

Colorado Coal Corridor

BY GREG MONROE/PHOTOS BY THE AUTHOR

WE ARE STANDING TRACKSIDE ON a cold March morning in Peetz, Colo., a small farming community three miles south of the Nebraska state line. Ice, created by the early morning fog and overnight sub-freezing temperatures has coated bushes, poles, and wires and the many metal-topped buildings and can be heard thudding and clinking as it loosens in the growing warmth of the rising sun and slides down to the ground. A sheeting of ice cracks off the crossing signal arm lowering for the approaching westbound. A 300mm telephoto lens is on my camera

to emphasize and exaggerate the main line and mile-long siding rails dipping and rising dramatically on the rolling northeastern Colorado plains.

Peetz (named for a former railroader) at MP 90 is the first Colorado town on the Northport, Neb., to Sterling, Colo., Angora Subdivision of BNSF Railway's Powder River Division. Residents are friendly and quick to wave at a stranger standing beside the tracks with a camera, and one can hear the horns and growling of trains on the Union Pacific's transcontinental line across central Nebraska and southern Wyoming a mere

15 air miles to the north over the horizon.

A never-ending stream of 110 and 120 144,000-pound-car BNSF coal trains with DPU pushers pass this way from the massive coal fields of the 24,000-square-mile Powder River Basin near Gillette in northeast Wyoming and southeast Montana. They run southeast through Alliance and Northport in western Nebraska, south through Peetz into Sterling, southwest into Denver, then south to Pueblo in southern Colorado on their way to power plants in Texas and other states. It's a veritable "coal corridor" some 375 miles long.

Moving coal from the Powder River Basin to markets in the southwest is the name of the game. A westbound BNSF coal drag sweeps through a curve between Roggen and Keenesburg, Colo.





came to Denver when completed into the Mile High City in 1882, and is still the route of Amtrak's *California Zephyr*.

The Colorado Joint Line

While the Powder River Basin has its own BNSF/UP Joint Line, 93 miles of jointly owned multi-track line between Caballo Junction and Shawnee Junction, the Joint Line in Colorado is the much older multi-tracked route between Denver and Pueblo, currently co-owned and operated by the BNSF and UP.

In Denver, the BNSF's Brush Sub ends at MP 542.1, meeting the Joint Line which starts at MP 0.0. From here BNSF trains run on the Pikes Peak Sub jointly with the UP's Colorado Springs Sub for the next 120.4 miles into Pueblo.

Several other rail lines in addition to the Brush converge in Denver and contribute to traffic over the Joint Line. UP coal loads and BNSF freights come off the UP's "Moffat Line" (Moffat Tunnel Subdivision) from western Colorado, and freight and unit grain trains come off BNSF's Front Range Sub down from Cheyenne. The UP's Denver Area Limon Subdivision (the 1870 Kansas Pacific line from Kansas City, Kan., which became UP in 1880) also converges here, along with BNSF's Greeley Sub from Borie, Wyo., and the Golden Sub that runs 16 miles west to the Coors Brewery



in Golden, Colo.

This first section of the Joint Line south into the Denver suburb of Littleton at MP 12.2 is triple track with three connecting crossovers. Main 1, the western track, is UP, with Mains 2 and 3 BNSF. Next is 39.8 miles of double track south into Palmer Lake, with crossover tracks at the former Santa Fe intermodal Big Lift facility at MP 19.3 (now often filled with shipments of new automobiles), and crossovers again just south of Sedalia. From Littleton for the approximately 12 miles into Sedalia, the southbound

Track 1 is UP, while it is BNSF for the next 32.4 miles into Crews in the town of Fountain just south of Colorado Springs, except for a six-mile stretch of BNSF rail from near Kelker (with a junction to serve the Fort Carson Army Base's occasional trains of tanks and other military equipment) to Crews. A 3.9 mile long siding with three crossovers (at points named Bijou, Colorado Springs, and Cimarron) at the north edge of Colorado Springs, along with sidings at Monument and Academy between Palmer Lake and Colorado Springs, help relieve some of this single track congestion.

Then 36 miles of double rails begin again from Crews into Pueblo, with the west side southbound Track 1 BNSF and east side northbound Track 2 UP. Additional crossovers are located at MP 87.9 south of Crews; at a location called Buttes at MP 95.3; and again at Bragdon between MP 108.6 and MP 109.9.

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A Bit of History

This "Joint Line" began in July 1871 when the new Denver & Rio Grande Railroad was being built by Civil War

Congressional Medal of Honor winner General William Jackson Palmer from newly booming Denver in what was then Kansas Territory to El Paso, Texas, at the Rio Grande River, with a connection with a Mexican railroad to Mexico City. Palmer's fledgling line was built as three-foot gauge, and his "Baby Railroad," so called because of its diminutive size and 30 pound rails, reached Pueblo, 120 rail miles south of Denver, by June 1872.

With both the Atchinson, Topeka & Santa Fe and the Rio Grande having eyes on the silver mining boom town of Leadville to the west, in 1877 a three-year court fight (bullets were also fired!) occurred over the right to build westward from Pueblo through the deep and narrow Royal Gorge of the Arkansas River. This "Royal Gorge War" was finally settled in 1880, with the D&RG getting the rights to the gorge (creating the Grande's famed Tennessee Pass line, closed by current owner UP since 1997) and on into Utah. The AT&SF in turn got the rights to Raton Pass to the south (today's Raton Subdivision of the BNSF's Southwest Division, and the route of Amtrak's *Southwest Chief*).

Then in 1887, changes started happening that would lead to the creation of today's Joint Line. The AT&SF built a standard gauge line closely paralleling the Grande between Denver and Pueblo,

prompting the Rio Grande to start standard-gauging its line in order to better compete. Then yet a third Denver-to-Pueblo line (up to 15 miles to the east) was built in 1881 by the Denver & New Orleans, through a succession of owners becoming the Colorado & Southern in 1898. Not as efficient as the AT&SF and D&RG lines, in 1900 the C&S agreed to a joint operation using the AT&SF's line (with the C&S line largely unused until it was torn out in 1919), spawning for the first time the term "joint line." The Denver & Rio Grande's line was not part of this new agreement until World War I when America's railroads were taken over by the United States Railroad Administration, which mandated all Denver-Pueblo rail traffic would be a joint operation on just the two ATSF/C&S and D&RG lines.

With the 20th century's booming population growth, the ATSF line in Colorado Springs found itself running through residential neighborhoods with many grade crossings. The Santa Fe line from Kelker to Palmer Lake and the D&RG line from Crews to Kelker were torn out in 1974, and the remaining segments joined to create today's 32.4 miles of single track between Palmer Lake and Crews.

Today, all these railroads have funneled down to the two present Joint Line owners, BNSF and UP. Rio Grande pur-



Since 1988, the PRB is the single largest source of coal mined in the United States, with seams of ultra-low sulfur sub-bituminous coal as much as 100 feet thick just under the surface. PRB mines supply 40 percent of the approximately one billion tons of coal used each year in the United States, in power plants in 36 states as far east as Pennsylvania and Georgia, as far south as Texas and Louisiana, and north into Canada.

Sterling to Brush

Sterling is a crew change point, and at times several long BNSF coal, unit grain, and freight trains will be waiting in the large yard at the eastern edge of town. Union Pacific runs an occasional



RIGHT: A southbound BNSF coal load approaches Palmer Lake in dramatic late afternoon winter sun light. BELOW: A manifest freight led by SD40-2 No. 8014 is southbound at Spruce spur beside Spruce Mountain Ranch, about three miles north of Palmer Lake. OPPOSITE: Still wearing its 1990s "Grinstein" paint, BNSF SD70MAC No. 9704 leads through the S-curve 2.5 miles north of Palmer Lake by the Spruce Mountain Ranch. Just behind the train is the location of one of the crossovers of Rio Grande and Santa Fe tracks before the USRA mandated joint operation for better rail efficiency during World War I.



local job down from Julesburg, Colo., to Sterling. At the east end of Sterling (BNSF MP 118.1, UP MP 87.5) BNSF trains enter UP rails and leave the Angora Sub and enter the Brush Subdivision, and for the next two dozen miles west to Union (BNSF MP 138.6; UP MP 81.1) are on the Julesburg Subdivision of UP's North Platte Area. From Union trains are again on BNSF rails for the final 11.4 miles south into Brush, before

the 87-mile run southwest into Denver. (Union is not a town, but the former junction of this UP line with the BNSF's line south to Brush. The old town here was called Pawnee and served as a railroad post office between 1903 and 1944.)

The UP section from Sterling is the remaining portion of the line built in 1881 from the UP's transcontinental Sherman Hill line at Julesburg, west into La Salle to join UP's Cheyenne, Wyo., to Denver



line. The UP tracks from Union to La Salle were torn out in 1993, leaving the Sterling-to-Union track mainly for use by BNSF coal trains. BNSF's line from Union to Brush was built in 1900 by predecessor Denver & Montana Railroad (later part of the Chicago, Burlington & Quincy).

Brush Subdivision

A Brush dispatcher was apologizing to the hogger on a unit grain train waiting at East Keenesburg, 49 miles west of Brush, explaining the reason for holding him in the siding was a backup of westbound trains in Sterling. The hogger responded with obvious exasperation that all that would do was pile them up waiting to get into Denver. A busy — and often typical — day on this section of the Brush Sub on the BNSF's coal corridor route through Colorado finds that it is not uncommon to see trains waiting in several sidings along I-76 between Brush and Denver.

Although the BNSF's Akron Subdivision from McCook, Neb., ends at the junction with the Brush Subdivision in Brush, milepost designations change from the Brush Sub's 150.0 to the Akron Sub's 454.9, continuing on into Denver to end at 542.1. This line, originally purchased in 1872 from the Burlington & Missouri River Railroad by the CB&Q, became the first direct rail line from Chi-

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Illustration by Otto M. Vondrak. Not all railroads and stations shown. Not an official map. ©2015 White River Productions



- AMTK - Amtrak
- ATSF - Atchafalaya, Topinka & Santa Fe
- BNSF - BNSF Railway
- CBQ - Chicago, Burlington & Quincy
- CRIP - Chicago, Rock Island & Pacific
- CS - Colorado & Southern
- DRGW - Denver & Rio Grande Western
- UP - Union Pacific
- RTD - Denver Regional Transit District

chased Southern Pacific in 1988, and the combined entity was sold to Union Pacific in 1996. The Burlington Northern absorbed the Colorado & Southern in 1981, then merged with the Atchison, Topeka & Santa Fe in 1996 to create BNSF.

The Littleton Depression

Since the 1970s, concern had been growing over the many long Joint Line trains passing through Littleton, blocking fire and ambulance emergency vehicles at the town's only two grade crossings. The solution was a one-mile-long concrete lined "depression" to lower the rails under the roads. The project was started in 1981, and by 1987 trains were no longer blocking traffic. And since 1994, the C and D lines of the Denver Regional Transportation District's electrified light rail system share the depression, paralleling the Joint Line tracks south from Denver.

Palmer Lake

The grade south from Littleton ranges from 0.975 percent to 1.55 percent to take trains the almost 2000-foot rise in elevation from "Mile High" Denver (5280 feet above sea level) to the Palmer Divide at Palmer Lake (MP 52.0 and 7237 feet), named after General Palmer. Northbound trains out of Pueblo at 4692 feet elevation climb a little over 2500

feet up to Palmer Lake, but on a longer and slightly gentler grade in the 1.0 to 1.1 percent range until a final rise to 1.4 percent before cresting at Palmer.

This crest of the grade at Palmer Lake, where the twin lines south of Denver come together into a single track, is probably the best location on the Joint Line to photograph both north- and southbound trains. This bottleneck can create traffic backups, and at times a line of southbound trains can be seen stopped on Track 1 between Larkspur and Palmer Lake, waiting for a "parade" of northbounds to enter Track 2 at Palmer Lake.

Waiting southbound merchandise freights may pull to a stop at the block signals in Palmer Lake. But the much heavier loaded coal trains will wait in the "sag" in the grade at the block signal about 1.5 miles north of Palmer Lake, to make restarting easier for the final climb up to Palmer Lake.

Colorado Springs - Pueblo

South of Palmer Lake, trains travel through Monument, Colo., where, if you are following the line south, you will need to get back on I-25 to drive on down to the Colorado Springs area. The single track (with several sidings) is out of sight of the interstate through here until it crosses over to the east side of I-25 at

the northern edge of "the Springs" (as Colorado Springs locals like to call their town, although there are other Colorado towns with "Springs" in their name). It is not uncommon to see northbound trains waiting on the 3.9 mile long siding beside I-25 in the Springs for southbounds entering the single track at Palmer Lake.

On to Texas

At Pueblo Junction in Pueblo, coal loads leave the corridor and split off east on the Pueblo Sub to La Junta, Colo., into the Boise City Sub south into Texas. Returning empties from Texas use the Twin Peaks and Spanish Peaks Subs back into Pueblo then north via the corridor back to the mines.

Railfanning the Corridor

Scanner frequencies include 160.920 on the Northport Sub into Sterling, along with 161.100 for the Sterling operator. From Sterling into Denver 161.100 is also used by the Brush dispatcher. Two road channels used for the Joint Line are 160.920 (UP dispatchers) and 160.650 (BNSF dispatchers). Trains switch to 161.100 at Englewood, and may use 160.695 to talk to the Denver yard.

All along much of the corridor, the photo possibilities are almost endless, and too numerous to detail here, but there are plenty of good locations visible



OPPOSITE: BNSF SD70MAC No. 8904 pokes its nose into the small, quiet community of Louviers just south of Denver on the Joint Line. Until 1971 the DuPont Chemical company manufactured dynamite and other explosives here. OPPOSITE BOTTOM: A northbound beside Route 85 north of Sedalia. ABOVE: Seven engines hustle a coal empty northward out of Sterling, Colo. The ascending grade is magnified with a 400mm telephoto.

RS-4-TC No. 4027 is switching near the BNSF main.

Another exception is the Commerce City oil refinery area in the northeast Denver metro area. This area is best reached from I-70 in Denver by taking Exit 275B and Brighton Boulevard north to follow the tracks to the refineries.

To follow the Joint Line south from Denver, from I-25 take Exit 207B for CO 85 (Santa Fe Boulevard) south to join the tracks into Castle Rock, where I-25 will take you on down to Pueblo. Access to Palmer Lake is via the Larkspur Exit 173 or Exit 167 at Greenland.

Whichever route you choose, Colorado's busy coal corridor puts on quite the show. 📷

from or close to highways, and virtually any I-76 and I-25 exit can give good access to the tracks via a crossing or frontage road, making it easy with a good state road map to seek out good photo locations.

A notable exception is the remote county road into Union. About 13 miles west of Sterling on U.S. 6, just before the tracks go under an overpass take CR 6 north for 2.1 miles, then CR 17.7 left to rejoin the tracks for the next seven miles

to Union, where the tracks again leave the road. Continue on CR 17.7 west (following the abandoned UP grade) for six miles to Snyder, then take Colorado Highway 71 south for 5.5 miles into Brush.

One mile east of Hudson on the I-76 frontage road, the Hudson Terminal Railroad car repair facility is off limits to railfans, but you may get an interesting photo or two from the frontage road when their Alco S1 No. 646 or Whitcomb