U.S.-Canada International Mobility and Trade Corridor

Industry and government are concerned about the capacity of ports and terminals, and the highways, rail lines, and waterways that serve them, to handle steadily increasing volumes of intermodal traffic, especially containerized freight. The volume of intermodal containers moving through ports worldwide doubled over the past decade. Similarly, the volume of intermodal freight moved by air, rail, and truck grew just as dramatically. Over the next two decades, volumes are expected to nearly double again.

Today's intermodal freight system is not equipped to handle this growth. Ineffective links among modes are degrading the reliability and performance of carriers, shippers, and terminal operators. Moreover, the lack of effective information sharing among stakeholders creates bottlenecks and unnecessary delays in the efficient movement of freight. These deficiencies increase operating costs and congestion, and decrease safety, economic competitiveness, and air quality.

Southbound truck delay at the Blaine, WA, border crossing.

Canada is our number one trading partner and has been for years. Between 1994 and 2000, U.S. trade with Canada increased from $243 billion to $406 billion, an average annual growth rate of 8.9 percent. Enormous amounts of trade cross the border in the Pacific Northwest between Washington State (WA) and British Columbia. Two-way trade at the Blaine, WA, border crossing was valued at more than $35 million per day in 2000.[1] Commercial truck traffic across the Washington State/British Columbia border also has been increasing since the implementation of the North American Free Trade Agreement (NAFTA). This growth in trade and commercial truck traffic has strained border crossing facilities and enforcement agencies. As a result, commercial vehicles are often delayed at the border, and long queues of trucks waiting to cross in either direction are a common sight. It has been estimated that $40 million in operating costs are lost annually due to border crossing delays at just the Blaine, WA border facility.

To respond to this situation, public and private stakeholders in Washington State and British Columbia established the International Mobility and Trade Corridor (IMTC) partnership. The IMTC is a coalition of over 60 U.S. and Canadian business and government entities whose mission is to identify and pursue improvements to cross-border mobility in the "Cascade Gateway," which includes four land border crossings between British Columbia and Washington State. IMTC-sponsored projects are funded through bi-national financial partnerships at federal, regional, and local levels.

Operational Testing and Phased Deployment Projects

As part of its comprehensive approach to improving access and mobility at border crossings, IMTC has initiated three projects: (1) a northbound automated border crossing development project, (2) a field operational test of electronic cargo container seals and freight information exchanges with port terminals, and (3) a southbound automated border crossing development project. Federal support for these initiatives is provided by the Office of the Secretary of Transportation and the Federal Highway Administration's Office of Freight Management and Operations.

These projects are expected to result in the development of a region-wide network of automatic vehicle identification (AVI) readers and tracking systems, giving visibility to cargo and assets for the Ports of Tacoma and Seattle and both sides of the international border crossing at Blaine. Another expected result is the integration of AVI readers at state and provincial weigh-in-motion stations on major highway approaches to both sides of the border.

The Trade Corridor Operating Systems (TCOS) information management system is being used to support and integrate AVI readers, tracking systems, and other agency systems. An Internet-based system, TCOS links a shipping line's information system with the U.S. Customs' Automated Manifest System. Approved users can log onto a secure website by entering in a pre-approved user name and password. All tracking and data functions can be viewed and managed over the Internet. Additionally, U.S. Customs will have access to information on all containers and will be able to flag certain containers in advance for inspection based on security or other concerns.

[1]U.S. Department of Transportation, Bureau of Transportation Statistics, *North American Trade and Travel Trends,* BTS02-07, (Washington, DC: 2001).

Container tracking field operational test.

The field operational test of electronic cargo seals will demonstrate the use of this low-cost disposable technology to track cargo movements and monitor the security of containerized freight. The test will also examine the use of a Congestion Notification System to improve truck access to the Port of Tacoma. Moreover, the test will assess the utility of using trucks/containers equipped with electronic seals, transponders, and wireless global positioning system devices, to both augment and decrease resources needed to collect transportation data on regional freight movements.

When these projects are completed and technologies deployed, the U.S.-Canada International Mobility Trade Corridor will have the first fully operational bi-national electronic commercial vehicle operations (CVO) border crossing system in North America. At a total investment of $4.35 million, this system will represent the largest single investment in CVO border crossing ITS technology to date. Additionally, the electronic border crossing system will be integrated with private terminal logistics systems at the Ports of Tacoma and Seattle.

Benefits of the U.S.-Canada International Mobility and Trade Corridor

The ability to track containers through TCOS can benefit intermodal freight carriers by providing more accurate information, reducing paperwork, and improving Port and Customs clearance procedures. Furthermore, the use of electronic seals provides additional security benefits, such as the ability to determine whether container tampering has occurred. If U.S. Customs is satisfied with the security of the seal, it may accept the use of this technology in the Customs process. A large-scale deployment of electronic seals in the future could potentially reduce shipper insurance claims, which, in turn, could lead to corresponding reductions in insurance rates.

An additional, but less tangible, benefit is the enhanced relationships that developed through the IMTC bi-national public-private partnership. The IMTC supports activities that enhance efficient truck, rail, and marine operations through ITS and infrastructure improvements.

Expected Benefits of the U.S.-Canada International Mobility and Trade Corridor

Stakeholder	Expected Benefit
Shippers/Consignees	Pickup/delivery notification Improved accuracy of logistics information Container and truck location at key points
Ocean Carriers	Pickup/delivery notification Improved accuracy of logistics information Enhanced customer service
Freight Forwarders/Brokers	Reduced paperwork Improved communication with Customs Reduced cost due to improved truck operations
Terminal Operators	Increase gate moves/throughput Pre-notification of truck arrival More efficient use of labor/equipment Enhanced customer service Reduced paperwork
Truck Drivers	Reduced wait times at border and port terminals Fuel savings from reductions in wait times Increase capacity for additional moves Reduced paperwork
Regional Transportation Agencies	Improved planning for freight transportation Increase in commercial vehicle safety
U.S. Customs/U.S. and Canadian Governments	Improved security through E-Seal verification Improved security through truck tracking Improved throughput of trucks at border crossing Reduced paperwork
Customers	Improved tracking and visibility of cargo Improved ability to support just-in-time logistics Lower costs due to efficiency improvements

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