Testimony of Transportation Experts

Terry C. Whiteside, Principal, Whiteside & Associates

And

Gerald W. Fauth III, President, G. W. Fauth & Associates, Inc.

File Number: PLASAR-15-01-0004

Concerning

Union Pacific Railroad Company’s

Proposed Mosier Second Mainline Track Project

Prepared For:
Introduction

These comments are submitted by transportation consultants Terry C. Whiteside, Principal, Whiteside & Associates based in Billings, Montana, and Gerald W. Fauth III, President of G. W. Fauth & Associates, Inc. based in Alexandria, Virginia. We both have many decades of experience working on hundreds of projects and regulatory proceedings involving a wide-variety of transportation issues. Statements describing our backgrounds, qualifications and experience are attached hereto as Appendix A-1.

We have evaluated the potential impacts associated with Union Pacific Railroad Company’s (UP) planned $25 million and 4.02-mile track expansion near Mosier, Oregon, which was recently submitted to Wasco County for Scenic Area permitting. The proposed project would significantly expand an existing UP railroad line on either side of Mosier. **UP’s proposal would not provide the local health and safety benefits the railroad promises and it would result in a massive expansion in the number of trains that could travel through Mosier.**

Project Context

UP’s proposed track expansion through Mosier is on UP’s 185-mile mainline between Portland and Hinkle, Oregon. As can be seen from UP’s system map in Figure 1 on the next page, the Portland to Hinkle line is one of two heavy-duty, high-density UP mainlines in and out of the Portland area. The green lines on the map have a weight capacity of 315,000 lbs. (185 tons) gross car weight and can accommodate unit trains (i.e. trains made up of cars all carrying the same commodity). Hinkle is a major junction point, it is UP’s primary carload classification yard (where trains are broken down into individual cars and reassembled), and it is UP’s primary locomotive service and repair facility in the Pacific Northwest. Due to its location, small improvements to the railroad infrastructure through Mosier could have tremendous ripple effects throughout Wasco County and the Pacific Northwest.
UP Has Overstated the Potential Health and Safety Public Benefits of the Proposed Track Improvements

In a fact sheet that UP prepared and presented to the City of Mosier, it stated that the new track would allow two trains to pass one another on parallel track without stopping in a siding.
thus creating public benefits for Mosier residents including reducing noise and emissions from idling locomotives, eliminating the need to hold and meet trains on the existing siding, reducing horn blowing as train traffic passes stationary trains parked in the siding, and improving the movement of Oregon products to market.

While there may be some improvements compared to the current operations over the line – such as reducing noise and emissions from idling locomotives – these purported benefits will be more than offset by new health and safety problems associated with the increased traffic levels through Mosier. More trains through Mosier means more train noise, more train emissions and increased potential for rail accidents and spills. Moreover, more trains will increase the safety risk associated with pedestrian and vehicles collisions. Railroading is an inherently dangerous business and more trains mean more health and safety risks for the public.

**Significance of the Project**

The proposed Mosier double-track project involves only 4.02 miles of track, which is a relatively small segment in comparison to UP’s 32,100 route miles and the $25 million price tag is only a small portion of UP’s $4.3 billion in capital spending in 2015. In fact, UP maintains that the Mosier double-track project is just “one of nearly 1,500 Union Pacific will complete across its 32,000-mile network this year to help improve train operating efficiency, reduce motorist wait times at crossings and enhance safety.” As indicated herein, however, this relatively small project is a key component in UP’s demonstrated master plans to significantly increase its railroad capacity and traffic to and from the Pacific Northwest.

In its application to the County, UP has indicated that the project would eliminate “the single greatest operational bottleneck in entire 206-mile Subdivision.” UP admits that traffic for the entire Subdivision is directly impacted (“causes ripple effects of delays and inefficient
operations along the Subdivision”). As detailed below, addressing this single bottleneck would allow UP to move one to three more trains through Mosier and Wasco County per hour.

**UP Has Likely Understated the Current Average Number of Trains Per Day Through Mosier**

According to its Mosier area fact sheet, UP maintains that it currently moves about 25 to 30 trains per day through Mosier and the new double track would allow UP to move 5 to 7 more trains per day through Mosier – or 30 to 37 trains per day. However, UP’s application to the County states that UP “typically moves 20 to 30 trains a day through the project area, and anticipates a similar number of daily trains with implementation of the proposed project.” In other words, UP maintains that, although it will have the capacity to move at least 37 trains per day through Mosier with the proposed improvements, it will continue to only operate 20 to 30 trains per day. If this is the case, it is reasonable to ask why does UP need to expand its capacity over the line?

In its application, UP even implies that there will be *fewer* trains on the line by the utilization of larger trains. Even if UP utilizes longer trains, it is likely that more trains and substantially more carloads will move through Mosier.

This is borne out in the rapid increase in train traffic through Oregon in the past five years. Figure 2 below details this traffic increase. Based on the reported significant increase in UP carloads originating and terminating in Oregon in the last few years (e.g., 436,925 cars in 2013 to 554,020 cars in 2015), it is safe to assume that UP’s current peak traffic levels over the line likely exceed 35 trains per day. We urge UP to provide more information concerning current traffic levels through Mosier. We also suggest that the County conduct an independent railroad traffic study and count, in order to accurately determine the number of current UP trains per day moving
through Mosier, including a separate determination of loaded and empty oil trains moving through town.

**Figure 2**

**UP Carloads Originated and Terminated in Oregon**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cars Originated in Oregon</th>
<th>Cars Terminated in Oregon</th>
<th>Total Cars O&amp;T in Oregon</th>
<th>Total Cars O&amp;T Per Day in Oregon</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>179,014</td>
<td>261,840</td>
<td>440,854</td>
<td>1,208</td>
</tr>
<tr>
<td>2012</td>
<td>185,280</td>
<td>251,200</td>
<td>436,480</td>
<td>1,196</td>
</tr>
<tr>
<td>2013</td>
<td>185,848</td>
<td>251,077</td>
<td>436,925</td>
<td>1,197</td>
</tr>
<tr>
<td>2014</td>
<td>211,410</td>
<td>298,344</td>
<td>509,754</td>
<td>1,397</td>
</tr>
<tr>
<td>2015</td>
<td>237,165</td>
<td>316,855</td>
<td>554,020</td>
<td>1,518</td>
</tr>
</tbody>
</table>

*UP’s traffic to and from Oregon has increased since 2011 from 1,208 cars per day to 1,518 per day.*

Additionally, UP reported that in the month of March, 2016, 6 unit oil trains ran through the state of Oregon instead of 4 unit trains as originally forecasted. Most, if not all, of these oil trains moved through Mosier. The improvements proposed by UP would allow the number of unit oil trains to increase significantly.

**UP Has Significantly Understated the Additional Capacity (Trains per Day) Resulting From the Proposed Project**

UP has also understated the *additional* capacity (i.e., 5 to 7 trains per day) that double tracking the line through Mosier would provide. If UP is currently operating 35 trains per day over the line and if the line is operating at or near capacity, double-tracking the line and including Positive Train Control (PTC), should result in nearly doubling the capacity. It is safe to assume that, rather than increasing the capacity to 37 trains per day, the capacity over the double-tracked line could easily exceed 60 trains per day.
In 2007, the Association of American Railroads (AAR) released the National Rail Freight Infrastructure Capacity and Investment Study, which was an assessment of the long-term capacity expansion needs of the continental U.S. freight railroads and provided an approximation of the rail freight infrastructure improvements and investments needed to meet the U.S. Department of Transportation’s (U.S. DOT) projected demand for rail freight transportation in 2035. The report included the following approximation of the capacity associated with various track configurations:

**Figure 3**

**Practical Track Capacity (Trains Per Day)**

<table>
<thead>
<tr>
<th>Number of Tracks</th>
<th>Train Control System</th>
<th>Trains Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>1</td>
<td>No Signal and Track Warrant Control (NS-TWC)</td>
<td>16</td>
</tr>
<tr>
<td>1</td>
<td>Automatic Block Signaling (ABS)</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>No Signal and Track Warrant Control (NS-TWC)</td>
<td>28</td>
</tr>
<tr>
<td><strong>1</strong></td>
<td>Centralized Traffic Control (CTC)</td>
<td><strong>30</strong></td>
</tr>
<tr>
<td>2</td>
<td>Automatic Block Signaling (ABS)</td>
<td>53</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Centralized Traffic Control (CTC)</td>
<td><strong>75</strong></td>
</tr>
<tr>
<td>3</td>
<td>Centralized Traffic Control (CTC)</td>
<td>133</td>
</tr>
<tr>
<td>4</td>
<td>Centralized Traffic Control (CTC)</td>
<td>173</td>
</tr>
<tr>
<td>5</td>
<td>Centralized Traffic Control (CTC)</td>
<td>248</td>
</tr>
<tr>
<td>6</td>
<td>Centralized Traffic Control (CTC)</td>
<td>360</td>
</tr>
</tbody>
</table>

Based on these AAR estimates, the UP line through Mosier should currently have a practical capacity of 30 to 48 trains per day, which is within the range of UP’s current traffic levels (20 to 35 trains per day) and projected capacity levels (an additional 5 to 7 trains per day). This table also demonstrates that UP has significantly understated the practical capacity of the improved line, which could range from 75 to 100 trains per day.
**Estimated Potential Trains Through Mosier**

UP’s application states that “The proposed project is not linked to the transport of any single commodity, nor is it a response to a planned rapid expansion of rail services.” It should be clear that UP has planned the proposed Mosier improvements and other capital improvements in Oregon, Washington and Idaho in order to significantly increase its capacity to handle significantly higher railroad traffic levels to and from the PNW.

While some of the oil and coal terminals in the PNW have been tabled or denied permits, there is still the potential for significant growth in coal and oil exports. Now that Congress has lifted the crude oil export ban, increased oil exports to Asian markets are likely when market conditions improve. In addition, fossil fuel terminals in Portland anticipate significant growth over the next 20 years.¹ UP clearly has its eyes focused on increasing oil and export coal shipments to the Pacific Northwest. We estimate that it is reasonable to assume that UP anticipates 6 to 12 additional oil trains per day and 5 to 10 export coal trains per day through Mosier, which would equal 36 to 57 trains per day or 1.50 to 2.38 trains per hour:

**Figure 4**

**Estimated Potential Trains Per Day Through Mosier**

<table>
<thead>
<tr>
<th>Item</th>
<th>Trains Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Estimated Current Trains Through Mosier</td>
<td>25</td>
</tr>
<tr>
<td>Potential New Loaded &amp; Empty Oil Trains</td>
<td>6</td>
</tr>
<tr>
<td>Potential New Loaded &amp; Empty Export Coal Trains</td>
<td>5</td>
</tr>
<tr>
<td>Estimated Potential Trains Through Mosier</td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

¹ See figure 6 here: https://www.portlandoregon.gov/bps/article/582407
This projected traffic level (36 to 57 trains per day) would fall well within the practical capacity of the improved line (75 to 100 trains per day).

**Conclusion**

In its application materials and in its public discourse, UP has claimed that there will be net benefits to Mosier and Wasco County of improved health and safety at very little cost in terms of additional train traffic. However, in our expert opinions, the health and safety of communities along the rail lines will suffer due to the massive increase in train traffic that this proposal would allow. Railroads can be made safer but they cannot be made safe. The increase in train traffic that this proposed project would allow will make Mosier and Wasco County more dangerous places to live.
STATEMENT
OF
BACKGROUND, QUALIFICATIONS AND EXPERIENCE
OF
GERALD W. FAUTH III

My name is Gerald W. Fauth III. I am President of G. W. Fauth & Associates, Inc. (GWF), an economic consulting firm with offices at 116 S. Royal Street, Alexandria, Virginia 22314. I am a recognized expert on transportation issues with over 38 years of experience in the private sector and in the Federal government.

This statement generally describes my background, qualifications and experience. The majority of experience has involved economic, regulatory, public policy and legislative issues primarily associated with, or related to, the U. S. railroad industry. Most of my work has involved regulatory proceedings and related projects before, or related to, the U.S. Surface Transportation Board (STB) and its predecessor, the Interstate Commerce Commission (ICC).

I have extensive experience in working in regulatory and other proceedings and projects involving: major railroad mergers and acquisitions; railroad transactions; railroad line construction and capital improvement projects; railroad line abandonments; railroad rate reasonableness and related economic issues; railroad operations and related environmental and safety concerns; and other railroad related issues. These matters have involved railroad issues on a nation-wide, system-wide and individual railroad line basis.

GWF has been engaged in the economic consulting business for over 50 years. My part time affiliation with GWF began in 1972. I began working for GWF on a full-time basis on May 15, 1978 and was employed by GWF continuously until November 1, 1999 at which time I took a leave of absence in order to take a position with the STB. At the STB, I served as Chief of Staff for one
of the three Board Members appointed by the President, Vice Chairman Wayne O. Burkes. I returned to GWF and consulting work effective June 23, 2003 after Mr. Burkes resigned his position to run for a political office.

Over the years, I have submitted expert testimony before ICC, STB, state regulatory commissions, courts and arbitration panels on a wide-variety of issues in numerous proceedings. In addition, I worked for 3½ years at the STB where I reviewed, analyzed and made recommendations on over 600 written formal decisions that were decided by the entire Board. These proceedings and decisions involved all matters of STB jurisdiction and had an impact on the transportation industry and the national economy.

Railroad transactions have long been the subject of ICC and STB regulatory proceedings and other matters involving: railroad merger and acquisition approval and oversight proceedings; railroad line abandonment proceedings; line sales; feeder line application proceedings; and other railroad transaction-related proceedings. I have been involved in numerous such proceedings and projects as an expert witness and as an STB staff advisor.

For example, I was an expert witness in the last two major Class I railroad merger proceedings: STB Finance Docket No. 32760, Union Pacific Corporation, et al. – Control and Merger – Southern Pacific Rail Corporation, et al, and STB Finance Docket No. 33388, CSX Corporation, et al., Norfolk Southern Corporation, et al. – Control and Operating Leases / Agreements – Conrail, Inc., et al. My testimony in these major merger proceedings concerned the potential adverse competitive impact of these mergers on two key areas.

In addition to my work in major railroad merger proceedings, I have submitted expert testimony in other railroad finance docket and abandonment proceedings before the ICC and STB. In these proceeding, I have developed and submitted evidence relating to the impacted railroad traffic and the valuation and economics of the railroad line at issue (such as: going concern and net liquidation values; freight revenues and traffic; operating costs; maintenance costs: right-of-way valuation; etc).
In addition to my testimony in railroad mergers and other rail finance and transaction proceedings, I served as an original member of the Conrail Transaction Council, which was established by the Board in Finance Docket No. 33388. This council consisted of representatives of the CSX, NS and shipper organization and provided a forum for timely and efficient communication of information and problems concerning the transaction. I was one of the original members of the Conrail Transaction Council and attended every meeting of the council until my employment with the Board.

During my time at the Board, I was actively involved in the STB merger oversight proceedings associated with the UP/SP and Conrail transactions. Perhaps the most significant merger-related proceedings that I was involved in during my time at the Board were STB Ex Parte No. 582, Public Views on Major Rail Consolidations and STB Ex Parte No. 582 (Sub-No.1), Major Rail Consolidation Procedures. These STB major rulemaking proceedings involved extensive oral hearings and written testimony from hundreds of witnesses. The Board concluded that its existing rules governing railroad mergers and consolidations, which had been developed nearly 20 years earlier, were not adequate for addressing the broad concerns expressed and initiated a major rulemaking proceeding which resulted in a major revision to the Board’s railroad merger rules.

I have a significant amount of experience working on complex economic issues involving railroad rate reasonableness. I was actively involved in the initial ICC regulatory proceedings over 30 years ago in which the ICC first proposed and established guidelines which have since evolved into the STB’s current railroad rate reasonableness guidelines. I was actively involved in several of the first cases to test the ICC’s then proposed guidelines. For example, I was the primary expert witness in ICC Docket No. 40073, South-West Railroad. Car Parts Co. v. Missouri. Pacific Railroad, which was the first case to test the ICC’s proposed simplified guidelines, which have since evolved into STB’s Three-Benchmark approach. I submitted extensive written and oral testimony in STB Ex Parte No. 646 (Sub-No. 1), Simplified Standards For Rail Rate Cases, on behalf of a group of 30 major stakeholders and my testimony was cited by the Board in its decision served September 5, 2007. My work and testimony in these ICC/STB proceedings has helped shape the STB’s current railroad rate reasonableness guidelines.
I have extensive experience in working in STB regulatory proceedings, litigation and other projects involving railroad valuation issues, such as the valuation of railroad track, right-of-way and equipment. These matters have involved railroad valuation issues on a nation-wide, system-wide, individual line and individual movement scope and basis.

Many of our projects have involved the development of railroad variable cost analyses based on the application of URCS and its predecessor, Rail Form A (RFA). URCS is used to determine STB jurisdiction and is an integral component of the STB’s Full-SAC method, new Simplified-SAC standard and recently modified Three-Benchmark approach.

I have an extensive working knowledge of the development and application of URCS and RFA. I have prepared URCS cost analyses for thousands of individual railroad movements. I also submitted expert testimony in ICC Ex Parte No. 431 (Sub-No.1), Adoption of the Uniform Railroad Costing System as a General Purpose Costing System for Regulatory Costing Purposes and more recently in STB Ex Parte No. 431 (Sub-No. 3), Review of the Surface Transportation Board’s General Costing System.

Proceedings before the Board often involve traffic and market analyses using the Board’s Waybill Sample, which is a computer database of approximately 600,000 records of sampled railroad movements. I am extremely familiar with this railroad traffic database. Over the years, I have performed hundreds of analyses using this data, which has been used as evidence in merger and other proceedings before the Board.

Co-authored, with Terry Whiteside, the Study Entitled: “Heavy Traffic Ahead” in July 2012 and the follow-up study entitled: “Heavy Traffic Still Ahead.” (November, 2013)

I am a 1978 graduate of Hampden-Sydney College in Hampden-Sydney, Virginia where I earned a Bachelor of Arts degree. My major areas of study were history and government. My senior paper in college dealt with the History of Railroad Deregulation. I am a 1974 graduate of

My professional memberships included the Transportation Research Forum and the Association of Transportation Law Professionals.
STATEMENT
OF
BACKGROUND, QUALIFICATIONS AND EXPERIENCE
OF
TERRY WHITESIDE

Terry Whiteside is a principal in Whiteside and Associates (P. O. Box 20574, Billings, Montana 59104-0574, Phone: 406-245-5132), a transportation and marketing consulting firm. Terry and wife, Beverly who is a Montana native enjoy living in the Big Sky country of Montana. Terry has over 30 years of experience in transportation with both carrier and shipper representation. He has worked in private industry for several Fortune 500 companies including Conoco, Continental Pipeline and several of the Williams Companies and later headed up the Transportation Division of the Montana Department of Agriculture and the Litigation Bureau of the Transportation Division of the Montana Department of Commerce. W&A today represents most of the Wheat and Barley Commissions throughout the Western half of the U.S. The firm does work for utilities, lumber companies, agricultural manufacturers and government entities and most importantly the growers of grain.

Terry Whiteside (TCW), principal, has experience in transportation with both carrier and shipper representation. He has worked in private industry for several Fortune 500 companies and did extensive transportation planning, management and litigation work for the State of Montana. Terry has worked for both carriers and shippers. TCW was head of a tariff department for a major Class I carrier and is an expert in tariff work. He has had extensive experience in transportation management; railroad operations and market development; costing analysis and financial evaluation; ICC/STB & FERC law and practice; facility siting; industrial plant location; develop private and public financing - Milwaukee Road Restructuring; various State Public Service Commissions; transportation law and practice; served as a transportation Expert witness in numerous cases, including Montana Power Company/Northwestern Energy contract negotiation with rail, motor, and pipeline companies; energy company development; railroad development; and transportation system design and evaluation.
Terry chairs the national Alliance for Rail Competition in Washington, DC. He currently represents the Wheat and Barley Commissions in Idaho, Colorado, Oklahoma, Nebraska, Oregon, South Dakota, Texas, Washington and Wyoming.

PROFESSIONAL

BA, MBA, Physical Distribution
ICC/FERC/STB - Registered Law Practitioner
Associate Member of American Society of Traffic and Transportation
Graduate of the College of Advanced Traffic and Transportation - Chicago

PREVIOUS CAREER AFFILIATION

Continental Oil Company (CONOCO)
Continental Pipeline Company
Yellowstone Pipeline Company
Cherokee Pipeline Company
Geophysical Services, Inc.
Williams Companies, Agrico Chemical, Williams Pipeline, Williams Energy
State of Montana - Dept. of Agriculture/Dept. of Commerce
Radermacher, Whiteside & Associates
Whiteside & Associates

REPRESENTATIVE PROJECTS

Railroad Fueling Center Study
Revenue Maximization Studies
Litigation Involving All Aspects of Transportation
Merger Representation
Shipper Representation - Mining, Lumber, Agricultural, Manufacturing, Utilities
Lease/Purchase of Coal Rail Car Fleet for MPC
Consumer Representation - Abandonment, Transportation Negotiation
Montana Grain Sub-terminal studies
Montana State Rail Plan (original)
Milwaukee Road Restructuring Plan - Statewide intermodal studies
Bulk Intermodal Transfer Facilities Design
Development of Hazardous Waste Transportation Entity
Feasibility of Port Auth. in Yellowstone County (Montana TradePort)
Negotiation of Rail Transportation Contracts - coal, petroleum coke, lumber, cement, lime, talc, bentonite, taconite, chromium, wood products, wheat, barley, oats, safflower, canola, fertilizer, & other products
Special Consultant to Governors on Rail Car Plan for Grain Movement in Montana
Negotiation of Truck Contracts: including LTL, truckload, small package and air services
Feasibility of Various Mining Operations - Chrome, Coal, Lime, Phosphate, etc.
Exporting western Coal to Pacific Rim countries
Coal for Fuel - Industrial demand
Railroad Rate Studies on Malt, Corn, Wheat, Barley and various value added industrial developments

**Expert Witness**

TCW has testified as an expert witness on behalf of the State of Montana: Montana Department of Agriculture, Montana Department of Commerce, Montana Governor’s Office, Montana Consumer Counsel, Montana Power Company, Montana Farmer Union, Montana Grain Growers and Montana Wheat & Barley Committee, Alliance for Rail Competition, National Association of Wheat Grower and National Farmers Union. These appearances have included proceedings involving rate hearings, rail abandonments, permits, certificates of public convenience and necessity, purchase and mergers. These hearings involved state and federal administrative agencies, regional commissions, and courts of law both federal and state.

TCW has also testified on behalf of many rail and transportation shippers involving shipper transportation issues including contracts, complaints, investigations, court proceedings and authority hearings. These proceedings involved state and federal administrative agencies, courts of law both federal and state as well as local administrative bodies.

Terry has testified for Montana Power Company/Northwestern Energy as an expert witness in rate increase cases, providing testimony on the rail rates on coal movements out of the Powder River Basin, and the MPC/BN Contract for coal movement from the PRB to Corette.