



Washington State Transportation
Commission

Statewide Rail Capacity and System Needs Study
Task 1.1.A – Washington State’s Freight Rail System

technical

memorandum

prepared for

Washington State Transportation Commission

prepared by

**Cambridge Systematics, Inc.
HDR, Inc.**

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Task 1.1.A – Washington State’s Freight Rail System

■ Summary

In 2004, freight railroads operating in Washington carried 2.4 million carloads and 99 million tons of freight over 2,523 route miles.^{1,2} The primary commodities originating within the State include: intermodal containers/trailers (6.6 million tons); lumber and wood products (5.1 million tons); waste and scrap (4.0 million tons); farm products (1.7 million tons); and, petroleum (1.6 million tons).³ The primary terminating commodities are: farm products (24.2 million tons); intermodal containers/trailers (4.2 million tons); food products (3.0 million tons); waste and scrap (3.0 million tons); and, chemicals (2.6 million tons). In addition to supporting other industries, Washington’s freight railroads are a major employer, paying over \$265 million in wages to nearly 4,000 workers in the State in 2004.

Washington is served by two Class I railroads, two regional railroads, and 16 active short lines and switching railroads. This technical memo profiles these 20 active freight railroads, along with three inactive railroads. It begins with a general overview, followed by a detailed corridor-level description of each railroad. For the two Class I carriers, the Burlington Northern Santa Fe Railway (BNSF) and the Union Pacific Railroad (UP), this memo first examines the main line corridors they operate and then the lower density corridors. The main line corridors connect Washington with the rest of the North American rail network, while the lower density corridors offer collection/distribution services and access to key industries. Finally, the principal terminals and yards impacting Washington rail traffic are described. Some of these yards are located outside the boundaries of Washington State, but are included based on their importance to rail operations within the State boundaries.

¹ Traffic, wage, and job statistics are from Railroad Service in Washington, Association of American Railroads, 2004.

² The AAR reports 3,179 miles of railroad owned in Washington State in 2004. Our best determination, after eliminating double counting of trackage and lease agreements, is 2,523 miles.

³ Imports through Washington’s ports are considered a Washington rail originating move in the data. Similarly, exports through the ports are considered as a Washington rail terminating move.

■ Objective

The objective of this technical memorandum is to describe the current freight-rail systems serving Washington State and the Pacific Northwest region.

The technical memorandum has three findings sections:

1. **Freight Rail System Overview** – A summary of the railroads operating in Washington State, with a focus on railroad class and mileage.
2. **Freight Railroad Descriptions** – A detailed, corridor-level description of each railroad operating in Washington State. It includes current condition, history, track speeds, control system, traffic base, and, where known, train volumes.
3. **Railroad Terminals and Yards** – A description of the location and function of the major rail terminals and yards that: a) are located in Washington; or b) are located near Washington and impact rail movements within the State.

The appendices contain the following:

- Appendix A: Railroad Abbreviations and Names;
- Appendix B: Railroad Train Control Systems; and
- Appendix C: Railroad Maps.

■ Methodology

Information contained in this technical memorandum was obtained from various railroad and government Internet sites, and discussions with coworkers and subconsultants familiar with the Washington State rail network. Depending on the availability of information, the description of each line includes endpoints, level of service, important features, brief summary of its history, permitted track speeds and railcar weights, and method of train control.

■ Freight Rail System Overview

Tables 1 and 2 provide a summary of the 23 freight railroads in Washington State. Table 1 contains a summary by railroad class, while Table 2 shows route miles.

Table 1. Washington Freight Railroads by Class

Name	Abbreviation	Class I	Class II	Class III	Terminal/ Switching
Ballard Terminal Railroad	BDTL				X
BNSF Railway	BNSF	X			
Cascade & Columbia River Railroad	CSCD			X	
Central Washington Railroad	CWA			X	
Columbia & Cowlitz Railway	CLC			X	
Columbia Basin Railroad	CBRW			X	
Great Northwest Railroad	GRNW			X	
Kettle Falls International Railway	KFR			X	
Longview Switching	LSC				X
Meeker Southern Railroad	MSN				X
Montana Rail Link	MRL		X		
Mount Vernon Terminal Railway	MVT				X
Palouse River & Coulee City Railroad	PCC		X		
Pend Oreille Valley Railroad	POVA			X	
Puget Sound & Pacific Railroad	PSAP			X	
Royal Slope Line (Inactive)	RS			X	
Tacoma Municipal Belt Line	TMBL				X
Tacoma Rail Mountain Division	TRMW			X	
Tri-City & Olympia Railroad	TCRY				X
Union Pacific Railroad	UP	X			
United States Government	N/A			X	
Yakima Interurban Lines (Inactive)	YILA			X	
Yelm-Roy Prairie Line (Inactive)	YRPL			X	

Source: *Railroad Service in Washington*, Association of American Railroads, 2004 was the initial source. This information was updated by CS and HDR.

Railroad classification is determined by the Surface Transportation Board. In 2004 a Class I railroad was defined as having \$289.4 million or more in operating revenues. A Class II railroad, often referred to as a regional railroad, was defined as a non-Class I line-haul railroad operating 350 miles or more with operating revenues of at least \$40 million. Class III railroads, or short lines, are the remaining non-Class I or II line-haul railroad. A switching or terminal railroad is a railroad engaged primarily in switching and/or terminal services for other railroads (i.e., they are not typically involved in line-haul moves between two geographical locations).

Washington State is served by two Class I railroads, BNSF and UP. These two railroads provide the primary connections between Washington's ports, farmers, and industries and the rest of North America. This is done over a series of nine major rail corridors within the State; seven traverse the State east-to-west, while the other two parallel Interstate 5 along the Pacific coast. The BNSF operates seven of these corridors, while the

UP operates on the remaining two corridors. These corridors are profiled in the BNSF and UP sections, respectively.

There are two Class II, or regional, railroads operating in Washington. The Palouse River & Coulee City Railroad operates in the eastern portion of the State and provides service to several industries, but most significantly the grain shippers. This railroad consists of a combination of privately and publicly owned track. The Montana Rail Link also is a Class II railroad, but it offers limited service in Washington and only reaches Spokane over trackage rights on BNSF from Idaho.

The 16 active short lines and terminal/switching railroads in the State provide both important collector/distributor services for the larger railroads and local rail service to Washington State shippers. These range from short lines operating over 100 miles in the State, to switching railroads that connect ports to line-haul railroads.

Table 2 provides a summary of the railroads in Washington based on mileage. This table includes miles operated in Washington (which includes owned track plus trackage rights), percent of miles operated in Washington to total miles operated, and the miles of road⁴ owned in Washington. BNSF operates over the most mileage in the State, but the 1,572 in-state miles only represents five percent of BNSF's total system mileage. In total, there are 3,628 miles operated in the State and 2,523 miles owned.

Table 2. Summary of Railroad Miles in Washington

Name	Abbreviation	Miles Operated in Washington ^a	Percent of Total Miles Operated	Miles Owned in Washington
Ballard Terminal Railroad	BDTL	3	100%	0
BNSF Railway	BNSF	1,572	5%	1,447
Cascade & Columbia River Railroad	CSCD	137	100%	131
Central Washington Railroad	CWA	81	100%	21
Columbia & Cowlitz Railway	CLC	9	100%	9
Columbia Basin Railroad	CBRW	112	100%	0
Great Northwest Railroad	GRNW	84	91%	69
Kettle Falls International Railway	KFR	142	88%	58
Longview Switching	LSC	17	100%	0
Meeker Southern Railroad	MSN	5	100%	5
Montana Rail Link	MRL	16	2%	0
Mount Vernon Terminal Railway	MVT	2	100%	2
Palouse River & Coulee City Railroad	PCC	370	90%	108
Pend Oreille Valley Railroad	POVA	61	66%	61
Puget Sound & Pacific Railroad	PSAP	178	100%	109

⁴ "Miles of road" is a linear measure of distance that does not consider the number of tracks.

Table 2. Summary of Railroad Miles in Washington (continued)

Name	Abbreviation	Miles Operated in Washington ^a	Percent of Total Miles Operated	Miles Owned in Washington
Royal Slope Line (Inactive)	RS	26	100%	26
Tacoma Municipal Belt Line	TMBL	51 ^b	100%	0
Tacoma Municipal Belt Line	TMBL	51 ^b	100%	0
Tri-City & Olympia Railroad	TCRY	56	100%	0
Union Pacific Railroad	UP	558	2%	280
United States Government	N/A	c	N/A	49
Yakima Interurban Lines (Inactive)	YILA	11	100%	11
Yelm-Roy Prairie Line (Inactive)	YRPL	5	100%	5
Totals		3,628	N/A	2,523

^a Miles operated includes all owned track plus trackage rights.

^b Does not include trackage within Port of Tacoma.

^c Included in PSAP-operated mileage.

Source: *Railroad Service in Washington*, Association of American Railroads, 2004. This information was then updated by HDR using BNSF timetables, UP timetables and charts, Amtrak charts, and Surface Transportation Board filings for short line railroads

Figure 1 in Appendix C: Figures (provided separately) provides a statewide rail map. Appendix C also contains maps of the individual freight railroad lines; the appropriate figure for each railroad line is referenced in the text description.

■ Freight Railroad Descriptions

Ballard Terminal Railroad (Publicly Owned, Operated by Third Party)

In 1999, the Ballard Terminal Railroad (BDTL) began operation of the City of Seattle's three-mile section on former BNSF trackage in Ballard. This switching railroad serves a number of industries along Ballard's waterfront on an as-needed basis, and interchanges with BNSF at the north end of its line. [Figure 2 in Appendix C.]

Burlington Northern Santa Fe Railway (Privately Owned)

The Burlington Northern Santa Fe Railway (BNSF) is one of the four largest U.S. railroads (along with CSX Transportation, Norfolk Southern, and Union Pacific). The railroad has 40,000 employees and operates over 32,000 route miles in the western United States, stretching from Seattle, Washington to Birmingham, Alabama. East/west service is provided through connections with the eastern railroads at four major gateways (Chicago,

St. Louis, Memphis, and New Orleans) and several minor interchange locations. North American service is provided through many connections with Canadian and Mexican railroads.⁵

An average day will find 220,000 rail cars on the BNSF network. Primary commodities include coal, grains, intermodal (containers/trailers), lumber, and chemicals. Over 90 percent of the coal hauled by BNSF originates in the Powder River Basin in Wyoming and Montana. This low sulfur coal not only feeds western power plants, but is increasingly being used by eastern plants. BNSF is one of the largest haulers of agricultural products, moving more than 900,000 carloads in 2005. Approximately half of these cars contained wheat and corn. The railroad serves more of North America’s primary timber producing region than any other railroad, and hauls enough lumber to build over 500,000 new homes annually. Chemicals hauled by the BNSF include propane, petroleum, oil, and asphalt.

BNSF operates over 1,600 route miles in Washington State, which represents five percent of their total system route miles. Service is provided over seven major corridors, and nine low-density corridors. The major corridors provide the primary conduits to the North American rail network, while the low-density corridors offer collection/distribution services. These corridors are summarized in Table 3 and in the discussion that follows.

Table 3. BNSF Railway Service Corridors in Washington

Major Corridors	Low-Density Corridors
Seattle-Spokane	Tukwila-Snohomish
Seattle-Portland	Woodinville-Redmond
Portland-Pasco	Burlington-Sumas
Auburn-Pasco	Sumas-Lynden
Pasco-Spokane	Burlington-Anacortes
Spokane-Sandpoint, Idaho	Intalco-Cherry Point
Everett-Vancouver, British Columbia	Marysville-Arlington
	Lakeview-Roy
	Spokane-Chewelah

BNSF: Seattle-Spokane Main Line

This 331-mile corridor consists of BNSF’s Scenic Subdivision (Seattle-Everett-Wenatchee) and Columbia River Subdivision (Wenatchee-Spokane). The line traverses the longest railroad tunnel in the United States, the 7.8-mile Cascade Tunnel under the summit of Stevens Pass. Between Seattle and Everett, there are an average of 40 freight trains per day, with 25 per day operating between Everett and Spokane. Four Amtrak *Cascades*

⁵ Introductory material adapted from www.bnsf.com.

trains operate daily between Seattle and Everett, along with four *Sounder* commuter trains each weekday. Amtrak's *Empire Builder* connecting Seattle and Chicago operates once each way per day along the length of the corridor.

The line over Stevens Pass was completed in 1893 by the James Hill's Great Northern Railway (GN), creating a single-carrier link between Seattle and St. Paul, Minnesota. The GN later acquired control of the Chicago, Burlington, and Quincy Railroad (CBQ) to provide a direct connection between the Northwest and Chicago, the railroad hub of the nation. Today, the line serves the same role for BNSF, conveying their highest-priority traffic to and from the west coast ports.

With only a few local exceptions, the corridor is controlled entirely by Centralized Traffic Control (CTC).⁶ The portion of the line between Seattle and Everett is mostly two main tracks, and the majority of the Everett-Spokane segment is single-tracked. Maximum passenger train speed is 79 mph, maximum track speeds for freight trains are 60 mph between Wenatchee and Spokane and 50 mph between Seattle and Wenatchee, and railcars weighing up to 143 tons are permitted. The traffic base is primarily bridge movement of intermodal, agricultural and forest products, chemicals, automobiles and other merchandise between the Northwest and the Midwest. Amtrak teams with the Cascade & Columbia River Railroad to provide *Washington Fruit Express* service between Wenatchee and eastern destinations. [Figure 3 in Appendix C.]

BNSF: Seattle-Portland Main Line

BNSF's 177-mile Seattle Subdivision, connecting Seattle with Portland, Oregon, is the most heavily trafficked rail line in Washington State, conveying BNSF and UP trains (the latter via trackage rights) to and from the major Pacific Coast ports. The corridor hosts an average of 50 freight trains each day, with eight Amtrak *Cascades* trains operating daily and eight *Sounder* commuter trains connecting Seattle and Tacoma on weekdays.

The portions of the corridor from Vancouver to Tenino and Tacoma to Seattle were completed by the Northern Pacific Railway by 1877, with the Oregon-Washington Railroad and Navigation Company obtaining trackage rights over the line. These segments were connected with the construction of the Port Townsend Southern Railroad along the shore of Puget Sound, with service beginning in 1914. It is this route via Point Defiance that carries the contemporary joint BNSF and UP main line, with the Tenino-Yelm-Lakeview segment no longer hosting through traffic.

The entire corridor is two main tracks controlled by CTC, with the exception of short stretches in the Tacoma and Seattle terminals. Maximum train speeds are 79 mph for passenger and 60 mph for freight, with 143-ton-capacity cars permitted. Freight traffic includes intermodal, forest and agricultural products, refuse, chemicals and finished automobiles. [Figure 4 in Appendix C.]

⁶ Definitions of railroad signaling systems are contained in Appendix B.

BNSF: Portland-Pasco Main Line

The 233-mile BNSF Fallbridge Subdivision connects Portland, Oregon, with Pasco, the junction with main lines to Seattle and Spokane and location of an important classification yard. The line closely follows the Columbia River for its entire length, connecting with the Oregon Trunk Subdivision (BNSF's sole connection between the Northwest and California) at Wishram. An average of 31 freight trains traverse the line daily, with the Portland section of Amtrak's *Empire Builder* running once each way per day.

Seeking a water-level line to the Pacific coast to complement his Cascade crossings at Stampede and Stevens Passes, James Hill constructed the Spokane, Portland and Seattle Railway along the north bank of the Columbia River, completing the line between Pasco and Portland in 1908. The line is essentially level, with a maximum eastward grade of 0.20 percent, and today continues to be a vital link in BNSF's national network.

The Fallbridge Subdivision is almost entirely single-track main line, with short stretches of two main tracks around Portland and Wishram. Traffic control over the entire line is via CTC. Passenger trains are permitted to operate at 79 mph and freight trains at 60 mph; the maximum allowable railcar weight is 143 tons. Annual freight traffic consists of intermodal, forest and agricultural products, refuse, coal, chemicals and finished automobiles. [Figure 5 in Appendix C.]

BNSF: Auburn-Pasco Main Line

BNSF's 227-mile main line across central Washington consists of the Stampede Subdivision between Auburn and Ellensburg, and the Yakima Valley Subdivision connecting Yakima and Pasco. The Stampede Subdivision crosses the Cascade Mountains at Stampede Pass, entering the height-restricted Stampede Tunnel at the summit. The Yakima Valley Subdivision traverses the twisting Yakima River Canyon, which limits train velocity and line capacity. An average of six trains utilize this freight-only corridor each day.

Required by the Federal government to connect Puget Sound to its eastern lines, or face the consequence of losing land grants, the Northern Pacific completed its link between Tacoma and Pasco in 1888. Decades later, after a merger which combined the Northern Pacific, Great Northern, Spokane, Portland and Seattle Railway and Chicago, Burlington and Quincy Railroad to form the Burlington Northern, and in response to the declining rail traffic of the early 1980s and the high cost of maintaining three main lines across the State, Burlington Northern abandoned the line over Stampede Pass in 1982; the majority of the corridor was sold to the Washington Central Railroad. The line lay essentially dormant until the mid-1990s, when a period of unexpected growth stretched to the limit the capacity of BNSF's Stevens Pass and Columbia River routes, culminating in the decision to reacquire and reopen the line to allow the diversion of low-priority traffic from the vital intermodal corridors.

The corridor is almost entirely single track, except for a short stretch of two main tracks at Easton. Traffic control is via Track Warrant Control (TWC), with CTC islands in place at

passing sidings. Maximum permitted train speed is 49 mph, and railcar weights up to 143 tons are allowed. Freight traffic includes forest, agricultural and chemical products. [Figure 6 in Appendix C.]

BNSF: Pasco-Spokane Main Line

The 149-mile BNSF Lakeside Subdivision is a vital line connecting Pasco and Spokane, and its eastern 12 miles also host UP trains operating between Hinkle, Oregon, and Spokane. The line traverses rolling farmland as it skirts north of the Palouse Region. Approximately 33 BNSF freight trains operate on the line daily, along with a daily average of 11 UP trains on the shared line near Spokane. In addition, the Portland section of Amtrak's *Empire Builder* runs once each way per day.

The Lakeside Subdivision was Northern Pacific's original main line from the east, completed between Spokane and Wallula in 1882. After the Burlington Northern merger of 1970, the line was operated in tandem with the parallel Spokane, Portland, and Seattle Railway route between Pasco and Spokane, before the latter was abandoned in the early 1990s in favor of the Northern Pacific route. The line currently is a vital link in BNSF's east-west network.

The corridor is primarily single-track, with short stretches of two main tracks in the vicinity of Spokane, Beatrice, and Pasco. Except for a short segment of Automatic Block Signaling (ABS) at Pasco, the entire line is controlled by CTC. Passenger trains are permitted to operate at 79 mph and freight trains at 60 mph; the maximum allowable railcar weight is 143 tons. Annual freight traffic consists of intermodal, forest and agricultural products, coal, chemicals and finished automobiles. [Figure 7 in Appendix C.]

BNSF: Spokane-Sandpoint, Idaho Main line

BNSF's Kootenai River Subdivision between Spokane and Sandpoint, Idaho, commonly known as the "Funnel," is the second-busiest rail corridor in Washington. The 69-mile line hosts an average of 46 freight trains each day, along with daily operation of Amtrak's *Empire Builder* service connecting Seattle and Portland to Chicago. Sandpoint also is the western end of the Montana Rail Link (MRL) system; the MRL has operating rights over BNSF into Spokane.

The Funnel was part of the original Northern Pacific main line, completed to Spokane in 1881. After the 1970 Burlington Northern merger, the Northern Pacific route was selected over the parallel ex-Great Northern route as the primary main line from the east into Spokane, a function that it retains today for BNSF. Portions of the original Great Northern route continue under operation as segments of the Pend Oreille Valley Railroad and BNSF's Kettle Falls Subdivision, but abandonments have rendered that line no longer viable as a through route.

As the corridor experienced substantial growth in recent years, BNSF began to increase capacity by adding a second main track. As of April 2005, only 20 miles remained under single-track operation. Except for a short stretch in Spokane, the entire line is controlled

by CTC. Annual freight traffic consists of intermodal, forest and agricultural products, coal, chemicals and finished automobiles. [Figure 8 in Appendix C.]

BNSF: Everett-Vancouver, British Columbia Main Line

The 155-mile corridor spanning the Bellingham and New Westminster Subdivisions is the only remaining main line link between the Washington State rail network and Canada (low-volume connections are served by BNSF at Sumas and KFR at Columbia Gardens, British Columbia). An average of 24 freight trains operate on the line daily, with approximately 10 running through to Vancouver. Two daily Amtrak Cascades trains run between Everett and Bellingham, with two additional Cascades services operating between Everett and Vancouver, British Columbia.

This stretch of railroad was completed by the Great Northern in 1891. From Blanchard to Bellingham, the line closely follows the shores of Samish and Bellingham Bays, a condition that limits both train speed and the ability to increase capacity without incurring great expenses. Additional delays are encountered while passing through Customs at the Blaine/White Rock border crossing. BNSF also operates a two-mile stretch of former Milwaukee Road trackage in Bellingham that is owned by the Bellingham International Railroad (BIRR); the BIRR was formed for the purpose of preventing an industry from losing service on a line that BNSF intended to abandon.

The corridor is single-track CTC from Everett to New Westminster, with the exception of a few short stretches of Automatic Block Signaling/Occupancy Control System (ABS/OCS). From New Westminster to Vancouver, the line is double-track CTC. Maximum train speeds are:

- Everett to Delta Junction: Talgo⁷ 50 mph, passenger 35 mph, freight 15 mph;
- Delta Junction to Blaine: Talgo 79 mph, passenger 79 mph, freight 60 mph; and
- Blaine to Vancouver: Talgo 60 mph, passenger 60 mph, freight 40 mph.

Freight traffic includes intermodal, forest and agricultural products, refuse, chemicals and finished automobiles. [Figure 9 in Appendix C.]

BNSF: Tukwila-Snohomish Branch Line

BNSF's 51-mile Woodinville Subdivision traverses the east side of the Seattle metropolitan area, connecting Tukwila, Renton, Bellevue, Woodinville, and Snohomish. BNSF operates

⁷ Talgo, Inc. manufactures high-speed articulated trains. These operate as a set, with adjacent cars sharing axles and wheels and functioning as a single unit. This technology increases stability and improves safety and the smoothness of the ride. Talgo trains were initially allowed into the United States on a temporary basis and were leased for use in the Pacific Northwest from 1994 through 1998. Today, five trains built by Talgo operate in the Pacific Northwest and British Columbia as the Amtrak Cascades service.

one round-trip local on weekdays that serves industrial customers along the line, including delivery of 737 fuselages to Boeing's assembly plant in Renton. Utilizing track-age rights, the Spirit of Washington Dinner Train operates one round trip each weekday evening between Renton and Woodinville, and two daily round trips on weekends.

The Woodinville Subdivision is a remnant of the former Northern Pacific (NP) main line from Seattle to Sumas. The line to Sumas and a connection with the Canadian Pacific Railroad was completed by the Seattle, Lake Shore & Eastern Railroad (SLS&E) in 1891; the SLS&E was subsequently absorbed into the NP in 1901. In the wake of the 1970 Burlington Northern merger, the Sumas line from Snohomish Junction to Sedro Woolley was abandoned. In 2006, a study was conducted upon the segment from Tukwila to Snohomish to consider potential future uses, including a parallel bicycle/pedestrian trail, mass transit, and as an emergency bypass route for freight traffic normally operating via Interbay, Edmonds, and Everett.

Traffic on the Woodinville Subdivision operates via TWC. Maximum permitted train speeds are 30 mph for passenger and 25 mph for freight. Railcar weights up to 143 tons can be operated from Snohomish Junction to Woodinville, while the remainder of the line is restricted to 134 tons. Freight traffic consists of aircraft fuselages, forest products, and chemicals. [Figure 10 in Appendix C.]

BNSF: Woodinville-Redmond Branch Line

Splitting from the Woodinville Subdivision at Woodinville, BNSF's Issaquah Spur runs seven miles to Redmond. There is rarely a demand for service, and trains operate on an as-needed basis.

The line was constructed by the Seattle, Lake Shore & Eastern Railroad (SLS&E) to compete with Northern Pacific's line to Tacoma, but construction towards Snoqualmie Pass stalled in 1890 at North Bend, and the focus of the SLS&E was adjusted to continue its efforts to build to Sumas. The east end of the line, between Snoqualmie and North Bend, has been maintained as a tourist railroad (the Snoqualmie Valley Railroad) since 1957 by The Northwest Railway Museum. The remaining trackage between Snoqualmie and Redmond has been abandoned.

BNSF operates the line via TWC, with permitted track speeds of 25 mph for passenger and 10 mph for freight. The line is restricted to 134-ton railcars. [Figure 11 in Appendix C.]

BNSF: Burlington-Sumas Branch Line

BNSF's Sumas Subdivision connects Burlington and Sumas via Sedro Woolley. It is served by a daily round-trip road freight forwarding cars to and from Everett, and a local that switches on-line industries. The 4.7 miles between Burlington and Sedro Woolley are the easternmost surviving segment of a former Great Northern branch that connected Anacortes and Rockport; the remaining 40 miles of the subdivision are formed from the north end of the Northern Pacific's ex-Seattle, Lake Shore & Eastern Railroad line from

Seattle to Sumas. BNSF interchanges with Canadian Pacific Railway and the Southern Railway of British Columbia at Sumas.

Train operation on the line is via TWC, with a maximum permitted train speed of 40 mph. The line is restricted to 134-ton railcars from Burlington to Lawrence, but 143-ton cars are permitted from Lawrence to Sumas. Freight traffic includes forest and agricultural products, and chemicals. [Figure 12 in Appendix C.]

BNSF: Sumas-Lynden Branch Line

Breaking off the Sumas Subdivision at Sumas, BNSF operates a short stretch of former Bellingham Bay & British Columbia Railway trackage southwest to Lynden. The Lynden Spur, constructed in 1889, is served as-needed by the road switcher based at Sumas. Track speed on the TWC-controlled line is 10 mph, with cars limited to 131.5 tons. [Figure 13 in Appendix C.]

BNSF: Burlington-Anacortes Branch Line

The Anacortes Spur of BNSF's Bellingham Subdivision extends 12.4 miles west from Burlington to serve a Texaco refinery at Fidalgo, and hosts daily rail service. This line segment is the westernmost surviving segment of a former Great Northern branch that connected Anacortes and Rockport.

The line is operated as an industrial track with a speed limit of 10 mph, and railcars up to 134 tons are permitted. Traffic includes petrochemicals. [Figure 14 in Appendix C.]

BNSF: Intalco-Cherry Point Branch Line

BNSF's Cherry Point Subdivision splits off the Bellingham Subdivision at Intalco, near the town of Custer, and runs southwest to serve a collection of industries at Cherry Point. BNSF operates two daily round trips on the line.

The Cherry Point Subdivision is operated by TWC, with a speed limit of 25 mph and a maximum railcar weight of 143 tons. The line was built in 1965 to serve the Intalco aluminum smelter, and later a series of petroleum-related industries were constructed on the line. Traffic includes metals and petrochemicals. [Figure 15 in Appendix C.]

BNSF: Marysville-Arlington Branch Line

Breaking off the Bellingham Subdivision at Kruse Junction, BNSF's Arlington Spur connects Arlington to the national rail network, and is classified by BNSF as an industrial spur. The line is served twice weekly by a road switcher based in Everett. Track speed on the line is 10 mph, and 143-ton railcars are permitted. [Figure 16 in Appendix C.]

BNSF: Lakeview-Roy Branch Line

Although BNSF sold freight rights on the north end of its Lakeview Subdivision and the entire length of the connecting Lakeview Spur to Tacoma Rail in 2004, it retained the remainder of the Lakeview Subdivision from Lakeview to Roy. The only customer remaining on the line is the United States Army's Fort Lewis, which occasionally ships or receives trains of military equipment. Track speed on the line is 10 mph, and 143-ton railcars are permitted; however, as of spring 2006, the only connection to the rest of the BNSF network, via the Lakeview Spur and Nisqually, is restricted to 134-ton railcars. [Figure 17 in Appendix C.]

BNSF: Spokane-Chewelah Branch Line

BNSF's Kettle Falls Subdivision was constructed in 1889 by the Spokane Falls and Northern Railway, and came under control of James Hill's Great Northern in 1898. In late 2004, BNSF sold the Kettle Falls and San Poil Subdivisions north of Kettle Falls to OmniTRAX's Kettle Falls International Railway (KFR), and leased the Kettle Falls-Chewelah segment to the KFR; the two railroads interchange daily at the latter location. BNSF's remaining Kettle Falls Subdivision trackage, between Spokane and Chewelah, is rated at 40 mph with 143-ton railcar weights, and is controlled by TWC. [Figure 18 in Appendix C.]

Cascade & Columbia River Railroad (Privately Owned)

The Cascade & Columbia River Railroad (CSCD), a wholly owned subsidiary of RailAmerica, was acquired from BN in 1996. The CSCD owns 131 miles from Welch to Oroville, and has trackage rights over six miles of BNSF's Oroville Spur to Wenatchee for the purpose of performing interchange at Wenatchee Yard.

This line was constructed by the Great Northern in 1914 to connect its lines in northern Washington and British Columbia to the main line at Wenatchee; over time, the original branch lines were abandoned, and only the Oroville line remains. Today, the CSCD hauls forest, agricultural and mineral products, with a traffic volume of 6,298 cars interchanged with BNSF in 2003. [Figure 19 in Appendix C.]

Central Washington Railroad (Privately Owned)

The Central Washington Railroad (CWA), a wholly owned subsidiary of the Columbia Basin Railroad (CBRW), serves a series of former BNSF and UP branch lines in central Washington. These include:

- Former North Yakima & Valley Railway (NY&V, acquired by the Northern Pacific in 1914) from Yakima to Moxee City, 8.6 acquired miles from BNSF in 2005;
- Former NY&V from Yakima to Fruitvale, three-miles acquired from BNSF in 2005;

- Former NP from Gibbon to Granger, 30 miles acquired from BNSF in 2005;
- Numerous short stretches of former NCRRT trackage between Grandview and Zillah, 15.6 total miles of trackage rights assigned by BNSF over UP-owned lines in 2005; and
- Former Toppenish, Simcoe & White Swan Railroad (TSWR; construction started in 1909 and completed in 1916 after acquisition by the Northern Pacific) connecting its namesake towns, 20.5 miles acquired from BNSF in 2006.

The CWA handles various agricultural and chemical products on these lines, interchanging with BNSF at Yakima, Toppenish, and Gibbon. [Figure 20 in Appendix C.]

Columbia & Cowlitz Railway (Privately Owned)

The Columbia & Cowlitz Railway (CLC) is a wholly owned subsidiary of Weyerhaeuser Company, interchanging with BNSF and UP at Rocky Point. The line was completed in 1928 and hauls forest products, steel, and chemicals. For the purposes of this report, the Weyerhaeuser line between Ostrander and Headquarters is treated as part of the CLC. [Figure 21 in Appendix C.]

Columbia Basin Railroad (Privately Owned)

Connell-Wheeler, Bassett Junction-Schrag, Warden-Othello, and Wheeler-Moses Lake Lines

In 1996, the Columbia Basin Railroad (CBRW) leased from BNSF a collection of former Northern Pacific and Milwaukee Road branches in central Washington: 39.6 miles between Connell and Wheeler, 12.5 miles between Bassett Junction and Schrag, 13 miles between Warden and Othello, and 18 miles between Wheeler and Moses Lake. The CBRW serves various agriculture and merchandise industries on these lines and performs interchange with BNSF on its Pasco-Spokane line at Connell. [Figure 22 in Appendix C.]

CBRW Rye Junction-Chelatchie Line

The Portland Vancouver Junction Railroad (PVJR), a wholly owned subsidiary of the CBRW, operates the former Northern Pacific trackage northeast of Vancouver under a lease agreement with Clark County. CBRW leased the 14 miles from Rye Junction to Battle Ground in 2004, and in 2005 obtained a lease for the remaining 19 miles to Chelatchie. In addition, the Chelatchie Prairie Railroad (BYCX), a tourist railroad,

operates passenger excursions between Lucia and Yacolt on weekends and holidays.⁸ [Figure 23 in Appendix C.]

Great Northwest Railroad (Privately Owned)

The Great Northwest Railroad (GRNW), a wholly owned subsidiary of Watco Companies, operates a Class III short line in eastern Washington and western Idaho, crossing the State line at Clarkston. The line was constructed in 1909 by the Oregon-Washington Railroad and Navigation Company as it competed with the Northern Pacific to serve Lewiston. Both roads realized that constructing parallel lines to the city would not be beneficial, and agreed to combine the lines into the jointly owned Camas Prairie Railroad (CSP). BNSF and UP agreed to sell the CSP to Camas Prairie RailNet in 1998. The line was acquired by the GRNW from Camas Prairie RailNet in 2004. In 2005, a group of branch lines in western Idaho were sold to the Bountiful Grain & Craig Mountain Railroad. Commodities handled by the GRNW include agricultural and forest products, chemicals, scrap iron and frozen vegetables. [Figure 24 in Appendix C.]

Kettle Falls International Railway (Privately Owned)

In 2004, the Kettle Falls International Railway (KFR), a wholly owned subsidiary of OmniTRAX, acquired from BNSF the 77-mile San Poil Subdivision from Kettle Falls to San Poil (which enters Canada at Laurier and returns to Washington at Danville). The KFR also obtained a lease to operate the 80-mile portion of BNSF's Kettle Falls Subdivision between Chewelah and Columbia Gardens, British Columbia (crossing the Canadian border at Boundary).

The Spokane Falls and Northern Railway completed its northern extension into Canada in 1893 through its subsidiary, the Nelson & Fort Sheppard Railway (N&FS). These roads were acquired by the Great Northern, which constructed the line through Laurier and San Poil to Republic in 1902. Currently, the KFR offers regularly schedule service on all its lines, hauling forest and agricultural products, minerals, metals, and chemicals. [Figure 25 in Appendix C.]

Longview Switching Company (Privately Owned)

The Longview Switching Company (LSC) is a jointly owned subsidiary of BNSF and UP that performs terminal switching duties at the Port of Longview. [Figure 26 in Appendix C.]

⁸ This section was included under CBRW because research could not confirm that the PVJR is an independent carrier with an assigned reporting mark.

Meeker Southern Railroad (Privately Owned)

The Meeker Southern Railroad (MSN), a wholly owned subsidiary of the Ballard Terminal Railroad, acquired 4.5 miles of BNSF trackage connecting Meeker and McMillin. The railroad provides regular service between McMillin and the BNSF interchange at Meeker.

Montana Rail Link (Privately Owned)

Montana Rail Link (MRL) is a Class II regional railroad with more than 900 miles of track serving 100 stations in Montana, Idaho, and Washington. They operate a fleet of over 2,100 railcars and 120 locomotives. MRL connects with the BNSF at Spokane, and at Laurel and Helena, Montana. MRL also connects with the Montana Western Railway at Garrison, MT, and the Union Pacific Railroad at Sandpoint, Idaho. Service to Washington is over BNSF trackage rights into Spokane.

MRL is a unit of the Washington Group of Companies headquartered in Missoula, Montana.

Mount Vernon Terminal Railway (Privately Owned)

The Mount Vernon Terminal Railway (MVT), a switching railroad serving Mount Vernon, was formed in 1933 by acquisition of track from the Pacific Northwest Traction Company. The railroad expanded in 1939 when it acquired trackage abandoned by the Puget Sound & Cascade Railway. The railroad provides as-needed service and interchanges with BNSF at Mount Vernon.

Palouse River & Coulee City Railroad (Privately and Publicly Owned)

Cheney-Coulee City Line (Privately Owned)

The Palouse River & Coulee City Railroad (PCC) operates the former Northern Pacific line connecting Cheney, located on today's BNSF Pasco-Spokane line, with Coulee City in central Washington. The line was acquired from BNSF in 1996. The PCC is a wholly owned subsidiary of Watco Companies, and serves a variety of shippers of agricultural products. [Figure 27 in Appendix C.]

Wallula-Dayton and Walla Walla-Weston, Oregon Lines (Privately Owned)

The PCC also operates the former Oregon-Washington Railroad and Navigation Company lines connecting Wallula, located on the UP Hinkle-Spokane line, with Dayton, and connecting Walla Walla with Weston, Oregon (departing Washington south of Mojonner). These two lines were among a group of rail lines acquired by the Blue Mountain Railroad

(BLMR) in 1992 from UP; the BLMR was subsequently acquired by the PCC in 1998. [Figure 28 in Appendix C.]

Hooper Junction-Thornton, Marshall-Pullman, and Winona-Moscow, Idaho Lines (Publicly Owned, Operated by Third Party)

In 2004, Washington DOT purchased the Palouse River & Coulee City Railroad trackage owned by Watco Companies lying south Marshall and east of Hooper Junction, with the goal of rehabilitating the lines to ensure their future commercial viability. The PCC remains the contract operator for this collection of trackage. The line from Marshall to Pullman was built by the Northern Pacific, and the remaining lines were constructed by the Oregon-Washington Railroad and Navigation Company. Washington State Department of Transportation (WSDOT) is in negotiations to purchase the remaining Watco-owned PCC trackage between Cheney and Coulee City. [Figure 29 in Appendix C.]

Pend Oreille Valley Railroad (Publicly Owned and Operated)

In the northeastern corner of Washington, the Pend Oreille Valley Railroad (POVA) operates a former Milwaukee Road (MILW) branch line between Newport and Metaline Falls. The line was completed by the Idaho & Washington Northern Railroad in 1910 before being acquired by the MILW in 1916. The Port of Pend Oreille acquired the line from the MILW in 1979 and began operations as a shortline to preserve rail service. Today, most of the POVA's customers are located near the south end of the line, and the north end hosts occasional tourist trains between Ione and Metaline Falls. [Figure 30 in Appendix C.]

Puget Sound & Pacific Railroad (Privately Owned)

The Puget Sound & Pacific Railroad (PSAP) was formed in 1997 by the purchase of BNSF's remaining ex-Northern Pacific lines west of Centralia by the Arizona & California Railroad Company, an operating division of ParkSierra Acquisition Corporation. ParkSierra was acquired by RailAmerica in 2002, and the PSAP became a wholly owned operating subsidiary later that year. In addition to its lines serving Hoquiam (84 miles) and Shelton (25 miles) [Figure 31 in Appendix C], the PSAP took over the operating rights on the United States Government trackage from Shelton to Bangor (44 miles) and Bremerton (4.6 miles) which had been obtained by BNSF predecessor Burlington Northern in 1994. [Figure 32 in Appendix C.]

The PSAP performs interchange with BNSF, TRMW and UP at Centralia and Chehalis. Its traffic base includes forest and agricultural products, and chemicals.

Royal Slope Line (Publicly Owned and Operated)

The 26-mile WSDOT-owned Royal Slope Line (RS) is a segment of the former Milwaukee Road “Pacific Extension,” and connects Royal City to the Columbia Basin Railroad at Othello. The line currently is dormant, but could play important roles in two projects under consideration by the State:

- Construction of a freight bypass between Ellensburg and Lind. This project would essentially rebuild the abandoned Milwaukee Road main line to increase capacity on BNSF’s Auburn-Pasco route and avoid the slow, circuitous routing through the Yakima River Valley. Some mitigation efforts would be necessary due to the line’s passage through the Yakima Firing Range and steep grades on the original route.
- Redevelopment of the Hanford Site as a large industrial complex. As an alternative to reconstructing the original Milwaukee Road line between Beverly and Lind, the bypass would travel through the Hanford Site to Pasco, opening up the site to direct Class I rail service and addressing the capacity and environmental issues that affect the existing BNSF Ellensburg-Yakima-Pasco main line.

Tacoma Municipal Belt Line (Publicly Owned and Operated)

The Tacoma Municipal Belt Line (TMBL), owned by the City of Tacoma, operates all the trackage within the Port of Tacoma terminal area (its Tidewater Division). In 2004, TMBL formed its Capital Division by leasing three miles of BNSF’s Lacey Spur (St. Clair-Quadlok) and 10 miles of the remaining original Northern Pacific main line (Olympia-Belmore), in conjunction with obtaining a freight service easement over seven miles of BNSF’s Lakeview Subdivision (South Tacoma-Lakeview) [Figure 33 in Appendix C] and 11 miles of BNSF’s Lakeview Spur (Lakeview-Nisqually) [Figure 34 in Appendix C]. BNSF retains trackage rights over these lines to access the portion of the Lakeview Subdivision south of Lakeview that it still serves. In 2005, the TMBL handled a total of 118,537 cars.

Tacoma Rail Mountain Division (Publicly Owned and Operated)

The Tacoma Rail Mountain Division (TRMW), owned by the City of Tacoma, operates former Tacoma Eastern Railroad (TERR, later Milwaukee Road) trackage south of Tacoma. The main line runs from Tacoma to Morton [Figure 35 in Appendix C], with a branch that diverges at Frederickson terminating in Chehalis [Figure 36 in Appendix C]. The TRMW interchanges with BNSF and UP at Tacoma, and with BNSF, Puget Sound & Pacific, and UP in the Centralia/Chehalis area; service is provided daily on both of its lines. Commodities handled include forest products, chemicals, and airplane components.

As the Milwaukee Road slipped into bankruptcy in the 1960s, the old TERR line became neglected, and was eventually purchased by Weyerhaeuser to be operated as a logging

railroad. Barely 20 years later, the line was again languishing due to Weyerhaeuser's decision to ship by truck, and the City of Tacoma acquired the line in 1989 to preserve the corridor for future use. Operation of the line was contracted to the Tacoma Eastern Railway Company (TE) until 1998, when the City invoked a clause in the contract to evict the TE from the property. Operations resumed under the TRMW, a new division of the existing city-owned railroad.

Tri-City & Olympia Railroad

The Tri-City & Olympia Railroad (TCRY) owns two separate operations in Washington. Their first line, between Richland and the south border of the Hanford Site, was leased from the Port of Benton in 2000, with the Port having acquired the trackage from the United States Department of Energy (DoE) in 1998 [Figure 37 in Appendix C]. In 2002, the TCRY leased from the DoE the remaining trackage within the Hanford Site, in accordance with the Port's goal of redeveloping the site for industrial use. Also in 2002, the TCRY arranged with the Port of Olympia to lease and operate two miles of trackage within the Port [Figure 38 in Appendix C]. The TCRY's traffic base includes agricultural products, metals, and intermodal.

Union Pacific Railroad (Privately Owned)

The Union Pacific Railroad (UP) is the largest railroad in North America, operating 32,400 route miles in the western United States. The railroad serves 23 states, linking every major West Coast and Gulf Coast port and provides service to the east through four major gateways (Chicago, St. Louis, Memphis, and New Orleans) with the eastern railroads. UP operates key north/south corridors, with several connections at the Mexican and Canadian borders.⁹

The railroad has one of the most diversified commodity mixes in the industry, including chemicals, coal, food and food products, forest products, grain and grain products, intermodal, metals and minerals, and automobiles and parts. Their largest customer is APL Limited, a steamship company that operates in the Pacific, and the second largest customer is General Motors.

Important commodities moved on the UP are chemicals, intermodal, and coal. UP is the nation's largest hauler of chemicals, much of which originates along the Gulf Coast near Houston, Texas. Union Pacific also is one of the largest intermodal carriers (containers and trailers). With access to the coal-rich Powder River Basin in Wyoming and coal fields in Illinois, Colorado, and Utah, the railroad moves more than 250 million tons of coal annually.

⁹ Introductory material adapted from www.up.com.

UP operates over 558 route miles in Washington State, which represents less than two percent of their total system route miles. Service is provided over two major corridors, and three low-density corridors. The major corridors provide the primary conduits to the nationwide rail network, while the low-density corridors offer collection/distribution services. These corridors are summarized in Table 4 and in the discussion that follows.

Table 4. Union Pacific Railroad Service Corridors in Washington

Major Corridors	Low-Density Corridors
Hinkle-Spokane	Spokane-Plummer, Idaho and Manito-Fairfield
Spokane-Sandpoint, Idaho	Ayer Junction-Riparia
	Wallula-Kennewick

UP: Hinkle-Spokane Main Line

UP’s 171-mile Ayer Subdivision connects Hinkle Yard in Hermiston, Oregon, to the busy Spokane terminal. At Fish Lake, the north end of the line, UP utilizes trackage rights on BNSF’s Lakeside Subdivision to access Spokane. The Ayer Subdivision hosts an average of 11 freight trains per day, and does not have passenger service.

The “Washy” line is comprised of four segments:

1. Hinkle to milepost (MP) 201 was completed in 1951 by the Oregon-Washington Railroad and Navigation Company;
2. MP 201 to Wallula (MP 215) was constructed by the United States Government and completed in 1952;
3. Wallula to MP 264 (near Ayer) was completed by the Snake River Valley Railroad Company in 1899, with much of the line being rebuilt by the United States Government in the 1960s as a result of their Snake River projects; and
4. MP 264 to Fish Lake (MP 355) was completed in 1914 by a joint venture between the Oregon-Washington Railroad and Navigation Company and the North Coast Railroad.

BNSF has trackage rights over the line from Pasco to Ayer Junction, and then down the Riparia Subdivision to its namesake city, for the purposes of interchange with the Great Northwest Railroad.

The Ayer Subdivision is operated by CTC from Hinkle to Page and for four miles between Ayer Junction and Joso; the remainder of the line is controlled by TWC/ABS. Maximum permitted train speed is 40 mph, except for a 30-mile stretch of 50 mph trackage between

Page and Ayer Junction. Maximum railcar weights are 158 tons between Hinkle and Wallula Junction, and 143 tons between Wallula Junction and Spokane. Freight traffic is primary forest and agricultural products, potash, and chemicals. [Figure 39 in Appendix C.]

UP: Spokane-Sandpoint, Idaho Main Line

The Spokane Subdivision of UP roughly parallels BNSF's Kootenai River Subdivision for 74 miles from Spokane to Sandpoint, Idaho. Since this line is not an essential component of UP's transcontinental main line, quite unlike the parallel BNSF route, UP operates an average of only seven trains per day east of Spokane, with most of this traffic interchanged to Canadian Pacific Railway at the border crossing of Eastport, Idaho.

Completed in 1906 by the Spokane International Railroad and acquired by UP in 1958, the route retains a reminder of its origins through the commonly used "SI" nickname. Train operation on the single-track line is via TWC, with infrequent sidings. To address slow-speed issues, UP is performing upgrades to the line in 2006, which will include a new siding just east of Spokane and the addition of CTC islands at existing passing sidings.

Freight traffic is primary overhead tonnage connecting with Canadian Pacific Railway at Eastport, Idaho, and includes forest and agricultural products, potash, and chemicals. [Figure 40 in Appendix C.]

UP: Spokane-Plummer, Idaho & Manito-Fairfield Branch Lines

UP operates two branch lines southeast of Spokane. The 45-mile Wallace Subdivision runs from Spokane to Plummer, Idaho, crossing the State line five miles east of Manito. Interchanges with the St. Maries Railroad (STMA) are performed at Plummer. The 13-mile Fairfield Industrial Lead departs the Wallace Subdivision at Manito and heads south to its namesake town.

The Spokane-Manito and Manito-Fairfield segments were constructed in 1888 to 1889 by the Washington & Idaho Railroad, while the Manito-Plummer segment was constructed between 1909 and 1914 by the Idaho & Western Railway (which was merged into the Chicago, Milwaukee & Puget Sound Railway in 1912). These two branch lines serve the agricultural region of eastern Washington and western Idaho. [Figure 41 in Appendix C.]

UP: Ayer Junction-Riparia Branch Line

UP's 11-mile Riparia Subdivision connects the Ayer Subdivision to the Great Northwest Railroad (GRNW) at Riparia. BNSF has trackage rights over this line for the purpose of interchange with the GRNW, and the GRNW has trackage rights to MP 267.1 on the Ayer Subdivision to perform interchanges at Ayer (see the GRNW section for more background information). The line was constructed in 1899 by the Snake River Valley Railroad, and was relocated in 1968 by the United States Government. [Figure 42 in Appendix C.]

UP: Wallula-Kennewick Branch Line

The 19-mile UP Kalan Industrial Lead extends from the junction with the Ayer Subdivision at Wallula to the connection with the Tri-City & Olympia Railroad at Richland Junction. The line, which once extended west to Yakima, was completed in 1911 by the Oregon-Washington Railroad and Navigation Company and the North Coast Railroad. [Figure 43 in Appendix C.]

U.S. Government: Shelton-Bangor Line (Publicly Owned, Operated by Third Party)

The United States Government owns trackage between Shelton and Bangor, with a spur to the U.S. Navy base at Bremerton. When the Puget Sound & Pacific Railroad purchased BNSF's remaining ex-Northern Pacific lines west of Centralia in 1997, they took over the operating rights on this USG trackage from Shelton to Bangor (44 miles) and Bremerton (4.6 miles) which had been obtained by BNSF predecessor Burlington Northern in 1994. The Government also owns trackage within the Ft. Lewis Military Reservation. [Figure 44 in Appendix C.]

Yakima Interurban Lines Association (Privately Owned and Operated)

The Yakima Interurban Lines Association (YILA) owns an 11.3-mile line between Fruitvale and Naches that has been dormant since 1997. The YILA purchased the line from BNSF in 1999 with intent to resume service to Naches, and obtained a loan from WSDOT to rehabilitate the line. The rehabilitation work never commenced, resulting in the YILA defaulting on the loan. Subsequently, the YILA filed to abandon the line, with intent to sell the right-of-way to Yakima County for transformation into a multi-use transportation corridor. On April 4, 2006, the Surface Transportation Board approved the abandonment effective October 2, 2006, provided an interim trail use agreement is reached with the county by that date. [Figure 45 in Appendix C.]

Yelm-Roy Prairie Line (Publicly Owned and Operated)

The Yelm-Roy Prairie Line (YRPL) was formed in 2000 when the City of Yelm acquired 4.5 miles at the southern end of BNSF's Lakeview Subdivision. The line currently is out of service, but negotiations are underway to obtain funding for construction of a connection to the Tacoma Rail Mountain Division at Roy that would permit regular freight service to resume. The line was originally a portion of the Northern Pacific Tenino-Tacoma mainline completed in 1873.

■ Railroad Terminals and Yards

Terminals and yards serve many functions on the railroads. They originate and terminate traffic by building outbound trains and breaking down inbound trains. They are used to classify inbound cars for assignment to outbound trains for through traffic. Yards can offer refueling, crew change, storage, and maintenance functions. Given this key role in the rail network, a significant amount of rail capacity is impacted by the terminals and yards.

Table 5 summarizes the major terminals and yards that have the most impact on Washington railroad movements. This table includes the owner, yard/terminal name, location, and function. Also included in Table 5 are the terminals and yards located outside the boundaries of Washington State most that influence rail movements within the State.

Table 5. Railroad Terminals and Yards Impacting Washington State Rail Movements

Owner	Yard/Terminal	Location	Function
BNSF	Bayside/ Delta Yards	Everett	Everett generates some traffic locally, but is principally a classification yard for through traffic. It is the southern endpoint for most through traffic on the Everett-Vancouver, British Columbia route. Generally, traffic from south and east of Everett arrives in Bayside yard, where it is switched, and made up into trains for north of Everett. Traffic from north of Everett arrives in Delta Yard, where it is switched and made up into trains for south and east of Everett.
BNSF	Hauser Yard	Hauser, Idaho	Hauser Yard is not important as a terminal; however, it is important as a main line fuel station. Westward trains stop for fuel, providing sufficient fuel for a trip to Seattle, Tacoma, Kalama, Longview, Vancouver, Portland, or Pasco and return. Eastward trains stop for fuel, providing sufficient fuel to reach the next fueling station at Havre, Montana.
BNSF	Pasco Yard	Pasco	Pasco processes traffic to and from local industries and is the BNSF classification yard for carload traffic moving to and from Washington State. Virtually all traffic handled by Pasco Yard is originating from classified traffic or terminating for classification. Pasco also is a crew change point for through trains (generally grain and intermodal trains).
BNSF	East St. Johns	Portland, Oregon	East St. Johns processes traffic for local industries and is an interchange point for traffic moving between BNSF and UP. Traffic is a combination of through trains and transfers.

Table 5. Railroad Terminals and Yards Impacting Washington State Rail Movements (continued)

Owner	Yard/Terminal	Location	Function
BNSF	Lake Yard	Portland, Oregon	BNSF Lake Yard is adjacent to the PTRR Lake Yard. It is the BNSF intermodal terminal for the Portland area. Traffic is generally originating and terminating trains.
BNSF	Willbridge	Portland, Oregon	Willbridge processes traffic for local industries. Traffic is a combination of through trains and yard transfers.
BNSF	Balmer Yard	Seattle	Balmer Yard at Interbay is primarily a classification yard for the Portland-Seattle route. Traffic from the south is distributed to local industries or forwarded to Everett for further classification and forwarding. Traffic from the north is classified by destination station between Seattle and Portland and made up onto trains. Traffic processed by Balmer Yard is generally originating and terminating only. Interbay also is a crew change point for through trains that do not originate or terminate in Seattle terminal. The primary commodity at Balmer is grain hauled for Cargill.
BNSF	SIG	Seattle	The Seattle International Gateway is the BNSF international intermodal terminal in Seattle. Containers are drayed to and from the Port of Seattle terminals. This traffic is generally originating and terminating only.
BNSF	Stacy Street Yard	Seattle	Stacy Street yard is in the same physical location as SIG. Stacy Street is the terminal used by most local industry traffic originating and terminating in Seattle. Traffic to and from Seattle industries south of King Street Station and in West Seattle is processed at Stacy Street. Traffic is generally originating and terminating only.
BNSF	Yardley	Spokane	Yardley processes cars to and from local industries and is a block swap location for intermodal trains. Train traffic is a mixture of originating, terminating, and through trains, including through trains that stop for block swapping as well as setout or pickup. Yardley is a crew change point for through trains.
BNSF	Tacoma Yard	Tacoma	Tacoma Yard processes traffic for Tacoma industries in the Tidelands area west of the Puyallup River. It also is the classification yard for traffic originating and terminating in the Tacoma Rail yard. Traffic arrives in Tacoma from through or terminating trains and the Tacoma Rail traffic is delivered after the train has been switched (sorted). Carload traffic from Tacoma Rail is switched by destination and forwarded on the appropriate train. Traffic is a mixture of originating, terminating, and through.

Table 5. Railroad Terminals and Yards Impacting Washington State Rail Movements (continued)

Owner	Yard/Terminal	Location	Function
BNSF	Vancouver Yard	Vancouver, British Columbia	Vancouver Yard processes traffic to and from local industries in Vancouver, BC, and the Port of Vancouver. Traffic is a combination of originating, terminating and through trains that set out and pick up cars. Vancouver also is a crew change point for through trains moving between the Portland-Seattle route and the Portland-Pasco route.
Canadian National	Thornton Yard	Surrey, British Columbia	This is the northern endpoint for virtually all through traffic on the Everett-Vancouver, British Columbia route. Traffic is generally originating and terminating only.
BNSF	Wenatchee Yard	Wenatchee	Wenatchee processes cars to and from local industries and is the interchange point for traffic moving between BNSF and Cascade & Columbia River Railroad. Traffic is originating and terminating trains. Wenatchee also is a crew change point for through trains.
Longview Switching Company	Longview Yard	Longview	Longview Switching Company (jointly owned by BNSF and UP) processes all traffic to and from the Port of Longview and local industries. All traffic is transfer movements between Longview Junction yard and Longview Yard.
Longview Switching Company	Longview Junction Yard	Longview	Longview Junction yard is the interchange point among Longview Switching Company, BNSF, and UP. It also processes local industry traffic for Ridgefield, Woodland, and Kalama, and interchange traffic to and from Columbia & Cowlitz in Rocky Point. Traffic is a combination of originations and terminations, and traffic arriving or leaving on through trains.
Port of Kalama	Kalama Export Company Terminal	Kalama	The Kalama Export grain terminal (also known as Peavey) can accommodate five grain trains of about 108 cars each and can unload 6 trains in 24 hours. Traffic is generally originating and terminating only.
Port of Kalama	Cenex-United Harvest Terminal	Kalama	The Cenex-United Harvest grain terminal can accommodate two grain trains of about 108 cars each and can unload two trains in 24 hours. Traffic is generally originating or terminating only.
Port of Portland	Port of Portland	Portland, Oregon	Port of Portland has several marine terminals and industrial sites that generate traffic directly related to Washington State rail operation. These facilities are connected to BNSF at North Portland Junction and to UP at Barnes. Traffic is a combination of complete trains and traffic to and from through trains.

Table 5. Railroad Terminals and Yards Impacting Washington State Rail Movements (continued)

Owner	Yard/Terminal	Location	Function
Port of Seattle	Terminal 5	Seattle	Terminal 5 is a Port of Seattle on dock international terminal. BNSF provides the switching service. UP currently has the contract for all traffic originating and terminating at this terminal. Traffic is generally originating and terminating only.
Port of Tacoma	Port of Tacoma	Tacoma	Port of Tacoma operates several marine terminals in the Tideflats area. Trains originate or terminate directly or are processed in the Tacoma Rail yard depending upon the nature of the traffic.
Portland Terminal Railroad	Lake Yard	Portland, Oregon	Lake Yard processes traffic for local industries and serves as an interchange point for BNSF and UP. Traffic is generally originating and terminating trains and yard transfers.
Tacoma Rail (TMBL)	Tideflats Yard	Tacoma	Tideflats processes traffic originating and terminating in the Tacoma Tideflats area east of the Puyallup River, adjacent to the Port of Tacoma intermodal terminals. Traffic is transfer movements between the Tideflats yard and the BNSF and UP yards.
UP	Albina Terminal	Portland, Oregon	Albina processes traffic to and from Portland area industries on UP. It also is one of two UP intermodal terminals for the Portland area. Traffic is generally originating and terminating trains and yard transfers.
UP	Barnes	Portland, Oregon	Barnes processes traffic for local industries and the Port of Portland terminals and is an interchange point for traffic moving between BNSF and UP.
UP	Brooklyn Terminal	Portland, Oregon	Brooklyn is one of two UP intermodal terminals in Portland, Oregon. Traffic is generally through trains with setouts and/or pickups.
UP	Argo Yard	Seattle	Argo also includes subyards Manar and Van Asselt. Argo is the UP intermodal terminal (domestic and international) in Seattle as well as a truck to rail transfer station for solid waste. Argo yard is almost exclusively used for intermodal traffic and interchanges between BNSF and UP. Van Asselt and Manar yards are used for carload freight originating and terminating at industries on UP in Seattle and Tukwila. Traffic is generally originating and terminating only.
UP	Spokane Yard	Spokane	Spokane processes cars to and from local industries. Train traffic is generally originating and terminating trains. Spokane is a crew change point for through trains.
UP	Tacoma/Fife Yards	Tacoma	The UP Tacoma terminal is split between two yards. The Tacoma yard processes carload traffic to and from the Tacoma Tideflats area west of the Puyallup River. The Fife yard processes carload traffic for industries east of the Puyallup River and on Tacoma Rail. Traffic is a combination of originating/terminating and traffic arriving or leaving on through trains

■ Conclusions

Freight railroads operating in Washington carried 2.4 million carloads and 99 million tons of freight over 2,523 route miles in 2004. They provided service to the ports, agricultural shippers, lumber industry, and to the residents of the State by supplying consumer goods, food products, and petroleum. The two Class I railroads operating in the State, BNSF and UP, provide the primary connections between Washington and the rest of North America. This is done over a series of nine major rail corridors; seven traversing the State east/west, and the other two paralleling Interstate 5 along the Pacific coast.

The regional, short line and terminal/switching railroads provide local service and connections to the national rail network. The largest regional railroad in the State, the Palouse River & Coulee City Railroad, operates in the eastern portion of the State and provides service to several industries, especially the grain shippers, over a combination of private- and public-owned track. The 16 active short lines and terminal/switching railroads provide both important collector/distributor services for the Class I railroads and local regional rail services.

■ Appendices

Appendix A: Railroad Abbreviations and Names

AMTK	Amtrak
BB&B	Bellingham Bay & British Columbia Railway
BDTL	Ballard Terminal Railroad
BIRR	Bellingham International Railroad
BLMR	Blue Mountain Railroad
BN	Burlington Northern Railroad
BNSF	BNSF Railway
BYCX	Chelatchie Prairie Railroad
CBQ	Chicago, Burlington, and Quincy Railroad
CBRW	Columbia Basin Railroad
CLC	Columbia & Cowlitz Railway
CPR	Canadian Pacific Railway
CSCD	Cascade & Columbia River Railroad
CSP	Camas Prairie Railroad; Camas Prairie RailNet
CWA	Central Washington Railroad
GN	Great Northern Railway
GRNW	Great Northwest Railroad
KFR	Kettle Falls International Railway
LSC	Longview Switching Company
MILW	Chicago, Milwaukee and St. Paul Railroad; Chicago, Milwaukee St. Paul and Pacific Railroad (“Milwaukee Road”)
MRL	Montana Rail Link
MSN	Meeker Southern Railroad
MVT	Mount Vernon Terminal Railway
N&FS	Nelson & Fort Sheppard Railway
NCRR	North Coast Railroad
NP	Northern Pacific Railway
NY&V	North Yakima & Valley Railway
OWRN	Oregon-Washington Railroad and Navigation Company
PCC	Palouse River & Coulee City Railroad
POVA	Pend Oreille Valley Railroad
PSAP	Puget Sound & Pacific Railroad
PVJR	Portland Vancouver Junction Railroad
RS	Royal Slope Line
SF&N	Spokane Falls and Northern Railway
SI	Spokane International Railroad
SLS&E	Seattle, Lake Shore & Eastern Railroad
SPS	Spokane, Portland, and Seattle Railway
SRV	Southern Railway of British Columbia
ST	Sound Transit
STMA	St. Maries Railroad

SVR	Snoqualmie Valley Railroad (The Northwest Railway Museum)
TCRY	Tri-City & Olympia Railroad
TE	Tacoma Eastern Railway Company
TERR	Tacoma Eastern Railroad
TMBL	Tacoma Municipal Belt Line
TRMW	Tacoma Rail Mountain Division
TSWR	Toppenish, Simcoe, and White Swan Railroad
UP	Union Pacific Railroad
USG	United States Government
WCRC	Washington Central Railroad
YRPL	Yelm-Roy Prairie Line

Appendix B: Railroad Train Control Systems

Automatic Block Signaling (ABS) - An automatic system that prevents two trains moving in the same direction from occupying the same section of track simultaneously. As the lead train exits a section of track, it automatically triggers the signal to allow the following train to enter.

Centralized Traffic Control (CTC) - Train movements are controlled by signals, which are in turn controlled by dispatchers at a centralized location. The dispatchers will generally have a computerized graphical depiction of all or part of the railroad allowing them to monitor train movements. Software prevents conflicting signal setting that could lead to an accident.

Occupancy Control System (OCS) - A version of TWC often used by Canadian railroads.

Track Warrant Control (TWC) - A verbal authorization, usually with radio, from a dispatcher to the train engineer permitting the train to occupy a specific section of track. Used in unsignalized (“dark territory”) sections of the railroad.

Appendix C: Railroad Maps

Appendix C: Railroad Maps

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Figure 1. Statewide Rail Map

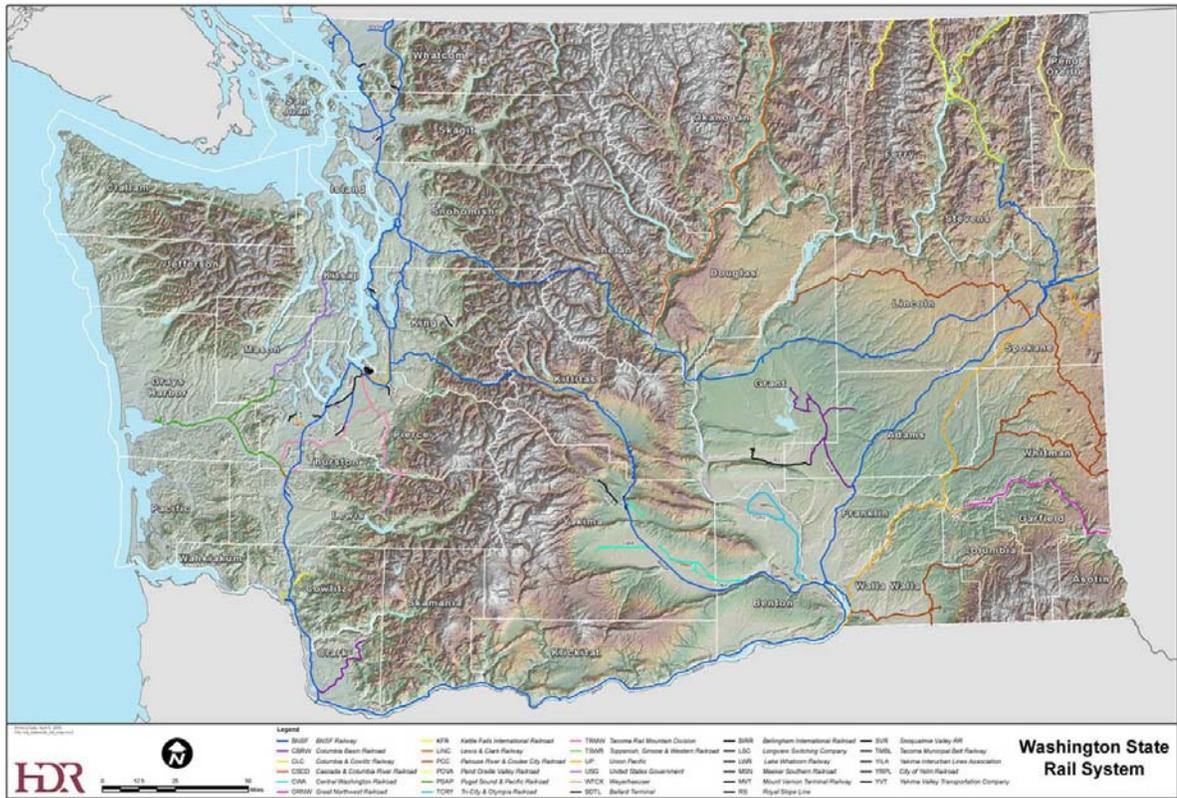


Figure 2. Ballard Terminal Railroad



Figure 3. BNSF: Seattle-Spokane Main Line



Figure 4. BNSF: Seattle-Portland Main Line

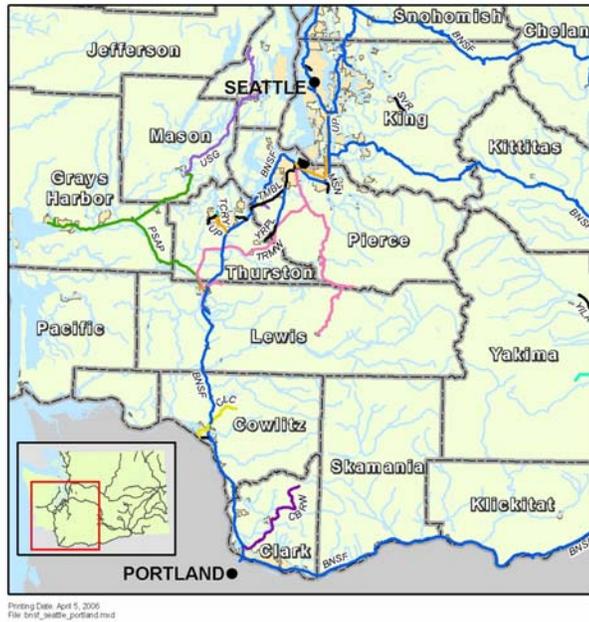


Figure 5. BNSF: Portland-Pasco Main Line

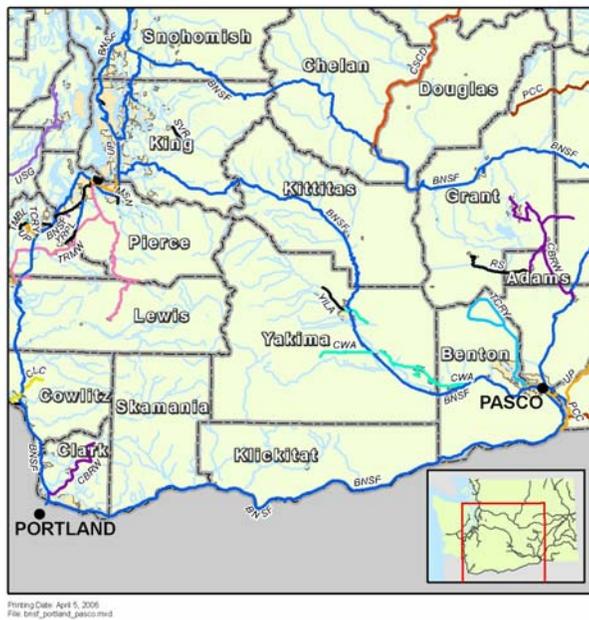


Figure 6. BNSF: Auburn-Pasco Main Line



Figure 7. BNSF: Pasco-Spokane Main Line

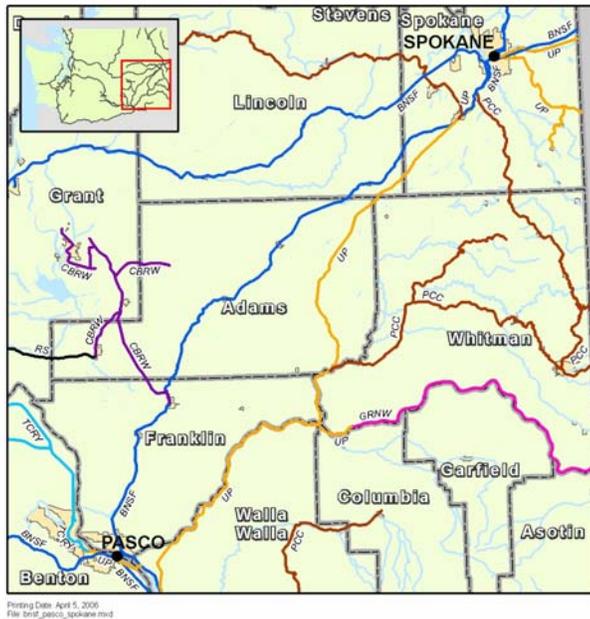


Figure 8. BNSF: Spokane-Sandpoint, Idaho Main Line

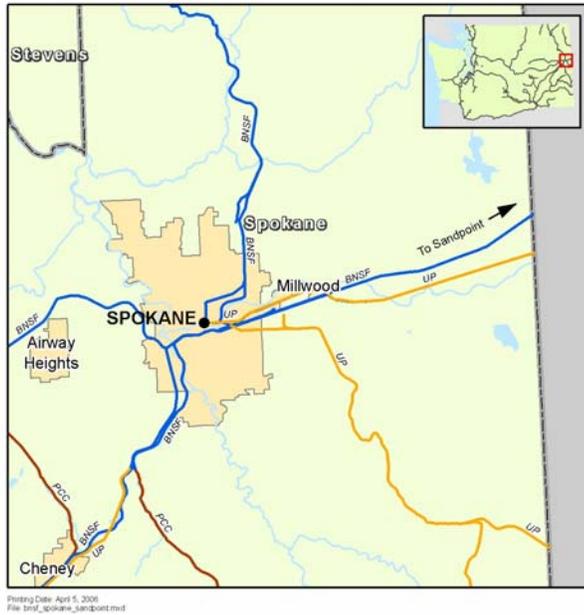


Figure 9. BNSF: Everett-Vancouver Main Line



Figure 10. BNSF: Tukwila-Snohomish Branch Line



Figure 11. BNSF: Woodinville-Redmond Branch Line



Figure 12. BNSF: Burlington-Sumas Branch Line



Figure 13. BNSF: Sumas-Lynden Branch Line

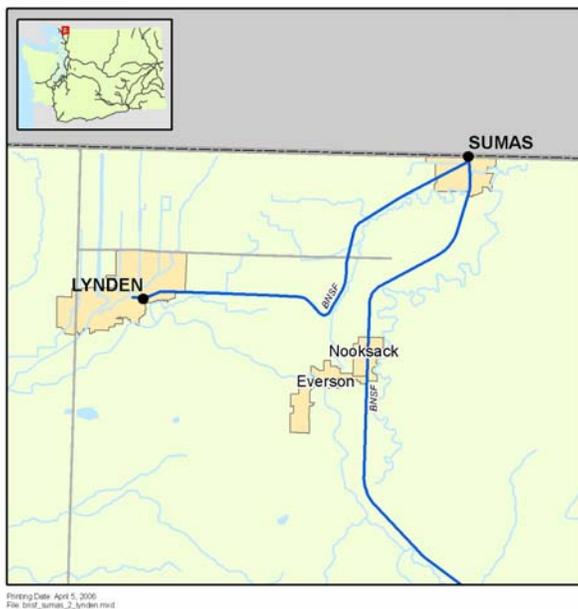


Figure 14. BNSF: Burlington-Anacortes Branch Line



Figure 15. BNSF: Intalco-Cherry Point Branch Line



Figure 16. BNSF: Marysville-Arlington Branch Line



Figure 17. BNSF: Lakeview-Roy Branch Line



Figure 18. BNSF: Spokane-Chewelah Branch Line



Figure 19. Cascade and Columbia River Railroad



Figure 20. Central Washington Railroad

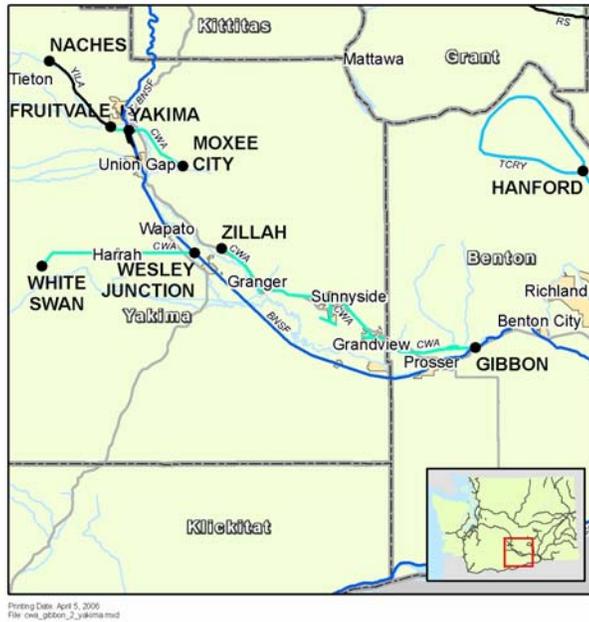


Figure 21. Columbia and Cowlitz Railway

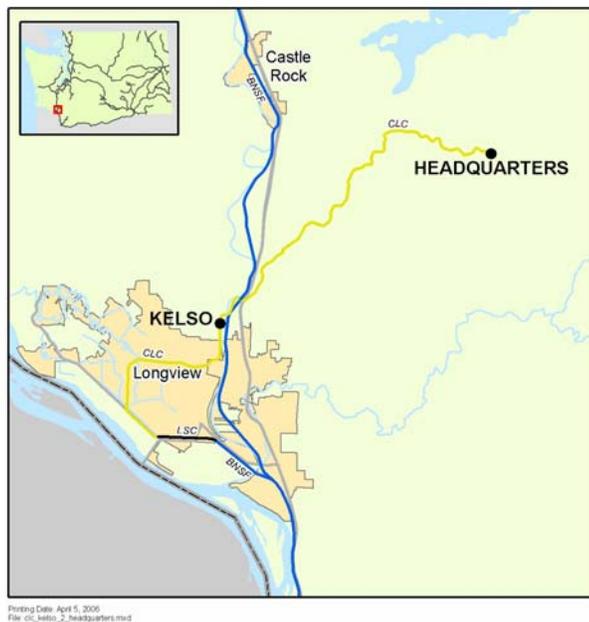


Figure 22. Columbia Basin Railroad: Connell-Moses Lake

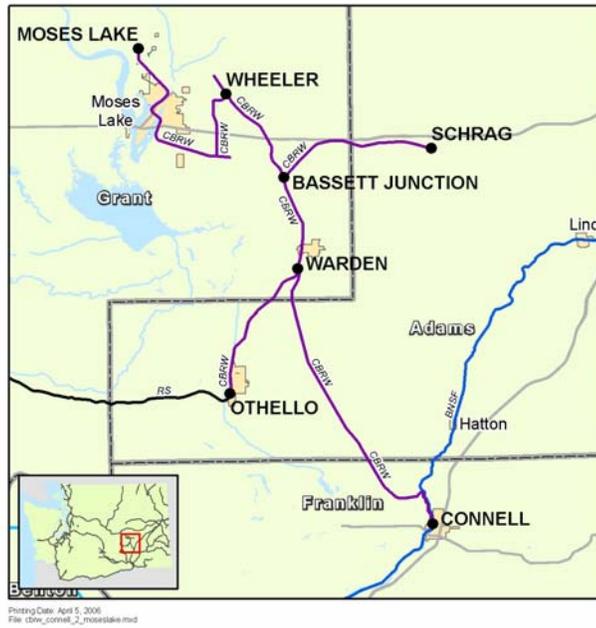


Figure 23. Columbia Basin Railroad: Chelatchie Line



Figure 24. Great Northwest Railroad



Figure 25. Kettle Falls International Railway



Figure 26. Longview Switching Company



Figure 27. Palouse River and Coulee City Railroad: Coulee City Line

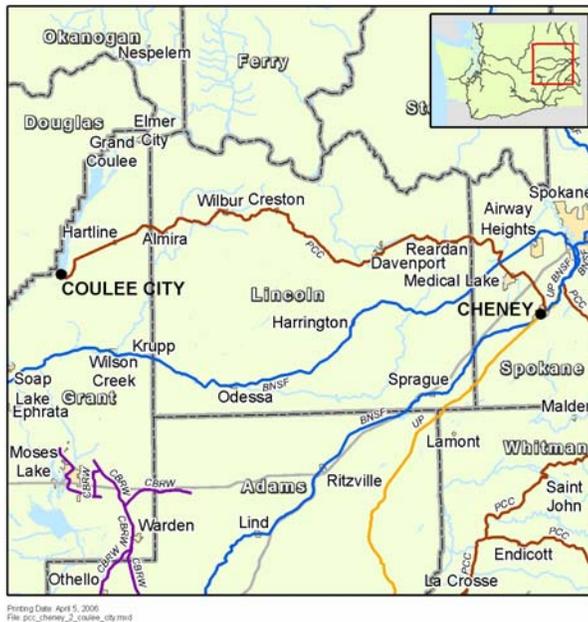


Figure 28. Palouse River and Coulee City Railroad: Wallula-Dayton

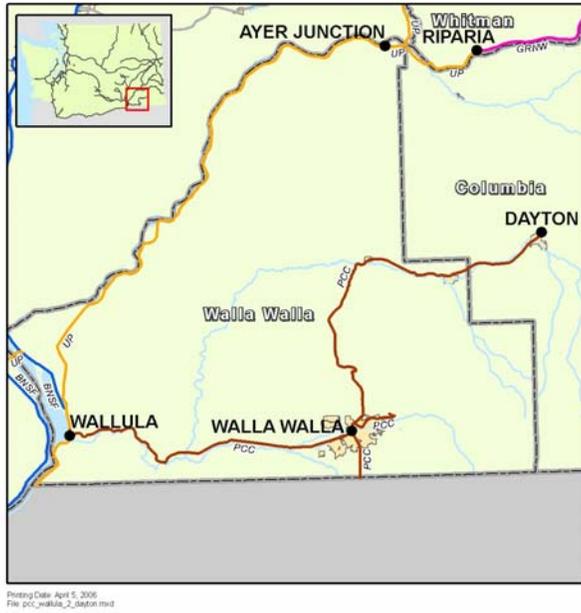


Figure 29. Palouse River and Coulee City Railroad: Hooper Junction



Figure 30. Pend Oreille Valley Railroad

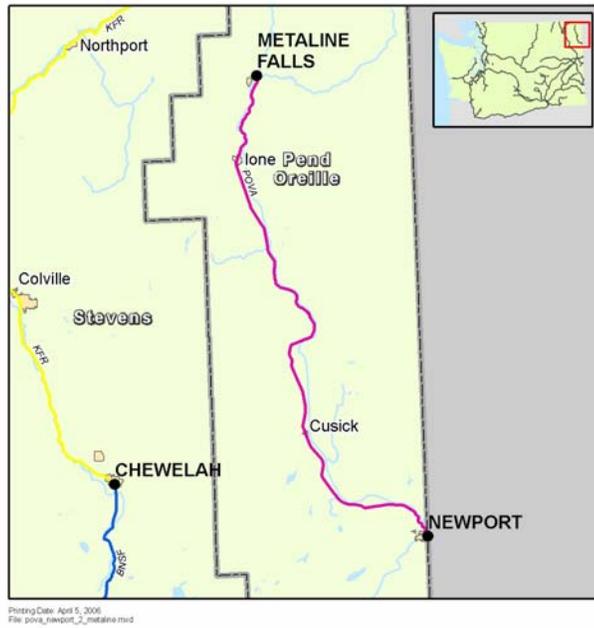


Figure 31. Puget Sound and Pacific Railroad: Chehalis-Hoquiam

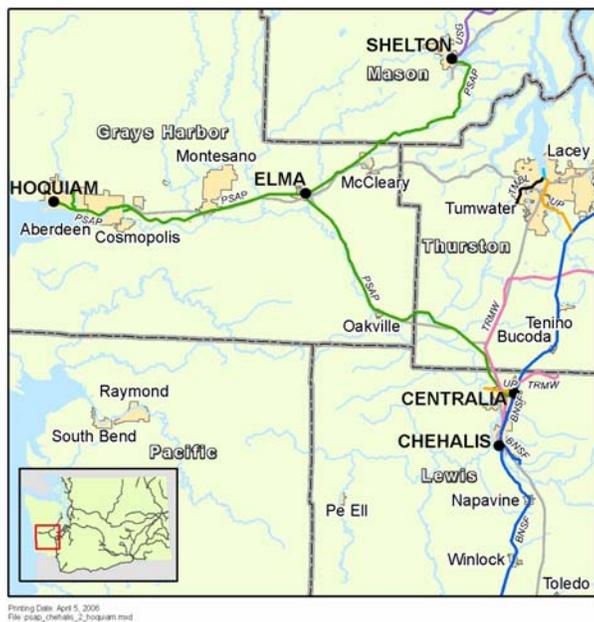


Figure 32. Puget Sound and Pacific Railroad: Elma-Shelton



Figure 33. Tacoma Municipal Belt Line: Port of Tacoma

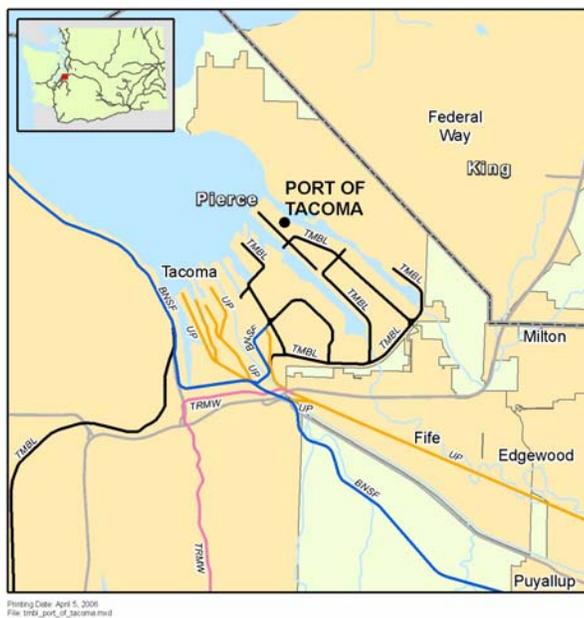


Figure 34. Tacoma Municipal Belt Line: South Tacoma-Nisqually



Figure 35. Tacoma Rail Mountain Division: South Tacoma-Morton

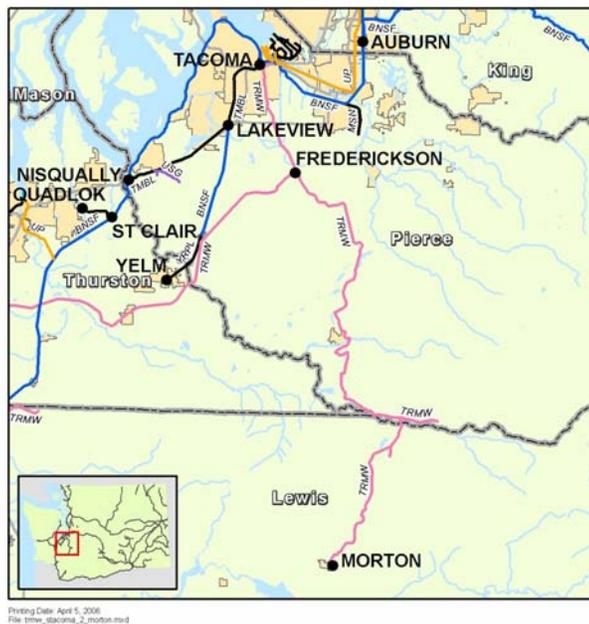


Figure 36. Tacoma Rail Mountain Division: Fredrickson-Chehalis

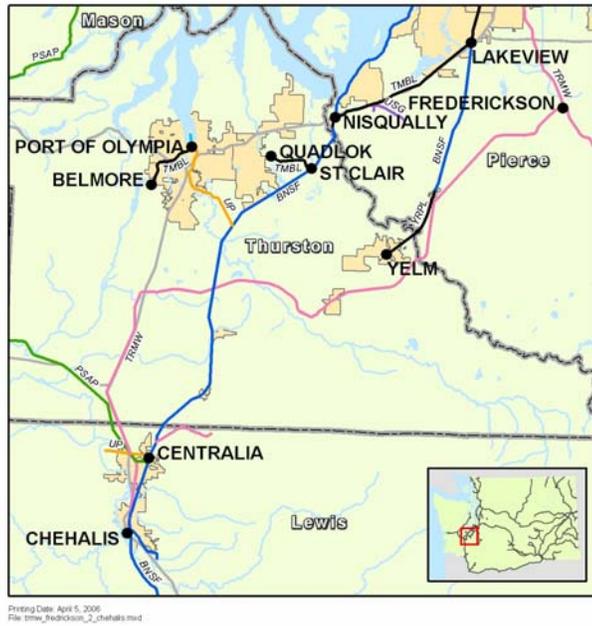


Figure 37. Tri-City and Olympia Railroad: Richland-Hanford

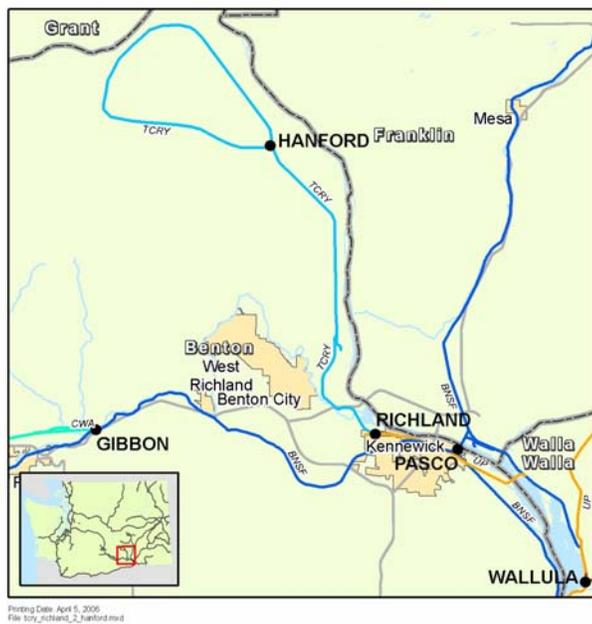


Figure 40. UP: Spokane-Sandpoint, Idaho Main Line

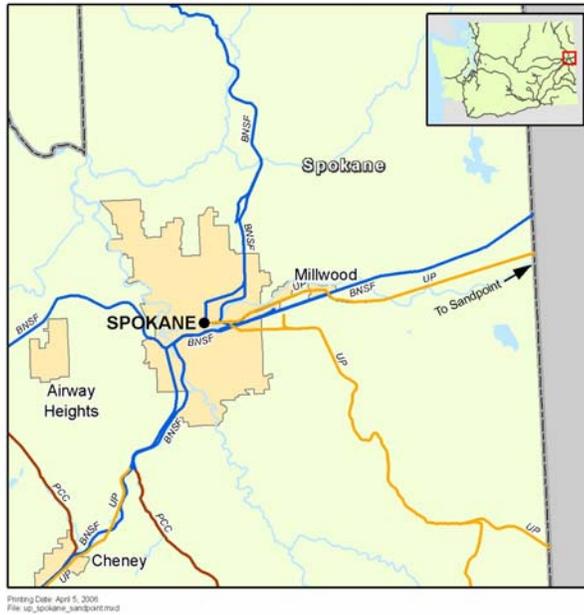


Figure 41. UP: Spokane-Plummer, Idaho and Manito-Fairfield

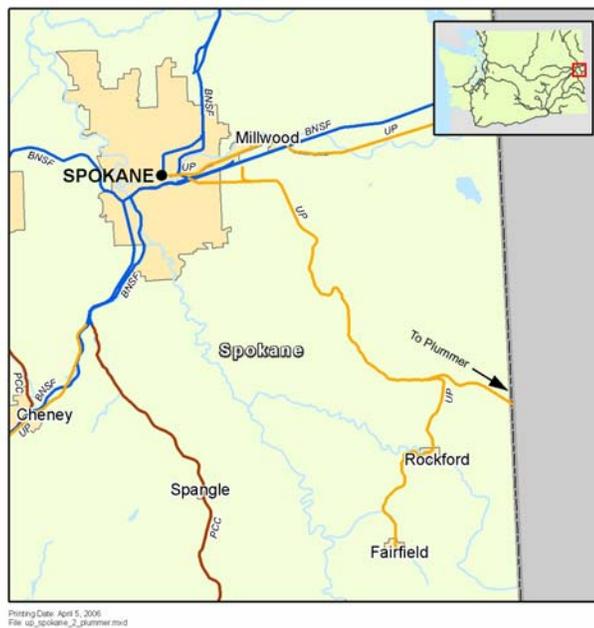


Figure 42. UP: Ayer Junction-Riparia Branch Line

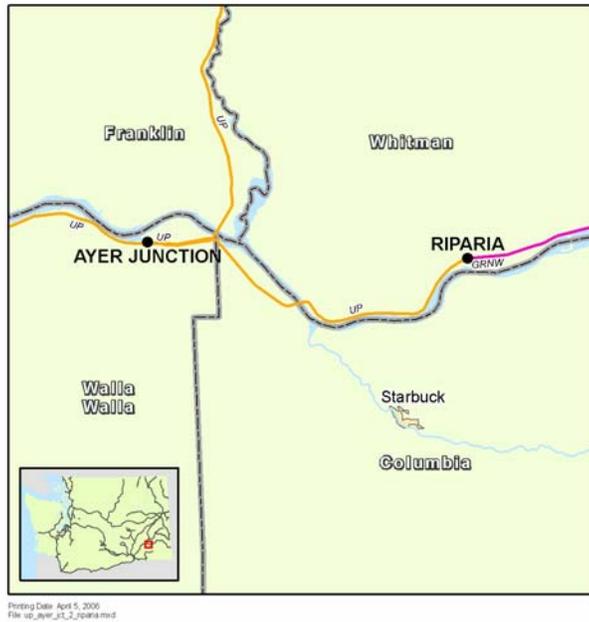


Figure 43. UP: Wallula-Kennewick Branch Line

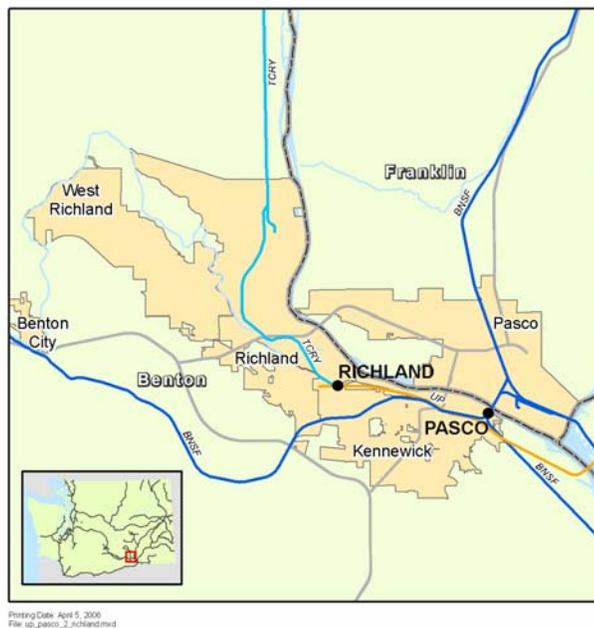


Figure 44. U.S. Government: Shelton–Bangor Line



Figure 45. Yakima Interurban Lines Association

