WSDOT Summary of Track 2 Projects

High Speed Intercity Passenger Rail Program Funding Application

September 2009
Introduction

On February 17, 2009 President Obama signed into law the American Recovery and Reinvestment Act (ARRA), which contained $8 billion of federal funding for the High-Speed Intercity Passenger Rail (HSIPR) Program.

The applicants are restricted to state transportation departments and Amtrak. Additionally, only applicants in a federally designated High-Speed Rail Corridor are considered eligible.

The Pacific Northwest Rail Corridor (PNWRC) is one of the 11 federally designated high-speed rail corridors in the United States. It spans 466 miles from Eugene, Oregon to Vancouver B.C. and parallels Interstate 5.

This is the first major federal investment in high-speed intercity passenger rail outside the Northeast Corridor. The Federal Railroad Administration (FRA) was mandated to issue guidance for state transportation department grant applicants no later than June 17, 2009 and make all awards under the program by February 17, 2010.

On April 16 President Obama announced a new vision for developing high-speed rail in America and sought comments on the legislation. At this announcement he stated that the $8 billion HSIPR funds would not require any matched funding and that guidance on the application process would be issued no later than June 17, 2009.

When the guidelines were issued, a requirement to qualify using a pre-application process was announced. The pre-application process required that states submit a standard form that would register them and validate them for the formal application process. This pre-application was due by July 10, and failure to submit would disqualify the applicant.

At the same time, four separate funding “Tracks” were announced that would be considered for grants. Tracks 1, 3, & 4 required final submission no later than August 24, 2009. Track 2 requires final submission no later than October 2, 2009.

What are the different Tracks?

The difference between the tracks includes project readiness and the type of work for which the grant is being applied. Tracks 1 and 2 can be funded to 100 percent of the costs. Tracks 3 & 4 require a 50 percent local match.

Track 1: Ready to go projects that can be completed within 2 years of obligation and have independent utility.
(Subsequently the FRA divided Track 1 into a Track 1A and Track 1B – see later list of projects.)

**Track 2:** High-speed passenger rail corridor projects that bring a benefit greater than the sum of individual projects.

**Track 3:** Planning for future development. Funded from sources outside the HSIPR program and limited to $9 million. Requires projects be on a State Transportation Improvement Program (STIP) list.

**Track 4:** The same requirements as Track 1, but require matching funds and the ability to be completed in five years (rather than two). Funding is limited to approximately $83 million and requires projects be on the STIP.

**Initial Pre-application Process**

WSDOT approached the pre-application process in connection with all the stakeholders within the corridor.

As Washington State has completed a Long Range and Mid-Range plan for high-speed passenger rail, projects were already listed in these documents in a progressive and planned approach. This became the basis for the first draft list.

WSDOT also discussed plans for the corridor with The Oregon Department of Transportation (ODOT) and the Province of British Columbia. The timing of the Track 1 application coincided with the launch of the second daily service to Canada and marketing plans are currently underway with the provincial government to maximize ridership and revenue.

Separate meetings were held with the ports, Washington Public Ports Association (WPPA), cities, councils of governments (COGs), BNSF Railway, Amtrak, Talgo, and user groups who have an interest in rail.

Several of these groups proposed projects along the corridor and every one was seriously considered. A requirement of the application was that Amtrak and BNSF must also support the process to confirm its eligibility, and each of the proposals received from the ports, cities, and others was discussed with BNSF and Amtrak to gain their support.

Several projects were suggested, but after discussion with the proponent, projects were withdrawn when it was obvious they would fail to qualify. In many cases support was given and in each case passenger benefits were quantified. In some instances this support was withheld and these projects were dropped from the proposed list.

Projects that were considered, but which could not be supported and were dropped from the list included the following:
• Centralia – Yard re-signaling to move trains more quickly to the Blakeslee Junction branch and on to Grays Harbor.
• Skagit River Bridge Replacement - following claims by the city of Burlington that the bridge was at the end of its useful life.
• Rye Junction (Vancouver) – Clark County Line connection to move trains onto the branch line and avoid main line delay.

At all times WSDOT has ensured the projects that are submitted do not put sound projects at risk by discrediting the state.

WSDOT submitted projects into Track 1 and Track 2 and met the pre-application deadline of July 10.

**Outcome from the Pre-application Process**

Following the pre-application process on July 10, FRA held a series of one-on-one meetings with the states. WSDOT met with the FRA on July 27.

At this meeting FRA announced:

- Pre-applications from states resulted in a request for $103 billion when only $8 billion was available.
- Applications had been received from non-eligible entities (e.g. not states).
- Track 1 was to be divided into Track 1A – Final Design (FD) and Construction projects and Track 1B – Preliminary Engineering (PE) and Environmental (NEPA).
- A Track 2 requirement for a corridor NEPA document

**How did WSDOT select the projects proposed on the list that follows?**

As the first priority, WSDOT used the criteria set out in the FRA Guidelines to select projects. WSDOT made a series of Track 1 applications by the deadline date of August 24 2009. The total of all the project requests are $435 million, the details of which were circulated to legislators and others in a separate document. This paper concentrates on the Track 2 application.

Track 2 projects have to be completed by September 30, 2017 and the “maintenance of effort” requirement ends September 30, 2010.

The criteria on which the FRA awards grants are set out in the guidelines and WSDOT has selected projects that fit within these guidelines.

The ranking of criteria for Track 2 is different to Track 1 and is:-

1. Transportation benefits.
2. Other public benefits.
3. Project management approach.
4. Sustainability of benefits.
5. Economic recovery.
6. Timeliness of project.

Specific Issues Facing the Track 2 Application

NEPA Documentation

The July 27, 2009 meeting with the FRA alerted WSDOT that the prior existing conditions and acceptance of the corridor NEPA documentation would no longer be accepted. This presented WSDOT with a major hurdle as completion of a corridor NEPA document would normally not be possible in the period of time that existed. The same stipulation was a hurdle that some states are not expected to be able to overcome.

The FRA has agreed to the shortened public consultation period of 14 days and to submit the public comments to the FRA by October 23, 2009, three weeks after the submission date. This agreement with the FRA made it possible for WSDOT to comply with the NEPA requirement. Even so this has been a major impact on the cost of the application and workload involved.

Without the help of other WSDOT offices (ESO and Communications) and other agencies, it would not have been possible to satisfy the NEPA requirement.

An implication of this policy change was that projects that were going to be selected could not be included if they pushed the NEPA requirement from an Environmental Assessment to an Environmental Impact Statement. A project on the original list circulated prior to the July 27th meeting was dropped for this reason.

Changes in Guidelines

In discussion with the FRA it was announced that the Track 2 was an “all or nothing” application.

The original information was that only one Track 2 application per state was expected. However, given the “all or nothing” approach, the FRA said that we could apply for separate blocks of projects. This still became problematic as awards could have been made for later blocks in the planned, sequential development of WSDOT’s intercity passenger rail program. This has been overcome by the approach being used and agreed upon with the FRA. WSDOT’s will submit three applications using the incremental concept of Service Blocks. These blocks are cumulative and build on each other and will provide increasing levels of daily train service between Seattle and Portland, as well as improved schedule reliability and reduced travel times between cities. Each application will thus give the FRA the option of funding to different service levels.
Information Following Track 1 Application

The FRA announced that applications for Track 1 had totaled $8.1 billion, more than was available for the whole HSIPR program, but that 40 percent of applications were ineligible.

WSDOT was advised that all Track 1 applications should also be requested in Track 2. WSDOT has complied with that request. Not all the Track 1 projects are included in Track 2 Service Block 1 as explained below. This is because they are not essential for that part of the program development.

Logic for WSDOT’s Track 2 Application

Each of the three Service Blocks set out in this summary are based on a logical progression of adding services. Each one of these groups of projects adds at least one round trip between Portland and Seattle, improves schedule reliability, and reduces travel times between cities.

Preparation of Submission

The submission requirements were extensive, especially with the addition of the NEPA requirements.

WSDOT’s submission was produced in-house and with the assistance of a consultant team from HDR Engineering, who assisted with the economic modeling, the environmental reviews and input, and the train timetable service development.

WSDOT State Rail & Marine Office expended approximately 1,300 hours writing and compiling the submission with WSDOT ESO and Communications spending an additional 300 hours.

There have also been multiple hours of help from funding partners on the projects especially, BNSF Railway, Amtrak, Sound Transit, city of Seattle (SDOT), and the Port of Vancouver, without whose help this application could not have been completed.
Washington State High-Speed Intercity Passenger Rail Proposed Projects

Project Location Key

Service Block 1
2. Tacoma – Point Defiance Bypass – WA-PNWRC-Tacoma-Point Defiance Bypass
4. Vancouver – New Middle Lead – WA-PNWRC-Vancouver-New Middle Lead
5. Vancouver – West Side Associated Trackage – WA-PNWRC-Vancouver-W Side Assoc. Track
6. Cascades Corridor Reliability Upgrades - South – WA-PNWRC-Corridor Reliability Upgrades S
7. King Street Station Seismic Retrofit – WA-PNWRC-King St. Sta. Seismic Retrofit
8. Cascades Corridor Reliability Upgrades - North – WA-PNWRC-Corridor Reliability Upgrades N
10. Everett – Storage Track – WA-PNWRC-Everett-Storage Track
11. Amtrak Cascades – One Train Set – WA-PNWRC-Amtrak Cascades - One Train Set

Projects that Span the Corridor
Corridor Application Service Block 1 Proposed List of Projects
These projects enable a fifth round trip between Seattle and Portland, improve on-time performance, and reduce the travel time between Seattle and Portland by 6 minutes, from today’s 3 hours 30 minutes to 3 hours, 24 minutes.

Blaine – Swift Customs Facility Siding
This project provides a second siding track to allow freight trains awaiting customs inspections to move out of the way of oncoming Amtrak Cascades trains. The new second siding will allow freight train inspections to occur clear of the main line, helping ensure that passenger trains operate on-time.

The project provides a second siding track to allow freight trains awaiting customs inspections to move out of the way of oncoming Amtrak Cascades trains. The new siding will allow freight train inspections to occur clear of the main line, helping ensure that passenger trains operate on time. In addition, the upgrade to the existing active warning devises at the at-grade Loomis Trail Road will improve safety for motorists, rail workers, and passengers

Cascades Corridor Reliability Upgrades – South (Nisqually to Vancouver WA)
This project is located on the BNSF mainline between milepost 26.5 at Nisqually Jct. to 36.48 in Vancouver, WA.

This project was identified through an operations analysis to address slow orders that often delay Amtrak Cascades trains. Without this project, these delays will continue, impacting on time performance. One of the Mid-Range Plan goals for the service is to improve overall on-time performance, and this project will eliminate a major source of passenger train delays to help achieve that goal.

Specifically, this project would improve track quality, reliability, and passenger ride comfort by increasing track class of track infrastructure. Major components of the work include ties, track, ballast, lining undercutting, and surfacing.

Cascades Corridor Reliability Upgrades – North (Everett to Blaine)
This project is located on the BNSF mainline between milepost 8.8 in Everett to 119.1 in Blaine. In other respects it is identical to the project described for the southern section of the BNSF main line described above.

Everett - Storage Track
This project is located on the BNSF mainline between milepost 8.8 and 9.9 in Everett.
This project was identified through a capacity modeling and operations analysis as a location where freight interference often delays Amtrak Cascades trains. Without this project, these delays will continue, impacting on time performance. One of the Mid-Range Plan goals for the service is to improve overall on-time performance to over 90 percent, and this project will eliminate a major source of freight train interference to help achieve that goal.

BNSF needs the additional tracks in Everett’s Delta Yard because the existing yard tracks are too short to handle long trains. This causes substantial congestion in and around the yard. The project is also a contractual requirement for the second Amtrak Cascades round trip service to Vancouver, B.C.

Specifically, the project would construct two new departure/receiving tracks with a total length of approximately 13,000 ft. next to the existing Delta Yard tracks in Everett. The major component of the project is track work.

The project will reduce congestion, add rail capacity, and eliminate a substantial rail yard bottleneck. The additional yard track will allow freight trains to move into the Delta Yard and out of the way of oncoming Amtrak Cascades trains. It has independent utility due to its project termini.

NEPA documentation, minor wetland permitting with the Army Corps of Engineers, and final engineering design for the receiving/departure track is complete.

**Seattle (King Street Station) – Seismic Retrofit**

King Street Station is the central hub of the Pacific Northwest corridor that handles more passengers than any other on the route. The building was erected in 1906 by the architect who built Grand Central station in New York. It is however, vulnerable to earthquakes. The city of Seattle, since they acquired the station from BNSF, have replaced the roof and refurbished the brick exterior.

This project will retrofit the station to handle earthquakes. Subsequent phases will refurbish the station — last updated in 1960—to a terminal suitable for modern high-speed service. A prerequisite of any refurbishment has to be to secure the building.
Tacoma – D to M Street Connection

This project, when combined with the Tacoma – Point Defiance Bypass project, will re-route Amtrak trains from the slower and more congested Seattle Subdivision route along Puget Sound and around Pt. Defiance to a lightly-used inland route along Interstate 5 and through south Tacoma. It will result in an Amtrak Cascades trip time that is six minutes shorter than today. The new route leaves the BNSF Railway’s Seattle Subdivision at TR Jct. at MP 38.2X and returns to the Seattle Subdivision at Nisqually Jct. at MP 24.5. This project will construct 1.2 miles of new passenger rail between D Street and M Street in downtown Tacoma. Scope includes building new track over Pacific Avenue on a bridge located between 25th and 26th Streets, lowering Pacific Avenue to provide for grade-separation, and installation of state-of-the-art safety equipment. This project allows WSDOT’s Amtrak Cascades intercity rail service to bypass the Point Defiance route and provide faster, more reliable service. The project also allows Sound Transit to extend commuter rail eight miles from the city of Tacoma to the city of Lakewood. With the D Street to M Street project, 52 passenger trains (26 round trips) will use this segment of new rail. Total passenger rail ridership on the D-M Street project is estimated to be nearly one million per year.

The D to M Street project is located in downtown Tacoma. Sound Transit owns the railroad assets and rights-of-way. WSDOT will have use of the facility for Amtrak Cascades intercity service in perpetuity.

Tacoma – Point Defiance By-Pass

This project, when combined with the Tacoma - D St. to M St. Connection project (separate application), will re-route Amtrak trains from the slower and more congested Seattle Subdivision route along Puget Sound and around Pt. Defiance to a lightly-used inland route along Interstate 5 and through south Tacoma. It will result in an Amtrak Cascades trip time that is six minutes shorter than today. The new route leaves the BNSF Railway’s Seattle Subdivision at TR Jct. at MP 38.2X and returns to the Seattle Subdivision at Nisqually Jct. at MP 24.5. The new route will use a segment of tracks already used by commuter rail operator Sound Transit and owned by the City of Tacoma to access the new station location at Freighthouse Square (Tacoma Dome Station). From this location the new route will use a new connection between East D St. to West M St. in Tacoma which is to be constructed as a separate project. From West M St., the new route uses the former Lakeview Subdivision to Lakeview Jct. (SW 108th St.) and Lakeview Spur from Lakeview Jct. back to Nisqually Jct. Lakeview Subdivision and the Lakeview Spur are former BNSF rail lines now owned by Sound Transit. The services that will benefit are Amtrak Cascades which serves Washington, Oregon and British Columbia, Canada. The commuter rail service which will share the route from TR Jct. to Lakeview Jct. will also benefit through their investment in the route.
The project is the final independent phase of the larger project. The heavily-used water-level route was identified as a location where capacity restricts the additional Amtrak Cascades service and creates delays. The tight curves, restrictive clearances, and a movable bridge restrict speeds on the route to no more than 60 mph and as little as 35 mph is some locations. The capacity reseption of the single-track Nelson-Bennett and Ruston Tunnels are also obstacles to increasing Amtrak Cascades intercity passenger service. Freight interference on the water-level route often delays intercity passenger trains. Without the project, these delays will continue, making the service unreliable.

Specifically, the project will build 3.5 miles of second main track through Lakeview Jct., adjacent to a reconstructed main track currently under construction by Sound Transit. This double-track section will accommodate planned train meets and passes. From the southern end of the new second main track, the existing single main track will be reconstructed for 10.5 miles to Nisqually Jct. The crossovers and signal system at Nisqually Jct. will be reconfigured adding a new crossover. Within the project area, five at-grade crossings will be reconstructed to improve safety, and accommodate higher speeds. In addition, a new staffed station location for Amtrak service will be created within the existing Freighthouse Square shopping center adjacent to the existing commuter rail waiting area. The existing platform for the commuter rail service will be used for the new Amtrak station. The existing Tacoma Amtrak station will be closed.

**Vancouver – West Side Associated Trackage**

This project is located on Port of Vancouver property in Vancouver, WA. It is west of NW Gateway Ave between State Route 501 (aka NW Lower River Rd.) and the Columbia River.

The project was identified as a location where freight interference often delays Amtrak Cascades trains. Without the project these delays will continue, making the service unreliable. This project reduces delays for main line passenger trains by constructing rail infrastructure, including a loop track and a highway-rail grade separation, to allow freight trains entering the Port to immediately clear the BNSF main line. Freight trains from BNSF Railway and Union Pacific Railroad will use the newly created loop track.

Specifically, 35,831 ft. of new main track will be constructed forming a loop at the western end of the Port property. In addition a new roadway bridge will eliminated the at-grade crossing of NW Gateway Ave. Major components of the work include track and switches, highway bridge and approaches, and earthwork/grading.
The project provides a means of receiving incoming freight trains and staging outbound trains by eliminating “doubling” during which the North-South main tracks are blocked.

NEPA documentation, and final engineering design for the track center widening and the rerouting of the main line track is complete

**Vancouver – New Middle Lead**

This project adds a second connection between the BNSF mainline at milepost 136.0 and 10.2 in Vancouver, WA.

The project is a phase of the larger Vancouver Rail Bypass and W 39th St. Bridge project. The project was identified as a location where freight interference often delays Amtrak *Cascades* trains. Without the project, these delays will continue, making the service unreliable. BNSF Railway freight traffic will use the newly created siding.

Specifically, a 1,300 ft. long segment of track will be constructed along with two parallel crossovers and a new turnout. The new main line turnouts will require reconfiguration of the signals in the vicinity. Construction of the new connecting track will require the relocation of the existing “drill” track for 500 ft, and the construction of two crossovers for access to the “drill” track from the main line. The relocation of the “drill” track will also require the replacement of two yard turnouts. The speed of the new connection will be at 20 mph, twice as fast as the current connection.

The project provides a second connection between the east-west line and the north-south line to more quickly clear the north-south main tracks to get out of the way of Amtrak *Cascades* trains. Today, the adjacent main track is used to hold these trains. Speeding the entrance and exit of freight trains from the north-south main line will help ensure that passenger trains operate on time.

NEPA documentation and final engineering for the project are complete.

**Vancouver – Yard Bypass Track**

This project builds a bypass track between the BNSF mainline at milepost 133.5 and 10.2 in Vancouver, WA.

The project is a phase of the larger Vancouver Rail Bypass and W 39th St. Bridge project. The project was identified as a location where freight interference often delays Amtrak *Cascades* trains. Without the project, these delays will continue, making the service unreliable. BNSF Railway freight traffic will use the newly created siding.
Specifically, a 15,200 ft. long segment of track will be constructed around the eastern side of the yard and maintenance facilities. Construction of the new track will require the relocation of the existing turntable and 1,000 ft. of lead track as well as maintenance offices and storage buildings. The new bypass track will also require the removal of 4,500 ft. of industrial and spur tracks and associated turnouts. Earthwork and retaining walls will also be constructed to allow for the track construction. A new at-grade crossing for BNSF equipment and maintenance of way access will be constructed with active warning devices. The speed of the new bypass track will be a minimum of 25 mph, two and half times as fast as the current connection.

The project provides a crew-change track and additional connection between the east-west line and the north-south line to more quickly clear the north-south main tracks for freight traffic to get out of the way of Amtrak Cascades trains. Today, the adjacent main track is used to hold these trains. Speeding the entrance and exit of freight trains from the north-south main line will help ensure that passenger trains operate on time. It has independent utility due to its project termini and benefits.

NEPA documentation and final engineering for the project are complete.

**Amtrak Cascades – New Train Set**

To expand the train service to five round trips each day between Seattle and Portland will require the purchase of new rolling stock. Equipment that is identical to the existing equipment is no longer manufactured. Purchases of an additional train set will be through a competitive equipment acquisition. This project is intended to develop a specification in connection with Amtrak, and bid competitively for a new train set. These will be capable of handling the specific geographic feature of the corridor and also handling 350 passengers.

| Total funding requested for Block 1 projects - $389.64m |  |
Washington State High-Speed Intercity Passenger Rail Proposed Projects

Project Location Key

Service Block 2

2. Tacoma – Point Defiance Bypass – WA-PNWRC-Tacoma Pt. Defiance Bypass
4. Vancouver – New Middle Lead – WA-PNWRC-Vancouver-New Middle Lead
5. Vancouver – West Side Associated Trackage – WA-PNWRC-Vancouver-W Side Assoc. Track
6. Cascades Corridor Reliability Upgrades - South – WA-PNWRC-Corridor Reliability Upgrades S
7. King Street Station Seismic Retrofit – WA-PNWRC-King St. Sta. Seismic Retrofit
8. Cascades Corridor Reliability Upgrades - North – WA-PNWRC-Corridor Reliability Upgrades N
10. Everett - Storage Track – WA-PNWRC-Everett-Storage Track
12. Amtrak Cascades High-Speed Locomotives – WA-PNWRC-Amtrak Cascades-HS Locomotives
16. King Street Station Track Upgrades – WA-PNWRC-King St. Station Track Upgrade
17. Advanced Signal System - Positive Train Control - WA-PNWRC-Advanced Signal System-PTC

Projects that Span the Corridor

Washington State Department of Transportation

WSDOT Summary of Track 2 Projects

September 2009
Corridor Application Service Block 2 Proposed List of Projects

These 17 projects enable a fifth and sixth round trip between Seattle and Portland, improve on-time performance, and reduce the travel time between Seattle and Portland by 10 minutes, from today’s 3 hours 30 minutes to 3 hours, 20 minutes.

In addition to the 11 projects set out in Service Block 1 above, the six additional projects would bring the benefits stipulated.

**Kelso Martins Bluff — New Siding**

![Map of Kelso Martins Bluff — New Siding](image)

This project is on the BNSF mainline between milepost 105.5 and 108.8, in Kalama.

This project was identified as a location where freight interference often delays Amtrak *Cascades* trains. Without this project these delays will continue, making the service unreliable. BNSF Railway freight traffic will use the newly created siding.

Specifically, a 17,000 ft. siding will be created from running and storage tracks. The storage tracks will be replaced with new storage tracks. Two new control points will be built and a third existing one will be modified. One of the three control points will include universal crossovers between the two main tracks and the siding. The remaining two control points will have universal access to the adjacent main track. The crossovers at the control points will either replace or add eight crossovers and one single turnout. The replacement storage tracks will also require the replacement of six turnouts. The project provides a new receiving and departure siding to allow freight trains waiting to enter the Port of Kalama grain elevators to be clear of the main track and out of the way of Amtrak *Cascades* trains. Today, the adjacent main track is used to hold these trains. Reducing the need to use the main track to hold these trains will help ensure that passenger trains operate on time.

NEPA documentation and preliminary engineering for the project are complete.

**Kelso Martins Bluff — Toteff Siding Extension**

This project would add a signalized arrival and departure track, associated switches and crossovers that would hold up to two full-length freight trains, and a grade separation of Toteff Road. The project would also clear the main lines, providing capacity necessary for additional and more reliable Amtrak *Cascades*.
service, and improve public safety. The Preliminary Engineering documents and NEPA documents will address this concept. A Preliminary Engineering Report will address feasibility of the concept, further design issues to be addressed in Final Design, and a likely schedule and cost for Final Design and Construction. The NEPA document will examine the natural and built environments and specifically address impacts to waterways, and contaminated locations as well as fish and wildlife.

**Kelso Martins Bluff — Kelso to Longview Junction**

This project is a phase of a much larger project listed as Kelso to Martin’s Bluff Rail Project in the Long-Range Plan. Since then, the larger project has been separated into six projects.

This project will build on other projects and construct a 4.5-mile third main line track from the passenger station in Kelso to Longview Junction South at the south end of Longview Yard. The Longview Yard is an area of congestion with trains of cars bound for and coming from the Port of Longview and the Weyerhaeuser paper mill. Here cars are switched by BNSF, Union Pacific Railroad, and the Longview Switching Company. The third track would allow passenger and freight trains to move around freight trains leaving or bound for Longview Yard. A new rail bridge over the Coweeman River, as well as two bridges over private access roads, would also be built.

A 5,000-foot storage track in south Kelso would be replaced and converted to main track. This siding is crossed by Yew Street and Mill Street in Kelso at grade. This project will also require these two grade crossings south of the station to be closed or replaced. They are planned to be replaced by a new grade separation above or below the tracks, at an alignment near Hazel Street, south of both crossings.

**Seattle – King Street Station Track Upgrades**

This project will build on work in the King Street Station – Track Improvements – Phase 1 project currently under way. It will allow access from all main lines to all station tracks and improves on-time performance for trains entering or leaving King Street Station from the north. Improvements include track upgrades, platform upgrades, switches and interlocking signals to allow for Amtrak long distance, Amtrak Cascades and Sounder commuter trains to move in and out of the station simultaneously both north and south-bound.

The extensive track work will also require the existing bridge above the tracks that carries the intersection of Second Avenue Extension and Jackson Street to be rebuilt to relocate bridge supports.

It is anticipated that the project would be categorically excluded from NEPA, but extension coordination with the city of Seattle and BNSF Railway will be
necessary.

**Amtrak Cascades – New Train Sets**

To expand the train service to eight round trips each day between Seattle and Portland will require the purchase of new rolling stock. Equipment that is identical to the existing equipment is no longer manufactured. Purchases of additional train sets will be through a competitive equipment acquisition. This project is intended to develop a specification in connection with Amtrak, and bid competitively for four new train sets. These will be capable of handling the specific geographic feature of the corridor and also handling 350 passengers.

**Amtrak Cascades – New High Speed Locomotives**

This project is for the specification and purchase of 18 new locomotives to work with the existing Train Sets and the new ones procured. Since the existing locomotives were purchased new design specifications are available. This will allow for swifter acceleration for passenger trains and for greater tilting capabilities. Travel time reduction has not been built into the model as the specifics are not known at this time.

**Advanced Signal System – Positive Train Control**

This project is a legal requirement by the year 2015 and is being built by BNSF to meet those requirements. This application is for the element of the project that is attributable to intercity rail.

**Total funding requested for Block 2 projects - $976.4***

* Includes Track 2 Service Block 1 funding request.
Washington State High-Speed Intercity Passenger Rail Proposed Projects

Project Location Key

Service Block 3

2. Tacoma – Point Defiance Bypass – WA-PNWRC-Tacoma-PT. Defiance Bypass
4. Vancouver – New Middle Lead – WA-PNWRC-Vancouver-New Middle Lead
5. Vancouver – West Side Associated Trackage – WA-PNWRC-Vancouver-W Side Assoc. Track
6. Cascades Corridor Reliability Upgrades - South – WA-PNWRC-Corridor Reliability Upgrades S
7. King Street Station Seismic Retrofit – WA-PNWRC-King St. Sta. Seismic Retrofit
8. Cascades Corridor Reliability Upgrades - North – WA-PNWRC-Corridor Reliability Upgrades N
10. Everett – Storage Track – WA-PNWRC-Everett-Storage Track
12. Amtrak Cascades High-Speed Locomotives – WA-PNWRC-Amtrak Cascades-HS Locomotives
16. King Street Station Track Upgrades – WA-PNWRC-King St. Station Track Upgrade
18. Centralia Station Modifications – WA-PNWRC-Centralia-Station Modification
20. Bellingham Main Line Relocation – WA-PNWRC-Bellingham Mainline Relocation
22. King Street Station – WA-PNWRC-King Street Station Renovation
23. Tukwila Station – WA-PNWRC-Tukwila Station
25. Tacoma Trestle Replacement – WA-PNWRC-Tacoma-Trestle Replacement

Projects that Span the Corridor
Corridor Application Service Block 3 Proposed List of Projects

These 25 projects will result in a fifth, sixth, seventh, and eighth round trip between Seattle and Portland, improve on-time performance, and reduce the travel time between Seattle and Portland by 18 minutes, from today’s 3 hours 30 minutes to 3 hours 12 minutes.

In addition to the projects set out in Service Blocks 1 and 2 above, these additional eight projects would bring the benefits stipulated.

**Bellingham Main Line Relocation**

This project will relocate and realign the main line through a former industrial area in downtown Bellingham. The new alignment roughly follows an alignment that was abandoned by the Milwaukee Road Railroad. It will allow passenger and freight trains to move through the area about one minute faster and will keep freight trains from slowing before they begin to climb a 1.1 percent grade northward. The bridge at Cornwall Avenue, built to accommodate 1950’s Milwaukee Road clearances, will be replaced with a span that has improved clearances to accommodate modern rail traffic on the new track alignment. The new alignment and the new bridge avoid two at-grade crossings. A third at-grade crossing, Pine Street, may also be closed. This will also allow the city and port to redevelop the waterfront area. Some FHWA funds are being used to develop preliminary designs for the Cornwall Avenue Overpass. NEPA documentation needs to be completed.

**Centralia - Station Modifications**

This project constructs a new eastside passenger second platform and passenger overcrossing at Union Station in Centralia. The station is located approximately half way between Seattle and Portland on the BNSF Seattle subdivision. The station is served by Amtrak Cascades and the Coast Starlight intercity rail passenger services. The latter rail service operates in California, Oregon, and Washington.

The project will improve safety by eliminating a center platform between tracks, reduce railroad congestion by eliminating crossover moves, and improve on-time performance by saving 4.5 minutes on average travel time between Seattle and Portland.
It is anticipated that the new platform will be located on the BNSF right-of-way. The existing station is owned by the city of Centralia. The passenger overcrossing may be located on public or leased railroad property. Upon completion, the project will serve existing and future Amtrak Cascades service and the Coast Starlight.

**Everett – Curve Realignment**

This project realigns curves and upgrades grade crossings, bridges, and signals, and constructs a new track to improve speeds for passenger trains up to 50 mph, a 15-20 mph increase.

This project phase extends generally between C-Line Jct. and the Snohomish River Bridge on BNSF Railway’s Bellingham Subdivision. It will involve realigning curves near the intersection of Pacific Avenue and Chestnut St. as well as the grade crossing at Railway Avenue and locations along the hills below East Grand Avenue. At a point where the main line is adjacent to the Snohomish River and travels under Interstate 5, main track would be realigned, which may require some of the river to be filled. A new main track will be built adjacent to the two storage tracks which today sit on the back of the existing main track. The new main track will then pass under the two SR 529 highway bridges in a location up to 200 ft southwest of where is passes through today. A private crossing under SR 529 will have to be protected with active warning devises or be closed. In addition, Bridge 37 over the Snohomish River will be rehabilitated to accommodate higher trains speeds, as will the entire CTC signal system.

This project will reduce the Seattle – Vancouver, B.C. schedule by at least two minutes and greatly improve on-time performance.

**Tacoma – Trestle Replacement**

This project, estimated to cost $125.4 million, would design, permit, purchase necessary right-of-way, construct earthwork, and replace a 1910’s era 1,700 foot-long timber trestle to accommodate two main tracks from Portland Avenue and Freighthouse Square. As part of the work, two bridges over city streets would be replaced and two main tracks installed and the signal system upgraded. Today, the intercity passenger trains share the single track alignment through the project area with both commuter and some freight trains.
This single track will need to be able to accommodate two trains simultaneously once Amtrak Cascades service expands beyond eight round trips between Seattle and Portland. The project is listed in the state’s 2006 Long-Range Plan as part of another larger project for service beyond eight Seattle-Portland round trips.

The project is presumed to be categorically excluded from NEPA, but some property acquisition with minimal relocations will likely be required.

**Kelso Martins Bluff — Kalama New Main Line**

This project is a phase of a much larger project listed as Kelso to Martin’s Bluff Rail Project in the Long-Range Plan. Since then, the project has been separated into six phases.

This project would build on other phases and construct a 4.4-mile third main track around the congested Port of Kalama area. Here, 7,000-foot BNSF and Union Pacific grain trains move between the main tracks and one of the largest grain terminals on the west coast. These movements, on and off the main line, create congestion on the main tracks. The third main track would allow passenger and freight trains to move around freight trains that are waiting to enter or are leaving the Port of Kalama.

**King Street Station – Renovation**

Once the station is complete with its seismic refit outlined in Track 2 Service Block 1, it will be necessary to refurbish the station building areas that will service the Amtrak Cascades. This will replace the existing ticket office and baggage handling facilities, not updated since the 1960s and inadequate for the train service today. The damaged floor caused by subsidence and the historic features will be restored making it a fit centerpiece for the service.

**Vancouver Port Access Improvements**

This project will add anew rail connection to the Port of Vancouver that will eliminate passenger and freight train conflicts. It will remove the “at grade” crossing for entry to the Port of Vancouver for all trains arriving and departing from the BNSF Gorge Route along the Columbia valley. The new connection will go under the existing north – south main line and along the banks of the river. The land for this project has been acquired and NEPA clearance is awaited.
Tukwila Station

Sound Transit already has this project at an advanced stage of development. The project will add to the station that provides service for both intercity and commuter rail passengers by including a waiting facility at the station and connectional information at the Sea-Tac International Airport terminal for arriving airline passengers.

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<th>Total funding requested for all Track 2 projects - $1,296.6 million**</th>
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<td>** Includes Track 2 Blocks 1, 2 &amp; 3 projects</td>
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Separate NEPA Track 2 Request $10m. Total request $1,306.6 million

Benefits of Projects

If all 26 projects are funded by grants from the FRA there are considerable benefits. These projects will create 13,926 new jobs. There will be a 23 percent overall improvement in on-time performance that will eliminate 85,803 minutes of delay annually. It will enable an increase in seating capacity of 776,720 per year on the Amtrak Cascades service. Finally, there are improvements in safety created by diverting travelers to rail and through several grade separations, as well as environmental benefits which have been precisely enumerated for each project in the submission proposal.

Conclusion

This document provides the background concerning WSDOT’s HSIPR grant applications for Track 2, explains the rationale behind projects that were selected for the application, and the consultation process that was undertaken.

For more in-depth information about any of these projects or the process involved please contact WSDOT Director, State Rail & Marine at (360) 705-7900.