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Halifax: Hinge between new global trading patterns and the International Northeast **Port Days at the Port of Halifax**

Text of remarks by Brian Lee Crowley, President, AIMS, Halifax, 17 September 2005

A series of factors is conspiring together to work a revolution in geography.

My basic message to you today is that people now have an outdated vision of where they are on the earth's surface, and those who understand the quickest where they really are today in the world trading system will be able to capitalise on huge opportunities. And in fact our challenge here in Halifax is to realise that we need not just one revolution in mental geography, but two. For not only are world trading patterns shifting, moving us from the periphery to the centre, but our position in North America is shifting as well, as we cease being the back end of Canada's national transportation system to occupy a pivotal position in a new binational region that we call Atlantica, the International Northeast.

Let's talk trading patterns first. This is not the first time that politics, technology

and economics have shifted world trading patterns. The Silk Road, the land-based route between Asia and Europe died out and was replaced by maritime routes centuries ago, just as the Iron Curtain moved whole swathes of the planet outside the mainstream of the world trading system. But let me start by telling you a kind of parable about another era when similar changes were re-shaping geography.

In the middle of the 19th Century, the new railway technology was going to provide for the first time a major eastwest link across the continent, ultimately reorienting America's transport network from a north-south axis (along the eastern seaboard and down the Mississippi) to an east-west one, opening up on a hitherto undreamt of scale the development of the west. In fact the century that followed in both Canada and the US was of nationbuilding on an unprecedented scale as the population centres of the east and of Europe provided the capital, the industrial goods and the people to open up the vast frontier to our west. Each of our countries spent that century preoccupied with our respective half-continental construction projects.

But those projects are largely over. The next stage is stitching together the continent as a whole – we are no longer only building countries, but have moved on to the construction of something wholly new and unprecedented. The shift now is to the north-south axis, a theme that I will return to in a moment. But to illustrate what I want to say to you today, I want to return, just for a minute, to that historical moment when the US was poised to open the west through the construction of the railway, for that moment contains a powerful lesson – a lesson contained in a tale of two cities.

The original thought was that the main

railway junction would be in St. Louis, the dominant city in the Midwest and the 4th largest city in the US. But St. Louis made two mistakes which were to prove disastrous. To the eyes of that city, railways were a dirty, expensive unproven technology. They thought at first that they would remain aloof from this new evolution of the network, preferring to remain the king of the Mississippi, a free piece of infrastructure that to date had given the city a commanding economic position. So their first mistake was the Not In My Backyard syndrome. Then they said, well, alright, we'll allow the railways to come, BUT, we will not allow a bridge to be built across the Mississippi, because we want to force the people and goods coming by train to be ferried across the river by barges, because that's what we do here. So their second instinct was protectionism.

Chicago, on the other hand, was a small but new and thrusting town that said it would be the railway hub, and trains could pass through and exchange passengers and cargo unimpeded, allowing the huge efficiencies that the new rail network offered a chance to be fully realised. Chicago invested, it acquired a dominant position in the new network, and by 1860, the city was served by 11 railways and 100 trains a day passed through the city. St. Louis never recovered. It went from a dominant to a very secondary position in the network, and has never really recovered. This story was repeated in microcosm a thousand times throughout the country, as communities vied to have the economic dynamism and energy that being on the railway offered to them. Those that succeeded in attracting the iron horse prospered, those that were by-passed withered.

The story of the railway is, in a way, a parable about "globalisation", which is merely shorthand for an incredible "densification" of a whole series of networks that girdle the globe and create huge and growing value for those who are connected to them. But not everybody is connected. With the global network, you must either be a destination in your own right (Chicago, London, Hong Kong, Tokyo), or you must be on the route to a destination.

My talk today is about the steps that my institute is convinced must be taken if the natural bi-national economic region in the International Northeast, in Atlantica, is to be put on the road to the major centres of global commerce.

Recall that before 1867, we in what was to become Canada were a collection of north-south trade corridors. This trade orientation was protected and managed by the first Canada-US trade agreement, known as the Reciprocity Agreement. The United States abrogated reciprocity, and that together with the fears engendered by the military build-up attendant on the civil war, and a host of other factors, led directly to the creation of Canada in 1867.

Canada's first Prime Minister, Sir John A. Macdonald's very explicit first choice for a keystone policy for the new nation was the negotiation of a new reciprocity agreement to safeguard the prosperity of Canada's regions. Washington refused, and Macdonald was forced back on what he considered to be very much a second



best policy: the National Policy. That policy was a conscious decision to disconnect from one network and to create a new one, more or less from scratch.

The tariff wall went up at the border, sundering many trading relationships southward, and a new network was created in the form of nation-building infrastructure reaching from the Atlantic to the Pacific.

The effect on Eastern Canada was dramatic — in effect, we were cut off from the global network, and became the obscure end of the line for a new national network. Over a period of a century or more, the pieces of the natural trading region that straddles the border in this part of North America progressively turned their backs on each other. Economic activity was sucked out of Atlantic Canada, which had been dependent on international trade with New England, the Caribbean and Europe. In the words of one famous Maritime historian, Ernie Forbes, it was as if the Maritimes had been pushed a thousand miles further out to sea.... Just as the move away from heavy industrial manufacturing hit northern New England and upstate NY particularly hard about a century later, pushing that region also a thousand miles further out to sea.

But the possibility exists today to haul ourselves a thousand miles back into the heart of North American economic activity. That possibility is created by the new network building activities that increasingly dominate the globe and the continent, and that can connect the industrial heartland of North America with Europe and Asia via a series of trade corridors radiating out from the Port of Halifax to major destinations in North America. That is the concept at the core of Atlantica.

Well what are the major trade routes, how are they shifting, and how is that likely to affect traffic to Canada, and especially to the east coast? Well, let's start by having a look at the major trade patterns that converge on the east coast.

First there is NAFTA – the biggest bilateral trade in the world, and 43% of it takes place over the border crossings stretching from Buffalo-Niagara in the West to Calais-St. Stephen in the east. But this trade is almost wholly land-based (although that will shift in the next little while for reasons I hope to discuss shortly).

Then there is the EU-NAFTA trade - about 40% of all international



trade takes place between these two trading blocs. But in international trade terms as this slide shows, the trans-Atlantic trade has been the poor cousin of the three major international maritime trade routes.

Finally, there is the NAFTA-Asia connection, with routes going to the west coast as well as to the east coast via the Panama and the Suez canals.

Almost the totality of Asian shipping to North America used to cross the Pacific to west coast ports or, to a much smaller extent passed through the Panama Canal headed to the east coast ports, including New York. But increasingly shipping destined for east coast and neighbouring destinations is borrowing the so-called Suez Express route. As a result, and this is one of those revolutions in mental geography I mentioned to you, *the east coast of North America is now on the Pacific Rim*, and is a destination for the industrial output of fast-growing China, India and SE Asia as well as a departure point for our exports back to them. But there are reasons why both this east coast bound traffic is about to take a quantum leap forward as well as why the traditional routes it has followed will soon be overtaken by events.

As we all know, trade between Asia and North America is growing by leaps and bounds. Maritime trade has been growing between the two by 15% a year in recent years. Most of that cargo has traditionally gone to West Coast posts like LA and Long Beach, Seattle and Vancouver. But those ports are butting up against significant capacity constraints. As this chart shows, according to Drewry shipping consultants, the container-handling capacity of the major west coast ports will be exceeded by projected traffic within a couple of years. The green line shows expected capacity in the next few years pretty much levelling off at 30m TEUs, with throughput exceeding that by about 2007. If you want a foretaste of what this will mean, think about what happened last summer when LA and Long Beach were already exceeding capacity, with disastrously disruptive effects on the world trading system.

Now there clearly are strategies to increase the throughput capacity of the ports, but if you look at this next slide, that compares

the pessimistic and optimistic outlooks for total west coast capacity, you can see that even the most optimistic projections show that capacity will be exceeded by a large margin in a few short years, and there are relatively few options for major expansion of existing capacity, at least in the short run. There is a lot of talk of new capacity, but many a slip 'twixt dock and ship.

The traditional response is to put cargo on ships headed from Asia through the Panama Canal and into East Coast ports. But the Panama Canal today operates at 93% capacity, which means it is to all intents and purposes full (especially with Asian traffic bound for the east coast growing at 15% a year). It will take \$8-billion to \$10-billion

and many years to expand the canal, which will also raise the cost of using the canal, and that money must be borrowed on the credit of Panama.

Moreover, the way we move containers by sea, the lifeblood of the world transport system, is changing. It used to be that the bulk of the ocean shipping fleet carried in the 3000 – 4000 container range. This is the largest size of ship the Panama Canal can accommodate. But the next generation of ships, are too large to fit through the Panama Canal - hence their name: they are called Post-Panamax ships. The largest ship afloat today handles 10,500 containers, and there are ones on the drawing board today that will handle 12,000 containers, and they may, as Mike Ircha, a port expert at UNB pointed out recently, go as high as 15,000. That's about three times the capacity of the Panama Canal. To put these ships in perspective, if you were unloading the entire cargo of one of these ships in a port, as often happens e.g. at LA or Long Beach, even with half the loads going to trains, the line of tractor trailers needed to haul the containers from portside would stretch for 32 kilometres (20 miles)! That makes for one long line of traffic heading out of town.

And BTW, it took us thirty years to build the world's current container fleet, but in the next FIVE years, we will add 50% again to the fleet's capacity, the vast bulk of it Post-Panamax. Of the 250 or so post-panamax ships that will be built, roughly 80 will be available to carry cargo from China, SE Asia and India to North America. The rest will be devoted to intra-Asian trade. But if the west coast ports are largely at capacity and the Panama Canal is choked and cannot accommodate these ships, how will they reach the richest market in the world?

Via the Suez Canal, of course. It can handle these ships and more – it has the depth and it has the spare capacity. Moreover, does anyone know the difference in distance that a ship has to cover going from Hong Kong to New York City via the Panama or the Suez Canals? It is 300 miles. In other words, distance is not an issue.

So the ships are there, the route is there, the business case and the economics are there. Why has this route not lived up to its potential? Beside the fact that the capacity constraints are only going to bite in the next few years, just as the Post-Panamax fleet emerges on a major scale (remember it takes 10-11 post-Panamax ship fleet for a transporter to be able to run a once a week service between Hong Kong and NYC), there is a host of reasons.

First of all, the east coast has its capacity problems too. In particular, the port of New York/New Jersey has significant constraints on its ability to accommodate post-panamax ships. It has water draft issues (its harbour is too shallow, and a billion dollars is being spent not merely to dredge the harbour, but to blast the rock out to lower the depth, and because of ongoing silting even then they will not have a reliable 50 foot draft) and air draft issues because the Bayonne Bridge at the entrance to the harbour which is too low to accommodate the fully loaded ships. Yet these ships have to call at New York, or they will not come from Asia, because New York is the anchor port on the east coast.

But they can call at Halifax, with its location on the Great Circle route from the Mediterranean and Europe to New York, its Class One railway service and other advantages. Halifax has a natural depth that allows it to accommodate the largest ships in the world, it has

no air draft issues at the terminal at the entrance to the harbour, and it has spare capacity. It is not constrained by the relatively shallow draft of the St. Lawrence. That means that Halifax, the only major east coast port on the direct route to New York from the Suez, the Mediterranean and Europe that can handle this post Panamax traffic, is in a pivotal position in the global trade network, and is joined at the hip with NY/NJ if we are to bring the economic

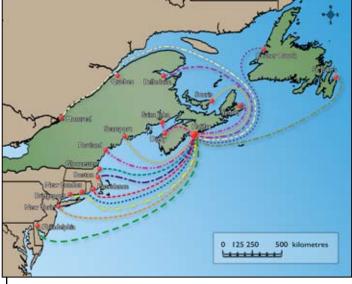
• Several states and provinces expressed concern that the NASTO region's freight facilities...will not have sufficient capacity to accommodate expected levels of freight transportation growth. This is a particular concern for those ports and terminals located in major urban areas.

• Both United States and Canadian ports ... are facing acute shortage of land suitable for development into marine terminals ... Limited intermodal access to local ports and terminals is a major issue.

- NASTO Freight Service and Investment Study, 2002

energy of Asia to the East Coast of North America in large volumes. Only Halifax in particular and Canadian east coast ports in general can lighten the load of the big ships and make NY/NJ accessible to them.

So, shipping and trade pattern developments are driving the emergence of a hub and spoke structure of the main ocean-based trade routes. The main traffic will be increasingly concentrated on things with them. You have to put them on a truck, on a train or on a short sea shipping carrier destined for a smaller regional port. NY has huge capacity constraints in this regard, but then so does Halifax, whereas Halifax has no compact domestic market on its immediate doorstep to compensate. That means that well-developed infrastructure landside operating at peak efficiency will be absolutely critical to Halifax's, and Atlantica's, success



a declining number of load centres capable of handling these huge ships, with local traffic radiating out from there via a number of means of transport: rail, truck, shortsea shipping. If Atlantica wants to benefit from these trends, Halifax and NY are indispensable partners. This is one reason why, for example, there have been two major announcements regarding Halifax recently. In the first, a consortium of major retailers, like Sears, are turning Halifax into an eastern distribution centre for Asian merchandise that previously

> major Chinese shipper that Halifax would be the first North America port of call on their new round-the-world weekly cargo service. But we cannot think about the front door alone, in other words the arrival of goods from Asia and from Europe. It is not

sufficient to drop the

stuff at the port. You

have to unload those

boxes from those ships

and do one of three

exclusively

to west coast ports.

The second was the

announcement by a

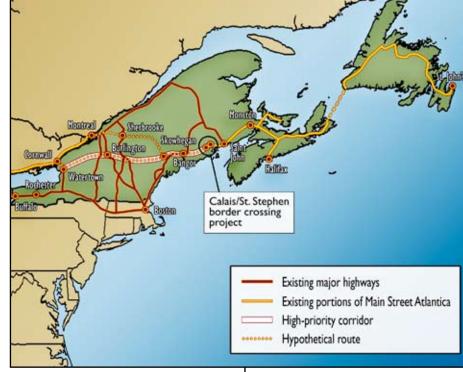
went

Yet, the centre of the region running from Halifax south to New York City and Philadelphia or west to Buffalo, Ohio and Ontario,

is largely a transport black hole. If you want to go by the shortest route to the tens of millions of people who live in the US northeast, you cannot do so on the interstate network, but only on secondary roads. At the moment, looking west, the Port of Halifax aims to connect almost exclusively with Chicago in the US market, because of its excellent connections with the US industrial heartland, and because it is in the interests of CN to do so, for reasons that are obvious if you look at their route map. But because of poor connections and disinterest by CN, we find it almost impossible to connect, for example, with Buffalo, the fifth largest port of entry to the US, and the hub of an equally impressive distribution network reaching a region currently largely inaccessible to the Port of Halifax.

The peculiar interaction of the border and geography in this region means that the border is far more disruptive of economic efficiency than almost anywhere else (a close parallel would be the Ontario/Michigan border). Look, for example, at the inefficient route that geography and national policy have imposed on freight traffic trying to get from the *major centres of this region* to markets in the North American heartland. Compare that

to the geographically most efficient routes. Now look at how the border would affect a route that was much more efficient (Map of Halifax-Chicago route). Look at the fragmented routes that rail cargo follows from that same corridor trying to get to Boston and New York (Map of regional rail service), almost all of it on secondary quality routes that cannot support the maximum loads that Class One railways handle, can and using so many small



carriers that the possibility of competitive discounting is lost because revenue has to be divided among too many carriers. So much for the advantages of being "a day's sailing time closer to Europe". Add to that the unwillingness of CN to guarantee a ready and well-timed supply of rail cars, and you have a real network problem for the Port that is our main attraction to the world in terms of being connected to the global trade network.

The Hudson River is now the east coast of the United States...and the entire area north of New York City and south of Halifax has become a cul-desac in the global network.

- US Regional Planner Michael Gallis And heading south, the main highway from the nearest land border crossing to the US only allows an 80,000 lb. load on trucks, meaning a fully laden container cannot be moved by the main highway from Halifax to Boston or New York. This is in strong distinction to the other north/south routes elsewhere in the region. You can, of course, move heavier loads on the secondary roads in Maine, but not on the Interstate.

And the short sea shipping network, what should be the gem in the crown, is constrained by protectionist legislation — most obviously the Jones Act. Here's what Halifax's local hub and spoke short sea shipping network should look like. I say gem in the crown because short sea shipping should allow us to deliver goods directly to the heart of major urban markets without having to use scarce road and rail capacity, without increasing traffic and at lower environmental cost. When you consider that the US DoT predicts that truck traffic on US highways will DOUBLE in the next 15 years, you can see why short-sea shipping is increasingly going

to be the jewel in the transport crown. This is what the emerging short-sea shipping network on the entire east coast is going to look like.

This is what the landside connections of the Port could look like, with all the traffic volume that could generate if we could move cargo efficiently along this network.

This is not of merely local interest. Not only is Halifax the only port north of Virginia (and

the only Canadian east coast port) capable of taking fully loaded post-Panamax ships, but it is also a significant piece of continental infrastructure for other reasons. For example, one of the major constraints on regional growth right down to New York City is the paucity of room for port development, as these two quotations make clear.

Moreover, it is now widely understood that the transport infrastructure across the Hudson River is now а maximum capacity, which means, as Michael



Gallis likes to say, that the west bank of the Hudson River is now effectively the east coast of North America for international trade purposes. And looking at this map, showing shortsea shipping routes as well as an I-95 corridor with a 100,000lb load limit, you can see that the Port of Halifax and other east coast Canadian ports are the solution to the relative isolation of the area between the east bank of the Hudson and the Atlantic.

Continentalism is starting to percolate in the minds of decisionmakers, but it has only just begun to sink in with respect to this region. As an illustration, look at this map of high priority highway corridors as designated by the <u>US Congress</u> several years ago.

Looking at this map, one is immediately struck by three features. One is the predominance of north-south high priority corridors. The dominant theme of this map is the realization of an integrated North American transport infrastructure, supplying the north-south connections that lacked under the previous regimes concerned solely with national (largely east-west) transportation systems. This map shows that NAFTA is under construction all around us. It is another one of those revolutions in mental geography.

The second is the power and efficacy of the Tennessee Congressional delegation. Virtually the entire state is paved over.

The other feature that leaps off the page for residents of Atlantica is that the International Northeast is virtually the only part of the country with no designated high priority corridors. Yet based on the objective factors that usually justify the construction of new interstate highways (such as the potential economic spin-off) there is almost no other route that could generate as many potential benefits as a highway cutting east-west across Atlantica. It would, among other things, intersect with 5 north-south interstate corridors

And this is not idle talk. Under pressure from members of Atlantica's congressional delegation, including especially Senators Susan Collins, Olympia Snowe, Chuck Schumer and Hilary Clinton, the outgoing US Transportation Secretary, Norm Mineta, has pledged Washington will carry out a multi-modal transportation study of the corridor that reaches from Halifax, right across New Brunswick, Maine, New Hampshire and Vermont and northern New York state to the Ontario border. Congress has appropriated a million dollars for this. My Institute is working to make sure that the Government of Canada participates actively in that study and acts on its recommendations.

Moreover, just within the past two months, the map of congressionally designated high-priority corridors has been updated. And here on this map is one of the new corridors that have been added, thanks to the efforts, again, of the Atlantica congressional delegation. The east-west highway from Calais-St-Stephen right through to Watertown NY, is now designated, connecting with all those north south interstate corridors and the distribution network centred on Buffalo. I might also mention that a major Icelandic transporter has just bought a major interest in the short-sea shipping service connecting Halifax with the Port of Portland, Maine, which has just enlarged its customs jurisdiction to include the major multi-modal terminal in the Lewiston-Auburn area. US Customs inspectors are now stationed in Halifax, inspecting containers bound for US destinations. Things are clearly gathering momentum.

By the way, I want to make explicit to you that point I have just been making about the involvement of US congressional and administration leaders in decisions about Atlantica adds a new dimension to the revolutions in mental geography I have been referring to. The revolutions are not just in economic geography or trading patterns. The revolution is also in political geography. We are now clearly part of the equation of prosperity in the minds of the US half of Atlantica. And that means that we have new allies and new pressure points to exploit.

By the way, remembering my theme of choosing to be connected to the emerging networks, and the consequences for those regions and people that fail to make the right choices or that are simply bypassed by events, let me say that I really don't think that we have a choice about building the coherence of our international region, because investment and commerce increasingly will flow to those regions where the obstacles to the quick and efficient movement of goods, services and people have been minimised.

We are not the only ones to have noticed the huge increases in trade and to have laid plans to try and capture a piece of the economic energy that these trade flows will release. The Mexican Pacific Coast port of Lazaro Cardenas is investing for example, a billion dollars to build a new Post-Panamax container facility that will be connected by rail to the US heartland, bypassing congestion at the existing west coast ports. In fact to accommodate this, the Mexican government is now building a massive Mexican customs facility --- in Kansas City (a major US rail hub), the first such Mexican customs facility outside their national territory. (And by the way, does this route ring any bells in terms of its connection with an earlier slide? If you're not good at memory games, here it is: the CN route map). Ports like Norfolk and Charleston on the east coast are investing to capture a share of this trade. Every option will be tried on the west coast, including things like expanding ports like Prince Rupert.

And on the land side, look at the efficiency-enhancing plans for Texas and its transport infrastructure.

The Texas Transportation Commission has approved a plan for 4,000 miles of multi-use corridors. The Trans-Texas Corridor, a state-wide network designed to be up to 1,200 ft wide, includes elements such as six passenger vehicle lanes, four 13-ft-wide truck lanes, six rail lines with high-speed lines for passengers and freight, and a 200-ft-wide dedicated utility zone.

Estimated cost for the 50-year project is between \$145 billion and \$183 billion. Everything really is bigger in Texas.

There is no room for complacency anywhere as the world trade networks become increasingly fluid, as flows build up and begin to seek new points of contact with major markets. Now is the time for all of us, wherever we are, to take part in this debate about where we fit in the emerging global trade networks, before the networks are formed and solidified for the next 20 years. Whether we choose St. Louis's fate, or Chicago's, is almost entirely in our hands.

Thank you ladies and gentlemen.

A high-resolution version of this commentary is available on the AIMS website at http://www.aims.ca.



The Atlantic Institute for Market Studies (AIMS) is an independent, public policy think tank based in Halifax, Canada. It is a leading research institute for such policy issues as public education, health care, pharmaceuticals, and public finances. It is one of the most decorated think tanks in the world. AIMS has been awarded the prestigious Sir Antony Fisher International Memorial Award four times. No other think tank has received this honour more times than AIMS. In 2004-05, its 10th anniversary year, AIMS was also awarded the Templeton Freedom Award for Institute Excellence, the only think tank in North America so honoured this year.

AIMS' Atlantica concept covers the International Northeast Economic Region, which is defined chiefly by geography, economic trends and trade patterns; common problems and experiences; and politics. It includes much of Eastern Canada south and east of the St. Lawrence, Maine, New Hampshire, Vermont and upstate New York. Much of this wedge of the continent has been outside the charmed circle of North American prosperity for years. However, opportunities are being offered by emerging global trade patterns to unlock the region's potential. If the proper measures are taken now, such as developing cross-border infrastructure, improved border procedures and security, port facilities, short sea shipping networks and more, Atlantica will be ideally positioned as one of the main points of contact between the world trading system on the one hand and the North American industrial and population heartland on the other. To learn more about Atlantica, check the website at http://www.Atlantica.org.