# **STATEMENT OF WORK**

# Port of Benton, WA Port of Benton Southern Connection Rail Line Project CRISI Program

#### I. AUTHORITY

Authorization	E.g. 49 U.S.C. § 22907 authorizes the Consolidated Rail Infrastructure and Safety Improvements Program (CRISI Program).
Funding Authority/Appropriation	E.g. Contract authority in the FAST Act Sec. 1101(a)(5), Pub. L. 114-94 (December 4, 2015) E.g. Section 22305 of the Infrastructure Investment and Jobs Act (IIJA) (Pub. L. 117- 58, November 15, 2021), Advanced appropriation in Division J of IIJA
Notice of Funding Opportunity	Consolidated Rail Infrastructure and Safety Improvements Program for Fiscal Year 2022 Federal Register/Vol. 87, No. 19004/Friday, September 2, 2022/Notice 54278

#### II. BACKGROUND

The Port of Benton (Port) seeks \$8,000,000 the FRA's Consolidated Rail Infrastructure and Safety Improvement (CRISI) grant program investment to modernize and expand rail capacity.

The proposed project includes replacing the at-grade crossing panels and signal equipment at 5 crossings, repairing ties and rail through three at-grade crossings, correcting and repairing track bonding, repairing the asphalt approaches, .

These include the following crossings: (North to South)

- Battelle Blvd Signal Control System
- SR 240 (WSDOT grant project awarded POB/COR Spring 2023)
- Kingsgate Way (City of Richland road and rail crossing)
- Saint Street Repair/ replace rail signal, signal crossing panels, approaches, signage, barrier and warning equipment
- Airport Way Repair/ replace rail signal, signal crossing panels, approaches, signage, barrier and warning equipment

• Jadwin Signal- Replace railroad signal controls and enclosures

Rail track improvements:

- Replace the Wye Track with new ties, 136 lb. track, switches and ballast.
- Replace approximately 3 miles of rail, ties, ballast on elevated curves with 136 lb. rail.

The project including the replace of up to 12,000 ties, as the majority of the ties currently in place are near, or at failure. Additionally, the entire Wye track, which is the heart of the rail operations on the Port track, has failed ties/rail/and switches that need to be replaced in the immediate future to keep the industrial track in safe use. Finally, approximately three track miles of rail in elevated curves needs to be replaced with heavier rail, due to the continued increased rail traffic.

This will increase safety, economic strength and global competitiveness of the Port, productivity for Railroads, address climate change and sustainability by reducing environmental impact consistent with the U.S. Department of Transportation's (DOT) strategic goals. *Exhibit 1: Port of Benton Southern Connection Rail Line Project.* 



The Port has learned that their short line operator, Tri-Cities Railroad Company (TCRY) had not kept the track or signals up to the Class 3 FRA standard required under the Lease with the Port. Through a very rigorous inspection process over the last 3 years, the Port has discovered multiple areas on the track that have not been maintained. Many of these deficiencies have already been addressed by the Port including the Columbia Park Trail Bridge, round ballast installed by a WSDOT road widening project in the mid 1980's that required replacement, replacement of the Yakima River Bridge deck, replacement of ties and rails on the I-182 (Berry's) bridge, and replacement of the Yakima River Pedestrian crossing and the Jadwin Avenue crossing panels. Additionally, the City of Richland as part of a road project has replaced the Duportail Street signalized crossing.

The next most critical safety issue is upgrading and replacing the remaining 5 at-grade crossings.

Since the City and Port coordinate rail maintenance activities on this one continuous industrial track, the project will replace the electronic components within the City's Kingsgate RR crossing. This RR crossing regularly fails in the down position blocking vehicle traffic.

The Port routinely receives complaints from vehicle traffic concerning the conditions of the existing crossings and has received complaints about vehicle damage due to the rough crossings. While no train damage has occurred, the Port has had broken joints at the crossings and feel it is only a matter of time until the line experiences a broken rail, or similar, causing a derailment.

Additionally, the railroads consistently complain about the slow downs across these signals which regularly cause the trains to Stop and Protect in the worst case, or be slowed to walking speed in the best case.

The current signal situation is unacceptable to local government, the Port, the rail users and the general public. Repair and replacement of these signals is of critical importance.

#### Horn Rapids Industrial Park (HRIP)

The City of Richland's Horn Rapids Industrial Park (HRIP) has a spur located off the Port of Benton's industrial spur. The HRIP encompasses over 2,000 acres of heavy industrial property of which approximately 1,300 acres are developed and 692 acres are still available for sale. In addition, the Port and City just received an additional 1,341 acres of industrial land located to the north of the Horn Rapids Industrial Park. BST Associates Analysis estimates that 30% of firms seeking industrial properties will also be seeking to secure a rail option, resulting in 370-1770 rail related jobs with wages \$38,000-\$56,000 per year (2016 dollars). The Association of American Railroads, Economic and Fiscal Impact Analysis of Class I Railroads, May 16, 2016, IMPLAN model (www.aar.org; p12-13) states that for each railroad job, 9 other jobs are created within a community. Currently, there are over 900 jobs that are rail related that would be retained. This type of job development and growth is strongly desired within the Tri-Cities as our economy has begun its shift towards a post Hanford project economy. The prospect for economic development opportunities for large industrial companies, companies and services related to value added agricultural processors all of which ship internationally is of strong significance not only locally but to the state of Washington. There is also opportunity to do value added manufacturing in the areas of clean energy, importing in products then exporting them

back out to serve international markets. The Tri-Cities has skilled and knowledgeable workforce within this sector as well as value added agriculture. The City and Port are currently working with two potential rail partners looking to site withing the HRIP that could add an estimated 200-250 rail cars per week. These crossing repairs and track replacement projects are becoming critically important to continued operation and the further development of the HRIP and continued growth of the existing companies within the HRIP. The movement of commerce is of critical importance to the regional economy as it fuels much of the economy. HRIP is uniquely positioned to continue momentum to recruit new investment in industrial rail users that will be critical to state and regional economic development and recovery efforts post COVID.





#### **Benefits of the Project**

Currently the track is rated as Excepted Track and is reduced from 25 mph to 5 mph. There are 5 at-grade crossings that have not been upgraded and improved or require new electronic components. At 22 mph (normal preferred speeds by UP and BN) these crossings can pass a Unit Train (6,940 ft long on average) in 4 mins. At 5 mph a crossing is fouled for 17.8 minutes and longer if a conductor/brakeman is required to disembark and Stop and Protect the crossing.

On average, the 5 sub-standard crossings on the Port's track increase fouling of the crossings an extra 13.8 minutes or a total of over 80 minutes per train.

In a very conservative estimate, based on average daily vehicle trips on each of these roadways, divided by a simple 24 hour calculation and assuming the average number of 6.9 minutes (half of the 13.8 min total) delayed per vehicle, each Unit Train would delay vehicles an extra estimated 1,865 minutes due to the Unit Trains being delayed between 5mph and 22 mph. At the estimated number of 60 Unit Trains for 2020, that equates to 120 train movements x 1,865 minutes/60 min = 3,729 hours annually. Based on passenger vehicles alone, which are estimated at operating 17,600 minutes per year and generating 4.6 Metric tons, there is a potential reduction of CO2 of 58 metric tons per year if we can reduce vehicle delays at these crossings by the 3,729 hours.

Without the improvement of the speed of these trains, rail shipments to Richland become extremely difficult and much more costly. BN reports that the additional time due to delays in track conditions prohibit them from adding any additional business to the Horn Rapids Industrial Park.

### III. OBJECTIVE

The objective of this project is the maintenance of the existing rail infrastructure and to provide added rail capacity through the increased efficiencies gained in order to support the future expansion of the rail network within the Horn Rapids Industrial Park and the Transfer Area.

Access to rail reduces the need for trucks. Currently there are 60 Unit Trains annually bringing product from the east and mid-west along with daily shipments in and out to support international exports of frozen french fries and other frozen food products, paper products, food grade oil, and other miscellaneous shipments. The City and Port are currently working with two large rail users that would further increase rail traffic within Richland, specifically inbound product that would otherwise be shipped by truck. Regionally there are over 250,000 truck trips that could leverage the use of rail facilities. Increasingly, the Tri-Cities and Walla Walla regions are becoming a logistic hub due to availability and access to air, rail, water and highways systems. The impact within trucking industry and electronic logging devices is also placing more pressure on agricultural producers seeking to get their products to national and international markets.

Currently the Unit Trains delivering cattle feed products to the Central Washington Corn Processors (CWCP) total almost 6,000 rail cars per year or approximately 21,000 semi-trucks. Just the CWCP rail business removes almost 21,000 semi-trucks from the local roadways annually. Most of these cattle feed products come from the mid-west or an average of 3,400 miles round trip. So just the CWCP business alone removes over 71 Million road miles of truck traffic.

While this Project alone does not further reduce truck trips, without improvements to the current track then rail traffic on the Port of Benton industrial track will require moving more rail traffic to trucks as the current track further impacts the ability for safe and efficient movement of rail cars.

Additionally, the current speed on the track is often reduced to 5 mph which requires trains to take over 2 hours to travel through Richland to the Horn Rapids Industrial Park. This significantly limits the efficiency of the track and the movement of trains. With the current

signal outages, it also requires an additional conductor/brakeman per train to Stop and Protect at signal crossings.

# IV. PROJECT LOCATION

The Project is located in the Port of Benton in Richland, Benton County, Washington. It is located in Rural area of Washington State 46.229264°, -119.223558° to 46.351067°, -119.2283949°

South end of the Rail line Project is at Richland Junction (Columbia Center Boulevard) to Horn Rapids Road in north Richland, WA. As shown in Exhibit 3 below. The Project improves selected sections of the Port's Rail Network between Richland Junction (46.229264°, -119.223558°) on the south to the Department of Energy Transfer Area (46.351067°, -119.2283949 on the north. The rail line is in area represented by Congressional District WA-04. The Project is key to the continued growth and success of the Industrial area at the Port of

#### Benton.

Exhibit 3: Port of Benton White Bluff Southern Connection



# IV. DESCRIPTION OF WORK

#### Task 1: Project Administration

The Grantee is responsible for facilitating the coordination of all activities necessary for implementation of the Project as described in Section VII. Project Management of this Attachment 2 of the Grant Agreement. In addition, the Grantee, or its selected Contractor, will oversee the project administration for all Project activities completed using funds under this Agreement. Project administration activities may include, but are not limited to:

• Complete necessary steps to hire a qualified consultant/contractor to perform required Project work;

- Review and approve invoices as appropriate for completed work;
- Submit all required documentation on-time and according to schedule, including periodic receipts and invoices;
- Complete all reporting requirements as described in Attachment 1 of Grant Agreement;
- Perform Project close-out audit to ensure contractual compliance and issue close-out report;
- Perform all required Project close-out activities.

Project Management and Administration – The Port will perform project management and administration activities for all Project activities completed using funds under this Agreement. These activities include, but are not limited to, completion of necessary work tasks to complete the implementation of the Project; conduct as needed coordination meetings with the Port and project Partners such as, BNSF, UPRR and FRA to provide Project progress updates; provide oversight and direction of work completed; provide approvals as necessary; facilitate coordination and review required for as-needed approvals from FRA, and Project Partners; review and approve invoices, as appropriate, for work completed as part of Project; perform Project close-out audit to ensure contractual compliance and issue Final Performance Report; periodically submit required Project documents, including receipts and invoice, to FRA; and comply with all FRA Project reporting requirements.

The Grantee will submit a Detailed Project Work Plan and Performance Measures Reports, as further described in Task 1.1 and 1.2 below, to FRA for review and approval.

#### Task 1.1 Detailed Project Work Plan, Budget, and Schedule

The Grantee will prepare a Detailed Project Work Plan, Budget, and Schedule for the following tasks, which may result in amendments to this Agreement. The Detailed Project Budget will be consistent with the Approved Project Budget but will provide a greater level of detail. The Detailed Project Work Plan will describe, in detail, the activities and steps necessary to complete the tasks outlined in this Statement of Work. The Detailed Project Work Plan will also include information about the project management approach (including team organization, team decision-making, roles and responsibilities and interaction with FRA), as well as address quality assurance and quality control procedures. In addition, the Detailed Project Work Plan will include the Project Schedule (with Grantee and agency review durations), and a detailed Project Budget. It is anticipated that this Project will receive a CE from FRA. Similarly, agreements governing the construction, operation and maintenance of the Project will also be included. The Detailed Project Work Plan, Budget, and Schedule will be reviewed and approved by the FRA.

The Grantee acknowledges that work on subsequent tasks will not commence until the Detailed Project Work Plan, Budget, and Schedule has been completed, submitted to FRA, and the Grantee has received approval in writing from FRA, unless such work is permitted by pre-award authority provided by FRA. The Port intends to seek pre-award authority to re-let the project as soon as possible. The FRA will not reimburse the Grantee for costs incurred in contravention of this requirement.

#### Task 1.2: Performance Measurement Reports

The Port will submit Performance Measurement Reports as required by this grant on the schedule as described in Attachment 5: Performance Measurements.

#### Task 1 Deliverables:

- Detailed Project Work Plan, Budget, and Schedule
- Project Agreements (if applicable)
- Performance Measurements Reports as required in Attachment 5

#### Task 2: Final Design

This Task includes submittal of the final engineering design for the Project and preparation of the Plans and Project Manual for construction bidding. This includes coordination of the design bidding, consultant selection, and contract execution on a competitive bidding basis. The Grantee will provide FRA with written notification of bid letting, contract award and issuance of notice to proceed for work under this Agreement. The dates for these activities will be identified in the Detailed Project Work Plan.

The Grantee will submit the Final Engineering Design (FD) Set for FRA review. The FD Set must be accepted by FRA in writing prior to initiating construction.

The FD Set will include, as applicable, but not limited to:

- Final (90%) Design Plans, as applicable, but not limited to:
  - o Plan cover sheet signed by all stakeholders
  - A title sheet with a drawing revision number or date; an index identifying various plan sheets comprising the drawing set; a legend of symbols or abbreviations
  - o Typical Sections & Cross-sections
  - o Track Geometry and Track Work Plans
  - o Track Profile
  - o Construction Staging Plans
  - o Temporary (erosion control) and permanent drainage plans
  - o Communication and Signal Plans
- Contract Documents (if applicable)
- Geotechnical Plan / Reports
- Preliminary Construction Cost Estimate, updated as a result of Final Engineering Design efforts
- Preliminary Construction Schedule (printed from an acceptable scheduling software format)

The Grantee will develop an Environmental Mitigation Plan to ensure that commitments identified in the approved environmental decision document are accounted for in the final design process and implemented during construction. The Environmental Mitigation Plan will be included in the Detailed Project Work Plan and will outline a process for monitoring compliance throughout the Project.

# Task 3: Construction of Port of Benton Southern Connection Rail Line Project -Phase I

The Grantee shall ensure the Project is constructed in accordance with the FRA-approved environmental decision documents and the FRA-accepted Final Engineering Design Package. The Grantee shall ensure that all pre-construction requirements identified in Task 1 are met prior to issuing notice to proceed to any construction contractor performing work under this Agreement. The Grantee shall ensure that all avoidance, minimization, and mitigation commitments identified in the FRA-approved environmental decision documents and any associated permits are implemented during construction.

The Grantee will construct the Project by:

- Replacing approximately 5,900 cross ties
- Replacing approximately 3,500 Cross Ties with Plate Replacement
- Replace 19,900 feet of 90 lb. Rail with 136 lb. Rail
- Distribute approximately 4,600 tons of Ballast
- Rehabilitate approximately 1,800 Joints
- Reconstruct 3 turnouts
- Upgrade Warning Signals at 3 crossing:
  - o Battelle
  - Kingsgate
  - o Jadwin
- Add Sign Enhancements at Saint Street crossing.

The track improvements locations are shown in Exhibit 1 above.

This project includes improvements to rail efficiency, capacity, and safety.

The Grantee will provide FRA with written notification of construction substantial completion and final completion.

#### **Task 3 Deliverables:**

• None

#### Task 5: Project Closeout

The Grantee will submit a Final Performance Report, along with other final reports as required under this Agreement, to the FRA within 90 days of the Period of Performance end date. The Final Performance Report should describe the cumulative activities of the Project, including a complete description of the Grantee's achievements with respect to the Project objectives and milestones.

#### Task 4 Deliverables:

• Final Performance Report

### V. PROJECT COORDINATION

The Grantee shall perform all tasks required for the Project through a coordinated process, which will involve affected railroad owners, operators, and funding partners, including:

- BNSF
- UPRR
- FRA
- Rail users do we list them individually?
- City of Richland

# VI. PROJECT MANAGEMENT

The Grantee is responsible for facilitating the coordination of all activities necessary for implementation of the Project. Upon award of the Project, the Grantee will monitor and evaluate the Project's progress through regular meetings scheduled throughout the Project Performance Period. The Applicant/Grantee will:

- Participate in a project kickoff meeting with FRA
- Complete necessary steps to hire a qualified consultant/contractor to perform required Project work
- Hold regularly scheduled Project meetings with FRA
- Inspect and approve work as it is completed
- Review and approve invoices as appropriate for completed work
- Perform Project close-out audit to ensure contractual compliance and issue close-out report
- Submit to FRA all required Project deliverables and documentation on-time and according to schedule, including periodic receipts and invoices
- Comply with all FRA Project reporting requirements, including, but not limited to:
  - a. Status of project by task breakdown and percent complete
  - b. Changes and reason for changes in and updated versions of Detailed Project Work Plan, Budget, and Schedule
  - c. Description of unanticipated problems and any resolution since the immediately preceding progress report
  - d. Summary of work scheduled for the next progress period
- Read and understand the Terms and Conditions of this Agreement (Attachment 1)
- Notify FRA of changes to this Agreement that require written approval or modification to the Agreement.