

Assessment of State Support for Short Line Rail Infrastructure

Draft Report

December 2021

Prepared for:

Washington State Legislature
Joint Transportation Committee



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Executive Summary

Overview

In 2015, as directed by the legislature, the Washington State Department of Transportation (WSDOT) published the “Washington State Short Line Rail Inventory and Needs Assessment.” This assessment was the first data-based evaluation of the condition and capital needs of the state’s entire short-line rail network. It found that “Much of the existing short line rail system in Washington State does not meet the state’s current or future capacity and velocity needs for efficient operations for the future. Productivity and safety of the system suffers from long-deferred maintenance.”

The Washington State Legislature directed the Joint Transportation Committee to update the Washington State Short Line Rail Inventory and Needs Assessment, to both assess the effectiveness of state support for short-line rail infrastructure and to make recommendations to improve and enhance state support efforts for the future.

This study was conducted by DB (Deutsche Bahn) Engineering & Consulting USA. The project team developed a methodology that involved a broad stakeholder outreach effort with short line rail infrastructure owners, short line rail operators, short line rail customers from representative industries, and ports served by short line railroads.

Background

Large Class I Railroads provide the primary arteries for the movement of goods by rail throughout Washington. Short line railroads provide connectivity between rural agricultural and timber/wood products production areas and the main line rail networks. Additionally, short line railroads provide first mile and last mile connectivity to customers utilizing rail but not located on the Class 1 Railroad network. This short line rail network allows Washington state farmers, manufacturers, and other sectors access to both national and global markets. The state’s Short Line Railroads also serve advanced manufacturing sectors, facilitating the movement of both raw materials and finished goods. Several of the state’s deep-water and inland ports rely on the short line railroad network to provide access to the North American rail network, allowing them to efficiently move import and export traffic.



While Short Lines in Washington carry a comparatively small share of the total rail traffic in Washington, they comprise about 40 percent of all railroad mileage in the state with over 1,300 route miles of track. In addition to the network of privately run railroads, The state of Washington owns three rail lines that comprise the Palouse River and Coulee City (PCC) Rail System in Eastern Washington. At almost 300 miles in length, It is the longest short line freight rail system in Washington.

State and Federal Support for Short Lines

Washington state law (RCW 47.76) has directed the Washington State Department of Transportation (WSDOT) to provide grants and loans to improve the short line rail system. That assistance is a primary means for WSDOT to assure essential service is protected through the inclusion of projects designed to acquire rail lines when necessary, rebuild, rehabilitate, and construct improvements on the state rail network, and preserve railroad service and right of way to fulfill future needs. One means to fulfilling that statutory obligation is through the administration of two financial support programs, the Freight Rail Investment Bank (FRIB), and the Freight Rail Assistance Program (FRAP). FRIB loans provide funds to build new or improve existing rail infrastructure across the state. In the most recent 2021-2023 biennium program period, a total of \$5.08 million has been made available for FRIB loans. Participation in the FRIB Program is limited in scope, by state law, to include entities in the public sector only.

In contrast to loans under FRIB, FRAP, the state's grant program, is open to both publicly and privately owned railroads, rail shippers or receivers, and port districts with rail for purposes of rehabilitation, infrastructure preservation or economic development. The state most recently provided \$7.6 million in grants in 2019-2021. For the 2021-2023 biennium, a total of \$7.04 million is available for FRAP grants.

Based upon the amount of monies requested through both programs, in the most recent biennium period exceeding available funds, WSDOT is then tasked with determining the most suitable projects for funding using a prioritization process conducted jointly with the Washington Department of Commerce, Washington Department of Agriculture, Washington Public Ports Association and various entities within WSDOT's Rail, Freight, and Ports Division. Review includes the evaluation of proposals using a benefit/cost analysis in accordance with state legislature direction, identification and utilization of best practices as specified under Washington State Law, and use of a self-evaluation matrix as submitted in the initial application.

Key Findings

Through interviews and a survey, Washington Short Line Railroads stakeholders universally identified maintenance and commercial issues as their top priority regarding on-going needs for support. While maintenance of infrastructure is a major issue across the broader railroad industry, it is a particular challenge among short lines, many of which lack the larger revenue streams, maintenance budgets, and access to capital markets which larger companies enjoy. For most commodities, short line railroads

face fierce competition from trucking, which benefits from operating on the publicly maintained roads and on the federal interstate highway system despite the greater environmental impact created by utilization of the mode. As such, it is critical to a short line's success to provide reliable, timely and tailored service to its customers; metrics which strongly correlate to the condition of a railroad's infrastructure. All railroads, including short lines, are both most economically and environmentally efficient as the volume of traffic moved over their railroad is maximized. The continued health and growth of Washington's short line industry is dependent on its ability to not just maintain existing customers and levels of service, but to execute on opportunities to site and serve new customers as well.

Recommendations

Through a stakeholder engagement process, the project team heard desire for an expansion of state programs, potentially through both changes to the program and by easing both the requirements and application processes. The programs are perceived to have value, and needs expansion, vs. reduction or discontinuance. Other recommendations heard from stakeholders are listed below:

- Increase size of funds available for grant funding - Survey participants articulated that there is an overall greater desire to use grants vs. loans for project funding. Grant Program Participants articulated a desire for the pool of grant monies available under FRAP to be increased by legislative action. Increased funding to short line railroads not only provides social and environmental benefits due to decreased congestion and emissions, but also decreases highway maintenance needs from less truckloads.
- Evaluate creation of a state tax credit program - Programs involving tax credits serve as a potential source of funding outside the grant or loan program and encourage additional private investment. While several states currently have a tax credit program, but the most prominent example is federal 45G Short Line Rehabilitation Tax Credit. Originally envisioned as a means to allow railroads to reduce the scale of deferred maintenance and project cancellations due to a lack of consistent funding opportunities, 45G provided a means to subsidize project and maintenance obligations with a credit against tax liability.
- Develop new funding opportunities to meet specific short line rail needs and open availability to additional entities - There was a desire to open both programs to both public and private entities to include customers and other stakeholders. This is particularly significant with FRIB, where eligibility is limited to publicly owned railroads, port districts, rail districts, and local governments only based on the wording in the enabling legislation.

- Streamline grant application review process – The current process uses a fixed period for the application and selection process, there was a request to utilize rolling periods to allow groups to focus on multiple applications over time into both programs. The grant and loan application processes mirror each other in the lengthy and detailed application process. This process is identical for public and private entities, and the private entities noted that the complexity and time constraints in the application process require resources that are often not available.
- Increase state's ability to serve short line economic development needs – To best support the economic development needs of short line railroads there must be an experienced facilitator envisioning the project, developing consensus, and directing negotiations. The usual expertise in economic development and community consensus building must be supported by a working knowledge of railroad economics.
- Increase statewide engagement with short line owners/operators - There was a desire to strengthen the relationship between statewide stakeholders and Class 1 Railroad connections. This may involve state-level resources that could be advocates for the interest of locally owned short lines within the state.

Introduction

The ongoing recovery from the COVID-19 pandemic highlights the complexity and fragility of supply chain and logistics infrastructure, both domestically and internationally.

A crucial link in the rail supply chain are short line railroads, which frequently serve as the “first mile” or “last mile” in moving raw materials, processed goods, and finished products between origin and destination via the rail network. While larger railroads are primarily focused on the line haul movement between locations, short lines, as the name implies operate on a limited amount of track, often focused on or dedicated to serving only a single area or industry. However, even with limited geographic size, short line railroads play an important role in the U.S. supply chain, comprising 40% of the overall U.S. railroad network. For a sense of scale, it has been shown that one every four rail cars moving throughout the country are handled at some point by a short line railroad.



The Surface Transportation Board (STB) classifies American railroads on three tiers based on annual operating revenue. These tiers are revised annually based on changes in actual revenue and the incorporation of a deflator formula based on the Railroad Freight Price Index. In 2021, the annual operating revenue thresholds are as follows:

- Class I Railroads are railroads with annual operating revenues exceeding \$900 million. There are seven Class I railroads in the United States. Two, BNSF Railway and the Union Pacific Railroad (UP), operate in the state of Washington. BNSF and UP combined operations comprise approximately 60% of Washington's total freight rail route miles.
- Class II Railroads are railroads with annual operating revenues exceeding \$40.4 million, but less than \$900 million. There are currently 19 railroads in the United States that qualify as Class II railroads, one operates in Washington, utilizing trackage rights on a Class 1 Railroad to access the Spokane area for interchange.
- Class III Railroads are railroads with annual operating revenues below \$40.4 million, which includes most short line railroads currently in operation. The terms “Class III” and “Short Line” are often used interchangeably. While Class III Railroads represent the smallest railroad companies;

they comprise a major part of the overall freight railroad network. STB classifications of railroad companies should not be confused with the Federal Railroad Administration (FRA)'s track classifications, which dictate the maximum safe operating speed on a track segment based on track condition.

- In the state of Washington alone, there are more than two dozen Class III Railroads with a total of over 1,300 route miles, or about 40% of the overall freight rail network. Individual Class III railroads in Washington range from a single route mile to over 150 route miles.

STB classifications of railroad companies should not be confused with the Federal Railroad Administration (FRA)'s track classifications, which dictate the maximum safe operating speed on a track segment based on track condition.

FRA Track Classifications includes criterion related to attributes such as the size of the rail, grade crossings conditions, superelevation (banking) on curves, and the condition of ties and rail as well as other engineering elements.

- Class 1 track restricts operating speeds to 10 mph for freight operations and 15 mph for passenger operations. Most yard, branch line, and industrial spur track falls into this category, and for many short lines Class 1 track encompasses the majority of their route miles. FRA standards also permit excepted track, or track that does not meet Class 1 standards, but can still be safely operated upon at speeds of 10 mph or less. Passenger trains are prohibited from using excepted track as are loads containing hazardous materials
- Class 2 track restricts operating speeds to 25 mph for freight operations and 30 mph for passenger operations. Branch lines and secondary main lines are often classified as Class 2 track, and are common on short line railroads.
- Class 3 track restricts operating speeds to 40 mph for freight operations and 60 mph for passenger operations. Class 3 track is common on regional railroads and for higher-traffic branch lines of Class I railroads.

Additional Classes 4, 5, and 6 exist for higher speed operation, but are not utilized by short line railroads.

Higher track classes require increased levels of maintenance and inspection, in accordance with federal guidelines. Costs to upgrade track to a higher class also create a longer-term responsibility for increased maintenance. Upgrading of infrastructure is critical for the future.

As maximum permissible carload weights on Class I Railroads have increased over the past several decades, notably from 263,000 pounds per car (263K) to 286,000 pounds per car (286K), these considerations are crucial for short line railroads that may have to operate at lower speeds or spend time and labor to rebalance loads to stay within track capacity limits. Lack of ability to handle 286K loads significantly impacts the level of service that can be provided by the railroad for its customers.

This is particularly important for bulk agricultural traffic. Some Class I Railroads have started increasing maximum car capacities to 315,000 pounds per car (315K), track classifications will continue to have an outsized role in challenging short line railroads to both remain profitable and maintain a state of good repair.

The concept of a short line railroad is as old as American railroading itself. Unlike larger railroads, short line railroads exist to provide rail access to smaller markets and/or individual industries. Following the deregulation of the railroad industry with the Staggers Act of 1980, larger railroads were able to consolidate operations, including leasing or selling off low-profit, low-traffic lines to existing or new short line railroads. This allowed them to pursue profitable line haul movements, leaving a need for the handling of traffic in the first and last mile of movements in many instances.

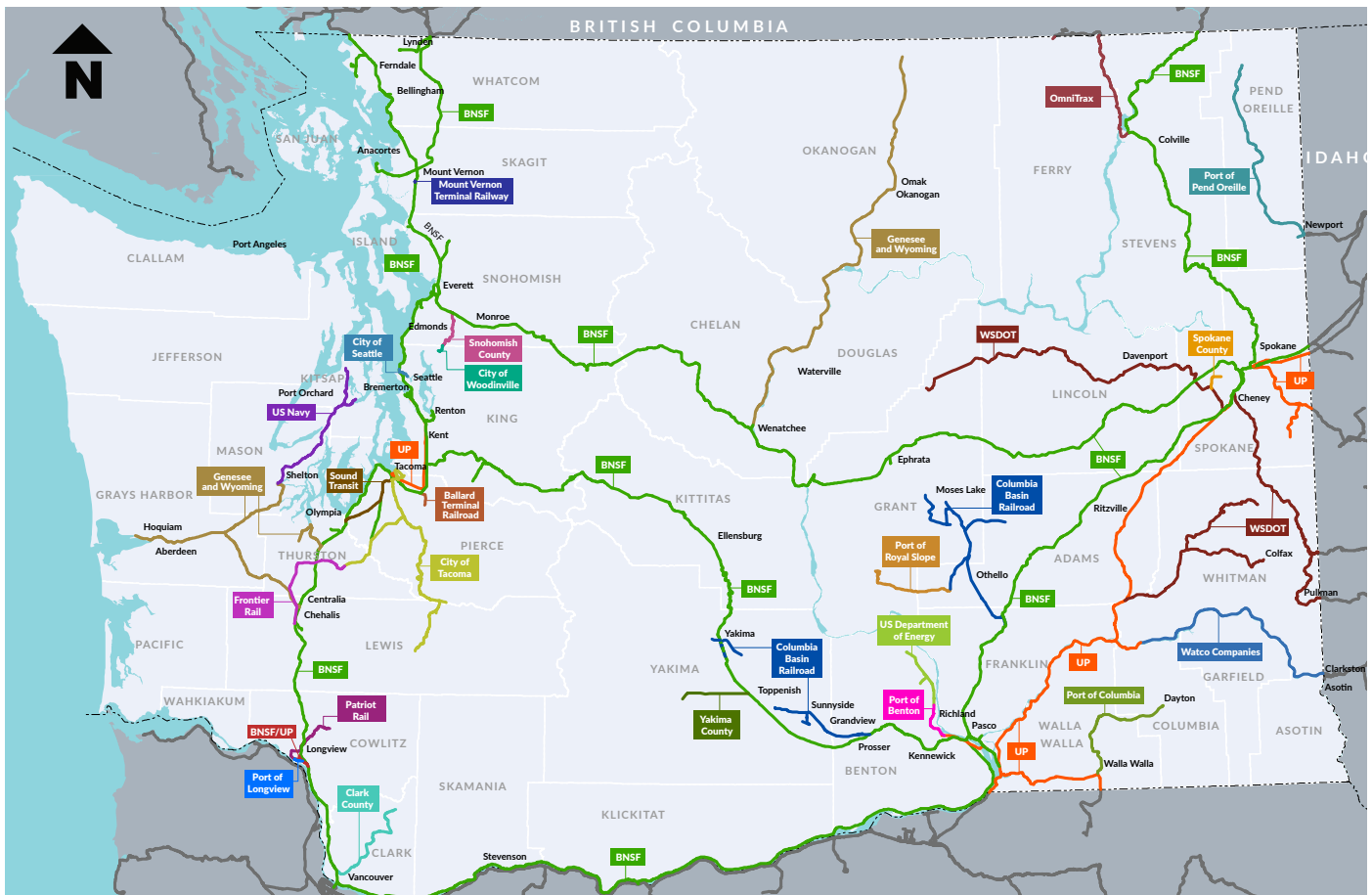
Short line operations play a vital link in the freight network, linking Class I Railroads with ports, industries, agriculture, and other customers to provide a seamless network connecting Washington to the nation and the world. Short line railroads are also crucial to smaller markets or industries that may be without rail access entirely. Short line railroads also improve the efficiency of other transportation modes by reducing the need for additional trucking operations on public highways. Short lines can also be integrated with trucking operators, using intermodal freight or through transloading, where freight is trucked to or from the railroad when a customer does not have direct rail access.

Short Lines are in most cases local or regional businesses, making a significant contribution to local and state economies. While each short line railroad is unique, there are four general organizational structures for short line railroads based on ownership:

- **Independent:** The short line railroad is a privately-owned third-party business that operates similarly to any small business. In some cases, the third party may be a unit of local government, such as a port district or a regional transportation agency.
- **Integrated:** A larger company owns the short line as part of a vertically integrated logistics stream. For example, a lumber mill may own its own short line railroad to connect the mill directly to a Class I Railroad.
- **Class I Owned:** Some short line railroads are partially or wholly-owned subsidiaries of one or more Class I Railroads
- **Railroad Holding Company:** While the short line railroad is locally operated, the company is owned by a larger multi-state railroad corporation. Major American short line holding companies include Genesee and Wyoming, OmniTRAX, Progressive Rail, Patriot Rail, and others.
- **Contractor Relationship:** Somewhat unique to Washington is a fifth structure of public/private partnership, where the Washington State Department of Transportation (WSDOT) owns several railroad line segments and contracts out operations and maintenance to short lines who act as contractors.

Washington's Class III Network

Short line railroads in Washington operate over 1400 miles of track, portions of which are in both public or private ownership. This is approximately 40% of the total rail route mileage in the state. The population of short lines railroads in Washington is comprised of 32 Class III Railroad Carriers. Montana Rail Link, a Class II Regional Railroad, also operates into Washington on trackage rights over the BNSF Railway, a Class 1 Railroad.



State and Federal Support for Short Lines

Washington state law (RCW 47.76) has directed WSDOT to provide grants and loans to improve the short line rail system. The state policies authorizing these programs recognize that the short line system has the potential to generate significant social benefits.

Freight Rail Investment Bank (FRIB)

The state loan program used to fund small capital rail projects with at least 20 percent match. FRIB loans provide funds to build new or improve existing rail infrastructure across the state. The program is administered by WSDOT and only available for publicly owned railroads, port districts, rail districts and local governments. There was \$7 million for eligible projects in 2019-2021. For the 2021-2023 biennium, a total of \$5.08 million is available for FRIB loans.

An example of a project funded under the FRIB Loan Program is the loan of \$465,000, 38% of the project cost, for the upgrade of rails, ties, and turnouts within Tacoma Rail's Tacoma Yard. Tacoma Rail is owned fully by Tacoma Public Utilities, a publicly owned department of Tacoma City Government. The project is designed to improve reliability and reduce ongoing maintenance costs on trackage utilized to service the rail operations in the Port of Tacoma, a busy container port served by BNSF and UP utilizing the Tacoma Rail. A total of seven tracks will see various levels of upgrade and renovation within the project scope.

Freight Rail Assistance Program (FRAP)

The state's grant program is open to both publicly and privately owned railroads, rail shippers or receivers, and port districts with rail for purposes of rehabilitation, infrastructure preservation or economic development. This program is directed toward larger projects where it is difficult to gain a contribution and where the rail location or the project is of strategic importance to the local community and the state. The state provided \$7.6 million in grants in 2019-2021. For the 2021-2023 biennium, a total of \$7.04 million is available for FRAP grants.

An example of a project funded in the most recent cycle is grant award to the Puget Sound and Pacific Railroad (PSAP) for rehabilitation and maintenance on two railroad bridge spans. In this case the grant award of \$1.8M, funds 75% of the costs associated with repair to the spans. The primary project scope is substantial rehabilitation of a swing span, which has ongoing issues with bridge locks. As the span is over 100 years old, substantial work is needed to bring it to a state of good repair improving train operation and reducing a substantial annual maintenance cost being borne by the railroad. The project affects the ability of a private railroad to serve a public port, and as a result has a multiple stakeholder, public and private benefit.

In each program, a list of projects is submitted and then evaluated by WSDOT. In the most recent grant period, 2019-2021, \$8.3M was made available for FRAP grants and \$7.13M was available for FRIB loans.

Projects for inclusion were selected by WSDOT after the completion of a benefit/cost analysis (BCA), using criterion agreed to by the Washington legislature in 2008 and the completion of other required evaluation. WSDOT received three (3) applications for the FRIB loans requesting \$1.6 million in funding and ten (10) FRAP grant applications requesting approximately \$8.1 million in funding. Two (2) of the ten (10) FRAP applications were from the public sector. For the most recent round of applications, FRAP proposals exceeded the available funding. The applications to WSDOT fell into three broad categories:

- Critical infrastructure including bridges/tunnels
- Improvement and maintenance of existing infrastructure
- Business development

The review panel evaluated each proposal based on the following elements:

- The Washington State Department of Transportation implements the Rail Benefit/Impact Evaluation Methodology, which focuses on the benefit-cost analysis with major evaluation categories of transportation and economic benefits (reduced road maintenance cost, shipper savings, and reduction in auto delays at grade crossing), economic impacts (new or retained jobs, tax revenues), external impacts (safety improvements, environmental benefits). With the benefit-cost ratio determined, the legislative priority matrix, the project management assessment matrix, and the user benefit levels matrix are used for the prioritization purposes
- Best past practices as specified in section 309, chapter 367, Laws of 2011
- Verified scores based on the self-evaluation matrix required as part of each submission, as outlined in the application criteria

Direct Project Appropriations

The Washington State Legislature also directs funds to specific short line (and other freight rail) projects through the transportation budget. The 2021-23 biennium budget includes \$19.54 million for four (4) freight rail improvement and preservation projects that will benefit short lines.

Federal Grant Programs

Several federal grant programs are available to short line railroads. With the passage of the Infrastructure Investment and Jobs Act in 2021, additional funds will be made available for short line railroads to drive economic growth, improve safety, and implement innovative technologies.

Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grants Program

Beginning under the Obama Administration in 2009 as the Transportation Investment Generating Economic Recovery (TIGER) program, continuing in the Trump administration as the Better Utilizing Investments to Leverage Development (BUILD) program, and now in the Biden administration as the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program, this federal grant program has distributed over \$8.9 billion throughout the country to transportation projects through a discretionary grant program. RAISE grant applications are extremely competitive, with over 9,700 total applicants since 2009 seeking over \$175 billion in funds.

While RAISE grants can fund private railroad improvements, all applications need a public sponsor, which includes state and local governments, metropolitan planning organizations, tribal governments, public transit agencies, and other public-sector entities. Additionally, each state is capped at \$100 million in RAISE grants per year, with a national 50/50 split on funds geared towards urban and rural areas. Since RAISE encompasses all modes of transportation, it is often challenging for Class III railroads to successfully win RAISE grants.

Infrastructure for Rebuilding America (INFRA) Grant Program

Beginning in 2016 as the Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies (FASTLANE) grant program and now known as the Infrastructure for Rebuilding America (INFRA) grant program, this discretionary grant program administered by the U.S. Department of Transportation helps fund transportation infrastructure projects that create jobs, improve safety, apply new and “transformative” technologies. In 2021, the scope of the INFRA program was expanded to also include addressing climate change and racial equity. This enhanced scope also includes relevant issues for short line railroads, including encouraging modal shifts away from trucking; reducing highway vehicle miles traveled (VMT), and deploying zero-emission vehicle infrastructure. INFRA awards grant projects to two project tiers: small projects with a minimum cost of \$5 million, and large projects with a minimum cost of \$25 million. The program is required to allocate at least 10% of funds to small projects and at least 25% of funds to rural projects.

Private railroads are not eligible to apply for or receive INFRA grants directly; however, a private railroad can partner with a public agency to submit a grant application, with the public agency funding the railroad’s project with a successful grant application. In FY 2021, approximately \$889 million was available in INFRA grant funding.

Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program

Since 2017, the Federal Railroad Administration has administered the Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program, which focuses on “projects that improve the safety, efficiency, and reliability of intercity passenger and freight rail”, according to the FRA. Projects eligible for CRISI funding include railroad safety technology deployments; capital projects to improve or expand rail infrastructure, including short lines; grade crossing improvements; improving multimodal connections and service integration between rail and other modes of transportation; and workforce development and training. Unlike some other state and federal grant programs, Class III railroads are eligible to apply for and receive CRISI funds without a local partner agency. In Fiscal Year 2020, 50 projects in 29 states were selected to receive over \$320 million in funding.

Federal Short Line Tax Credit Program

Since its enactment in 2004, the railroad track maintenance tax credit (Internal Revenue Code section 45G) has provided an important financial incentive to maintain and improve short line infrastructure. The result has been a marked increase in industry investment, as evidenced, for example, by industry purchases of railway ties, which have grown at an annual rate of 6.3 percent since enactment of the credit, compared to 0.1 percent before the credit. In addition, safety on short line railroads has improved since enactment of the credit. For example, train derailments on short line railroads have declined by 50 percent, from a rate of 4.72 per million train miles in 2004 to 2.37 in 2017.

The Section 45G credit is a business tax credit that allows for 50 percent of qualified railroad track maintenance expenditures paid or incurred in a taxable year by an eligible short line railroad. Qualified railroad track maintenance expenditures are gross expenditures for maintaining railroad track (including rail, ties, bridges, signals, crossings, tunnels, roadbed, etc.) owned or leased as of January 1, 2015 by a Class II or Class III railroad. The credit is limited to the product of \$3,500 times the number of miles of railroad track owned, leased, or assigned to the eligible taxpayer as of the close of its taxable year. The credit is assignable to any eligible taxpayer who makes qualified expenditures. An eligible taxpayer is (1) any Class II or Class III railroad and (2) any person that transports property using the rail facilities of a Class II or Class III railroad or that furnishes railroad-related property or services to such person. The Section 45G credit was reauthorized in 2019 (retroactive to 2018) and will remain in effect through 2022 barring any additional extensions of the program.

Key Findings

Railroads are extremely fuel efficient, a fact which encourages shippers to utilize the railroad freight network, reducing their own energy costs and more wholistically helping to reduce the nation’s dependence on foreign oil and helping to reduce the shippers carbon footprint. A freight train, on average, can carry one ton of cargo 480 miles on a single gallon of fuel. For all that efficiency and potential for sustainable growth, however, the current level of funds available each year, are simply not sufficient to allow short lines to address their deteriorating infrastructure problem in a timely manner. This is despite a healthy annual reinvestment of revenues back into these railroads by the individual owners and others. The amount of available funds will not permit components to be replaced at a rate faster than they are wearing out, nor will it allow for sufficient growth or expansion efforts to be fully funded.

The various short line railroads operating in Washington were invited to complete surveys and interviews as part of the creation of this report. These interviews and surveys were instrumental in better understanding the current operations of each railroad, and helped to identify and prioritize important needs that this plan attempts to address. Interviews with the state’s short line railroads allowed for a more detail discussion and understanding of the issues, challenges and opportunities effecting short line operators in the state. Regarding the survey, respondents were asked to assign a point value to each of the 18 issues listed below, based on that issue’s importance to the railroad. The following table aggregates the responses received.

	Average Rating	High Importance	Moderate Importance	Low Importance	Rank
Track conditions	4.9	15	0	0	1
Funding to properly maintain rail lines	4.9	14	1	0	2
Funding for state/federal-funded programs for construction/ rehabilitation"	4.5	13	2	0	3
New business opportunities	4.5	11	4	0	4
Rail/highway crossings Surface conditions	4.3	13	2	0	5
Bridge conditions	4.3	13	0	2	6
Ability to handle 286k or higher weight railcars	4.1	11	3	1	7
Existing traffic levels	4.1	10	3	2	8
Funding for emergency repairs	3.7	8	6	1	9
Adequacy of service from inter-change carriers	3.7	8	5	2	10
Equipment and support facilities condition	3.5	6	7	2	11

Rail/highway crossings Un/under-protected crossings	3.5	6	6	3	12
Rail/highway crossings Crossing consolidation	3.3	7	3	5	13
Trespassers	3.2	7	3	5	14
Rail/highway crossings Sight obstructions	2.6	4	4	7	15
Customers holding cars	2.5	3	4	8	16
Other Issues					
Homeless Camps			1		
Regulatory Issues or Legislation		2			
Technical assistance for grant writing			5		
Land Availability under Growth Management Act			1		
Relief from responsibility to maintain grade crossings on low volume lines			4		
Gaining access to other Class 1 interchanges			4		

The ability to maintain existing infrastructure is the top priority of most short lines

Survey respondents overwhelmingly identified infrastructure maintenance as their top priority. 15 of 15 (100%) respondents identifying track conditions and 13 of 15 (87%) respondents identify bridge conditions as highest priorities. While maintenance of physical plant is a major issue across the broader railroad industry, it is a particular challenge among short lines, which lack the larger revenue streams, maintenance budgets and access to capital markets which larger companies enjoy. The challenges stemming from the financial limitations of many short line railroads was reflected in the survey responses; 15 of 15 (100%) respondents identified state/federal funded for rail line construction or rehabilitation projects as a top priority, while 14 of 15 (93%) respondents reported that funding to properly maintain rail lines was a top priority. The three of these four issues (track conditions, funding to maintain rail lines and state/federal funding for rail line construction/rehabilitation) were on average the top issues reported by respondents. Funding to maintain at-grade road crossings was also a major priority, with 13 of 15 (87%) respondents identifying it as a top issue and an additional 13 of 15 (87%) identifying grade crossing surface condition as a top priority.

Concerns about infrastructure maintenance and the associated funding was also a persistent theme in interviews with the state's short line railroads. Most operators reported that track and structure

maintenance was performed on a piecemeal basis as budgets allowed, with many larger renewal projects deferred indefinitely for long periods of times. Several operators went so far as to predict that without public sector support, railroad operations may at some point be suspended, as the economics of the operations alone would not justify the capital investment required to rehabilitate infrastructure. During the interview process various operators expressed a desire that either application process for state monies was simplified or that some form of technical assistance was provided to smaller railroads. These railroads were enthusiastic at the opportunity to utilize state programs but lacked the time, resources, and/or expertise to submit what they perceived to be competitive applications to the state FRAP/FRIB call for projects.

Short lines need to maintain and expand their customer base

Commercial concerns were the second highest priority issues among survey respondents. 10 of 15 (67%) respondents identified existing traffic levels as a top priority. Similarly, 11 of 15 (73%) respondents identified new business opportunities as a top priority. Short line railroads typically rely on a small group of larger volume shippers, or in many situations even a single customer, for much of their livelihood. What more, for most commodities short line railroads face fierce competition from trucking, which benefit from operating on the publicly maintained road and interstate system despite the greater environmental impact created by the mode. As such, it is critical to a short line's success to provide reliable, timely and tailored service to its customers; metrics which strongly correlate to the condition of a railroad's infrastructure. In survey responses and interviews, all operators stressed the importance of creating and maintaining a competitive regulatory (at both the state and local level) environment to attract new rail served business. Several railroads expressed frustration with perceived overburdensome regulation and/or oversight, which added barriers to both siting new industrial customers and/or creating a rail connection to new customers.

All railroads, including short lines, are both most economy and environmentally efficient as the volume of traffic moved over their railroad is maximized. The continued health and grow of Washington's short line industry is dependent on its ability to not just maintain existing customers and levels of service, but to execute on opportunities to site and serve new customers.

Short lines want to upgrade infrastructure to meet the industry standard of 280,000 pound rail cars

11 of 15 (73%) of respondents identified the ability to handle 286,000-pound railcars as a high priority. Larger railcars permit more product to be shipped in a single train, increasing the efficiency of rail operations. The current accepted industry standard for rail cars allows loading of the cars to 286,000 lbs. (286K), allowing for up to 125 tons of freight per railcar. As railcar capacity increases, more robust infrastructure – particularly bridges – is required to support the additional weight. The infrastructure found on many short lines was typically constructed in the early- to mid-20th century - a time when the

average railcar was significantly smaller and lighter. As a result, many of the contemporary secondary and tertiary lines which short lines operate cannot handle 286k cars. The inability to handle 286k cars not only negatively impacts a railroad's efficiency, but it also increases the complexity of operations via the additional effort required to ensure trains are not exceeding the weight restrictions of any non-286k capable line.

While the inability to handle 286k cars is a prevalent issue across the short line railroad industry, it is particularly relevant in eastern Washington state where many short lines are involved in the shipment of large volumes of grain. Class 1 Railroads maintain grain rates allowing for more effective rates per ton on shuttle grain trains for grain shippers. This rate structure encourages higher loading on individual cars with proportionately lower rates per mile. As a result, grain shippers are competitively disadvantaged and may not have the ability to choose rail as their mode of choice.

Transloading allows short lines to expand into markets beyond the rail head

Transload operations permit shippers without rail access to reach the North American railroad network. Transloading allows a shipper to load or unload a rail car on the property of the railroad or an intermediary and then to utilize another mode of transportation to complete the haul. This multimodal operation allows shippers to enjoy the benefits of rail transportation without facing the significant barriers – namely the construction of a new rail line – and related expense typically associated with introducing a new rail service. It's also beneficial for the railroad as it allows for significant flexibility to handle different types of freight. These various factors make transloading very attractive to short lines.

Some of Washington's short lines face challenging geography

Challenging geography for some routes, long routes to reach customers, in some cases individual railroads face geographic challenges to access customer. These can include heavy grades, which limit the tonnage that can be handled, as well as circuitous routes that may add additional mileage to individual railroad movements.

Land use restrictions can be a barrier to new business opportunity for short lines

Incompatible land use near railroad ROW, loss of customer site options. In many cases railroad land use may be at odds with local preferences for business access to the network. Railroad facilities may be deemed as disruptive to land use, and may face local opposition when looking at new sites or locations for railroad expansion. In some cases, right of way may have been made a part of the Rail Bank process, wherein a portion of an unused right of way may be utilized for public trail purposes. While the Rail Bank program is not intended to permanently repurpose railroad right of way conversion back to railroad use can cause significant public opposition.

Ports are important partners for short lines

Washington State has a total of 75 ports, located in 33 individual counties. Unlike some states, however, ports are not necessarily located exclusively adjacent to a navigable waterway. In Washington, the port designation is utilized as a tool for industrial and economic development. Washington's port system is the largest locally controlled port system in the world which utilize tax revenue to fund economic investment. Ports invest in facilities that are leased to local entities, or access fees for facility usage, providing opportunities for local business development. Access to these ports, located throughout the state is critical for short line railroads, as their access increases the marketability of these locations by providing access to the railroad network.

Some of these port authorities are also under capitalized, thus an increase in overall short line railroad access encourages interest on the part of potential users, and encourages increased funding for the locations on a local level.

Most short lines do not see a perceived or actual bias towards grants to WSDOT-owned routes

The interviewees did not perceive the selection process being used by WSDOT under ESSB 6106, Section 310(2) and (6) to make program selections to be fundamentally unfair, nor did they perceive any favoritism towards public entities nor projects on WSDOT owned rail lines as an issue. However, since the process for approving projects under the program incorporates WSDOT, some applicants believe it should be more transparent incorporating other state governmental entities and municipalities.

Recommendations

In conjunction with the creation of this document, a series of interviews were conducted with stakeholders in Washington's Short Line Rail Network. These stakeholders included individual railroads, WSDOT representatives, Local Governmental Entities, Short Line Railroad advocacy groups, and economic development organizations. Representatives were interviewed about their experiences as short line stakeholders in WA and asked to provide ideas and feedback about ways to foster potential improvement. The themes of the discussions are synthesized below. In each case, the message was that the stakeholders desired to see an expansion of the state's existing program, potentially through both changes to the program and by easing both the requirements and timing parameters of the application processes. The program is perceived to have value, and needs expansion, vs. reduction or discontinuance.

Increase Size of Funds Available for Grant Funding

Survey participants articulated that there is an overall greater desire to use grants vs. loans for project funding. This is due, in part, to the relatively low rates for gaining capital in the open market. Loan conditions from the state can result in restrictions that are not present in private financing options, and private financing can be obtained at a faster rate and at timing determined by the borrower, vs. the timing of the individual state funding cycles.

Grant Program Participants articulated a desire for the pool of grant monies available under FRAP to be increased by legislative action. This would require a commitment to increased funding on a legislative level to expand the program. As recently identified in the last program biennium cycle, the total funding made available did not meet the financial requirements to fully fund short line needs identified in the application process. Increased funding to short line railroads not only provides social and environmental benefits due to decreased congestion and emissions, but also decreases highway maintenance needs from less truckloads.



Similar to Washington, Pennsylvania sponsors a program designed to underwrite costs incurred by projects designed to preserve essential rail freight service, or to preserve or stimulate economic development through the generation of new or expanded rail freight service. Unlike Washington, the program is based upon the receipt of a line item through their local legislative representative to approve funding.

PennDOT manages two grant programs: RTAP, a capital budget grant program funded with bonds; and RFAP, which is underwritten through the Multimodal Fund, created by Act 89. The maximum state funding for a RFAP project is 70 percent of the total project costs, not to exceed \$700,000. RTAP applicants must have a line item in the Capital Budget Act, which they are able to do by contacting their state representative or state senator. The maximum state funding for a RTAP

project is 70 percent of the total project costs, not to exceed the amount of the line item. In the 2020 grant period, PennDOT awarded \$31 million for 26 rail freight projects.

The application process has a unique attribute in that while the state's Bureau of Rail, Freight, Ports, and Waterways administers the funding and is responsible for the evaluation of grant applications, the process includes an opportunity for applicants to present their project directly to the Bureau. This is designed to allow for questions and more effective evaluation of individual applications, aiding in both decision making, as well as providing an opportunity for applicants to be heard directly through direct interaction with state decision makers

Evaluate Creation of a State Tax Credit Program

Numerous participants desired the implementation of a state tax credit program, mirroring the federal program commonly known as 45G, the Short Line Rehabilitation Tax Credit. Programs involving tax credits serve as a potential source of funding outside the grant or loan program and encourage additional private investment in railroad properties. Railroads, particularly with large mileage segments are capital intensive, and financing without the incurring of additional debt is critical, particularly on lines without high traffic and associated high revenue operations. Originally envisioned as a means to allow railroads to reduce the scale of deferred maintenance and project cancellations due to a lack of consistent funding opportunities, 45G provided a means to subsidize project and maintenance obligations with a credit against tax liability. Each two dollars of investment resulted in one dollar of tax credit, up to originally \$3500 per track mile annually. This program rewards railroad investment with a tangible financial benefit, encouraging investment monies to be allocated. While the projects funded are varied, the theme remains the same in funding opportunities to stabilize or improve short line railroad infrastructure.



The State of Oklahoma developed an offer in 2006 for a Railroad Modernization Income Tax Credit to incent Class II or Class III Railroad track reconstruction or replacement. Eligible may qualify for a tax credit equal to 50 percent of qualified track improvement annual expenditures, up to a cap of \$1,500 multiplied by the miles of railroad track owned or leased by that taxpayer within the State. In a 2019 evaluation of the program, an independent consultant recommended the State continue the program as the continued utilization of the program had provided a measurable improvement beyond just the economics of the program, but also into railroad safety. The correlation was driven by data which illustrated the increased investment was responsible for a measurable reduction in reportable short line derailment events with the total reduction of 10% being observed. The evaluation

also recommended changing the structure of the tax credits from transferable tax credits, which may be sold by the railroad to other companies.

Develop new funding opportunities to meet specific short line rail needs and open availability to additional entities

In addition to the funding opportunities already present in the state and the recommendation to expand those sources, several other programming opportunities should be considered for further evaluation and potential implementation in Washington.

There was a request for WSDOT to potentially assist with the handling of corridors that were railbanked under 16 U.S.C. 27. This may pose jurisdictional issues with the Surface Transportation Board based upon federal regulations. However the ability to act in an advisory role may provide an opportunity.

There was also a desire to open both programs to both public and private entities to include customers and other stakeholders. This is particularly significant with FRIB, where eligibility is limited to publicly owned railroads, port districts, rail districts, and local governments only based on the wording in the enabling legislation. This will require adjustment to the current legislation. There was a perception articulated that some larger entities have better opportunities with less restriction regarding time and potential award amounts when seeking financing in the financial markets vs. utilizing the programs in their existing forms.



Finding new pathways for funding railroad needs can be a challenge. North Carolina DOT has a distinct program in place designed to attract new industry to the state, locating that industry on railroad lines.

As part of a statewide effort to attract new industry to North Carolina, the N.C. Department of Transportation's Rail Industrial Access Program (RIAP) uses state funds to help build or refurbish railroad tracks that a new or expanding industry needs. This funding helps ensure that companies have the railroad infrastructure necessary to allow them to utilize the railroad network to deliver their goods and services more effectively and efficiently. The program funds up to 50 percent of project costs which may be used to construct or rehabilitate tracks. This grant is capped at \$200,000 annually. The premise of the program is to provide an incentive for businesses to locate or expand facilities in North Carolina. Unlike many state rail programs this one is oriented towards potential rail shippers, and used an economic development tool to help offset the costs of constructing railroad site access to allow for utilizing the railroad network. The program makes

funds available to various parties, including local governments, community development organizations, railroads, and industries. This program is notable as the fund's recipient becomes responsible for the ownership and maintenance of the track involved in the project. This type of ownership arrangement is common at lineside industries where a shipper locates along an existing railroad right of way. Industrial application is tied to economic gain for the community, and requires a commitment on both job creation and rail usage in year one after the project's completion. This directly ties these projects to measurable economic development activity.

Streamline grant application and review process

The current process uses a fixed period for the application and selection process, there was a request to utilize rolling periods to allow groups to focus on multiple applications over time into both programs. The staggering of program dates may conflict with state fiscal year requirements. The grant and loan application processes mirror each other in the lengthy and detailed application process. This process is identical for public and private entities, and the private entities noted that the complexity and time constraints in the application process require resources that are often not available. This prompts the need for contracting with others to write applications, increasing the overall costs for participation. Time constraints to match the provisions of the programs also tax resources and provide a disincentive to utilizing the program, particularly for the smaller entities.

Multiple respondents noted a desire in technical support from the state for the development of grant proposals. Many short lines are small entities with limited staff. That staff is mostly dedicated to the operation of the railroad and possesses limited expertise developing grant proposals. Respondents would like to see assistance from WSDOT that can aid in understanding the grant writing process, basic grant writing skills, and information on access to grant development resources.



Since 2000, KDOT has administered more than \$87 million to support 80 freight rail projects in the state through the state Rail Service Improvement Fund (RSIF). Originally a loan program; modified to loan/grant program (40% loan/30% match – loan component had 2% interest with a 10-year pay back period); modified to grant only program (2019) – 60% grant/40% match (use of the program with loan component varied based on external market factors such as grain prices – if grain doesn't move (i.e., low bushel price), rail carloads are negatively impacted and/or operating expenses (i.e., price of fuel) the short line railroads/shippers bottom line and cash flow are affected, making it a challenge to justify additional debt. The annual call for applications occurs in May/June. Benefit-Cost Analysis is required for all applications; Benefit-Cost Ratio (BCR) must be 1.0 or greater (projects with a BCR of less than 1.0 cannot be funded). Applicants must also analyze truckload

equivalent (TLE) – number of trucks taken off Kansas roadways when converted to railcars. Qualified applicants include short line railroads, shippers, and local units of government. The RSIF program covers major rehabilitation, system expansion, railcar/locomotive purchase, and 286K upgrades.

The Short Line Rail Improvement Fund (SLRIF) has also provided over \$9.4 million to support 22 freight rail projects (SFY2021 and SFY2022). The program is for the purpose of facilitating maintenance, rail relay and the rehabilitation of track, bridge, industrial leads and sidings on Class II or III (short line) railroads in Kansas. If the applicant is a shipper they are required to submit a letter of concurrence from the serving railroad (railroad approves project, will coordinate with applicant on the project, and will provide car supply to shipper). Calls for applications occur in the first week of July annually.

Increase state's ability to serve short line economic development needs

Short line railroads increasingly are the rail freight industry's point of contact with local customers, so the condition of those regional and local rail lines will have a major effect on economic development. To best support the economic development needs of short line railroads there must be an experienced facilitator envisioning the project, developing consensus, and directing negotiations. The usual expertise in economic development and community consensus building must be supported by a working knowledge of railroad economics. In addition, the local community will need to agree on project definitions and sites. Site selection is limited by the physical requirements of rail operations. Once a suitable site has been found, there is not much flexibility given the constraints of rail infrastructure. The local community must support the project with enough enthusiasm to agree to compromises they would be unwilling to make in connection with highway projects.



JobsOhio has been Ohio's privatized economic and business development organization since 2011. This shift from a state agency to a privatized economic development model was enhanced by the purchase of Ohio's spirituous liquor enterprise in 2013 by the JobsOhio Beverage System. This provides JobsOhio with long-term, stable and substantial funding to support economic development initiatives on behalf of Ohio.

JobsOhio launched SiteOhio in 2016 in response to the need across the state for more construction-ready industrial sites, including sites that are rail accessible. This program guarantees industrial sites are ready for immediate development and companies get access to sites that minimize risk, reduce costs and increase speed to market. Communities gain construction-ready sites that are more appealing to potential buyers and may help attract jobs to their region. The Ohio Rail Development Commission works with JobsOhio on development projects

that involve rail infrastructure and serves as the subject matter expert and point agency for rail related needs.

Increase statewide engagement with short line owners/operators

There was a desire to strengthen the relationship between statewide stakeholders and Class 1 Railroad connections. This may involve state-level resources that could be advocates for the interest of locally owned short lines within the state.

Many of the line owners and operators would be well served by a state level short line association. Such an association would allow the lines to keep abreast of the opportunities that exist within the state and the potential for partnerships. This association would not only serve the short lines, but also be a host for connecting with like interested parties. Primary functions of such an association would be to keep members aware of federal and state opportunities, collect and maintain statewide rail data, and connect short line owners and operators with the necessary resources to fund projects.



The California Short Line Railroad Association (CSLRA) is an industry group that represents the owners and operators of short line railroads throughout the state. As of 2021, 17 short line railroads in California are members of the CSLRA, with an additional 27 entities listed as associates of the CSLRA. These associate groups include the two Class I railroads, port districts, railroad suppliers, and engineering consultants. The CSLRA provides resources to member railroads and advocates and lobbies in the interests of short line railroads.

CSLRA was started on private initiative, which is the most direct way to stand up a state rail association. In California, a small group of senior short line officials secured private funding and time to draw up a mission statement, bylaws and other organizational documents, and serve as the first set of officers and directors. They then requested tax-exempt status from the IRS and state taxing authority. Once the organization was officially set up it began recruiting members; in California, both short lines and their vendors/suppliers were permitted to join (CSLRA became a much more robust organization after adding the latter). The state's two Class 1 railroads were also invited to participate as associate members, same as vendors/suppliers. They do not serve on the Board or fill officer positions. Once set up, the CSLRA started having events and organizing a legislative/regulatory agenda. CSLRA also contracted with a bookkeeper to manage finances, and raise money through dues and event sponsorships.

The exact type of organization will depend on state law. CSLRA is an unincorporated business/trade association. However, an incorporated nonprofit would benefit from an ease of ability to have bank accounts and credit cards, which requires articles of incorporation in addition to bylaws.

Ballard Terminal and Meeker Southern

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	0	
Leased	8	3 - City of Seattle, 5 - Pierce County

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	8	N/A
Class 1	0	
Class 2	0	
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads	589	610	511	511	494
Full time employees	1	1	1	1	1
Part time employees	5	5	6	6	4
In State Expense	\$507,523	\$556,146	\$739,982	\$850,656	\$506,930
In State Revenue	\$428,946	\$384,577	\$450,508	\$596,342	\$436,634

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
Mainline rehab	Ballard, WA	\$ 1.0M	Required to maintain minimal railroad operation	Immediate	Yes
Mainline rehab	East Puyallup, WA	\$ 1.5M	Required to maintain minimal railroad operation	Immediate	Yes
Run around track	East Puyallup, WA	\$500K	Needed to support future growth and attract new business	Medium term	Yes
Lead track extension	Meeker, WA	\$750K	Needed to support future growth and attract new business	Medium term	Yes
Interchange track extension	Meeker, WA	\$750K	Needed to support future growth and attract new business	Medium term	Yes
1963 EMD SW1500 Rewiring	East Puyallup, WA	\$50K	Needed to support future growth and attract new business	Medium term	Yes
Replacement of power assemblies	East Puyallup, WA	\$75K	Required to maintain minimal railroad operation	Immediate	Yes
1940 EMC SW1 General overhaul	Ballard, WA	\$60K	Required to maintain minimal railroad operation	Immediate	Yes
Caboose Safety appliances upgrades	East Puyallup, WA	\$25K	Required to maintain minimal railroad operation	Immediate	Yes
Locomotive maintenance facility	Ballard, WA	\$ 1.0M	Required to maintain minimal railroad operation	Immediate	Yes
Locomotive maintenance facility	East Puyallup, WA	\$ 1.0M	Required to maintain minimal railroad operation	Immediate	Yes

Top inbound and outbound commodities

	Inbound	Outbound
1.	Cement	Recycled metal and glass
2.	Rebar	
3.	Steel Coil and beams	
4.	Paraffin	

Cascade and Columbia River Railroad Co.

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	144.5	Oroville to Rocky Reach (Okanogan, Chelan, and Douglas Counties)
Leased	0	Does not include 6 miles of BNSF trackage rights to affect interchange at Wenatchee

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	0	
Class 1	13.2	Yard and storage tracks
Class 2	131.3	Cascade Main
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads			<i>not reported</i>		1,373
Full time employees	4	4	4	4	4
Part time employees	0	0	0	0	0
In-State Expense			<i>not reported</i>		
In-State Revenue			<i>not reported</i>		

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
Rail replacement program	Wenatchee-Oroville	\$4.8 million	Required to maintain minimal railroad operation	Medium-term	Unknown
Switch replacement (with rail replacement program)	Wenatchee-Oroville	\$1.2 million	Required to maintain minimal railroad operation	Medium-term	Unknown
Tie renewal program	Wenatchee-Oroville	\$4.5 million	Required to maintain minimal railroad operation	Medium-term	Unknown
P1/P2 bridge repair work and upgrades	Wenatchee-Oroville	\$35,000	Unsafe condition or could fail at any time	Immediate	Unknown
Improved bridge safety appliances	Wenatchee-Oroville	\$10,000	Unsafe condition or could fail at any time	Medium-term	Unknown
Bridge strengthening and settel conversions	Wenatchee-Oroville	\$125,000	Affects ability to properly serve customers	Medium-term	Unknown

Top inbound and outbound commodities

	Inbound	Outbound
1.	Cement	Lumber

Central Washington Railroad Company

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	0	
Leased	71	Yakima County and Benton County. Does not include 3 miles of trackage rights on BNSF in Yakima.

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	19	1st and 2nd Subdivisions, including yard tracks and sidings
Class 1	15	1st and 2nd Subdivisions
Class 2	37	Yakima to Moxee and Gibbon to Granger
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads	7,207	6,443	6,861	6,320	5,581
Full time employees	12	13	13	13	13
Part time employees	0	0	0	0	0
In-State Expense	\$2,607,000	\$2,563,000	\$3,064,000	\$2,757,000	\$3,100,000
In-State Revenue	<i>not reported</i>				

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
Rail replacement	Gibbon to Granger	\$6 million	Affects ability to properly serve customers	Medium-term	Maybe
Tie replacement	Yakima (1st Sub.)	\$1-2 million	Required to maintain minimal railroad operation	Immediate	Probable
Ballast cars	1st and 2nd Subs.	Unknown	Required to maintain minimal railroad operation	Immediate	No

Top inbound and outbound commodities

	Inbound	Outbound
1.	Pulpboard	Mixed Canned Goods
2.	Plastic	Cheese
3.	Liquified Petroleum	Fruit Juice
4.	Soybean Hulls	Scrap Steel
5.	Corn	Fresh Fruit

Columbia Basin Railroad Company

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	87	1st Subdivision (Grant, Adams, and Franklin Counties)
Leased	0	2nd Subdivision comprised of 19 miles of BNSF trackage rights in Grant and Adams Counties

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	34	1st and 2nd Subdivisions
Class 1	10	1st and 2nd Subdivisions
Class 2	62	1st and 2nd Subdivisions
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads	9,908	9,260	8,749	9,209	9,433
Full time employees	26	25	25	25	25
Part time employees	0	0	0	0	0
In-State Expense	\$5,200,000	\$5,300,000	\$5,300,000	\$5,570,000	\$5,650,000
In-State Revenue	<i>not reported</i>				

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
Rail replacement	1st Subdivision	\$8 million	Needed to support future growth and attract new business	Long-term	Maybe
Tie replacement	1st Subdivision	\$2 million	Needed to support future growth and attract new business	Immediate	Yes
Expanded, rehabilitated yard tracks	Warden (1st Sub)	\$2 million	Affects ability to properly serve customers	Immediate	Maybe
Locomotive fleet upgrade or rehabilitation	n/a	Unknown	Needed to support future growth and attract new business	Long-term	Unknown

Top inbound and outbound commodities

	Inbound	Outbound
1.	Rapeseed	Frozen Potatoes
2.	Wind Turbine Blades	Rapeseed Oil
3.	Potassium Chloride	Canola Meal
4.	Urea	Wheat
5.	Pulpboard	Beans

Columbia-Walla Walla Railway

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	0	
Leased	103	Leased from UPRR, BNSF, and Port of Columbia in Walla Walla and Columbia Counties. Does not include 14.5 miles of out-of-service track.

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	72	
Class 1	15	
Class 2	16	
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads		<i>not reported</i>		120	448
Full time employees		<i>not reported</i>			18
Part time employees		<i>not reported</i>			4
In-State Expense			<i>not reported</i>		
In-State Revenue		<i>not reported</i>			\$824,055

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
Build-out to River Terminal	Northwest Grain Growers, Wallula	\$10 million	Required to maintain minimal railroad operation	Immediate	Maybe
Upgrade rails to 115#	Dayton Line	\$30 million	Unsafe condition or could fail at any time	Medium-term	Yes
Timber trestle replacement	Various	\$20 million	Unsafe condition or could fail at any time	Medium-term	Yes
Interchange capacity and technology (scanners)	Wallula	\$3 million	Required to maintain minimal railroad operation	Immediate	Maybe
Public grade crossing consolidation	Various	\$1 million	Affects ability to properly serve customers	Medium-term	No
Locomotive technical upgrades	n/a	\$1 million	Required to maintain minimal railroad operation	Immediate	Maybe
Intermodal flatcars	n/a	\$1 million	Needed to support future growth and attract new business	Medium-term	Maybe
Fencing and signage	Walla Walla	\$300,000	Unsafe condition or could fail at any time	Immediate	No
Locomotive shop and office	Walla Walla	\$300,000	Required to maintain minimal railroad operation	Immediate	Yes

Top inbound and outbound commodities

	Inbound	Outbound
1.	Gypsum Ground	Frozen Vegetables
2.	Liquified Petroleum	Wheat
3.	Corn Syrup	Seed
4.	Propylene/De-icer	

Great Northwest Railroad

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	77	Riparia
Leased	0	Does not include 10 miles of trackage rights

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	0	
Class 1	25	Riparia
Class 2	0	
Class 3 and above	62	Riparia

Economic Impact

	2016	2017	2018	2019	2020
Carloads	13,434	13,943	13,653	12,858	13,852
Full time employees			<i>not reported</i>		
Part time employees			<i>not reported</i>		
In-State Expense			<i>not reported</i>		
In-State Revenue			<i>not reported</i>		

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
18 miles of rock fence	Various	\$2 million	Unsafe condition or could fail at any time	Immediate	Unknown
Track surfacing	Various	\$300,000	Required to maintain minimal railroad operation	Medium-term	Unknown
Yard expansion	Port of Wilma or Port of Central Ferry	\$4 million	Needed to support future growth and attract new business	Long-term	Unknown

Top inbound and outbound commodities

	Inbound	Outbound
1.	Chemicals	Pulp and Paper
2.	Pulp and Paper	Lumber and Forestry Products
3.	Hazmat	Minerals
4.	Agriculture	Chemicals
5.	Metals	Agriculture

Palouse River & Coulee City Railroad

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	0	
Leased	86	Does not include 63 miles of UPRR trackage rights

Top inbound and outbound commodities

	Inbound	Outbound
1.	Hazmat	Agriculture

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	29.9	Pleasant Valley Sub
Class 1	14.6	Hooper Sub
Class 2	41.5	Hooper Sub
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads	4,004	3,296	2,738	1,888	4,169
Full time employees	<i>not reported</i>				
Part time employees	<i>not reported</i>				
In-State Expense	<i>not reported</i>				
In-State Revenue	<i>not reported</i>				

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
Ties and resurfacing	Hooper Sub	\$1.5 million	Required to maintain minimal railroad operation	Medium-term	Unknown
Upgrade excepted track to Class 1	Pleasant Valley Sub	Unknown	Affects ability to properly serve customers	Long-term	Unknown
Crossing upgrades	Various	Unknown	Required to maintain minimal railroad operation	Immediate	Unknown
PTC locomotives for trackage rights	Various	\$1.2 million	Needed to support future growth and attract new business	Long-term	Unknown
Locomotive shop	Colfax	\$350,000	Required to maintain minimal railroad operation	Long-term	Unknown

Puget Sound & Pacific Railroad

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	100.8	
Leased	57.4	53.7 miles leased from U.S. Navy; 3.7 miles leased from UPRR

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	0	
Class 1	61.6	Shelton main, Raisch, Blakeslee yard, Aberdeen yard
Class 2	96.6	Elma main, Bangor main, Bremerton main
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads			<i>not reported</i>		
Full time employees	<i>not reported</i>		45	45	45
Part time employees	<i>not reported</i>		0	0	0
In-State Expense			<i>not reported</i>		
In-State Revenue			<i>not reported</i>		

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
Rail replacement program	Elma-Aberdeen	\$4.8 million	Required to maintain minimal railroad operation	Medium-term	Unknown
Switch replacement (with rail replacement program)	Elma-Aberdeen	\$1.2 million	Required to maintain minimal railroad operation	Medium-term	Unknown
Tie renewal program	Elma	\$4.5 million	Required to maintain minimal railroad operation	Medium-term	Unknown
Tie renewal program	Bangor	\$5 million	Required to maintain minimal railroad operation	Medium-term	Unknown
Crossing rehabilitation	Elma-Shelton	\$2.2 million	Required to maintain minimal railroad operation	Medium-term	Unknown
P1/P2 bridge repair work and upgrades	PSAP	\$300,000	Unsafe condition or could fail at any time	Immediate	Unknown
Improved bridge safety appliances	PSAP	\$25,000	Unsafe condition or could fail at any time	Medium-term	Unknown
Bridge strengthening and settel conversions	PSAP	\$700,000	Affects ability to properly serve customers	Immediate	Unknown

Top inbound and outbound commodities

	Inbound	Outbound
1.	Export Soymeal	Garbage
2.	Biodiesel	Lumber

Rainier Rail

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	38.5	Chehalis to McKenna (Lewis, Thurston, and Pierce Counties)
Leased	0.8	McKenna (track owned by City of Tacoma)

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	15.8	
Class 1	23.5	
Class 2	0	
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads			<i>not reported</i>		2,900
Full time employees			<i>not reported</i>		6
Part time employees			<i>not reported</i>		0
In-State Expense			<i>not reported</i>		
In-State Revenue			<i>not reported</i>		

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
Timber trestle replacement	Various	\$20 million	Unsafe condition or could fail at any time	Immediate	Yes
Interchange capacity and technology (scanners)	Chehalis	\$2 million	Required to maintain minimal railroad operation	Immediate	Yes
Public grade crossing consolidation	Various	\$1 million	Required to maintain minimal railroad operation	Medium-term	No
Locomotive technical upgrades	n/a	\$200,000	Required to maintain minimal railroad operation	Immediate	Maybe
Intermodal flatcars	n/a	\$1 million	Needed to support future growth and attract new business	Medium-term	Maybe
Fencing and signage	Various	\$500,000	Unsafe condition or could fail at any time	Immediate	No

Top inbound and outbound commodities

	Inbound	Outbound
1.	Propane/LNG	Propane/LNG

Royal Rail

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	0	
Leased	26	Owned by Port of Royal Slope

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	26	
Class 1	0	
Class 2	0	
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads			<i>not reported</i>		116
Full time employees			<i>not reported</i>		
Part time employees			<i>not reported</i>		
In-State Expense			<i>not reported</i>		
In-State Revenue			<i>not reported</i>		

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
Replace ties with non-combustible	Various	\$5 million	Unsafe condition or could fail at any time	Medium-term	Yes
Timber trestle replacement	Royal City Junction	\$1 million	Unsafe condition or could fail at any time	Medium-term	Yes
Intermodal flatcars	n/a	\$1 million	Needed to support future growth and attract new business	Medium-term	Maybe
Terminal tracks and transloading	Othello and Royal City	\$2 million	Affects ability to properly serve customers	Medium-term	Yes

Top inbound and outbound commodities

	Inbound	Outbound
1.	Nitro Fertilizer	Wheat
2.	Urea	
3.	Potassium Chloride	
4.	Calcium Chloride	
5.	Ammonium Thiosulfate	

St. Paul & Pacific Northwest

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	0	
Leased	89	Chewelah WA-Columbia Garens BC; leased from BNSF

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	0	
Class 1	0	
Class 2	87	
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads		<i>not reported</i>		17,100	17,321
Full time employees				18	18
Part time employees				0	0
In-State Expense			<i>not reported</i>		
In-State Revenue			<i>not reported</i>		

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
<i>not reported</i>					

Top inbound and outbound commodities

	Inbound	Outbound
1.	Lumber	Lumber and Plywood
2.	LPG	Logs
3.		Grain

Tacoma Rail

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	121	TRMW owned by City of Tacoma; TMBL owned by Tacoma Public Utilities. Includes 33.5 miles leased to other railroads. Also has trackage rights for approximately 70 miles owned by the Port of Tacoma and 20 miles owned by Sound Transit.

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	20	TRMW
Class 1	48	TMBL 32, TRMW 16
Class 2	11	TRMW
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads	120,119	112,010	130,702	123,895	97,455
Full time employees	116	113	115	118	115
Part time employees			<i>not reported</i>		
In-State Expense	\$36,134,828	\$32,867,344	\$33,682,458	\$35,848,969	\$36,167,345
In-State Revenue	\$32,734,810	\$31,211,606	\$34,491,858	\$38,350,588	\$36,016,177

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
Various track rehabilitation and upgrade projects	Tacoma	Unknown	Affects ability to properly serve customers	Immediate	Yes
Railroad bridge repairs	Pierce County	Unknown	Affects ability to properly serve customers	Immediate	Yes
Locomotive repowers to modern standards	Pierce County	\$2.5 million each	Affects ability to properly serve customers	Immediate	Yes

Top inbound and outbound commodities

	Inbound	Outbound
1.	Intermodal Containers	Intermodal Containers
2.	Crude Oil	Passenger Autos
3.	Denatured Alcohol	Asphalt
4.	Ethanol	Freight of All Kinds
5.	Frozen Meat	Petroleum

Washington Eastern Railroad

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	0	
Leased	113.8	Owned by Washington State DOT

Top inbound and outbound commodities

	Inbound	Outbound
1.	Steel	Grain

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	90.5	Cheney/Geiger Spur
Class 1	3.5	Cheney/Geiger Spur
Class 2	19.8	Cheney/Geiger Spur
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads			<i>not reported</i>		
Full time employees		<i>not reported</i>			13
Part time employees		<i>not reported</i>			
In-State Expense		<i>not reported</i>			
In-State Revenue		<i>not reported</i>			

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
Replacement of 85# rail	MP 8-107.8	\$30 million	Unsafe condition or could fail at any time	Immediate	Unknown
Replacement of 90# rail	MP 8-107.8	\$16.5 million	Affects ability to properly serve customers	Medium-term	Unknown
Upgrade of non-286k bridges	Various	\$200,000	Required to maintain minimal railroad operation	Immediate	Unknown

Yakima Rail

Track Mileage

Ownership	Miles of Track Operated in WA	Locations of Trackage Rights, Haulage Rights, Leased, or Out-of-Service Lines
Owned	0	
Leased	22	Yakima County

Mileage by FRA Class of Track

Track Class	Miles	Subdivision
Excepted track	22	
Class 1	0	
Class 2	0	
Class 3 and above	0	

Economic Impact

	2016	2017	2018	2019	2020
Carloads			<i>not reported</i>		539
Full time employees			<i>not reported</i>		
Part time employees			<i>not reported</i>		
In-State Expense			<i>not reported</i>		
In-State Revenue			<i>not reported</i>		\$168,014

Freight Rail Needs

Description of Need	Location	Estimated Cost	Priority	Timing	Planning to Apply for State Funding (Y/N)
US 67 Overpass	Yethonat	\$20 million	Unsafe condition or could fail at any time	Immediate	Maybe
Timber trestle replacement	Various	\$10 million	Unsafe condition or could fail at any time	Medium-term	Yes
Interchange capacity and technology (scanners)	Toppenish	\$500,000	Required to maintain minimal railroad operation	Immediate	Yes
Fencing and signage	<i>not reported</i>	\$200,000	Required to maintain minimal railroad operation	Immediate	No
Locomotive shop and office	Toppenish	\$300,000	Required to maintain minimal railroad operation	Medium-term	Yes

Top inbound and outbound commodities

	Inbound	Outbound
1.	Propane/LPG	Animal Tallow/Grease
2.	Cattle Feed	Lumber

1. ASSESSMENT OF STATE SUPPORT FOR SHORT LINE RAIL INFRASTRUCTURE

The Washington State Legislature Joint Transportation Committee (“JTC”) has commissioned a study to assess the effectiveness of state support for short-line rail infrastructure and make recommendations to improve and enhance that support.

As a Washington State short line operator, your input to this study is vitally important. Your participation will provide you an opportunity to both let state lawmakers understand your needs and concerns, as well as an opportunity to potentially improve existing state loan and grant programs to better serve short line operators like yourself.

As part of the study, we request that provide the following information pertaining to your short line. We would appreciate as much information as you are comfortable or allowed to share. Partial answers are also valuable to the study.

When you complete this survey form, please email it to:

matt.kirson@deutschebahn.com

We appreciate your participation in this study.

2. CONTACT INFORMATION

<i>Railroad</i>	<input type="text"/>		
<i>Parent company</i>	<input type="text"/>		
<i>Contact name</i>	<input type="text"/>	<i>Contact title</i>	<input type="text"/>
<i>Contact phone</i>	<input type="text"/>	<i>Contact email</i>	<input type="text"/>

3. ASSETS

The purpose of this section of the survey is to obtain information on your assets and their condition.

Infrastructure

Track mileage (owned, leased or trackage rights)

Type	Miles	Locations of Trackage	Owner of Trackage
<i>Owned</i>	0		
<i>Leased</i>	0		
<i>Leased to other</i>	0		
<i>Trackage rights</i>	0		
<i>Haulage rights</i>	0		
<i>Out of service</i>	0		

Mileage by FRA class of track

Track Class	Miles	Subdivision/Line
<i>Excepted track</i>	0	
<i>Class 1</i>	0	
<i>Class 2</i>	0	
<i>Class 3 +</i>	0	

Mileage of track unable to accommodate 286K railcars

Subdivision/Line	Milepost Range	Track Class

Height restrictions—locations less than high cube double stack height (20'-02")

Subdivision/Line	Milepost	Limiting Height

Mileage by rail weight

Rail Weight	Main Line Miles	Rail Weight	Main Line Miles	Rail Weight	Main Line Miles
70		110		131	
75		112		132	
80		115		133	
85		119		136	
90		130		Other	
100					

Current FRA slow orders

Miles of Track	Number Issued

Bridges

	Less than 286,000 pounds	286,000 pounds	315,000 pounds
<i>Number of bridges</i>			

Please identify individual bridges less than 286,000 pounds capable in bridge portion of section 7 Rail Freight Issues

Yards, car/loco repair facilities

Condition: 5 = Excellent; 3 = Moderately; 1 = Poor; OOS = Out of Service

Facility Name	Subdivision/Line	Facility Location (City)	Condition

Transload, barge, team tracks, or other multimodal facility

Condition: 5 = Excellent; 3 = Moderately; 1 = Poor; OOS = Out of Service

Facility Name	Facility Location (City)	Facility Type	Current Annual Throughput (carloads or tons)	Capacity	Condition

Equipment

Locomotives

Condition: 5 = Excellent; 3 = Moderately; 1 = Poor; OOS = Out of Service

Type (Manufacturer, Model)	Number Owned	Number Leased	Condition

Railcars

Condition: 5 = Excellent; 3 = Moderately; 1 = Poor; OOS = Out of Service

Car Type	Number Owned	Number Leased	Condition

4. RAILROAD OPERATIONS

This section of the survey addresses the railroad’s operations and traffic base.

Train operations (e.g., 2 trips per day, 5 days per week)

Train Symbol/Number	Subdivision/Line	Train Operations

Number of Washington carloads transported (2016-2020)

Year	Outbound	Inbound	Local	Overhead	Total
2016					
2017					
2018					
2019					
2020					

Top inbound and outbound commodities (2020)

	Inbound		Outbound	
	Commodity	Number of Carloads	Commodity	Number of Carloads
1				
2				
3				
4				
5				

Top five customers (2020)

Shipper Name	Location	Carloads

Total Number of Customers

Interchanges

Interchange Partner	Location

5. ECONOMIC IMPACT

The following is related to the importance of the railroad to the economy.

Railroad employment in Washington

Year	Full-Time Employees	Part-Time Employees
2016		
2017		
2018		
2019		
2020		

Impact on state economy

Year	In-State Expense	In-State Revenue	State Taxes
2016			
2017			
2018			
2019			
2020			

6. RAIL FREIGHT ISSUES

Rate from 1 to 5 the importance of the following issues to your short line railroad:

5 = Extremely important

3 = Moderately important

1 = Unimportant

	Issue	Importance
A	Supply of railcars	
B	Trespassers	
C	Track conditions	
D	Bridge conditions	
E	Equipment and support facilities condition	
F	Funding to properly maintain rail lines	
G	Funding for emergency repairs	
H	Ability to handle 286,000-pound or higher weight railcars	
I	Rail/highway crossings:	
I1	• Crossing consolidation	
I2	• Surface conditions	
I3	• Unprotected or under-protected crossings	
I4	• Sight obstructions (e.g., trees, bushes outside railroad right-of-way)	
I5	• Funding to maintain crossings	
J	Funding for state/federal-funded programs for construction or rail line rehabilitation	
K	Adequacy of service from interchange carriers	
L	Customers holding cars	
M	Existing traffic levels	
N	New business opportunities	
O	Other issues (please explain below)	

Other issues

7. FREIGHT RAIL NEEDS

- Priority 1 = Unsafe condition or could fail at any time
 2 = Required to maintain minimal railroad operation
 3 = Affects ability to properly serve customers
 4 = Needed to support future growth and attract new business
- Timing I = Immediate/Near-term
 M = Medium-term
 L = Long-term

Infrastructure

Project Description	Location	Estimated Cost	Priority	Timing	Applying for Funding	
					State? (Y/N)	Federal? (Y/N)

Equipment

Project Description	Location	Estimated Cost	Priority	Timing	Applying for Funding	
					State? (Y/N)	Federal? (Y/N)

