Port of Pend Oreille – Pend Oreille Valley Railroad (POVA)
Additional Information Attachment for WA UTC Grade Crossing Protective Fund
2025 – 2027 Grant Application Open Call for Projects

# **Applicant Information**

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# **Project Information**

#### 1. What is the project location?

The Birdhouse Railroad Crossing (USDOT Crossing #399603C) is a rural at-grade crossing located approximately 1.5 miles north of Usk in Pend Oreille County, Washington, where the Pend Oreille Valley Railroad intersects State Route 20 (SR-20).

The crossing is situated on the main line of the Pend Oreille Valley Railroad (POVA), a short line freight corridor, owned by the Port of Pend Oreille. The Birdhouse Crossing supports regional freight movement, rural mobility, and emergency access despite its low daily traffic volumes.

While the crossing consists of a single track with standard concrete panel construction, it has experienced ongoing erosion and maintenance issues caused by a pronounced dip in the roadway at the rail interface. This creates safety risks for passenger vehicles, school buses, WSDOT snow removal equipment, and heavy trucks. Given its strategic location and recurring safety concerns, the site has become a priority for repair for the Port of Pend Oreille and Pend Oreille County as part of the broader rural infrastructure and mobility improvements in the region.

#### **Approximate Coordinates:**

Latitude: 48.3644° N Longitude: 117.3068° W

#### 2. What are the existing hazards being addressed?

The Birdhouse Railroad Crossing presents persistent safety hazards that warrant immediate corrective action. The most critical concern is the pronounced dip in the roadway where the travel lanes intersect with rail panels - a condition caused by long-term subgrade settlement, aging infrastructure, and poor drainage. This uneven grade poses a significant risk to passenger vehicles, school buses, WSDOT snow removal crews, and emergency responders, especially during winter months and low-visibility conditions at night.

Exacerbating the problem are ongoing drainage issues. Water routinely pools along the track bed due to inadequate grading and a lack of stormwater infrastructure. This leads to subgrade

softening, shoulder erosion, and hazardous ice formation during colder months, further increasing the risk of vehicle loss-of-control incidents and reduced visibility.

The track structure itself is also compromised. The uneven settlement beneath the rails has caused a vertical misalignment that results in severe impacts as locomotives pass over the crossing. This not only accelerates wear on rail equipment but also threatens long-term track stability if it is left unaddressed.

Although SR-20 is straight and offers clear sightlines, the crossing is only signalized and lacks gates. While no major injury crashes have been officially reported, the site has been the subject of repeated complaints from residents and WSDOT maintenance crews—including snowplow operators—due to ongoing vehicle damage and challenges in maintaining the area during winter.

The deteriorating condition of this crossing is posing growing concerns for public safety and transportation resilience. Full reconstruction—including new concrete panels, subgrade repair, hardwood ties to restore track stability, and comprehensive drainage improvements—is urgently needed to eliminate these risks and ensure reliable, all-season functionality for both road and rail users.

#### 3. How will the project eliminate and/or mitigate the hazards listed above?

The Birdhouse Railroad Crossing Improvement Project is specifically designed to eliminate current safety hazards and deliver long-term structural resilience for both road users and rail operations. Core elements of the project include full removal and replacement of deteriorated crossing panels, subgrade stabilization, drainage improvements, and roadway resurfacing.

Repairing the subgrade, installing treated new hardwood ties, and replacing the aging panels will correct the pronounced dip in the roadway by restoring proper vertical alignment between the pavement and the rail. The crossing will be rebuilt using approximately six to eight precast concrete panels—typically 8 feet wide by 10 feet long—to span the full 24- to 30-foot width of the highway. These panels, selected for their strength and durability, will include both gauge panels (installed between the rails) and field panels (on either side). This modular system ensures a smooth, stable crossing for all vehicle types, including school buses, heavy freight, and emergency response vehicles.

Subgrade reconstruction will remove the compromised base materials and replace them with compacted crushed aggregate and geotextile fabric to prevent future settlement and maintain long-term track stability. New hardwood ties will be installed to replace deteriorated wood ties that have lost structural integrity and no longer securely hold spikes—restoring proper track gauge and supporting safe train movements through the crossing.

To address persistent drainage issues, the project will incorporate grading adjustments, shoulder restoration, and an optional underdrain system to improve water runoff and protect the subgrade. The roadway approaches will be re-graded and repayed with hot mix asphalt to

create a continuous, level surface that enhances ride quality and reduces pooling or ice buildup during winter months.

Together, these improvements will significantly reduce the risk of vehicle damage, loss-of-control incidents, and delays for emergency responders—while also lowering long-term maintenance costs for both the railroad and roadway. This project represents a proactive, durable solution that addresses current deficiencies and strengthens the overall reliability of this critical segment of the regional rail corridor.

#### 4. How will the project benefit public safety?

The Birdhouse Railroad Crossing Improvement Project will deliver substantial public safety benefits by eliminating existing rail infrastructure deficiencies that currently pose hazards to drivers, WSDOT maintenance crews—including snowplow operators—and other essential service vehicles. Chief among these hazards is a severe dip where the roadway meets the rail panels, causing vehicles to jolt, bottom out, or swerve, and WSDOT snow plows to strike the rail which poses a danger to the driver and could knock the rail out of alignment possibly leading to a derailment at the crossing. These reactions increase the risk of rear-end collisions, loss-of-control incidents, and other dangerous behaviors, particularly in winter months when pooling water and ice exacerbate the problem.

Although no serious crashes have been officially recorded at this location, the crossing has been the focus of repeated safety concerns from WSDOT crews, emergency responders, and residents—particularly given its role as the primary north-south access route in Pend Oreille County.

By reconstructing the subgrade, installing new precast concrete panels, and re-grading the roadway approaches, the project will restore a smooth, level, and well-drained crossing surface. These improvements will significantly reduce the likelihood of erratic vehicle maneuvers, damage to personal and service vehicles, and delays for emergency and public works operations. They will also enhance crossing performance for larger vehicles such as school buses and fire trucks that are more sensitive to vertical deflection or instability.

In addition to improving safety for road users, the project will directly benefit rail operations by correcting the misalignment between the track and roadway surface. The current subgrade failure has led to uneven rail support, resulting in jarring impacts on locomotives that can accelerate track wear and increase the risk of operational delays or equipment damage. Replacing deteriorated ties and stabilizing the railbed will restore proper track geometry and reduce long-term maintenance needs—supporting safer, more efficient train movements through the corridor.

Ultimately, the project will eliminate known hazards and improve the operational reliability of this critical multimodal crossing—promoting long-term safety, access, and resilience for both road and rail users.

- 5. Does the Project involve coordination with the railroad: Yes
- 6. If yes, please provide the railroad contact information:

Kelly Driver, Executive Director
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- 7. Provide a Project Budget, including:
  - a. An itemized list of the total costs of the project.

#### Birdhouse Railroad Crossing Repair – Total Project Cost: \$150,000

- Mobilization & Traffic Control \$10,000
   Includes equipment transport, site setup, detours, signage, and flagging services.
- Demolition & Removal \$15,000

Removal of existing crossing panels and excavation of the settled dip area.

• Subgrade Stabilization – \$25,000

Excavation and reconstruction of the base using compacted crushed aggregate geoteytile fabric, and drainage preparation

- aggregate, geotextile fabric, and drainage preparation.

   Hardwood Tie Replacement \$10,000
  - Supply and installation of durable hardwood ties to support panel installation and improve long-term track stability.
- Crossing Panel Procurement \$45,000
   Purchase of full-width precast concrete crossing panels for a single-track configuration.
- Panel Installation \$20,000

Labor and equipment for proper panel placement, alignment, and integration with track infrastructure.

- Roadway Tie-In & Surfacing \$15,000
  - Grading and paving of roadway approaches, including drainage improvements and asphalt or concrete surfacing.
- Inspection & Testing \$5,000
  - Quality assurance measures including compaction testing, alignment verification, and coordination with railroad operations.
- Contingency \$5,000
   Reserved for unforeseen site conditions or cost fluctuations.
- b. The requested grant amount. \$25,000
- c. Names of parties contributing financially to the project, including the applicant, and the amount each is contributing. The Port of Pend Oreille: \$125,000

8. What is the name of the part responsible for long-term maintenance of the project, such as repair of fencing? The Port of Pend Oreille – Pend Oreille Valley Railroad (POVA)

### 9. What is the estimated timeline for completion?

The Birdhouse Railroad Crossing Improvement Project is expected to be completed within 6 to 8 weeks, including approximately one week of active on-site construction. A 2- to 4-week preconstruction phase will involve final design coordination, permitting, and procurement of key materials such as pre-cast concrete panels, drainage components, and traffic control equipment.

Following grant award notification, the project will be advertised for competitive bidding to select a qualified third-party contractor. Once a contractor is selected and materials are secured, construction will begin with site mobilization and the setup of traffic control measures. On-site work will include the removal of existing panels, subgrade stabilization, installation of new concrete panels, and resurfacing of the roadway approaches—expected to be completed within a 4- to 6-day window, weather permitting. A final inspection, site restoration, and the removal of traffic control devices will wrap up the project in an additional 1 to 2 days.

Due to the lead time required for materials procurement and contractor scheduling, construction is anticipated to occur during the summer of 2026. Throughout all phases, the Port will coordinate closely with Pend Oreille County, local and regional WSDOT officials, and others to ensure continuous access and minimize traffic disruption.

# 10. How will the project's success be measured?

The success of the Birdhouse Railroad Crossing Improvement Project will be measured through technical inspections, seasonal performance monitoring, and stakeholder feedback to ensure long-term safety, reliability, and durability.

The Port of Pend Oreille will lead post-construction evaluations. Immediately following construction, quality assurance checks will confirm proper panel alignment, subgrade stability, and smooth transitions between the roadway and rail—verifying that the prior dip has been eliminated and that new drainage systems are functioning as designed.

The site will be actively monitored through the first winter season to assess freeze-thaw performance and ensure that water no longer accumulates or contributes to icing hazards. Feedback from local drivers, WSDOT maintenance crews, school transportation providers, and emergency responders will provide critical insight into improvements in comfort, drivability, and perceived safety.

Within 12 months of project completion, the Port will conduct a formal review of incident data and site performance to assess long-term safety outcomes and identify any remaining issues, including behavioral risks such as detouring or trespassing. A reduction in maintenance needs, safety complaints, and service disruptions will serve as key indicators of the project's success.

Collectively, these evaluation metrics will confirm whether the project has met its objectives: eliminating infrastructure-related hazards, improving safety for all users, and maintaining reliable, year-round access for both highway and rail operations to support essential transportation movements—for both people and goods—along this vital north—south corridor.

# 11. What is the applicant's experience in grant management or the successful completion of grant projects of this nature, including years of experience, types of projects completed and project cost/scope?

The Port of Pend Oreille brings over 30 years of experience managing multimodal infrastructure projects and administering public funds in full compliance with state and federal regulations—with zero audit findings. As the designated Associate Development Organization (ADO) for Pend Oreille County, the Port has successfully led and delivered a range of publicly and privately funded projects that advance rural economic development, freight mobility, and transportation safety.

The Port has a proven track record of delivering rail infrastructure improvements, including:

- 1) Track Rehabilitation Projects (2017–2021): Two WSDOT-funded grants, combined with local match, totaled over \$1.1 million in improvements to enhance rail safety, stability, and long-term performance.
- 2) Port Shop Expansion (2023–ongoing): A \$14.5 million capital investment currently supported by state and local match funding, with ongoing efforts to secure additional federal support to expand locomotive maintenance and conversion capabilities and enhance heavy freight handling capacity.
- 3) Regional Safety Action Planning (2024–2025): A \$715,000 planning initiative to advance multimodal safety along the US 2 corridor, led in collaboration with local agencies and the Northeast Washington RTPO.

The Port strictly follows all procurement, contracting, and grant administration requirements and regularly partners with licensed engineering firms to ensure technical accuracy, transparency, and regulatory compliance. Its experienced team—including executive leadership, financial officers, operations staff, and a dedicated grant manager—has consistently delivered complex transportation projects on time and within budget.

This demonstrated capacity ensures the Birdhouse Railroad Crossing Improvement Project will be delivered efficiently, professionally, and in full alignment with UTC grant performance requirements.

# 12. List any other information that may be useful in evaluating this project. Include additional attachments if needed.

The Birdhouse Railroad Crossing Improvement Project addresses a long-standing safety concern and infrastructure deficiency along the Pend Oreille Valley Railroad (POVA) in rural Pend Oreille

County. This at-grade crossing is a vital connection for residents, emergency responders, freight carriers, and recreational users traveling along the Pend Oreille River between Newport and Metaline Falls. Its deteriorated condition—including a severe dip at the rail panels—causes significant safety risks, accelerates wear on vehicles and rail equipment, and compromises the railroad's operational efficiency.

The proposed improvements build on recent investments by the Port to enhance freight mobility and infrastructure resilience. By eliminating hazards for both highway users and train operations, the project will extend the corridor's service life and reduce long-term maintenance costs. It also reflects the Port's proactive approach to rail safety and system performance—addressing emerging issues before they escalate into costly repairs, service disruptions, or injury to the public.

The project has also garnered strong support from local stakeholders, including WSDOT maintenance crews, school transportation staff, and emergency services - all of whom have voiced ongoing concerns about the site's condition and the need for timely improvements.

With engineering estimates, a defined scope of work, and contractor readiness already in place, the Port is prepared to move forward immediately upon receiving funding. Construction will occur entirely within the existing transportation corridor, with no significant environmental impacts anticipated. Standard best management practices (BMPs) will be used to control erosion, manage stormwater runoff, and protect nearby natural resources. The Port will also coordinate with Pend Oreille County, WSDOT, and other relevant agencies to proactively address potential conflicts through early consultation and to obtain the necessary permits.

This shovel-ready project offers a high return on public investment, delivering meaningful safety, mobility, and economic benefits to the region.

13. I hereby affirm that, to the best of my knowledge, the information provided in this application is true and accurate. See Application Worksheet for Signature

Railroad Consent Information – See Application Worksheet for Signature Kelly Driver
Executive Director
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