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Background Brief on ...

Freight and Passenger Rail

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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 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 2,388 miles of active track and 22 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 20 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 over 577 miles, and the Central Oregon & Pacific (CORP) with 387 miles of track.

According to the Association of American Railroads (AAR), total Oregon rail freight tonnage in 2005 was 73.9 million tons, up more than 55 percent since 1984. AAR indicated that railroads employed 2,871 Oregonians in 2005, and that those employees earned \$186.5 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. Sixty-one percent of rail freight tonnage originated in Oregon in 2005 was attributed to forest products, while 40 percent of terminating tonnage consisted of chemicals and farm products.

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 signal systems and the length of and intervals between sidings. Sidings, where trains pull off to allow passing, are critical since most main lines are single track. Modernization of rail yards is also needed as a number of tunnels in Oregon won't allow passage of double stacked domestic containers.

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 tracks in the state to accommodate 286K cars is between \$125 to 150 million.

Additionally, a number of bridges and tunnels on the state's short rail system are suffering from aging. Most short line bridges are timber trestles built between 1940 and 1950. Of the 34 tunnels in 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, 2006. The CORP embargo was one of two such embargoes that are unresolved as of April 2008, both due to safety issues related to deferred maintenance; a third, the Port of Tillamook rail line, was severely damaged by a storm in December 2007 and continues to remain closed.

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

Aside from three publicly-owned 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 and congressional earmarks. Railroads pay a 4.3 cent per gallon federal diesel tax, but the revenue currently goes toward federal deficit reduction, not to railroad infrastructure.

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.

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.

In Senate Bill 71, the 2005 Legislative Assembly provided \$100 million of lottery bond authority for non-highway transportation grants and loans for aviation, rail, transit, and marine modes. Under the program, known as ConnectOregon, the Transportation Commission approved \$39 million in grants for 17 rail projects. Of the rail total, \$34.7 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. During the 2007 Legislative Session, House Bill 2246 provided a second \$100 million, known as ConnectOregon II; the Oregon Transportation Commission will select projects for ConnectOregon II funding on June 20, 2008.

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 two state-sponsored round-trip Amtrak *Cascades* trains between Eugene and Portland that operate as part of a greater Eugene-Vancouver, B.C. *Cascades* corridor service. The ODOT contracts with Amtrak for operation of the two Amtrak *Cascades* trains south of Portland.

The state also contracts with Oregon bus companies to operate Amtrak *Thruway* buses to supplement the train service. The program includes routes connecting points in central, eastern, and north coast Oregon with Amtrak train stops in the valley. It also includes two daily *Thruway* round trips between the Portland and Eugene Amtrak stations via Salem and Albany, connecting with other trains at Portland. A third Portland-Eugene round trip will begin test marketing in May 2008. The *Thruway* buses are designed to offer riders more arrival and departure choices while making travel plans.

Oregon lost Amtrak *Pioneer* service to Eastern

Oregon and Boise in 1997. Amtrak's *Empire Builder* still serves a section of the Washington side of the Columbia River from Vancouver to Pasco, and then on to Spokane and Chicago.

The Vancouver, B.C.-to-Eugene rail corridor is 1 of 11 federally designated high speed rail corridors. The Federal Rail Administration defines "high speed" as capable of speeds of 125 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 between Eugene and Portland involves incrementally addressing bottlenecks and, where feasible, making improvements to increase passenger speeds up to 79 miles per hour.

Amtrak trains operate over UP mainline between the 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 was used for improvements in southeast Portland. These projects helped improve schedule performance and allowed addition of a new Amtrak *Cascades* stop in Oregon City in April 2004 without adding more run time. 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, is being spent in 2008 for a new 2.5-mile siding at Eugene Yard and replacing 5.87 miles of automatic block signals at Eugene with a more modern Centralized Traffic Control system. Congress passed the Passenger Rail Investment and Improvement Act of 2007 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 are expected to generate sufficient revenue to pay for the annual operation of one of the two state-supported Amtrak *Cascades* train; the other train is paid for by General Fund moneys. State support is considered critical to retaining services for regional passenger rail markets; the states of Washington and California have provided substantial financial support for passenger trains over the past few years.

In 2007, ridership on the Amtrak *Cascades* trains and the Oregon segment of the *Coast Starlight* was 135,978 passengers, not counting persons boarding in Portland to go north. Another 41,294 persons traveled in the Portland-Eugene corridor in 2007 aboard Amtrak *Thruway* buses. In all, there were a total of 749,921 Amtrak boardings and alightings at Oregon's 7 train stations in 2007. Since 1996, the Oregon passenger rail system and its allied bus network have shown continued ridership growth despite serious delays affecting the on-time performance of the *Coast Starlight*.

The ODOT estimates that at least \$120 million (in 2001 dollars) in track and signal improvements are needed along the corridor between Eugene and Portland. The upgrades would allow increased speeds and the addition of more trains as conflicts with freight trains are reduced. Funds would also be needed to buy additional equipment if trains are added.

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. Three small freight carriers that rely heavily on excursion revenue include Mount Hood Railroad, the City of Prineville Railway, and Wallowa Union Railroad. 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.

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 170 miles of state-owned railroad right-of-way in 6 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 bus network.

Commuter Rail Initiatives

The Tri-County Metropolitan Transportation District (**TriMet**) is completing construction on the West Side Express Service (**WES**), scheduled to begin operation in the fall of 2008. The WES will provide 16 passenger trains daily each way over a 15-mile freight short line connecting Wilsonville, Tigard, Tualatin and Beaverton. Construction began in July 2006 and line testing and training will take place between May and September 2008. Once in operation, trains will run every half hour during weekday rush hour periods. TriMet estimates that average daily ridership will reach 3,000 to 4,000 riders by 2020. Federal funds provided for 38 percent of

the project's \$156 million overall costs and the Legislative Assembly committed \$35.3 million in lottery-backed bonds for the project.

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