Rail Capacity for Grain Movement

The rail line along the Snake River has different physical characteristics from the Washington State-owned rail lines in the area, and it operates differently as a result. There are only two grain elevators between Lewiston and Ayer. Both are currently oriented to barge loading, so will need to have rail loading facilities added. Grain movements consist of full trains loaded at Lewiston, running through to Ayer for delivery to Union Pacific and empty cars returning. There is a daily train of regular commercial freight, such as lumber. Capacity is determined in a similar manner to other main line railroads. The line may accommodate several trains in both directions. Since it is single track, trains in opposite directions can only meet at a place where there is more than one track, typically a siding or double track. The only track that can be used as a siding that can accommodate a full train is at Riparia, so capacity is figured accordingly.

There are five local elevators between Winona and Thornton, eight between Hooper and Pullman, and 12 between Marshall and Pullman, not including the McCoy “shuttle” elevator. Typical rail traffic on these lines consists of trains that distribute empty cars and collect loads, typically traveling along the line and returning in the same trip. For this type of traffic, the important consideration is the length of the trip, end to end, and the amount of time remaining within a crew’s Federal hours of service limitation (12 hours) to perform all of the distributing and collecting of cars. Depending upon the rate at which cars are loaded, the grain hauling capacity may be doubled by employing a train on each of two shifts.

Rail capacity between Lewiston and Ayer

Grain by barge on the Lower Snake River passing Ice Harbor Dam in 2014 was 2,800,000 tons. That amount is the equivalent of 255 grain trains of 110 cars each, or five trains per week. The truck equivalent is 107,692 trucks per year, or 2,071 trucks per week.

The Great Northwest Railroad between Lewiston and Ayer is regularly used by one train per day, occasionally by more. The line has capacity of three trains per day in each direction, with good reliability, and can be stretched to six trains in either direction, with some potential for less predictability of operation. With modest improvement, the capacity can be increased and/or the reliability of operation can be increased. For example, a train may leave Lewiston with 50 cars and stop at Almota and Central Ferry (after rail loading facilities are constructed) for additional cars. In either of the higher volume cases, careful traffic management would be required.

Rail Capacity for the Central Routes east of Hooper

A round trip between Hooper and Thornton or Pullman has a travel time of less than five hours. If necessary, two trains per day can operate on the line successively.

Rail Capacity between Marshall and Pullman

A one way trip between Marshall and Pullman with a train of empty grain cars takes two and a half hours. The return trip with a loaded grain train takes three hours. Trip time would be increased by the time needed to distribute empties and pick up loads from elevators along the way, making a two day trip for the crew likely. With the extension and rehabilitation of sidings along the line, a train each way every day could be accommodated, transporting roughly 20,000 tons of grain per day.

Consolidating Loads for Further Movement on Class 1 Railroads

The short line operators can consolidate shipments into the size train that the Class 1 railroads demand. This may be accomplished over a period of several days, or in heavy loading season, more than one 110 car train may be accumulated per day.

Energy Consumption

When electrified, the rail lines north and west of Pullman will have a small electric power footprint. The hilly nature of the Palouse is reflected in the rail lines. For example, a round trip between Marshall and Pullman, empty cars south, loaded cars north, returns to the grid 94 percent of the electricity used. Between Hooper and Thornton, the amount returned is 79 percent. Between Hooper and Pullman, the amount returned is 81 percent. Between Lewiston and Ayer, the return is only 44 percent because there is only a very slight grade.

Effective Service

The US railroad industry generally operates as a monopoly. The monopoly is also found in the short line railroads. When selling branch lines, the Class 1 railroads typically ensure that there is no connection to any, other than their own track, making all customers on the line captive to the original owning railroad. Short lines on those lines are also a monopoly as a result.

Washington State is in the unusual position of owning a combination of former Class 1 lines that have a connection with two Class 1 railroads. The connection at Pullman is inconvenient, but nonetheless, there is a connection.

Washington state could dramatically improve the effectiveness of rail service by changing the contracting method. The state-owned rail lines could become effectively a toll road for trains. In such an arrangement, the state manages the operation and maintenance of the infrastructure and sells access by the train mile. An operator could

arrange to move grain to either of the Class 1 railroads, BNSF and Union Pacific. More than one operator may compete for the service at each elevator along any of the lines.

The Toll Road for Trains arrangement ensures that the state's rail assets are properly maintained and well-utilized.

The arrangement would be greatly improved by connecting the former Union Pacific line that terminates at Thornton with the former Burlington Northern line at either Rosalia or Colfax, about eight miles. There was a railroad between these points, but it was abandoned and removed decades ago. There is visible evidence of the former rail line for most of the distance between Thornton and Rosalia.

Further reduction in truck miles could be effected by adding new rail loading facilities along the state-owned routes. Short line operators can serve such smaller loading facilities that Class 1 railroads won't. Part of the justification for purchasing the railroads in eastern Washington was reduction in truck traffic. The current situation is not as effective in that regard as it should be.

High Capacity Grain Cars

The railroad industry works its monopoly position against its subsidized competition. Class 1 railroads demand the use of cars with 286,000 pound capacity. This is much greater than many bridges on short line railroads were designed to accommodate. Although common carrier obligations require the nondiscriminatory acceptance of shipments tendered, circumvent this obligation by providing a level of service and a price that makes trucking the favorable substitute for the same shipment. This puts the short lines at a serious disadvantage unless the track and bridges are improved to accommodate the high capacity cars.

Were the short line operators to aggregate a 110 car train of cars with less than 286,000 pound capacity, the Class 1 railroads would be less likely to win a case brought against them for failure to meet Common Carrier obligations. Trucks would obviously not be a physically or economically practical alternative to movement by rail.

Subsidy

The remaining short line railroads in eastern Washington were once part of an extensive network, most of which was abandoned long ago, and removed. The remaining lines barely survive. They were, and still are, the victims of government-subsidized competition.

Trucking is typically responsible for 99 percent of highway wear and damage and pays 35 percent of the cost through license fees and taxes. Trucking is also provided with

special facilities not required by private users such as slow traffic lanes on steep grades, special parking spaces at rest areas, and intersections designed to accommodate the length of a truck turning a corner of the intersection.

Barges on the Snake River generally receive about $30 million in government subsidies annually.