

The BN

Expediter

Volume 23, Number 1

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The official publication of *The Friends of the Burlington Northern Railroad*, the historical society focused on the Burlington Northern Railroad, the Burlington Northern Santa Fe Railway, and the BNSF Railway.

**Friends of the
Burlington Northern Railroad**
PO Box 271, West Bend, WI 53095-0271
www.fobnr.org

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The Friends of the Burlington Northern Railroad (**FOBNR**) was formed to gather, preserve, and share information about the history, current operations, and future development of the Burlington Northern Railroad and its successors. It follows the evolution of the railroad from its inception in 1970 with the merger of the Great Northern, Northern Pacific, Chicago, Burlington, and Quincy, and the Spokane, Portland and Seattle Railroads.

The purpose of the **FOBNR** is educational. We wish to perpetuate the history of the Burlington Northern Railroad and its successors. We seek to collect and preserve any materials which help establish or illustrate the life, conditions, events, and activities of the railroad. We will disseminate this information through the publication of a newsletter, establishment of a web site, by maintaining an archive, and by conducting an annual convention somewhere along the lines operated by the railroad. We may also publish information in other media and may restore and operate historical railway equipment.

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Regular membership is \$25.00/year; Sustaining membership is \$50.00/year; Junior membership (16 and under) is \$10.00/year. The membership year is from January 1 to December 31.

The FOBNR is not supported by, nor affiliated in any way with, the BNSF Railway, its subsidiaries or affiliates.

Board of Directors Election - Request for Nominations

The current terms of office of John Adams and Gary Seymour on the **FOBNR** Board of Directors will expire at the annual meeting this summer. In accordance with the bylaws of the **FOBNR** and Board policy, nominations are hereby solicited by March 1, 2015 for candidates for these positions. All positions are for two years.

Any **FOBNR** member can nominate him or herself or be nominated by another person (the nominee will be contacted and must then accept the nomination). All nominees will be asked to write a short autobiography and a statement of why they should be elected.

A list of nominees, their supporting information, and a ballot will be sent along with the April 2015 issue of **The BN Expediter**. Voting will take place by mail.

All details of the election will be handled by John Bourgeois. Send nominations, or names, addresses and supporting information to him at:

500 Stonehenge Drive
Rock Hill, SC 29730 email: bnsfdh618@yahoo.com

Our New Cover Design

As you have probably noticed, we've come up with a new look for the cover of *The BN Expediter*. We hope it is more eye catching and appealing and, just perhaps, will attract more members. We're also going to attempt to produce 24 pages in every issue, so if you can help, let us know!

2015 BN Calendars Still Available

Even though you won't be receiving this issue until mid to late January, there is still time to order our BN (only) 2015 calendar. Just go to the **FOBNR** website (www.fobnr.org) and follow the link to the calendar page where ordering information is available.

New Members

Daniel Bergen 14-019 4178 Jason Ct NE Saint Michael, MN 55376	Thomas Robb 14-020 681 Plum Drive Burlington, TX 76028	Chuck Sted 15-001 1737 Via Di Salerno Pleasanton, CA 94566
Marilynn Versteed 15-002 8205 Hannegan Rd Lynden, WA 98264	Terry Jenner 15-004 17673 S. Santa Fe St Mounds, OK 74047	Richard Anema 15-005 101 N Quebec St Kennewick, WA 99336

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The BN Expediter

The BN Expediter is published four times a year and is included with membership in the **Friends of the Burlington Northern Railroad**. Manuscripts, photographs and information are welcome for publication. Articles are compensated at \$25/page of text; contributors of photos will receive one free copy if an **FOBNR** member, two if not.

Anything published in *The BN Expediter* (including the classifieds), must be focused on the Burlington Northern Railroad and its successors, from the 1970 merger on. Information and/or pictures that give historical perspective or context are acceptable (e.g., premerger road numbers). The disposition of a locomotive, other piece of equipment or property is also acceptable. Further information is available from the Editor.

Send material for publication to either:

Dave Poplawski, Editor 7733 Copper Corner Drive SE Caledonia, MI 49316 pop@mtu.edu	Mark Demaline, Assoc. Editor 29658 Schwartz Road Westlake, OH 44145 conductor7@aol.com
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Cover Photo: Oil empties stretch out along the prairie on the recently double-tracked main line between Berthold and Tagus, North Dakota. The double tracking extends roughly 40 miles from Berthold to Ross. July 2, 2014. Photo by Micheal Farley.

Information/Photos Needed

April, 2015

BN/BNSF 3-Bay Covered Hoppers. We're planning the first in a series of photo articles on the evolution of the BN and BNSF grain covered hopper car fleets, showing the various types of cars, paint schemes, and lettering variations and modeling info. We are looking for data about and photos of these cars, both roster and in various settings, like solid sets on unit trains or in loading/unloading situations. Also, if you've modeled any these cars we'd like to hear about the details of how you did it for a possible article.

Oil train loadouts and new trackage. We will continue the series on BNSF oil trains, focusing on the loadouts in North Dakota along with all the new trackage and other infrastructure improvements. Please send along any information and photos that may apply.

July, 2015

BN Electric Trailers (ET-1, 2, 3). BN inherited these from the NP. We need good photos to go along with a modeling article of the ET-2 that is in progress.

Locomotive Chronicles 1988. We need photos of LMX units 8567-8599 and remanufactured GP39M's 2575-2578 and 2800-2805 and GP40M's 3500-3508, plus any interesting information about the rebuilding program.

The **FOBNR** web page now has a link to all the articles that are in progress for future issues of *The BN Expediter*. Check it at www.fobnr.org and contribute if you are able.

Sustaining Members

On behalf of all our members, the **FOBNR** Board of Directors would like to take this opportunity to thank our sustaining members for 2014. Their generous contributions to the finances of the **FOBNR** has helped us to continue furthering the goals of our organization.

John Adams	Wade Griffis	Richard Rink
Doug Andreason	Gerad Grossman	Thomas Robb
Jim Archer	Bill Harvey	Kim Saign
Joseph Beasley	Alexander Hedin	Gary Seymour
Tom Bentley	Richard Heggen	Dennis Shogren
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Peter Ferch	Emery Rahm	Aric Van de Vord
Roger Field	Anthony Raimondi	Gary Wlodarczyk
John Flodin	Richard Rehn	

New BN Links of Interest on the FOBNR Web Site

By Gary Seymour, **FOBNR** Secretary

We have added new listings on the **FOBNR** web site in recent weeks. If you have not checked our *Links of Interest* page recently, and are looking for something in your area of passion about the BN or BNSF, maybe you could check out the following:

BN Photos:

www.rrpicturearchives.net – You can select by various categories (railroad, BN, BNSF), location, locomotive type, rolling stock, etc.) or by doing a keyword search.

www.railpictures.net – You can select a railroad, a state, a year or range of years, a category (yards, tunnels, passenger trains, etc.), and add a keyword to narrow down your search.

www.passcarphotos.info/indices/BN.htm – You can look for BN passenger car photos on this page by clicking on the link for the car(s) you wish to see. Some of the links will connect to the **FOBNR** web page listings, but there are many more links to other sources.

www.carrtracks.com/bnindex.htm – This site is titled Burlington Northern Freight Train Symbol History. It discusses information and history of individual BN freight trains over many years-primary functions, work activities, condensed schedules, and periodically provides some pictures. There are also additional pages for extra trains, unit trains, and others.

General and Comprehensive:

www.railserve.com – This is the granddaddy of all railroad links sites. It has multiple categories of links to search-historical societies, locomotive manufacturers, model railroading, railroad music and art, discussion and forums groups, and almost anything else you can think of for railroading interests.

www.venere.com/blog/articles/travel-back-to-railroad-history.html – Multiple links to information and lesson plans for teaching about railroad history.

We are always looking for new and useful web sites to include on our *Links of Interest* page. So if you know of a good web site that would be related to our interests in the Burlington Northern or in railroading in general, please go to our web site and click on "contacts". On that page you can either click on my name as Secretary or on Dave Poplawski as Web Site Administrator or on contact@fobnr.org. Send us an email and tell us what you would like us to add, describe what it focuses on, and why it will be a useful addition.

FOBNR 2015 Convention and Membership Meeting in the Twin Cities

June 24-27

Article and photos by Peter Ferch

At one time there were 23 active railroad lines in the Twin Cities, and an extensive trolley line (with trolley boats and their own amusement park) operating within the city confines. When the BN merger occurred in 1970, the CB&Q had one small yard in St. Paul called Dayton's Bluff. It is now a 9 track yard used for processing auto racks in the nearby facility. The GN and NP had yards scattered throughout the two cities, mainly GN's Union Yard and NP's Northtown Yard. All of the previous separate yards were consolidated into the newly rebuilt Northtown Yard. The GN's Union Yard was kept active for the in-town customers, mainly the large grain elevators in the area, but this use has been steadily decreasing as farmers don't have to drive all the way into the cities to deliver their grain anymore. The GN yard at Minneapolis Jct was sold to the C&NW, and they subsequently sold it to a group that runs excursion trains using the ex-MILW 4-8-4 #261. BN added the new Midway Yard near Minneapolis Jct in the mid-70's for all intermodal activities.

Now a common occurrence, NS power leads an empty oil train north through Alma, Wisconsin on the way back to North Dakota to reload.

We will be providing maps of the area, with vantage points, so you can sightsee the various yards during unscheduled times. Northtown (see photo at right) is the center of activity, handling about 100 trains a day, with almost hourly oil trains (empty or loaded) and intermodals about one every two hours. The subdivisions running from Northtown include: the Staples Sub, 50+ trains a day; the Wayzata Sub to Willmar, 25 trains a day; the Hinckley Sub to Duluth, 20 trains a day (four taconite and two coal trains); and the St Croix Sub to LaCrosse, 50+ trains a day.

We are planning a railfan outing following the St Croix Sub, starting with the lift bridge in Prescott (see photo below right), which has a nice park to sit and watch for trains crossing the bridge, and finishing in the town of Alma (see photo below) or perhaps a couple of road crossings past there near Buffalo City. We are working on getting a tour of the Alma Power Plant—this will probably be the last chance to see coal there as they will be switching over to natural gas.

A tour of the James J. Hill mansion, a guided tour of the newly restored St. Paul Union Depot (SPUD), as well as a layout tour of a model railroad club near Northtown are also on the agenda. The club is planning on having a working





(above) Looking north from the 44th Avenue bridge over the Northtown Yard. South of the bridge is the engine facility and hump.

(right). The lift bridge over the St. Croix River at Prescott, Wisconsin, one of the sites along the beautiful Mississippi River line.

version of the Northtown hump yard—yes actually humping cars. We are still working on arrangements for a tour of the Jackson Street Museum and possibly other rail-oriented facilities.

We are planning several train rides, including Northstar Commuter Rail, our inter-town LRT system, and either the train ride at Osceola using MTM equipment or the Wisconsin Great Northern depending on times available. You might also like to ride the remaining trolleys at Lake Calhoun and Lake Harriet or the Trolley Boat in Excelsior in your free time.

The Twin Cities has plenty to offer to families, so bring them along and make it a great vacation for all. Just do a Google search on “things to do in the twin cities” and you’ll find information about hundreds of family oriented activities.

Detailed convention and registration information will appear on the **FOBNR** website (www.fobnr.org) by March and will also be mailed with the April 2015 issue of *The BN Expediter*. Come join us for an interesting and informative convention in the Twin Cities.



Bakken Oil and the BNSF

Black gold. Texas Tea. Or so goes the theme song of the Beverly Hillbillies. In no time the Clampets became millionaires and their lives were changed forever. It's a nice story, one that's not quite true, but one that is being played out for real every day in the farmers and other land owners in western North Dakota.

For the BNSF, tea is being served courtesy of the Bakken shale formation, mostly in North Dakota, and the invention of drilling techniques called horizontal drilling and hydraulic fracturing, or *fracking* for short. To meet the demand, BNSF is running unit oil trains in every direction and regular freights with oil drilling equipment and fracking sand every day, is converting many miles of trackage from single to double track, adding and lengthening sidings, improving signalling and hiring an army of new employees to run the trains and manage the infrastructure.

This is the second time in the short history of the BN and BNSF that the serendipitous location of enormous natural resources have given the railroad huge opportunities, and not surprisingly, huge challenges. The first was Wyoming's Powder River coal boom that started in the 1970's. Fortunately for BN in the '70's and the BNSF now, the resources just happen to be in close proximity to exiting rail lines, essentially handing the railroad business it didn't hardly have to lift a finger to develop.

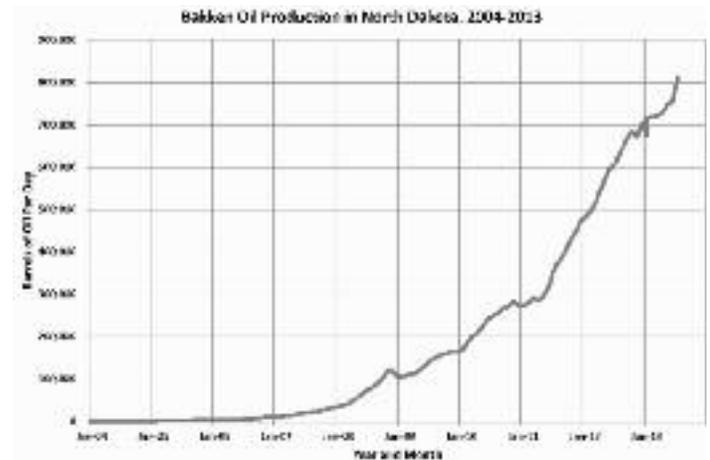
Oil's history in North Dakota

Oil was discovered in North Dakota in 1951. A boom in oil exploration and discovery followed, which peaked in the mid-1960's and then declined.

In the late 1970's oil prices spiked due to various global geo-political issues, and a boom began again. But the boom went bust, as described by Jeff Meyer of the Associated Press in 1989, "The decade began with great promise for the energy industry. Prices for oil reached an all-time high in 1980 at more than \$40 a barrel, sparking a frenzy of drilling and residential development in the Williston Basin. But those prices began to slip in 1984, and they hit a low of \$9 a barrel two years later. The boom went bust and hundreds of oil workers and their families moved out of communities like Williston and Dickinson."

In 1987, the first successful horizontal well was drilled in North Dakota. Horizontal drilling decreases the probability of drilling a dry hole from three in four to around 5 percent, and dramatically increases the amount of oil produced from a single well. But the price of oil at the time was much too low to spur any boom in drilling. But in 2007 came a huge spike in oil prices, which got things moving again, but then just as huge a drop, followed closely by a gradual rise in prices again to very high levels by 2011, and the boom was on again (see chart below). High prices and

years of improvements in drilling technology were working their magic.



Moving oil by train

Until recently, very little oil was transported via rail in North Dakota, with trucks and pipelines handling most of the crude. What did go by rail stayed in-state and moved on locals and manifests. There were no unit trains.

But the boom of the last few years has been so large that unit trains taking the oil to the east, west and gulf coast overwhelms the existing infrastructure. Trucks are far too expensive for long distance movements, and building an oil pipeline requires a huge capital investment and many years with all the environmental hurdles that have to be overcome. A pipeline also needs a somewhat stable long term market to monetize the time and cost of construction. In addition, pipelines move oil extremely slowly. A train can move oil across the country in about 5 to 7 days, versus about 40 days via by pipeline, thereby reducing the working capital needed to cover the cost of oil in transit

Transporting oil by train is 2-3 times more expensive than pipelines, but yet much more flexible since trains can change where they are loaded, where they are emptied, and the route they take based on short term market fluctuations. Because of this, oil can get to refineries that up to now have used higher priced oil from other places, mostly overseas. For example, refineries on the east coast that were on the verge of being shut down because they used high cost African or Mid-east oil are being given a new lease on life, with new construction, including rail yards to receive and unload the light sweet crude from North Dakota.

Enter the BNSF

Geographically, things could hardly have worked out better for the BNSF and Bakken oil. The Glasgow Subdivision, between Minot on the east Glasgow, Montana on the west runs pretty much right down the middle of the oil



boom area, with six loadouts spread out from Stanley in the east to Trenton on the west. The Dickinson Subdivision to the south has two loadouts just west of Dickinson, and there is another at the end of the Zap Line Subdivision that branches north out of Mandan. The Sidney Line Subdivision, connecting the northern and southern lines between Snowden, Montana and Glendive, Montana has one loadout just inside the North Dakota border. And finally the Hettlinger Subdivision far to the south has the 11th loadout.

The loadouts were built by the oil companies, and the tank cars were bought by them too. Hence the BNSF didn't have to invest much to get the oil moving. That's the good news.

Locomotives were needed, lots of them, and so were crews to run them. Recent high levels of grain and intermodal traffic competed for both. And the rail lines themselves were inadequate to handle the sudden, exponential increase in demand for transportation (not one tank car of oil left North Dakota prior to 2009). The lines were already running near capacity so adding a dozen or so oil trains in and out **every day** was a lot to ask.

To meet the demand, BNSF has spent almost \$1 billion for expansion and maintenance in North Dakota alone since 2009. Hundreds of new locomotives have been bought, and BNSF plans on purchasing 330 more new locomotives in 2015.

BNSF's oil trains

A BNSF oil train typically has around 100 tank cars, al-

though there is considerable variation, with as few as 70 or as many as 120 possible. The amount of oil carried per car varies depending on the type of oil and how much of various additives have been included, but a typical load is about 30,000 gallons, or 715 barrels. A hundred car loaded oil train can typically carry over 70 thousand barrels of oil.

The tank cars meet the DOT-111 standard, which has received considerable criticism in the light of several derailments, some with fire, explosions and fatalities. Older cars especially seem to be vulnerable. New standards were defined in 2011 for all newly built cars. More stringent standards have also been proposed but not yet adopted (DOT-117). Last February BNSF announced that it would purchase 5,000 tank cars with safety features that surpass those specified in the 2011 industry standard.

There are usually 2, sometimes 3 locomotives pulling the oil trains, and single unit DPU's are common. 6-axle GE power seems to be the norm, while EMD's are not uncommon. A significant number of east-coast bound loads and returning empties using Norfolk Southern trackage east of Chicago will have NS power run straight through to the loadouts and back. It isn't all that rare for NS's units in one of the heritage paint schemes to show up in western North Dakota!

Regulations require at least one buffer car between the oil cars and locomotives, usually one at the front and another at the rear when there is a Distributed Power Unit (DPU). Typically this is some sort of hopper car, usually

Oil loads have just cleared the Stanley loadout and are ready to go east. July 1, 2014. Photo by Micheal Farley.



filled with sand. You'll usually find an old Airslide hopper being used.

BNSF takes extra precautions with its oil trains. All crew members inspect every car before departing an oil facility, checking from top to bottom to ensure valves and housings are closed and secure, all necessary placards are in place, and there are no mechanical deficiencies. If an issue is spotted, the car is not accepted from the shipper and gets set out for repair right at the oil facility. While the conductor is walking the train checking those items, a full brake test is done on each car.

Oil train symbols carry a U (unit train) designation. A list of typical loaded BNSF oil train symbols is:

Symbol	Loadout	Destination
UBERGAT	Berthold	Galveston, TX
UDNDPTW	Dore	Port Westward, OR
UELUCXY	Eland	Albany, NY (via CSX)
UEPPAYW	Epping	Ayr, WA
UFYNCXP	Fryberg	Philadelphia, PA (via CSX)
UMNUKCJ	Manitou	St. James, LA
UTIOAWA	Tioga	Arco, WA
UTNDAGW	Trenton	Armory, MS
USTNNSD	Stanley	Reybold, DE (via NS)
URPBMIJ	Republic	Mitchell, IL

Empties returning to the loadouts have the three letter destination codes reversed (e.g., UGATBER for Galveston, TX to Berthold).

The future

The cycle of boom and bust in the North Dakota oil busi-

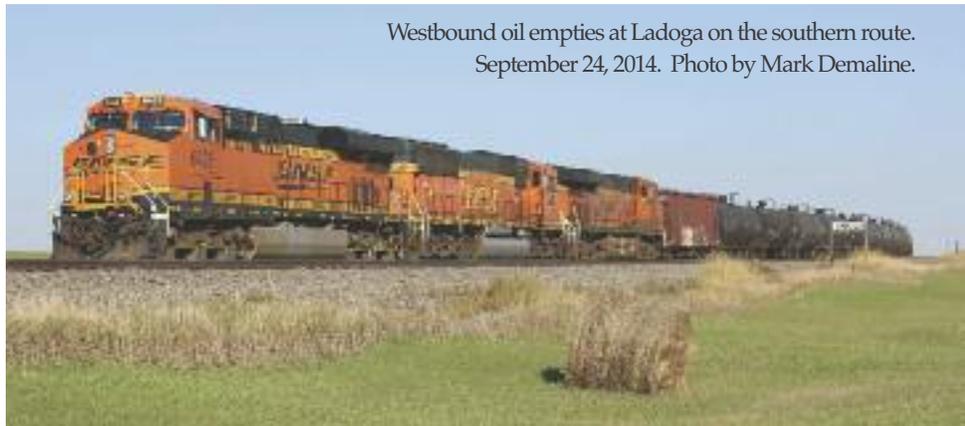
NS's Southern Railway heritage unit just west of Mandan leads oil loads east from the Eland loadout. June 3, 2013. Photo by Micheal Farley.



Westbound empties climb out of the James River Valley at Eldridge on the southern line, headed for the loadout at Eland, just west of Dickinson. May 24, 2014. Photo by Micheal Farley.



Westbound oil empties at Ladoga on the southern route. September 24, 2014. Photo by Mark Demaline.



ness is well established, and it isn't surprising that signs of the bust may already be happening. Crude oil prices are at the lowest in years, comparable to before the boom. Drilling activity shows signs of decreasing. One company, American Eagle Energy, suspended its 2015 operated drilling budget and does not anticipate resuming drilling operations until crude oil prices improve.

The XL pipeline, if built, will also draw some oil away from rail, but it is projected to only use Bakken oil for one fourth of its total capacity (the majority coming from Canada). At its projected 800,000 or so barrels/day capacity, this is only 200,000 barrels/day, or about 2-3 train loads. Whether it even will be built is a political issue at this time.

Various new regulations have been proposed, including limiting the speed of loaded oil trains and requiring various conditioning

The DPU brings up the rear on loads heading to the west coast on the bridge over Lake Pond Orrielle, just south of Sandpoint, Idaho. October 3, 2014. Photo by Mark Demaline.



processes be applied to the oil before shipping to reduce its volatility in case of a derailment. Both of these will increase shipping costs and potentially reduce or eliminate the economic viability of rail shipment.

A slowdown in drilling will lead to a small decrease in the need for drilling supplies and hence less traffic, but moving the oil from existing wells won't be directly affected. One of rail's advantages is the agility to quickly respond to new source/destination opportunities. This encourages short-term contracts, and means that when contracts are up the traffic can easily disappear if the economics dictate.

In the April issue...

Bakken Oil and the BNSF will continue in the April issue of **The BN Expediter**, covering infrastructure issues including new trackage and signalling, as well as information about and photos of all the loadouts where BNSF's unit oil trains start their cross country journey.

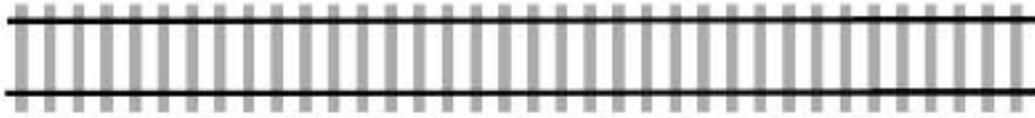


(above) One eastbound oil empty with a Citrail lease unit passes another oil empty at Crossport, Idaho. October 4, 2014. Photo by Mark Demaline.

(below) Empties from the east coast head west on the triple track through Hinsdale, Illinois. July 29, 2014. Photo by Dave Poplawski.



Right of Way



The Browns Valley Subdivision

by Peter D. Ferch

As a member of this historical society, I feel it is in our best interest to document the trackage that the Burlington Northern and BNSF has used in its lifetime. Now, I am not saying go out and take a picture of the track every 100 yards, but maybe just the major points along the line, like towns, stations, junctions, trackage, bridges, industries and other points of interest. We already have the maps of the major yards and the timetable scans provide the names of towns/places along the various routes, we just need to “fill in the blanks.”

As an example, on my way out to the FOBNR convention in Gillette, Wyoming in 2011 I tried to cover two of the lines the BNSF uses, the Browns Valley and the Moberg Subdivisions. The Browns Valley Sub is a short branch line in Minnesota from the town of Morris, Minnesota toward Browns Valley, Minnesota. The timetables indicate that there are only seven towns on this Sub, and I happened to purchase a copy of the track chart for this line on eBay, so following it was a little easier than the Moberg Sub.

Morris, Minnesota was a junction point of the GN and

Length of Siding (Feet)	Station No.	Mile Post	Browns Valley Subdivision BRANCH LINE STATIONS	Track 4.3	Type of Oper. Rule 6.38	Line Segment	Miles to Next Stn.
00146	0.0		MORRIS	JTXXII			7.9
54507	7.2		ALBERTA				8.1
54513	13.3		CHECKO				5.9
54519	18.2		JOHNSON		TWC	201	7.0
54525	26.2		GRACEVILLE				5.9
54532	34.1		BARRY				7.3
54539	39.4		BEARDSLEY		PAV 6.38		39.4

NP, and the town had a small yard to facilitate the interchange of cars between the two lines. With the forming of the BN, the NP line to Little Falls, Minnesota was abandoned piece by piece from Little Falls toward Morris until, by 1984, the entire line was gone. BNSF still uses the ex-GN trackage that runs from Willmar to Fargo and the Browns Valley Sub is an important feeder line, providing carloads of covered hoppers during the harvest season. Just to the south (railroad east) of town is the wye track connecting the mainline to the branch.

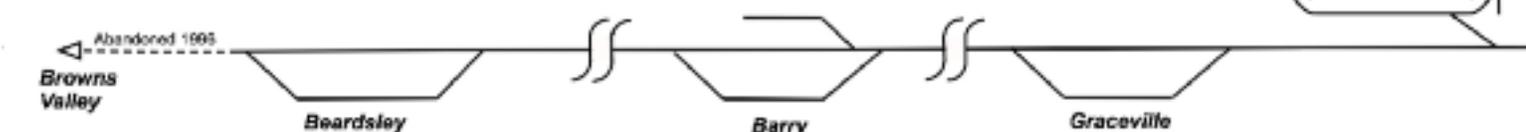
These first pictures (below) are from the middle of the wye. The photo on the left is looking south (railroad east) towards Willmar, the one on the right is looking north towards Fargo.



Browns Valley Subdivision

(not to scale)

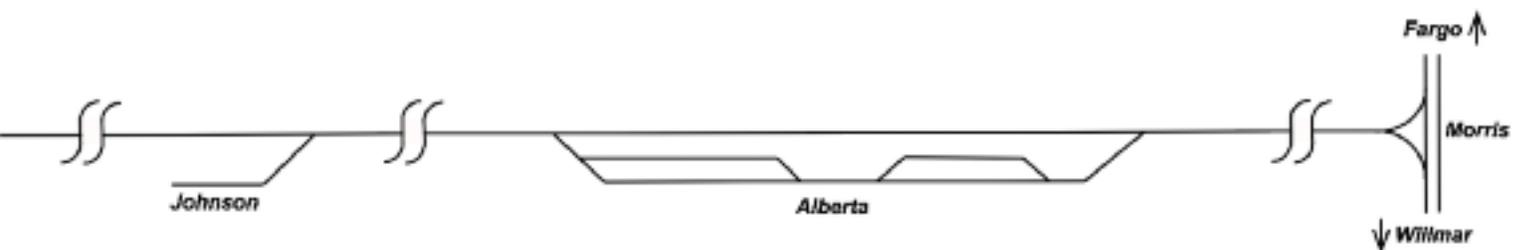
Wheaton-Dumont CO-DIP Grain Terminal (constructed after 2011)





Construction of 6 large grain bins was underway in June, 2011 at the Cargill AgHorizons grain facility in Alberta to increase its storage capacity to 3,430,000 bushels from 1,084,000.

The next town along the line is Alberta, looking east (above) and west (below). We see the large Cargill elevator and rest of the “team track”, and as the picture (right)I shows, the elevator uses a Trackmobile to move cars for loading.



The next town is Chokio, again looking east then west. There is a good sized elevator in this town also.



The next town is Johnson, again east then west. About two-thirds of the way up the track is a left hand switch. I never did see any industry there though—the elevator has been removed.



The next town is Graceville, it was a former crossing of the CMSP&P line to Fargo. The MILW right of way is now a county road – went by the implement dealer in the background (right to left). No industry to service in this town either.



This ownership plate, a relic of the BN era, was on a signpost near the town of Beardsley.

The next town is Barry, two elevators in this town! Again, looking east, then west, then a better shot of the left elevator, the station sign and the 'perfectly' laid track.



The next town is Beardsley, again east then west. For some reason I never went into the town to shoot the elevators.



The next and final town would have been Browns Valley, but there was no trackage to be found! I had to look at my notes again and find where the line would have been, but there was no trackage, ties, or buildings, just empty land where the track was. I guess I should have done this twenty years ago. This trackage was abandoned around BNSF merger time.

This completes the Browns Valley line. It took only about two hours to traverse and photograph, so next time you are out railfanning consider going into the smaller towns and shooting the remaining trackage and/or buildings for history.

Editor's note: When Peter traversed this line in June of 2011 a large unit-train grain loading facility was yet to be built just east of the town of Graceville. This facility, with a large loop track capable of holding 120 railcars and four locomotives, and loading railcars at a rate of up to 80,000 bushels per hour, opened for business in August of 2013. It is included in the track diagram on the previous pages. A nice aerial photo and other information about the facility can be found at the following website:

<http://www.wdcoop.com/pages/custom.php?id=36828>

Billings Region

Big Men, Big Skies and Shining Mountains

With 4,660 miles of track stretching from the shining mountains of Montana and Idaho eastward to the billiard-table-green flatness of North Dakota, and southward from the great arc of the "Big Muddy" in northern Montana to the big sky country of central Wyoming and western South Dakota, the Billings Region is one of the largest geographically in the consolidated BN system.

This is truly "God's Country"—the wide-open, people-scarce spaces where one will find the copper-laden "Richest Hill on Earth" at Butte, endless fields of grain, mountain slopes thick with timber, herds of livestock on grazing lands as far as the eye can see, a sub-surface laced with precious minerals, and mines and mills and refineries and factories producing everything from plywood and gypsum board to talc, phosphate, gasoline, and bentonite clay.

But with all this diversity of output, the big ticket item today in the Billings Region is coal. Billions of tons of this black gold are folded into thick veins under a thin, dusty overburden in east central Montana and northern Wyoming. Its mere presence, now being invaded by the giant draglines, has tongues wagging and economic hopes soaring throughout the Billings Region of the BN. Coal may have gone through its doldrums in recent years, but a nation concerned with the purity of its air, and power generating plants under public pressure and desperate for cleaner sources of energy, particularly coal of low-sulphur content, have changed the picture suddenly and dramatically.

The effect on BN operations, according to John O. Davies, the eloquent and convivial regional vice president, has been close to incredible.

"During the entire year of 1968," he says, his finger tracking its course down a sheet of statistics, "our income from coal originating in this region was \$407,000. In one month alone this year—the month of January—it was \$2,620,000!"

Builders are now snaking spur lines to new coal mines in Wyoming and Montana, and they will eventually add their substantial impetus to coal tonnages. Such a phenomenal increase in shipments and promise gives a clear and as-

tonishing realization of coal's resurgence in this part of the West.

But coal, moving eastward in 100-car unit trains to steam generating plants in Minnesota, Missouri, and Illinois, isn't the only "black gold" boosting BN revenue in the Billings region. The more liquid variety—crude oil—is important enough to warrant the personal attention of a BN executive. Charles F. Hunkins, assistant vice president—oil development, hangs his official hat in Billings regional headquarters.

He is one of some 5,600 employees of the Yellowstone and Rocky Mountain Divisions who man all reaches of the Billings Region. You'll find them in diesel repair centers, car shops, and freight classification yards from Bismarck and Mandan, in Dakota country to Missoula and Livingston, Montana. A sizeable number work at the Divisional nerve center, the Security Bank Building in downtown Billings.

This building located in the shadow of the city's famous rimrocks, is also the executive center for Davies, regional vice president since the date of the merger, and two assistant vice presidents—Bill Taylor (marketing), and Bill Shannon (operations).

Davies is a native son. He was born in Butte, graduated in economics and business from the University of Washington, then cast his lot with the NP and a railroading career, primarily in operations, that carried him as trainmaster and divisional superintendent to such scenic spots as Tacoma, Spokane, and Missoula. Before the merger, he was general manager—Lines West for the NP.

Davies is in a glorious spot now to follow his affinity for outdoor hobbies. But he has precious little time to do so. A new railroad, a new region, new men, new objectives, new problems require most of his time and attention.

But, as Davies is pleased to report, the Region is making headway. More flexible routings have reduced in-transit car days, and last year the lid was clamped on car shortages, two of many achievements that have earned the gratitude of shippers in the Region.

"The merger," Davies says, "is a great thing."



(above) The BN in the early '70s was a colorful railroad, as repainting of units from the predecessor roads was proceeding slowly. A 120 car westbound leaves the siding at Reed Point, Montana on the ex-NP line with a nice selection of power and color: F9A's 9828, 828, 9818; U25C 5621; U33C 5745; SD45 C&S 869; SD40 C&S 877. March 21, 1972. Photo by Larry Zeutschel.

(below) BN had 160 NW2s, far more than any other switcher type, from every pre-merger road including the C&S and FW&D, even inheriting 16 from the Frisco in 1980, and they operated just about everywhere. This unit is shuffling cars in Cut Bank, Montana in August, 1974. Photo by Dave Poplawski.





Laurel, Montana roundhouse area on August 19, 1972. U33C 5731 came to the BN in 1971, but the rest, GP35 2503, GP9 1815, and NW2 544 were all inherited. The roundhouse is gone and the fueling area has been moved and rebuilt to modern standards, but the turntable that fed the roundhouse is still there to turn locomotives. Photo by Larry Zeutschel.

A westbound leaves Laurel, Montana with 76 cars and four locomotive paint schemes on March 22, 1972. SD40 C&S 877 still in CB&Q Chinese Red, SD45 6455 in very dirty GN Sky Blue, SD45 6466 in CB&Q's anticipated BN paint scheme, and F45 6630, barely a year old, in Cascade Green. Photo by Larry Zeutschel.





(above) Not every train had a kaleidoscope of power. This eastbound crossing Moore Lane in Billings, Montana on March 22, 1972 has three Cascade Green units delivered to BN in 1971: U33C 5754, SD45 6521 and U33C 5732. Photo by Larry Zeutschel.

(below) Essex, home to the Isaac Walton Inn and the Marias Pass helper base, was and is a favorite destination for BN and now BNSF fans. The Essex depot was manned right up to the end of timetable and train order (TT&TO) dispatching in the mid- '80s. That's an eastbound coming up the hill, but the green train-order signal (both sides) indicates that there would be no need to stop for orders on this trip. One of the operators at Essex for many years was Wilbur Gulbranson, who also served as mayor of Essex. An interview with Wilbur about his experiences at Essex appears in the January 2008 issue of *The BN Expediter*. August 1974 photo by Dave Poplawski.



Seattle Region

Gateway to the Pacific Rim

Ralph L. Merklin, the brawney and good-natured vice president of the Burlington Northern's Seattle Region, can stand at a window in his corner office and look out over the island-dotted waters of Puget Sound.

It's a grand sight to see, but for Ralph Merklin, appointed to this challenging post on May 1, the vision doesn't end with the tall towers, wharfs, and ships of a teeming deepwater port. His vision goes far beyond the Sound and the heaving waters of an ocean to the burgeoning nations rimming the vast basin of the Pacific.

"The nations around the Pacific Rim," he says referring to such countries as Australia and Japan, "are going to be among the fastest growing in the world during the decade of the '70's."

And because of this, Merklin, looking into the future, can foresee a greater and greater diversity of goods, such as ores, grains, containers, and automobiles, moving between Seattle's deep water port and inland cities.

Three factors make him particularly sanguine about the prospects in the Seattle Region—the growing commerce with Japan (Seattle is Japan's closest U.S. port by a day's journey over water), the oil play at Prudhoe Bay in Alaska, and the recent decline in the prime rate, a significant economic stimulant to a timber-rich region dependent on the number of housing starts in the nation.

"Our region," he explains, "is tied to the water, and to the Puget Sound ports of Seattle, Tacoma, Everett, and Bellingham, and the British Columbia ports of Vancouver and New Westminster. We're also tied to the facts of geography. Our corner of the U.S. is one of the nations's richest in natural resources."

And, we might add, one of the most picturesque.

The Seattle Region with its 2,599 miles of rail encompasses an extensive network of main and branch lines in Washington, Idaho, Montana, and British Columbia, and a long stretch of main line trackage that extends from Puget Sound to Columbia Falls, Montana. Within this strung-out area, the working world of some 7,500 Seattle Region railroaders, are a number of important BN facilities—the Balmer Yard, for example, an automated classification yard, the Stacy Street Yard in Seattle, and the South Seattle Yard, the principle trailer and container handling complex for the Region. There are also yards and shops at Spokane and Auburn, Washington.

Merklin, the second head man of this far-flung operations (Worthington L. Smith, the Region's first vice president, is now in St. Paul filling the newly created post of vice president-marketing planning), has spent most of his railroad career with the Great Northern in the Pacific Northwest.

Born in a little lumbering and mining town in the Cascade Mountains east of Seattle, he graduated from the University of Washington with a degree in business and economics, then joined the GN in 1940 as a station and extra clerk at White Rock, British Columbia. These were rugged days in the small towns of the Pacific Northwest and most of the in-town entertainment centered around the local dancehalls. "After the dance," Merklin recalls, "there was always a fight." He remembers one pair who started trading punches in a moving pick-up truck. They soon rolled off the back of the truck into the roadway, but that didn't stop them. They kept right on swinging.

These were also nomadic years for Merklin and his family. A series of promotions kept them shuttling in and out of Portland, Seattle, and Tacoma. In 1966, he was appointed assistant to the vice president-sales at GN's St. Paul headquarters. He moved up to assistant vice president—marketing the following year, and after the merger became the Burlington Northern's first assistant vice president—marketing services.

Merklin's two top lieutenants in the Seattle region are Bill Malone, assistant vice president—regional sales manager, and John Hertog, assistant vice president—operations. Malone*, a native of Spokane, is a Korean War veteran who has been in railroading (with the NP) since 1956. Hertog was born close to BN headquarters in Minneapolis, earned a civil engineering degree at the University of Minnesota, and joined the NP in 1943. He saw service with the U.S. Navy during World War II.

A wide mix of raw materials and commodities move over BN lines in the Region. Lumber and wood products such as poles, logs, newsprint, paper, plywood and wood chips still provide some 20 percent of the tonnage.

But there is a growing port traffic in wheat and grain destined for the Orient, autos from Japan, alumina ore and alumina ingots, containers, vermiculite, fruit, and fish. "Port traffic," Merklin reports, "was up 23 per cent last year."

That's not saying, however, that all traffic was up. "We had to be a little leaner, a little tougher, and a whole lot more competitive in 1970," Lou Menk, the BN president, told an audience in Everett several months ago.

Such an approach to business in the Pacific Northwest will undoubtedly carry over in to 1971—the BN will still have to hang in there lean, tough and competitive—but op-



(above) BN business car A2, the Columbia River, at Seattle's King Street Station. July 1, 1973. Photo by Aric VandeVord.

(below) Looking north at the House Yard towards downtown Seattle. The King Street Station and ex-GN piggyback tarmac are on the right, the Smith Tower (tall white building) and the Seattle First National Bank building (tall black building) in the middle, GN & NP freight houses are in the lower left, and just the very top of the Space Needle on the far left. In 1969 the bank was the tallest building west of the Mississippi and was also known as the box the Space Needle came in. Next to the main line (unseen on right) was House Yard track 29 west to tracks 28 and 27. The piggy packers worked the asphalt between 29 and 28 to load and unload trailers off of Train 97. The yard was removed to build the old Kingdome sports arena, and is now occupied by the new football and baseball stadiums. 1971 photo by Robert Wheeler.



erations, according to Merklin, are bound to look up.

In fact, if you're afoot in downtown Seattle you can look up toward the topmost reaches of the Centennial Building and see what must stand as the largest block "B" in the history of signmaking.

This giant "B" with its subtle "N" is 45 feet high and 35 feet wide. It's so big, in fact, that its vivid green lumines-

cence required nearly a half-mile of neon tubing. One glance at this massive logo, towering over the Queen City, is convincing proof that whatever plans the BN is cooking up for the Seattle Region, they are not going to be small ones.

* The original article had the name "Kiser" here, but that was probably an error.



(above) Freshly painted GP30 2201 (ex-GN) and not-yet-repainted 2217 await their next assignment on the outbound ready track at the Interbay engine facility in Seattle. The “smokehouse” and sand tower are in the background. 1971 photo by Robert Wheeler.

(below) Looking north on the mainline at the end of the double-track mainline at Balmer Yard. The Interbay roundhouse and storehouse are near the black water tower in the distance. The rusty tracks on right are ex-NP. 1971 photo by Robert Wheeler.





(above) This northbound train with Alco C636 4367 on the point is just about to pass the old King Street Terminal RR yard office, the little brick structure with white-trimmed windows on the left. 1971 photo by Robert Wheeler.

(below) SW12 217, not yet repainted, works the Stacy Street Yard in Seattle. The large white building in the background is the old Sears catalog sales and warehouse and retail store; downtown Seattle is in the background. August 16, 1973. Photo by Aric VandeVord.



Chicago Region

“Bridge” to the Nation...

The Burlington Northern's Chicago Region, like the city of the broad shoulders it calls home, rates a generous quota of superlatives.

It's the great "land bridge" between the BN and the 30 railroads moving freight to points east and south of the Great Lakes...the Region serving the nation's great heartland cities—Chicago, St. Louis, Kansas City...the prime gateway to the outside world for a cornucopia of agricultural products and manufactured goods from the bounteous farms and booming mills and factories of Illinois, Iowa, Missouri, and Wisconsin...a bustling center of passenger traffic where the BN's high-speed double-deckers act as indispensable conveyors of 40,000 commuters living in Chicago's farflung western suburbs.

One could go on indefinitely singing the praises and recounting the potentials of the BN's Chicago Region with its 3,850 miles of rail. You could single out the unit trains heaped with coal and moving north in endless streams from the mines of downstate Illinois, one of the nation's prime repositories of soft coal. Or you could mention an impressive roster of preeminent, freight-speeding facilities such as BN's Cicero Yard, where 3000 cars roll over the hump daily, the busy yards in the St. Louis area, or the new \$9 million automatic classification yard at Kansas City, complete with computers and closed circuit television.

In its entirety, the four-state complex measures up to one of the BN's most industrious and vital regions.

Head of operations as regional vice president is Donald H. King, who took over from Ivan C. Ethington on May 1 after 14 months as Twin Cities Regional V.P. (Ethington was advanced to vice president of operations in St. Paul.)

King, a native of St. Paul who had spent his early years in Duluth, signed on with the NP in 1937 as a conductor-brakeman. For awhile it appeared he "had his cap set" on a union career. He held offices as president, secretary and local chairman in the Brotherhood of Railway Trainmen (now part of the United Transportation Union). But the fortunes of railroading decreed otherwise. His switch to the ranks of management in the early 50's was followed by a fast climb up the promotional ladder to trainmaster, (Jamestown) assistant superintendent (Yellowstone Division), assistant to the vice president—operating, superintendent of NP's Fargo, Rocky Mountain, Idaho, and Tacoma

Divisions, and finally, general manager, Lines East, at St. Paul.

Through it all, Don King, undoubtedly as a result of his experiences as a labor leader, has never lost his close kinship with employees and his understanding of union needs and aspirations.

One can see from the tenor of his statements shortly after M-Day that he was concerned with the welfare of all employees.

"Our goal," he said, "is to supervise the growth of a more efficient railroad that will benefit our customers and employees alike."

With such thinking permeating the ranks of BN management not only at Chicago headquarters but throughout the system, one can see why the transition or assimilation of so many employees from so many lines went so smoothly in all regions of the company.

King's offices are on the 13th floor of the BN Building in Chicago, a stone's throw from Union Station. It's an off-street level shared by top staffers Jack Hamer, assistant vice president—operations, and Joe Grimes, assistant vice president—marketing.

The 13th obviously hasn't been a jinx floor for King as he carries on his M-Day assignment of keeping 8,100 employees reasonably inspired, contented, and productive, and the merger on schedule.

The BN's predecessor lines in the Region had always enjoyed a good mix of commodities—steel, iron, cement, fertilizer, farm and industrial machinery, agricultural products, processed foods, and a thousand varieties of manufactured and consumer goods. And this hasn't changed for the new Burlington Northern. Except that now according to King, coal is moving up fast in importance.

"If I had to rank them," he says, "I'd put coal number one, then freight forwarder traffic, manufactured goods, and grain products in that order.

King, however, as with Ethington before him, is not so much concerned with comparative rankings as he is with providing the best possible service to the Region's many shippers. And it is evident that this is being done as the few kinks unavoidably created by the merger are being rectified one by one.

"In today's railroad," King contends, "there is no line of demarcation between operations and sales. We believe in the type of direct contact...that gives us the ability to be more competitive.

And it's this type of direct contact, he might have added, that will help BN's Chicago Region in Merger Year Two give even greater service to its growing list of shippers.



(above) Two renumbered but not repainted GP30s plus a repainted ex-GN U25B head a manifest west by the Fairview Avenue communitier station on August 30, 1970. Photo by Marty Bernard.

(below) A pair of ex-NPSD45s in Cascade Green hustle a manifest through Hinsdale on September 1, 1970. Notice all jointed rail. Photo by Marty Bernard.



The passenger train in this photo being taken to the BN coach yard (former Burlington Route) from Chicago Union Station via BN's car washer is Burlington Northern's combined eastbound St. Paul to Chicago Domeliner Morning Zephyr-Empire Builder-North Coast Limited (although the train appears to be a bit short and we're not quite sure why). The Morning Zephyr had been operated solo from Minneapolis B Station to St. Paul Union Depot. Prior to its arrival, the eastbound Empire Builder had arrived from the Pacific Northwest over the former Great Northern via Stevens Pass, Spokane, Havre, New Rockford, Willmar, and Minneapolis. The eastbound North Coast Limited has also arrived from the Pacific Northwest over the former Northern Pacific via Pasco, Spokane, Butte, Staples, and Minneapolis. After cars destined to St. Paul had been set out by St. Paul Union Depot switcher from these two Domeliners from the Pacific Northwest, the Morning Zephyr, Empire Builder, and North Coast Limited were combined in that order. This combined Domeliner was operated by Burlington Northern from St. Paul to Chicago via La Crosse and Savanna. March 30, 1971. Photo by Marty Bernard. Caption information by Marty Bernard and John Strauss.

