



Freight Rail System Profile

Oregon State Rail Plan Update - 2025
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Contents

1	Oregon’s Freight Railroads.....	1
1.1	Class I Railroads.....	2
	Class II (Regional) Railroads.....	2
1.2	Class III Short Line (Local) Railroads	4
1.3	Switching and Terminal Railroad.....	5
2	Freight Railroad Operations.....	6
2.1.1	Union Pacific Railroad.....	6
2.1.2	BNSF Railway	9
2.2	Non-Class I Railroads	9
2.3	Key Railroad Facilities.....	12
3	Rail System Conditions and Characteristics	15
3.1	Physical Conditions and Operating Characteristics	15
3.1.1	Weight Limits	15
3.1.2	Bridges	16
3.1.3	Tunnels and Curves.....	17
3.2	Traffic Control Systems	18
3.3	At-grade Rail Crossings	19
3.4	Line Abandonments	20
3.5	At-Risk Railroads.....	20

Figures

Figure 1. Oregon’s Railroad Network3

Figure 2. Oregon’s Class I Railroad Subdivisions, Major Terminals and Yards8

Figure 3. Oregon’s Short Line Carloads and Revenue: 2000-202312

Figure 4. Vertical Clearance Restrictions on Oregon Railroads18

Tables

Table 1. Railroad and Track Classifications1

Table 2. Class I Railroads in Oregon2

Table 3. Local Railroads in Oregon4

Table 4. Class I Railroad Operating Characteristics in Oregon6

Table 5. Non-Class I Railroad in Oregon with Revenue (2024 dollars)10

Table 6. Key Rail Yards and Terminals in Oregon14

Table 7. At-risk Non-Class I Railroads in Oregon21

1 Oregon's Freight Railroads

The freight rail system in Oregon is part of a nationwide, interconnected system of rail infrastructure and services that link the state and local regions to the rest of North America and, through international marine gateways, to the rest of the world. These marine gateways include the Port of Portland, other Columbia River ports and coastal ports. The infrastructure supporting rail services in Oregon is substantial, and includes various carload and intermodal facilities, along with significant tunnels and bridges that are necessary to surmount the state's rugged topography.

The Surface Transportation Board classifies railroads in terms of operating revenue. The Association of American Railroads classifies railroads based on both annual operating revenue and mileage. The Federal Railroad Administration (FRA) classifies rail track for freight and passenger trains by maximum allowable operating speeds in miles per hour (mph). These classifications are listed in **Table 1**¹ and are referenced throughout this memorandum.

This section presents a brief overview of the history, evolution and general status of freight railroads and the business structure of the rail industry and concludes with a discussion of the key physical attributes of the rail network in Oregon. At present, freight railroads in Oregon consist of the two large Class I railroads, one Class II regional railroad, and twenty-one Class III short line railroads, six of which are Class III switching railroads and terminal yards (see **Figure 1**).

Table 1. Railroad and Track Classifications

Railroads		
Class	Annual Operating Revenues (as of 2024)	
I	Greater than \$1.054 billion	
II	Between \$47.3 million and \$1.054 billion	
III	Less than \$47.3 million	
Track		
	Maximum Allowable Operating Speed for:	
Class	Freight Trains (mph)	Passenger Trains (mph)
Excepted	10	N/A
1	10	15
2	25	30
3	40	60
4	60	80
5	80	90

Source: Association of American Railroads and USDOT Federal Railroad Administration, 2025.

¹ Association of American Railroads website on Industry Information: <https://www.aar.org/rail-facts/>.



1.1 Class I Railroads

As **Table 1** shows, a Class I railroad is defined as earning annual operating revenues in excess of \$1.054 billion. Six out of seven Class I railroads in the United States operate west of the Mississippi River, and two of the largest operate in Oregon—BNSF Railway (BNSF) and Union Pacific Railroad (UP). **Table 2** lists data about the Class I railroads in Oregon.



UP Class I Railroad Intermodal Train Along the Bank of the Columbia River

Table 2. Class I Railroads in Oregon

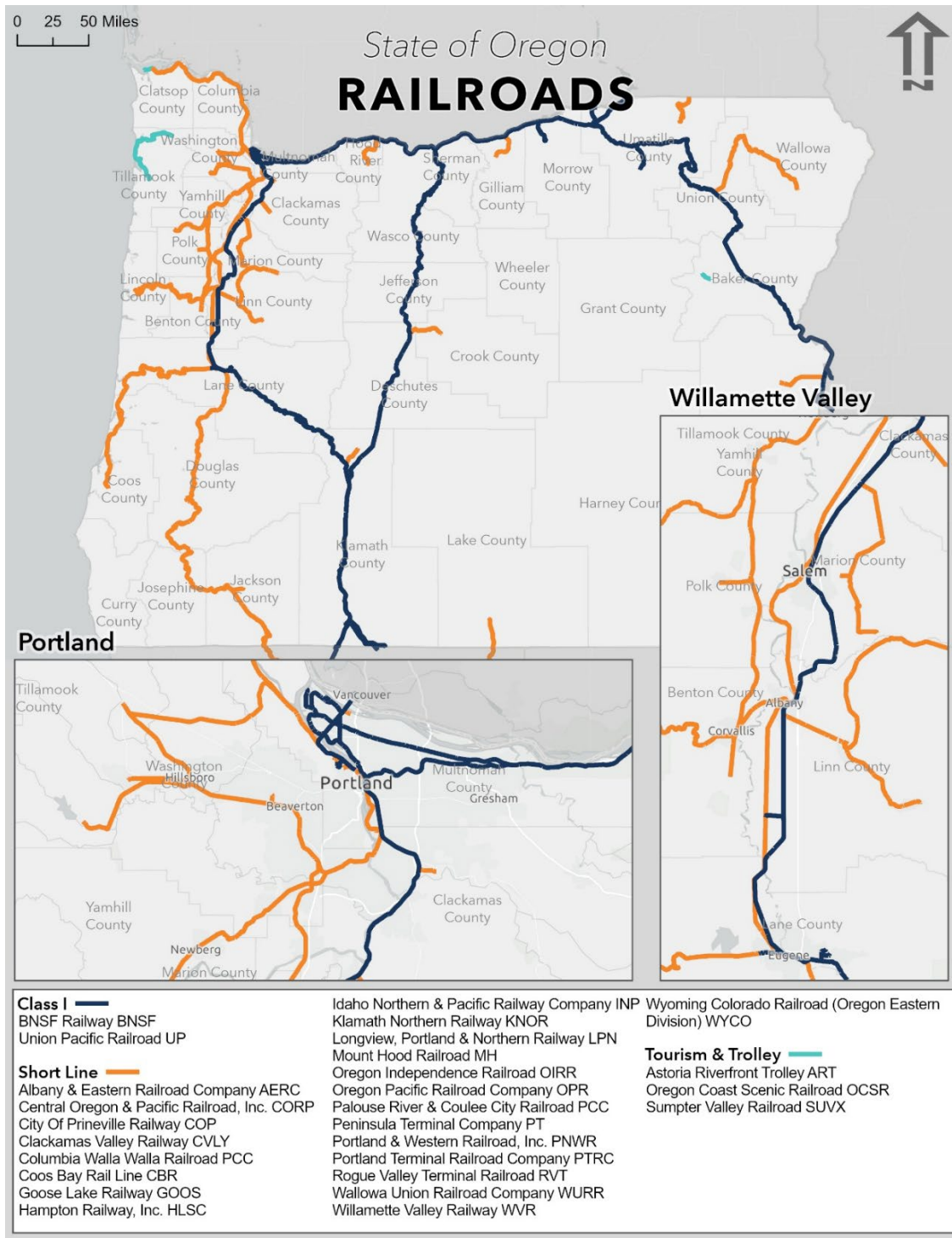
		
Route Miles in Oregon	1,073	414
Originating Carloads	163,928	127,797
Terminating Carloads	248,169	165,494
Top Train Types	Manifest, Intermodal, Bulk commodities	Manifest, Intermodal, Grain Units

Sources: Association of American Railroads State Facts – Oregon, 2023; BNSF Oregon State Facts, 2023; Union Pacific Oregon Fact Sheet, 2023.

Class II (Regional) Railroads

A Class II railroad is one that operates over at least 350 route miles or earns more than \$47.3 million in annual operating revenue. Oregon has only one Class II regional railroad: Portland & Western Railroad (PNWR).

Figure 1. Oregon's Railroad Network²



Source: Oregon Department of Transportation, 2024

² Figure 1 lists Portland & Western Railroad (PNWR) which includes Willamette & Pacific Railroad (WPRR)

1.2 Class III Short Line (Local) Railroads

Class III, or “short line” railroads, often are primarily engaged in line-haul service³ or switching and terminal operations, as discussed in Section 1.4. There are 21 Class III short line railroads currently operating in Oregon, as listed in **Table 3**.

Table 3. Local Railroads in Oregon

Railroad Name (Standard Carrier Alpha Code)	Route Miles in Oregon ⁴	Parent (Ownership)
Short Line		
Albany & Eastern (AERC)	71.74	Independent
Coos Bay Rail Line (CBR)	133.39	Oregon International Port of Coos Bay
Central Oregon & Pacific (CORP)	247.02	Genesee & Wyoming Inc. (Holding Co.)
City of Prineville (COP)	18.34	City of Prineville (Municipal)
Columbia Walla Walla (CWW)	21.20	Independent
Goose Lake (GOOS) ⁵	14.65	Track owned by Lake County (Shipping & Entrepreneur)
Hampton Railway (HLSC)	5.20	Hampton Lumber Sale Co. (Industry)
Idaho Northern & Pacific (INPR)	20.00	Rio Grande Pacific Corp. (Holding Co.)
Klamath Northern (KNOR)	10.50	International Forest Products Ltd. (Industry)
Longview Portland & Northern (LPN)	3.39	Industrial Harbor USA, LLC (Land Developer)
Mount Hood (MH)	21.22	Mount Hood Capital Investments (LLC)
Palouse River & Coulee City Railroad (PCC)	11.00	WSDOT (Public)
Wallowa Union (WURR)	63.08	Wallowa & Union Counties (Public)
Willamette Valley (WVR)	33.19	Independent

³ Line-haul movement is the long-haul rail portion of a trip between the originating and terminating intermodal yards. On either end of the line-haul is the local dray to and from the actual shipper or receiver of the goods.

⁴ Route miles are miles of main track not including second main line tracks, sidings and track yardage, except mileage for some switching and terminal railroads may include industrial and support trackage that ordinarily would not be classified as main line tracks. Original data shown for route miles is derived from 2020 Oregon State Rail Plan and Oregon Department of Transportation Geographic Information Systems (GIS) layer. All information is verified and updated to current year (2025).

⁵ Goose Lake Railway operates a 54.5-mile branch line, owned by Oregon’s Lake County, between Lakeview, OR, and Alturas, CA, of which 39.5 miles are in California.

Railroad Name (Standard Carrier Alpha Code)	Route Miles in Oregon ⁴	Parent (Ownership)
Short Line		
Wyoming Colorado RR, Oregon Eastern Div. (WYCO)	24.70	Jaguar Transport Holdings
Switching and Terminal		
Clackamas Valley (CVLY)	1.60	Progressive Rail (Holding Co.)
Peninsula Terminal Co. (PT)	1.01	Independent
Portland Terminal (PTRC)	0.53	BNSF and UP (Class I)
Rogue Valley Terminal (RVT)	12.20	CCT Rail System Corp. (Independent)
Oregon Independence (OIRR)	0.40	Independent
Oregon Pacific (OPR)	13.16	Independent
Regional		
Portland & Western (PNWR) ⁶	441.23	Genesee & Wyoming Inc. (Holding Co.)
Total Miles	1168.75	

Source: Oregon Department of Transportation, 2024.

1.3 Switching and Terminal Railroad

A switching and terminal railroad is a non-Class I railroad engaged primarily in switching and/or terminal services for other railroads, irrespective of gross revenues. Local and switching and terminal railroads are typically grouped together with short lines and usually are Class III railroads.

As listed in **Table 3**, there are six switching and terminal railroads in Oregon: Clackamas Valley Railway, Oregon Pacific Railroad, Peninsula Terminal Company, Oregon Independence, Portland Terminal Railroad, and Rogue Valley Terminal Railroad. Non-Class I operators can carry out operations at a lower cost and be more responsive to customer needs.

In addition to owned trackage, some railroads also operate over tracks owned by other railroads through contractual agreements. Under such trackage rights arrangements, UP operates on 205 additional route miles, while BNSF operates on 188 additional route miles.

Some short line freight railroads in Oregon also host passenger excursion service. All of the main line passenger rail services in Oregon, consisting of Amtrak and TriMet's Westside Express Service, operate over lines owned by private railroads whose main concern is freight.

⁶ Note that PNWR, listed as a Regional Railroad in Table 3, accounts for both Portland & Western Railroad as well as Willamette & Pacific Railroad (WPRR)



Mt. Hood Railroad Excursion Train – Hood River Valley

2 Freight Railroad Operations

The Class I railroads in Oregon (UP and BNSF) together operate 54 percent of all active rail mileage in the state. On these lines, they handle the vast majority of freight traffic, including virtually all interstate shipments and all Amtrak passenger service. In 2023, combined, the two railroads employed just over 1,300 people and handled more than 700,000 carloads that had either an origin or destination in the state (see **Table 4**). In addition, the two railroads handled a considerable volume of through traffic.

Table 4. Class I Railroad Operating Characteristics in Oregon

Name	Employees	Payroll (Millions of Dollars)	Miles Operated	Originating Carloads	Terminating Carloads
UP	1,048	\$148.1	1,073	163,928	248,169
BNSF	270	\$20.6	414	127,797	165,494

Source: UP statistics from Union Pacific in Oregon fact sheet for 2023; BNSF statistics from BNSF Railway in Oregon fact sheet, 2023.

2.1.1 Union Pacific Railroad

UP is the largest rail operator in Oregon by mileage and traffic volume. In 2023, UP operated trains over 1,073 miles of track in Oregon, with a staff of 1,048 and a \$148.1 million payroll.

Figure 2 maps the Class I subdivisions, terminals and rail yards in Oregon. UP's Oregon

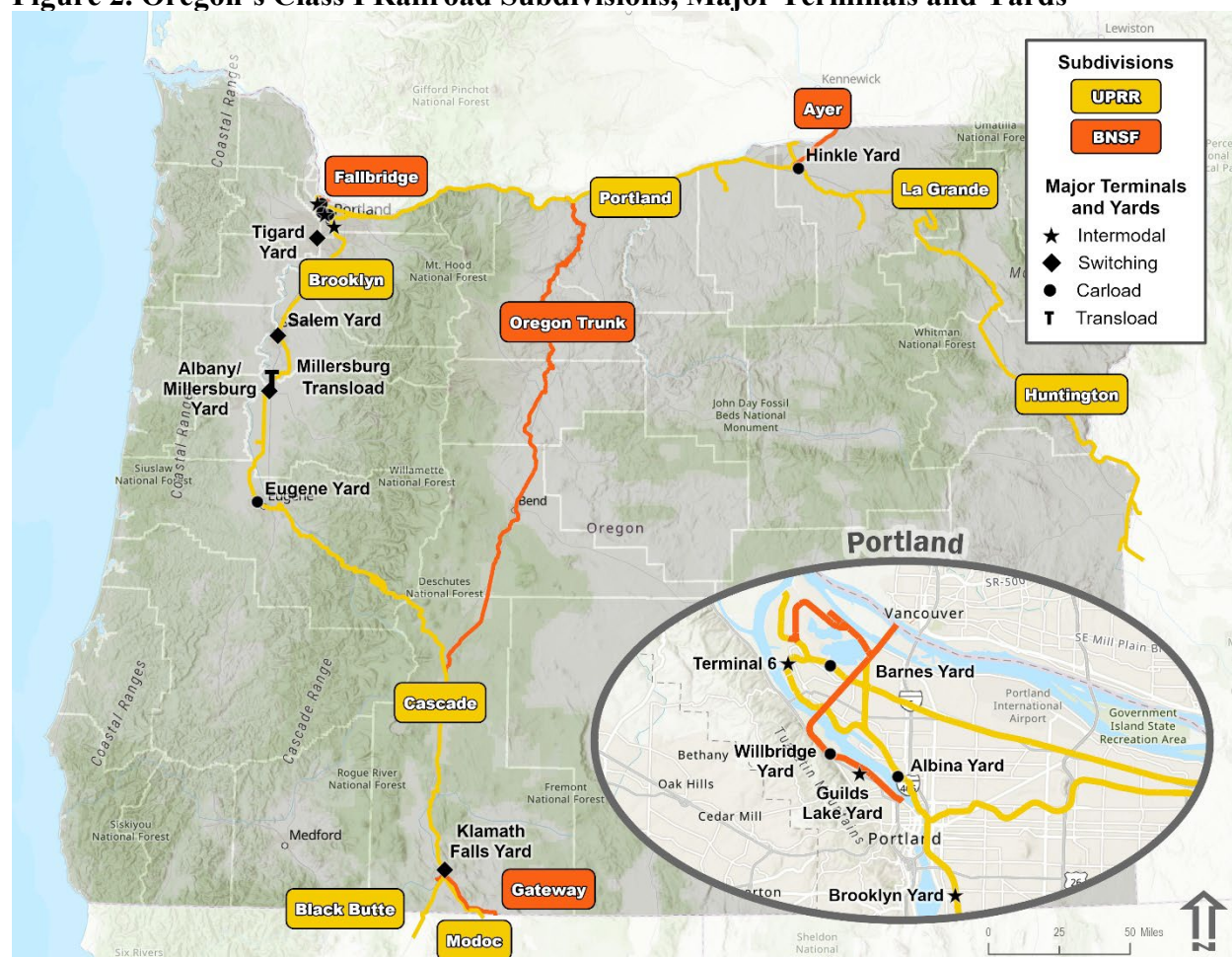
network consists of two primary corridors: an east-west transcontinental route, and a north-south route that generally follows Interstate 5 (I-5).

The transcontinental route runs between Portland and Hinkle, Oregon along the southern bank of the Columbia River (Portland Subdivision). Hinkle is a junction point and the location of a large carload classification yard. The yard was built as a hump yard, designed to use gravity to sort railcars. Since 2019, the hump has been deactivated, and the yard has been operated as a flat-switching yard in which crews must classify cars by pushing or pulling them in and out of the classification tracks.



UP Train Operating in the Portland Subdivision

Figure 2. Oregon's Class I Railroad Subdivisions, Major Terminals and Yards



The transcontinental route continues southeast from Hinkle (along the La Grande and Huntington subdivisions) to Granger, Wyoming, and Ogden, Utah, connecting to UP's historic Overland Route that links the San Francisco Bay Area with Salt Lake City, Omaha and Chicago.

The north-south route is the former Southern Pacific line that connects Portland, Eugene and Klamath Falls (Brooklyn, Cascade and Black Butte subdivisions) to Sacramento, and is used by through trains from Washington and Canada to destinations in California and the Southwest. The north-south and east-west routes meet in Portland, with Albina Yard serving as the primary carload yard and Brooklyn Yard as the primary intermodal yard. Beyond the main line network, UP operates very few short lines in the state; what remains of predecessor Southern Pacific's once extensive branch line network has either been abandoned or is being operated by various non-Class I railroads.

UP's network in Oregon is predominantly single track with passing sidings. Top inbound commodities include mixed freight handled in containers and trailers, recyclables/waste, fertilizers, soda ash and coal. Top outbound commodities are dominated by mixed freight handled in intermodal service, lumber and building materials, cement and miscellaneous minerals, paper, and frozen/refrigerated foodstuff.

2.1.2 BNSF Railway

BNSF is the third largest rail operator in Oregon, with 226 miles of owned track and 188 miles of trackage rights. In 2023, BNSF employed 270 people in Oregon, with a payroll of \$20.6 million. In addition to extensive operations in the Portland region, approximately 313 miles comprise a north-south corridor that forms part of BNSF's through route between California's Central Valley and the Pacific Northwest. Often referred to as the Inside Gateway, the Oregon portion is composed of the segment beginning at the state line near Wishram, Washington, on the Columbia River and extending through Bend, Chemult and Klamath Falls to Malin on Oregon's southern border with California. Although it is beyond Oregon's borders, BNSF's main line along the north bank of the Columbia River between Pasco, Wallula, Wishram and Vancouver, Washington, is critical to BNSF's service in the state.

BNSF's top inbound commodities consist of mixed freight moving in intermodal service, agriculture products and industrial products. Top outbound commodities are dominated by mixed freight and forest and industrial products. Almost all of BNSF's network in Oregon consists of single-track main line.



BNSF Train Crossing the Crooked River Gorge in Eastern Oregon

2.2 Non-Class I Railroads

Non-Class I railroads in Oregon primarily serve line-side industries, such as agriculture and forestry, while the switching and terminal railroads partially serve the Port of Portland, where they handle carload and containerized goods, as well as serving nearby industries.

While the Class I main line railroads provide the primary arteries for the movement of goods throughout the state, non-Class I railroads provide important collector/distributor services for the larger railroads and local rail services for rural shippers. In Oregon, non-Class I rail lines were primarily built to support the extraction of forest products in the western part of the state along what is now the I-5 corridor. Most of the present non-Class I railroads in Oregon were created in the 1980s and 1990s as spin-offs from Southern Pacific and Burlington Northern railroads.

Notably, these include what are now the second and fourth largest railroads in Oregon in terms of mileage: the Portland & Western Railroad (including Willamette & Pacific) and the Central Oregon & Pacific Railroad, respectively. All three of these railroads are owned by Genesee & Wyoming Inc., the largest non-Class I rail holding company. These three railroads operate 59 percent of the total 1168.75 non-Class I railroad mileage in Oregon as of 2024 and earned 75.5 percent of the \$85,432,484 non-Class I revenue in 2024.

Table 5 lists non-Class I railroads in Oregon by revenue per mile. From the table it is evident that non-Class I railroads in Oregon vary greatly in length and carload volumes. Also evident are great variations in revenue, ranging from \$11,000 to more than \$33 million. In terms of revenue per mile, the highest ranked line is the Peninsula Terminal Co., which provides local switching in Portland. Revenue per mile is a useful indicator of non-Class I railroad health, because the miles of track that must be maintained directly correlate with maintenance needs. Thus, higher revenue per mile offers the potential to reinvest a greater portion of revenues into the physical system.

Table 5. Non-Class I Railroad in Oregon with Revenue (2024 dollars)

Name of Railroad ⁷	Route Miles	No. of Carloads	Revenue	Revenue/Mile	% Total Non-Class I Line Revenue
Albany & Eastern Railroad	71.74	4,131	\$3,189,043	\$44,453	3.73%
Central Oregon & Pacific Railroad	247.02	20,540	\$22,051,022	\$89,268	25.81%
City of Prineville Railway	18.34	648	\$460,812	\$25,126	0.54%
Clackamas Valley Railway	1.60	925	\$706,371	\$441,482	0.83%
Columbia Walla Walla RR	21.20	16	\$11,463	\$541	0.01%
Coos Bay Rail Line	133.39	5,302	\$3,149,806	\$23,614	3.69%
Goose Lake Railway	14.65	575	\$602,320	\$11,062	0.71%
Hampton Railway	5.20	-	-	-	0.00%
Idaho Northern & Pacific Railroad	20.00	1,258	\$575,583	\$28,779	0.67%
Klamath Northern Railway	10.50	63	\$25,699	\$2,448	0.03%
Longview Portland & Northern Railway	3.39	-	-	-	0.00%
Mt. Hood Railroad	21.22	501	\$3,084,000	\$145,335	3.61%
Oregon Independence RR	0.40	-	-	-	0.00%
Oregon Pacific Railroad	13.16	835	\$465,397	\$35,365	0.54%

⁷ Not listed in Table 5 are City of Astoria Trackage (2.73 mi.), Oregon Coast Scenic Railroad (48.63 mi.), former Newberg paper mill spur (1.50 mi.), and Sumpter Valley Railroad (6.00 mi.).

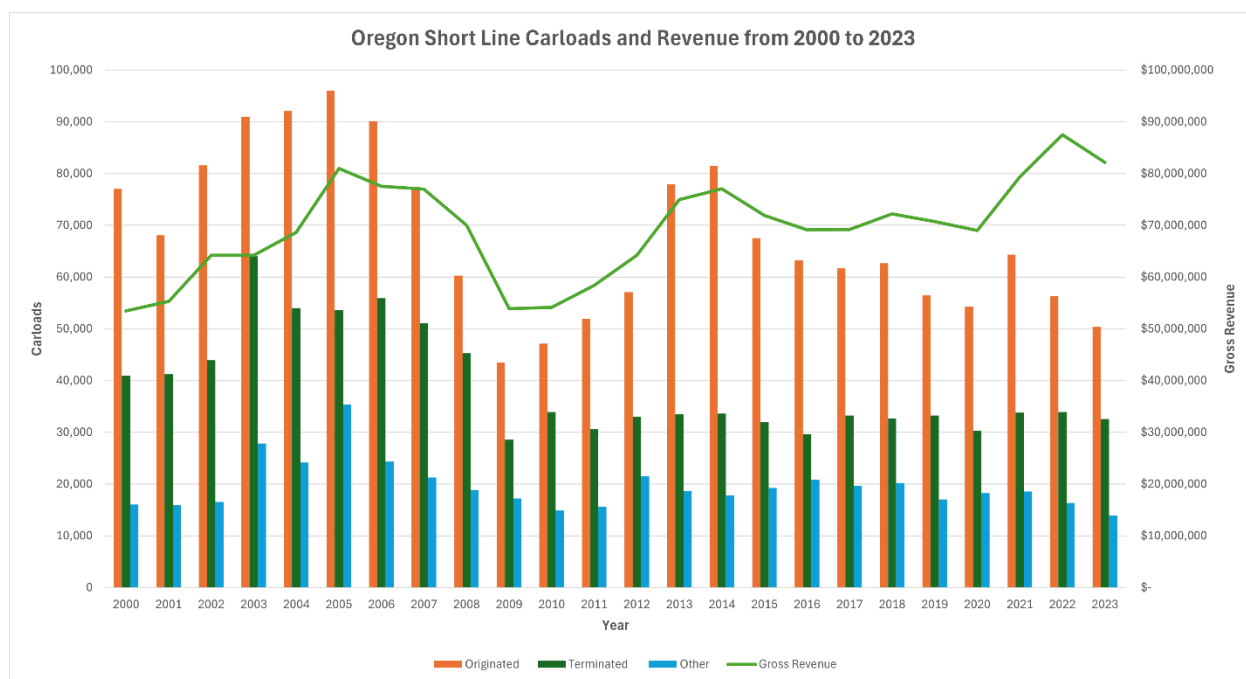
Name of Railroad ⁷	Route Miles	No. of Carloads	Revenue	Revenue/Mile	% Total Non-Class I Line Revenue
Palouse River & Coulee City Railroad ⁸	11.00	56,148	\$394,108	\$35,828	0.46%
Peninsula Terminal Company	1.01	3,049	\$1,858,818	\$1,840,414	2.18%
Portland Terminal Railroad	0.53	-	\$550,950	\$1,039,528	0.64%
Portland & Western Railroad	280.30	36,420	\$33,478,801	\$119,439	39.19%
Rogue Valley Terminal Railroad	12.20	2,032	\$1,624,026	\$133,117	1.90%
Wallowa Union Railroad	63.08	-	\$60,000	\$951	0.07%
Willamette & Pacific Railroad ⁹	160.93	14,123	\$9,187,858	\$57,092	10.75%
Willamette Valley Railway	33.19	909	\$799,398	\$24,086	0.94%
Wyoming Colorado RR, Oregon Eastern Div.	24.70	1,204	\$3,157,009	\$127,814	3.70%
Total	1168.75	148,679	\$85,432,484	\$70,690	100.00%

Source: Oregon Department of Transportation – Rail and Public Transit Division, 2024 Oregon Short Line Ranking Data; At Risk Corridor Information from ODOT Rail and Public Transit, 2024.

As shown in **Figure 3** the 2007 through 2009 economic recession resulted in a serious decline in short line shipping and revenue in Oregon. A short renewal of short line traffic growth peaked in 2014. Short line traffic and revenues in Oregon have been in steady decline since 2014; this trend is tied closely to short line carloads originating and terminating in Oregon. Since 2022, gross revenue attributed to short line railroad shipping has plateaued and is beginning to decline.

⁸ Annual carloads reported by PCC are conflated by inclusion of the total containers terminating at a regional landfill near Arlington, Oregon. In 2024, PCC listed 56,090 on line 91 provided for “Total TOFC/COFC carloads originated, terminated or bridged.” According to company officials, this entry is an accounting of containers delivered to the Arlington landfill because PCC is compensated per container rather than by carload due to the differing capacities of intermodal car types, which can be composed of one to five platforms. Thus, a “carload” in a train of mixed intermodal car types can vary from two to ten containers. For its Weston line, PCC reported handling 58 carloads during 2024. Therefore, PCC's actual 2024 total volume would be 58 carloads plus an undetermined number of intermodal platform cars used to transport 56,090 containers of refuse to the landfill.

⁹ Note that PNWR has been separated in this table to reflect the individual revenue data of Willamette & Pacific Railroad and Portland & Western Railroad.

Figure 3. Oregon's Short Line Carloads and Revenue: 2000-2023

Source: Oregon Department of Transportation, 2024.

2.3 Key Railroad Facilities

Rail yards and terminals form an integral component of every rail network and serve different functions as follows:

- Terminals provide access to the rail system, typically through a transfer between highway or water and rail.** The transfer can take place in the form of shifting an intact container or truck trailer holding goods from one mode to another, or moving (e.g., transloading) the contents from a truck or vessel to a railcar. Common commodities that are transferred in this manner include bulk goods, such as grain, cement and plastic pellets; assembled motor vehicles; and project cargoes, such as electrical transformers and windmill parts. Facilities where trailers and containers are transferred intact between modes are typically called intermodal terminals.
- System, local and industry yards serve various functions in the handling of carload rail traffic.** As a rail car travels across the rail network from origin to destination, it goes through a series of rail yards, where trains are separated into single railcars or blocks of cars and sorted by subsequent destination, which could range from a train serving nearby industry to a yard thousands of miles away.

Oregon is home to one or more yards and terminals of each of these types. Over the years, BNSF and UP have concentrated their operations in fewer locations. This consolidation has occurred as a result of operational efficiency, technology improvements and the railroad industry's evolving traffic mix. For example, declining carload traffic and increased unit train volumes, which bypass intermediate yards, have reduced the need for carload service yards. Today, Oregon is served by three primary system yards: Albina Yard and Brooklyn Intermodal Rail Yard on the UP, and Lake Yard on the BNSF.

Intermodal terminals are key links in supply chains that utilize Oregon’s ports. There are several different types of intermodal terminals, each serving a different purpose. On-dock rail terminals handle international containers moving from ship to rail and vice versa, while near-dock terminals can handle both port-related and highway traffic. Inland terminals generally handle the transfer of containers and highway trailers between truck and rail. **Table 6** lists the key rail yards and terminals in Oregon.



Rail Service at Port of Portland's Terminal 5 – Grain and Potash Dry Bulk Exports

The Mid-Willamette Valley Intermodal Center is a \$35.5 million, 64-acre multimodal hub in Millersburg, Oregon. Construction was completed in 2023 and has the potential for connecting rail, trucks and ocean carriers to the valley’s natural resource-based economy. Trucks will bring in international intermodal containers for transload to rail cars before traveling north to Pacific Northwest marine terminals. To date, the transload facility awaits its first customers.

Table 6. Key Rail Yards and Terminals in Oregon

Railroad	Name	Location	Type	Description
BNSF	Lake Yard	Portland	Intermodal and Carload	BNSF intermodal regional hub and carload interchange between BNSF, UP and Portland Terminal Railroad
BNSF/UP	Terminal 6 Intermodal Yard	Port of Portland	Intermodal and Import Autos	Import autos and intermodal facility with marine interface and connection to BNSF and UP mainlines
BNSF	Willbridge Yard	Portland	Carload	Primarily chemical and petroleum products, adjacent to Lake Yard
BNSF	Rivergate Yard	Portland	Switching and Import Autos	Support Port of Portland Terminals 4, 5, 6 and Rivergate industrial area
PNWR	Albany/Millersburg Yard	Albany	Switching	Switching, transloading and storing rail cars (BNSF, UP)
PNWR	Tigard Yard	Tigard	Switching	Switching, train makeup and storing rail cars (UP, BNSF)
CORP	Winchester Yard	North of Roseburg	Switching	CORP's principal yard for train makeup, switching, storing and distributing cars
UP	Albina Yard	Portland	Carload	Regional carload yard; some locomotive servicing
UP	Barnes Yard	North Portland	Carload	Support Port of Portland Terminals 4, 5, 6 and Rivergate industrial area
UP	Brooklyn Yard	Portland	Intermodal	UP Portland intermodal facility
UP	Eugene Yard	Eugene	Carload/Switching	Connections between UP and three short lines: CORP, PNWR, and CBR
UP	Salem Yard	Salem	Switching	Local service hub for Willamette Valley and home base for 2 locals
UP	Hinkle Yard	Hinkle	Carload/Service	UP's Pacific Northwest system yard for staging transcontinental traffic
BNSF/UP	Klamath Falls Yards	Klamath Falls	Switching	Switching, storing rail cars and minor locomotive servicing (BNSF and UP have separate yards and interchange at Bieber Line Junction between the two)

Sources: Oregon Rail Study, 2010; Port of Portland Website; BNSF and UP Oregon Factsheets, 2023; ODOT Rail and Public Transit Division, 2019.

3 Rail System Conditions and Characteristics

3.1 Physical Conditions and Operating Characteristics

Existing conditions and key operating characteristics of rail lines in Oregon were reviewed as part of this Oregon State Rail Plan and include items such as maximum speeds (track class), number of tracks, weight limits, double-stack capability, traffic control systems, grade crossings, tunnels and bridge conditions. Together, these affect the performance of the rail system significantly and form the basis for existing and future infrastructure needs and improvements.

3.1.1 Weight Limits

Throughout the history of the railroad industry, equipment has gained in size and capacity as guideway and rolling stock technology has advanced. In the 1970s, the industry moved from a standard 70-ton capacity car to a 100-ton (263,000 pounds) capacity car. Standard weight limits increased again in 1995 to 286,000 pounds (typically referred to as 286K). Although this increase produced significant productivity benefits for the industry, it also required upgrading of infrastructure in some instances. The Class I railroads were able to complete these improvements; however, for Class II and III lines the situation was often quite different because of the deteriorating state and sometimes functional obsolescence of their tracks, bridges and other infrastructure. As a result, many Class II and III lines restricted the heavier cars from their networks for safety reasons until improvements could be made.

As the railroad industry has shifted to 286K capacity equipment, it has become a necessity for all operators to accommodate the heavier cars. For some Class II and III lines, this is a competitive issue, because an inability to accommodate this equipment impairs their long-term viability. A regularly updated survey of 286K capacity conducted by ODOT found that all Class I railroad owned mileage could accommodate the heavier cars, but only 78 percent of Class II or III railroad owned mileage could do so. However, it is not necessarily accurate to conclude that 84 percent of the rail network can sustainably handle the heavier equipment. Competitive market pressures have caused some carriers to move 286K cars over track that is considered too light for the task. The railroad either accepts the maintenance impacts of heavier cars or risks losing the business altogether.¹⁰

Better indicators of Oregon railroad health are miles maintained to FRA Class 2 track standards or greater, and miles laid with 110-pound or heavier rail.¹¹ FRA Class 2 track permits maximum speeds of up to 25 mph for freight and 30 mph for passenger. Branch and secondary main lines often fall into this class, and it is commonly viewed that these are the minimum speeds needed for non-Class I railroad lines of any length to operate efficiently and be competitive.¹² About 35 percent (around 500 miles) of Class II or III railroad owned mileage in Oregon is not up to FRA Class 2 track standards.

In addition, railroad track needs to be constructed with sufficiently heavy rail to withstand the stresses from higher weights and speeds in an economically efficient manner. About 34 percent (or nearly 500 miles) of the network in Oregon is composed of rail lighter than 110 pounds per

¹⁰ Oregon Department of Transportation Rail Division – 286K Survey, 2006.

¹¹ Ibid.

¹² <https://www.trains.com/trn/train-basics/abcs-of-railroading/track-classifications/>.

yard, the minimum weight at which 286K operations can be conducted economically over the long run. Eventually, this lighter rail must be replaced.

Various rail upgrades have been completed on multiple railroads in Oregon over the past five years with support funding from Connect Oregon¹³ (supported by private or federal matching funds). These upgrades include portions of the Goose Lake Railway (\$1.91 million), Central Oregon & Pacific Railroad (\$5.7 million), Wyoming & Colorado Railroad (\$1.69 million), Oregon Eastern Railroad (\$1.18 million), Portland & Western Railroad (\$1.78 million) and Mt. Hood Railway (\$2.58 million).

3.1.2 Bridges

A further critical factor affecting general conditions and the ability to efficiently handle 286K equipment is the condition of bridges and other civil works. The 2010 Oregon Rail Study included a bridge condition assessment that was conducted on 332 bridges located on 15 non-Class I railroads. The study evaluated bridges to determine their load capacity and remaining service life and produced cost estimates to upgrade or repair them. The estimates were based on the ability to carry 286K rail cars at 10 mph and at 25 mph.

The study found investment needs ranging from \$124 million for repairs necessary to achieve 10 mph, \$147 million to achieve 25 mph, and \$1.436 billion for complete replacement. These costs will have risen significantly since 2010.



Coos Bay Rail Line Train over the Siuslaw River Bridge

¹³ <https://www.oregon.gov/odot/Programs/TDD%20Documents/ConnectOregon-Funded-Projects-List.pdf>.

Since the 2010 study was completed, several rail lines have received Connect Oregon funds to rehabilitate bridges. These include the Phase II Coos Bay Railroad Mt. Hood Railroad Bridges Fortification, funded by Connect Oregon at \$247,000; Bridge Program #1 Wyoming Colorado Railroad Inc., funded by Connect Oregon at \$119,749; and Bridge Replacement MP 662.00 Union Pacific Railroad Company funded by Connect Oregon at \$4,000,000.

3.1.3 Tunnels and Curves

Since rail lines were first constructed, the dimensions of rolling stock have increased, sometimes necessitating changes in bridges, tunnels and other infrastructure to accommodate them. Since the 1970s, the growth in the movement of intermodal containers, assembled motor vehicles, and specialty cargoes such as windmill parts and machinery have increased requirements for vertical and horizontal clearances. Size requirements have increased particularly with respect to containers, which are most efficiently handled when they are stacked two high, a configuration that requires vertical clearances to be at least 18 feet 6 inches for two stacked international containers (each of which is 8 feet 6 inches high); 19 feet 6 inches for a combination international and domestic container; and 20 feet 8 inches for two domestic containers (each of which is 9 feet 6 inches high). Tri-level auto-rack cars require a vertical clearance of 19 feet 6 inches. Primarily by greatly reducing line-haul costs and improving ride quality, the application of this technology substantially contributed to the rapid growth in domestic and international intermodal volumes in North America since the mid-1980s.

Except for BNSF's Oregon Trunk Line, the main line network in the state has been adapted to accommodate double-stack operations (see **Figure 4**). Some non-Class I lines have no known clearance limitations, while others do not have sufficient clearance to accommodate double stacking. For many of these railroads, the nature of the traffic they handle does not require clearance for double-stack service, but expanded vertical and horizontal clearances may be beneficial for the handling of other types of large loads.

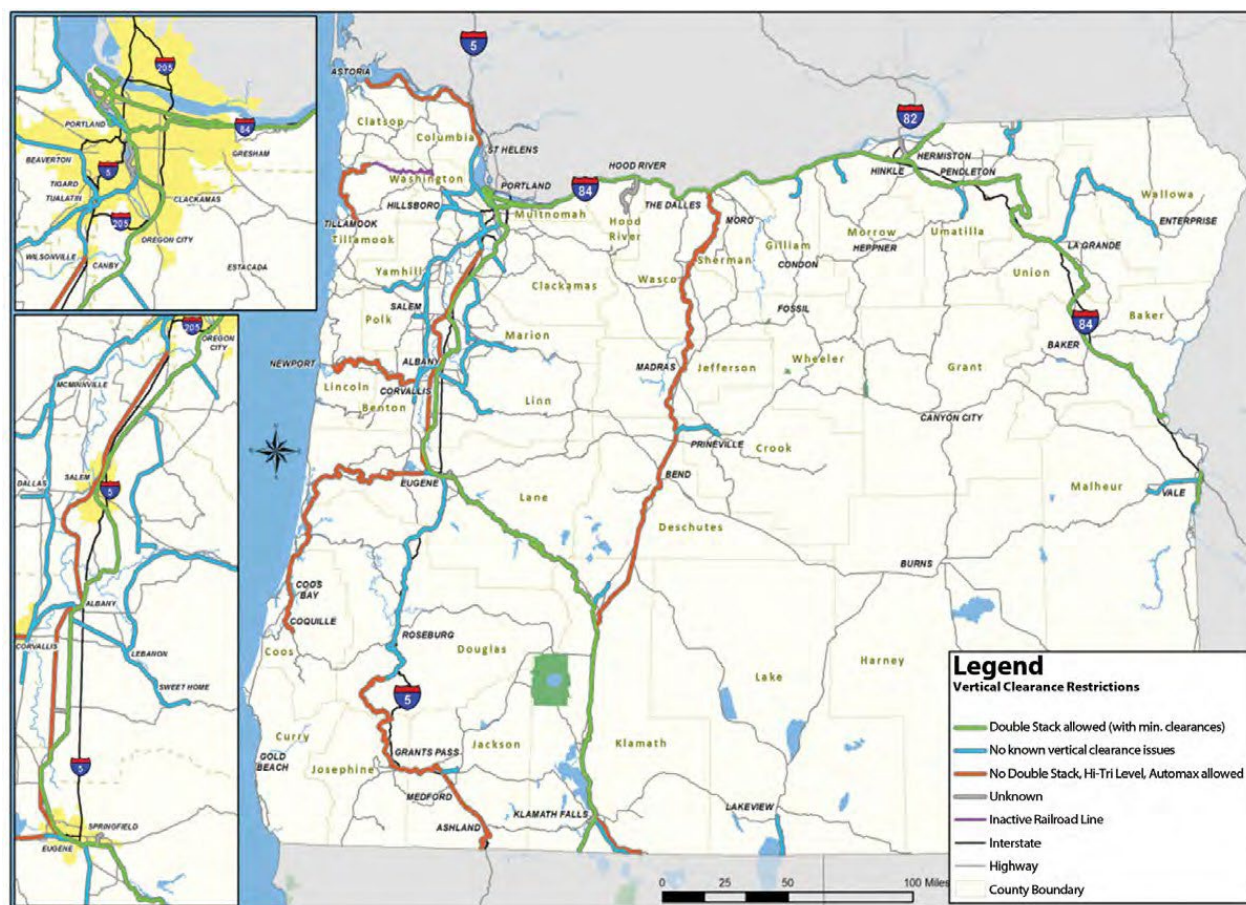
The 2010 Oregon Rail Study include a rail tunnel assessment, which evaluated 24 out of 34 tunnels on non-Class I routes in Oregon. The 24 tunnels, which range in length from 128 feet to 4,202 feet, are distributed on three railroads: Central Oregon & Pacific (CORP) (11 tunnels), PNWR (4 tunnels), and CBR (9 tunnels). Individual cost estimates were developed to repair each of the 24 tunnels to achieve a 20-year life expectancy and to provide sufficient clearances to accommodate double-stack rail cars. Repair costs for all tunnels were projected to total \$32 million if clearances were not increased, and \$92 million with increased clearances. The locations of the tunnels, their lengths and their condition figure highly in the rehabilitation costs and risk to the system.¹⁴

Since 2009, a combination of \$26 million in federal funding and \$7.8 million in Connect Oregon III¹⁵ funding have allowed the Port of Coos Bay to rehabilitate the 9 tunnels and repair the infrastructure and resume efficient operation over the line.¹⁶ An additional \$10 million in rehabilitation funds were obtained both in the 2013 and 2015 Oregon legislative session. This tunnel rehabilitation work was completed in December 2020.

¹⁴ Oregon Rail Study, 2010.

¹⁵ This is a funding program created by the Oregon Legislature in 2005, and subsequently renewed, to fund multimodal transportation projects.

¹⁶ <https://www.portofcoosbay.com/coos-bay-rail-line-tunnel-rehabilitation-project>.

Figure 4. Vertical Clearance Restrictions on Oregon Railroads

3.2 Traffic Control Systems

Systems for controlling rail traffic serve two primary purposes: preventing trains from colliding with each other and efficiently managing the flow of traffic. There are several different types of systems that differ in their sophistication and complexity. The most basic method for controlling operations is Track Warrant Control (TWC), whereby train crews are given permission to operate within specified segments by dispatchers via radio. TWC, which does not require any wayside equipment, is best suited for lines with low traffic volumes. More advanced control methods—which also permit higher speeds—include Automatic Block Signaling (ABS), which controls train spacing by dividing a line into segments or blocks, with wayside (or in-cab) signals automatically indicating occupancy status of subsequent blocks, and Centralized Traffic Control (CTC), where a dispatcher remotely controls signals and sets train paths from a central location. CTC systems improve efficiencies by consolidating operations management, improve safety and increase capacity on lines with higher volumes.

In Oregon, the majority of Class I railroad mileage is operated under CTC, and has freight train speeds up to 60 mph and passenger speeds up to 79 mph. This mileage operated under CTC includes UP's transcontinental and I-5 corridor main lines. BNSF's Oregon Trunk Line utilizes CTC and TWC control types. The PNWR utilizes cab signals along the route of TriMet's Westside Express Service between Beaverton and Wilsonville. The remaining railroads, all of

which are non-Class I lines, utilize TWC or other methods of manual control. CORP relies primarily on TWC, and augments TWC with ABS on the north end of its line.

The Railway Safety Improvement Act (RSIA) of 2008 mandated that the railroad industry implement traffic control technology called Positive Train Control (PTC). PTC is implemented as an “overlay” over existing signal systems, for the express goals of preventing overspeed derailments and preventing collisions between trains and other authorized track occupants. The deadline for implementation of PTC was December 2020 on most lines handling regularly scheduled passenger trains or toxic-by-inhalation hazardous materials, or lines with freight volumes that are greater than 5 million gross ton miles annually. In Oregon, PTC has been implemented on all lines that are required by RSIA to do so.

3.3 At-grade Rail Crossings

At-grade crossings are the most common locations where the general population interacts with railroads. Incidents occurring at at-grade crossings, and more so from trespassing on railroad property, are the primary causes of injuries and fatalities. Population growth, along with increased rail, vehicular and pedestrian traffic, is expected to increase interactions at public at-grade crossings, which will have implications for safety, delays for vehicles and pedestrians, and associated impacts.



A passenger train crossing one of Oregon's 2,300 at-grade crossings.

In Oregon there are more than 2,300 public at-grade rail crossings¹⁷; the greatest number of these are situated in Linn, Marion, Multnomah and Lane counties. The most typical warning signs are

¹⁷ ODOT Commerce and Compliance section, 2025

cross bucks and stop signs; 71 crossings have flashing lights, and 804 (43 percent) have some type of gate. Railroads with the most crossings are: PNWR (573 crossings), UP (447 crossing), CORP (170 crossings) and BNSF (129 crossings).¹⁸

Trespassing on a railroad's private property and along railroad rights-of-way is the leading cause of rail-related fatalities in the United States. Since 1997, more people have been fatally injured each year by trespassing than in motor vehicle collisions with trains at highway-rail grade crossings. In Oregon, between 2020 and 2024, there were 138 trespassing incidents that resulted in death or injury.¹⁹

See ***Oregon Highway-Rail Top 76 Higher Risk Grade Crossings Supplement to ODOT Highway-Rail Crossing Safety Action Plan Memorandum, 2025***²⁰ for a detailed analysis and listing of Oregon's public, higher-risk at-grade highway-rail crossings.

3.4 Line Abandonments

In the wake of rail deregulation in 1980, railroads moved to improve their financial performance by selling or abandoning lines with poor prospects. While the most marginal lines were abandoned, many were sold or leased to non-Class I line operators. Subsequently, these operators either succeeded in improving the financial performance of the line through lower operating costs and improved service or were eventually forced to cease operations. Thus, while abandonment applications were once primarily a Class I phenomenon, in recent years, non-Class I lines have filed a growing portion of line abandonments.

In Oregon, line abandonments have been driven by multiple factors, including high capital costs, lack of customer diversity and changing economies. Coupled with the recession of 2009, long-term systemic deferred maintenance and operating deficits left some non-Class I line corridors at-risk of closing.²¹ In the most recent decade from 2010 to 2019, 98.6 miles were abandoned.

The attempted abandonment in 2008 and subsequent reopening in October 2011 of the Coos Bay rail line presents an opportunity to understand the importance of rail preservation. In 2007, the Coos Bay Rail Line was embargoed by CORP due to safety concerns in three tunnels, which resulted from a backlog of deferred maintenance. This forced shippers on the line to seek alternative transportation options.

3.5 At-Risk Railroads

The 2010 Oregon Rail Study documented all at-risk non-Class I lines in Oregon, based on several factors, including carloads per mile, revenues per mile and specific rail operator actions. **Table 7** lists the at-risk non-Class I railroads in Oregon. Most lines that are at risk of abandonment have little or no volume on the lines and no known planned change in strategy or conditions to attract additional business.

¹⁸ Data extract from ODOT Rail and Public Transit Division, 2020.

¹⁹ <https://safetydata.fra.dot.gov/officeofsafety/publicsite/query/castally4.aspx>.

²⁰ ODOT Rail and Public Transit Division, 2025

²¹ Oregon Rail Study, 2010.

Table 7. At-risk Non-Class I Railroads in Oregon

Name of Railroad	At-risk Segments
Portland & Western Railroad	Astoria District – no customers beyond Wauna
Willamette & Pacific Railroad	Dallas District – no customers
Central Oregon & Pacific Railroad	Ashland to CA State Line – low traffic
Albany & Eastern Railroad	Sweet Home Branch – low traffic
Goose Lake Railway	Entire line – low traffic
Willamette Valley Railway	Southern 23 miles embargoed since 2012 for storm damage; no traffic
Wyoming & Colorado Railroad	Entire line – low traffic
Oregon Pacific Railroad	Liberal (Molalla Ave.) to Molalla – track removed
Wallowa Union Railroad	No freight traffic
Coos Bay Rail Line	More volume needed for sustainability
Hampton Railway, Inc.	No customers – service provided by PNWR
Longview Portland & Northern Railway	Dormant – no traffic

Source: Oregon Department of Transportation, 2025.