

Building North America

NORTH AMERICAN TRANSPORTATION COMPETITIVENESS RESEARCH COUNCIL



WORKING PAPERS

The Security and Prosperity Partnership and the North American Competitiveness Agenda: Freight Transportation Infrastructure

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IMPROVING NORTH AMERICAN TRANSPORT COMPETITIVENESS

During the 20th century, the United States and Canada developed highly effective and efficient freight transportation systems. After World War II, foreign observers looked with envy on our highway networks, modern urban distribution systems, supply chain flexibility and the agility of North American logistics systems – all of which gave Canada and in particular the US a substantial cost advantage on the value of all shipments compared to the next best region in the world. This advantage together with business innovation are the keys to maintaining North American competitiveness in the face of emerging challenges from the entry of major trading and manufacturing countries like China and India into the global economy. The future prosperity of North America rests on maintaining and improving this advantage.

Yet as the 21st century begins, competitiveness problems in freight transportation are apparent. As UPS CEO Mike Eskew states, *“What’s shocking, quite frankly, is the inability of our transportation infrastructure to keep up with the normal day--to-day stresses imposed upon it... Our highways, waterways, railroads and aviation network are simply not keeping up with ordinary demands.”*^{1 2}

- The system is becoming more congested as ever increasing volumes of trade and travel encroach on existing capacity that is difficult to expand.
- GHG emissions from transportation are recognized as a difficult environmental problem because of the inherent energy requirements of transport and the need for mobile fuel sources.
- Increasing performance demands being put on transportation today; e.g., JIT/lean, demand-pull/rapid replenishment, visibility, reliability (15 minute delivery windows) and maximizing utilization of assets and people resources (drivers and operators).
- North American transport infrastructure is straining under today's volumes and performance requirements; even if volumes were to remain relatively stable, performance demands would put increasing pressure on the transportation networks.

Perhaps even more important, how to confront these problems in a North American context is not at all clear. There is no shortage of reports describing problems facing our transportation infrastructure. Each is piled upon the table, but little cumulative and collaborative work has resulted. We have no vision of what an efficient, environmentally acceptable and secure transportation infrastructure for the 21st might look like. Perhaps the greatest problem is that no institution or arrangements now exist with responsibility for creating such a vision (or alternative visions) of what this might be and for engaging

¹ UPS Pressroom: Current Press Releases, “Transportation Infrastructure Failing the Nation, Says UPS CEO” (March 30, 2006)

² Several members of the Council while acknowledging this is a useful quotation for focusing attention on the overall transportation infrastructure issue would disagree, for example, on how much railroads should be viewed as a part of the current problem. The Council will deal more with these modal issues in the course of its future papers.

in building a constituency for a transportation infrastructure strategy among federal, state-provincial and metro government, business and civil society leaders in North America.

BACKGROUND

Transportation is the foundation of the economic systems in North American and of our ability to strengthen trade relationships between Canada, the United States and Mexico anticipated under the North American Free Trade Agreement. The North American Transportation Competitiveness Research Council has been established to address transportation infrastructure and policy impediments to North American competitiveness with the objective of creating a more efficient and secure North American transport infrastructure for the 21st Century. The Council is composed of researchers in transportation, logistics and supply chain management from universities, transport research institutions and companies across Canada, Mexico and the United States.

During the 1980s, the economies of the three North American nations were increasingly linked in by a wide array of cross border arrangements. Freight transportation in North America today faces profound new challenges as it addresses a long standing infrastructure deficit, accommodates increasing freight container traffic from rapidly growing continental and Asia Pacific trade, introduces innovative information and freight management systems, experiments with alternative models of infrastructure financing while at the same time meeting important and necessary new security requirements.

NORTH AMERICA'S COMPETITIVENESS AGENDA

Reports of the Security and Prosperity Partnership of North America (2005 and 2006) (SPP) and the North American Competitiveness Council (February 2007) (NACC) have made a good start on their central priority of *improving the secure flow of goods and people within North America, essential to the global competitiveness of enterprises in all three countries.*³

Recent discussions by the members of the North American Transportation Competitiveness Research Council have identified many of the transportation issues and opportunities facing North American industry and concluded that it is now time to develop a continental framework for North American Transportation. Significant issues that have brought us to this conclusion and not currently contained in the work plans of either the SPP or the NACC outside of border security include:

1. Congestion costs at critical locations in the North American freight transport networks, including ports and inland freight hubs.
2. The role of pricing signals in transport infrastructure investment.
3. Emerging continental gateways, corridors, networks and freight movements.
4. Competitive cross border frameworks for continental traffic.

³ North American Competitiveness Council, Enhancing Competitiveness in Canada, Mexico and the United States, Private Sector Priorities for the Security and Prosperity Partnership of North America, February 2007. p.3.

5. Harmonizing institutional frameworks for freight governance and regulation.
6. Public and private investment requirements and options.
7. Information and data management.
8. Priorities for freight transportation in the urban and service economies.

Addressing these and other issues will be central to maintaining North America's transport competitiveness in the years ahead in the face of growing competition from Asia and Europe. Yet, most of the items identified in the 2005 and 2006 productivity agenda items do not provide a new competitive framework for transportation investment and planning in North America.

A highly disparate European transport system has since 2001 been able to bring its mutual interests together in a European Transportation Policy Framework that concludes that its renewed agenda will now *build on a broader range of policy tools achieving shifts to more environmentally friendly modes where appropriate, especially on long distance, in urban areas and on congested corridors. At the same time each transport mode must be optimized. In this context the overall EU framework could help to enable differentiated and regionally more ambitious solutions whilst maintaining the necessary larger EU framework of mobility in a single market and confirming the EU's presence as a global player.*⁴

Similarly, the emergent growth of Asian trade is already transforming global and continental container flows and holds important development opportunities for Canada, Mexico and the United States. Yet the pace of transport infrastructure investment, productivity improvement and efficiency in both Asia and Europe is already challenging North America's traditional supremacy in transport capacity and efficiency.

AN OPPORTUNITY FOR A CONTINENT-WIDE TRANSPORT INITIATIVE

The framework now in place for improved North American Competitiveness and Security offers an important forum to focus the efforts of the North American private sector transportation, governmental (federal, provincial, state and city) and the transport research communities towards a continental transport policy initiative designed to improve the global competitiveness of North America's transport productivity throughout the continent and with the rest of the world. The undersigned would welcome the opportunity to work with you to cooperatively develop an agenda for this purpose and to undertake the necessary research, consultation and evaluation to ensure that North America remains the global leader in transportation productivity and efficiency.

⁴ Commission of the European Communities, Communication for the Commission to the Council and the European Parliament, Keep Europe Moving, Brussels, 22-06-06, p.21.

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The North American Transportation Competitiveness Research Council

Who are we?

In response to mounting concerns about carrying capacity throughout the United States, Mexico, and Canada, we have come together to form the North American Transportation Competitiveness Research Council. The Council is composed of researchers in transportation, logistics, and supply chain management from universities, transportation research institutions, and companies in Canada, Mexico and the United States.

Our initial meetings were organized with the support of authorities in Kansas City and Winnipeg – well-established freight and distribution hubs in their respective regions. However, it has become clear to all of us that the issues must be addressed on a continent-wide basis. Mexico, the U. S., and Canada each have unique needs and capabilities which complement each other. But realizing these synergies requires a continent-wide approach to moving freight within and between these three countries. Many companies have organized trinational production systems whose continued efficiency is threatened by deterioration in infrastructure capacity and network capabilities

What does the Research Council do?

North American companies have spent the last thirty years finding ways to leverage the unique capabilities of the three countries that share the continent. This progress is now threatened by rising congestion at borders, in major cities, and at critical hubs. The Council intends to investigate how to transform the overstressed, disjointed network into an efficient and secure continental freight transportation system that will enhance North American competitiveness in the 21st century.

Trustworthy information, innovative alternatives, and political insights are all critical to enabling the necessary changes to the North American network. The Council will deliver objective information, policy assessments, and options to key stakeholders in industry and government. It will organize projects to educate and train professionals in North American transportation, bringing together planners, civil engineers, users, and operators of the North American transportation systems. Thus we will facilitate collaboration between North American transportation research institutions, transportation industry executives and their customers, and urban region leaders to seek both short term and long term solutions to congestion issues that are facing every freight transport mode serving the North American business community.

Developing an agenda for addressing transportation shortcomings to North American Competitiveness

The members of the Research Council welcome the opportunity to work with transportation industry and government agencies to cooperatively develop an agenda for this purpose and to undertake the necessary research, consultation and

evaluation to ensure that North America remains the global leader in transportation productivity and efficiency. We hope to:

Evaluate technological, organizational, and political solutions to port, infrastructure, and modal bottlenecks throughout North America

Determine specific requirements and priorities for infrastructure improvement and expansion to improve North American freight and data connectivity

Lay out options for creating a more efficient and secure North American transportation infrastructure for the 21st century.

The Council's initial output will be briefs on transportation infrastructure competitiveness, relevant policy options, and alternative future scenarios. These briefs will be designed to address the needs of decision makers who have been identified in cooperation with transportation industry and government leaders. The Council believes that it can initially contribute by:

- identifying existing research assets and completed studies that support specific initiatives
- building links among research projects already underway in research centers, industry, and government agencies throughout North America
- locating gaps where new work should be undertaken to address near term choke points in the continental network.

The Council will have an equally important mission to show policy makers the need to configure transportation systems to support the reality of a deeply integrated continental economy. The Council, in cooperation with industry and government leaders, will strive to open points of access into the national policy making processes – through the SPP-North American Competitiveness Council, through elected representatives and through other governmental agencies. The overarching goal is to create a dialogue among transportation industry leaders and experts representing different regional, modal and industry perspectives, a dialogue that will produce recommendations for action and also build a broad constituency to support the implementation of these recommendations.

North American firms have long since understood the need to be globally competitive, and they have made many adjustments to face that reality. However, competitiveness is a moving target, and what served in the past will not assure a bright future. Safeguarding and improving living standards in North America requires the best use of the talents, knowledge, and resources of three major countries working together. These synergies can only be realized if the physical connections throughout the continent are capable of handling an increasing level of commerce. The North American Transportation Competitiveness Research Council is committed to finding and synthesizing the best information available to give policy makers alternatives which address current congestion, capacity, and security issues while showing the best ways to employ North

America's formidable resources to enable three major economies to work together and improve opportunities for citizens of all three nations.