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Background Brief on …

Freight and Passenger Rail

History

Oregon's first north-south rail line required two decades to complete, beginning at Portland in 1869. Track reached Salem in 1870 and Roseburg in 1872, but did not extend to Ashland until 1884. Federal land grants financed this early track building. Construction continued over the Siskiyou Mountains into California and, by 1887, the continuous route between San Francisco and Portland was completed. Meanwhile, in 1883, completion of a railroad along the Columbia River gave Oregon a transcontinental connection across the northern tier states. Late in 1884, completion of a line from Umatilla over the Blue Mountains established a second transcontinental link through Idaho, Wyoming, and Nebraska. Rail mileage in Oregon peaked in the 1930s at nearly 4,350 miles. More than 90 percent of the rail infrastructure in 1927 hosted both passenger and freight service, including 11 daily passenger trains between Portland and Eugene. Passenger trains served the Rogue River Valley into the 1950s. Other milestones include the formation of Amtrak in 1971, national deregulation of freight rates and routes in 1980, and acquisition of Southern Pacific by Union Pacific in 1996.

Today's Freight System

Oregon currently has 2,390 route miles of track and 23 federally franchised freight railroads. Currently, Union Pacific **(UP)** and BNSF Railway Co. **(BNSF)**, dominate rail transportation west of the Mississippi River. UP has lines extending from Portland into Washington State and east through Pendleton, La Grande, and Ontario and north from Hermiston to Spokane and Canada. UP also

has a line from Portland south through Eugene and over the Cascade Range to Klamath Falls and into California. BNSF track connects Portland and Seattle to Canada, and another line along the north bank of the Columbia River links Portland to Spokane and beyond. A BNSF line to California diverges from the Columbia River line near Wishram, Washington and passes through Madras, Redmond, Bend, and Klamath Falls into California. Between the Columbia River and Klamath Falls, BNSF and UP share 75 miles of UP track and 218 miles of BNSF line. Altogether, UP operates over 1,067 miles of track in the state and BNSF operates 330 miles.

Oregon's 21 other freight railroads are regional and short line carriers. Collectively, Oregon's short lines operate more than half of the state's rail mileage, serving much of the Willamette Valley, all of the Oregon coast, and the major communities along Interstate 5 between Eugene and the California border. Short lines serve the lower Columbia River basin and rural locations in Hood River, Gilliam, Union, Wallowa, Crook, Malheur, Lake, and Klamath counties. Most of today's short line network, derived from former branch lines of major carriers, was spared the fate of other lines that were abandoned following mill closures and rail deregulation in 1980. Oregon's longest short lines today are the Portland & Western, operating 577 miles, and Central Oregon & Pacific **(CORP)** with 255 miles of track in the state.

According to the Association of American Railroads **(AAR)**, total Oregon rail freight tonnage in 2008 was 61.1 million tons, down from 73.9 million tons in 2005. AAR indicated that railroads employed 2,131 Oregonians in 2008, and that those employees earned $154.9 million in total wages that year. Principal commodities carried by trains are wood and paper products and farm-related products and chemicals (largely soda ash or potash). Transportation equipment, petroleum, metals products, stone, scrap materials, and varied wholesale and retail shipments are also hauled. Oregon ranked seventh in originations for pulp and paper (4.9 percent of total nationwide); for terminations Oregon ranked sixth in farm products (4.1 percent), eighth in chemicals (3.8 percent) and eighth in waste and scrap material (4.5 percent).

Condition of the main line track is generally good, but the number of trains that can be safely and efficiently carried depends on several factors, such as whether a signal system is present, the complexity of that system, and the length of and intervals between sidings. Sidings, where trains pull off to allow other trains to pass, are critical since the vast majority of Oregon's main lines are single track. Modernization of rail yards is also needed and a number of tunnels in Oregon won't allow passage of double stacked domestic containers.

Excepting the recent economic downturn, traffic on short lines has grown substantially in recent years as operators have improved service, upgraded track and equipment, and added customers. However, a significant portion of Oregon's short line network won't allow freight speed of 25 miles per hour, the state's minimum goal for secondary line operation, because of deferred maintenance under previous ownership. Track conditions on some short line segments necessitate lighter loads in addition to slower speeds. Because new rail cars can weigh up to 286,000 pounds **(286K)** when fully loaded, track incapable of hosting heavier vehicles discourages customers if they must load cars below capacity. The Oregon Department of Transportation **(ODOT)** estimates that the cost of upgrading all lines in the state to accommodate 286K cars is $125 to $150 million.

Additionally, a number of bridges and tunnels on the state's short line system are suffering from aging. Most short line bridges are timber trestles built between 1940 and 1950. Of the 34 tunnels on the short rail system, all but one was dug between 1883 and 1916 and most contain significant portions of the original timber rib structure. Structural concerns within tunnels of Central Oregon & Pacific's Coquille-Eugene line were cited as the reason for the embargo of that line beginning on September 21, 2007. The CORP embargo was eventually resolved when the Surface Transportation Board ordered CORP

to sell a segment of the line to the Oregon International Port of Coos Bay for $16.6 million. The Port of Tillamook Bay rail line was severely damaged by a storm in December 2007 and continues to remain closed due to high estimated cost of repairs.

Most Oregon businesses that ship by rail, whether on a major railroad or short line, have access to only one of the state's two interstate railroads. This lack of competition is of concern to shippers and the short lines.

A 2004 study commissioned by the Port of Portland, *Freight Rail and the Oregon Economy*, indicates that, although the rail industry is stable, productive, and competitive enough to increase business, railroads are not in the financial position to increase capacity quickly due to the industry's capital-intensive nature. On average, railroads reinvest 18 percent of revenues back into improvements. With reasonable economic growth, freight volume is expected to double in the next 20 years. The study notes that if railroads are not able to maintain their current share of that increase, additional tonnage will travel by truck, increasing public-sector costs for highways and private-sector transportation costs.

Funding Improvements

Except for three publicly-operated short lines, Oregon's railroads are private companies that pay federal, state, and local income taxes as well as property taxes assessed on their rights of way, buildings, and locomotives. All railroads, whether public or private, maintain their own equipment, track, and right of way. They pay an annual fee based on gross revenue for state track and equipment safety inspections and for rail crossing infrastructure. Both federal and state highway funds support rail crossing improvements, but very little federal money has been allocated to the states for other track improvements. The exception is a federal loan program, the Railroad Rehabilitation and Improvement Financing Program, and congressional earmarks.

Although federal rail programs are included in six-year transportation authorization bills, funding generally comes through "earmarking" for specific projects. The 2004 federal appropriation included $8 million for continued rehabilitation of the railroad drawspan over the Coos Bay harbor entrance; $7.5 million for replacing the trestle on the north approach to the Willamette River rail bridge at Albany; $7.1 million for new rail yard capacity in Portland's Rivergate District; $1 million for enhancements at Eugene's rail passenger station; and $700,000 for upgrading a branch line serving Willamina. The Coos Bay drawbridge money later was redirected toward acquisition of the entire line by the Port of Coos Bay.

In 2001, Oregon started a $2 million Short Line Credit Premium Account, with lottery bond proceeds to fund short line infrastructure improvements and to pay the credit risk premium required for federal loans. Nine projects were funded and the Mount Hood Railroad obtained a $2.6 million federal loan with state dollars paying the credit premium. The nine projects entailed replacement of ties and track, placement of ballast rock, and repair of bridges. The short lines provided an average 67 percent match for the improvements.

The 2003 Legislative Assembly authorized another $2 million for the short line rehabilitation program and funded a new $8 million Industrial Rail Spur program to create or improve rail access to industrial sites.

The Legislative Assembly created the multimodal *Connect*Oregon program in 2005, authorizing $100 million in lottery-backed bonds during each of the 2005, 2007 and 2009 sessions. *Connect*Oregon provides grants and loans for non-highway transportation projects, including aviation, marine, rail passenger and rail freight, and public transportation projects. ODOT administers a competitive application process for *Connect*Oregon. The Oregon Transportation Commission selects projects for funding.

The Oregon Transportation Commission approved $39 million in grants for 15 rail projects under the 2005 *Connect*Oregon I program. Of the rail total, $25.7 million was

approved for short line improvements throughout the state; $3.7 million for added track at UP's Hinkle yard; and $658,000 for passenger rail facilities at Chemult and equipment for the Eagle Cap excursion train in Wallowa and Union Counties. The Commission selected 13 rail projects to receive a total of about $56 million under the *Connect*Oregon II program. Applications are currently being considered for the *Connect*Oregon III program with project selection by August 2010.

Today's Passenger System

Oregon is currently served with passenger train service by the daily Amtrak *Coast Starlight* that runs between Seattle and Los Angeles, and by Amtrak's daily *Empire Builder* between Portland and Chicago. In addition, there are four daily round-trip Amtrak *Cascades* trains between Seattle and Portland, two of which extend down the Willamette Valley to Eugene, all of which operate as part of a greater Eugene-Vancouver, B.C. *Cascades* corridor service. ODOT contracts with Amtrak for operation of the two Amtrak *Cascades* trains south of Portland.

ODOT also contracts with Oregon bus companies to operate Amtrak *Thruway* buses supplementing train service. The program includes routes connecting points in central, eastern, and north coast Oregon with Amtrak train service at Portland, Eugene and Chemult. In 2010, the service offered three daily (four on Fridays and Sundays) *Thruway* round trips between Portland and Eugene via Salem and Albany, connecting with trains at Portland, and two round trips daily between Portland and Astoria via Seaside. The *Thruway* buses in the Willamette Valley are designed as extensions of more frequent train service available between Portland and Seattle, and to generally offer Oregonians more options when making travel plans.

The Vancouver, B.C.-to-Eugene rail corridor is one of 10 federally-designated high speed rail corridors. The Federal Rail Administration defines "high speed" as speeds reasonably expected to achieve 110 miles per hour or more, though top speeds on the line today are 79 miles per hour. The locomotives and Talgo cars in operation today are designed to run at higher speeds, but the current track and signal system is not. The strategy to reduce run time, increase daily roundtrips and increase on-time performance between Eugene and Portland on the current freight system is estimated to cost approximately $2 billion dollars. The Pacific Northwest Rail Corridor received $598 million out of $8 billion allocated for high speed rail as part of the federal American Recovery and Reinvestment Act of 2009. Oregon's share was $8 million to replace the roof at Portland's Union Station and to conduct preliminary engineering for two rail projects in north Portland. In order for Oregon to receive significant federal funding, certain planning requirements must be met. In May 2010, Oregon applied for federal funding to complete a Tier 1 Environmental Impact Statement to analyze route options and to meet the federal minimum planning requirements.

Amtrak trains operate over UP mainline between Portland Union Station and Eugene, and over BNSF Railway between Portland and Vancouver, B.C.. Using federal funds, the state completed major track improvements north of Union Station in Portland. A project using federal, UP, and Amtrak funds paid for improvements in southeast Portland. These projects helped reduce schedule time and facilitated addition of a new Amtrak *Cascades* stop in Oregon City in April 2004. To mitigate impact on the freight system from the second Amtrak *Cascades* train, Oregon pledged $15 million to create new capacity between Eugene and Portland. In 2005, UP completed a new signalized running track through Portland's Albina yard to alleviate freight train interference at a key junction in East Portland. The remainder of the state's commitment, approximately $4.5 million, was spent in 2008 for a new 2.5-mile siding at Eugene Yard and upgrading 5.87 miles of automatic block signals at Eugene to a modern Centralized Traffic Control system. Congress passed the Passenger Rail Investment and Improvement Act of 2008 that passenger rail proponents hope will evolve into a major federal/state funding partnership for meeting

capital needs for state-supported passenger services such as the *Cascades*.

The 2007 Legislative Assembly approved a measure directing Oregon customized license plate fees to support the passenger rail program. The funds were expected to generate sufficient revenue to pay for the annual operation of one of the two state-supported Amtrak *Cascades* trains. House Bill 2001 (2009) increased the motor vehicle custom registration plate fee to $50/year to generate revenue sufficient to help fund the second *Cascades* passenger train.

In Fiscal Year 2009, ridership on the Oregon-funded *Cascades* trains and the Oregon segment of the *Coast Starlight* was 159,486 passengers, not counting persons boarding in Portland to go north. Another 62,922 persons traveled the Portland-Eugene corridor in 2009 aboard Amtrak *Thruway* buses. Since 1996, the Oregon passenger rail system and its allied bus network have shown continued ridership growth with the exception of 2009, a year hard-hit by a severe economic recession.

Excursion Trains

Excursion trains are important to the financial survival of some Oregon short lines and to the economies of the regions in which they operate. Two small freight carriers that rely heavily on excursion revenue include Mount Hood Railroad and Wallowa Union Railroad. The City of Prineville Railway relies somewhat on excursion revenue. Two other operators, Sumpter Valley Railroad and the Oregon Coast Scenic Railroad, run exclusively for tourists.

Amtrak

Passenger rail funding discussions in Congress are tied to the discussion of Amtrak's future. In 2002, Amtrak was on the brink of closing lines. Missing Congressional deadlines to be operationally self-sufficient, Amtrak has reorganized and is overhauling its accounting processes. With the exception of the eastern seaboard, Amtrak operates lines at a loss, with its cross-country trains showing the highest losses. Affected communities and states are urging Congress to more fully support the system in order to provide alternatives to crowded highways and airports. While California, Oregon, and Washington are financing their share of state-supported trains, some states on the East Coast are not. Some states don't currently contribute at all. However, that will soon change as Amtrak is currently establishing a single, nationwide standard methodology for allocating the operating and capital costs of state-supported service among the states as mandated by Congress.

Commuter Rail

The Tri-County Metropolitan Transportation District **(TriMet)** began commuter rail service between Beaverton and Wilsonville, with three intermediate stations in Tigard and Tualatin. Service began in February 2009 on upgraded freight rail tracks operated by Portland & Western Railroad. The Westside Express Service **(WES)** uses three self-propelled diesel multiple unit vehicles (**DMUs**) plus one non-powered trailer car. Early in 2010, TriMet acquired two used self-propelled rail diesel cars (**RDCs**) from the Alaska Railroad to be overhauled as standbys for the newer DMUs. WES trains average 37 miles per hour over the route and travel up to a maximum speed of 60 miles per hour. WES trains run every 30 minutes during the morning and afternoon rush hour on week days only. Ridership numbers for March 2010 show 1,230 daily boardings and 6,150 weekly trips, about half of the projected level of ridership.

Oregon Rail Division

The Rail Division within the ODOT carries out programs in Rail Safety, Rail Employee Safety, Crossing Safety, Planning, and Operations. Most division staff is involved in regulatory activities focusing on safety. They ensure compliance with federal and state regulations related to track, equipment, operating practices, railroad employee safety, highway-railroad crossings, and hazardous materials handling. The division directly manages 155 miles of state-owned railroad right-of-way in six counties as well as federal and state-funded crossing improvement projects. Finally, the division helps manage and

market the Amtrak *Cascades* passenger service and connecting *Thruway* bus network.

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