Federal Railroad Administration

U.S. Department of Transportation, Office of the Secretary of Transportation

Brunner Road BNSF Grade Separation

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Cover Page

Project Title	Brunner Road; BNSF Grade Separation
Applicant Name	Lakes Highway District
Amount of CRISI Program Funding Requested Under this NOFO:	$14,373,128
Amount of Proposed Non-Federal Match:	$3,593,282
Other Sources of Federal Funding, if applicable:	none
Source(s) of Proposed Non-Federal Match:	
Lakes Highway District	$3,375,567
BNSF	$217,715
Total Project Cost	$17,966,410
Was a Federal Grant Application Previously Submitted for this Project?	No
City, County, State Where the Project is Located	Outside City Limits, Kootenai County, Idaho
Is the Project Located in a Rural Area?	Yes, 100%
Congressional District Where the Project is Located	1st Congressional District
Application Track(s) proposed to be funded by this NOFO?	Track 3: Final Design (FD) / Construction (CN)
Current Lifecycle Stage and Anticipated completion of current Lifecycle Stage?	Final Design 2026 / Construction 2028
Is the Project located on real property owned by someone other than the applicant?	Yes; primary ROW was purchased in 2023, small remnants remain to be purchased:
If yes, list real property owners and the nature of the property interest.	Jenelle Jay, ROW purchase .01 ac Brandee & Jeremy Shively, ROW purchase 0.44 ac Chris Ripatti, ROW purchase 0.04 ac Gem State Water Company LLC, ROW purchase 0.01 ac

Host Railroad/Infrastructure Owner of Project Assets;	BNSF
Other impacted Railroads	None
Tenant Railroad, if applicable	Amtrak, Montana Rail Link
If applicable, is a 49 U.S.C. 22905-compliant Railroad Agreement Executed or pending?	Pending; in conversations with BNSF, an agreement will be obtained once funding is secured.
Is the Project currently programmed in ANY medium or long range planning document: For example, State rail plan, or interregional intercity passenger rail systems planning study, State Freight Plan, TIP, STIP, MPO Long Range Transportation Plan, State Long Range Transportation Plan, etc.?	1. State Rail Plan; 20 year Capital Investment Plan table, Bridging the Valley Project, page ES-6 (pdf page 7) 2. KMPO Metropolitan Transportation Plan 2020-2024; Short Term Project #63, page 6-3
Is the Project located on a potential corridor selected for the Corridor Identification and Development Program?	Yes; New Conventional Rail: North Coast Hiawatha, page 8[1]
Is this Project eligible under 49 U.S.C. 22907(c)(2) that supports the development of new intercity passenger rail service route including alignments for existing routes?	No
Is this Project eligible under 49 U.S.C. 22907(c)(11) that supports the development and implementation of measures to prevent trespassing and reduce associated injuries and fatalities?	No
If YES to the previous question, is this project located in a county identified by FRA's National Strategy to Prevent Trespassing on Railroad Property?	N/A
Is the application seeking consideration for funding under the Magleve Grants Program?	No

[1] DOT FRA, FY22 Corridor Identification and Development Program Selections, https://railroads.dot.gov/elibrary/fy22-CID-program-selections (Attachment 11 Section A)

Project Summary

The Brunner Road BNSF Grade Separation Project (Project) proposes to construct a structure to grade separate Brunner Road and the BNSF railway. The alignment of Brunner Road will be redirected to reduce the skew with the railroad, which in turn shortens the proposed bridge. The proposed Project is at the intersection of Brunner Road and the BNSF railroad Kootenai Subdivision. An extreme skew angle (49 degrees) with the railroad is present, creating an unsafe condition due to poor intersection sight distance. The situation continues to deteriorate as traffic on the local road has increased with recent growth in the area. Despite the railroad intersection with Brunner being an extremely busy (50 trains a day, as reported in the grade crossing inventory sheet) double track with a signal, horn, and gates, vehicles have been documented bypassing the gates. Combining this with traffic backing up from the nearby intersection of Diagonal/Clagstone Roads with Brunner Road, there is a high risk of cars coming into conflict with trains moving at high speeds. With the realignment of Brunner Road, a roundabout will be installed at the intersection with Diagonal/Clagstone Road. The Project improvements will remove the possibility of vehicular accidents at the railroad, improve the performance of the Diagonal/Clagstone Roads intersection, provide more reliable travel times, reduce pollution due to less idling at the train crossing, and increase the viability of Diagonal Road as a connection to Highway 95.

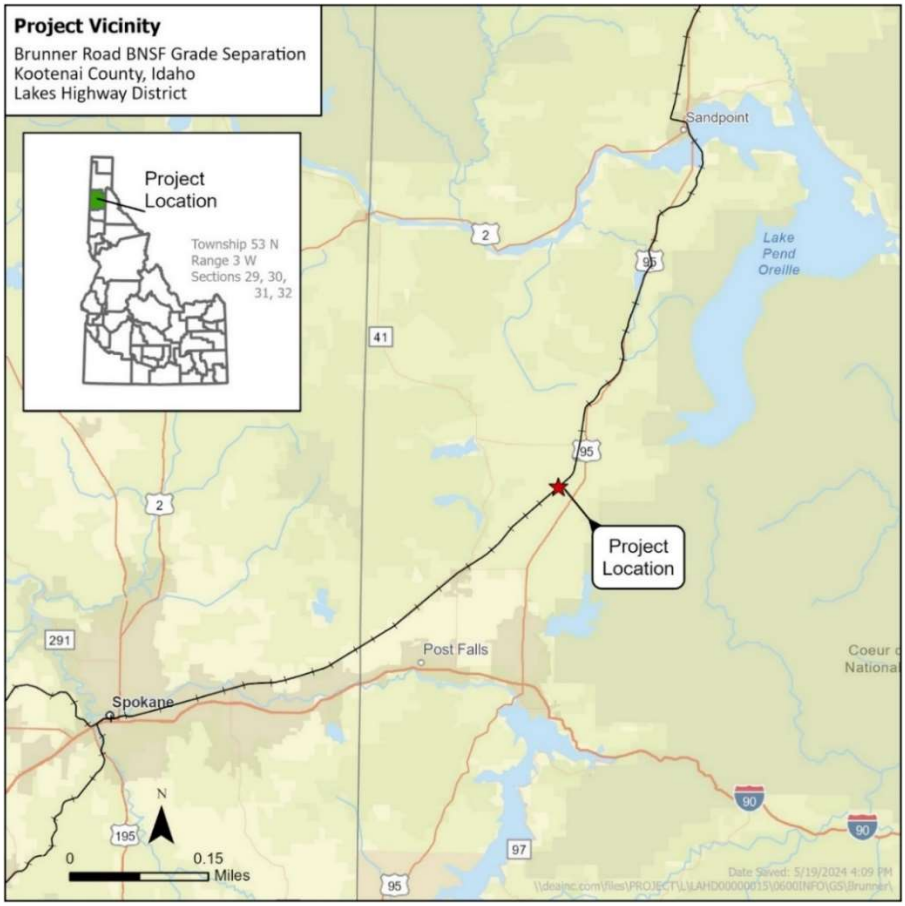

Figure 1: Vicinity Map

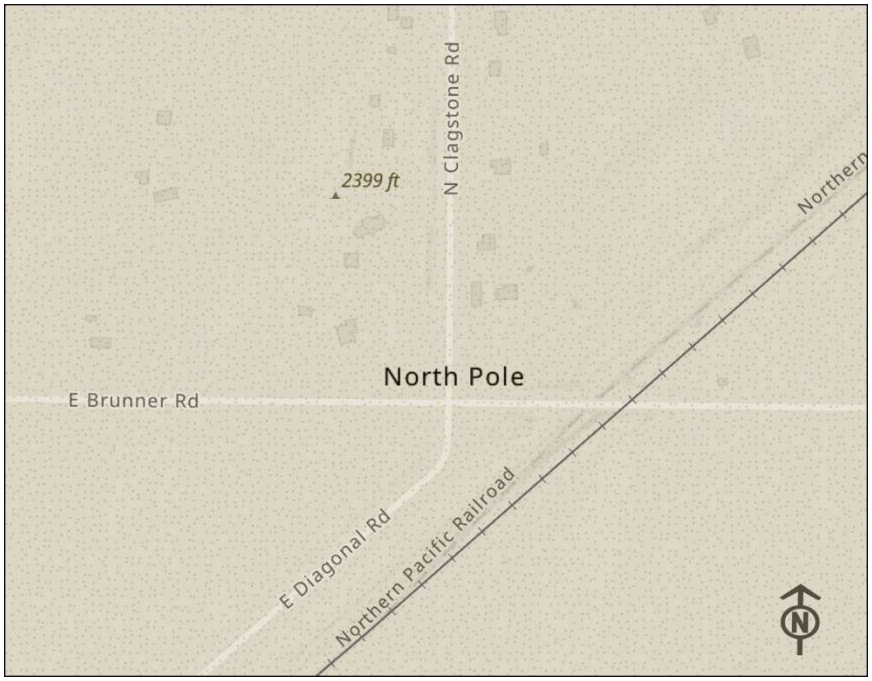

Figure 2: Project Area Overview

Grant Funds, Sources and Uses of Project Funds

Lakes Highway District (LHD) is responsible for 18.71% of the total Project cost. Previous costs have been incurred by LHD and are discussed below. BNSF Railway will cover 5% of the cost of the overpass which comes out to 1.29% of the Project cost. The remaining 80% of the Project cost is what is being requested in this grant application.

The cost for Track 3 – Final Design and Construction phases of the Project is $17,626,623. Table 1 details the overall Project cost summary and identifies the specific phases for which this application requests funding (in light blue). A detailed cost estimate is shown in Attachment 11 Section B.

Table 1: Project Cost Estimate Summary

Project Cost Estimate Summary				
Task No.	Task Name / Project Component	Cost	Percentage of Total Cost	Source of funds
1	Concept Planning and Preliminary Design	$127,000	0.71%	Lakes Highway District (LAHD)
2	Preliminary ROW Acquisition	$212,787	1.18%	LAHD
3	Final Design Engineering	$1,348,710	7.51%	CRISI grant request, LAHD
4	Construction & Future ROW	$16,227,913	90.60%	CRISI grant request, LAHD
Total Project Cost**		$17,966,410	100.00%	

** Please see detailed project cost estimate in Attachment 11 Section B.

Previously incurred Project costs associated with grade separation and trespass prevention per 49 U.S.C 22907(c) 5 and 11, included:

- $394,385 for planning (done in 2004), preliminary engineering (done in 2004), which included 30% design plans and cost estimates for the previous concept, and environmental documentation (initial NEPA approval in 2006). These Project costs are not included in the total project cost, as they were incurred prior to November 15, 2021.
- $127,000 (funded by the highway district) for alternatives analysis/selection (2023) and preliminary engineering. Lakes Highway District completed an alternatives analysis to clearly identify the best option for the grade separation and to identify needed right-of-way and Project costs. The alternatives analysis is available in Attachment 11 Section C.
- $212,787 has been spent by Lakes Highway District on early property acquisition (2023).

Lakes Highway District has not requested any other federal funds at this time; currently this CRISI grant is the only federal funding program request.

Table 2: Funding Sources

Project Funds			
Previously Incurred Project Costs	Funding Source	Total ($) 2023	Percentage of Total Cost
Federal Funding			
	Subtotal:	**$0**	**0.00%**
Non-Federal Funding			
2023 Brunner Road Concept Planning & Preliminary Design		$127,000	
Right-of-Way Purchase		$212,787	
	Subtotal:	**$339,787**	**1.89%**
	Total Previously Incurred Project Costs	$339,787	1.89%
Current Project Costs	Funding Source	Cost (2023)	Percentage of Total Cost
Federal Funding			
Requested	CRISI (2024) Program Request	$14,373,128	
	Subtotal:	**$14,373,128**	**80.00%**
Non-Federal Funding			
In Process	BNSF	$217,715	1.21%
Secured	Lakes Highway District	$3,035,780	16.90%
	Subtotal:	**$3,253,495**	**18.11%**
	Total Current Project Costs	$17,626,623	98.11%
	Total Project Costs	$17,966,410	100.00%

Applicant Eligibility Criteria

Lakes Highway District, the applicant, is eligible as a local government in the state of Idaho. The Idaho State Statute Title 40 Chapter 13 gives highway districts the "exclusive general supervision and

jurisdiction over all highways and public rights-of-way within their highway system, with full power to construct, maintain, repair, acquire, purchase and improve all highways . . . The highway district board of commissioners shall have the exclusive general supervisory authority over all public highways, public streets and public rights-of-way under their jurisdiction . . ."[1] The full statute is attached as Attachment 11 Section D.

The Local Highway Technical Assistance Council (LHTAC) will serve as the primary point of contact for the grant and will administer the grant. Per Idaho State Statute Title 40 Chapter 24, the Local Highway Technical Assistance Council has the ability to cooperate with and receive and expend aid and donations from the federal or state governments, and from other sources for the administration and operation of the Council, and when authorized by the participating local jurisdiction, to act for that local jurisdiction, through a joint exercise of powers agreement with any other local jurisdiction and any agency of the state of Idaho, or any agency of the federal.[2] The full statute is attached as Attachment 11 Section E. As such, LHTAC has been the primary contract administrator for many federal aid projects throughout the state and is able to continue to assist locals in the contract administration of the Federal-aid program throughout Idaho. With over two dozen staff specifically trained and ready to help with federal aid projects including the management, design, environmental, and financial management of projects, LHTAC is well suited to providing the necessary management and oversight on federal aid projects.[3]

Project Eligibility Criteria

This rail grade separation project is eligible under this NOFO Section 3.A.ii. as a capital project. The Project contains only one component. The Brunner Road Grade Separation is in the lifecycle stage of final design and construction and therefore falls under Track 3.

As part of the Bridging the Valley 42 mile rail corridor project to separate vehicle traffic from train traffic, the Brunner Road Grade Separation went through the environmental NEPA process and has been designated as a Categorical Exclusion (Cat. X). The approved Cat. X is under federal aid project number TPUL-9932(028) and was approved on August 22, 2006. The signed Cat. X and the original Documented Categorical Exclusion Determination of Non-Significance report are in Attachment 13 Sections A and B.

[1] Idaho Statutes; Title 40, Chapter 13; https://legislature.idaho.gov/statutesrules/idstat/title40/t40ch13/sect40-1310/#:~:text=(8)%20The%20highway%20district%20board,resolutions%20and%20establish%20regulations%20in
[2] Idaho Statutes; Title 40, Chapter 24; https://legislature.idaho.gov/statutesrules/idstat/Title40/T40CH24/SECT40-2403/
[3] Local Highway Technical Assistance Council, Access May 14, 2024; https://lhtac.org/about/

Idaho Transportation Department (ITD) environmental regulations have been met through this Cat. X.

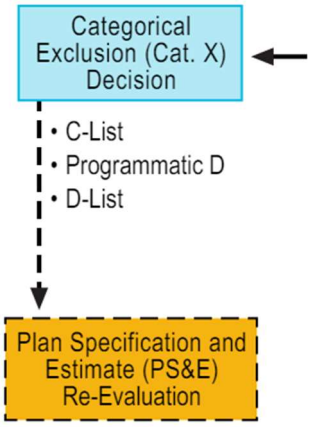

Figure 3: Excerpt of ITD's Environmental Process Flow Chart

The next steps for the Project would be a Plan Specification and Estimate (PS&E) Re-Evaluation as identified in the ITD Environmenmental Process Flow Chart (Attachment 13 Section C).[4] This evaluation is required to be completed within six months of going out to bid for construction of the Project. According to ITD's NEPA Re-evaluations and Environmental Commitments document (Attachment 13 Section D), a revaluation has three possible outcomes with the probable outcome of the Brunner Road Grade Separation Project being that the "Details of the project or circumstances have changed, but the original finding is still valid. In this case, the project documentation is updated to reflect the changes and accurately describe the project, affected environment, and compliance with legal requirements."[5]

As noted in the Scope of Work Subtask 2.6, the recipient will complete all FRA requirements and approval processes for NEPA compliance by following FRA's *Procedures for the Consideration of Environmental Impacts* (effective May 26, 1999) (Environmental Procedures).

Detailed Project Description

During the concept development of the Project, the design team took a fresh look at the Bridging the Valley (BTV) proposed layout and location. The original BTV alternative was reviewed, and three different alternatives were developed. Ultimately Alternative 2 was selected based on the Project footprint, constructability, and traffic operational efficiency. One of the principal constraints and constructability issues for the original BTV alternative was the construction of a temporary railroad crossing. This could be alleviated if a roadway bridge was constructed instead of an underpass and railway bridges. In order to construct a roadway bridge that minimized the span length over the railway, an "S" curve was used to shift Brunner Road southward (this layout is similar to the original BTV, but with a smaller footprint). This alignment shift caused the existing intersection of Brunner/Diagonal/Clagstone to shift to the south as well. The proposed intersection would be a roundabout, which maximizes the predominant movements of right turns onto eastbound Brunner Road and left turns onto southbound Diagonal Road. The roundabout was carefully designed to avoid impact to the existing Brunner alignment for constructability purposes. This allows for two-way traffic to be maintained through most of the construction of the proposed roadway and bridge. It also simplifies the coordination between the contractor and the BNSF Railway Company, avoiding potential delays and costs during construction. The new overpass crossing between Brunner and the BNSF railway is about 0.12 miles south of the existing at-grade crossing. The proposed roundabout

[4] ITD Environmental Process Flow Chart, Accessed April 24, 2024; https://apps.itd.idaho.gov/Apps/env/ITD%20Env%20Process%20Flow%20Chart.pdf

[5] ITD NEPA Re-evaluations and Environmental Commitments March 2024, agreement between ITD and FHWA, Accessed April 24, 2024; https://itd.idaho.gov/wp-content/uploads/2024/02/NEPA_Re-evaluations_2024.pdf

center is located approximately 320-feet southwest of the existing intersection. The proposed bridge in this alternative is 263-feet long by 32-feet wide. Figure 4 lays out the Project design. The Brunner Road; BNSF Alternative Memo can be seen in Attachment 11 Section C. Additionally, this corridor has been designated as one of three "Corridors of Commerce" (Idaho rail plan page 3-38; Attachment 11 Section G).

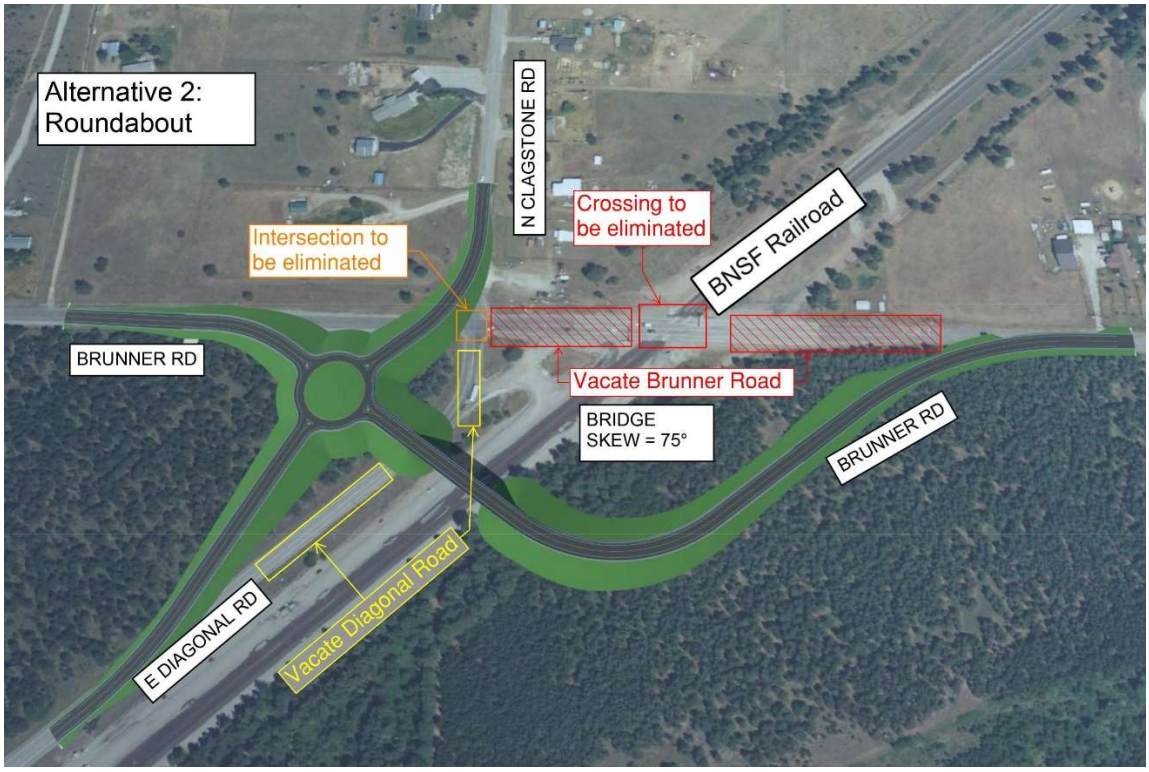

Figure 4: Project Design

Challenges Being Addressed

The existing intersection of Brunner with the railway is at an extreme skew angle (49 degrees), creating an unsafe condition due to intersection sight distance. Additionally, the intersection of Clagstone and Diagonal Roads with Brunner is 560 feet to the west of the railroad and all have a posted speed limit of 50 mph, although the curve of Diagonal that leads to Brunner is posted at 15 mph. The roadway intersection is a two-way stop controlled with Brunner Road being the free flowing movement. The Brunner/Diagonal/Clagstone intersection has large, paved returns to allow turning movements. All roads are 2 lane rural roads with varying shoulder widths; however, Brunner Road is four lanes directly over the rail crossing, 300 feet to the west and 500 feet to the east. It has an annual average daily traffic count of 2500 (2023) with an estimated 2% truck traffic. The railroad intersection with Brunner is an extremely busy double track with 50 (48 freight, 2 passenger) thru trains in any

given 24 hour period[6] (see Attachment 11 Section F) and an estimated 105 trains per day by 2040 (see Attachment 11 Section G)[7]. Waiting times for vehicles to cross are high and expected to continually increase over time without the Project. The grade separation project will reduce vehicle wait times, increasing travel efficiency and creating less air pollution of idling vehicles. The railroad crossing has a signal, horn, and gates, but vehicles can still bypass the gates. With train traffic traveling at speeds up to 79 mph over the roadway crossing, this creates a very unsafe crossing. Although there have been no crashes directly involving a train, 1 accident in the last five years occurred directly as a result of the railroad crossing[8] and there have been a number of near misses (see cover photo). Additionally, in 2013, there was a fatality at an at grade crossing 4 miles to the south of Brunner Road along the same rail line. The intersection had a similar skew to Brunner Road and a grade separated crossing has been put in place since the time of the fatality. The intersection of Brunner/Diagonal/Clagstone has had 9 crashes within the past five years. As part of the grade separation project the intersection will be realigned and a roundabout will be installed. Roundabouts reduce the likelihood of high-speed collisions at intersections and will be an improvement at this intersection. Brunner Road is also a school bus route. A summary of the challenges is listed in Table 3.

Table 3: Challenges

Safety	High speed road with high vehicle and train volumes
	Increasing volumes of both vehicles and trains
	Skew angle of road with railroad
	Ability for vehicles to by-pass crossing gates
	Nearby intersection of Diagonal Road with Brunner
Economic	Vehicle operating costs due to idling times
Environment	Noise from horns
	Queuing with high wait times create air pollution
	Increased air pollution over time due to increased train and vehicle volume
Quality of Life	Travel delays due to waiting for train
	Noise from up to 50 trains per day
	Travel delays at Diagonal/Clagstone and Brunner Roads

[6] U.S. Department of Transportation, Open Data Catalog, Accessed 2/24/24, https://safetydata.fra.dot.gov/OfficeofSafety/PublicSite/Crossing/Crossing.aspx?phasetype=C&rpttype=I&txtcrossingnum=058860J

[7] Idaho Statewide Rail Plan, page 3-28, Accessed 5/2/2024, https://apps.itd.idaho.gov/Apps/freight/Idaho-Statewide-Rail-Plan.pdf

[8] Local Highway Technical Assistance Council, online crash map, accessed 2-28-24, https://gis.lhtac.org/safety/

Current and Proposed Railroad Operations

The railroad owner is Burlington Northern-Santa Fe (BNSF) with Amtrack and Montana Rail Link (MRL) also operating on the track. Two passenger trains and 48 freight trains pass through the at-grade crossing within any given 24-hour period. By year 2040, this volume is estimated to more than double, averaging 105 trains per day (Idaho Statewide Rail Plan page 3-28; Attachment 11 Section G).[9]

Expected Project Outcomes

The Project outcome will be a grade separation of Brunner Road and the BNSF railway resulting in the elimination of one grade crossing and the realignment and redesign of a nearby intersection. The grade separation will improve safety through reduced collisions, reduce vehicle delay and associated air pollution, provide reliable travel times for the general public and school bus routes, and ease access for emergency vehicles. The new roadway intersection will reduce high speed collisions and provide greater efficiency in the movement of vehicle traffic through the use of a roundabout. Expected Project outcomes are shown in Table 4.

Table 4: Expected Project Outcomes

Safety	• Eliminates the risk of conflict between roadway users and trains by separating uses
	• Eliminates queuing of vehicles stopped for train crossings
	• Reduces the potential for high severity collisions at the intersection
	• Reduces crash risk at the Diagonal/Clagstone and Brunner Roads intersection
Economic	• Decreased vehicle operating costs by reduced idling
Environment	• Reduces fuel consumption and vehicle emissions due to idling in a queue waiting to cross the tracks
	• Eliminates the need for train horns
Quality of Life	• Reduces delay for vehicle travel
	• Eliminates the noise from train horns

Users/Beneficiaries

Beneficiaries include local, regional, and interstate users. The Project is located on a nationally significant east/west corridor. The corridor provides a direct link from Puget Sound to Chicago as noted in the Idaho Statewide Rail Plan.[10] This is also the only Amtrak/passenger route in the northern portion of the United States making it essential for passenger rail connections. An essential route for BNSF and MRL freight and Amtrak passenger movement, the Project will eliminate the risk of

[9] Idaho Statewide Rail Plan, page 3-28, Accessed 5/2/2024, https://apps.itd.idaho.gov/Apps/freight/Idaho-Statewide-Rail-Plan.pdf
[10] Idaho Statewide Rail Plan, page 2-2, Accessed May 2, 2024, https://apps.itd.idaho.gov/Apps/freight/Idaho-Statewide-Rail-Plan.pdf

vehicle/rail conflicts providing improved safety. Figure 5 shows the interstate BNSF Railway routes and Figure 6 shows the routes in relation to the Project in the Pacific Northwest.

The local traveling public will benefit by less traffic delays and eliminating the risk of vehicle/rail conflicts. Additional benefits to the traveling public of not having to wait for a train include more reliable travel times, ease of access for emergency vehicles in the area, on time school bus routes, and less vehicle idling, resulting in less pollution. A grade separation will also improve noise quality as no train horns will be required. The surrounding area is rapidly developing residential neighborhoods so these homeowners will also be beneficiaries.

Figure 5: BNSF Interstate Routes

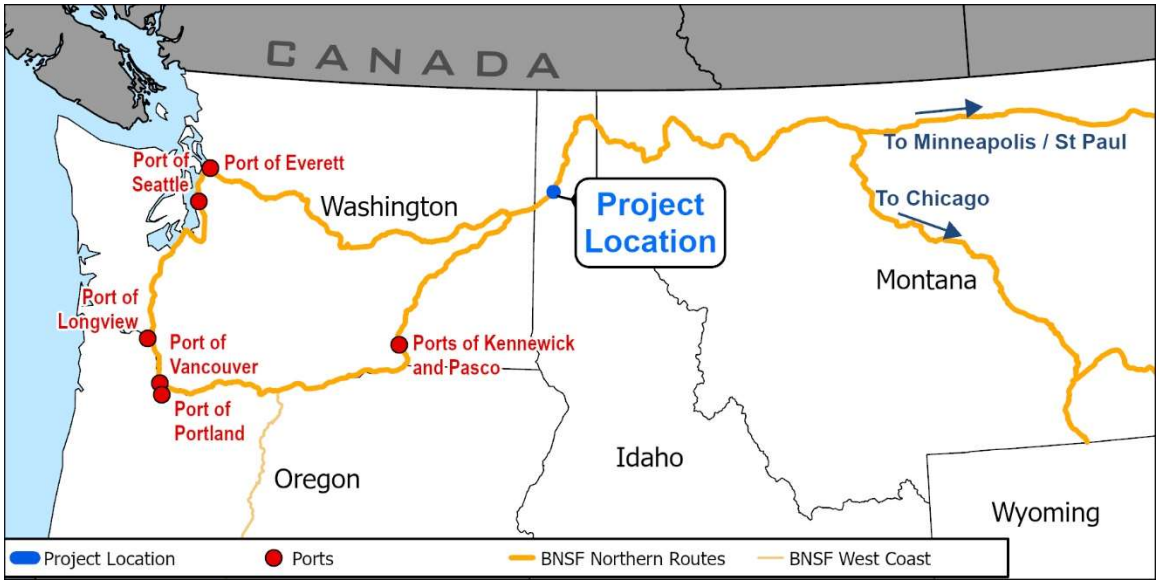

Figure 6: Project Location in relation to BNSF Interstate Routes in the Pacific Northwest

Table 5: Beneficiaries and Benefits

Beneficiary	Benefit
Freight and Passenger Rail	Eliminate risk of vehicle/rail conflicts
	Reduction in delays due to collisions
Vehicle	Eliminate risk of vehicle/rail conflicts
	Improved travel time
	Less travel delays
	Reliable travel times
Residents	Less pollution from idling cars
	Noise reduction
Regional Economy	Reliable vehicle travel times
	Cost savings due to -no collisions, travel times, etc.
Interstate Economy	Reliable rail travel times

Project Elements

The Project will remove one grade crossing and will include the final design of a vehicle bridge over the railroad, realignment of the local roads in the vicinity of the bridge, and a new intersection of Diagonal/Clagstone Roads and Brunner Road. The overpass will be high enough to allow for double stacked freight containers with a long enough span to allow a future third track. See Figure 4 above.

Table 6: US DOT Crossing Inventory Form

US DOT Grade Crossing Inventory #	Proposed Improvement	Rail Operator(s)	Railroad Owner	Property Owner	Latitude	Longitude
058860J	Grade Separation	BNSF, Amtrak, MRL	BNSF	Applicant & BNSF	47.90410	-116.74041
https://safetydata.fra.dot.gov/OfficeofSafety/PublicSite/Crossing/Crossing.aspx?phasetype=C&rpttype=I&txtcrossingnum=058860J						

The full DOT form is shown in Attachment 11 Section F.

The Project will eliminate one grade crossing through a grade separation. The Project is listed as part of the Bridging the Valley projects in the Idaho State Rail Plan on page ES-6 (pdf page 7). The Idaho

State Rail Plan is in Attachment 11 Section G. Of the 11 new grade crossings proposed in Bridging the Valley, five of them are in Idaho. Brunner Road grade separation would be the second one to be completed. Bridging the Valley information can be seen at the Spokane Regional Council website[11] and the Kootenai Metropolitan Planning Organization website[12]. The Project will be implementing measures to prevent trespassing and reduce associated injuries by positive separation in the ROW with access control fence.

Project Location

The Project is located in rural Kootenai County, Idaho in Idaho Congressional District 1 at 47.90410 degrees latitude, -116.74041 degrees longitude. The U.S. DOT Inventory Crossing number is 058860J and is on a BNSF railway branch SANDP J-Lakes J at rail mile 34.72. Please see Figure 7.

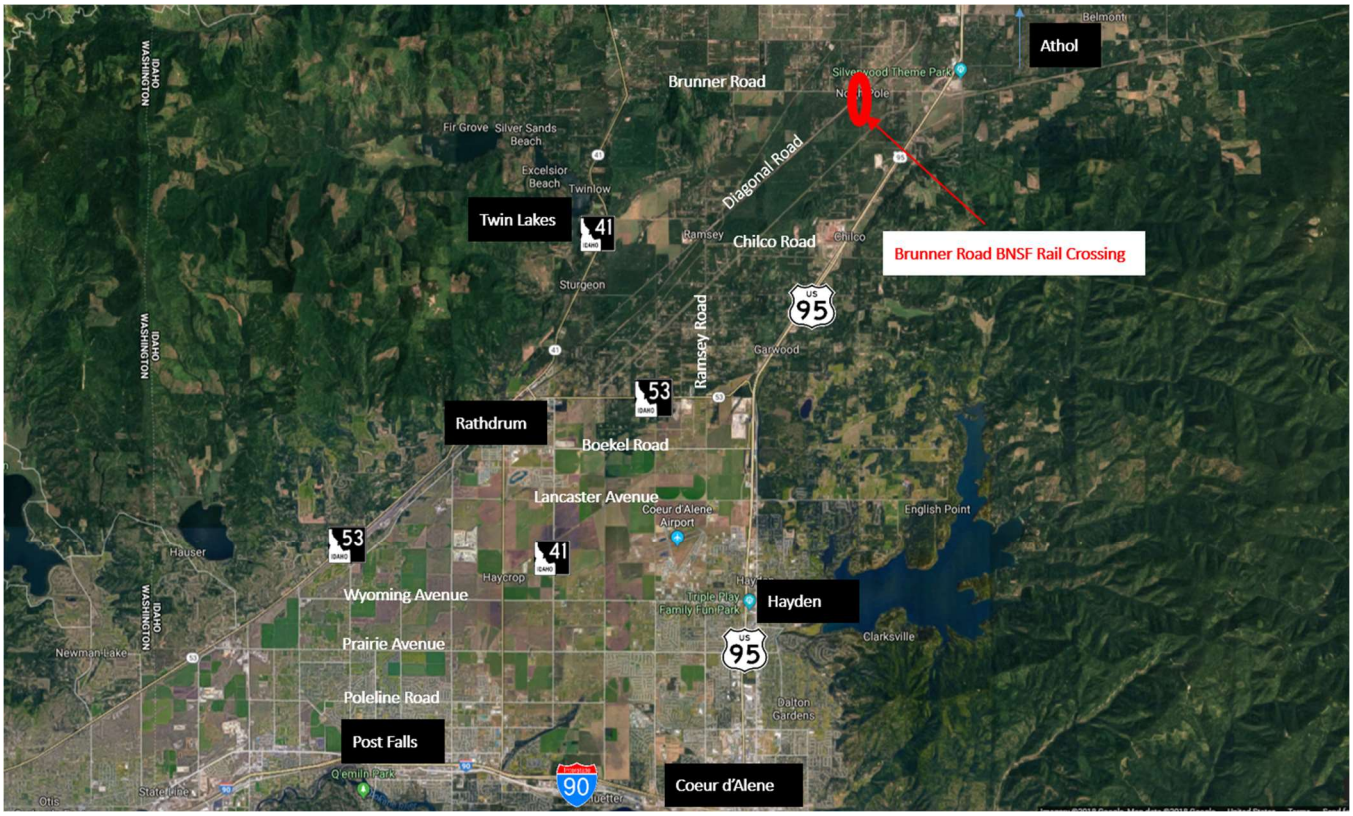

Figure 7: Detailed Project Location

[11] Spokane Regional Transportation Council, Bridging the Valley, https://www.srtc.org/bridging-the-valley/
[12] Kootenai Metropolitan Planning Organization, Bridging the Valley, https://www.kmpo.net/bridging-the-valley/

Evaluation and Selection Criteria

Evaluation Criteria

This application shows the Project is ready for final design and construction, has technical merit, and has exceptional project benefit.

i. Project Readiness:

This application shows project readiness through the outlined criteria as shown below.

(A) Status of Required NEPA

This rail grade separation project is eligible under this NOFO Section 3.A.ii. as a capital project. The Project contains only one component. The Brunner Road Grade Separation is in the lifecycle stage of final design and construction and therefore falls under Track 3.

As part of the Bridging the Valley 42 mile rail corridor project to separate vehicle traffic from train traffic, the Brunner Road Grade Separation went through the environmental NEPA process and has been designated as a Categorical Exclusion (Cat. X). The approved Cat. X is under federal aid project number TPUL-9932(028) and was approved on August 22, 2006. The signed Cat. X and the original Documented Categorical Exclusion Determination of Non-Significance report are in Attachment 13 Sections A and B.

Idaho Transportation Department (ITD) environmental regulations have been met through this Cat. X. The next steps for the Project would be a Plan Specification and Estimate (PS&E) Re-Evaluation as identified in the ITD Environmenmental Process Flow Chart (Attachment 13 Section C).[13] This evaluation is required to be completed within six months of going out to bid for construction of the project. According to ITD's NEPA Re-evaluations and Environmental Commitments document (Attachment 13 Section D), a revaluation has three possible outcomes with the probable outcome of the Brunner Road Grade Separation project being that the "Details of the project or circumstances have changed, but the original finding is still valid. In this case, the project documentation is updated to reflect the changes and accurately describe the project, affected environment, and compliance with legal requirements."[14]

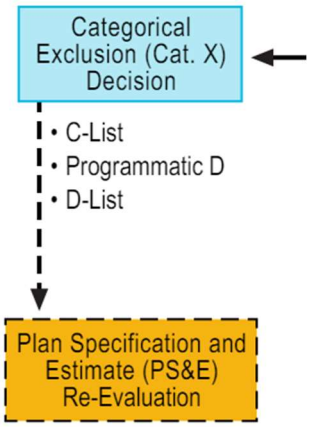

Figure 8: Excerpt of ITD's Environmental Process Flow Chart

(B) Status of Agreements

Lakes Highway District currently has a permanent easement with the BNSF railroad for an at-grade crossing. The proposed grade separation is in a separate location. As BNSF

[13] ITD Environmental Process Flow Chart, Accessed April 24, 2024; https://apps.itd.idaho.gov/Apps/env/ITD%20Env%20Process%20Flow%20Chart.pdf

[14] ITD NEPA Re-evaluations and Environmental Commitments March 2024, agreement between ITD and FHWA, Accessed April 24, 2024; https://itd.idaho.gov/wp-content/uploads/2024/02/NEPA_Re-evaluations_2024.pdf

supports the Project, the new grade separation will include a new permanent easement that will replace the existing at-grade easement. Any difference in easement area will be minimal.

(C) Lifecycle Stages

The Brunner Road and BNSF grade separation is in Track 3, Final Design and Construction. Tracks 1 and 2, Systems and Project Planning and Project Development have been completed through the Bridging the Valley studies in which the Project received an environmental Categorical Exclusion (as noted above) and will need a re-evaluation during Final Design. The Project went through additional planning to determine the best roadway alternative alignment and to determine if a bridge or an underpass would be most appropriate as noted in the Detailed Project Description section above. This effort took the Project through Preliminary Design. The planning study is shown Narrative-Attachment 3. The preliminary design is shown in Figure 4.

(D) Partner Coordination

This Project has local, regional, state, and national support. Two states, several regional public entities, multiple cities, and local businesses support the Bridging the Valley project which this grade separation project is a part of. Letters of support include Kootenai Metropolitan Planning Organization (KMPO), the Idaho Transportation Department (ITD), the BNSF Railway, Silverwood Theme Park, and Coalition for America's Gateways and Trade Corridors (CAGTC). Letters of support are attached in Attachment 11 Section H.

Lakes Highway District has the funds available to support the Project during the course of the final design and construction timeframe. The board is ready and willing to designate specified funds as soon as grant funding is available. LHD had an annual approved budget of $21,125,792 in Fiscal Year 2023-24 which can be seen in Attachment 11 Section I. Of those funds over $15,000,000 were dedicated towards roadway and asset expenditures. LHD has the capability to provide their match funds which comes out to approximately $607,000 per year over 5 years. BNSF will provide the remaining support which is a 5% match for the construction of the bridge.

ii. Technical Merit:

This application shows technical merit through the outlined criteria as shown below.

(A) Statement of Work Readiness

The tasks and subtasks outlined in the statement of work (SOW) are appropriate to achieve the expected outcomes of the proposed Project. The tasks and subtasks outlined are standard procedure for this type of project. These same tasks and subtasks were followed in the last five years by Lakes Highway District when they completed the Ramsey Road grade separation project (previous grade separation project over the BNSF).

(B) Technical Qualifications

Lakes Highway District, the applicant, is eligible as a local government in the state of Idaho. The Idaho State Statute Title 40 Chapter 13 gives highway districts the "exclusive general supervision and

jurisdiction over all highways and public rights-of-way within their highway system, with full power to construct, maintain, repair, acquire, purchase and improve all highways . . . The highway district board of commissioners shall have the exclusive general supervisory authority over all public highways, public streets and public rights-of-way under their jurisdiction . . ."[15] The full statute is attached as Attachment 11 Section D. Lakes Highway District staff has successfully managed previous projects that were federally funded such as the recent Ramsey Road grade separation.

The Local Highway Technical Assistance Council (LHTAC) will serve as the primary point of contact for the grant and will administer the grant. Per Idaho State Statute Title 40 Chapter 24, the Local Highway Technical Assistance Council has the ability to cooperate with and receive and expend aid and donations from the federal or state governments, and from other sources for the administration and operation of the Council, and when authorized by the participating local jurisdiction, to act for that local jurisdiction, through a joint exercise of powers agreement with any other local jurisdiction and any agency of the state of Idaho, or any agency of the federal.[16] The full statute is attached as Attachment 11 Section E. As such, LHTAC has been the primary contract administrator for many federal aid projects throughout the state and is able to continue to assist locals in the contract administration of the Federal-aid program throughout Idaho. With over two dozen staff specifically trained and ready to help with federal aid projects including the management, design, environmental, and financial management of projects, LHTAC is well suited to providing the necessary management and oversight on federal aid projects.[17]

(C) Business Plan

Lakes Highway District intends to fund the Project match through a 5% BNSF match for the bridge costs and the rest through the LHD's annual budget. Final Design of the Project will be completed by a consultant selected through a fair request for proposal process. Construction of the Project will be completed by a selected contractor. In order to develop a workforce with a high job quality and create wealth within the region, local consultants and contractors will be hired, when possible, through a competitive process.

(D) Legal, Financial and Technical Capacity

As noted earlier, LHD and the LHTAC have authority through Idaho State Statues in Title 40 Chapters 13 and 24. Lakes Highway District (LHD) has demonstrated excellent financial stewardship of its assets and has funded 100% of its federal match obligations on capital projects. The Ramsey Road grade separation project was recently completed (Spring 2022) as a rural funded Federal Aid STP project. The project, completed on time and within budget, was managed by the LHTAC in cooperation with LHD and consultants. As mentioned previously, one of the LHTAC's responsibilities is to receive and administer federal or state funds on behalf of local highway districts. The LHTAC has managed dozens of projects for highway districts state-wide over the years. With over two dozen staff

[15] Idaho Statutes; Title 40, Chapter 13; https://legislature.idaho.gov/statutesrules/idstat/title40/t40ch13/sect40-1310/#:~:text=(8)%20The%20highway%20district%20board,resolutions%20and%20establish%20regulations%20in
[16] Idaho Statutes; Title 40, Chapter 24; https://legislature.idaho.gov/statutesrules/idstat/Title40/T40CH24/SECT40-2403/
[17] Local Highway Technical Assistance Council, Access May 14, 2024; https://lhtac.org/about/

specifically trained and ready to help with federal aid projects including the management, design, environmental, and financial management of projects, LHTAC is well suited to providing the necessary management and oversight on any project. Lakes Highway District intends to fund the Project match through a 5% BNSF match for the bridge costs and the rest through the LHD's annual budget. LHD had an annual approved budget of $21,125,792 in Fiscal Year 2023-24. As mentioned under *Partner Coordination*, $15,000,000 was dedicated towards roadway and asset expenditures which shows they have the financial capacity to meet the non-federal match.

(E) Innovative Technology and Financing

The Project has demonstrated innovation by revisiting the Bridging the Valley (BTV) preferred alternative and developing a less impactful solution. According to the *Brunner Road; BNSF Rail Separation Alternatives Analysis Recommendation Memorandum* (Attachment 11 Section C), the Project (alternative 2) would save $5.3 million and reduce right of way impacts by 5.3 acres over the BTV alternative (alternative 1). Choosing the Project alternative allows the BNSF railway to maintain normal operation whereas the original BTV option would require a temporary railway shoo-fly in order to maintain operations. BNSF will contribute financially (5% or bridge costs) to the Project.

(F) Consistent with DOT Planning Guidance and Laws

The proposed Project is consistent with planning guidance and documents set forth by DOT, including those required by law or State rail plans developed under title 49, United State Code, chapter 227.

As part of United States Code Title 49 Chapter 227, the Project will be consistent with state transportation planning goals and will coordinate with intergovernmental agencies. This Project is in the Idaho Statewide Rail Plan (see Attachment 11 Section G) and supported by the metropolitan planning organization (see letters of support in Attachment 11 Section H). Grant management through the LHTAC provides additional oversight.

iii. Project Benefits:

This project benefits the stakeholders in the following way:

(A) Effects on system and service performance;

The Project will improve vehicular connection from Diagonal Road to Highway 95. Diagonal Road serves as a secondary connection from Rathdrum to Highway 95. By constructing a roundabout and an overpass traffic will move more efficiently to and from Highway 95. As mentioned earlier this rail corridor is a crucial connection for BNSF and Amtrak as well. Reducing the risk of vehicle and train conflicts increases the reliability of the rail corridor.

(B) Effects on safety, competitiveness, reliability, trip or transit time, and resilience;

The Project will improve safety on Brunner Road as well as the intersection with Diagonal Road. Cars no longer run the risk of queuing into the roadway intersection or the rail crossing. Additionally, the skew with Brunner and the railroad will be eliminated which was creating a sight distance concern

with vehicles. Vehicle trip time will decrease, and trip reliability will increase as there will no longer be the need to wait for a train.

(C) Efficiencies from improved integration with other modes

The Project will remove conflict between vehicles and trains at the grade crossing. Roadway shoulders are also being increased from 2' to 5' which provides more space for bicycle users.

(D) Ability to meet existing or anticipated demand.

The Project will be replacing a 2 way stop controlled intersection with a roundabout. The roundabout takes the intersection from a Level of Service(LOS) of F to a LOS of A for the year 2045 (Attachment 11 Section C). The proposed roadway bridge span also leaves room for a future third track to be installed.

Selection Criteria

i. FRA preference to:

(A) This Project is not addressed by other FRA grant programs and is not currently requesting any other funding beyond this CRISI grant application.

(B) The proposed federal share requested for this grant is 80%.

(C) The grant funds will be maximized considering the cost of the Project in relation to the public benefits. The Benefit-Cost Analysis (Attachment 3) shows benefit cost ratio of 1.00:1 at a 3.1 percent discount with benefits exceeding cost. Benefits accrue to safety, economic competitiveness, environmental sustainability, quality of life, and residual project value. The project is expected to generate $15.83 million in discounted benefits and $15.80 million in discounted capital costs; therefore, the project has a NPV of $26k.

(D) This Project will be developing or implementing measures to prevent trespassing and reduce associated injuries by positive separation in the ROW with access control fence.

ii. Administration Priorities:

Safety:

The Project provides safety benefits by eliminating the risk of conflict between roadway users and trains, eliminating crashes. It also reduces the risk of high severity crashes at the intersection of Diagonal and Clagstone Roads with Brunner Road by converting a two way stop to a roundabout.

Climate Change and Sustainability:

The Project would reduce greenhouse gas emissions due to less idling of passenger cars, buses, and heavy trucks as they wait for a train to cross the road. With the anticipated increase in vehicle traffic on the roadway and an increase in the number of train crossings, idling time is only expected to increase. Putting the Project in place will remove these environmental impacts.

The new roundabout at the intersection of Diagonal/Clagstone Roads and Brunner Road will allow vehicles to continue their trip more efficiently without idling at a stop sign waiting to access an increasingly busy road. Details of the reduction of greenhouse gas emissions can be seen in the BCA; Attachment 3.

Figure 9: Queue of idling cars at crossing

Equity and Justice40:

Based on the **Justice40 Rail Explorer**, the Project location is not within any disadvantaged area or within any BIA area. However, a transportation disadvantaged census tract is located approximately 3 miles north of the Project, well within this rural Project's impact area. The tract also has PM 2.5 above the 75th percentile. The Project is not in a BIA AIAN National LAR (Bureau of Indian Affairs American Indian and Alaska Native National Land Area Representation).

The **USDOT Equitable Transportation Community (ETC) Explorer** shows results for the closest community to the Project, Athol, which is approximately 3 miles to the northeast.

- The National Explorer Results indicate transportation insecurity in the area at 94% with both transportation access and transportation safety being greater than 70%, while Kootenai County below the thresholds.
- The State Explorer Results indicate transportation insecurity in the area at 80% with both transportation access and transportation safety being greater than 70%. Kootenai County is below the transportation insecurity thresholds, but is above the environmental burden threshold at 67%.

The **FEMA National Risk Index online tool** shows the Overall Risk and Social Vulnerability of the Project area as Very Low to Relatively Low with a Community Resilience rating of Very High. The Project location on the below maps (screenshots from the FMEA National Rish Index online tool) is at the local place known as the 'North Pole'. Figures 10, 11, and 12 show the FEMA National Risk Indices for the Project area.

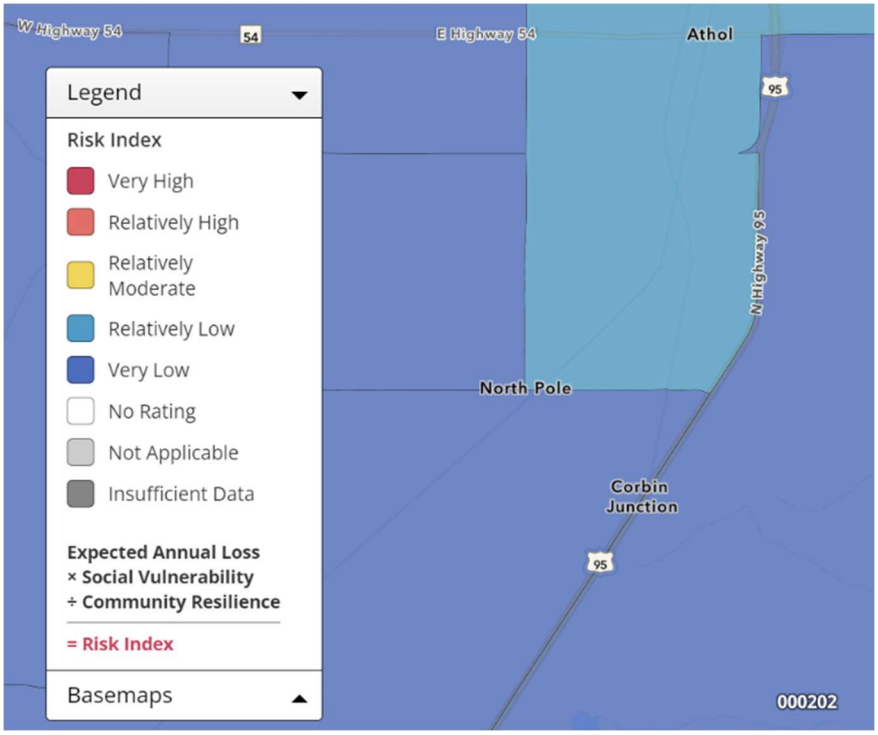

Figure 10: Risk Index

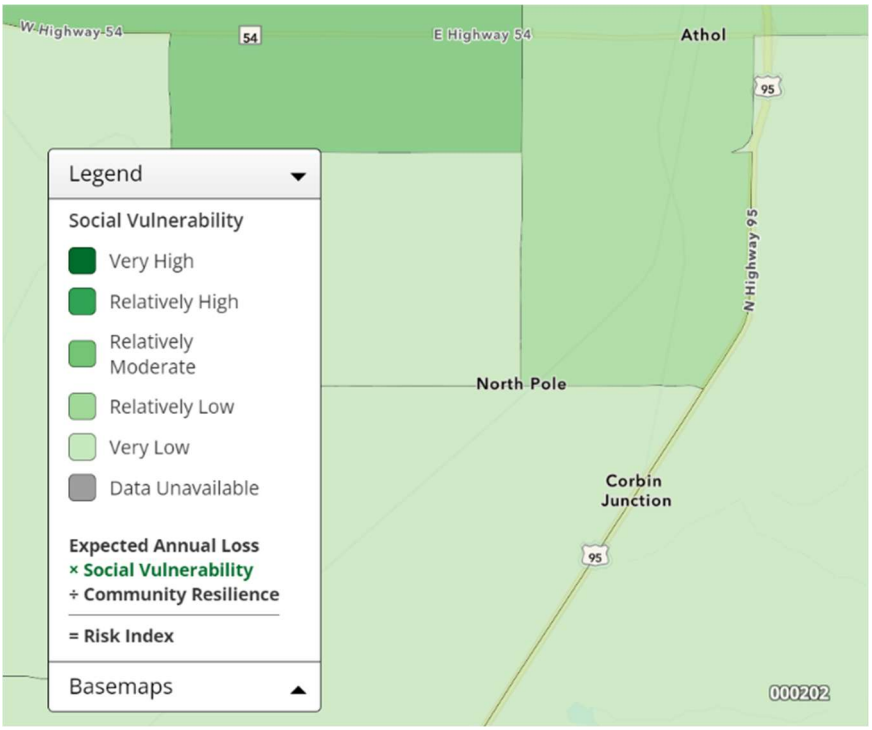

Figure 11: Social Vulnerability

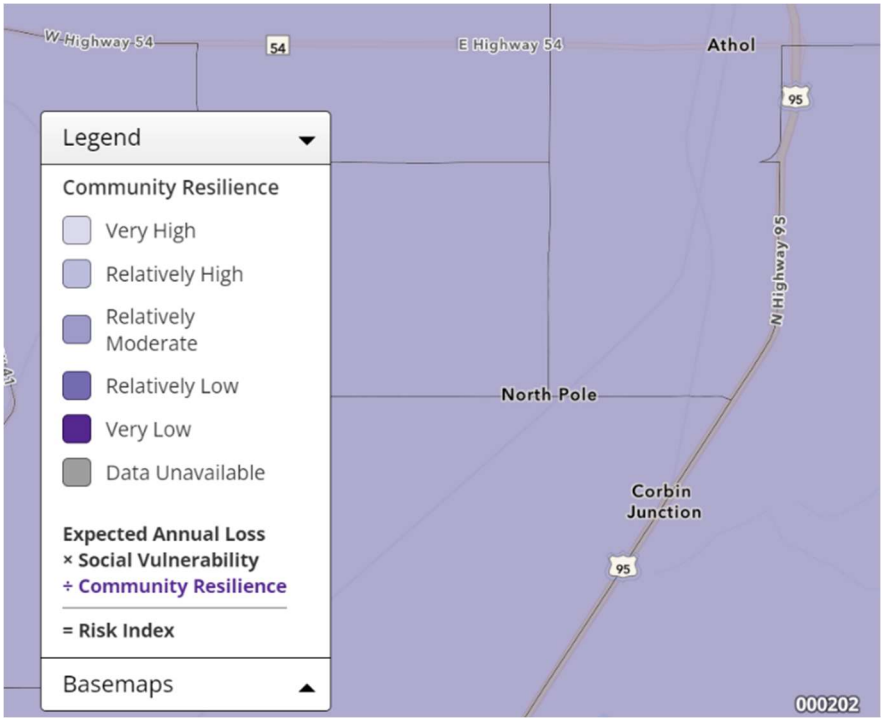

Figure 12: Community Resilience

Workforce Development, Job Quality, and Wealth Creation:

In order to develop a workforce with a high job quality and create wealth within the region, local consultants and contractors will be hired, when possible, through a competitive process. The Project is supported by one of the largest employers in the area, Silverwood Theme Park (the local amusement and water park). Diagonal Road is an alternate route to Highway 95 to access the venue; this alternate route requires accessing Brunner Road and crossing the BNSF railway for the last leg of the journey. The Silverwood Theme Park supports improvements to Diagonal Road so guests and employees traveling from Washington and other Idaho cities to the south have improved safety. See the Silverwood Theme Park letter of support in Attachment 11 Section H.

Attachment 2: Articles 9 – 11 are attached as Attachment 11 Section J.

Project Implementation and Management

The contract administration and oversight for this Project will be handled by the Local Highway Technical Assistance Council (LHTAC). LHTAC specializes in assisting local highway jurisdictions with the distribution of federal funds. They have 30 years of experience working with local highway jurisdictions which displays a long history of experience in distributing federal funds. They will ensure that Lakes Highway District (LHD) remains in proper conformance with guidelines laid out by FRA including project progress reporting.

Steps have already been taken by LHD to minimize risks associated with the Project. The Project has already been through environmental review and has a Categorical Exclusion (Cat X) determination

(see Attachment 13 Section A). An environmental re-evaluation is required during PS&E and it is anticipated that the original Cat X will still be valid. In this case, the project documentation will be updated to reflect the changes and accurately describe the project, affected environment, and compliance with legal requirements.

Right-of-way acquisition often presents one of the highest risks in the preconstruction phase. LHD has mitigated a large portion of this risk by acquiring 90% of the needed right-of-way already. This reduces the likelihood of a drawn-out acquisition process which would delay the construction of the Project. The Project intends to follow ITD design standards and project delivery procedures and supplement applicable standards for LHD and BNSF. Therefore, the technical risks, and budget risks associated with design uncertainties are low.

LHD has administered a contract that constructed a similar grade separation project within the past 5 years. The project consisted of removing an at grade crossing at Ramsey Road by putting in a bridge over the railway. An existing intersection was modified and a local road was realigned. LHD also worked alongside BNSF to maintain train operations while constructing the local road overpass. All this work closely resembles the effort needed to construct the Brunner Road grade separation. The construction was completed in a single season with no significant schedule conflicts.

The cost estimate is based on the Preliminary Design effort completed in 2023. Costs were developed in 2023 dollars and inflated at 3.5% annually to the start of the respective phase. A 35% contingency has been used for construction costs. The detailed cost estimate is included in Attachment 11 Section B. All future maintenance of the completed Project will be handled by LHD.