
Market Analysis of the Reconnection of the PV Hooper and P&L Branches

Prepared for

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Executive Summary

The state of Washington owns most of the former Palouse River and Coulee City (PCC) Rail System in eastern Washington. Two of the three line segments, the PV Hooper and P&L Branches, are connected where they converge in Pullman.

In August 2006 a bridge trestle (the Risbeck Bridge) over the Palouse River just south of Colfax burned, which severed the connection between the PV Hooper and P&L Branches. The segment of the PV Hooper Branch between Colfax and Pullman cannot be used for through-rail traffic.

The Washington State Department of Transportation (WSDOT) identified three options to respond to the problem: rebuild the Risbeck Bridge; rebuild an abandoned rail segment to connect the towns of Thornton and Oakesdale; or leave the system as it currently exists. In order to determine which option to choose, one must know the costs and benefits of the two “build” options, and the market changes the two “build” options would make to the current situation.

The following table summarizes the findings of a previous report about costs, and the current study on market changes.

Table ES1 Comparison of Two “Build” Options

Rebuild Risbeck Bridge	Construct a Connection Between Thornton and Oakesdale
<p>Cost plus necessary line rehabilitation plus net present value of difference in maintenance costs from Thornton to Oakesdale connection: \$9.363 million.</p> <p>Potential exists for additional economic development and for a shift of shipping from truck to rail, but it is marginal and uncertain at this time.</p>	<p>Cost not including right of way purchase: \$7.25 million.</p> <p>Potential exists for additional economic development and for a shift of shipping from truck to rail, but it is marginal and uncertain at this time.</p>
<p>Offers access to two Class I railroads to a very limited number of stations including Willson Siding near Moscow, Pullman, Colfax and possibly Fallon. There are theoretical benefits from increased marketing flexibility, potential competition between the Class I railroads, and access to rail cars. However, these benefits are not certain at this point.</p>	<p>Offers access to two Class I railroads to many of the stations on both branches. There are theoretical benefits from increased marketing flexibility, potential competition between the Class I railroads, and access to rail cars. However, these benefits are not certain at this point.</p>
<p>Benefits only one rail customer in the foreseeable future. The benefit was not easily quantifiable at this time. The shipper continues to be served by rail via the P&L Branch rather than the PV Hooper Branch.</p>	<p>Could benefit a lumber shipper in Idaho that uses the P&L Branch to connect to the BNSF Railway main line by providing access to customers served by the Union Pacific Railroad main line.</p> <p>May transfer a marginal amount of grain from the PV Hooper Branch to the P&L Branch, mostly from the Thornton area. Even if the reconnection is built, the transfer may be by truck rather than rail. The transfer will be the result of the construction of a loader facility at Oakesdale, not the construction of the connection.</p> <p>The extension of the Thornton to Oakesdale segment, along with the 110-car facility at Oakesdale, may decrease the amount of grain moving by truck to barge facilities on the river. However, it will not likely be a large impact because the fixed investment of firms on the river will likely mitigate the extent of this shift.</p>

In summary, few benefits could be found from reconstructing the Risbeck Bridge. The same could be currently said for constructing the Thornton to Oakesdale segment. The potential positive impact is more uncertain in the latter case because the extent of the affects of the construction of a 110-car shuttle facility at Oakesdale cannot be fully anticipated. Those impacts can be better determined in two to five years. Until then, quantifiable benefits amounting to or exceeding the costs of reconnecting the branches under either option were not found. Benefits of extension do exist, but are uncertain and speculative at this point. As the market structure and business operations of the area solidify, the potential benefits and costs of the extension can be better determined.

Even if reconnection of the branches was warranted economically, one must consider that a major hurdle needs to be surmounted. This study assumed that one railroad would operate the two branches; however, at the present time one railroad operates the P&L Branch, and another operates the PV Hooper Branch. With two operators, moving freight off of one branch to the other may simply move the routing of freight in a way that could make one of the branches uneconomical to operate. Also, two short-line freight tariffs rather than one must be paid. This extra cost likely makes such movements uneconomical. Thus, in order to achieve the benefits of reconnection, the operations probably should be consolidated with one of the railroads, which may be very difficult to do under existing contracts.

As a final note, representatives of the wheat industry asserted that any connections and rail capacity lost anywhere on the system is a deterioration in the value of the overall asset. They reason that because the PCC Rail System belongs to the state, it should maintain the asset as it would any other, and reconnect the PV Hooper and P&L Branches.

Market Analysis of the Reconnection of the PV Hooper and P&L Branches

Background

The state of Washington owns the former Palouse River and Coulee City (PCC) Rail System which consists of the CW, P&L, and PV Hooper Branches. The CW Branch runs from Coulee City to Cheney, where it interchanges rail cars with the BNSF Railway Company (BNSF). The P&L Branch runs from Marshall, where it interchanges with BNSF, through Pullman to the Idaho border at Moscow. In Palouse, a sub-branch of the P&L Branch runs to the Idaho border, where it continues to Princeton, Idaho under private ownership. The PV Hooper Branch runs from Thornton to Winona and from Pullman through Colfax to Winona and on to Hooper. The PV Hooper interchanges with the Union Pacific Railroad (UP) at Hooper near Washtucna. The branches are shown in the map provided as Appendix A.

The PV Hooper and P&L Branches are connected where they converge in Pullman. In the past that connectivity allowed Pullman and Willson Siding near Moscow to be served by both the UP and BNSF. Theoretically, all other stations on both branches could be served by both major railroads; however, it was operationally and economically infeasible to do so.

In August 2006 the Risbeck Bridge over the Palouse River just south of Colfax burned, which severed the connection between the PV Hooper and P&L Branches. The loss of this connection is a substantial issue currently facing the state in its stewardship of the PCC Rail System. It is important to examine how best to react to the connectivity issue in light of the past and current general importance of rail transportation in the region, as well as considering the specific use of the connection.

Eastern Washington has historically been blessed with the existence of a complete transportation system. Truck, rail, and barge transportation modes have all been available to the region since the opening of Lower Granite Dam in 1975. That event allowed barges to complement rail transportation. Trucks were used primarily to transport grain to barge terminals and railheads. In 1994 slightly over 61 percent of the grain moving out of eastern Washington went by barge. In 2002 that share was still at 60 percent, but interestingly for this region, slightly over 5 percent was transported by a new combination of rail and barge (recent discussions during this study suggest this volume has increased even further). Rail

began to be successfully used to transport grain to a barge facility in Wallula, rather than leaving all of that transport to trucking. This complementary role between barge and the other facilities is pronounced and productive for the region.

The barge system also helped farmers and shipping cooperatives by serving in an effective competitive role for the region. Barge competition caused railroad rates to be held at stable levels. In fact, a past review of rates by these authors indicates that, as late as 1999, railroad rates were at the 1936 level. As a result, competition from the truck-barge mode was very instrumental in holding railroad rates very close to costs of operation on the Class I railroads (BNSF and UP), as evidenced by revenue to fully allocated costs in the 80 percent range.

In 1980 the Staggers Act was passed, which provided railroads with the increased flexibility to abandon or sell branch lines. The low rates, low returns, and less restrictive regulatory environment drove major railroads to begin abandoning many unprofitable rail lines. Over one-third of the lines in the state of Washington were abandoned during the 1980s and 1990s.

However, another phenomenon became common: short-line or regional railroads were formed that purchased lines that the major railroads were proposing for abandonment. In eastern Washington, Watco Companies purchased the PV Hooper Branch from the UP in 1992, and the CW and P&L Branches from BNSF in 1996.

The success of short-line railroads throughout the nation has varied. In eastern Washington the PCC Rail System suffered from the lack of profitability that caused the major railroads to sell the branches in the first place. Additionally, the major railroads had not regularly maintained the lines at the needed level because of their unprofitability. Given the levels of business that were exacerbated by changes in grain transportation markets, Watco could not upgrade the lines and then maintain them at desired levels. As a result, the state of Washington purchased the lines, provided rehabilitation monies, and found new operators for two of the three branches. Watco Companies, Inc. and the Washington and Idaho Railway Company (W&I) are the current operators on the two branches of interest to this study.

Connectivity Options

Doing nothing is one course of action. The P&L and PV Hooper Branches would remain disconnected. In addition to transportation and market implications, choosing this path raises issues about whether to rail bank

the segment between Colfax to Pullman, convert it to a path, abandon it, or allow it to be used for rail car storage by the current operator. Such additional issues are beyond the scope of this study. It should be noted that car storage contributes to the railroad operator's economic viability.

The other alternative is to reconnect the branches. Two proposals have been made to do this: rebuild the trestle that burned and rehabilitate the rest of the segment between Colfax and Pullman; or build a connection between Thornton on the PV Hooper Branch and Oakesdale on the P&L Branch (see Figure 1 on page 7). The potential cost of either reconnection choice raises questions of impact on business, growers and shippers, transportation, marketing flexibility, and return on investment to the taxpayers of the state. Answering these questions is difficult due to the dynamic and changing marketing landscape, both current and future, in the region surrounding the branches.

Both of the projects under evaluation in this study are in Whitman County. The branches run through the communities of St. John, Rosalia, Thornton, Endicott, Hooper, Colfax, Oakesdale, Palouse, Pullman, and several smaller towns. Rebuilding the Risbeck Bridge would reconnect the branches as they had been just before the fire. The other proposal, reconstructing an abandoned stretch of UP line that ran directly between Oakesdale and Thornton, would reconnect the P&L and PV Hooper Branches at a point about 36 miles north of the former connection at Pullman.

Study Assumptions

WSDOT seeks to develop economic information for policy and stakeholders to use in considering rebuilding the Risbeck Bridge, rebuilding the Thornton to Oakesdale segment, or leaving the PCC disconnected as it is today. WSDOT provided the following assumptions for use in this study:

1. Unit trains will not travel on the PV Hooper Branch because there are 23 miles of 75-pound rail and tight curves.
2. 286K cars will also not travel the PV Hooper Branch for the same reason.
3. A single railroad will operate the P&L and PV Hooper Branches.
4. All stations will be open for traffic traveling to and from BNSF via Marshall, and to and from the UP via Hooper Junction.

Scope and Objectives

Specific charges and objectives of the study are to:

1. Update existing and projected (five years) traffic flows by train for current and expected conditions, if the PV Hooper Branch is not reconnected to the P&L Branch.
2. Determine effects of such traffic flows and existing and potential customers, if the Risbeck Bridge is rebuilt and the Colfax to Pullman segment rehabilitated to allow safe, consistent 10 mph operation.
3. Determine effects on such traffic flows and existing and potential customers, if the PV Hooper Branch is extended beyond Thornton to connect with the P&L Branch at Oakesdale.
4. Determine any other economic advantages or disadvantages created by reconnecting the segment between Colfax and Pullman.
5. Determine any other economic advantages or disadvantages created by reconnecting the segment between Thornton and Oakesdale.

Previous Work

The overall economic condition of the PCC, in all three of its segments, has been evaluated in previous studies by these authors. *The Palouse River and Coulee City Railroad: CW Line Market Assessment* identified the flows on that northern segment, the volume necessary for economic viability, and the impact of the new Ritzville 110-car loading facility on the grain flows in the area and ultimately the viability of the CW Branch. The impact of a 110-car loading facility was found to be pronounced, since it caused the geographic flow of shipments across the landscape of the region to significantly shift. The study then looked to the potential of future traffic and the public benefits associated with saved pavement damage impacts.

A second phase in that series of studies, *Palouse River and Coulee City Railroad: Market Assessment*, evaluated the entire three branches of the PCC Rail System, again looking to the volumes on the railroad segments (current and expected), the revenue situation of the segments, and the potential for necessary investments by the state to keep the railroads viable. Public benefits of maintaining the branches in operation were also inventoried and categorized. The most commonly cited public benefit was the 2,000 carloads that would not move on the region's highways, with accompanying stress and deterioration of those roads.

The market assessment revealed a dynamic and uncertain market with a multitude of competing forces. Also, there exist many decision makers

and stakeholders in the market who have different options. The authors found that the most probable scenario would be that the CW Branch would require continued state investment, around \$200,000 to \$400,000 per year. Similarly the P&L Branch would probably require continuous state investments of \$500,000 to \$1,000,000 on an annual basis. The PV Hooper Branch was expected to be viable, especially after the branch was rehabilitated as initially planned. The study also identified the “best possible scenario” and the “worst possible scenario” for consideration by policymakers.

The specific issue for this current study, the connection of the PV Hooper and P&L Branches, also received previous attention. The initial groundbreaking work, on April 16, 2007, was done by W. Casey Harman, entitled *Thornton to Oakesdale Renaissance?* Harman characterized his work as a comparative study of rebuilding the Risbeck Bridge or reconstructing an abandoned railway between Thornton, Washington and Oakesdale, Washington. It was found by Harman that:

“The cheapest and most viable option is to rebuild the eight mile Thornton to Oakesdale line with salvaged rail from the Colfax to Pullman segment. Ten miles of left-over rail could be used to replace some of the 75lb rail between Thornton and Winona. The Colfax to Pullman corridor could be converted to a recreational trail to preserve the corridor for future use. Costs for this work could be as low as 2.5 million dollars. But costs could soar if more expensive options are implemented. If heavy 115lb used rail and new ties are utilized, the project may cost more than four million dollars. ...The current traffic on the line is not enough of an economic incentive to either rebuild the bridge or rebuild the proposed segment....”

This innovative study by Mr. Harman was followed by a more detailed study funded by WSDOT in December 2007, done by HDR Engineering. This analysis, *Palouse River and Coulee City Railroad Bridge 3 Alternative Route Feasibility*, did not reveal any engineering or environmental obstacle that could prevent consideration of either route. However, similar to the Harman report, it was confirmed that:

“The right-of-way costs and impacts could be significant. This more detailed engineering study estimated the cost of reconstruction of the Thornton to Oakesdale segment, using salvaged materials from the Colfax to Pullman line segment, would be about \$7.25 million. This route was more expensive to build than replacing the Risbeck Bridge but that route has other bridges needing repairs, the track requires rehabilitation and

improvement, the line has low traffic volumes with no shippers between Pullman and Colfax and the line is difficult to maintain due to its alignment with the Palouse River. One suggestion from this study was to identify shipping demand likely to be generated or lost, shifts of freight among transportation modes, and other business impacts.”

Both of these studies were concerned about the comparative costs and the physical or technical feasibility of reconnecting the PV Hooper and P&L Branches. Little information on the demand or business side of the impacts of this reconnection was included. Thus, both studies provide the rationale for this study requested by WSDOT.

Data Collection and Personal Interviews

WSDOT provided an initial list of the major shippers to contact and interview. The interviews were structured around the following questions and interview items:

- Past experiences and expectations for future shipments by the firm.
- Impact on their traffic flow from each of the alternatives: no reconnection (essentially abandonment of the Pullman to Colfax segment), rebuild the Risbeck Bridge, or reconnect via the old UP segment from Thornton to Oakesdale.
- Their perceptions of the impact of the alternatives on the overall flow in the region.
- Expected rate changes in the region.
- Other changes occurring in the region that would alter the impact of the alternatives.
- Change in competitive environment, with or without the alternatives.
- Advantages or disadvantages to their firm, other firms, or the communities.

The original list of shippers received from WSDOT included seven major shippers and the two operators of the PV Hooper and the P&L Branches. The authors used their previous work in the region, along with the interviews and contacts, to enlarge the survey list, looking for smaller shippers who might be affected, other potential future traffic on either of the branches, as well as institutional interests such as the port district, etc. A total of 21 individuals or firms in the region were contacted by completion of the report (see Appendix B), including all major current shippers, railroad operators, and identified potential users of the rail system.

Market Analysis and Assessment

Production and Traffic Volume

The locations and density of the grain production in the region are presented in Figure 1. What is noticeable is that the original railroads responded to that productive capacity by locating the lines, now the PCC Rail System, in close proximity to those high density production areas. The soil conditions and precipitation levels are very favorable for yields and total production.

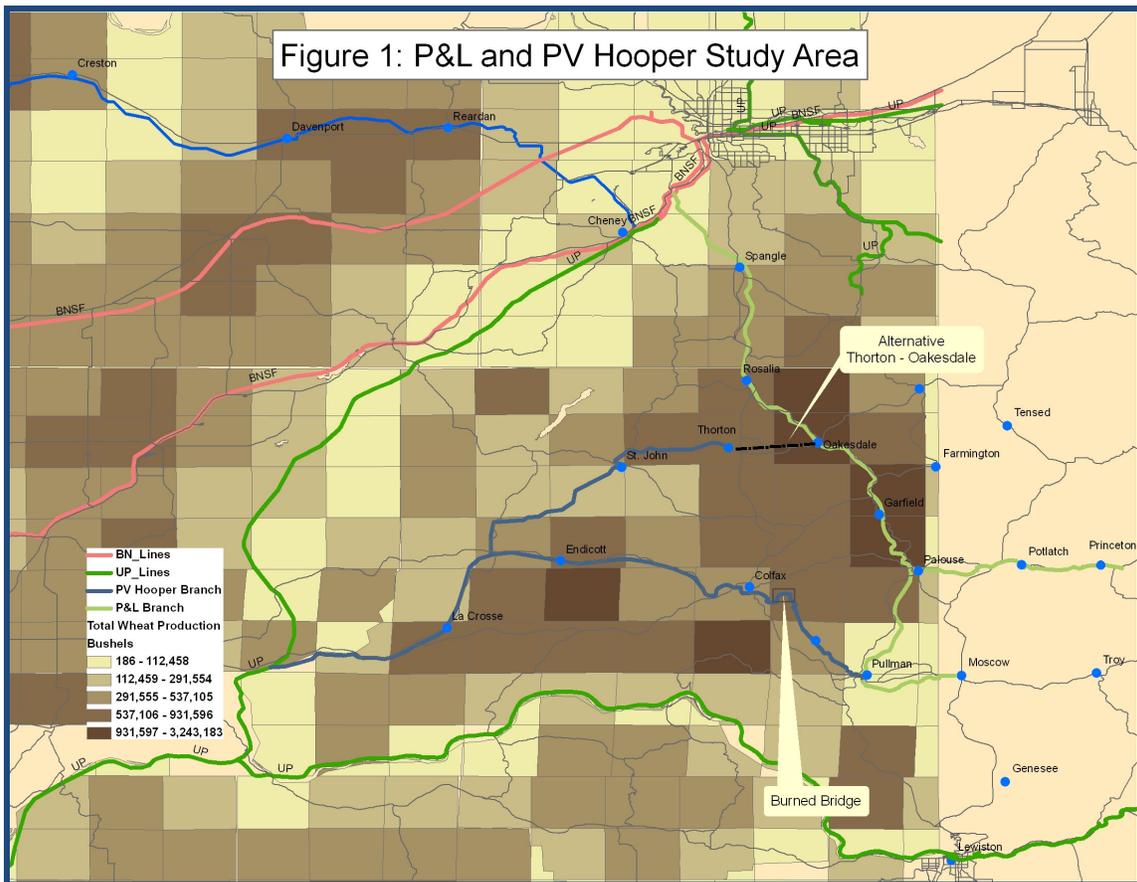


Table 1 indicates the location, storage capacity and car loading capacity of the elevators being served by the P&L Branch and the PV Hooper Branch. These elevators, and the grain traffic produced by them, comprise the economic lifeblood of the two railroad segments. It is these volumes and stations, primarily, that may or may not be affected by the reconnection of the PV Hooper and P&L Branches.

Table 1: Wheat Storage and Car Loading Capacity for Elevators Served by the PV Hooper and P&L Branches

Elevator/Station	Bushel Capacity (in thousands)	Car Loading Capacity (in units)
Colfax	1,061	7
Endicott	2,950	26
Fallon	1,148	26
Mockonema	220	8
Oakesdale	1,715	26
Palouse	1,456	9
Plaza	836	26
Rosalia	551	3
Spangle	1,656	26
St. John	5,250	26
Thornton	647	26
Winona	850	8
Total Rail Storage	18,340	217

Further marketing information is presented in Figures 2 through 5, and Tables 2 and 3 below. Figure 2 displays the grain attraction zones associated with the PV Hooper Branch. Figure 4 does the same for the zones around the P&L Branch. These zones generally follow the contours of the transportation segment. These market attraction zones are indicated by the concentric circles around the rail segment. The amount of grain production associated with those marketing zones is indicated in Tables 2 and 3. This information is presented in bushels and then in cars and trucks to indicate the need for transportation capacity to handle each of the zones. See page 13 for more detail on Figures 3 and 5.

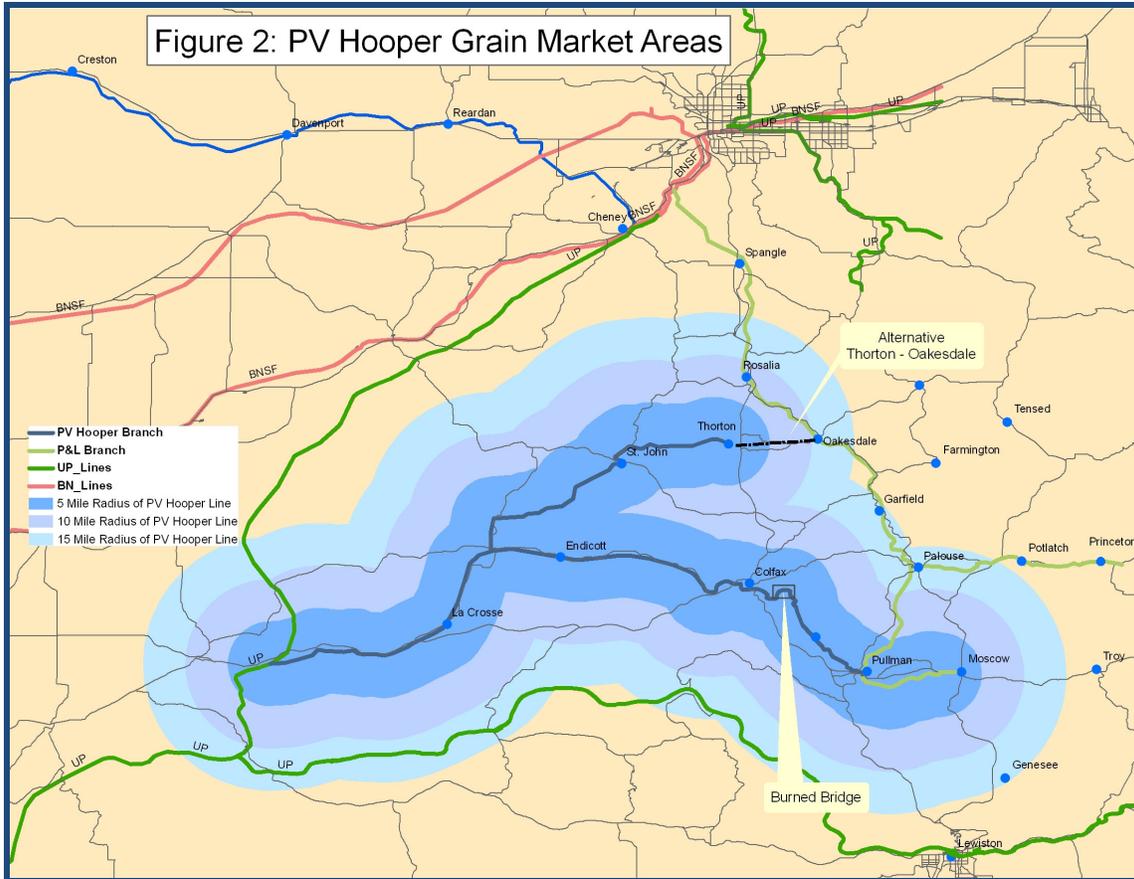


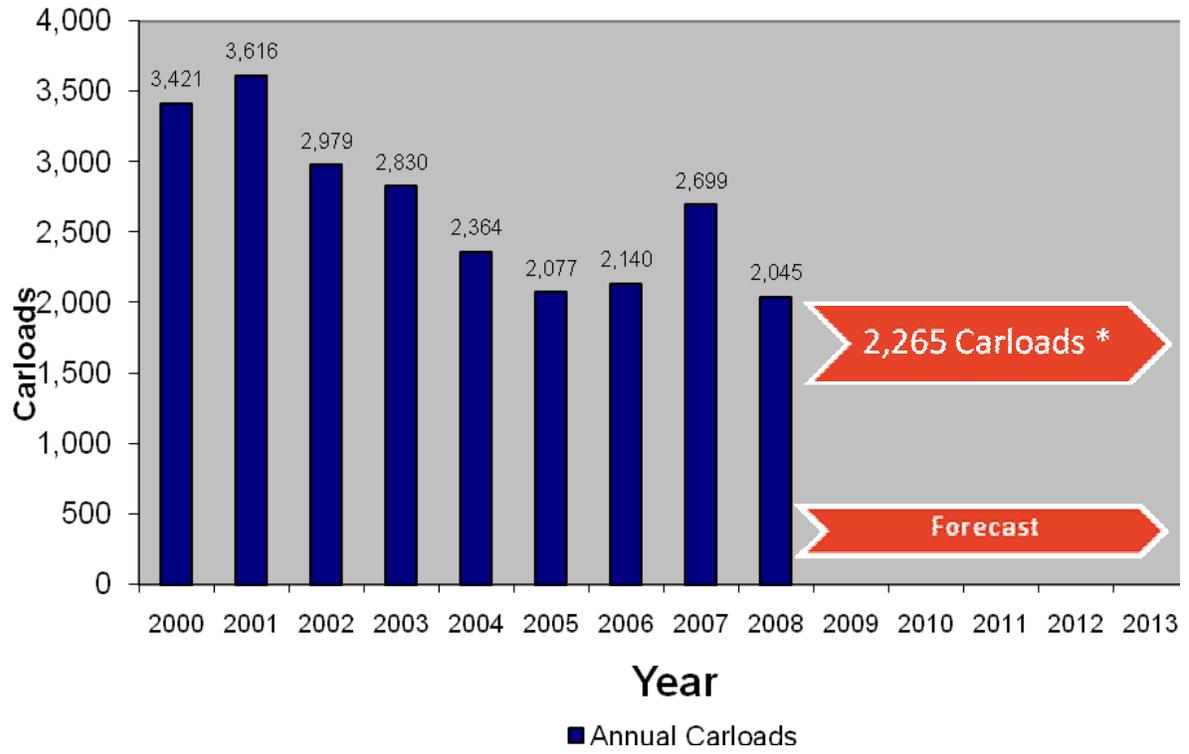
Table 2: Wheat Production Volumes for PV Hooper Market Area

Market Radius	Bushels	Rail Cars ¹	Trucks ²
5 miles	10,763,880	3,213	8,970
10 miles	21,884,991	6,533	18,237
15 miles	31,438,247	9,384	26,199

¹ Assumes rail car capacity of 3,350 bushels.

² Assumes truck capacity of 1,200 bushels and 72,000 pounds.

Figure 3: PV Hooper Line Car Loads



*Estimated from the previous six years of traffic with a standard deviation of 272 carloads.

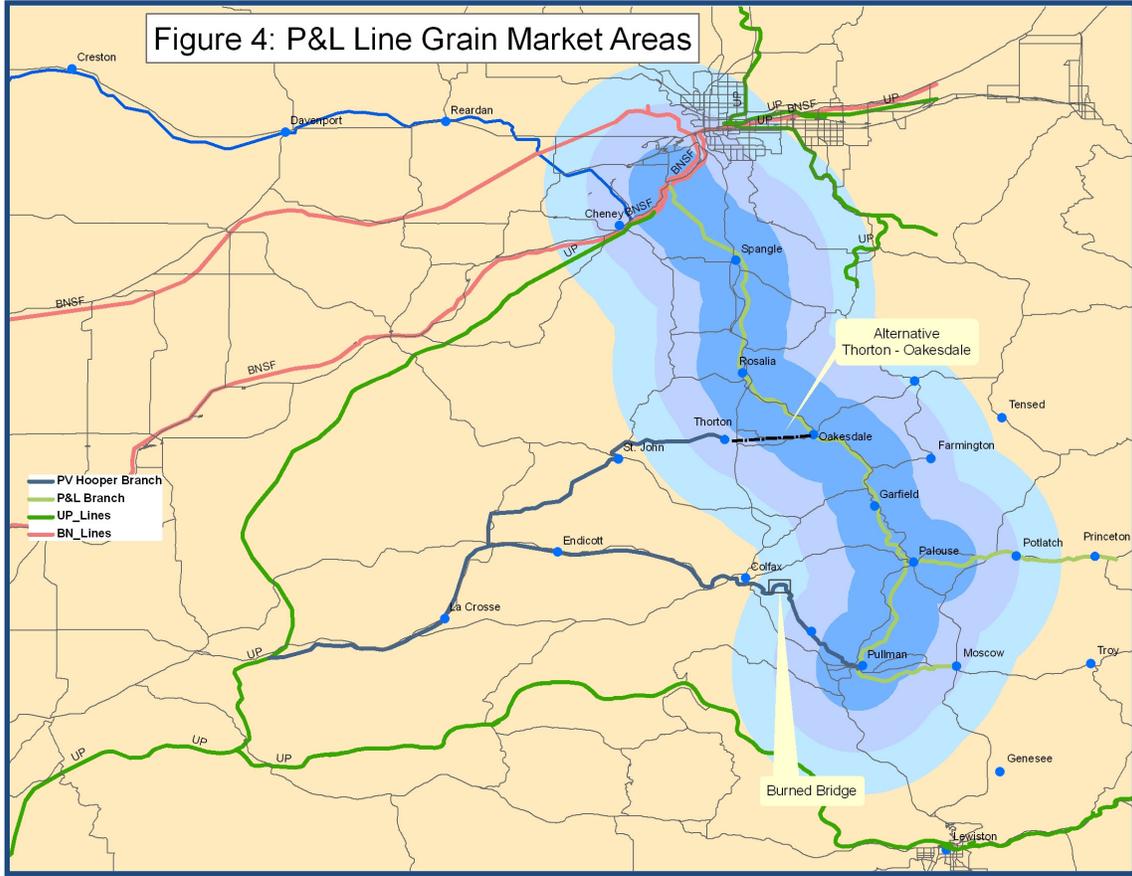


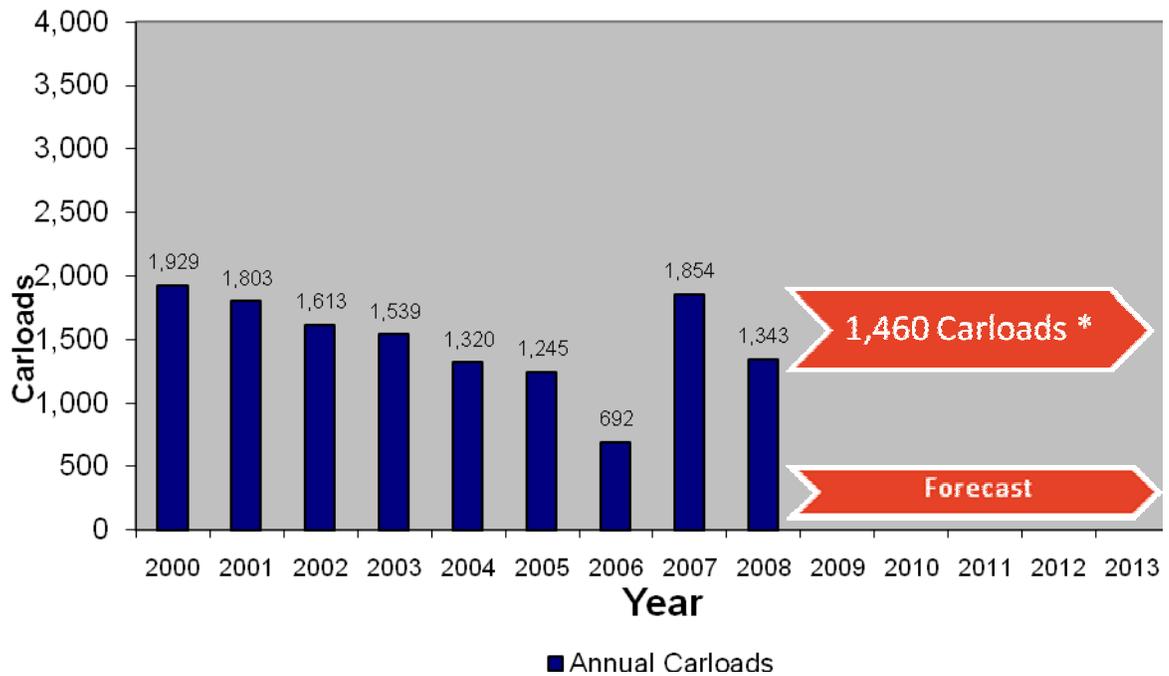
Table 3: Wheat Production Volumes for P&L Branch Market Area

Market Radius	Bushels	Rail Cars ³	Trucks ⁴
5 miles	8,080,007	2,412	6,733
10 miles	15,164,853	4,526	12,637
15 miles	19,913,890	5,944	16,595

³ Assumes rail car capacity of 3,350 bushels.

⁴ Assumes truck capacity of 1,200 bushels and 72,000 pounds.

Figure 5: P&L Line Car Loads



*Estimated from the previous six years of traffic with a standard deviation of 245 carloads.

The actual specific geographical boundary of each of these markets is continually changing. The boundaries fluctuate with different rates and capacity availabilities based upon current market conditions, world grain demand, time of year and the individual transportation services required by grain merchants and handlers throughout the region. In eastern Washington the entrepreneurial ability of individual elevator managers can also reshape these boundaries. While distance and geographical proximity play a significant part in where grain is shipped, availability of rail cars, quality of rail service, availability of storage capacity, contract terms, and price from grain merchandisers also impact the proportion of grain claimed by the rail segment versus truck or barge. One would expect that as distance to the river increases for grain producers or elevator operators, rail shipments become the more attractive and competitive alternative, subject to availability and price.

One alternative to truck barge is the successful rail barge shuttle currently active on the PV Hooper Branch, where the benefits of the barge volumes and associated rates are combined with a rail shuttle rate that competes very well, away from the river. In close distances, truck barge is still the competitive alternative, affecting the grain available to the PV Hooper. Further away from the river the PV Hooper does compete with some success against the truck barge movement. Overall rail handles about 45 percent of the movement versus 55 percent for the truck barge from that area. Along the P&L Branch there is no rail barge movement, but the

truck barge movement accounts for almost 40 percent of the movements, based on earlier surveys and interviews with shippers.

The historical and current carload volumes on the two branches are indicated in Figures 3 and 5, in addition to a forecast of carload volume through 2013. These historical data come from the railroads operating in each of the years, Watco early in the time period, the combination of Watco and the W&I on the P&L in 2007, and solely the W&I in 2008. Discussions with the elevator managers and railroad managers suggest that the carload traffic forecast on the PV Hooper Branch will be stable in the future, with some risk of reduced traffic. Correspondingly, the P&L Branch is expected to see an increase in freight traffic. The rationale and extent of these flow changes is discussed in the next section.

Market Assessment under Alternative Reconnection Options

Option I: Reconstruction of the Risbeck Bridge

The reconnection of the P&L Branch with the PV Hooper by reconstructing the Risbeck Bridge did not receive much interest or support from the firms and individuals interviewed for this project. Only one firm had been using the segment from Colfax to Pullman prior to the trestle burning. Approximately 250 cars per year of fertilizer were delivered to the firm's facility at Willson Siding near Moscow, Idaho.

Since the Risbeck Bridge burned, that firm, a major fertilizer company in the region, has been receiving the same amount of product via Marshall and the P&L Branch. The industry shippers for those products are the ones that choose the transportation mode and pay the tariff for the movement into the Palouse region. In the almost two years since the loss of the bridge, no increase in tariff has been felt by the fertilizer company. The company expects, though it is uncertain, that any increase in tariff might result in a marginal increase in the price of the product delivered to the Willson Siding. It is possible that the tariff hasn't been identified as a source of increased prices, because the cost of fertilizer was, until recently, dramatically increasing. In recent months the price of fertilizer, and probably the associated margins, have been significantly decreasing, suggesting any increased cost via the P&L Branch might be charged to the fertilizer firm in the future. But at this point no financial impact has been noticed. It should be noted that the fertilizer firm is considering purchasing a spur to guarantee access to railroad capacity and service.

The current impact of the loss of the Risbeck Bridge is basically a shift of 250 cars or so from the PV Hooper Branch to the P&L Branch. Other firms were sought out to determine if there might be movement relevant to

this segment of the branch in the future. None were identified that would be users of the Pullman to Colfax segment. The only future usage was the possibility of coal or biomass feedstocks being moved to Washington State University. These would be used in the modified old power plant that formerly used coal to supply heat to the campus. A committee has been formed and a study of the technical and economic feasibility of the plant is underway, with one of the authors of this report interacting on the transportation and logistics component. Alternative feedstocks could be coal (45,000 tons), woody biomass (138,000 tons), or wheat straw (85,000 tons). The report is expected to be completed this spring but initial indications are such movements would be by truck or over the P&L Branch.

Option II: Extension of the Thornton to Oakesdale Line

Reconnection the PV Hooper and the P&L Branches by extending the PV Hooper Branch from Thornton to Oakesdale over the abandoned UP route is far more complex. Significant changes in the elevator industry structure are under consideration, with some transportation innovations being the main theme.

The tight competitive and potentially complementary relationship between the PV Hooper and P&L Branch can be seen by examining Figures 2 and 4 above. The overlapping market zones, derived from both of the rail branches, indicate that there can be strong competition for grain volume among elevators on the different branches. Notably, large production areas can be found in the locations of Endicott, St. John, Thornton, Colfax, and even Rosalia. The survey showed that elevators at these locations were on the bubble as to which direction the grain volume might move if the branches are reconnected between Thornton and Oakesdale. The two branches are separate but are economically intercombined, and could possibly be administratively and managerially combined in the future (see earlier assumptions from WSDOT).

The economic evaluation of grain flows on the two branches is further complicated by the possibility that a 110-car loading facility will be developed in Oakesdale. The elevator firm developing the concept has reached agreement with BNSF on basic rate terms, and on operational and physical requirements for a facility. Two trial runs of a “co-load” scheme, where 26-car or 52-car loads from different shippers are combined to form a 110-car train and moved to Marshall on the BNSF in a single tariff load, have been successfully completed. The cost savings from this co-loading is not certain but appears to be in the 3 to 5 cents per bushel range.

It is expected that this shuttle alternative could draw train segments from both north and south of Oakesdale, all on the P&L Branch. It is expected

that this savings may allow some of the grain now moving by truck barge to return to the railroad branch, though the amount is still uncertain at this time. Barge companies and some elevators in the area have a substantial amount of fixed and paid for investment on the river. Those companies could react competitively depending on how close to the river the rail mode can compete with truck movements to barge facilities.

The reconnection of the branches by reconstructing the segment between Thornton and Oakesdale may be beneficial to the 110-car loading facility. This facility is expected to draw some grain from the west as well as from the elevators south and north of Oakesdale. Discussions with the elevator managers and examination of current and potential rates suggests that the new facility may be able to compete to some degree and at some distance, into the shuttle train currently operating so successfully on the PV Hooper Branch to the Wallula barge facility. Again, the barge operator at Wallula could react to reduce the economic inducement to move wheat from the PV Hooper Branch to Oakesdale.

Further with the extension of the Thornton to Oakesdale line, some marginal grain may be drawn from the Thornton area onto the P&L Branch, even without a full 110-car loading facility. However, this grain may be moved by truck because of the lower rates available from truck versus rail for such a short haul. Such truck movements would have to move on all weather roads in the area and such movements are considered difficult by the interviewed elevator managers. The final rate available from BNSF for all the differing situations will be the driving factor, as it commonly is in these marketing situations.

The estimates of the volume to be handled by this 110-car loading facility range from 15 million to 20 million bushels. This is the equivalent of 5,000 to 6,750 carloads per year for the P&L Branch. Representatives of the wheat industry note there is a loss of marketing flexibility when most grain is moved by 110-car units. Further they note that the UP seems to be reaching capacity on its main line with the significant amounts of Canadian grain and other products currently moving south to tidewater terminals.

A forest products firm is also a significant user of the P&L Branch, moving about 300 cars annually. The major lumber company accessing the branch states that railroad access is critical, with markets all over the nation. The Thornton to Oakesdale extension is very attractive to this firm, because it wants UP connections to the important Los Angeles and Los Vegas markets. It has found that rates from the railroads are more competitive when access to both the UP and BNSF is available, as the extension would allow. This 300-car volume is expected to be doubled in

the future as a new mill for small logs is completed, though the recent market softening and credit expenses have delayed completion. The lumber company is also considering buying the spur that connects with the P&L to their plant in Idaho.

It appears that the extension has the ability to marginally increase the volume of grain moving east to Oakesdale, whether it is for the 110-car facility or the co-loading scheme, and whether it goes by rail or truck to Oakesdale. This puts more grain on the P&L Branch, further increasing the potential viability of this branch, as has been noted by other elevator managers on that branch. The usage of this branch might also be increased as the forest products firm reaches out to the new rail accessible markets in the south via the UP at Hooper and increases output and traffic in reaction to those new markets.

Industry representatives spoke favorably about the market flexibility that the extension would provide, with two Class I railroads providing cars, power, and differing rates to alternative markets. Car availability was mentioned often as a benefit but several managers simply felt it was a matter of paying a cent or two over tariff or using the secondary market to access cars as needed.

Interviews were conducted with a fuel distributor and a minerals development and mining company to see if future traffic could be identified. The fuel distributor said they currently were using trucks for their shipments and did not feel they would be changing in the near future. The movement comes from a terminal in Spokane, where it has been off loaded and put on trucks. The firm did express some interest in rail if it ever fit into their logistical arrangements, and in fact are studying the possibility of putting in a spur if it makes economic sense. The current economic conditions have delayed that study.

The minerals and mining company in Idaho had developed their business plan, based on trucking to their future terminal in Lewiston and rail shipment from there to the final markets in Taiwan and Japan. The PCC Rail System is simply not in their business plan. They had considered trucking to a local location and using a short-line railroad in Idaho, but the investment wasn't economically warranted. They are expecting to move 300,000 tons per year of feldspar and quartz down to their processing plant and terminal in Lewiston.

Option III: Maintain Status Quo

Currently the two railroad segments are not connected, except through a very roundabout route over a Class I railroad. If this continues the impacts are uncertain but reflect the discussion above. Potential flexibility and

choice between Class I carriers, with accompanying car availability, rate structures, innovativeness, and overall quality of service, are generated by competition and would be lost if the status quo continues. Shippers would still probably be able to access the co-loading option and the 110-car train loading facility in Oakesdale as it becomes available. Some traffic to the west of Oakesdale, accessible with the extension, would not be available, decreasing traffic and putting some stress on the P&L Branch. The advent of the co-loading scheme and 110-car unit train facility may generate more traffic on the rail branch, including pulling some grain back from the truck barge pattern. Over time this could decrease the volumes on the river, putting pressure on barges to either raise rates to recapture revenue or lower rates to recapture traffic. The outcome is uncertain at this time.

Report Findings

Using a review of literature on the competitive structure of transportation in the area, combined with updated traffic flow data provided by the operating railroad managers, along with a region-wide survey of shippers and industrial representatives, the following conclusions can be drawn.

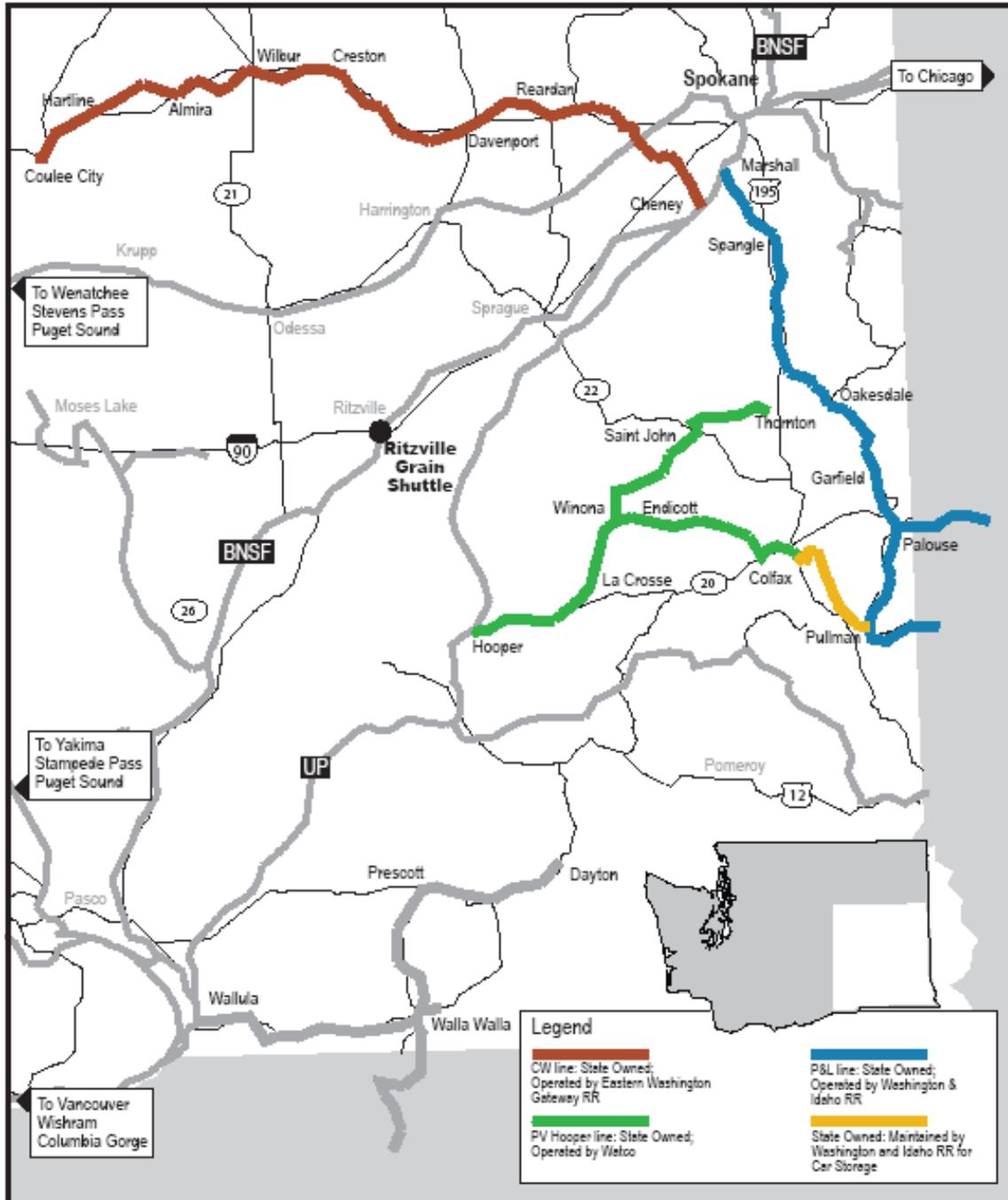
1. Benefits to reconnecting the railroads do exist, but they are not easily quantifiable nor are they certain. The extension of the Thornton to Oakesdale line offers access to two Class I railroads to many of the stations on both branches. This could give shippers new marketing flexibility as well as the benefits of potential competition between the Class I railroads. There may also be increased access to rail cars due to the access to both lines' pool of cars. But all of these are admittedly expectations and not proven at this point.
2. The benefits of reconstructing the Risbeck Bridge are less obvious. Given the location of the connection and operational problems created by a significant grade to Colfax, fewer stations would be given access to both major railroads compared to the reconnection between Oakesdale and Thornton. The existing shipper that previously used the Colfax to Pullman connection could realize lower rates in the future. The potential of this line segment to move new traffic or be available to aid in economic development in the future also exists, but only to a marginal degree. Such traffic and development is speculative at this point.
3. Major marketing changes are coming to the region. The advent of co-loading and the potential 110-car loading facility at Oakesdale will reshape the landscape of traffic flow. It will take time to see just how dramatic that is and what the economic reach of these innovations are. The shuttle on the PV Hooper is very competitive and is expected to

remain so. Little loss to the extended Thornton to Oakesdale line from that movement is expected; the most might come from the Thornton area of production and even that may move by truck to Oakesdale.

4. The extension of the Thornton to Oakesdale line, along with the co-loading scheme and the 110-car facility, may decrease the amount of grains moving by truck to barge facilities on the river. The fixed investment of firms on the river, some owned by firms in the county, may mitigate the extent of this shift.
5. No significant advantages or disadvantages to communities from any of the three alternatives were identified in the survey of affected or potentially affected business or entities.

In summary, the potential impact of the extension from Thornton to Oakesdale will be easier to identify with certainty within about two years. Until then, quantifiable benefits amounting to or exceeding the costs of reconnecting the branches under either option were not found. Benefits of extension do exist, but are uncertain at this point.

Appendix A: Map



Appendix B: List of Firms Contacted and Interviewed

1. McGregor Company
2. Pacific Northwest Farmers Cooperative
3. Whitgro, Inc.
4. Northwest grain Growers
5. Coag
6. Bennet Lumber Products
7. Palouse Grain Growers
8. W & I Railway Company
9. PCC Railroad (Watco)
10. Schweitzer Engineering
11. I Minerals
12. Wallace grain and Peas
13. Busch Distributing
14. Washington Grain Alliance
15. Centennial Mills
16. Spokane Seed
17. BN Lentil
18. Primeland
19. AshGrove Cement
20. BNSF
21. PCC Rail Authority