-US crossborder region (see Policy Research Initiative

2 Many of these factors were recognized by the Policy Research Initiative (2005) in its interim report on crossborder regions.

3 For a further description of Atlantica's neighbourhood, see the web site: <http://www.atlantica.org/atlanticastory.asp?cmPageID=94>.

4 These data are from Industry Canada's Strategis database.

2005). This cooperation also extends beyond government to civil society through organizations such as the Gulf of Maine Council on the Marine Environment, Downeast Lakes Land Trust, the Atlantic Provinces Chambers of Commerce, and the shared marketing authority of the Wild Blueberry Association of North America.

Atlantica is bounded by several strong, self-aware regions with which it has strong and historic economic ties. These include the Windsor-Quebec corridor, Appalachia, and the "New Atlantic Triangle" (New York City, up the Hudson River, over to Boston, and back to New York). Each of these regions also has strong economic ties to other areas. Increasingly, however, they see themselves as regional economies that spill over jurisdictional boundaries, that have common interests, and that are in competition with other regions.

Trade Trends

The key message for trade trends is that success breeds success. World trade is increasing, and so is the share of world trade handled by containers — from approximately 23 percent of all cargo trade in 1980 to 40 percent in 1990 to 70 percent in 2000. By 2010, that share is expected to be 89 percent (Fung 2006). Furthermore, the big movers in this trend are well known. East Asian countries, China in particular, dominate the container trade with North America (see Appendix Figure A-3), but these regions are also experiencing the greatest growth. Digging deeper, the growth is most spectacular in Ontario, a traditional market of Atlantica, and the products that are most critical are growing the fastest. A very conservative view is that the top ten containerized product imports from China to Ontario and Quebec will grow by more than C$2 billion from 2004 to 2009 (see Appendix Figure A-4).

Of course, Atlantica is a gateway to many markets around the Great Lakes other than Ontario. Although detailed, accurate import trade data by US state is difficult to access, their similar economic profiles suggest that these other markets will experience growth in container traffic similar to that of Ontario (see Appendix Table A-2). How will this traffic get to its destinations?

Eastern North America's gateway of the future must be able to handle not only this increased traffic but also the emerging dominance of the new post-Panamax container fleet. The Mercator Transport Group (2005) states:

> There are several North American ports outside San Pedro Bay that…have sufficiently deep water to accommodate 10,000-12,000 TEU vessels.[5] Those on the West Coast (Prince Rupert, Vancouver, Seattle, Tacoma, and Lazaro Cardenas) would all require substantial improvements to rail yards and rail lines in order to handle the unit train volumes that would be generated by first-inbound calls. On the East Coast, only Halifax and Hampton Roads [Norfolk, Virginia] have adequate channel and berth depth.

As Drewry Shipping Consultants (2005) reports, the west coast ports are reaching capacity. Their optimistic estimates suggest that may happen as soon as 2007, with annual deficits increasing by about 2 million TEUs — equivalent to the entire annual throughput of eastern Canada — each year thereafter. The University of New Brunswick's Dr. Michael Ircha (2006), in a recent paper for AIMS, suggests that, if all plans for expansion on Canada's west coast went ahead, capacity would increase by 3.4 to 4.9 million TEUs, but such plans are contingent on increasing the rail capacity to move the cargo inland. On the east coast, several ports are also attempting to increase their capacity. Most notable is the Port of New York/New Jersey, which has an aggressive ten-year dredging project to

5 TEUs refer to 20-foot equivalent units — hence, a 40-foot container is 2 TEUs.

increase its ability to handle larger ships. Even this effort, however, will be sufficient to address the depth requirements of only the current fleet of container ships; it will not guarantee access to many of the much larger post-Panamax ships now on order.

The need to handle post-Panamax ships is clear from several facts. First, virtually all of the vessel capacity on order is for post-Panamax ships. Second, smaller vessels are aging and are not being replaced; for example, in 2003, more feeder ships were retired than were ordered — see Appendix Figure A-5). Third, since the Panama Canal is already running at capacity, building a larger number of ships small enough to pass through it makes little sense. Plans exist to widen and deepen the canal, but they will take a decade or more to come to fruition. Fourth, economies of scale are available from using the larger ships. Drewry Shipping Consultants estimates that transport costs from China to New York could decline by more than 15 percent using a post-Panamax ship through the Suez Canal rather than a Panamax ship through the Panama Canal. Finally, it is reasonable expect that ship operators would prefer to use the largest ships for transoceanic trade. This is evidenced by the current fleet, in which all the largest ships are allocated to transoceanic routes.[6]

6 The only smaller ships running transoceanic routes for Orient Overseas Container Line (OOCL) are the ICE-class ships required for the Montreal winter routes. All of their larger ships run transoceanic routes. See the web site: <http://www.oocl.com>.

THE OPPORTUNITY

"Growing the port's containerized cargo business is our primary focus."
— Karen Oldfield, president and CEO, Halifax Port Authority.[7]

Given growing global trade, the limited number of ports able to handle new, larger ships, and the focus of the Port of Halifax, several other key issues should be considered to ensure the arrival of more traffic through the Halifax gateway: the needs of shippers and "just-in-time" customers, the need for adequate connecting infrastructure, and the existence of policy barriers.[8]

The Port Needs of Shippers and Customers

According to a 2003 survey by the US Department of Transportation Marine Administration, when shippers chose Canadian ports over US ports, they did so because Canadian ports had lower "costs per move" and shorter "truck gate time/queuing times" (United States 2004). Canadian ports were also chosen for their strong inland connections, short transit times, depth of water, and to avoid US harbour maintenance fees and cabotage laws. Areas where shippers said Canadian ports could improve relative to US ports were in the survey categories of security, the availability of trucks, terminals, the use of technology, on-dock rail access, yard equipment, vessel turnaround time, ship-to-shore cranes, rail access away from the terminal, and overall efficiency.

Given these shippers' needs, Halifax needs improvement only in the areas of security, technology, and competitiveness. Indeed, the 2002 list of Halifax SmartPort priorities — marketing and strategy, competitiveness and productivity, value-added opportunities, information technology, and port security — reflects shippers' concerns closely (AAPA 2003). The port has implemented this plan with some success, but about C$100 million in improvements are still required.[9] One of the more challenging of the remaining issues is that of container throughput. After a few years of reduced services, CN is again adding cars to the Halifax route and has recently reduced its maximum time on-dock to 48 hours. Service should continue to improve as traffic grows.

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7 Comment made February 3, 2006; see web site: <http://www.aims.ca/inthemedia.asp?typeID=4&id=1289&fd=0&p=1>.

8 It is important to note that, although industry trends focus on containerized cargo, this analysis applies equally to bulk cargo. Accordingly, improvements of the type suggested for the Port of Halifax to ports in Canso, Saint John, Belledune, and St. John's would see significant benefits accrue. For example, the mining industry in northern New Brunswick could only benefit by having improved access to markets in lower New England.

9 The ability to pursue these improvements is not necessarily an indicator of financial health. For example, in 2004, the Port of Halifax showed net earnings of $7.9 million, as well as an increase in cash of $4.6 million and $10.6 million in new capital improvements. Needless to say, the "deficit" was done on the back of $5.4 million in depreciation of existing capital assets.

Infrastructure

The impact on international trade of border flows in the Atlantica region cannot be overstated. One study (Taylor, Robideaux, and Jackson 2003) estimates that border-related issues cost the US and Canadian economies US$10.3 billion each year. The most direct trucking route from Halifax to Chicago would cross the border three times, in addition to clearing customs on arrival at Halifax. In its 2003 Compendium (New York 2003), the Transportation Border Working Group — a collaboration of the US Department of Transportation and Transport Canada — enumerated 224 needed border-related infrastructure projects at a cost of more than US$13.3 billion. More than half of these necessary border and approach projects, in both number and value, are within Atlantica; more than 41 percent of the Canadian highway cost is in the New Brunswick–Maine corridor.

Some infrastructure problems are specific to particular markets. For example, among the problems of the lower New England market are the following:

- the lack of class 1 rail service in Maine, New Hampshire, Vermont, and Rhode Island, the only US states that lack such service; even going through Montreal, freight needs to change companies and move to a class 2 service to get to New York;[10]
- poor road/bridge conditions (see Appendix Table A-3);
- the lack of a direct, four-lane highway from Moncton to Bangor;
- a load limit of 80,000 pounds on Interstate highways in Maine, versus a limit of 100,000 pounds on the Interstate road between Montreal and New York;
- congestion on Interstate 95.[11]

For traffic between Halifax and Ontario and the US midwest, the problems include the lack of direct access to a major highway hub, the lack of an east-west road corridor, border congestion, and increased paperwork due to multiple border crossings. Short sea shipping has been suggested as a solution, but a recent study (MariNova Consulting 2005) finds that a run from Halifax to Hamilton, Ontario, for example, would be uneconomical for reasons of vessel costs, pilotage costs, St. Lawrence Seaway tolls, limited winter service, and, most of all, the 25 percent duty payable on foreign-built vessels.

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10 A class 1 railway is a national carrier, while a class 2 railway is regional. To ship by rail from Halifax to Boston requires at least two switches because of the lack of continuous, non-stop class 1 rail service between the two cities. There may be an opportunity in expanding track rights, even on class 2 railways, through New Brunswick and down the New England coast into the rail system known as the "Northeast Corridor." A major obstacle seems to be the political emphasis on passenger rail almost to the exclusion of freight. This is because the Northeast Corridor is a public-private partnership, "governed by a unique set of legal and financial contracts among seven commuter authorities, Amtrak and freight railroads." It is not self-sufficient and receives appropriations through the US Federal Railroad Administration; see the web site: <http://www.csgeast.org/page.asp?id=weeklytrans34>.

11 It is possible that the increasing viability of short sea shipping — with its relatively low infrastructure costs and low emissions — will partially alleviate the highway congestion problem. For Halifax, however, some of the impediments to the growth of short sea shipping, such as the US Harbor Maintenance Tax and US cabotage rules, are also factors that make Halifax attractive for transoceanic trade. Other challenges to the growth of short sea shipping to New England ports include their lack of cranes, shallow berth depths, and, in smaller ports, spotty logistical support.

As Appendix Figure A-2 shows, freight flows through a few major hubs, of which the most important within Atlantica is Buffalo. But most of Atlantica has no easy access to Buffalo. Rail connections exist, but they are not heavily used, for several reasons. First, until recently, the Port of New York/New Jersey did not have on-dock rail service, which meant that removing containers directly by truck reduced lift costs in the port. Second, there is no sizable multimodal yard in Buffalo, so that most container traffic landed in Canada and destined for the area comes directly by truck from Montreal or by rail (from Halifax or Vancouver) to Toronto and is then loaded on a truck.[12] Third, trucking companies do not offer substantial discounts on traffic from Buffalo rather than from New York, which makes the added cost of rail to Buffalo uneconomical. Moreover, freight forwarders (third-party logistics firms) are traditionally slow to change modal partners.

Canadian federal authorities seem well aware of the need to address these impediments to the flow of crossborder trade. Canada's Senate has recommended increases in infrastructure spending and the rapid introduction of pre-clearance facilities (Canada 2003), and there is some hope that the Free and Secure Trade (FAST) program (together with shared customs facilities) will expedite the crossing of low-risk goods. The House of Commons Standing Committee on Foreign Affairs and International Trade has echoed the recommendation for improved infrastructure at the border and increased capacity generally (Canada 2005).

Policy

One challenge Canadian ports face in improving their infrastructure is the difficulty of raising capital, relative to the experience of US ports, as the policy comparison shown in Table 2 suggests. The US federal government sees investment in ports as vital, including as strategic resources for military deployment. This has led to the building of expanded berthage capacity and roll-on/ roll-off capabilities that then become available for commercial use (see United States 2005). Canadian ports, in contrast, lack the mechanisms they need for financing, as pointed out in an earlier AIMS report (Cirtwill, Crowley, and Frost 2001). In June 2005, the Martin government tabled legislation (Bill C-61) that would have introduced a number of useful reforms for ports, including an increase in discretionary borrowing, the ability to create securities against revenue, exemption of leasing and licensing revenue from fees owed to Ottawa, and managerial flexibility on physical property. The proposed legislation was not passed before Parliament was dissolved.

Brooks (2006) summarizes the policy reforms that are needed to clear away impediments to cross-border trade and the development of a North American gateway such as Halifax as follows. The US federal government should remove cabotage restrictions under the *Jones Act* for all modes of transport, remove the Harbor Maintenance Tax for NAFTA flag countries, and reduce the 24-hour-prior-to-load period required for advance notification of maritime shipping to a US port to the current land

12 Plans exist for a large multimodal yard in Buffalo, which, if built, would be especially useful for the Port of Halifax. By shipping freight across the border by rail, significant cost reductions are possible, since trucking companies resist crossing the border and charge premiums for this service.

Table 2: ***US and Canadian Government Policies toward Ports***

United States	Canada
• Ports are local government agencies and viewed as a requirement for industrial support	• No explicit recognition of the importance of marine transport to the economy in National Marine Policy
• Ready access to local government funding	• Different property tax regimes
• Raise taxes for port development	• Pay stipends to federal government
• Direct federal investment	• No federal investment
• Tax-exempt municipal bond financing	• Taxable market debt financing
• Federal government investing in port security	• Limited federal investment in port security

Source: Jones 2005, table 4.

requirement of 30 minutes to one hour. For its part, particularly to aid the development of short sea shipping, the Canadian federal government should remove customs charges on new operations and remove ice-breaking charges on short sea operations in ice-free zones. More generally, border frustrations could be reduced by standardizing hours of service, standardizing vehicle weights and measures, and introducing coordinated approaches to insurance. For this purpose, it would be useful to reinvigorate NAFTA's Land Transportation Subcommittee as an international forum in which to standardize the relevant regulations.

Other Issues

Part of the challenge in developing an integrated gateway is to get all of the players aligned. Particular difficulties are the shortage of people, especially in government, with formal training in freight (see Cambridge Systematics 2002); the lack of a clear regional and national plan to build the infrastructure needed to handle growing container traffic, and the insufficient appreciation by the public of the connection between economic growth and the ability to move people and goods seamlessly and easily that underlies gateway/corridor proposals for Halifax.

Complacency, however, can be costly. David Fung, Chairman and CEO of the ACDEG Group of Companies and Vice-Chair of the Canadian Manufacturers and Exporters, suggests that delays, potentially from political procrastination and in-fighting, will allow operators of ports in the Bahamas and elsewhere to grab significant market share. Furthermore, inadequate planning will result in mismatched cargo to and from the port, meaning that shippers will not be able to share the round-trip cost of containers, which, in turn, will make Canadian ports less economical.

Government Activity

One of the most dramatic examples to date of government support for the Atlantica concept is *CanAm Connections: Integrating the Economy and Transportation*, a forthcoming $1 million

comprehensive study of transportation and economic activity, including business costs, safety and mobility, in the Atlantic northeast, commissioned by the US National Corridor Planning and Development Program and the Coordinated Border Infrastructure Program. The project will be the culmination of many earlier studies.[13] The Maine Department of Transportation is taking the lead, and Wilbur Smith Associates have been named consultants to the project. Transportation and economic development organizations from all affected states and provinces have votes on the study's steering and management committees, while federal agencies have non-voting advisory roles. The study will focus on the relationship between transportation and economic activity, and will examine all modes of transportation. Of particular relevance for Atlantic Canada will be the study's consideration of the shared context of job loss, population loss, and low wage levels.

As evidence of its appreciation of the importance of the region, the US government has added to its list of high-priority corridors an east-west route from Calais, Maine, through New Hampshire, Vermont, to Watertown, New York.[14] Although the size of Washington's commitment is hard to gauge since funding can be accessed through several programs, it is expected to contribute about 80 percent of the expected US$900 million cost.[15]

13 The *CanAm Connections* web site lists no fewer than 89 related previous studies; see <http://www.edrgroup.com/northeastborder/Documents/list-of-relevant-studies.shtml>. Among the more interesting are New York's *North Country Transportation Study Action Plan* (<http://www.danc.org/NCTS/finalreports.htm>); Maine's studies on the impact of truck weight limits (<http://www.maine.gov/mdot/freight/study.php>); a Cambridge Systematics study on crossborder rail freight (<http://www.ebtc.info/files/ebtc-rrstudy.pdf>); and a collection of papers published by the Northeastern Economic Developers Association (2004).

14 For details, see web site: <http://www.fhwa.dot.gov/hep10/nhs/hipricorridors/hpcor.html>. It is worth noting that Atlantica has a second high-priority corridor, Interstate 87, which runs from the Quebec border directly south through eastern New York state down to New York City.

15 According to Sandy Blitz, executive director of the Bangor-based East-West Highway Association; see *Bangor Daily News,* reproduced at web site: <http://www.atlantica.org/library.asp?cmPageID=93&fd=0&id=1203&p=2>.

The Benefits of an Atlantica Gateway

The regional entity of Atlantica is poised to help resolve the congestion problems of the west coast and satisfy the growth demands of central North America and the US northeast. Despite the barriers that need to be overcome and the expensive investment in infrastructure that would be required, the benefits of making the effort would be considerable.

First, there is the potential for increased economic growth in central North America. Greater competition for limited port throughput will result in higher input costs for manufacturing in the North American heartland. This will erode the productivity of companies that diversified their supply chain because they require reduced input costs to stay competitive. Canada already has low productivity, ranking fifteenth on the World Economic Forum's Business Competitiveness Index, far behind the first-ranked United States. It can ill afford further slippage.

Second, direct economic benefits would be derived simply from handling container traffic — one estimate is $1000 per container transferred to a land mode and $500 per container transferred to a maritime mode (Fung 2006). According to their respective web sites, the Port of Montreal, which handles two and a half times as much container traffic as Halifax, also employs twice as many workers and derives nearly three times as much economic benefit ($2 billion versus $700 million).

Third, as can be seen in Appendix Figure A-4, panel B, Canada has a significant container trade deficit with China. Canadian firms have an opportunity to make use of these empty containers at substantially reduced rates, thus boosting the competitiveness of Canada's manufactured goods (Fung 2006). The synergies of this opportunity work well since the areas showing the most export growth to Asia are the same markets that Atlantica serves for its imports. Northern New England, which has seen its exports to Asia grow by more than 13 percent per year over the past five years, could also take advantage of this opportunity (see Appendix Table A-4). It would also be valuable to evaluate opportunities in all of southeast Asia, not just China. Since China runs substantial trade deficits with Taiwan, South Korea, and Japan, opportunities for triangulation exist,[16] which would further reduce container costs.

Another possibility is the full development of an international distribution cluster in the Atlantica region, which would have significant benefits, including better maintenance of infrastructure; an influx

16 Triangulation means exploiting the acute container shortage in, say, Taiwan by shipping a container there first and then returning to China.

of logistics and distribution firms; the development of additional transportation skills and capabilities; and new and increased access to markets for regional goods. Although the details of such a cluster need to be fleshed out, it is clear that the benefits would extend throughout the region. For example, there are plans for an inland port at Dieppe, New Brunswick, beside the Moncton International Airport, to handle the new "road trains" and connect to both air and rail modes, while development plans are also under way in the Halifax–Moncton and Saint John–Bangor corridors.[17]

Finally, there is hope that the development of transload facilities in Atlantica will produce substantial economic benefit. This is the subject of a separate study.

17 See the web sites: <http://www.halifax-moncton.ca/homepage/index.cfm> and <http://www.sjboardoftrade.com/BoardNews.asp?ID=160>.

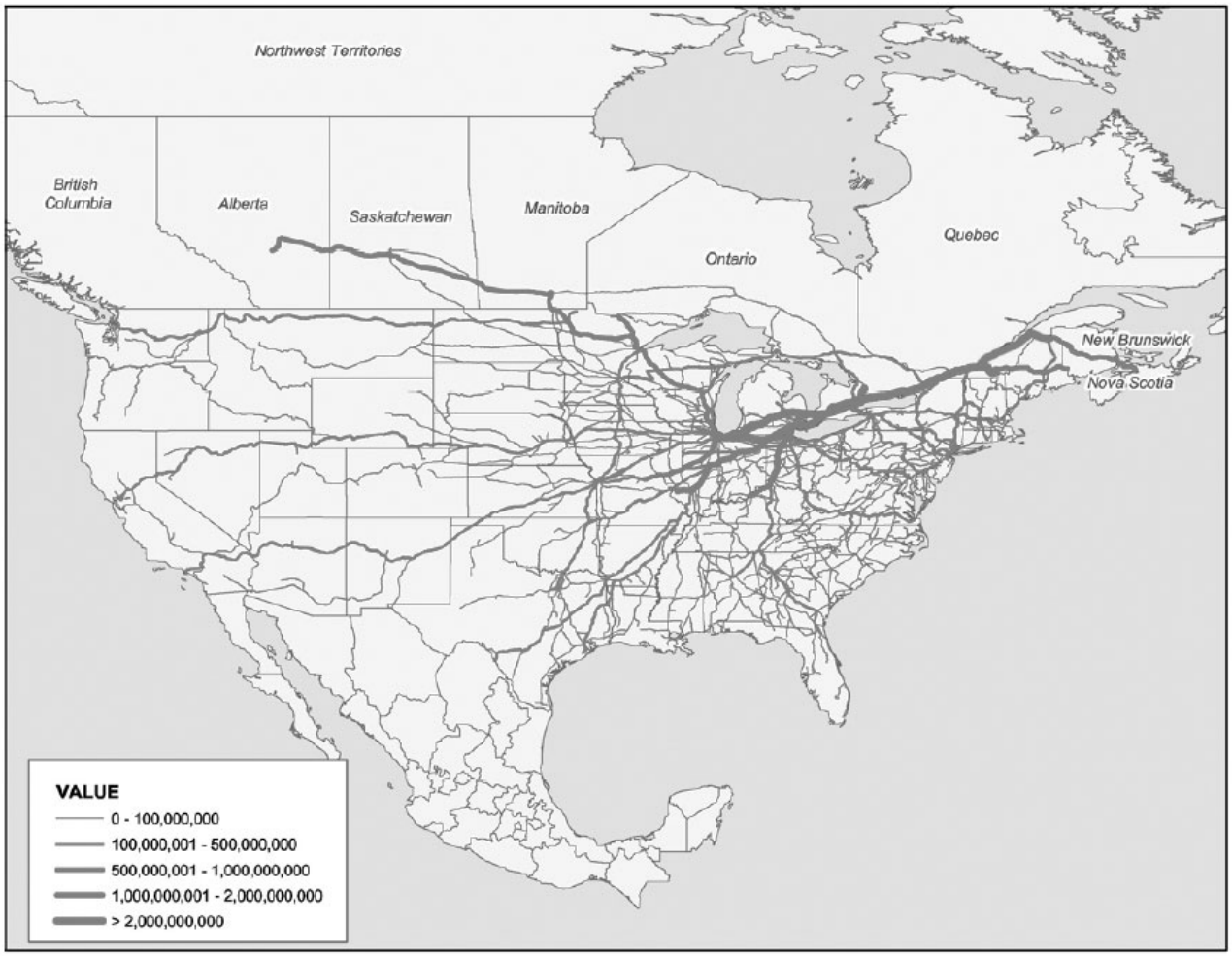
SUMMARY

Atlantica is a region with shared social, historical, and economic interests. Importantly, it has a common interest in a future that matches the economic drivers of all North America. If future Canadians and Americans are to enjoy the economic growth rates that the current generation has experienced, new gateways to world inputs and markets are essential. The Atlantica gateway is not the only one imaginable — in fact, all major North American ports will need to increase their capacity — but it is essential to meet growing demand. Drewry Shipping Consultants (2005) predicts that the growth in North American demand for containers is the equivalent of adding Halifax's current traffic four times over, every year. West coast ports are already at or near capacity, but Canada's east coast offers several underutilized ports, each with its own strengths but lacking conduits to major markets.

The continental and regional economy can ill afford complacency. In the absence of an Atlantica gateway and in response to rising costs, Ontario and the US midwest and northeast no doubt would find other routes for their goods eventually. But the cost in lost opportunity for North America in general and Atlantica in particular would be serious. The US federal government certainly believes in the Atlantica vision, as evidenced by its support of the *CanAm Connections* project and an east-west corridor. The changes Canadian federal and regional governments need to make to bring this vision to life are straightforward, and the benefits to Atlantica would be substantial and lasting. The gateway of Atlantica is an idea whose time has come.

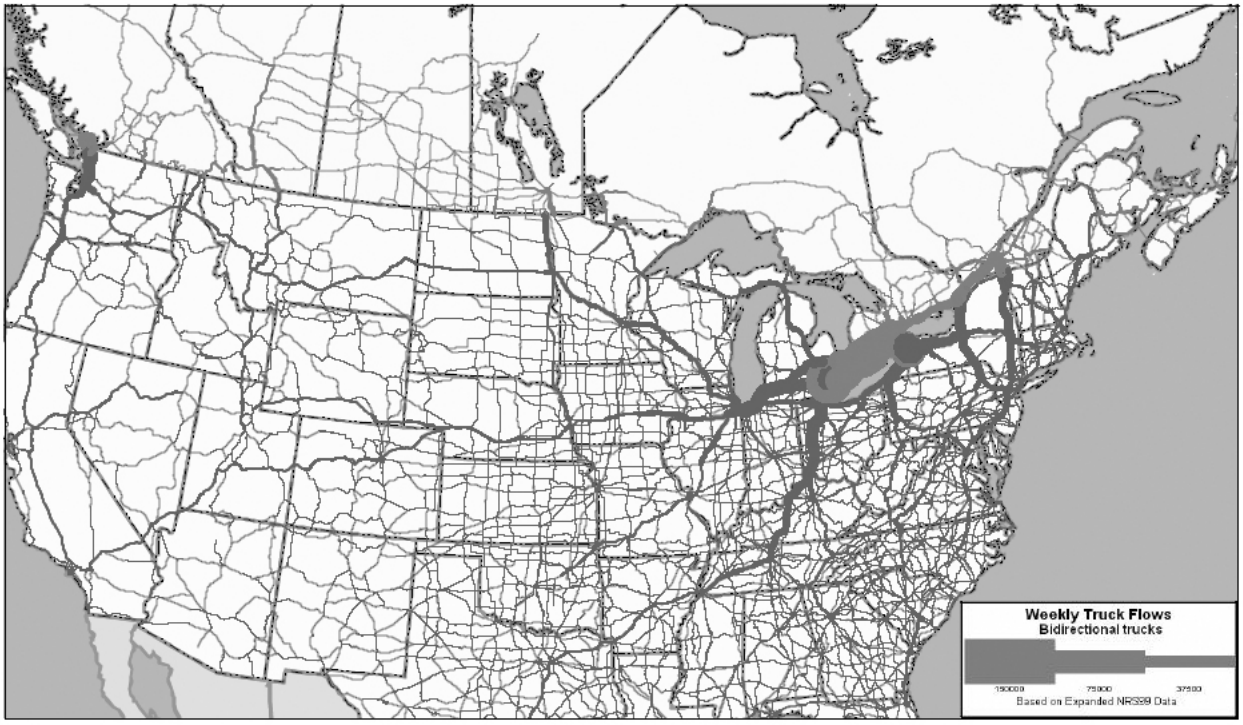
APPENDIX

Figure A-1: ***Rail Flows through the Atlantica Region, by Value, 2002***
(US dollars)



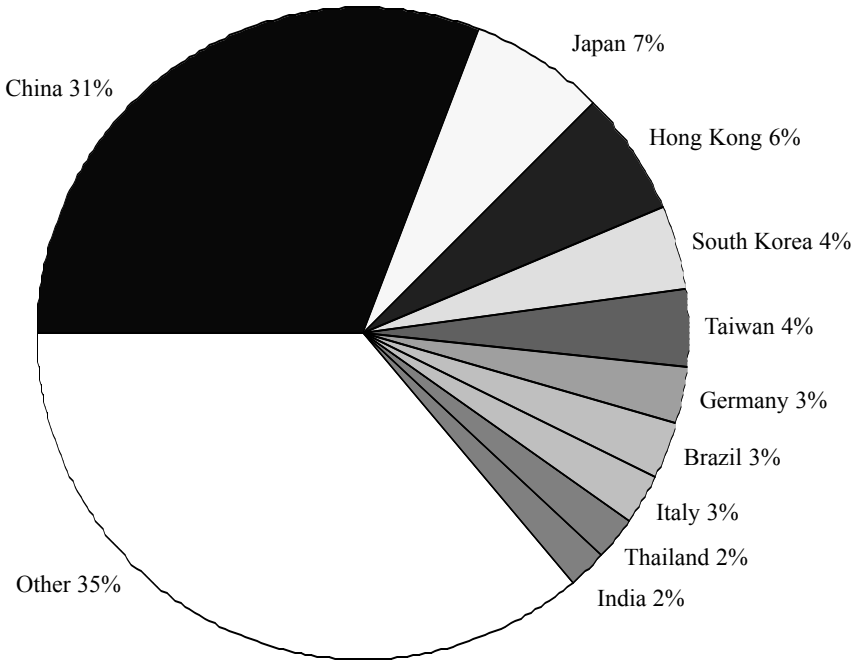
Source: Eastern Border Transportation Coalition.

Figure A-2: ***Weekly Truck Trips across the Canada-US Border, 1999***



Source: Eastern Border Transportation Coalition.

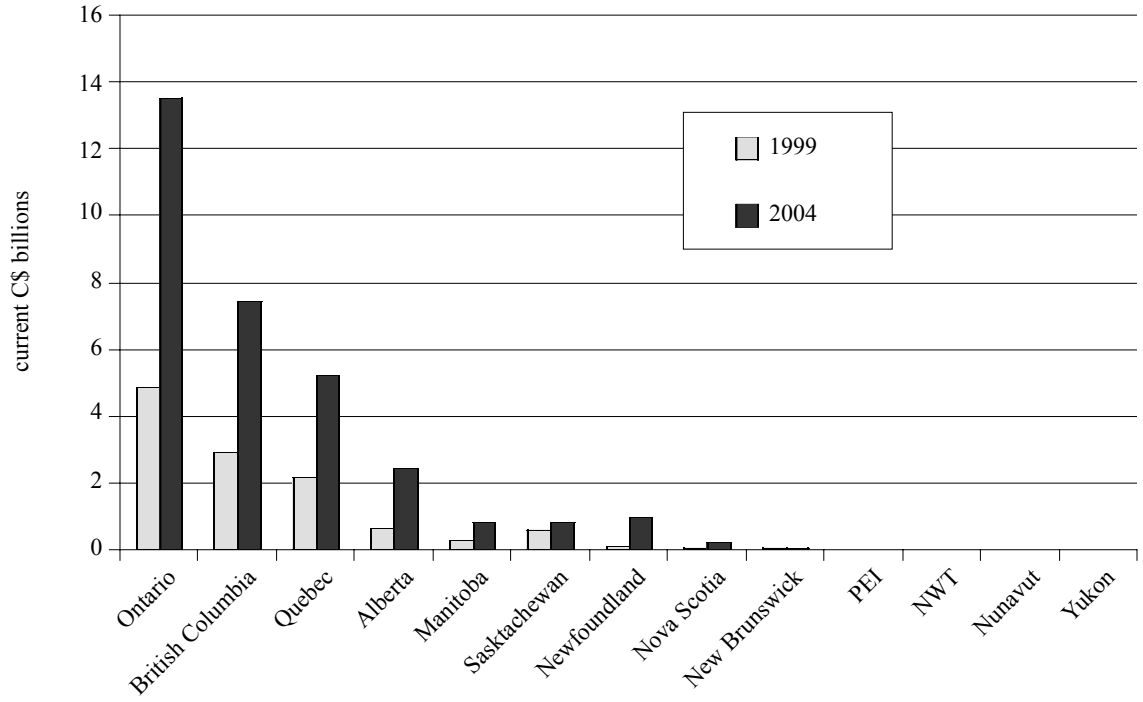
Figure A-3: ***US Waterborne Foreign Container Trade, by Trading Partner, 2004***



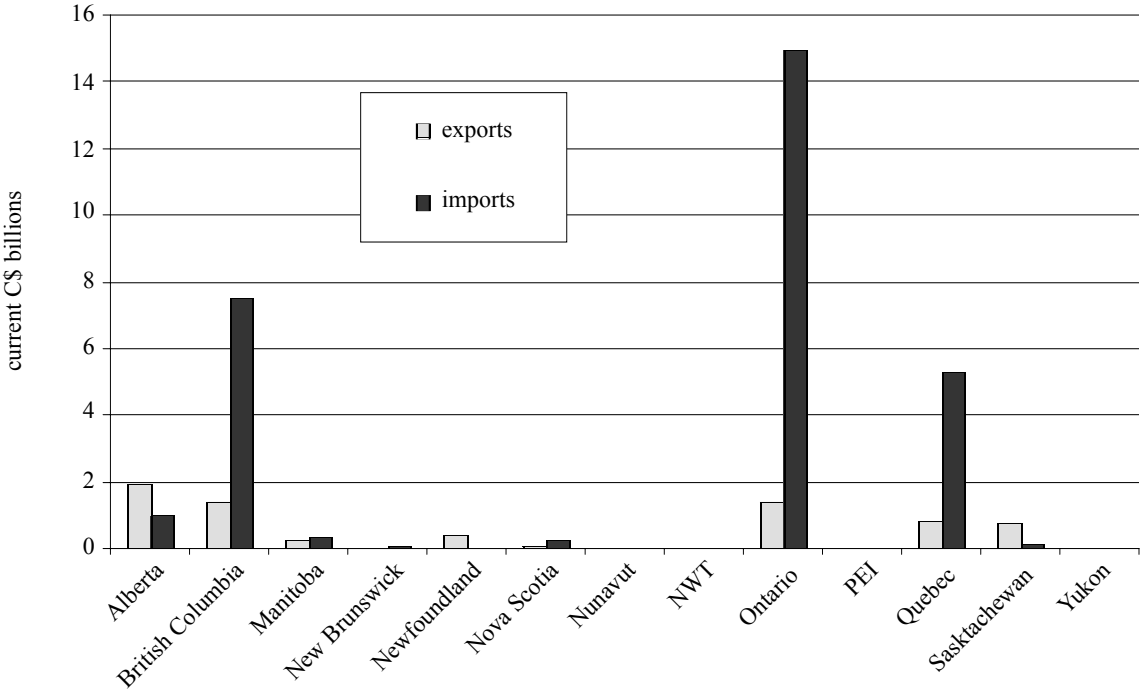
Source: Port Import/Export Reporting Services.

Figure A-4: ***Canada's Trade with China***

A. Total China-Canada Trade, by Province and Territory, 1999 and 2004



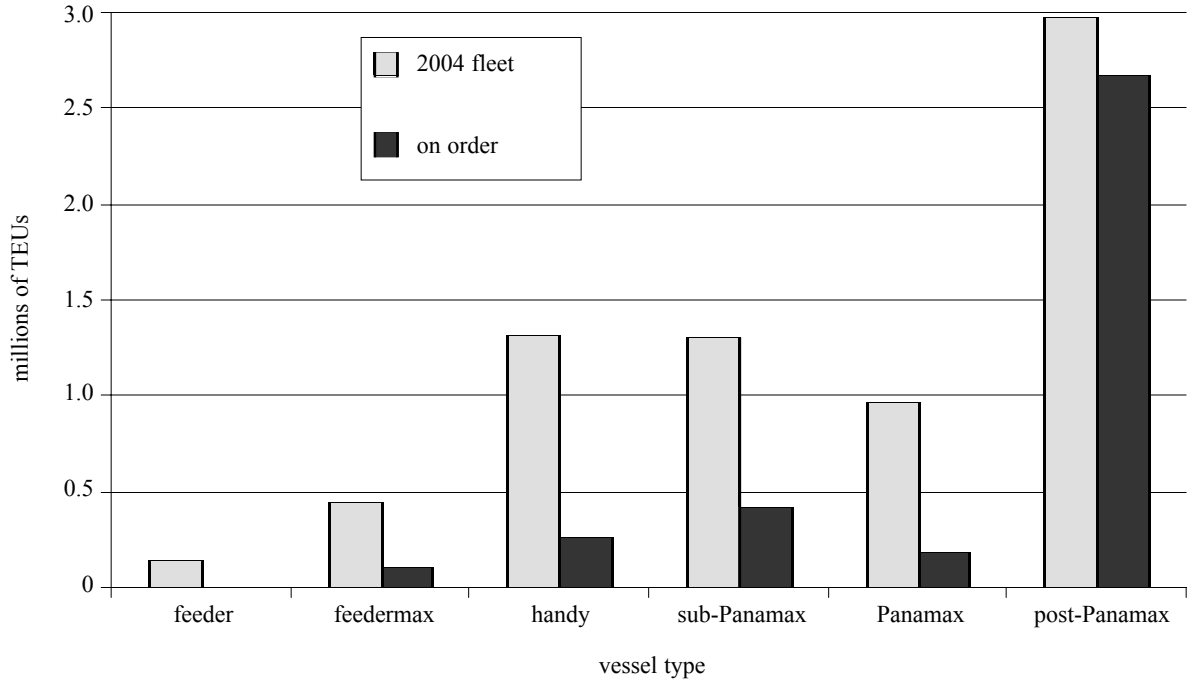
B. Canada's Trade Balance with China, by Province and Territory, 2005



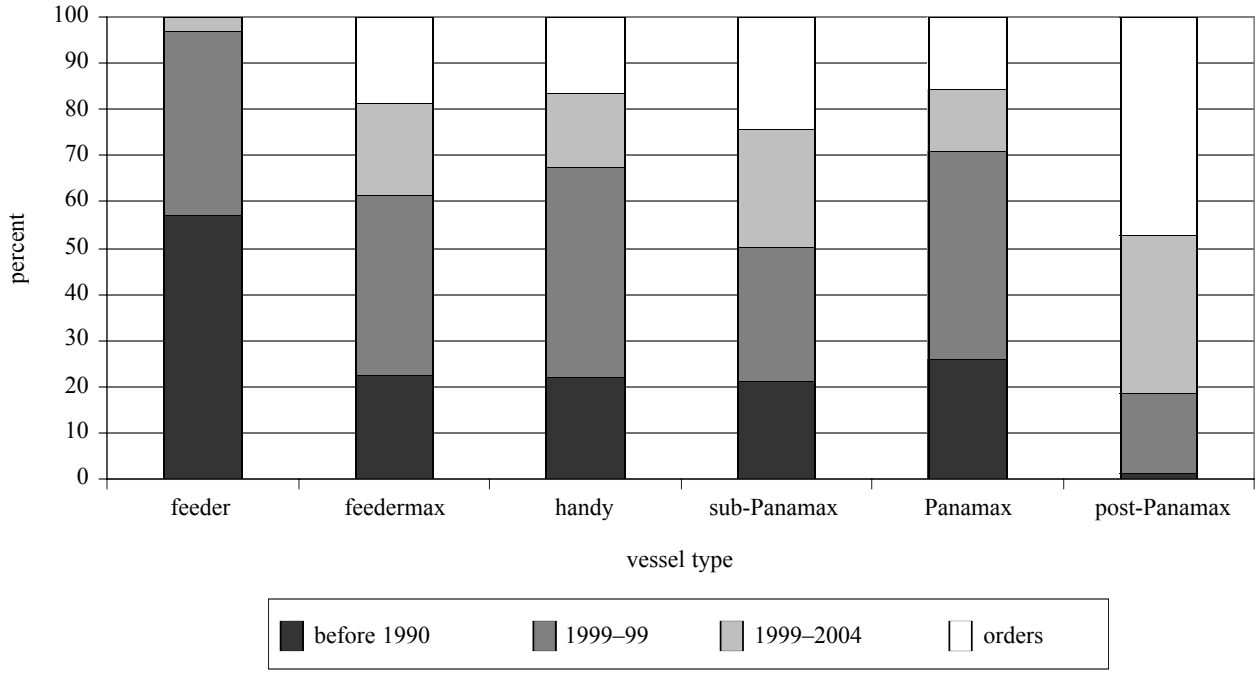
Source: Industry Canada, Strategis database.

Figure A-5: ***Post-Panamax Capacity Requirements***

A. World Container Fleet Size, 2004 and On Order



B. Age Profile of Container Ships



Source: Clarkson Research Services, *Clarkson Register*.

Table A-1: ***Atlantica Border Crossings, 2004***

Port	Trains	Rank	Rank, Northern	Loaded Rail Containers	Empty Rail Containers
NY: Buffalo-Niagara Falls	2976	5	4	121,585	32,080
NY: Champlain-Rouses Pt.	1360	11	9	57,311	19,716
ME: Jackman	558	17	13	8988	11,011
NY: Trout River/Ft. Covington/Chateaugay	546	18	14	38,944	6476
ME: Van Buren	496	19	15	2260	6585
Port	**Trucks**	**Rank**	**Rank, Northern**	**Loaded Truck Containers**	**Empty Truck Containers**
NY: Buffalo-Niagara Falls	1,175,254	3	2	1,018,208	157,676
NY: Champlain-Rouses Pt.	397,317	8	4	351,224	30,210
NY: Alexandria Bay/Cape Vincent	252,745	11	6	249,480	10,391
VT: Highgate Springs	142,038	15	8	98,849	5525
ME: Calais	137,574	16	9	125,792	8530
VT: Derby Line	136,353	18	11	120,448	6785
ME: Houlton	129,140	19	12	121,361	6669
ME: Jackman	122,826	20	13	71,123	47,714
NY: Massena	72,374	23	15	52,792	18,519

Source: United States, Department of Transportation, Bureau of Transportation Statistics; see web site: <http://www.transtats.bts.gov/bordercrossing.aspx>.

Table A-2: ***Gross Domestic Product Profiles of Ontario and Selected US States***

Industry	Ontario	Ohio	Michigan	Illinois	Pennsylvania	Indiana
			(percent of gross domestic product)			
Primary	1.72	0.84	0.69	0.86	1.14	1.33
Manufacturing	20.96	20.18	20.71	13.38	16.42	27.40
Construction	5.16	4.04	4.45	4.80	4.36	4.70
Utilities	2.32	2.25	2.20	2.28	2.66	2.30
Transportation, warehousing	4.01	2.93	2.48	3.52	3.17	3.36
Information, culture	4.20	2.83	2.72	4.00	3.78	2.24
Wholesale trade	6.94	6.01	5.78	6.95	5.58	5.26
Retail trade	5.48	7.41	7.07	6.15	6.98	6.86
Finance, insurance, real estate	21.87	18.17	17.40	22.00	19.41	15.95
Arts, entertainment, recreation	0.93	0.74	0.87	0.93	0.75	1.36
Accommodation, food	1.91	2.21	2.12	2.23	2.14	2.18
Professional, administrative services	7.69	10.34	13.34	13.08	10.66	7.17
Health care, social services	5.48	7.86	7.01	6.51	8.91	7.11
Other services	2.32	2.46	2.27	2.50	2.59	2.36
Education, public administration	9.06	11.73	10.90	10.80	11.45	10.42

Notes: Values may not total to 100 percent due to rounding. Ontario data are for 2004, state data are for 2003.

Sources: Ontario government, web site: <http://www.2ontario.com/welcome/bcei_205.asp>; United States, Department of Commerce, Bureau of Economic Analysis, web site: <http://www.bea.gov/bea/regional/gsp/>.

Table A-3: ***Road and Road Bridge Conditions, Selected US States, 2004***

State	Road Conditions		Road Bridge Conditions		
	Mediocre or Poor	Rank	All Bridges	Structurally Deficient or Functionally Obsolete	Rank
	(percent)		*(number)*	*(percent)*	
New Jersey	49.79	50	6484	36.6	43
Maryland	35.65	48	5064	29.2	32
Massachusetts	33.76	46	4954	51.4	49
Rhode Island	31.15	44	749	54.1	50
Pennsylvania	27.13	39	22,253	42.3	47
Maine	24.77	35	2371	35.6	42
Michigan	24.27	34	10,818	28.9	31
Vermont	22.39	33	2690	35.5	41
New York	18.83	29	17,301	37.9	46
Indiana	17.94	27	18,171	22.1	16
Delaware	17.64	26	850	14.4	4
Connecticut	17.08	25	4167	32.7	38
New Hampshire	15.30	21	2357	33.4	39
US total (including Puerto Rico)	18.57		593,885	26.7	

Source: United States, Department of Transportation, *State Transportation Statistics 2005*.

Table A-4: ***Northern New England-Asia Trade, 2005***

State	Destination	Manufactured Goods Exports, 2005	Annualized Growth, 2000–05
		(US$)	*(%)*
Vermont	Taiwan	416,158,840	9.04
Maine	Malaysia	362,374,021	22.17
Vermont	South Korea	320,722,110	18.23
Vermont	Singapore	210,371,940	20.53
Vermont	China	203,657,025	79.28
Maine	Singapore	202,909,601	41.33
Vermont	Hong Kong	197,258,513	55.38
New Hampshire	Japan	159,193,524	2.68
Vermont	Japan	123,801,932	–9.71
Vermont	Malaysia	123,339,264	41.88
Maine	China	99,962,988	35.01
New Hampshire	China	98,932,835	28.34

Source: TradeStats Express; available from web site: <http://tse.export.gov/>.

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