



NORTH SPOKANE
US 395
CORRIDOR

 **Washington State**
Department of Transportation

US 395 North Spokane Corridor BNSF Railway Structures/Realignment

TIGER ID Number: WSDOT55788



Application to the 2012 TIGER Discretionary Grants Program

Submitted To:

U.S. Department of Transportation
TIGER Discretionary Grants Program

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Executive Summary

US395 North Spokane Corridor BNSF Railway Structures/Realignment

TIGER ID Number: WSDOT55788

The Washington State Department of Transportation is seeking through this TIGER Discretionary Grant request **\$18.9 million of Federal funds**, with a **40%** match of **\$12.6 million State funds**, to provide for the continued construction of the US 395 North Spokane Corridor (NSC) located in Spokane, WA. Specifically, this project removes a choke point for continuation of the NSC south of the current interim terminus at the Freya Street interchange by relocation of 7.5 miles of BNSF Railway (BNSF) mainline, switching, and spur tracks, construction of two freeway structures over the BNSF tracks, and two pedestrian/bicycle structures, one over Freya Street and one over the BNSF mainline tracks. The project will also extend the previously constructed 5.5 mile pedestrian/bicycle trail by over one mile into the Hillyard neighborhood. This **\$31.5 million** project can be obligated by **May 6, 2013**.



- **State of Good Repair:** Aligns with longstanding regional transportation improvement plans and ensures that the area's transportation infrastructure can continue to meet increasing demand while reducing travel times.
- **Economic Competitiveness:** Improves access to over 500 acres of industrial land and 329 acres of underutilized residential property; contributes to economic competitiveness by travel time reductions of 9.4 million hours per year at a value of \$240 million/year; system efficiency of over 7.2 million tons of freight valued at \$13.5 billion/year.
- **Livability:** Provides increased mobility and neighborhood connectivity through extension of a pedestrian/bicycle trail into a distressed neighborhood; constructs multiple park and ride lots.
- **Environmental Sustainability:** CO2 emission changes are neutral; 6.5% average network fuel efficiency savings.
- **Safety:** Saves \$22 million annually in societal costs related to collision reduction; 29 signalized intersections avoided by use of the NSC; updates an aging rail system and maintains operational and rail worker safety; provides community connectivity over BNSF property.
- **Job Creation and Economic Activity:** Generates 410 job-years of direct, indirect and induced jobs over the life of the TIGER Discretionary Grant request.
- **Partnership:** Incorporates strong and collaborative input from a variety of local, regional and state jurisdictions, transit and transportation agencies reflecting broad consensus and support for the project.

I. Project Description

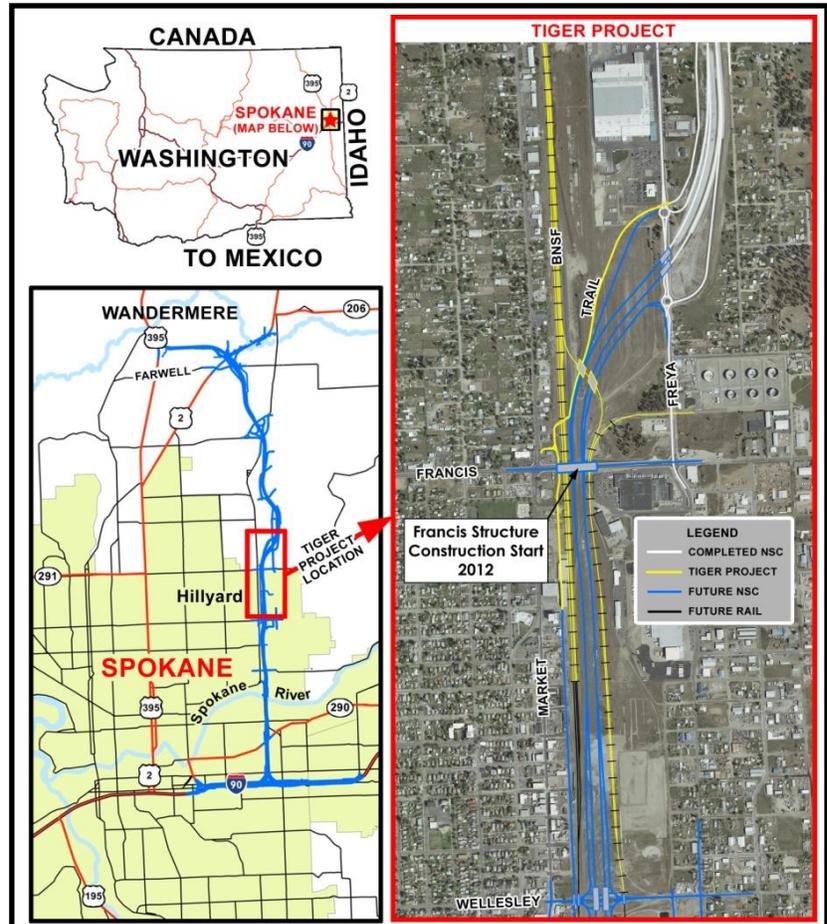
Introduction

This TIGER Discretionary Grant application provides for the continued construction of the US 395 North Spokane Corridor (NSC) located in Spokane, WA. Specifically, this project removes a choke point for continuation of the NSC south of the current interim terminus at the Freya Street interchange by relocation of 7.5 miles of BNSF Railway (BNSF) mainline, switching, and spur tracks, construction of two freeway structures over the BNSF tracks, and two pedestrian/bicycle structures, one over Freya Street and one over the BNSF mainline tracks. The project will also extend the previously constructed 5.5 mile pedestrian/bicycle trail by over one mile into the Hillyard neighborhood.

The US 395 North Spokane Corridor BNSF Railway Structures and Realignment Project is a part of the larger North Spokane Corridor Project. Throughout this document the benefits of the NSC are described. The relocation

of the BNSF mainline railroad tracks and associated structures over the tracks is the next fundable element in the progression of projects to realizing all of the benefits of the overall NSC facility. Completion of this segment of the NSC and track realignment will provide lasting, long term economic benefits to one of the most economically distressed areas of Spokane, the Hillyard neighborhood and the surrounding industrial area. This project will also provide improved neighborhood connectivity from the extension of the pedestrian/bicycle trail.

The NSC is a completely new transportation route located in the greater Spokane, Washington metropolitan area. When completed, this 10.5 mile Corridor will provide a truly **multi-modal** transportation facility that includes a 60-mile per hour limited access roadway, a parallel pedestrian/bike trail, park and ride lots, and preservation of right of way for high capacity transportation. The NSC will provide a necessary link between Interstate 90 on the south end and existing US 2 and US 395 on the north end. This new facility, with portions currently open to traffic, contributes to the safe and efficient movement of freight and regional trips through this North American Free



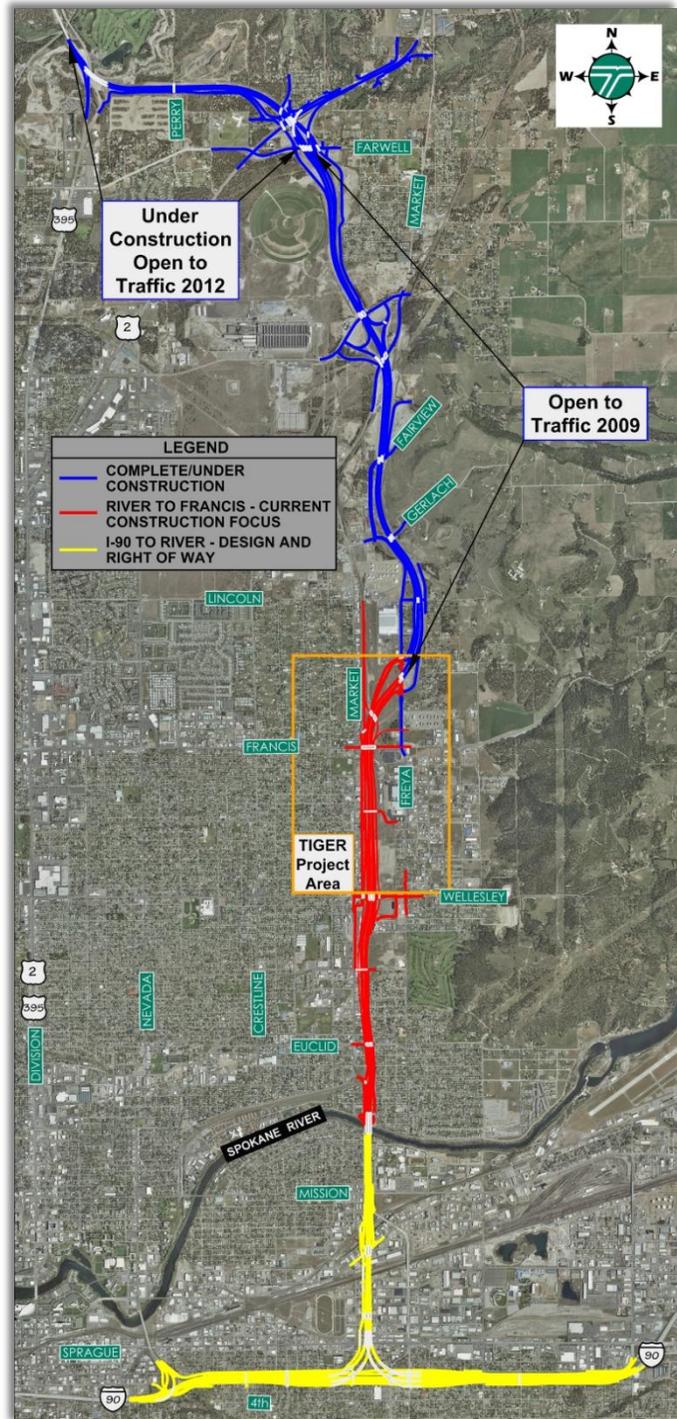
Trade Act (NAFTA) corridor, is overall neutral on greenhouse gas emissions, and creates both short and long term jobs. US 395 is listed 19th on the Congressional High Priority Corridor list on the National Highway System.

Background

The Spokane metropolitan area, with nearly 500,000 people, utilizes Interstate 90 for the vast majority of east/west regional trips through the area. This high speed facility was completed in 1967, with subsequent widening projects built to address growth and development occurring in both Washington and Idaho. However, there is no comparable facility for north/south trips through Spokane.

North/south traffic travels on the urban principal arterial street network. This results in regional passenger vehicle trips and freight traffic competing for capacity on the local arterial street system seriously impacting travel time, fuel usage, congestion, and safety. Routing these intra-regional trips and international freight and goods movements through neighborhoods, past schools, and congested retail centers, adversely impacts the livability of the region and impairs the ability to deliver timely public transportation schedules on many routes.

The idea of a North Spokane Corridor was originally conceived in the late 1940's and has been the subject of discussion and development ever since that time. In the mid to late 1990's, Washington State Department of Transportation (WSDOT) and the community made a concerted effort to identify the final alignment of the corridor. They recognized the need to take a multi-modal approach toward providing the region transportation choices rather than just a traditional highway project. As a result, significant interest from a wide variety of stakeholders resulted in a Final



Environmental Impact Statement (FEIS) being approved in April 1997. A supplement to the FEIS and re-evaluations were completed in September 2000 and May 2005.

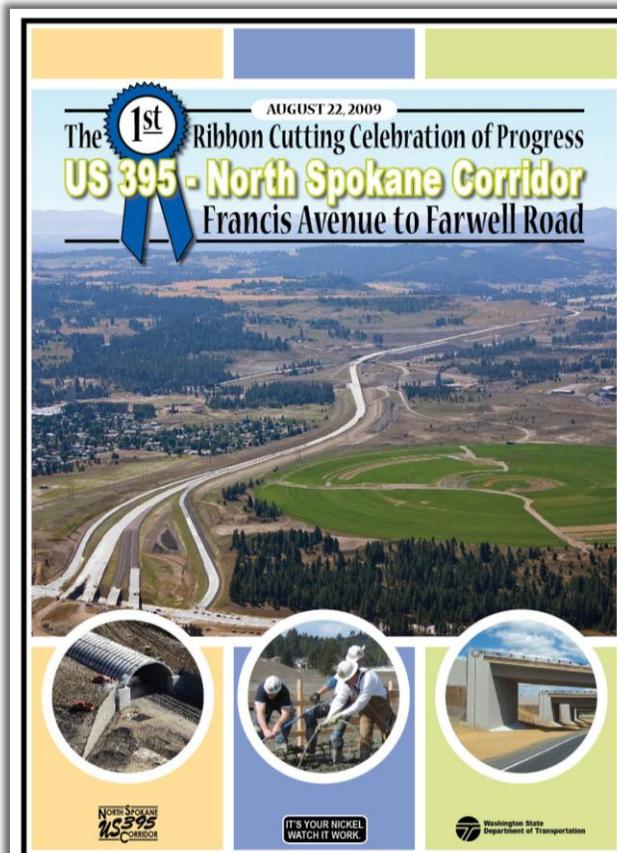
Progress

In August of 2001 construction on the North Spokane Corridor broke ground with the first project titled 'Hawthorne Road to US 2 - Grading'.

In 2003, the Washington State Legislature passed an additional 5-cent gasoline tax, which funded eight NSC construction projects. At the completion of all eight contracts, 5.5 miles of the 10 mile NSC project will be open to traffic. Seven of the eight contracts are complete, and the final project is scheduled for an early summer 2012 completion. About 3.7 miles of the 5.5 miles from Francis Avenue to Farwell Road



opened to traffic August 22, 2009, in a temporary two lane configuration.



In 2005, the Washington State Legislature established the Transportation Partnership Account which provided in part for a major right of way purchasing effort to begin along the Interstate 90 corridor for the connection of the NSC to Interstate 90. Approximately 470 residential properties are scheduled for purchase, with funding available until 2018. Approximately 285 of those have been purchased to date. Along with the right of way funding, preliminary engineering and construction funds were made available to construct noise abatements in the affected neighborhoods along I-90.

The first ribbon cutting ceremony was held August 22, 2009 and opened a 3.7 mile segment to traffic from Francis Avenue to US 2/Farwell Road. Both directions of traffic are temporarily using

the northbound alignment until construction of the southbound lanes is complete.

The NSC received \$35 million through the 2009 TIGER Grant application. The Tiger Grant allowed for the completion of 3.7 miles of the southbound lanes between



Francis Avenue and Farwell Road and the interchange at Parksmith Road. The southbound lanes and Parksmith Interchange will be fully operational in the summer of 2012, thus ending the temporary use of the northbound alignment for both directions of travel.

In the 2009 budget session, the Washington State Legislature allocated an additional \$28 million of funding for the North Spokane Corridor. These funds were targeted for right of way purchases and continued

development of cost saving design refinements for a three mile section from the Spokane River to Francis Avenue. This is the next logical piece of the corridor to construct after completion of the funded southbound lanes and Francis Avenue structure replacement.

Over the last two years, BNSF and WSDOT have collaborated in developing a design that is mutually beneficial. This process was iterative with many meetings held to fully develop the optimum design. The result of this effort contributed to a revised design which will save an estimated \$300 million--reducing the cost of the project in this area by over 50%. There is urgency in building the Spokane River to Francis Avenue segment as early as possible. Currently all of the staff for BNSF and WSDOT who worked on the cost saving design are ready to move forward with this project. While the design should stand over time, the positive synergy of having all of the stakeholders and personnel ready to move forward is an opportunity that should be capitalized on. With any design, there is risk to letting it be "shelved" for too long. Standards can change, stakeholder perceptions and needs can fluctuate and other outside issues can have an influence which may necessitate alterations. These alterations can be costly and time consuming. Much of this risk can be mitigated by funding this section of the NSC sooner than later.

In May of 2012, WSDOT will advertise a construction project to replace the Francis Avenue structure. This project will reconstruct the Francis Avenue structure over the BNSF mainline and spur tracks and provide the necessary clear span to accommodate the NSC. Completion is scheduled for Fall of 2013.

Financial

WSDOT uses a Cost Estimate Validation Process (CEVP) to verify project costs and risks to both cost and schedule. This analysis indicates the remaining cost to complete the corridor is \$1.3 billion in 2011 dollars which inflates to \$1.9 billion at year of expenditure with a projected 20 year build out. To date, the project has received a total of \$600 million in State and Federal funds. See section III for more detail.

Benefits/Need

The existing US 395 corridor carries over 7.2 million tons of freight (\$13.5 billion in value) annually through Spokane. Between 1993 and 2003, freight shipments on US 395 have increased 58%. In part, this increase resulted from the North American Free Trade Agreement (NAFTA) which expanded freight transport among Canada, the United States, and Mexico.

When completed, the NSC is neutral on greenhouse gas emissions (see results of Benefit-Cost Analysis attachment), improves safety by an estimated \$22 million in societal costs from collision reductions annually, and most importantly improves the livability of the Spokane metropolitan area.

The NSC project is also expected to reduce travel time through Spokane by an estimated 9.4 million hours each year, computing to a dollar savings of approximately \$240 million annually. This will be accomplished by directing international, interstate and regional through trips onto a facility without the congestion of a signalized surface street.

As a multi-use corridor, the NSC supports alternative transportation choices by providing park and ride lots, reserving space for high capacity transportation, and constructing a pedestrian/bicycle trail along the full 10.5 mile length of the corridor.

TIGER Discretionary Grant Request

This TIGER Discretionary Grant application provides for the continued construction of the US 395 North Spokane Corridor (NSC). Specifically, this project removes a choke point for continuation of the North Spokane Corridor south of the current interim terminus at the Freya Street interchange through the relocation of BNSF track, construction of structures over the BNSF spur tracks, including pedestrian/bicycle structures. Over the last two years BNSF and WSDOT have collaborated in developing a design that is mutually beneficial.

This TIGER Discretionary Grant request is for **\$18.9 million**, with a **40%** match by WSDOT at **\$12.6 million** to be used for construction. A detailed project budget can be found under section V (vi) Financial Feasibility– Detailed Project Cost. The project will be ready for funding obligation by **May 6, 2013**. A detailed project schedule can be found under section V (i) Project Schedule. Specific construction elements on this **\$31.5 million** project, as shown in yellow on the below maps, are:

- Relocates 7.5 miles of BNSF mainline, spur, and switching track to accommodate the extension of the US 395 travel lanes.
- Constructs two structures over the BNSF spur tracks to be used for the future mainline six lanes of the NSC.
- Constructs two pedestrian/bicycle structures, one over Freya Street and the other over the BNSF mainline tracks.
- Extends the NSC Children of the Sun pedestrian/bicycle trail by over one mile, connecting the trail into the Hillyard neighborhood and street system.
- Completes the earthwork for the NSC mainline alignment from the vicinity of Francis Avenue to Freya Street.

- Construction of this project will allow WSDOT and the Spokane region to maintain focus and momentum on completing the NSC to Interstate 90.

TIGER Grant request area is shown in yellow on the below maps.



II. Project Parties

The Washington State Department of Transportation (WSDOT) is the party seeking the grant. WSDOT is responsible for overseeing the state's highways, ferries and aviation programs, including planning and administrative activities to support public transportation and rail. Highways and bridges make up the largest portion of Washington's transportation system. WSDOT is responsible for more than 20,000 lane-miles of roadway, nearly 3,000 vehicular bridges and 524 other structures. While the State highway system accounts for less than 11% of the total roadway lane-miles, it accounts for over half, 56.2%, of the vehicle miles traveled.

Spokane Regional Transportation Council (SRTC), as the Metropolitan Planning Organization (MPO), included the overall NSC project in the Metropolitan Transportation Plan and prioritized the NSC as the number one project for the region. As the MPO, SRTC has also certified the NSC for meeting regional air quality conformity requirements under both U.S.C. Title 23 and Section 172 of the Clean Air Act.

This project is widely supported as the number one priority for the Spokane area. Recent letters of support for this TIGER Discretionary Grant Application include: Senator Patty Murray, Senator Maria Cantwell, Congresswoman Cathy McMorris Rodgers, State Senator Lisa Brown, Representative Andy Billig, Representative Timm Ormsby, Representative Kevin Parker, Representative Shelly Short, Representative Joel Kretz, Association of Northeast Washington Mayors (includes the City of Spokane), Spokane County, Spokane Transit Authority, the Spokane Regional Transportation Council, Inland Northwest Association of General Contractors, Greater Spokane Incorporated, BNSF Railway, Good Roads Association, Kalispel Tribe of Indians, Castlegar B.C. Chamber of Commerce, Acme Concrete Paving, Graham Construction, Spokane Regional Labor Council, Cowles Company, Avista Corp., Frank Gurney Inc., Haskins Steel Co. Inc., and the Hillyard neighborhood. Letters of support are attached to this application.

III. Grant Funds and Sources/Uses of Project Funds

The current amount being requested for the TIGER Discretionary Grant is **\$18.9 million**, with a **40% match** by WSDOT at **\$12.6 million**, for a total construction cost of **\$31.5 million**. The following table illustrates an expenditure aging plan with the first quarter starting in July 2013:

Project Funding Source Aging Plan

	Quarter 1*	Quarter 2	Quarter 3	Quarter 4	Quarter 5	Quarter 6
TIGER Federal Funds	\$3,600,000	\$3,300,000	\$2,400,000	\$4,800,000	\$3,600,000	\$1,200,000
WSDOT State Funds	\$2,400,000	\$2,200,000	\$1,600,000	\$3,200,000	\$2,400,000	\$800,000
Total	\$6,000,000	\$5,500,000	\$4,000,000	\$8,000,000	\$6,000,000	\$2,000,000

*For purposes of this chart, Quarter 1 starts July-September 2013

To date, the State of Washington has provided 78% of the funds to advance the overall NSC. The chart below includes \$35 million in Federal Funds received in 2009

from a TIGER competitive grant, and \$19 million from various competitive programs and Congressionally designated projects.

Financial Summary

State Funds	\$470 Million
Federal Funds	\$130 Million
Total Funds to Date	\$600 Million
Remaining Funding Required to Complete the NSC	\$1.3 Billion (1.9 Billion Y.O.E. in 20 Years)

*Y.O.E. – Year of Expenditure

IV. Selection Criteria

Primary Selection Criteria

a. Long-Term Outcomes

Washington's economic vitality and renowned livability depend on reliable, responsible and sustainable transportation. Therefore, WSDOT created the Moving Washington initiative. The objectives are clear and measurable and rely on partnerships that invest for the long term. Moving Washington is WSDOT's framework for making transparent, cost-effective decisions that keep people and goods moving and support a healthy economy, environment and communities. Moving Washington reflects the state's transportation goals and objectives for planning, operating and investing. State law directs public investments in transportation to support economic vitality, preservation, safety, mobility, the environment and system stewardship. The investment principles start with maintaining and keeping safe the current investment in the transportation system. Moving Washington then combines three essential transportation strategies to achieve and align WSDOT's objectives and those of WSDOT's partners: Operate Efficiently, Manage Demand, and Add Capacity Strategically. The grant request project, and the overall NSC corridor, balances these objectives to fulfill the State's transportation goals.



The existing infrastructure in and around the greater Spokane metropolitan area threatens to choke the growth and economic vitality of the region. It is an important objective of the NSC project to solve this ever expanding concern. Existing US 395 currently carries \$13.5 billion worth of freight through Spokane annually. All of this freight is carried on the local street network. The economic health of the entire region is heavily dependent on the effective management of regional and through-put freight trips, reducing congestion on the existing north/south routes through Spokane. The counties of Eastern Washington are some of the most economically depressed in all of Washington

State. This is especially true of the three northeastern bordering counties that will benefit from the improved transportation system efficiency created with the completion of the NSC. As of December 2011, unemployment rates in Ferry County (14.0%), Stevens County (11.9%) and Pend Oreille County (11.6%) are among the highest in the State. The Spokane Tribe of Indians and the Confederated Tribes of the Colville Reservation also reside within these counties and are considered severely distressed economic communities.

i. State of Good Repair

WSDOT, City of Spokane, Spokane County, SRTC, and BNSF, along with many other economic development and freight groups, are in agreement that the NSC is a critical link for continued economic viability for Eastern Washington. The NSC project is part of the local, regional, and State efforts to improve travel times and reduce emissions and congestion in and through Spokane.

The Spokane area does not have a dedicated separated north/south pedestrian bicycle trail. With the construction of the NSC, a trail will span the entire 10.5 miles of the corridor. To date, WSDOT has constructed 5.5 miles of the separated trail system. The BNSF Railway Structures/Realignment Project will extend the trail by over one mile into the Hillyard neighborhood improving connectivity and the use of alternative transportation modes.

The BNSF Railway Structures/Realignment Project provides benefits to BNSF's ability to provide safe and efficient transportation services in good repair by:

- Updating all track to meet today's standards on horizontal and vertical alignment, along with new concrete track ties, therefore improving rail safety and renewing this rail corridor's life cycle.
- Increased rail car storage capacity
- Reduced maintenance costs of a dated facility
- Reducing trespassing. Today trespassing is an issue throughout this corridor. Fencing and the adjacent freeway will dramatically reduce trespassing.
- Relocating new storage and auxiliary track to improve loading and off loading of goods for existing and future BNSF customers.
- Increasing economic development and public affordability. With this project, a mile long spur line will be built adjacent to a newly



zoned and developing industrial/commercial area of Spokane with over 500 acres of planned development. As this area develops in conjunction with the NSC, BNSF is in a prime location for moving goods in and out of this development. BNSF owns land along this spur line which also has significant development potential.

WSDOT has invested through State and Federal funds \$600 million dollars toward the completion of the NSC. The Washington State Legislature has classified the NSC a high priority project for the State of Washington and continues to fund advances of the corridor. Current right of way funds of \$140 million, until 2018, are committed to purchase the necessary right of way well in advance of the NSC construction phases.

WSDOT uses many tools to ensure the highway system and components are maintained in a state of good repair. The NSC will use an asset management approach to optimize its long term investment. The NSC is part of the statewide maintenance program with a consistent source of preservation and maintenance funding. For long-term operations, maintenance and preservation will be managed through the WSDOT's Maintenance Accountability Program (MAP) and the Capital Programs' Pavement Management System and Bridge Preservation System. WSDOT also uses a pavement management system, bridge condition inspections, and priority programming to ensure its roadways are maintained to the highest standard by programming work to the highway segments at the lowest life cycle cost.

ii. Economic Competitiveness

Existing US 395 currently carries \$13.5 billion worth of freight through Spokane annually. Efficient management of the movement of freight is a significant factor in the economic competitiveness of this region and the United States as a whole. US 395 is a NHS route as well as a designated NAFTA corridor connecting Canada, the United States, and Mexico that has seen a significant increase in freight traffic since the adoption of NAFTA. Both US 2 and US 395 are freight routes from points north and east of Spokane. The NSC will collect freight traffic from both of these routes and efficiently move them into and through Spokane. Out of 88 total crossings in the United States, the US 395 corridor services the border crossings into Canada in the adjacent chart.

Border Crossing	National Ranking By Loaded Truck Containers
Frontier, WA	26
Laurier, WA	42
Metaline Falls, WA	53
Danville, WA	83
Boundary, WA	69
Ferry, WA	84
Eastport, ID	15
Porthill, ID	29

There are a number of regional distribution and trucking firms located at interchange points along this new corridor. Providing this freeway facility as an alternative to the existing surface street system will have a significant positive impact on the economy of the freight haulers through travel time and fuel savings.

The BNSF Railway Structures/Realignment Project improves access to over 500 acres of industrial/commercial land and 329 acres of underutilized residential property in the Hillyard area. The City of Spokane North East Development Advisory Board, which represents the interests of the residents, business leaders, and stakeholders in the Hillyard neighborhood, have joined forces with community leaders, local governmental agencies, and WSDOT to focus on improving the economic viability of Northeast Spokane. The Northeast Spokane area is one of the city's most underutilized resources as it is one of only three industrial zones in the city. Its location near the North Spokane Corridor provides very unique opportunities for development. The BNSF Railway Structures/Realignment Project will provide economic development to this industrial area.

The North Spokane Corridor (NSC) contributes to economic competitiveness by removing freight from the local surface street system in Spokane and placing it on a high speed limited access facility which provides for efficient deployment of freight to and through the greater Spokane area. Improvements to the freight transportation system through Spokane will assist the economies of the distressed counties of Ferry, Stevens, and Pend Oreille to the north of Spokane, as well as providing opportunity for development of adjacent vacant commercial and industrial land in the Hillyard area of Spokane. The NSC will realize an anticipated travel time savings of 9.4 million hours/years at a value of \$240 million dollars.

The Inland Pacific Hub (IPH) is a widely-connected coalition of business, community, and government leaders from 19 counties of eastern Washington and north Idaho, partnering within a large geographic area, including southern Idaho, Alberta, and British Columbia Canada. The vision of the IPH project is to transform the Inland Northwest into a hub for commerce, vital to the global economy. The IPH, a global reach for commerce, is a transportation system that can move goods quickly to other major centers for speedy delivery. The IPH recognizes the importance of the North Spokane Corridor. IPH includes continuation and completion of the US 395 North Spokane Corridor as a high priority infrastructure project. The US 395 North Spokane Corridor is an asset to facilitating the development of infrastructure that will position the region as an efficient and reliable transportation hub, which in turn will fuel the local economic development. For more information see the following web site: www.inlandpacifichub.org/

iii. Livability

The NSC will divert heavy freight and goods movement away from sensitive land uses, such as schools and parks, to a facility that is designed to improve the flow of commerce into and through the region. Moving through freight traffic off of local surface streets adjacent to these sensitive land uses will provide for a more livable community and an economic lift to some of the most distressed areas in Spokane. For the community adjacent to the new corridor, individuals will have new access and mobility previously unavailable in the area. As a historically low and moderate income area, the Hillyard and Morgan Acres communities are already seeing development opportunities because of the improved access and mobility through the opening of the first section of the NSC. An example of development along the corridor from the March 14, 2012, Spokesman Review Newspaper, details the redevelopment of abandoned industrial properties adjacent to the NSC corridor. Quoting from the article, *"The plan is to turn the site into an industrial park", Schain added. 'It has a north-south freeway nearby. It has power and water ... it has the infrastructure already there to make this a world-class location,' ... 'This is the kind of site that will create jobs,' Messmer said."* The entire article can be found at:

<http://www.spokesman.com/stories/2012/mar/14/kaiser-mead-site-sold-for-redevelopment/>

The BNSF Railway Structures/Realignment Project removes a choke point for continuation of the North Spokane Corridor south of the current interim terminus at the Freya Street interchange by relocating 7.5 miles of BNSF Railway mainline, switching, and spur tracks. With the railroad mainline and spur track relocated, the continued construction of the NSC south to



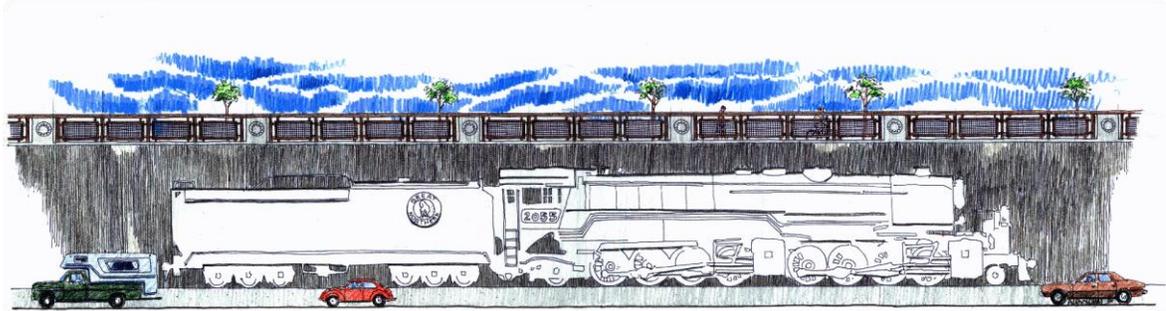
I-90 will provide greater access, economic development and more vibrant communities to the Spokane area.

The NSC, with its full length separated *"Children of the Sun"* pedestrian/bike trail, has been designed to integrate with the Spokane neighborhood *"Centers and Corridors"* theme, making this facility a significant part of

community connectivity. This trail will connect to the existing east/west Centennial Trail system, which reaches from Spokane to Coeur d'Alene, Idaho and with various other trail systems within the Spokane area. The BNSF Railway Structures/Realignment Project will extend an already completed 5.5 mile trail system by over one mile into the Hillyard

neighborhood providing non-motorized connectivity to major north/south and east/west arterial street networks.

In addition, the enhancement of alternate transportation choices through the addition of four planned park and ride lots, the Children of the Sun pedestrian/bike trail and potential commuter service by Spokane Transit Authority provides the opportunity to capture discretionary commuters from northern Spokane County as well as the northeasterly three counties, further reducing congestion on the local system.



Artist Rendition of Noise Wall in Hillyard

WSDOT has undertaken an extensive public involvement campaign, not just designed to educate the public about the NSC project, but more specifically to gather input that can optimize the public use and ownership of the project. To date, there have been more than 275 public meetings. As a result, the project incorporates themes from the various community neighborhoods it passes through and includes them as aesthetic amenities within the project that blend into and complement the comprehensive neighborhood planning effort. In addition, public comment has led to significant changes in several project design elements.

iv. Environmental Sustainability

The NSC will decrease travel time and congestion on the entire surface street system in Spokane. The overall NSC project removes these trips from the already congested local streets, providing for better travel times, safety improvements, and reduced maintenance of the local street network. When complete the NSC traffic will avoid 29 signalized intersections along the existing US 395 Division Street Corridor. It is estimated that the project will provide a 6.5% average network fuel efficiency savings. The following table illustrates travel time savings on the eight major north/south arterials through Spokane:

2030 PM Peak Hour – Improvement in Arterial Travel Times

Arterial	Freight Route	No Build	Build	Improvement
Ash (SB)	Yes	19:33	16:30	16%
Maple (NB)	Yes	18:59	15:39	18%
Division	Yes	20:28	16:35	19%
Nevada	No	15:41	11:25	27%
Crestline	No	8:15	6:01	27%
Market/Greene	Yes, but Weight/Axle Restrictions Due to Greene St. Bridge	17:19	11:50	32%
Freya	Yes, but Weight/Axle Restrictions Due to Greene St. Bridge	8:04	5:57	26%
Argonne	Yes	15:40	10:11	35%

As greenhouse gas emissions are directly related to burning fossil fuel, this project has a neutral greenhouse gas emissions footprint for carbon dioxide. In 2011, WSDOT used the EPA's mobile source emissions model (MOVES) to analyze this project for greenhouse gas emissions. In comparing the No-Build to Build condition in 2030, an increase of 5 metric tons (3%) of CO₂ can be seen. This is less than a 10% increase and is therefore considered to be negligible by FHWA. See the Benefit-Cost Analysis attachment.

The project provides four park and ride facilities, space for future high capacity transportation, as well as a full length bicycle/pedestrian facility.

The NSC received NEPA (FEIS) approval in April 1997, and has since had a supplemental FEIS approved in September 2000 for the Spokane north to US 395 at Wandermere section, and an EIS reevaluation approved in May 2005 from Interstate 90 to the Spokane River. These documents contain comprehensive discussion of the environmental considerations for this project. An environmental reevaluation to the section from the Spokane River to Francis Avenue is underway with anticipated approval in June 2012.

v. Safety

The NSC is projected to save \$22 million annually in societal costs related to collision reduction by redirecting as many as 100,000 regional trips per day from the local surface streets to a fully access controlled facility. Approximately 700 intersection related accidents ranging from fatal collisions to possible injury only type are reduced within the regional transportation system. This is directly related to a decrease in total congestion at the surface street intersections where 29 signalized

intersections along the existing US 395 Division Street Corridor will be avoided by use of the NSC.

The NSC removes regional trips including heavy freight volumes, from the surface street system. It removes three BNSF crossings off major city arterials plus several rail crossings off other local roadways. The project will update an aging rail system to meet today's standards on horizontal and vertical alignment, therefore maintaining rail and worker safety, and renewing the rail corridor's life cycle. Safety benefits include:

- Updating all track to meet today's standards on horizontal and vertical alignment, along with new concrete track ties, and therefore maintaining rail safety and renewing this rail corridor's life cycle.
- Maintaining operational safety for BNSF workers
- Reducing maintenance costs of a dated facility
- Reducing trespassing. Today trespassing is an issue throughout this corridor. Fencing and the adjacent freeway will dramatically reduce trespassing.

The project funded by this grant request will extend the existing pedestrian/bicycle trail system by over one mile connecting the Hillyard neighborhood and street system providing safer community connectivity. This trail will eventually connect to the existing east/west Centennial Trail system along the Spokane River, which reaches from Spokane to Coeur d'Alene, Idaho and various other trail systems within the Spokane area.

Summary of Long-Term Benefits and Outcomes

Criteria	Description	Inputs	Value	Dollar Amount
Economic Competitiveness	Improves Travel Times	Travel Time Reduction	9.4 million hours/yr	\$240 million/yr
	Improves System Efficiency	Freight Flow	7.2 million tons	\$13.5 billion/yr
	Improves Access to over 500 acres of Industrial/Commercial Land and 329 acres of underutilized residential property			
	Jobs Created – TIGER Grant Request		410 job-years (851,812 job-hours)	
	Remaining NSC Jobs Created over 20 years		25,000 job-years	
Livability	Improves Travel Times	Travel Time Reduction	9.4 million travel hours /yr	\$240 million/yr
	Increases Mobility	Alternate Modes of Travel	10.5 mile parallel Pedestrian/Bike	

	Improves Neighborhood Connectivity		Trail. 4 Park-n-Ride Lots Space reserved for high capacity transportation. Pedestrian/Bike Trail connectivity to major arterial and neighborhood street system.	
Environmental Sustainability	Fuel Consumption	Vehicle Miles Traveled	6.5% average network fuel efficiency savings	
	Reduces Greenhouse Gas Emissions	CO2	Neutral (see benefit-cost section)	
	Increases Regional Mobility	Local Street Vehicle Miles Traveled	600,000 VMT per day moved to NSC network	
	Provides Alternative Transportation Choices	Pedestrian/Bicycle and Transit		
Safety	Reduces Collisions	Accident Cost Savings	Reduces approx. 700 intersection accident per year	\$22 million/yr
	Separates/Eliminates Conflicting Movements	Access control	10.5 miles of access controlled freeway	
		Interchanges Constructed	7 interchanges	
		Rail Conflicts Removed	3 Rail/Roadway Crossings Eliminated	
			29 signalized intersections avoided	
	Updates Aging Rail Line		Maintains operational and worker safety Reduced trespassing on BNSF property through the trail system over BNSF	

b. Job Creation & Near-Term Economic Activity

This application for the BNSF Railway Structures/Realignment Project will create approximately 410 job-years. The remaining NSC project will produce a total of 25,000 job-years over the next 20 years. The following table illustrates the total job-hours by quarter for the TIGER Grant request. See attachment for the complete chart, including assumptions and quarterly project costs.

Short Term Job Creation by Project Phase

Project Phase	Spending by Phase	Direct Job-Years**	Indirect Job-Years**	Induced Job-Years***	Total Job-Years
PE	\$0	-	-	-	-
RW*	\$0	-	-	-	-
CN	\$31,500,000	102	102	205	410
Totals	\$31,500,000	102	102	205	410

Short Term Job Creation by Time Period

Period	Spending 2012 Dollars*	Total Direct, Indirect, and Induced Created Job-Hours**
2013 – Q1	\$6,000,000	162,250
2013 – Q2	\$5,500,000	148,729
2013 – Q3	\$4,000,000	108,167
2013 – Q4	\$8,000,000	216,333
2014 – Q1	\$6,000,000	162,250
2014 – Q2	\$2,000,000	54,083
Total	\$31,500,000	851,812

One job-year is created for every \$76,923 in government spending.

Based on above, and the assumption that there are 2080 job-hours per job-year, one job-hour is created for every \$36.98 of expenditures.

Estimate is calculated using current and future funds. This model does not use prior expenditures in the calculation.

Based on a project total of \$31,500,000 for PE and CN (RW is excluded), the job creation results are as follows:

*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.

WSDOT estimated employment using quarterly budgets and taking into account the percentage of project spending devoted to labor, average hourly wages, and the number of work hours per quarter. These estimates assume: (1) approximately 25% of project spending is dedicated to labor expenses; (2) the average hourly wage for construction workers is \$36.98 based on prevailing wages for Spokane County and the assumption that "marked up" rates are 29% greater than prevailing wages; and (3) the average number of work hours per quarter is 520 based on a standard 2,080 hour work year. These estimates reflect more than just jobs created at the project work site; also included are all direct jobs created from this spending such as jobs at fabrication plants.



Per the 1997 FEIS, "The regional area of growth which will be enhanced by construction of the preferred alternative is that area served by US 395 from Deer Park north to the Canadian Border. This project facilitates truck movement, the movement of freight, and serves the pleasure motorist whose origin and/or destination is Stevens, Ferry, or Pend Oreille Counties, as well as the Province of British Columbia and the Fraser River Valley. The project enhances the objectives of NAFTA – North American Free Trade Agreement."

Typically, regional construction companies and suppliers will be created or benefit both during construction and when the project is operational. Local freight companies will benefit from this facility, many of which are already located near the facility.

The contract will require the construction contractor to have a program in place that meets Presidential Executive Order 11246 regarding equal employment opportunities for women and minorities. Goals will be defined for each. For projects costing \$2 million or more the contract specifications will require that no less than fifteen percent of the labor hours be performed by apprentices.

The specifications will define apprentice eligibility and reporting requirements. Special training provisions are added to the contract requiring the contractor to provide a minimum number of training hours to help in developing trainees move toward journeyman level. A bid item on the contract is provided and a unit cost will be paid for every hour an individual is trained. This program encourages the contractor to make every effort to enroll minority groups and women trainees to the extent possible. The provisions define program and trainee approval requirements.

Disadvantaged business enterprise participation will be required per 49 CFR, part 26. The contract provisions will outline expectations of the contractor in

the areas of affirmative efforts to solicit participation and reporting. WSDOT standard contract process provides that if the contractor has problems meeting the requirements as identified above, they will be referred to the area's community based organizations as a possible resource. The specifications will also inform the contractor of the availability of Work Source. Work Source is a free service located across the State that screens, shortlists, and refers qualified candidates. As a continuation of the Department's American Recovery and Reinvestment Act (ARRA) efforts for job creation, the Employment Security Department has been charged with giving people the opportunity to compete for these jobs. Their tool for doing so is Work Source.

This project will only support contractors with sound safety and labor reports. In the course of WSDOT's normal bidding and award process, only contractors with proven records in these areas will be allowed to participate.

The project goals and requirements defined above are designed to encourage the contractors to develop and sustain programs to help economically distressed areas. The Counties included in the Eastern Region are some of the most depressed in all of the State. As of December 2011 Ferry County (14.0%), Stevens County (11.9%) and Pend Oreille County (11.6%) are among the highest in the State for unemployment percentages. The Spokane Tribe of Indians and the Confederated Tribes of the Colville Reservation also reside within these counties and are considered severely distressed economic communities.

The project utilizes asphalt, concrete and steel products that will be provided by local manufacturers and suppliers. This will create follow-on jobs and economic stimulus for these entities.

The BNSF Railway Structures/Realignment project will begin to have an impact on job creation within twelve months of WSDOT receiving notification that this project was selected for funding.

Secondary Selection Criteria

c. Innovation

Innovative technologies including real-time driver information and remote traffic measurement will be constructed to enhance safety and operational efficiency. Variable message signs will be installed to provide updates to motorists on accidents ahead and destination travel times. The signs will be supported by Highway Advisory Radio (HAR) transmitters and traffic cameras.

d. Partnership

(i) Jurisdictional & Stakeholder Collaboration

The NSC project has a long history of coordination and collaboration with local jurisdictions and stakeholders extending back over 20 years. Over time the WSDOT has convened several teams that include stakeholders (i.e. neighborhood groups, private business, schools, BNSF, etc.) and local jurisdictions to help establish design elements, project direction, and

architecture. WSDOT continues to work closely with the Tribal entities as seen in the letters of support for the project.

The completion of the NSC is the number one priority project in the Spokane region for local agencies and business, City of Spokane, Spokane County, the Spokane regional MPO/RTPO, and Spokane Transit Authority.

The private construction industry, local businesses, and building trade associations started a campaign in 2009 titled "Keep Spokane Moving, Let's Finish What We Started". This movement has invested considerable private sector time and funds to promote the NSC corridor completion to Washington State's Legislators, US Congress members, and the USDOT. The campaign has also united the community towards the completion of the NSC and is evident in the letters of support for the project.



(ii) Disciplinary Integration

WSDOT has partnered with local governmental agencies for the design and construction of the NSC to meet their future transportation needs. WSDOT has received funding from the local governmental agencies contributing to the NSC.

WSDOT has worked with the EPA, the Washington State Department of Ecology and the Spokane Regional Clean Air Agency to develop a facility that improves the air quality, as Spokane is listed as an attainment area for CO (carbon monoxide) currently operating under a maintenance plan.

Over the last two years, BNSF and WSDOT have collaborated in developing a design that is mutually beneficial. This process was iterative with many meetings held to fully develop the optimum design. The results of this effort contributed to a revised design which will save an estimated \$300 million--reducing the cost of the project in this area by over 50%. There is urgency in building the Spokane River to Francis Avenue segment as early as possible. Currently all of the staff for BNSF and WSDOT who worked on the cost saving design are ready to move forward with this project. While the design should stand over time, the positive synergy of having all of the stakeholders and personnel ready to move forward is an opportunity that should be

capitalized on. With any design, there is risk to letting it be “shelved” for too long. Standards can change, stakeholder perceptions and needs can fluctuate and other outside issues can have an influence which may necessitate alterations. These alterations can be costly and time consuming. Much of this risk can be mitigated by funding this section of the NSC sooner than later.

The coordination between WSDOT and local Tribal governments has resulted in strong partnerships and more awareness of mutual needs and concerns during the development and ongoing construction of the NSC. WSDOT's Eastern Region currently works with four tribes: the Spokane Tribe of Indians, Confederated Tribes of the Colville Reservation, the Kalispel Tribe of Indians, and the Yakama Nation. WSDOT also coordinates with two tribes located in Idaho: the Coeur d'Alene Tribe and Nez Perce Tribe. The Spokane Tribe has a strong Cultural Resources program and has a Tribal Historic Preservation Officer (THPO) on staff who consults with WSDOT archaeologists on cultural resource surveys and reports as the NSC project progresses. Because of the ongoing coordination on community development projects and archaeological work on the NSC, WSDOT has developed a strong relationship with the Spokane Tribe based on mutual interests. WSDOT staff worked with the Spokane Tribe's Cultural Committee on the naming of the NSC Bike and Pedestrian Trail resulting in the “Children of the Sun” name.

The City of Spokane North East Development Advisory Board, which represents the interests of the residents, business leaders, and stakeholders in the Hillyard neighborhood, have joined forces with community leaders, local governmental agencies, and WSDOT to focus on improving the economic viability of Northeast Spokane. The Northeast Spokane area is one of the city's most underutilized resources as it is one of only three industrial zones in the city. Its location near the North Spokane Corridor provides very unique opportunities for development. The BNSF Railway Structures/Realignment Project will provide economic development to this industrial area through improved spur track connections, mitigation of an EPA Brownfield area, and improved local access through the extension of the pedestrian/bicycle trail.

e. Results of Benefit-Cost Analysis

Introduction

A benefit-cost analysis (BCA) for the US 395 North Spokane Corridor was completed with the intention of quantifying net benefits generated by the project. The benefits quantified in the BCA are Safety and Mobility. The costs used were project costs such as design, construction and real estate acquisition.

The table below lists the results from the BCA.

Impact Matrix Summary of Selection Criteria (All Values are in \$ Million)	3% Discount Rate	7% Discount Rate
Safety – Benefit Cost Savings	287	144
Travel Time – Benefit Time Savings	4,472	2,252
Fuel	(238)	(120)
Benefit Cost Analysis Results		
Total Discounted Benefit	4,522	2,278
Total Cost	1,938	1,938
Benefit to Cost Ratio	2.33	1.18
Net Present Value	2,584	340

Note: See BCA Attachment of Calculations

Methodology and Assumptions

Safety, travel time and fuel consumption are calculated from projected 2030 average daily traffic (ADT) volumes. These projected volumes were generated by Spokane Regional Transportation Council (SRTC) using the VISUM travel demand modeling software. This project was estimated to be fully constructed by 2030. The comparison of costs and benefits has been estimated in present value terms, using the required 3 and 7 percent discount rate, over a 50-year lifecycle. This 50-year period of analysis is conservative because the NSC will last much longer. However, it does capture at least two preservation efforts that will likely be needed for the pavement.

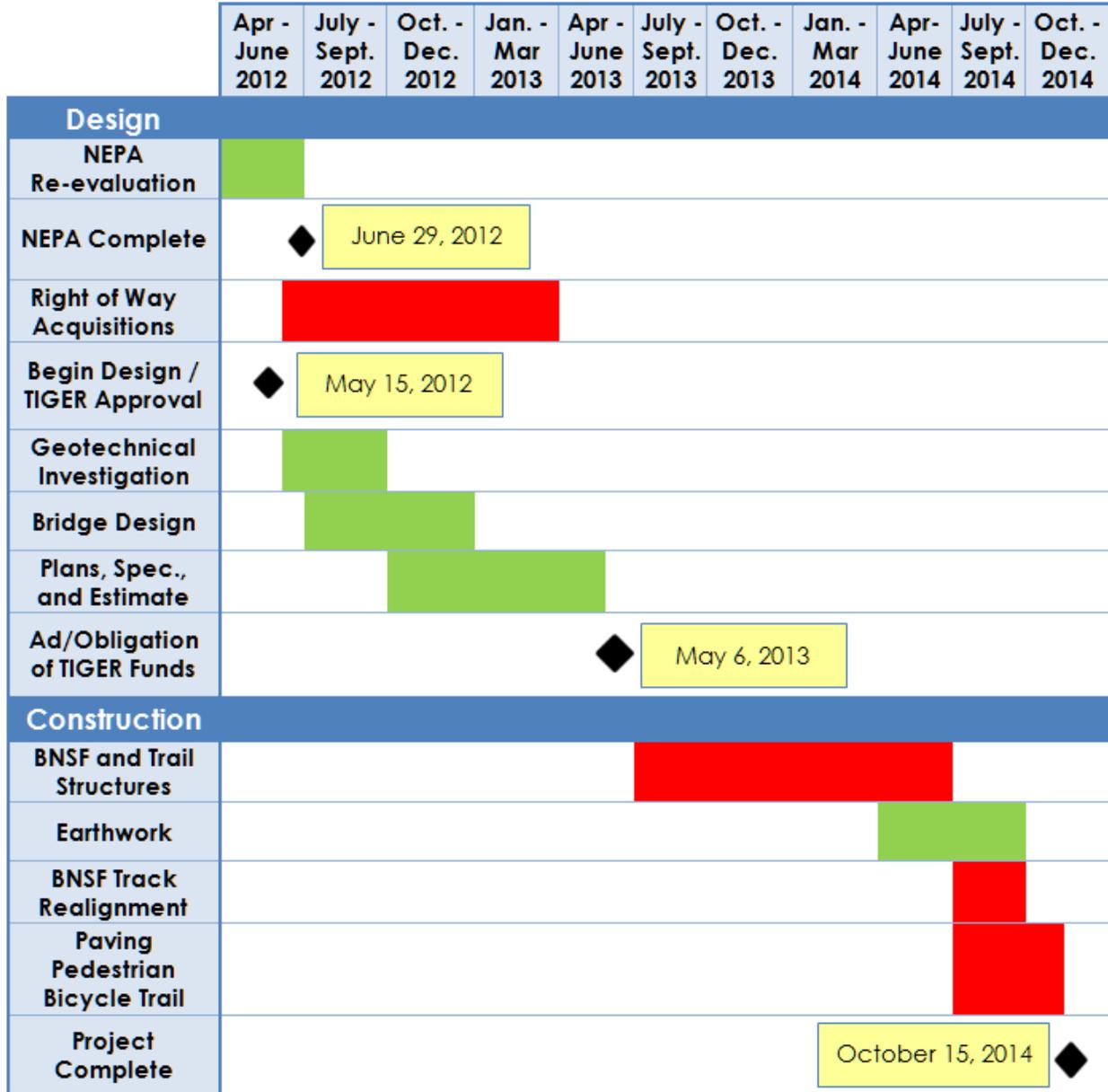
BCA Conclusion

This project has positive benefit-cost values by using Safety, Mobility and Fuel Consumption. Other benefits are addressed in the BCA Attachment but not quantified. If these other benefits were quantified and included in the analysis, the result would be even greater BCA values.

V. Project Readiness and NEPA

Plans, Specification and Estimates, along with right of way purchases, are underway by WSDOT using State funds, with a planned advertisement and obligation date of **May 6, 2013**.

i. Project Schedule



ii. Environmental Approvals

The NSC project received FEIS approval in April 1997. In September 2000, a supplemental FEIS was approved for the Spokane River North to US 395 at Wandermere. In May 2005 an EIS reevaluation was approved for Interstate 90 to the Spokane River. The BNSF Railway Structures/Realignment project has no sensitive areas (streams, wetlands, etc.) that would require permits. This area is covered under the FEIS and Supplemental FEIS approved in April 1997 and September 2000 respectively. An environmental reevaluation to the section from the Spokane River to Francis Avenue is underway with anticipated approval in June 2012.

The environmental documents and Record of Decisions can be found at the following link:
<http://www.wsdot.wa.gov/Projects/US395/NorthSpokaneCorridor/Environmental.htm>

iii. Legislative Approvals

The NSC has State Legislative support as demonstrated by the \$600 million commitment of funds provided for design, construction and right of way.

iv. State and Local Planning

The overall NSC project is included in the Metropolitan Transportation Plan. The MPO, Spokane Regional Transportation Council, has stated in its letter of support for the project, that if this project is selected for TIGER Discretionary Grant, it will process an amendment to the TIP/STIP as soon as possible with an anticipated date of July 2012.

v. Technical Feasibility

Plans, Specification and Estimates for contract plans are underway by WSDOT for the civil and structural components, and BNSF for the 7.5 miles of track realignment. This effort is funded with State funds with a proposed advertisement and obligation date of **May 6, 2013**.

WSDOT has experience in managing grants and partnering with other agencies in managing grants. WSDOT has a successful project delivery record with 87% of projects on time and 91% under or on budget.

vi. Financial Feasibility - Detailed Project Cost

Engineering design and right of way purchases are in process, with both scheduled for completion by March 31, 2013. State funds are being used to complete this portion of the project. TIGER Discretionary Grant funds can be obligated by **May 6, 2013**. WSDOT has funds currently available for a **40% match** to the TIGER Discretionary Grant request.

Detailed Project Cost

Project Activity	Cost	% of
Preparation	\$1,448,648	4.60%
Grading	\$2,858,250	9.07%
Drainage	\$52,765	0.17%
Storm Sewer	\$52,710	0.17%
Structure	\$8,902,046	28.26%
Surfacing	\$1,747,600	5.55%
Traffic	\$345,000	1.10%
Erosion Control	\$176,915	0.56%
Other Items	\$211,197	0.67%
BNSF Railway	\$10,614,394	33.70%
Project Subtotal	\$26,409,525	
Sales Tax, Contingencies, and	\$5,090,475	16.16%
Project Total	\$31,500,000	

VI. Federal Wage Rate Certification

WSDOT is a certification agency that requires Federal Wage rates as a condition of the contract.

VII. Pre-application Changes

After review of the application by BNSF, they requested a name change to match the current company title of BNSF Railway. The new TIGER Discretionary Grant request title is now **US 395 North Spokane Corridor BNSF Railway Structures/Realignment.**

The obligation date in the pre-application was June 24, 2013. The new obligation date with this TIGER Discretionary Grant request is **May 6, 2013.**

The anticipated date of inclusion in relevant STIP and TIP plans was listed as May 31, 2012 in the pre-application. The new anticipated date with this TIGER Discretionary Grant request is **July 2, 2012.**

The anticipated date for the NEPA reevaluation was listed as September 2012. The new anticipated date with this TIGER Discretionary Grant request is **June 2012**, per FHWA Washington Division.