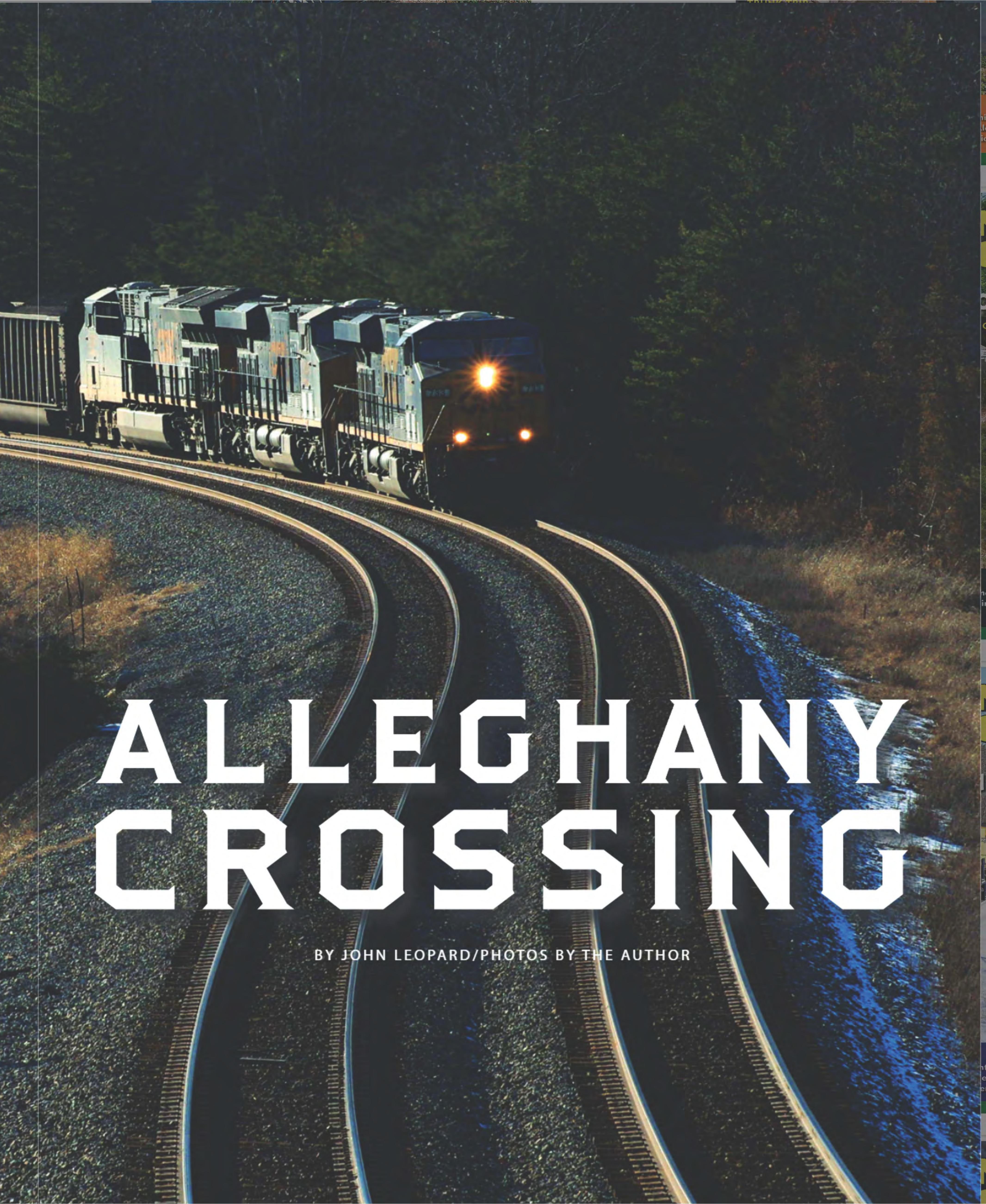
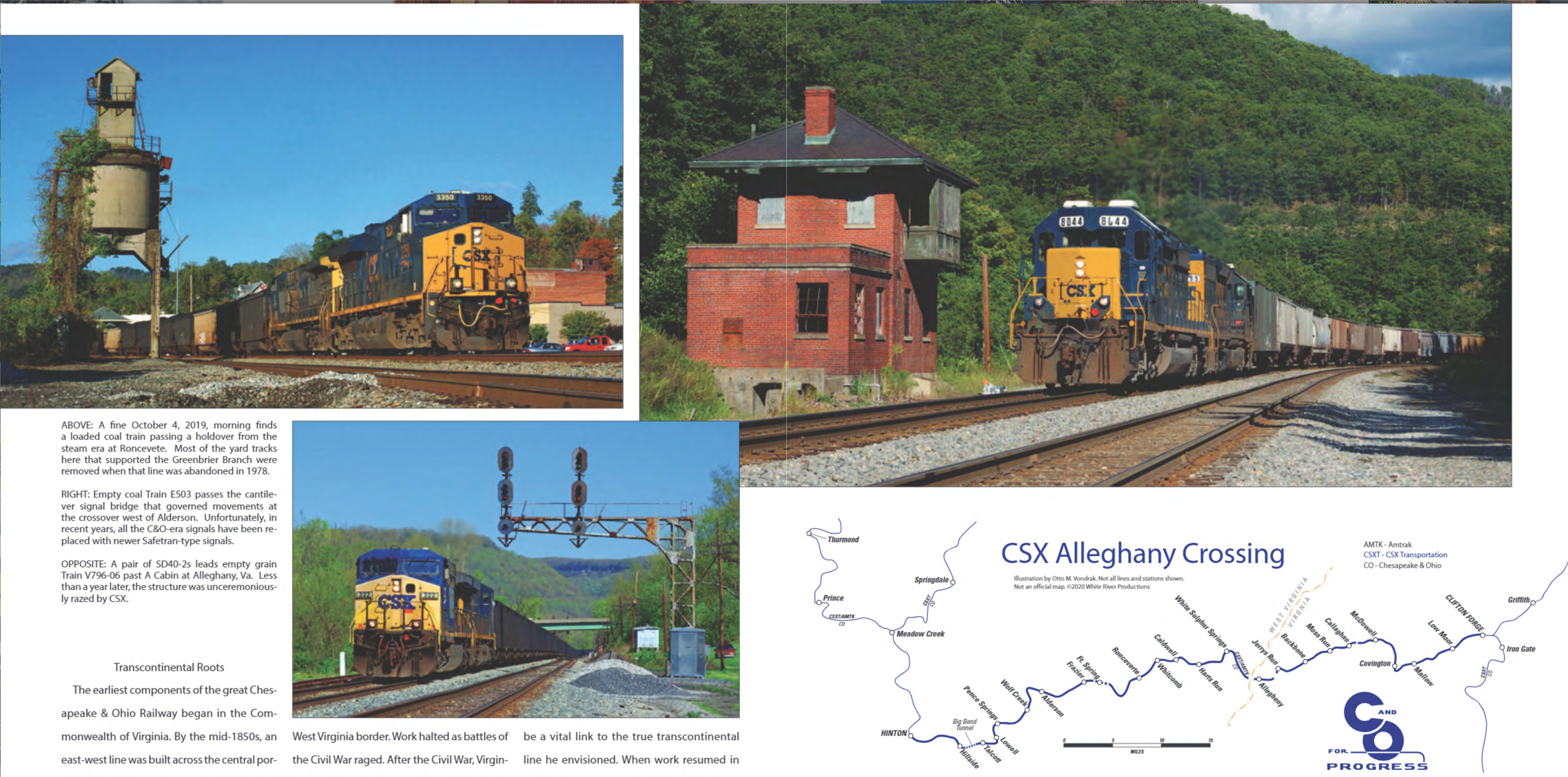
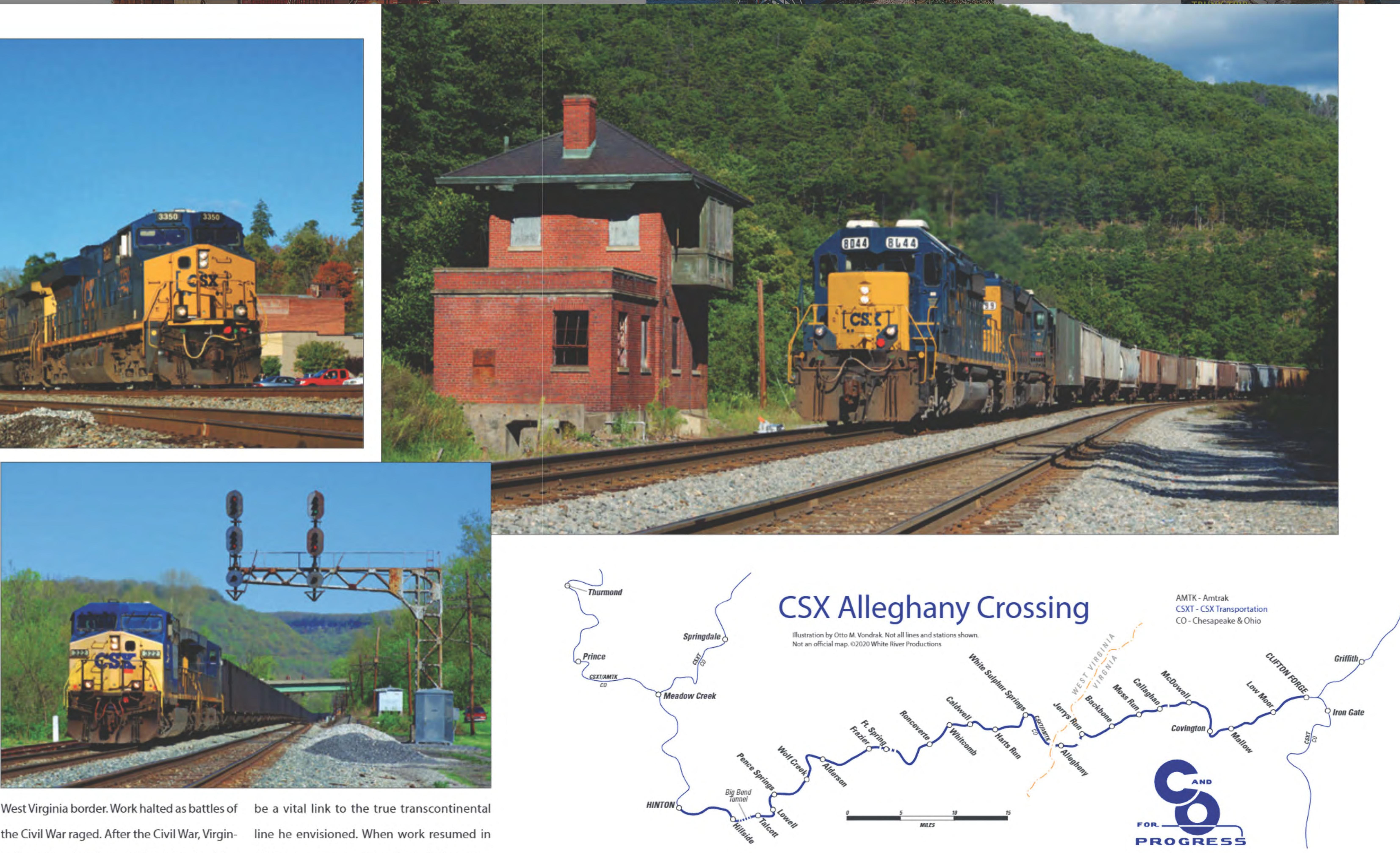
A trio of big GEs eases a loaded coal train through the reverse curves at Callaghan, Va., on a February 8, 2018, afternoon. Most trains are powered by modern locomotives built by General Electric, with a few EMDs mixed in.

> HINK OF CSX AND MOUNTAIN CROSSINGS, and the first that come to mind are tough grades along the former Baltimore & Ohio like Sand Patch, Seventeen Mile, Cranberry, Cheat River, and Newburg. Not as well-known, but equally interesting, is the old Chesapeake & Ohio Railway crossing of the Allegheny Mountains that forms the boundary between Virginia and West Virginia. Crammed into this short 78mile subdivision is a twisting mountain railroad between Hinton, W.Va., and Clifton Forge, Va., that has numerous tunnels as well as several old stations, coal towers, and interlockings. All of this, along with some great river and mountain valley scenery, makes this section of track worthy of a closer look.





as a local passenger route. By the late 1850s, ey to finish the line. more ambitious plans began to evolve and



tion of the state running west from Richmond ia Central ran into financial hardship. Looking 1867, crews were not only building west to Charlottesville. This line was mainly used for help, they enlisted the support of Collis P. from Covington but also east from the Ohio by farmers to transport their products and Huntington who agreed to provide the mon-

Huntington was involved with the buildthe line now known as Virginia Central began ers of the Central Pacific Railroad between an "a" in Virginia) and on to White Sulphur to lay track across the Blue Ridge Mountains Sacramento and Promontory Summit, Utah. Springs, W.Va., midway through the Alleghwest of Charlottesville to Covington, near the He thought the Virginia Central route could eny Mountains. Also at this time crews were

River Valley. In summer 1869, the road had been pushed westward over the summit of the Alleghanies ("Allegheny" is spelled with

building east from Huntington, W.Va., on the West Virginia had been admitted as a state, River. It was transported to market in small Kanawha River, then the New River. In 1873 apeake & Ohio Railroad (later Railway). the gap was closed near Hawks Nest in the

Ohio River to the state capital of Charles- and the early companies building these lines boats and barges using these waterways for ton, W.Va., and continuing east along the were combined under the new name of Ches-

Before the arrival of the rail line, small New River Gorge, completing 420 miles of rail quantities of coal were already being de- coveries away from the rivers led to a plethfrom Richmond to Huntington. By this time, veloped along the New River and Kanawha ora of branch lines being built, and what

further distribution via the Ohio River. But once the rail line was completed, more and more mines were opened. Further coal disRIGHT: On September 13, 2016, westbound single-level container Train Q135 (Portsmouth, Va.-North Baltimore, Ohio) rolls past the C&O station at Ronceverte while a loaded coal train slows to a stop to get the single-unit manned helper on the rear for the shove to Alleghany Summit.

BELOW RIGHT: Rebuilt SD40-2 4044 leads an eastbound freight through White Sulphur Springs on a fine spring morning on April 25, 2013. Unit train movements vastly outnumber those of merchandise trains on the Alleghany Sub.

began as a trickle turned into a flood of coal traffic after the turn of the century. C&O now reached major cities of the Midwest such as Cincinnati, Chicago, and Toledo to the west, and east to Washington, D.C., and the tidewater port at Newport News, Va. This resulted in coal flowing in each direction along the C&O main through West Virginia. By the 1940s, C&O was the largest originator of bituminous coal in the world, closely followed by the neighboring Norfolk & Western. The tremendous income generated by coal allowed C&O to continue expanding the railroad's physical plant with double track, new and enlarged tunnels, and automatic signaling.

During the heyday of the passenger train era, C&O's named trains — the George Washington, Fast Flying Virginian, and the Sportsman — traversed the route each day. Today, the line still hosts the varnish, so to speak, with Amtrak's Chicago-New York City Cardinal, Trains 50 and 51, operating three days a week on Sunday, Wednesday, and Friday. Eastbound, it passes over the Alleghany Sub in the mid-morning hours with westbound Train 51 traveling the line in late afternoon.









built at Avis, just east of the station, in about early construction crews would face. 1917. It served as the eastbound yard where the yard facilities at Hinton. Today, Hinton is mainly a crew change point and much of the infrastructure here has been removed.

Just east of Hinton, the old C&O turns east away from the New River and begins an affair with the Greenbrier River, closely following the waterway upgrade for the next 35 miles toward Alleghany Summit. Two main tracks twist along the river out of Hinton for six miles to Hilldale, where single track is encountered and enters Big Bend Tunnel. Just west of the Hilldale power switch is a large cut that was once the 700-foot-long Little Bend Tunnel,

mines scattered along the C&O main plus daylighted in 1970. The single track starting even more located on branch lines. Hinton at Hilldale immediately plunges into 6,152 was the major support yard for empty trains feet of darkness in the confines of Big Bend destined for these mines. Once loaded, the Tunnel. Instead of following the Greenbrier cars were returned to Hinton and made up River for seven miles as it twisted and horseinto road trains destined for eastern points shoed around Great Bend Mountain, the and the port at Newport News. When the old builders of the C&O chose to tunnel through Hinton yard was overtaxed, a new yard was the peak. It was one of the largest obstacles

The first tunnel here was named Great coal trains for the Alleghany grade were as- Bend Tunnel. Its construction began in Febsembled. As coal production along the New ruary 1870 and was difficult throughout its River Gorge fell, so too did the importance of 6,560-foot length. A pair of vertical shafts was



RIGHT TOP: Amtrak's eastbound Cardinal, Train 50, has just departed from its passenger stop at Clifton Forge. Visible in the distance are a few of the structures and equipment on the grounds of the C&O Heritage Center.

RIGHT: A pair of General Electric locomotives chugs under the old C&O signal bridge east of Caldwell, W.Va. A new silver cantilever signal installation now governs train movements here.

BELOW: An eastbound welded rail train slips through the cuts at Moss Run while a light engine helper set waits in the distance. Moss Run has good access for photographers and favorable morning sun angles for trains operating in both directions.







After completion of Great Bend Tunnel in bridge at Alderson not only provides a good August 1872, the unstable rock inside was a platform for photos, but also provides access constant problem. The original timber lining to a nicely restored train station. The wooden was eventually replaced with brick. And in frame depot was built in 1896 and is a perfect 1903, an air ventilation system was installed example of what was a C&O standard deafter the deaths of several train crew mem- sign. Amtrak provides flag-stop service to the bers who were overcome by steam engine station. Just west of the overpass is a set of exhaust. With train traffic in constant growth CTC-signaled double crossovers that allows mode, a second tunnel was completed in greater flexibility to train dispatchers. 1932. Located just south of the original bore, the 6,152-foot second tunnel was named the south bank of the Greenbrier River while Big Bend Tunnel. Traffic levels supported the highway is on the north side. Both are

drilled from atop the mountain toward where the tunnel floor was to be. Workers were lowered into these shafts and began tunneling workers at each portal, there were six fac- River is just west of Pence Springs at Lowell. ings where tunnel crews were working. It was talized in songs, and a statue of John Henry tunnel in 1972.

that time, the second main was taken up for crossover named Frasier in the timetable. seven miles east to Pence Springs. The Allehorizontally toward each other. Including ghany Sub's first crossing of the Greenbrier here that folk legend has it that worker John Springs, and a mile east on Track 2 is a track bored on the C&O main line; it is also the lon-Henry engaged in a supposed race against a scale known as the Riffe Scale. Here, east- gest to have two tracks. Reflecting the style steam-driven drilling rig and won. The classic bound coal trains that originate on the of the era, it has unique art deco-style, fluted "steel-drivin' man vs. machine" tale is immor- branch lines west of Hinton can be weighed in cast concrete portals. Prior to its completion, motion. Now following the south bank of the the tracks followed a large bow in the Greenwas placed near the eastern approach to the Greenbrier River, the tracks become some- brier River. The tunnel eliminated just over what inaccessible to Alderson. A highway 300 degrees of curvature and a mile of track.

East from Alderson, the tracks remain on the use of both tunnels until 1974 when crammed into a narrow canyon for the next five miles. Fortunately, access from State Highway 63 is provided by County Road 43 and a bridge over the river to reach Fort Spring. Immediately after crossing the river on the highway is a T-intersection with the tracks visible straight ahead; just to the west are the east portals of the dual Manns Tunnels. The original 982-foot tunnel was completed in August 1882 and was later expanded for two tracks, but as equipment grew larger it was deemed too small for two tracks. This resulted in a new 913-foot bore drilled parallel just to the north. Near the west portals of the Manns Tunnels is an abanthe rails were lifted in the original bore. At doned limestone quarry and a single CTC

Turning left at the T-intersection leads into Fort Spring where the west portal of the 2,806-foot Fort Spring Tunnel is visible. Com-Two main tracks begin again at Pence pleted in 1947, this was the last new tunnel



photography is all but nonexistent.

Next up is Rockland, where a short threeleghany grade.

The town of Ronceverte was basically cre-

Coming out of the east end of the Fort Spring 1900. The branch started just east of town Tunnel, the two-track main crosses the river and was largely tied to lumber and agriculon a five-span deck bridge and immediate- tural businesses. It was abandoned in 1978, ly plunges into the 2,100-foot Second Creek but facilities that remain today leave subtle Tunnel. Unfortunately, access to this area for hints of the area's prominence. A small 75ton capacity coaling tower remains as well as a "modern" two-story brick station built mile stretch of single track begins to WR in 1915. The eastbound climb to the summit Cabin. For those not familiar with former at Alleghany has a ruling percentage of 0.57, C&O trackage, there are numerous locations making it the easiest and lowest crossing of that contain "cabin" in their name, referring the Allegheny Mountains. Helper locomotive point of interest and is home to the famed to signal towers. While most of the tower operations have historically been based here, Greenbrier Resort. Constructed in 1858, the structures have been demolished or sit aban- but with today's distributed power technolo- springs resort became the standard summer doned, the location names are still used. WR gy their use has greatly diminished. A 12,200-Cabin is the beginning of two main tracks for foot CTC siding that parallels the twin mains Washington, D.C., residents. As its popularithe next 25 miles up the west side of the Al- west from town rounds out what Ronceverte ty increased and it gained status as a socialhas to offer.

At Whitcomb, three miles east of Roncevated by C&O. Only two houses and a grist erte, a set of CTC power crossovers marks the The resort remains one of the most luxurious mill were there when the railroad arrived in location where the Greenbrier Branch once and exclusive in the country. It has a signifi-1872. Ronceverte means Greenbrier in the came into the main line. Just east of Whit- cant place in golf history; in 1979, it hosted French language. The location became an comb, the main line crosses the Greenbrier the first Ryder Cup to feature the current important operational point, and soon after River for the last time on a four-span dou- competitive setup of the U.S. and European the railroad arrived one of the region's larg- ble-track bridge. Now climbing hard out of sides. Across the street from the entrance to est lumber mills opened for business. Ron- the Greenbrier Valley and following Howard the resort is the train station built in 1930; ceverte's operational stance grew when the Creek, the line begins to loosely parallel In- it now houses a Christmas-themed store, 101-mile Greenbrier Branch was opened in terstate 64. A large cut and fill at Harts Run but the lengthy platform still supports the



is visible from the interstate and is accessible using exit 175 and Harts Run Road.

White Sulphur Springs is the next major destination for wealthy eastern Virginia and ly exclusive site, the springs attracted elite guests from all areas of the South and East.

three-day-a-week stop for the Cardinal. Just east of the station, the tracks make a 90-degree bend, pass under I-64, and then immediately plunge into the 300-foot-long curved White Sulphur Tunnel.

Once clear of White Sulphur Tunnel, the tracks climb steadily twisting high above Dry Creek for several miles, then make another 90-degree curve into Tuckahoe. Here, a single power crossover allows for helpers to cut off, reverse direction, and cross over to the other main for the trip back to Ronceverte. Tuckahoe is also the west end of the twin Alleghany Tunnels. The south bore is the oldest, completed in 1870 at 4,711 feet in length and built for two tracks. However, this tunnel also soon became too small as equipment grew in size. During the massive 1930s program to increase clearances, C&O decided to construct a totally new parallel single-track tunnel just

to the north instead of enlarging the original is also the top of the Eastern Continental Dibore. When the new tunnel was complete, vide, separating waters flowing east to the the second track in the original bore was re- Atlantic Ocean or west to the Ohio River and, moved and the single track that remained ultimately, the Gulf of Mexico. At 2,072 feet was centered.

The boundary between Virginia and West Virginia is midway through the tunnels. This of what was once an important operation



OPPOSITE: CSX 3318 West, empty grain Train V632-21, passes A Cabin at Alleghany on a snow-covered March 22, 2018. The operator here utilized one of the first installations of CTC on the C&O, controlling movements between Jerry's Run and Tuckahoe.

LEFT: After a crew change, an eastbound loaded coal train passes the C&O station at Hinton. This structure once housed divisional offices and dispatchers of the New River Sub to the west; Alleghany Sub dispatchers operated their CTC boards from here as well.

BELOW: A rear-end manned helper disappears into the Lewis Tunnel on March 22, 2018. At this point, the shove has been completed and the crew is assisting with braking the heavy train down the 1.14-percent slope on the east side of the Alleghany grade.



above sea level, it was the second-highest elevation attained by C&O. Today, little remains