Information sheets are prepared and maintained for each project currently approved by IMTC Program organizations for their 2013 list of shared priorities for Cascade Gateway border improvements. Information sheets are updated as needed and thus include a version-date. Current copies, inclusive of any changes to information below, are available in the future-projects section at <a href="https://doi.org/10.1001/journal.org

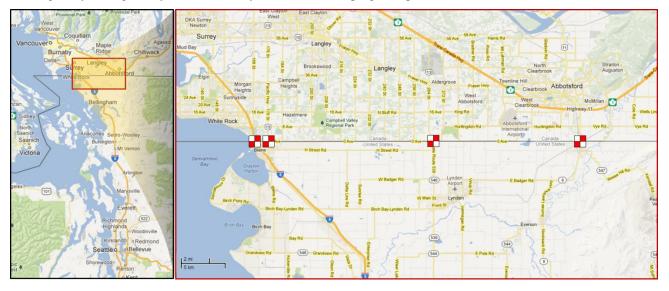
Assessing the Potential for Continued Expansion of NEXUS in the Cascade Gateway.

Overview

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.

Location

The map below shows the border crossings, related approach roads, and border-region road network of the Cascade Gateway –the geographic focus of this project. NEXUS currently operates at three of the four Cascade Gateway crossing. Only Aldergove-Lynden is currently without NEXUS program operations.



Why this project is needed

The underlying value of the NEXUS program is well understood. In addition to improving security by allowing inspection agencies to focus more time on lesser-known travelers, NEXUS is also a key strategy for maximizing throughput and transportation system capacity. Travelers in a vehicle using a NEXUS lane and booth(s) have an approximate average service time of 25 seconds compared to a regular booth per-vehicle service time of 66 seconds – 62 percent faster service time¹. With between 25 and 30 percent of all vehicles at Peace Arch/Douglas and Pacific Highway using the NEXUS lanes and booths, NEXUS is a critical component of the current operational profile.

The motivations for maximizing NEXUS benefits are intensifying because of the following:

- Passenger vehicle volumes at Cascade Gateway border crossings are growing dramatically up 18 percent from 2009 to 2010, another 25 percent from 2010 to 2011, and 2012 is currently on tracking at 14 percent over 2011.
- Expanding NEXUS is a biantionally promoted strategy under the U.S.-Canada Beyond the Border Action (BtB) Plan. Specifically under BtB, NEXUS lanes opened at the Sumas—Abbotsford-Huntingdon crossing

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¹ Based on analysis of southbound loop data from the BC MoT ATIS system

in August 2012 and expansion to Lynden-Aldergrove is listed for consideration. Expansion of NEXUS enrollment to the eligible portion of travelers though these crossings is an important part of leveraging investments in the underlying NEXUS infrastructure.

• More NEXUS enrollees in the cross-border traveler population will also complement strategies to make more use of vicinity-readable RFID – regardless of there being an open NEXUS booth.

Results

This project will result in:

- An analysis of remaining market potential for continued expansion of NEXUS enrollment among the population of regular cross-border travelers in the Cascade Gateway region.
- A descriptive review of existing NEXUS facilities in the Cascade Gateway region including possible improvements.
 - o Roadway infrastructure: dedicated lanes, lane placement, geometry.
 - o Booth infrastructure: static and dynamic, hardware performance.
 - o Border wait time systems: ongoing reliability of systems that can measure relative wait-times and proportion of NEXUS traffic.
 - Regional enrollment centers: Sufficiency of enrollment centers at the border and centers located in Seattle, WA and Vancouver, BC.

Estimated project Schedule

This project is estimated to take one year to complete.

Cost

This project is estimated to cost \$150,000

This project is not currently funded.

Administration, funding, and partnerships

This project could be done by the Whatcom Council of Governments, possibly in partnership with the Border Policy Research Institute. Funding support would be looked for and/or requested from U.S. Customs and Border Protection, Canada Border Services Agency, Washington State DOT, British Columbia MOT, Transport Canada, and U.S. Federal Highway Administration.