

AGENDA

IMTC Steering Committee Meeting

Thursday, October 18, 2012
9:00am – 12:00pm
Whatcom Council of Governments, Bellingham, WA

1. Current event updates

- a. September 20 General Assembly meeting recap
- b. Final review of 2012 IMTC project list for Core Group approval in November

2. Topic focus: cross-border rail

- a. Update on cross-border rail issues. John Sibold, State Rail & Marine Director, WSDOT
- b. Follow on discussion

3. Project updates

- a. Truck route & staging area compliance improvement at southbound Pacific Highway – update on coordinated initiatives
- b. NEXUS & EDL promotion – recap of summer activities, update on enrollment and use trends, and next steps
- c. NEXUS at Abbotsford-Huntingdon/Sumas - review of post-installation operations and update on continuing, near-term improvements to dedicated approach lanes
- d. Recent developments in border traffic data availability and advanced traveler information (ATIS) systems

4. Review of agency project initiatives and corresponding funding sources being pursued

- a. WSDOT & BPRI pursuing state support for border-related related research. Current focus on ATIS – establishing measures of effectiveness and identifying requirements for long-term system optimization, including user perspectives
- b. WCOG proposals to US FHWA for research funding for border projects: next passenger survey, developing near term traffic volume prediction, and mapping near-border freight logistics

**INTERNATIONAL MOBILITY TRADE CORRIDOR PROJECT (IMTC)
2012 FUTURE PROJECT PRIORITY LIST**

	Priority	Project Title	\$ Estimated Cost • Lead (DRAFT) • Possible partners (DRAFT)
Planning	1	Exit 274 Interchange Preliminary Design Complete the preliminary design and environmental documentation for revisions to the partial interchange consisting of a full tight diamond configuration. The preliminary design process will include geometric alignment, foot print, hydraulic report, environment reconnaissance, and NEPA.	\$300,000 • City of Blaine? WSDOT? • City of Blaine
	2	Exit 274 Interchange Final Design This project will design revisions to the I-5 interchange in Blaine, and will include: preparation of environmental documentation and address connections for eastbound traffic headed towards alternate border crossings via SR 539 and SR 546; improve access to Birch Bay; and evaluate a grade separated rail crossing at Bell Road (SR 548).	\$3,000,000 • City of Blaine? WSDOT? • City of Blaine
	3	Cascade Gateway Border Circulation Analysis Phase II Phase II of the Cascade Gateway Border Circulation Analysis will identify specific improvements using the information and tools developed in Phase I; preliminary planning and cost estimation for specific improvements; evaluation with WCOG traffic and simulation models, and, if available, cross-border regional economic impact model (project below); and overall funding strategies.	\$150,000 • WSDOT? • WCOG
	4	NEXUS Expansion -- measuring effectiveness This work will assess the NEXUS trusted-traveler program across the Cascade Gateway looking at 1) enrollment levels as a function of traffic volume and traveler demographics, 2) general, bidirectional system functionality (cards, readers, signage, booth systems, etc.), and 3) port/direction specific evaluation of approach lane and traffic management operations and needs. Products will include time series evaluation of performance measures, site specific observations and recommendations, and near term funding and partnership strategies.	\$150,000 • WCOG? BPRI? • CBP • CBSA • WSDOT • BC MoT
	5	Regional Economic Model This project will acquire and populate a regional economic model to estimate the effects of alternative investments and policy decisions—on both sides of the Cascade Gateway border. Estimated cost assumes five years of licensing, staff operation, and data that would include coverage of both U.S. and Canadian economic analysis zones.	\$650,000 • WCOG • FHWA • Transport Canada
	6	Cross-border passenger vehicle intercept data collection This effort would in most ways be a repeat of previous efforts, last done in 2007/08, consisting of two, two week survey periods (one in summer, one in late fall/winter) at all Cascade Gateway ports of entry, in both directions. The work could likely be done by BPRI and WCOG. As in the past, collaboration with WSDOT, BC MoT, CBP, and CBSA will be essential.	\$100,000 • WCOG? BPRI? • FHWA • Transport Canada
	7	Near term predictions of significant changes in cross-border traffic This project will build on current interest in making better use of various device data to improve anticipation of increasing border arrival rates and develop and test several approaches to forming predictions based on observable upstream traffic characteristics soon enough to allow proactive booth openings (and closings).	\$75,000 • WCOG? CBP/CBSA? • US FHWA • WSDOT • BC MoT
	8	Regional mapping of near-border freight logistics This will be an investigation of near border freight logistics trends such as locations of carrier bases, location of production or distribution facilities, truck parking and/or trailer staging, shipment consolidation, etc. What aspects have changed? What are the implications or observable opportunities for infrastructure, operations, and policy? How stable are these conditions?	\$50,000 • WCOG? BPRI? UW? • US FHWA • WSDOT • BC MoT

INTERNATIONAL MOBILITY TRADE CORRIDOR PROJECT (IMTC)
2012 FUTURE PROJECT PRIORITY LIST

	Priority	Project Title	\$ Estimated Cost • Lead (DRAFT) • Possible partners (DRAFT)
Planning	9	Cross-border <u>commercial</u> vehicle intercept data collection This project will acquire and populate a regional economic model to estimate the effects of alternative investments and policy decisions—on both sides of the Cascade Gateway border. Estimated cost assumes five years of licensing, staff operation, and data that would include coverage of both U.S. and Canadian economic analysis zones.	\$650,000 • WCOG? BPRI? UW? • US FHWA • WSDOT • BC MoT • Transport Canada
	1	Expanded NEXUS lane at Hwy 11 Phase I This project will improve NEXUS lane separation and access with signs and improved lane deliniation from approximately 2nd Ave to 4th Ave.	\$80,000 • BC MoT? • US CBP
Construction	2	Expanded NEXUS lane at Hwy 11 Phase II This project will evaluate and possibly implement addition of right-of-way to extend a dedicated, southbound NEXUS lane on Highway 11 to Vye Road.	\$7,500,000 • BC MoT? • US CBP
	3	Peace Arch/Douglas Bicycle and Pedestrian Route Improvements Depending on discussions among stakeholder agencies and municipalities, this project would complete design and improvement of pedestrian and bicycle pathways and way-finding strategies to complement recently enhanced U.S. and Canadian border clearance facilities for bikers and walkers.	\$70,000 • WA State Parks? • City of Blaine • WSDOT • US CBP
	4	SR 539 Congestion Relief: H Street to the Border Improved channelization of commercial and passenger vehicles approaching the border. Project will also provide infrastructure for potential operation of trusted trade and traveler programs.	\$15,000,000 • WSDOT • CBSA
	5	Pacific Hwy Southbound Lane-to-booth Traffic Flow Improvements Border approach traffic lanes at this location unevenly distribute traffic volume to inspection capacity. This generates additional congestion and creates a gap between published border wait times and individual driver experiences. This project will develop a traffic management strategy and proposed improvements to optimally direct current traffic volumes to the corresponding open-booth capacity.	TBD • BC MoT • US CBP • WSDOT
	6	SR 539 Congestion Relief: Lynden to H Street This project will widen State Route 539 (Guide Meridian) to four lanes from the City of Lynden to H Street.	\$30,000,000 • WSDOT • CBSA
	-	Northbound Bus Routing at Pacific Highway - Preliminary Design This project will generate preliminary designs and cost estimates of alternative northbound bus routing to to and through the CBSA Pacific Highway port of entry.	TBD • WSDOT • CBSA
	-	Lane-to-booth lane striping at Peace Arch southbound There is no lane-striping, from US Interstate 5 through Peace Arch Park (three defined lanes) to the ten US CBP primary inspection booths. Because the final set of ATIS loop detectors are in this zone (one loop set for each of the ten booths), the lack of lane stripes results in many vehicles driving "between lanes" and being counted twice. This significantly over counts cars. Because of this situation, this set of loops has been taken out of the current wait-time calculations. Planning and painting lane stripes will keep vehicles driving over the loops and restore the integrity of this important detector station.	TBD • US CBP / US GSA • BC MoT • WSDOT
	-	Pacific Highway Northbound Active Lane Management This project will evaluate the feasibility of using dynamic over-lane LED signage to enable CBSA to synchronize booth designations at Pacific Highway's port-of-entry with varying designations of approach lanes for the booths (autos, NEXUS, bus, etc.)	TBD • WSDOT • CBSA

2013 Research & Peer Exchange Proposal

Preliminary information for internal agency review. Not for further distribution.

Title

Cascade Gateway cross-border passenger vehicle intercept data collection

Estimated cost

\$100,000

Brief description

Robust passenger vehicle data collection efforts have been completed twice before at Cascade Gateway ports-of-entry (between Washington State and Lower Mainland B.C.) – once in 1999/2000 and again in 2007/08. Having been five years, IMTC participants want to refresh these data which have been critical in evaluating numerous capital investments (e.g. NEXUS lanes), analyzing the impacts of policy changes (e.g. ID requirements), and providing trip matrix data for traffic models and other data-based parameters for quantitative analysis.

Field data collection would occur during two, two week periods in the summer of 2013 and the winter of 2014.

Products will include a database of well over 10,000 trip records with fields including TAZ level origin, destination, and residence; trip purpose; border clearance type (NEXUS, regular, Ready Lane); clearance document types, length of stay; and time, location, and direction of travel. Possible sub-instruments for this effort could be used to collect attitudinal data about awareness of changes to border operations, perceived sensitivity to economic conditions (like exchange rate or duty rules on cross-border purchases).

The Whatcom Council of Governments (WCOG) and the Border Policy Research Institute will need to use new tools to conduct the next round of vehicle intercept data collection. Hand-held PDAs used to collect and compile data in past efforts have worn out. Next efforts offer an opportunity to develop state-of-the-practice roadside data collection using wirelessly connected devices that populate a central database through a wireless access point.

Agencies involved

As conducted in 2007/08, this project would be undertaken jointly by the Whatcom Council of Governments and the Border Policy Research Institute. US CBP and CBSA have been critical participants with facilitating past efforts and this level of collaboration would be pursued again. Washington State DOT and British Columbia MOT have also been critical partners with permitting and safety equipment for roadside operations. Collaborations and input would also be sought through the US-Canada Transportation Border Working Group (TBWG) – especially the data subcommittee.

Contact

This document is dated October 4, 2012. For additional information, please contact Hugh Conroy, Whatcom Council of Governments, Bellingham, WA, 360 738-6498, hugh@wcog.org

2013 Research & Peer Exchange Proposal

Preliminary information for internal agency review. Not for further distribution.

Title

Developing Near-term predictions of significant changes in cross-border traffic volume

Estimated cost

\$75,000

Brief description

Models and queuing theory demonstrate that opening additional service capacity in response to a long backup is much less effective than preemptively opening more capacity and averting lengthy queues. While it's possible to develop a port-of-entry operations schedule around average arrival patterns, the inherent variation in actual vehicle arrival rates results in frequent border congestion and added travel time for the public. There is a huge opportunity for increasing efficiency by developing a border volume prediction capability that would support preemptive border traffic management.

Growing awareness among regional agency staff (of U.S. and Canadian inspection agencies and state and provincial transportation agencies) of the increasing amount of real-time traffic data being generated has led to interest in using these data to anticipate significant changes in border arrival volume and thereby open and close inspection booths accordingly. The basic idea is to develop a method of comparing real-time traffic patterns on the main border approach route with an historical database of the same patterns and their corresponding, travel-time adjusted border arrival volumes. Pattern analysis could be as simple as pre-border vehicle volume by minute or enhanced with other attributes from other devices (e.g. license plate readers, cell phone signals, blue tooth, inspection agency data, etc.)

The research objectives are to scope the feasibility and goals, develop and test some alternative observation and prediction methods, and document the work and findings.

Agencies involved

This project would be led by the Whatcom Council of Governments and stakeholder agencies would be involved through the International Mobility and Trade Corridor Program (IMTC). For an initial effort focused on arrival volume prediction for CBSA's Douglas POE, collaborating agencies would include CBSA, WCOG, WSDOT, and possibly BPRI, University of Washington Transportation Research Center, and BC TransLink. Collaborations and input would also be sought through the US-Canada Transportation Border Working Group (TBWG) – especially the technology subcommittee and the Border Wait time Working Group.

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Title

Regional mapping of near-border freight logistics

Estimated cost

\$20,000

Brief description

Many who are familiar with cross-border trade and travel in the Cascade Gateway border region will assert that cross-border freight business practices have changed in the last decade. Example observations include: •Carrier base operations are shifting east, •Notable amounts of manufacturing and/or distribution operations have shifted south (across the border), •There is a growing market for truck and trailer parking and staging in U.S. border communities, and •There is a growing amount of freight consolidation operations and services in U.S. border communities.

The research proposed for funding here would investigate the above and other trends, verify or refute the occurrence of these shifts, and document the work and findings. Analysis will include assessments of causes, descriptions of changed business behaviors and new (or newly arrived) types of trade-related services, and a review of how an improved understanding of these dynamics could inform cross-border transportation and inspection system management as well as binational policy approaches to trusted trader programs and freight strategies.

A secondary goal of this project would be to consider what level an analytical framework could be defined for replicating this type of research and analysis in other cross-border regions where freight-flows and the resulting demand for services would likely be different.

Agencies involved

This project would be led by the Whatcom Council of Governments and stakeholder entities would be involved through the International Mobility and Trade Corridor Project (IMTC). This work could be performed through collaboration with researchers at the Border Policy Research Institute (BPRI) at Western Washington University or the University of Washington. Collaboration and input would also be sought through the US-Canada Transportation Border Working Group (TBWG) – especially the infrastructure sub-committee.

Contact

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