The Union Pacific Railroad Line, Timber and Southwest Montana







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About this Report

Representatives of the timber industry and conservation community have proposed a collaborative plan for managing the Beaverhead-Deerlodge National Forest in Southwest Montana. These interests asked Headwaters Economics to analyze the questions below:

- 1) How important is timber to the Union Pacific Railroad Line?
- 2) How crucial is the Union Pacific line to local timber operators?
- 3) How important is Sun Mountain Lumber to the Union Pacific Railroad Line?
- 4) Are there anti-competitive implications if the Union Pacific line goes out of business?

Background – Railroads in Montana

Rail lines in Montana cover 3,344 miles, transporting trains from eight carriers: the Burlington Northern Santa Fe, Montana Rail Link, Montana Western Railway, Union Pacific Railroad, Amtrak, Rarus Railway, Missouri Valley & Western Railroad, and the Yellowstone Valley Railroad. A ninth railroad company is proposed, the Tongue River Railroad (see map on page 8 of this report).

In Montana, lumber and wood products represent five percent of the product volume (2 million tons, out of a total of 40 million tons) carried over rail lines. The majority of rail cars originating or terminating in Montana carry coal (69% of total), petroleum products (10%), and grain (8%). Together these three products represent 87 percent of rail volume. Lumber and wood products represent the fourth largest commodity carried on trains that either originate or terminate in the state.¹



(Originating and terminating, not counting bridge traffic; total shipments = 40 million tons)



Source: Rail Freight Competition Study, 2004.

The Union Pacific (UP) has 125.2 miles of rail in Montana (3.7% of the state's rail miles), which runs from the Port of Montana at Silver Bow (near Butte) to the Idaho Border (along Interstate 15) and on to Salt Lake City via Idaho Falls and Pocatello.

The UP carries a small minority (0.7%) of overall rail car volume in the state (see table below). Even if you exclude "bridge" traffic (*i.e.*, traffic crossing but not originating or terminating in the state), UP still carries a small minority of rail volume. Burlington Northern Santa Fe dominates rail traffic in Montana.²

Montana Rail Volume (# of cars)			Union Pacific (% of total)
Originating	346,858	4,080	1.2%
Terminating	55,617	1,755	3.2%
Bridge traffic	1,201,190	5,414	0.5%
Total	1,603,665	11,249	0.7%

Source: Rail Freight Competition Study, 2004; Montana Branch Line Study, 2004.

Although UP's track mileage and cargo volume are small, there are at least two reasons why it remains important to southwest Montana:

- For many producers the UP line is the only connection to markets to the south, for both originating and terminating traffic. This is especially true for bulky products carried over longer distances, when trucking is much less viable as a transportation alternative.
- The UP line meets the Burlington Northern Santa Fe railroad at the Port of Montana (Butte-Silver Bow). This is the only place in Montana where two Class I railroads come together from opposite directions, allowing the transfer of goods (east-west on BNSF and north-south on UP).

How important is timber to the Union Pacific line?

Timber-related products are a significant portion of what the UP line carries. The figure on the next page shows that the majority of "originating" volume (*i.e.*, product exported out of state: 6,911 cars in 1999) carried by the UP line is lumber and wood products (37%) and paper and allied products (5%). In recent years, these timber-related commodities account for 42 percent of the volume carried on the UP line for commodities that originate in Montana.³



Union Pacific Carloads Originating in Montana

Source: 2000 Montana State Rail Plan Update.

Jared Gooch, a business manager for UP, confirmed that lumber and wood products are the largest cargo Union Pacific ships out of Montana today, making up more than half of all originating loads. Lumber and wood products from Sun Mountain Lumber make up the majority of this cargo.⁴

Little or no raw lumber is shipped by UP into the state today. According to Sherm Anderson, owner of Sun Mountain Lumber, UP no longer has bulkhead flat cars capable of carrying raw logs.⁵

Mark Darlow, accounts manager at the Silver Bow Port of Montana, believes "The Union Pacific can easily increase traffic to and from Montana." However, he thinks their pricing strategy is pushing business away for the simple reason that relatively short haul traffic between Silver Bow and Salt Lake City (roughly 400 miles) is less profitable than higher volume, longer haul traffic on main lines.

Mr. Darlow indicated that UP pricing for rail cars running from Silver Bow to Salt Lake City increased slightly to \$2,094 on March 1, 2007 (UP adjusts rates annually at this time of year).⁶

As an originating cargo today, dimensional lumber processed by mills in southwest Montana is the largest cargo the UP carries on its rail line.

There is some indication that traffic on the UP line is beginning to rise. The figure on the next page shows recent traffic history on the UP line, in terms of originating and terminating cars, as well as total traffic, which includes "bridge" or pass-through traffic.

Originating traffic has declined since 1999, while terminating traffic is on the rise, as is total traffic. From 2002 to 2003, the UP increased their traffic volume in the state by 1,621 carloads, mainly from "bridge" traffic that does not originate or terminate in Montana.



Source: Montana Branch Line Study. Data not available for 1997.

In and outbound traffic may continue to rise for several reasons: (1) Pendleton Flour in Idaho is importing carloads of grain from Montana; (2) Idaho Asphalt is importing road asphalt from Silver Bow, (3) a new General Motors facility is generating traffic that passes through the Port of Montana at Silver Bow,⁷ (4) Butte's Silicon Mountain Technology Park is expected to attract companies that will use the UP line, and (5) the recent announcement that United Building Center is adding a distribution center in Butte has also brought hope for increased rail traffic.⁸ These new sources may bring continued growth, a more diverse portfolio of customers, and consequently, less reliance on timber.

How crucial is the Union Pacific line to local timber operators?

The Union Pacific line is critical to some timber operators as a way to ship products out of state, especially to the south. The UP could be, but is not now, a source of raw logs from out of state.

One of the most important aspects of the UP line is its direct connection to markets in the south. For example, Sun Mountain Lumber (SML) ships 97 percent of their milled goods out of state. Most of it goes to "long haul" destinations like Texas. At present they ship 90 percent of their out-of-state products by UP, six percent by BNSF, and four percent by truck.⁹ For Sun Mountain Lumber, BNSF may not be viable as a transportation alternative because they lack direct connections to many markets in the south.

Another key calculation is cost. Except for short hauls to areas in and just outside Montana, trucking is too expensive for a high volume cargo like dimensional lumber. The greater the distance to market the less viable trucks become as carriers.

The UP used to bring raw logs into the state for area mills to process. This was the case when Louisiana Pacific operated the mills now owned by Sun Mountain Lumber. At present, Sun Mountain Lumber imports no raw logs by train, largely due to rail price and capacity constraints explained above. All of the raw logs they process in their solid stud mill are trucked in from the region, mainly Montana and Idaho. At the same time, most of the "shorts" they use in their finger joint mill come from Canada and arrive on the Burlington Northern and Santa Fe railway.¹⁰

Operators like Sun Mountain Lumber's solid stud and finger joint mills would not be viable without rail connections. The UP line represents the one viable transportation method for area mills to connect to southern markets. In addition, rail imports of "shorts" and the future potential to bring in raw logs by rail represent current needs and future opportunities to meet mill capacity.

According to Sherm Anderson, owner of Sun Mountain Lumber, "We would go out of business without affordable Union Pacific rail service."¹¹

How important is Sun Mountain Lumber to the Union Pacific line?

In the 2000 Montana State Rail Plan Update and Rail Freight Competition Study, both commissioned by the state of Montana, the UP line was identified as "at risk." There is no single, agreed-upon indicator of railroad viability. Years ago the Federal Railroad Administration "established 20 carloads per mile [per year] as one of its criteria for federal funding assistance under the Local Rail Assistance Program." R.L. Banks, in the reports above, uses a more permissive range: 20 to 100 carloads per mile per year. Other factors are also important. They include: number of railroad customers, current and prospective; economic significance and variety of commodities carried; traffic during recent years; and physical condition.¹²

The 2000 Montana State Rail Plan Update and Rail Freight Competition Study calculate, respectively, that the UP line in Montana had 87 carloads per mile in 1999, and 90 carloads per mile in 2003. These numbers place the UP line at the lower end of the concern list in both reports.¹³ If UP were to lose a single large client like Sun Mountain Lumber, the line would fall (using the 2003 number for total carloads and assuming SML accounts for 60% of all originating cargo) to roughly 70 carloads per mile per year. This is a significant drop in volume, and would likely cut into the line's current viability and profitability.

Jared Gooch at UP cautions that the loss of a major client like Sun Mountain Lumber could stress the UP line significantly.¹⁴ Rail pricing and the availability of manufacturing inputs – raw logs and dimensional "shorts" – will in turn affect whether a shipper like SML can continue to move products on the UP.

Are there anti-competitive implications if the Union Pacific line goes out of business?

A 2004 study on the competitiveness of the railroad industry in Montana concluded that Montana is a "captive state" because it is effectively dependent on one railroad, the Burlington Northern Santa Fe (BNSF), which owns over 90 percent of the rail line in the state. Factors that have lead to this non-competitive situation include railroad mergers and consolidations, railroad bankruptcies, the state's geographic isolation from major market centers, and increases in railroad efficiency made possible by deregulation (*i.e.*, the Staggers Act of 1980).¹⁵ The report notes that "Virtually no other state has a rail system where one railroad monopolizes the route miles to the extent of over 90 percent."¹⁶

Montana Rail Link (MRL) may appear to add competition, but this is not the case, according to the same report. BNSF owns the mainline over which MRL operates; MRL must obtain permission from BNSF to perform an interchange with any other railroad; MRL origins are treated as BNSF origins in the latter's tariff books; and BNSF has agreed to provide to MRL a certain level of bridge traffic, on which the smaller carrier's financial performance depends. The report concludes that "[MRL] does not provide Montana a genuine competitive solution."¹⁷ In 2004, MRL carried 7.9 percent of the share of traffic in Montana (296 of the total 3,296 route miles), compared to 90.7 percent from BNSF. By comparison, the UP line constitutes 0.7 percent of the state's traffic.¹⁸

The negative results that follow from the lack of rail competition are numerous. They include: high shipping rates; reduced rail service to rural locations; depopulation of rural communities; loss of Montana jobs; limited transportation options; inhibition of industrial location in Montana; and reduced business development opportunities.¹⁹

Can anything be done to alleviate the situation? The study concludes, "It is unrealistic to think, however, that changes in the law mandating competitive access would cause Montana's rail issues to disappear. Montana would still have a relatively small transportation market, related to Montana's relatively small population, and secondarily to Montana's geographic position, hundreds of miles from commerce centers on the West Coast and Midwest."²⁰

It is also unlikely that trucking can substitute as a viable long-haul alternative. The report found that BNSF's pricing strategy is often to match trucking rates. And, trucking rates in Montana tend to be disproportionately high because freight leaving Montana is among the lowest valued in the nation.²¹

Because the UP line is small relative to BNSF, and because the other factors hampering the state, such as distance to markets, low value products and small population won't change soon, it is unlikely the maintenance or disappearance of the Union Pacific line will do much to change the overall anti-competitive nature of the railroad industry in Montana.

Closure of the UP line could have anti-competitive results for southwest Montana, however. Mark Darlow at the Port of Montana (Silver Bow) believes the UP line keeps BNSF price increases in check for shippers that move products through the Port.

The Port of Montana was formed to increase shipping competition and move more Montana products out of state. "Losing the UP line," according to Mr. Darlow, "would result in the loss of a significant diversity of shipping and distribution options." That could lead BNSF to increase prices and result in reduced traffic. "A lot of our business is created because of our relationship to the Union Pacific," says Mr. Darlow.²²

Conclusion

UP ships more lumber and wood products out of state than any other commodity. It is an important cargo for the railway. Lumber and wood products from Sun Mountain Lumber make up the majority of this cargo. In recent years, the railroad has added several important new customers, and overall cargo volume is on the rise. If this trend continues, then there may be a more diverse portfolio of customers, and consequently, less reliance on timber.

Without the UP line, mill owners would lose their only commercially viable transportation link to southern markets. Loss of this railway would render business for companies like Sun Mountain Lumber impractical. Even with the UP line in operation, UP pricing may make it hard for mill owners to keep shipping at current levels.

If UP were to lose a single large client like Sun Mountain Lumber, this would represent a significant drop in current volume, would likely cut into the line's current viability and profitability, and, according to UP, could stress the UP line significantly.

It is unlikely the maintenance or disappearance of the Union Pacific line will do much to change the overall anti-competitive nature of the railroad industry in Montana. However, the loss of the UP line could have a disproportionate impact on transportation competitiveness in SW Montana, as there is some indication that the relationship between the UP and the Port of Montana does help to maintain competitive pricing and market access.

It's not clear how high a priority UP's Montana line is to the company. This line represents a short spur line and is probably less profitable to operate than main lines connecting larger markets. The Staggers Act freed railways to become more profitable at the cost of requiring service to more rural and isolated areas.

The UP's decision about the future of it's Montana line may have more to do with corporate economics and what it takes to remain competitive as a publicly traded company than with events in Montana. For the foreseeable future, operating a competitive railroad in Montana will face the usual hurdles: distance to markets, low value commodities, and small population.



ENDNOTES

¹ Rail Freight Competition Study. Prepared for the State of Montana, Governor's Office of Economic Development. R.L. Banks and Associates, Washington DC and Railroad Industries Incorporated, Reno NV. October 29, 2004.

² Ibid.; Montana Branch Line Study, Phase II, "Other At-Risk Lines." September 9, 2004. Montana Department of Transportation. Prepared by R.L. Banks and Associates, Inc. Washington DC and Railroad Industries Incorporated, Reno NV.

³ 2000 Montana State Rail Plan Update. Montana Department of Transportation. Prepared by R.L. Banks and Associates, Inc. Washington DC and Harding ESE, Helena MT.

⁴ Jared Gooch, Union Pacific, personal communication, February 23, 2007.

⁵ Sherm Anderson, owner, Sun Mountain Lumber, personal communication, February 26, 2007.

⁶ Mark Darlow, accounts manager, Port of Montana, Silver Bow, personal communication, February, 27, 2007.

⁷ 2000 Montana State Rail Plan Update.

⁸ "Railroad not planning to sell immediately." August 6, 2006. Erin Nicholes, The Montana Standard, Butte MT.

⁹ Bruce Thomas, logistics, Sun Mountain Lumber, personal communication, February 21, 2007.

¹⁰ Sherm Anderson, owner, Sun Mountain Lumber, personal communication, February 26, 2007.

¹¹ Ibid.

¹² 2000 Montana State Rail Plan Update; Rail Freight Competition Study.

¹³ Ibid.

¹⁴ Jared Gooch, Union Pacific, personal communication, February 23, 2007.

¹⁵ Rail Freight Competition Study. Page 10. According to a study produced by the U.S. Department of Agriculture, quoted in the Rail Freight Competition Study, "Differential pricing allows railroads to extract higher prices from those shippers who cannot effectively use other modes of transportation." Page 14. Quote. Page 46.

¹⁶ Ibid., Page ES-4.

¹⁷ Ibid., Page 19.

¹⁸ Ibid., Pages 54-56.

¹⁹ Ibid., Page 80.

²⁰ Ibid., Page 81.

²¹ Ibid., Page 30.

²² Mark Darlow, accounts manager, Port of Montana, Silver Bow, personal communication, March, 20, 2007.

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Cover Photos: UP train, Sean Lamb; SML cargo, Tony Colter; Landscape, MWA file photo.