SR 539/Lynden-Aldergrove
Port of Entry Improvements

Application to the 2012 TIGER Discretionary Grants Program

Submitted to:
U.S. Department of Transportation
TIGER Discretionary Grants Program
www.dot.gov/tiger

Submitted by:
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Executive Summary
This project widens and dramatically improves a narrow, outdated section of state highway in Washington state leading to an outdated Canadian border crossing. The Lynden-Aldergrove port of entry is a bottleneck that creates long traffic backups in an area with growing freight and traveler needs. Canadian customs has secured funding to rebuild its 40-year-old, obsolete building and quadruple the size of its inspection facilities. The improved port of entry cannot operate effectively without corresponding improvements to the state highway, which is why these improvements are needed so urgently.

Once completed, the combined Washington State Department of Transportation (WSDOT) and Canada Border Services Administration (CBSA) projects will remove a key bottleneck by separating trucks, passenger cars and trusted travelers into separate lanes, reducing border wait times, and increasing throughput of both passenger and freight traffic. These improvements will facilitate international trade, particularly U.S. exports and Canadian retail activity in Washington state, to help achieve national economic objectives and state/provincial and regional priorities identified by:

- U.S.-Canada Beyond the Border Action Plan
- Washington Governor-British Columbia Premier Joint Transportation Executive Council
- International Trade and Mobility Corridor (IMTC) project
The proposed project exemplifies the type of partnership that the Obama-Harper *Beyond the Border Declaration* calls “imperative” for our two countries to support economic competitiveness, job creation and prosperity. If funded, WSDOT will use a design-build project delivery to ensure funds are obligated by June 2013 to quickly create private-sector jobs.

**An effective border crossing is important to the economy**

The Lynden-Aldergrove crossing is one of four border crossings that are known collectively as the *Cascade Gateway* (five-minute video about Cascade Gateway available at: [www.youtube.com/watch?v=SVcUdaXLid8](http://www.youtube.com/watch?v=SVcUdaXLid8)). These crossings connect major metropolitan areas on both sides of the border. The Cascade Gateway contains the third busiest passenger-vehicle crossing on the U.S.-Canada border, the fourth busiest commercial crossing, and carries more than $40 million (USD) every day in trade. Each of the four Washington-British Columbia crossings plays a vital role in supporting international trade with Canada, and are important for creating U.S. jobs:

- Eight million net U.S. jobs (4.4 percent of total U.S. employment in 2008) depend on trade with Canada;
- 174,000 jobs in Washington state depend on Canada–U.S. trade;
- More than 25 percent of all Whatcom County employment is related to Canadian-consumer activity.

**The project produces long-term benefits and generates jobs in the near-term**

- *Economic competitiveness:* This project will facilitate international trade to promote long-term growth in the productivity of the American economy.
- *Livability:* This project emerged from and is being developed in the context of a broad regional/bi-national cooperative planning effort involving federal, state/provincial and local public agencies and interested stakeholders in the business community. The resulting shorter waits and more direct routing will reduce delays and vehicle miles traveled, thereby reducing cost, increasing convenience, improving reliability, and supporting secure mobility across the U.S.-Canada border.
- *State of good repair:* This project will bring the highway up to standards to improve the efficiency of the transportation network, the movement of goods, and accessibility of people to facilitate economic growth.
- *Job creation:* 105 job years
- *Benefit-cost ratio:* 2.7 (at 3 percent discount rate)
• **Innovation:** This project incorporates an innovative project-delivery method, and implements innovative approaches to maximizing efficiency by supporting trusted traveler programs and using Intelligent Transportation Systems (ITS).

• **Partnerships:** This priority project emerged from partnerships at multiple levels: bi-national, state/province, regional, and a direct agency-to-agency collaboration.

If awarded, TIGER funds will be obligated by June 2013

• Preliminary design is already under way, and right-of-way funding is secured
• NEPA will be completed by November 2012
• CBSA will begin building its port of entry facility in 2013
• Innovative design-build delivery will ensure obligation of funds by June 2013.

Improving and expanding this border crossing, through cooperation with Canada, is an investment in infrastructure and technology that will help meet the modern-day demands of a growing international economy with our closest trade partners. By widening the highway, adding capacity, and preserving the highway, we can match and complement the much-needed, state-of-the-art customs inspection station that Canadian Customs will build in 2013 to accommodate northbound drivers and freight exporters. Funding this proposal – the corresponding highway project - is a critical element of improving efficiency at the Lynden-Aldergrove border crossing to generate economic benefits that serve our nation, Washington state and the local region.
Table of contents

I. Project Description ........................................................................................................... 1
   Why is an efficient border crossing important for the U.S. economy? ............................... 4
   Key transportation challenges .......................................................................................... 7
II. Project Parties .................................................................................................................. 9
III. Grant Funds and Sources/Uses of Project Funds .............................................................. 9
IV. Selection Criteria ........................................................................................................ 11
   a. Long-Term Outcomes .................................................................................................. 11
      i. State of Good Repair ................................................................................................. 11
      ii. Economic Competitiveness .................................................................................. 13
      iii. Livability ................................................................................................................ 14
      iv. Environmental Sustainability ............................................................................... 15
      v. Safety ....................................................................................................................... 15
   b. Job Creation and Near-Term Economic Activity ............................................................ 16
   c. Innovation .................................................................................................................... 17
   d. Partnerships ................................................................................................................ 18
   e. Results of Benefit-Cost Analysis ................................................................................. 19
V. Project Readiness and NEPA ....................................................................................... 21
   i. Project schedule .......................................................................................................... 21
   ii. Environmental approvals ......................................................................................... 22
   iii. Legislative approvals .............................................................................................. 22
   iv. State and local planning ........................................................................................... 23
   v. Technical feasibility ................................................................................................... 24
   vi. Financial feasibility .................................................................................................. 24
VI. Federal Wage Rate Certification .................................................................................. 24
VII. Changes Since Pre-Application .................................................................................... 24

Appendix
   A: Job creation calculation
   B: Benefit-cost analysis and assumptions
   C: Letters of support
   D: Federal wage rate certification
I. Project Description
The primary focus of this project is to improve the northbound section of SR 539 connecting to a soon-to-be-expanded Canadian Customs facility. This project widens the existing single northbound lane to the Canadian Customs facility by adding a lane and separate truck spur, widening the shoulder, and bringing the highway up to current standards. Canadian customs has secured funding to rebuild its 40-year-old, obsolete building and quadruple the size of its inspection facilities. The improved port of entry cannot operate effectively without corresponding improvements to the state highway, which is why these improvements are needed so urgently.

Location
The proposed project extends along the last mile of SR 539 leading up to the U.S.-Canada border in Lynden, WA, which is in Whatcom County. The project is located in a rural location but serves international commerce passing through two major metropolitan areas: Seattle, WA, and Vancouver, British Columbia. State Route 539 connects the Township of Langley and the Vancouver metro area in British Columbia, Canada, to commercial and industrial centers in Washington via I-5 in Bellingham.

Objectives
The SR 539/Lynden-Aldergrove Port of Entry project will significantly increase capacity that will address long-term congestion, safety, and freight needs at the second busiest commercial port of entry in the Cascade Gateway.
CBSA will rebuild its facility with new passenger-car facilities, a hi/low booth for trucks, and a dedicated NEXUS-inspection booth for trusted travelers. NEXUS is an innovative transportation strategy that improves port security and makes more efficient use of highway infrastructure to move more travelers in less time.

**Features and benefits**

This highway project will remove a key bottleneck by separating trucks, passenger cars and trusted travelers into separate lanes, reducing border crossing wait times and realizing more throughput of both passenger traffic and freight (see project illustration, p. 3). Specifically, this project will:

- Add a dedicated lane northbound for NEXUS to reduce wait times and increase security
- Construct a northbound two-lane truck spur to separate commercial and passenger vehicles
- Widen the northbound shoulder to 14 feet to meet standards and allow trucks to bypass passenger-vehicle backups
- Expand/enhance existing Advanced Traveler Information System (ATIS)/Intelligent Transportation System (ITS) to inform travelers about additional crossing opportunities
- Add stormwater detention ponds and water treatment systems to improve water quality
- Correct deficient turning radius for merging onto southbound SR 539 from the U.S. inspection facility
- Flatten slopes along the edge of the roadway to improve safety (corrects existing slope from 2:1 to 4:1)
- Bring lane widths up to standard

**Results**

The project will provide more capacity, realize more throughput, and make more information available for travelers. Improved freight access will reduce shipping costs and travel times for U.S. exports. These innovations will also make better use of infrastructure we previously built.

**Estimated cost**

Current project-cost estimates, based on approximately 30 percent design, are shown in the table on the right:

<table>
<thead>
<tr>
<th>Project phase</th>
<th>Total cost</th>
<th>Secured funding</th>
<th>TIGER request</th>
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<tbody>
<tr>
<td>Preliminary engineering</td>
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<td>$1,020,550</td>
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<td>Right-of-way</td>
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<td>Construction</td>
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<td>$132,500</td>
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<td><strong>Total</strong></td>
<td>$9,162,010</td>
<td>$2,250,000</td>
<td>$6,912,010</td>
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*Note: Total PE costs include $250,000 for an initial preliminary engineering phase, which is currently under way. The cost estimate for remaining preliminary engineering to complete the project is $1,183,970.*
SR 539/Lynden-Aldergrove Port of Entry Improvements

Existing SR 539
- One 11-foot lane in each direction
- One 4-foot shoulder in each direction
- Deep drainage ditches abut both shoulders
- Steep slopes
- Aging pavement
- No NEXUS

Improved SR 539
- Improved turning radius for vehicles leaving customs and entering southbound SR 539
- Preserves aging pavement, flattens slopes, implements stormwater treatment, updates Advanced Traveler Information Systems (ATIS)

- Adds designated NEXUS lane
- Adds truck spur
- Shared Cars/Truck lane
- 14-foot outside shoulder (could become designated truck lane with future restriping)
Why is an efficient border crossing important for the U.S. economy?

The Lynden-Aldergrove crossing is one of four crossings that make up the Cascade Gateway. These four land-border ports of entry connect Western Washington state and the Lower Mainland of British Columbia, connecting a high volume, U.S.-Canada trade-and-travel corridor that serves the West Coast of North America. Roughly 75 percent of all trade and travel between British Columbia and Washington state occurs in the Cascade Gateway. More than 25,000 cars and 2,700 trucks cross the Cascade Gateway every day, carrying more than $40 million (USD) in daily trade. While much of the Cascade Gateway is in a rural location, it serves our national interests in exports, ongoing travel and business connections with Canada. It also serves long-standing social and cultural ties that have spanned the border for generations.

Cascade Gateway border crossings

These crossings serve the freight transportation needs of regional, national and international trade. In a 2009 Commercial Vehicle Operations study, about 75 percent of freight that crosses through the Cascade Gateway is bound for or coming from Washington state. The remaining 25 percent of long-haul imports and exports come from outside of Washington1.

Cascade Gateway freight transportation demand generators include exports from regional industries (agriculture, manufacturing), west coast freight distribution, and intermodal connections between international marine ports and railroads terminals. This geographic distribution validates the national attention that USDOT has given to, and should continue to give, high-volume, land-border ports of entry.

Cascade Gateway freight transportation demand generators include exports from regional industries (agriculture, manufacturing), west coast freight distribution, and intermodal connections between international marine ports and railroad terminals.

Growth in land use and the associated economic activity continues to move east within the lower mainland of British Columbia, Vancouver. Two thirds of British Columbia’s population - nearly three million people

- reside in Vancouver’s lower mainland, known as the Fraser Valley. This is very similar to Seattle’s urban centers in the Central Puget Sound region.

Previous investments by WSDOT, the B.C. Ministry of Transportation and Infrastructure and both U.S. and Canada customs agencies have maximized the capacity of the Peace Arch, Pacific Highway and Sumas border crossings. These three crossings are now operating beyond capacity.

The Lynden-Aldergrove crossing has had the least investment and is the most limited of the four crossings in the Cascade Gateway. It is only open from 8 a.m. to midnight daily. Both the U.S. and Canada facilities process passenger vehicles and permit-only commercial vehicles. Despite these limitations, the Lynden-Aldergrove crossing is a vital component of the Cascade Gateway system. It is one of three cross-border truck routes between the Vancouver lower mainland and Western Washington (the I-5 Peace Arch crossing is passenger vehicle only). In 2010, the Lynden-Aldergrove crossing accounted for nine percent of the total regional cross-border truck volume (95,000 annually) and 13 percent of the passenger-car volume (1,250,000 annually).²

**Freight:** In 2009, this vital port processed $322 million in Washington exports and $31 million in British Columbia exports. Northbound freight is very diverse – the top 80 percent is comprised of 16 commodity groups, making it important to several segments of our economy. In 2010, restrictions for northbound trucks were put in place due to inadequate processing facilities. Despite this impediment, demand for freight access at this location remains high and it still serves a regionally significant population of cross-border shippers.³ The proposed project includes improvements designed to support enhanced truck access in the future when CBSA operations no longer require pre-approved permits.

• **Personal and business travel:** A 2008 passenger-intercept survey revealed that shopping, vacation and recreation were responsible for 71 percent of summer auto trips and 62 percent of winter auto trips at this crossing. This supports regional economic goals.

• **Unique demands:** This U.S.-Canada port serves a distinct population of users. Based on comparisons of observed crossing choices and model assignments, Lynden-Aldergrove is not an “overflow route” for higher-volume crossings in the area, but the most efficient route for the shipments and carriers using it. Sixty percent of crossers at the Lynden-Aldergrove port of entry cross at least once every two months, and approximately 28 percent of crossers chose the Lynden-Aldergrove crossing specifically to avoid congestion at other ports. Improvements here are designed to maximize the existing corridor capacity, as well as absorb trips that will reduce congestion at the other, already busy Cascade Gateway crossings, thus extending their operational efficiencies as well.

Improvements at the Lynden-Aldergrove crossing are a critical to link continuing economic opportunities in the region. The project will not only help prevent trips from shifting and adding to the current congested conditions of other crossings, but will help to balance demand across all four Cascade Gateway crossings.

The Cascade Gateway is growing and developing quickly. Regional travel and trade result in frequent congestion of border crossings and the roads that serve them. The four Cascade Gateway crossings act as a system. If we improve connections at Lynden-Aldergrove, fewer trips will be diverted to other crossings. Despite huge investments, travel and trade continue to grow and during peak periods all crossings remain challenged. It is important to maximize improvements that reduce those impacts.

In the Cascade Gateway, Lynden-Aldergrove is among the easiest and least expensive to expand. This port improvement will benefit the other ports in the system by preserving an important route, thus reducing the length of trips and keeping traffic from other more congested and harder-to-expand facilities.

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5 IBID
**Contribution to United States economy:** The December 2011 Declaration by President Obama and Prime Minister Harper of Canada - *Beyond the Border: A Shared Vision for Perimeter Security and Economic Competitiveness* describes the importance of U.S.-Canada trade for the economies of both countries, noting that, “more than $250 billion of direct investment by each country in the other, and bilateral trade of more than half-a-trillion dollars a year in goods and services, create and sustain millions of jobs in both our countries”.

**Contribution to Washington state economy:** The Washington state - British Columbia 2012 Action Plan on Jobs, signed by Governor Gregoire and Premier Clark, highlights the economic interdependence of these two neighbors: “the jobs and standard of living of Washingtonians and British Columbians depend significantly on the open and secure movement of people, goods and services across our border, and therefore a need to facilitate legitimate cross-border trade and travel.”

**Contribution to Whatcom County regional economy:** The emphasis of the June 2011 Whatcom County Comprehensive Plan, on its economic ties with Canada, illustrate their importance for the regional economy.

**Key transportation challenges**

**Small and limited inspection facility**
The CBSA facility does not have any truck-inspection infrastructure other than an approach lane and small parking area. It is an old (built in 1972), operationally deficient facility, and CBSA has secured funding to construct a new building and expand their facilities. If funded, WSDOT’s project will provide corresponding highway improvements that provide a dedicated lane so the benefits of the new facility (efficiently process trusted travelers and reduce wait times for all traffic) can be fully realized.

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8 IBID


Operational inefficiencies due to unbalanced demand
The four Cascade Gateway crossings function as a system. Inadequate facilities for commercial vehicles and lack of NEXUS at the Lynden-Aldergrove crossing inefficiently shifts demand to other facilities that would be more difficult to expand. If funded, the highway improvements will reduce demand and corresponding wait times at the remaining three crossings, as well as vehicle miles traveled and greenhouse gas emissions due to route distortion.

Unpredictable and long border waits
Unpredictable and long waits lead to wasted time and increased greenhouse gas emissions. Ultimately this may serve as a disincentive for Canadians to travel to Washington state for tourism and retail activities. Expansion of the port screening facility and added highway capacity will improve efficiency.

Limited access for freight traffic
Lynden-Aldergrove serves a regionally significant population of cross-border shippers. While CBSA currently requires permits for trucks, they are considering broader commercial service in the future. This project includes a 14-foot shoulder that expedites truck access to the screening area. This shoulder could be converted to a dedicated truck lane when commercial inspection is expanded in the future.

Lack of alternative border access during emergency
Currently, of the four Cascade Gateway options, the Lynden-Aldergrove crossing has the most limited access. One northbound lane could not support additional flow as currently configured. Although emergencies are infrequent, when they occur this crossing is a close alternative to other Cascade Gateway options. Upgrades to the Lynden-Aldergrove port of entry would help to keep trade and traffic moving during an emergency.

Bi-national project implementation
Coordinating investments at borders is difficult due to the overlapping jurisdictions of federal inspection and state transportation mandates. This is even more difficult when coordination is required across the border. This project takes into account all funded CBSA facility developments and will coordinate highway construction to accommodate existing and future operations.

Data source: Cascade Gateway Border Data Warehouse (borderdatawarehouse.com) Compiled by: WCOG

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II. Project Parties
The Washington State Department of Transportation (WSDOT) was established in 1905. The agency is directed by Secretary Hammond and overseen by Governor Gregoire. WSDOT is a cabinet-level agency that builds, operates, and maintains the state highway system. WSDOT is also responsible for a number of local roads, railroads, small airports, ferry system, and multimodal alternatives to driving. WSDOT tracks, reports, and manages its programs and projects according to six interdependent transportation policy goals adopted by the Legislature in RCW Chapter 47.01.012. The six policy goals are safety, preservation, mobility (congestion relief), environment, stewardship, and economic vitality.

Although WSDOT is the sole party responsible for this application, WSDOT is developing the project in close coordination with the Canada Border Services Agency (CBSA). CBSA is a federal law enforcement agency that is responsible for border enforcement, immigration enforcement and custom services. They are a vital partner in this project because they are fully funding the redevelopment of the old and operationally deficient Lynden-Aldergrove border crossing facility and making improvements that will enhance operations, and facilitate NEXUS crossings at this port of entry.

III. Grant Funds and Sources/Uses of Project Funds

**TIGER Request: $6,912,010**
Project Total: $9,162,010
Our Canadian partners have secured the funding to develop the improvements needed north of the border. While the facility itself is fully funded by CBSA, U.S. highway improvements are needed for the port of entry to operate effectively. While the Canadian investment is not a match or calculated as part of our commitment, it does contribute and is necessary for this project to move forward. Simply put, it is the reason these improvements are needed so urgently. This request would fund the last improvement needed for the northbound port of entry into Canada.

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<td>Secured state funds</td>
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<td>Secured Coordinated Border Infrastructure funds</td>
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<td>TIGER funding request</td>
<td>$6,912,010</td>
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<tr>
<td><strong>Total</strong></td>
<td>$9,162,010</td>
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**Prior investments and leveraging of existing funds for Cascade Gateway priorities**
Dedicated federal Coordinated Border Infrastructure (CBI) funds have allowed WSDOT to focus on improving border infrastructure. However,
remaining funds are limited and there is uncertainty of CBI funding availability in the future. There is no assurance of the formula funding needed to start the project in time to meet the June 2013 deadline in the Obama-Harper Beyond the Border Action Plan. We hope to leverage remaining state and CBI funds with TIGER to move the project forward.

Recent WSDOT border investments include: SR 539 – Bellingham to Lynden widening, $169 million; SR 543 – Interstate 5 to Canadian Border – Additional lanes for freight, $49 million; SR 9 – Nooksack Road vicinity to Cherry Street, $18 million; and we continue to make operational improvements and expand the Advanced Traveler Information System (ATIS) – I-5, $8 million; SR 539/SR 9, $3 million. In addition, the U.S. and Canada recently completed construction of new port facilities at the Peace Arch-Douglas crossing, that represent more than $100 million in U.S. investment. These were all critical Cascade Gateway investments that help connect with international markets and spur economic advantages for the region.
IV. Selection Criteria

a. Long-Term Outcomes
This project expands and modifies an outdated SR 539 highway connection to an outdated Canadian port of entry by adding a lane, widening the shoulder, and bringing the highway up to current standards. The project will result in reduced delay and vehicle miles traveled to produce the following outcomes:

- Upgrades existing facilities in such poor condition that, if left unimproved, would threaten efficiency of the transportation network, movement of goods, accessibility of people and economic growth.
- Increases economic productivity of land, capital and labor.
- Has a significant effect on reducing the cost of transporting export cargo.
- Increase efficiency and effectiveness of all infrastructure, particularly efficiency for exports.
- Reduces congestion on existing transportation assets.
- Product of a collaborative planning process.
- Improve energy efficiency and reduce dependence on fossil fuels, reduce greenhouse gas emissions and decrease movement of people and goods by less efficient vehicles.
- Facilitates safe and secure travel across an international border.

i. State of Good Repair
The poor condition and lack of capacity at this section of SR 539 and associated port of entry facility makes the Lynden-Aldergrove crossing the weakest link in the Cascade Gateway system. This project will improve the efficiency of the transportation network by expanding the highway, updating aging infrastructure, incorporating innovative strategies such as NEXUS and ITS to gain more efficient throughput for the investment. The project implements regional plans to enhance this transportation network so it more efficiently improves mobility of goods. It will support long-term growth of the U.S. economy by improving freight access and potentially reducing passenger-wait times by 68 percent, which amounts to operating-costs savings, improved economic productivity, and helps our region remain competitive in this international market.

“Canada Border Services Agency’s (CBSA) Aldergrove Port of Entry (POE) has been identified as a priority for replacement under our major capital replacement plan. This facility, built in 1972 is no longer adequate for delivering the Agency’s various programs. Further, structural degradation has placed the option of repairs or renovation to the existing structure beyond economic feasibility. Therefore CBSA has begun planning for the complete redevelopment of Aldergrove POE.

In order to accommodate this project scope, some road re-alignment will be required both within Canada and the United States.”

Canada Border Services Agency
### State of good repair

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<tr>
<th>Outcome</th>
<th>Benefits</th>
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| Implements state, regional and local plans to maintain the transportation system in a state of good repair. | • This is part of a coordinated, bi-national effort to balance demand among the four region border crossings known as the Cascade Gateway. The effort incorporates strong, collaborative partnerships in the development and implementation of innovative operational solutions.  
• The highway is scheduled to be repaved in 2015, as part of WSDOT’s lowest life-cycle paving program.  
• Funding also would allow WSDOT to upgrade the highway to modern safety standards by widening narrow lanes and shoulders. |
| Upgrades existing facilities in such poor condition that, if left unimproved, would threaten efficiency of the transportation network, movement of goods, accessibility of people and economic growth. | • The Canadian border agency has funding and plans to upgrade their port of entry because it’s old and obsolete. The problem is that today there’s only one lane approaching the Canadian border crossing. Without highway improvements, the new Canadian crossing won’t be able to effectively or efficiently screen and approve visitors.  
• A new, dedicated NEXUS lane will allow pre-approved travelers to quickly cross the border, and reduce wait times for all users.  
• Upgrades will facilitate freight processing, and make it possible to build a dedicated freight-only lane in the future.  
• Highway improvements will allow more vehicles to use the crossing, reduce delays, and better balance demand at all four border crossings in the region.  
• These improvements will complement recent traveler information investments by WSDOT, B.C. Ministry of Transportation, FHWA and Transport Canada. New traffic cameras and road sensors provide real-time traffic, road and border conditions to drivers, helping them make informed decisions about when and where to travel. |
| Provides sustainable revenue for long-term operations and maintenance. | • WSDOT’s 2009-2015 Strategic Plan policy states that it will maintain, preserve and extend the life and utility of prior investments in transportation systems and services. |
ii. Economic Competitiveness

Expanding access to this port of entry optimizes the use of available infrastructure and will increase border efficiency, making crossing times quicker and more predictable. This improved infrastructure, for freight mobility and personal travel, facilitates international trade in the Cascade Gateway. It will reduce shipping and travel times for U.S. exports and promote long-term growth and increased productivity of the American economy.

“`The Lynden-Aldergrove border crossing has long been an important route for regional exports especially agricultural goods and construction materials. For regional travel and tourism, it is a well-known route for Northwest Washington recreation destinations and rural economies that depend on access by visitors from the populous Vancouver, B.C. metro area.”`

James G. Miller, Executive Director, Whatcom Council of Governments

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<tr>
<th>Outcome</th>
<th>Benefits</th>
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| Increases economic productivity of land, capital and labor | • As it is today, people wait in long lines at the border. Highway improvements will help expand the border crossing, shorten lines and provide a more direct route for some travelers, saving time and money.  
• A new, dedicated NEXUS lane will allow pre-approved travelers to cross the border more quickly, and could reduce delays for all travelers by as much as 68 percent. This is a substantial savings for travelers, and promotes cross-border travel. |
| Has a significant effect on reducing the cost of transporting export cargo | • An analysis found that if freight was no longer able to cross at the Lynden-Aldergrove border crossing, they would have to drive an additional 123,300 miles per month to other crossings. This would substantially increase costs and valuable time for freight shippers and haulers. Plus, it would increase the burden on the remaining border crossings.  
• This project will help keep the vital border crossing open for freight. It also will significantly reduce delays and wait times.  
• If today’s passenger vehicles have to wait up to 50 minutes for inspection, and this project reduces that by 68 percent, it will provide significant economic benefits. |
| Increase efficiency and effectiveness of all infrastructure, particularly efficiency for exports | • The Lynden-Aldergrove crossing is the weakest of the four region border crossings. In the event of an emergency at one of the other three border crossings in the region, the Lynden-Aldergrove crossing would be unable to accommodate the influx of travelers. Without viable alternate routes, a closure at any of the border crossings in the region would have a significant economic impact.  
• The proposed project will reduce wait times by adding capacity and increasing throughput, specifically by adding a NEXUS lane and reducing the inspection and approval time for pre-approved travelers.  
• The project will improve efficiency at this crossing and the other three region border crossings. |

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### iii. Livability

This project emerged from and is being developed in the context of a broad regional/bi-national cooperative planning effort. The project will enhance livability by better connecting communities separated by the border. This will broaden economic opportunities by creating predictable access for consumers and expanding new technologies that help communicate the best travel options available. It will help achieve broad community economic goals; it will relieve negative effects resulting from idling vehicles waiting in border congestion; and reduce vehicle miles traveled by enhancing a more direct route.

> “This project is not only consistent with our community vision but also implements the International Trade Mobility Corridor Project vision and the U.S.-Canada Beyond the Border action plan. This project was developed after extensive joint planning and will significantly improve the cross-border connections that will serve international travel for years to come.”

**Scott Korthuis, Mayor, City of Lynden**

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<tr>
<th>Outcome</th>
<th>Benefits</th>
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| Enhances user mobility through more convenient transportation options   | • Improving the capacity and efficiency at the Lynden-Aldergrove crossing, and the other three region border crossings, helps balance our concurrent pursuit of security and mobility.  
• Travelers will have shorter wait times and a more direct route available, which reduces their costs, increases convenience, improves reliability, and supports secure mobility across the U.S.-Canada border.  
• The NEXUS lane will save pre-approved travelers a substantial amount of time and money when crossing the border.  
• Increases viable transportation choices by reducing congestion and improving travel-time reliability for multiple users. This will provide consumers more predictable scheduling, making it more attractive to travel when they want to.  
• The project will improve access for more travelers to more commercial markets, tourist activities, retail shopping, and jobs. |
| Reduces congestion on existing transportation assets                     | • With improvements at the Lynden-Aldergrove crossing, more travelers will be able to use the crossing and spend less time waiting, which will reduce wait times at this crossing and help to better manage demand at all four region border crossings. |
| Makes goods, commodities and services more readily available            | • During 2008, the Aldergrove-Lynden port saw $38 million USD of goods exported from British Columbia. (Technical Assessment of the Aldergrove-Lynden port of entry.)                                                                                                                                 |
| Planning process                                                        | • This priority project emerged from partnerships at multiple levels: bi-national (U.S.-Canada Beyond the Border, 2011), state/province (Joint cabinet meetings since 1996; Joint Transportation Executive Council since 2009), regional (International Trade and Mobility Corridor project since 1997), and direct agency-to-agency collaboration (WSDOT and CBSA). |
| Users served                                                            | • In 2010, the Lynden Aldergrove crossing accounted for nine percent of the regional cross-border truck volume (95,000 annually) and 13 percent of the passenger car volume (1,250,000 annually). Expansion provided by the proposed project will support additional trips while reducing volumes at other ports. |
iv. Environmental Sustainability

WSDOT is committed to increasing sustainable transportation. Beyond improving system performance, this project promotes a more environmentally-sustainable transportation system by reducing vehicle miles traveled in the Cascade Gateway and reducing greenhouse gas emissions resulting from idling during prolonged delays. It also incorporates innovative techniques such as NEXUS and Intelligent Transportation Systems to improve energy efficiency, and reduces dependence on fossil fuels. The project will benefit the environment by upgrading drainage to improve water quality and conveyance.

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<thead>
<tr>
<th>Outcome</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve energy efficiency and reduce dependence on fossil fuels, reduce greenhouse gas emissions and decrease movement of people and goods by less efficient vehicles.</td>
<td>• Improving border access and providing a more direct route will reduce the number of miles travelers have to drive, reduce fossil-fuel consumption (particularly by less efficient freight trucks), and prevent the release of 3.85 kt of GHG per year that would result from a closure of the Lynden-Aldergrove crossing to trucks. (Technical Assessment of the Aldergrove-Lyden port of entry)</td>
</tr>
<tr>
<td>Enhance the environment</td>
<td>• Improves air quality by reducing idling at the port of entry, thus reducing greenhouse gas emissions. • The project will be designed and constructed to avoid, minimize and mitigate impacts to the environment. • Implements new stormwater detention and treatment facilities that will improve drainage and water quality.</td>
</tr>
</tbody>
</table>

v. Safety

The project will separate trucks and cars to improve safety, and will improve system efficiency to help address the transportation challenge of secure mobility across the U.S.-Canada border. The strategic location of the Lynden-Aldergrove border crossing makes it a viable alternative to the three other border crossings in case an incident were to shut one of them down. Alternative port planning in case of an emergency is an important safety consideration.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce collisions</td>
<td>• Divides trucks and cars into separate lanes to reduce congestion, which contributes to rear-end crashes.</td>
</tr>
<tr>
<td>Secure travel</td>
<td>• Facilitates safe and secure travel across the U.S.-Canada border by supporting expansion of trusted traveler programs.</td>
</tr>
<tr>
<td>Alternate access for emergencies</td>
<td>• Strategic location provides improvements that will make this port a viable option in the event that an incident on Interstate 5 between Bellingham and Blaine shuts down those two closely-connected ports, or the Sumas Huntingdon crossing. Alternative port planning in case of an emergency is an important safety consideration.</td>
</tr>
</tbody>
</table>
b. Job Creation and Near-Term Economic Activity
This project will utilize the design-build process to help save money, expedite project implementation, and get jobs to the private sector more quickly. Preliminary design and NEPA work is currently under way with existing funds to facilitate a request for proposals by June 2013. Right-of-way acquisition and design-build will take place concurrently, resulting in cost savings and time savings that will get the project under way more quickly.

Full details regarding project schedule, environmental approvals, legislative approvals, state and local planning, and technical and financial feasibility can be found in section V. Project Readiness and NEPA, and Appendix A.

**Short-Term Job Creation by Project Phase**

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Spending by Phase*</th>
<th>Direct Job-Years**</th>
<th>Indirect Job-Years**</th>
<th>Induced Job-Years***</th>
<th>Total Job-Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>$1,439,610</td>
<td>5</td>
<td>5</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>RW*</td>
<td>$1,096,950</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CN</td>
<td>$6,625,450</td>
<td>22</td>
<td>22</td>
<td>43</td>
<td>86</td>
</tr>
<tr>
<td>Totals</td>
<td>$9,162,010</td>
<td>26</td>
<td>26</td>
<td>52</td>
<td>105</td>
</tr>
</tbody>
</table>

**Short-Term Job Creation by Time Period**

<table>
<thead>
<tr>
<th>Period</th>
<th>Spending 2012 dollars*</th>
<th>Total Direct, Indirect, and Induced Created Job-Hours**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 – Q3</td>
<td>$126,000</td>
<td>3,407</td>
</tr>
<tr>
<td>2012 - Q4</td>
<td>$566,000</td>
<td>8,464</td>
</tr>
<tr>
<td>2013 - Q1</td>
<td>$596,000</td>
<td>8,464</td>
</tr>
<tr>
<td>2013 - Q2</td>
<td>$842,005</td>
<td>10,202</td>
</tr>
<tr>
<td>2013 - Q3</td>
<td>$406,555</td>
<td>8,392</td>
</tr>
<tr>
<td>2013 - Q4</td>
<td>$89,000</td>
<td>2,407</td>
</tr>
<tr>
<td>2014 - Q1</td>
<td>$114,000</td>
<td>3,083</td>
</tr>
<tr>
<td>2014 - Q2</td>
<td>$1,668,000</td>
<td>45,105</td>
</tr>
<tr>
<td>2014 - Q3</td>
<td>$2,454,000</td>
<td>66,360</td>
</tr>
<tr>
<td>2014 - Q4</td>
<td>$2,022,000</td>
<td>54,678</td>
</tr>
<tr>
<td>2015 - Q1</td>
<td>$278,450</td>
<td>7,530</td>
</tr>
<tr>
<td>2015 - Q2</td>
<td>$0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>$9,162,010</td>
<td>218,092</td>
</tr>
</tbody>
</table>

*Assumes no jobs created by RW expenditures

**Assumes 25% of the job-hour benefits are attributed to "direct project" related activities, and another 25% are attributed to "indirect" project related activities, during project PE and CN phases.

***Induced job-hours represent the remaining 50% of the job-hour creation benefits attributed to jobs created or preserved in the local, regional or national economy during the project.
c. Innovation

This project incorporates an innovative project-delivery method and implements innovative approaches to maximizing efficiency by supporting trusted-traveler programs and using Intelligent Transportation Systems.

**NEXUS** – This approach combines border inspection and highway infrastructure to maximize throughput. The NEXUS program provides access to a dedicated commuter lane and primary booth for American and Canadian citizens who meet program criteria. Frequent, low-risk travelers can therefore bypass often-lengthy backups in general lanes. It can also benefit general traffic by removing a significant portion of travelers from the general lanes and thus speed the border-crossing process for everyone. NEXUS marketing for the Cascade Gateway has been and will continue to be vigorously pursued for all crossings because of the reduction in operational costs for the agencies, and the reduction of wait times for travelers. The use of NEXUS has been found to be one of the most cost effective ways to reduce wait times and congestion when compared to any other measure employed. It is a critical national objective to get it implemented at the Lynden-Aldergrove crossing, as well as the Sumas-Abbotsford Huntingdon crossing, so it will further benefit the Cascade Gateway system as whole.

**Cascade Gateway Advanced Traveler Information System (ATIS)**: The project supports WSDOT’s efficiency investments in Intelligent Transportation Systems. Providing timely information about border wait times on our website, via social media, and on variable message signs encourages travelers to “know before you go”. It helps passenger vehicles and freight carriers decide when to travel, and helps them examine border crossing options to avoid lengthy waits. ATIS technology also provides attractive opportunities for market-based and public-private approaches to reducing congestion, such as emerging, market-based, real-time routing services, which helps disseminate information as needed. Readily available and attractive applications using this data have been shown to reduce demand during peak travel.

**Design-build project delivery**: Design-build is a method of project delivery in which WSDOT executes a single contract with one entity (the Design-Builder) for design and construction services to provide a finished product. WSDOT’s current design-bid-build project delivery system is effective in advancing projects through the
developmental stages of project scoping, concept design, environmental compliance efforts, and preliminary and advanced design, while ensuring conformance with design criteria and quality standards. The resulting design is packaged in a formal contract document that is used in a bidding process, where the construction contract is awarded to the lowest responsive bidder.

d. Partnerships
Collaborative roles amongst many different interests have been fostered through the common interest of improving crossing times, enhancing security, and developing cost-effective solutions that improve the livability of our region. This priority project emerged from partnerships at multiple levels: bi-national, state/province, regional, and a direct agency-to-agency collaboration.

**Bi-national partnership:** In February 2011, President Obama and Canadian Prime Minister Harper announced a shared vision for perimeter security and economic competitiveness in the *U.S.-Canada Beyond the Border Declaration and Action Plan*. The plan calls for improvements to the Canadian border inspection facility at Lynden-Aldergrove, including addition of a dedicated booth for NEXUS trusted travelers. Completion of WSDOT’s SR 539 project is needed for the booth to operate effectively.

**State/Province partnership:** Washington Governor Gregoire and former British Columbia Premier Campbell signed the Memorandum on Action on Regional Transportation and Planning in October 2009 and formed the British Columbia – Washington State Joint Transportation Executive Council (JTEC). This project fulfills recommendations adopted by JTEC to provide for reliable cross-border connections and improve efficiencies by reducing the need to travel further to get to appointed designations. Currently, CBSA has no plans to expand their limited truck-inspection infrastructure. However, both BC Ministry of Transportation and WSDOT are encouraging CBSA to incorporate full-service commercial processing to support the demand for international trade at this crossing.

**Regional, bi-national partnership:** The International Mobility and Trade Corridor Project (IMTC) is a U.S.-
Canada coalition of business and government entities that identifies and promotes improvements to mobility and security for the four border crossings connecting Whatcom County, WA, and the Lower Mainland of British Columbia. Since 1997, IMTC has been led by the Whatcom Council of Governments and has served as a model of regional coordination on border issues, establishing a coordinated and collaborative process with the more than 60 entities: government agencies, non-governmental organizations, elected representatives, and industry associations. Further information on the IMTC can be found at: [www.wcog.org/Border.aspx](http://www.wcog.org/Border.aspx).

Through the careful planning and prioritization of this group, British Columbia and Washington state have invested millions of dollars in cross-border economic generators. Investment at the Lynden-Aldergrove crossing has been strategically prioritized by the partnership because it serves a distinct population for whom the crossing is part of the most efficient route.

**Agency-to-agency partnership:** WSDOT works very closely with Canada Border Services Agency (CBSA) because they manage the inspection facility that requires direct access from our state highways. Such collaboration is needed for the port of entry to function cohesively. CBSA has secured funding for the redevelopment of their facility but still needs highway improvements to support access to the enhancement. TIGER funds are being requested as the last investment needed to get this improvement developed in conjunction with CBSA’s facility expansion. WSDOT will be the last partner to secure the funds needed to finish this work.

**e. Results of Benefit-Cost Analysis**

Our benefit-cost analysis (BCA) follows the guidance set forth in the TIGER BCA Resource Guide. The guide identifies a number of cost-benefit categories that may be considered. We reviewed each of the categories to determine the availability of objective and reliable data for inclusion in our BCA.

The total project benefit-cost ratio, based on anticipated project design and construction costs, as well as all monetized benefits, including travel time and emissions reductions, are estimated to be 2.7:1 and 1.9:1 using 3 percent and 7 percent discount rates, respectively. Project costs begin to accrue in 2012 and continue into 2015. The project is estimated to be completed in early 2015. Benefits begin accruing in 2015 and continue through 2034 over the project’s estimated useful life.

**Benefit-Cost Summary at 3 percent and 7 percent Discount Rates**

<table>
<thead>
<tr>
<th>Benefit/Cost Summary @ 3% and 7% discount Rates</th>
<th>3%</th>
<th>7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Value of Benefits</td>
<td>$23,457,179</td>
<td>$15,526,696</td>
</tr>
<tr>
<td>Present Value of Direct Project Costs (PE, RW and CN)</td>
<td>$8,722,829</td>
<td>$8,192,343</td>
</tr>
<tr>
<td>Benefit/Cost Ratio</td>
<td>2.7</td>
<td>1.9</td>
</tr>
</tbody>
</table>

**Methodology**

Without a reliable forecasting model that accounts for these economic factors, we are not able to forecast changes in annual traffic flows at the proposed project site. Therefore, we have taken a
conservative approach and are using the vehicle travel volumes from 2010 for each future year in our BCA analysis without any growth (or reduction) in volume.

A summary is provided below. Refer to Appendix B for a detailed list of assumptions, calculations and spreadsheets used to determine the benefit-cost ratios for the proposed project.

**Travel Time Reduction Benefits – included in BCA**
A wealth of historical vehicle-travel volume data exists for the proposed project site. More recently, data for average travel delay has been collected which enables us to estimate average and cumulative delay for the year 2010. The historical data also shows significant variability in traffic volumes at the proposed project location over the past 20 years. This variability is attributed to a number of economic factors:
- Fluctuations in U.S.-Canada currency exchange rates
- Fluctuations in commodity movements via trucks crossing the U.S.-Canada border
- Population growth in British Columbia and Western Washington
- Changes in retail sales tax policies in British Columbia and Canada
- Retail commodity prices and availability

**Emissions Reduction Benefits – included in BCA**
The basis of our travel-time evaluation is a finding of reduced vehicle-idling time attributed to the proposed project. A variety of sources were used to convert idling-time reductions over the life of the proposed project into reduced gasoline and diesel fuel consumption, and commensurate reductions in emissions. Our BCA includes reductions in carbon dioxide, and where conversion factors were available, for nitrogen oxides and particulate matter as well. Refer to Appendix B for information regarding sources of emission-reduction factors and calculations.

**Reduced Gas Consumption – included in BCA**
The reduced consumption of gasoline and fuel consumption calculation, used in the emissions reduction determination, also provides a benefit to the driver through reduced fuel expenses. We used an average annual cost of $3.50 per gallon of fuel in our calculation.

**Collision Reduction Benefits – not included in BCA**
We evaluated detailed collision history for the most recent five years of available data (2006 – 2010) to determine if the type, severity and frequency of collisions warranted the additional analysis necessary for inclusion in the BCA. Over the five-year period, there were 12 collisions that resulted in one serious injury, three resulted in minor injuries, and eight resulted in property damage only. Our data shows that the serious-injury collision and one of the minor-injury collisions were rear-end collisions associated with traffic queues on the highway. The proposed project would significantly reduce the frequency and length of traffic queues on the highway and would reduce the risk for rear-end collisions. We did not include a collision analysis in the BCA, as the affect on the benefit-cost ratio would be small given the frequency of collisions.

**Balancing Demand Across the Cascade Gateway Crossing – not included in BCA**
Adding northbound capacity at the Lynden-Aldergrove crossing not only benefits travelers and freight currently using the crossing, it also provides much needed capacity for the Cascade
Gateway crossings as a whole. With the capacity improvements in place at the Lynden-Aldergrove crossing, we estimate that volumes may increase 20 percent at the crossing, drawing those trips away from the other three congested Cascade Gateway crossings. Additional analysis is needed to confirm the degree of benefit, thus we didn’t include the benefits in the BCA. The table below is an estimate of the annual benefits in reduced travel time, gas consumption, and overall border wait-time reductions across the Cascade Gateway crossings. Additional information regarding the assumptions and inputs used to create this table are listed in the Appendix B BCA spreadsheet in the “balancing demand” tab.

<table>
<thead>
<tr>
<th>Balancing Northbound Cascade Gateway Demand: Estimated Annual Benefit</th>
<th>Travel Time Saving</th>
<th>Border Wait Reduction</th>
<th>Reduced Gas Consumption</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Car Traffic</td>
<td>$136,240</td>
<td>$567,666</td>
<td>$121,197</td>
<td>$825,103</td>
</tr>
<tr>
<td>Truck (freight) Traffic</td>
<td>$60,279</td>
<td>$56,126</td>
<td>$24,590</td>
<td>$140,995</td>
</tr>
<tr>
<td>Total Benefit</td>
<td>$196,519</td>
<td>$623,792</td>
<td>$145,787</td>
<td>$966,097</td>
</tr>
</tbody>
</table>

V. Project Readiness and NEPA

i. Project schedule
The project is being designed by WSDOT now, and the funds have been secured for most of the design phase, and all of the right-of-way phase to prepare the project for construction.

<table>
<thead>
<tr>
<th>Design-build delivery schedule by milestone</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Milestones</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
</tr>
<tr>
<td>Preliminary Engineering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Approval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEPA Approval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare RFP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertisement Date RFP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notice to Proceed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Begin Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substantial Completion</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WSDOT is currently designing this project ($250,000 invested to date; $1,020,550 secured for PE), and has secured all the funds necessary for right of way ($1,096,950), and has secured $132,500 for construction. We require TIGER funds for the final phases of design and construction to complete the project. With these funds, we will be able to complete design and move to design-build so that TIGER funds will be obligated in June 2013, and the project is ready for use when the CBSA facility opens.
WSDOT began design in the fall of 2011, and we are working to complete the remaining discipline reports and their approvals with an anticipated Documented Categorical Exclusion (DCE) approval by November 2012. WSDOT will also finalize the right-of-way plans needed for property acquisition and attain design approval. Once NEPA approval is attained, right-of-way acquisition will begin. The final Wetland Mitigation Report will be completed and approved concurrently with the right-of-way acquisition.

Right-of-way acquisition
Right-of-way acquisition (four properties) won’t hold up obligation of funds because it will be completed during the design-build phase of the project. The right-of-way acquisition will be completed while the design-builders prepare their proposals. These two activities will be finished by the beginning of September 2013, several months after obligation of funds.

ii. Environmental approvals
WSDOT has initiated environmental documentation as part of our current preliminary engineering efforts – for which we have funding to complete to the 30-percent-design level. We anticipate completing NEPA by November 2012.

- **Planned and anticipated consultation:** Endangered Species Act concurrence from National Marine Fisheries Service (NMFS) and US Fish and Wildlife Service (USFWS); Section 106 concurrence from the Washington Department of Archeology and Historic Preservation (DAHP).
- **Proposed NEPA class of action:** This project has been scoped as a Documented Categorical Exclusion under NEPA. The following discipline reports will be required: Biological Assessments for threatened and endangered species; Wetland and Stream Assessment Report; Wetland Mitigation Report; Cultural Resources Survey (Section 106); Hazardous Materials Report; Farmland Conversion Review; and a possible Noise Study.
- **Estimate of time required to complete NEPA and federal approvals:** Environmental documentation in accordance with the NEPA is under way but not yet completed. The project has been scoped as Documented Categorical Exclusion under NEPA, which can be completed following informal consultation under the Endangered Species Act, and consultation under Section 106 of the National Historic Preservation Act. It is anticipated that NEPA will be completed in November 2012. The proposed project area was evaluated as part of a larger corridor-level NEPA review conducted several years ago, and the results of that effort will expedite the current NEPA review process. Turnaround time to complete the discipline reports is estimated at 90 days. Estimated time to complete informal ESA consultation with USFW and NOAA is 120 days. Once these are completed, we can commence the design-build process.

iii. Legislative approvals
WSDOT has secured appropriate approvals for this project. These represent partnerships across government agencies that serve various public-service missions, as well as private interests. The attached letters serve as evidence of support for this needed project.
iv. State and local planning

It has already been stated in this application that this project has had many partners and participants who have advised us in the development of this project. These partners range from international committees, security agencies, regional MPO/RTPO, to local chambers of commerce. This project is a priority for all these different agencies because it addresses congestion issues that impact them all. Below are adopted plans that reference the need for this project that have undergone formal approval and screening.

- The International Trade Mobility Corridor (IMTC) project priority list has this project as a regional priority. [http://resources.wcog.org/border/2012manual.pdf](http://resources.wcog.org/border/2012manual.pdf)
- Federal funding to facilitate preliminary engineering on the project was approved as part of the 2011 State Transportation Improvement Program. As new federal funding is added to the project this project will be included in the updated STIP. [http://www.wsdot.wa.gov/LocalPrograms/ProgramMgmt/STIP.htm](http://www.wsdot.wa.gov/LocalPrograms/ProgramMgmt/STIP.htm)
- The project implements a regionally coordinated economic development strategy that was developed by a U.S. coalition through the Whatcom County Northwest Economic Development Council. The Whatcom County Regional Economic Strategy can be found at [http://www.nwecon.org/resources/economic-strategy](http://www.nwecon.org/resources/economic-strategy)
v. Technical feasibility
WSDOT has the technical capacity to deliver this project on budget and on time. We pride ourselves on a successful delivery record, with 90 percent of projects on time and 86 percent under or on budget. (We record these accomplishments at: www.wsdot.wa.gov/accountability/GrayNotebook.pdf.) Below is a chart that identifies potential risks and risk-mitigation strategies that will be employed to keep this project on schedule and on budget.

<table>
<thead>
<tr>
<th>Potential risk</th>
<th>Mitigation strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right of way attained on time (four parcels)</td>
<td>• While there are not many parcels needed, there is one large parcel that will be needed for the widening and the utility relocation. To mitigate this risk, it will be asked that this parcel be pursued first, and all remaining parcels be pursued concurrently.</td>
</tr>
<tr>
<td>Wetland Mitigation Plan not approved on time</td>
<td>• Acquiring and designing a wetland mitigation site can be a challenge in most circumstances. For this project, there will be two options to mitigate for this. Currently, there is excess property at an existing wetland mitigation site that will be pursued. If it is not feasible to develop, the Lummi Nation has established a wetland mitigation bank and it is anticipated this will be ready to sell credits in time for this project.</td>
</tr>
<tr>
<td>Utilities not relocated in time (right-of-way related)</td>
<td>• Acquisition of the large parcel will be prioritized as this is the location of the relocated overhead power lines. If this parcel can be obtained by the summer of 2013, the utility relocation can take place during the RFP phase and into the design-builder’s design phase.</td>
</tr>
</tbody>
</table>

vi. Financial feasibility
The project financing will be complete, assuming the availability of the requested TIGER grant funds. Currently, WSDOT has secured 25 percent of the funds, including most of the preliminary engineering, and all of the right-of-way phase, and is requesting the additional 75 percent needed to construct the project.

VI. Federal Wage Rate Certification
Federal wage rate is attached. See Appendix D.

VII. Changes Since Pre-Application
The amount of funding WSDOT has secured increased to a total of $2,250,000. As a result, the request for TIGER grant funds has decreased to $6,912,010.