

PART IV - THE CHESAPEAKE & OHIO



***The Sciotoville Bridge.** C&O's 1,550-foot span, 8.2 miles east of Portsmouth in Scioto County, carries the Russell Subdivision over the Ohio River. Completed in 1917, it is still the largest riveted through truss bridge in the U.S.*

The history of Chesapeake & Ohio Railroad in Central Ohio is two separate epic tales. The more familiar story is that of the Hocking Valley Railroad (HVRP), a local company critical to the growth of Columbus and its surrounding region in the 19th Century. The other is that of the Chesapeake & Ohio (C&O), a 235-year-old enterprise of national political and economic prominence, comprised of some 150 acquired railroads, controlled at key moments by a number of the most iconic and most mercurial figures in American railroad lore. The destinies of these vastly different entities were intertwined by merger a century ago. Their continuing success has led to C&O progeny CSX Corporation rising to the pinnacle of the industry, having absorbed much of the railroad giants described in Parts I through III of these articles. The Pennsylvania, New York Central and Baltimore & Ohio now legally exist only in historical corporate minute books. PRR, NYC and B&O stock symbols no longer trade on any exchange. Their Tuscan Red, Century

Green and Bando Blue liveries have given way to Cyan-Blue and "CSX Yellow" over some 2,500 miles of Ohio rail right-of-way, the remnants of their fragmented empires taken up by C&O.¹

Columbus and the Hocking Valley Railroad

The HVRR was built as three separate railroads, completed between 1869 and 1881. All were heavy coal haulers from their earliest days. The first, which gave the line its name, was the 70-mile Columbus & Hocking Valley Railroad, built southeast from Columbus through Lancaster, Logan and Nelsonville, reaching Athens in 1870. A 50-mile pea vine of coal mine service branches was built north and eastward from this right-of-way up into Perry and Athens Counties in 1871-82. The second constituent line was the 130-mile Columbus & Toledo Railroad, built north from Columbus in 1875-77 through Delaware, Marion, Upper Sandusky and Fostoria, reaching Toledo and the railroad's first Lake Erie coal docks. The third segment was the 82-mile Gallipolis, McArthur & Columbus Railroad, built in 1879 and 1881 between Oldtown, near Logan, and Pomeroy on the Ohio River, with a 17-mile branch from Dundas eastward to Wellston and Jackson.



The Athens Subdivision and Coal Field Branches

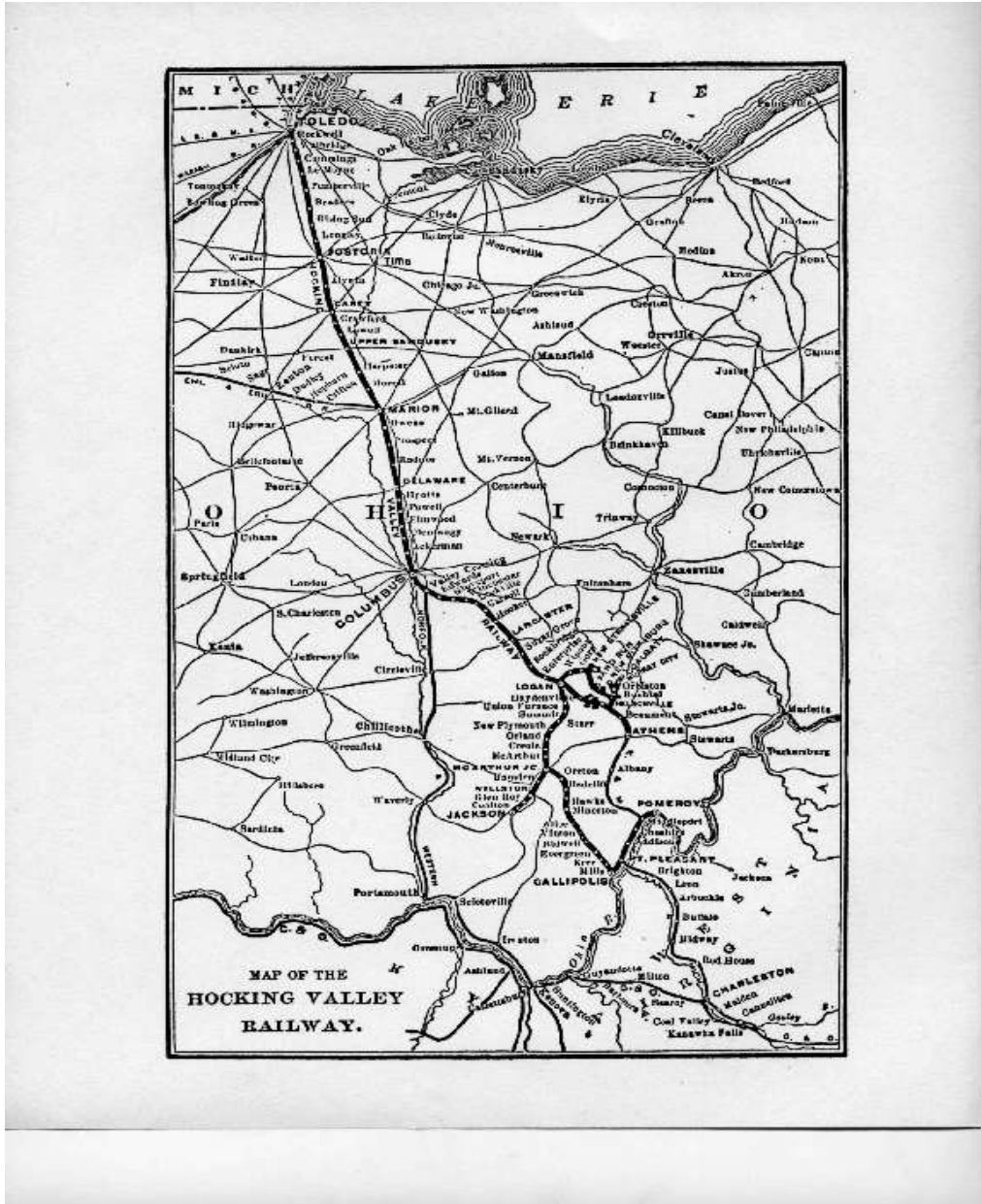
The Columbus & Hocking Valley line followed the Hocking Canal, a substantial branch on the Ohio canal system built in the 1830s and 1840s. The Hocking Canal was built to tap clay, sand, coal and other mineral deposits in the Hocking Valley. As Columbus grew in the 1850s and 1860s, with rapidly expanding demand for brick, tile, heating and industrial coal, this traffic flowed up through Carroll, on the Ohio & Erie Canal, and into Columbus on the Scioto feeder canal.

As the limitations of canal haulage became apparent, by the 1850s the state and business interests began to consider the possibility of a rail line to add freight and passenger capacity. They commissioned a survey for a prospective rail route by famed engineer Benjamin Latrobe in 1854.²

¹ For the purposes of identifying the C&O's various rail lines and branches, the C&O's Central Ohio lines were all part of its Ashland-Russell Division, organized into the Russell Subdivision (Russell, Kentucky to C.H. Cabin at the east end of Parsons Yard in Columbus), Columbus Subdivision (C.H. Cabin in Columbus to Toledo), Athens Subdivision (Mosel, east of Parsons Yard to Athens), Pomeroy Subdivision (Oldtown, near Logan, to Pomeroy on the Ohio River), Straitsville Subdivision (Logan to New Straitsville), Monday Creek Subdivision (Nelsonville Yard up through the coal mining areas of Hocking County, including several small branches), and Jackson Subdivision (Dundas on the Pomeroy Subdivision to Jackson). Also note that the Virginia-centric C&O labeled all these Subdivisions as being "East-West" lines, with the direction from the Ohio River or Athens to Toledo being "West".

² Benj. H. Latrobe, *Report upon the preliminary surveys of the part of the Columbus and Hocking Valley Railroad, from Lancaster to the Ohio River, in the direction of Parkersburg*, Sept. 1854.
<https://babel.hathitrust.org/cgi/pt?id=mdp.39015069992223&view=1up&seq=11&skin=2021>

Finally, during the Civil War, Columbus and Lancaster business interests incorporated the Mineral Railroad. This became the Columbus & Hocking Valley Railroad in 1867. The company began construction at a point on the Scioto River on the south edge of Columbus, crossing the feeder canal near Whittier Street, and then turning southeastward toward Lancaster.



The Hocking Valley Railroad, as finally built, just before merging into the C&O.

Building over level ground on the easily-worked alluvium of the Hocking Valley, the line reached Lancaster in early 1869, there crossing the ancient Cincinnati & Muskingum Valley Railroad (C&MV). The HVRR was completed through Logan and Nelsonville by the end of that year, and open to an interchange point with the B&O in Athens by July, 1870.³

Seeking to reach the mouths of more than 100 coal mines with prodigious production to the northeast in Hocking, Perry and Athens Counties,⁴ the HVRR built its 12.7 mile Straitsville Subdivision line from Logan to New Straitsville in 1870-1, the 16.8 mile Monday Creek Subdivision snaking northeast through various hollows from Nelsonville to a junction with the Straitsville line in 1877-80, and two 12-mile branches, the Snow Fork and Brush Fork Subdivisions off the Monday Creek Subdivision, in 1877-82. These branch lines were laid with 90-lb. rail, relaid in part in the 1920s and 30s. The routes were mostly flat but included a 1.6 percent grind at the north end up to New Straitsville. There was also the short Athens, Amesville and Chauncey Railway, formed in 1903 and built around 1907-8, which forked eastward from the HVRR several miles north of Athens, but never reached any of its intended destinations. This was merged into the HVRR in 1911 and called the Sugar Creek Branch.



The HVRR's Straitsville and Monday Creek Branches in 1898.
<https://www.west2k.com/ohstations/hocking.shtml>

The HVRR had connection points with the Toledo & Ohio Central (T&OC) predecessor Kanawha & Michigan Railroad (K&M), built in 1880-82, at Armitage just west of Athens, and several miles north at Beaumont where the K&M crossed the Hocking River. The T&OC and HVRR, which eventually paralleled each other all the way from the Ohio River to Toledo, with seven connections and interchange points, and were briefly under common control around 1910, had a long history of traffic interchanges and grants of running powers over each other's lines. As noted above, the HVRR crossed the C&MV at Lancaster, providing a connection for traffic to Cincinnati, and

³ For excellent detail of the formation and early financing and construction activities of the HVRR predecessor railroads, see O.C. Hooper, *History of the City of Columbus, Ohio*, railroad excerpt on Columbus Railroads website: <http://www.columbusrailroads.com/new/pdf/clbs%20history%201920%20railroads.pdf>

⁴ Industrial Commission of Ohio, Division of Mines, 40th Annual Report, December 31, 1914: <http://genealogytrails.com/ohio/athens/coal.htm>

Cleveland via Zanesville. Just south of Columbus, the HVRR also crossed the Norfolk & Western Scioto Valley line at Valley Crossing, providing an ideal coal traffic interchange point.

The north end of the Athens Subdivision was at Mound Street Yard, off South High Street west of the Brewery District. This yard eventually grew to 900 cars in capacity, including a 30-stall roundhouse and car shops, albeit in a fairly tight space as the railroad began to grow. The HVRR was extended up to a junction with the other Columbus railroads north of Broad Street in 1872. This required building two bridges across the Scioto River, but enabled the line to establish a downtown freight house, and provided a yard and connection with the PRR Bradford line at Dennison Avenue, interchange with the PRR, B&O, T&OC and Big Four lines, and a route to Columbus Union Depot. The HVRR added another 500-car yard at South Columbus.

On the south end of the Athens line, the railroad built a sizable yard at Logan, adding a roundhouse in 1881, with five of its ten stalls lengthened from 71 to 110 feet in the 1920s to accommodate bigger 2-10-2 Santa Fe engines acquired by the C&O to supplement its 2-8-2 Mikados and 2-8-0 Consolidations then used for freight and coal trains. The HVRR later built another big yard at Nelsonville just for coal, with a roundhouse and machine shop. The Nelsonville Yard had 23 inbound and classification tracks on its "light" side and ten outbound "heavy" side tracks for departing coal drags. This yard made up trains for 2.5 million tons of Columbus-bound coal annually during the peak era in 1915-1938. Some 52 road and yard crews based there covered the mine runs, yard work and line haul trains north.⁵

The Athens Subdivision was well suited to coal drags, having no challenging grades and relatively gentle curves. The HVRR laid 100-lb. rail. Several of the busier portions of the road, including the area around Logan and Nelsonville and its major bridges, were double-tracked.



The Columbus Subdivision

For some years after completion of the HVRR Athens line, there was no through railroad northwest from Columbus to Toledo. A group of Toledo investors was progressing the concept of a line linking up several short railroads running south from Toledo through Bowling Green, Findlay, Kenton and Marysville, which eventually would become the T&OC in the early 1890s. However, a competing alliance of Columbus investors, including shareholders of the HVRR, favored a more direct right-of-way north to Toledo through Delaware, Marion, Upper Sandusky and Fostoria. This latter group became the first movers, incorporating the Columbus & Toledo Railroad in 1872.

⁵ Lorinda LeClain, *Images of America - Nelsonville*, Arcadia Publishing 2015, p. 52:
<https://www.google.com/books/edition/Nelsonville/NKKMCgAAQBAJ?hl=en&gbpv=1&dq=Nelsonville+roundhouse&pg=PA53&printsec=frontcover>

After a hiatus arising from the Panic of 1873, construction commenced in 1875, reaching Marion in late 1876, and terminated at a connection with the PRR affiliate Toledo & Woodville Railroad at Walbridge in January 1877. Trains moving north from Columbus, like those on the competing T&OC and PRR lines, faced a long uphill grade of about 20 miles, using helpers for this pull.

The railroad also acquired a dock on the Maumee River, and quickly leveraged its ability to transload coal and ore directly between ships and trains at Lake Erie into very rapid growth, especially in the coal haulage business. Initially relying on coal off the Athens line, by the early 20th Century, this Toledo line was built into a robust, heavy haulage double-tracked route with 130 and 140-lb. rail. It began handling many multiples of the original Athens and Pomeroy coal volume, attracted from other railroads, especially from the T&OC and N&W.



The Pomeroy Subdivision

The remaining piece of the original HVRR was the Pomeroy Subdivision. Originally established as the Gallipolis, McArthur and Columbus Railroad in 1870, this company planned a through line from the Ohio River to Columbus. It purchased a graded but unbuilt-upon right-of way between Logan and Hamden, in Vinton County, but was knocked down by the Panic of 1873. A successor company stepped in during 1876, planning a through route to Columbus, but it too was inadequately capitalized. Finally, the Ohio & West Virginia Railway, incorporated in 1878, revised its plan so that the northern terminus would be at a junction with the HVRR at Oldtown, near Logan. Allied with the HVRR, the O&WV was able to fund and build the railroad between Oldtown and Gallipolis by 1880, with a branch westward from Dundas to Wellston and Jackson.

The O&WV added a further extension running 21 miles upriver from Gallipolis to Pomeroy in 1881. This track would soon be shared with the T&OC predecessor Kanawha & Michigan, built northward from Hobson Junction, near Middleport, in 1880-82. The K&M and a West Virginia affiliate short line built a through truss bridge across the river between Kanauga, Ohio and Point Pleasant, WV in 1885, in a project distinguished by the fact there were no fatal accidents during the construction, unique for such an undertaking.⁶ In its final form, the Pomeroy Subdivision ran 84 miles from Oldtown (Milepost 51, the distance from Columbus) to Pomeroy (MP 135).

The Pomeroy Subdivision was upgraded to 100-lb. rail in the 1920s, but was notorious for a significant number of challenging grades and sharp curves. It appears the HVRR and later the C&O did not assign helpers on this line. Pomeroy road crews were left to do for themselves by doubling the hills. About eight miles south from Oldtown, up through Union Furnace (MP 57),

⁶ Point Pleasant-Kanauga Railroad Bridge.
<https://web.archive.org/web/20120603014323/http://bridgestunnels.com/bridges/ohio-river/point-pleasant-kanauga-railroad-bridge/> This bridge was rebuilt in 1908 on the same piers without taking down the earlier structure.

there was a three-mile grade of 1.35-1.4 percent over most of its length. Crews on southbound tonnage trains, especially ore trains destined for the several iron works customers at Jackson, would double their trains over to Starr, backing the head end cut into the Coonville Spur (MP 61), and returning for the rear end. There were also tough hills with long grades up to 1.2 percent at Eagle, Alice, Glens and Kerrs, assuring long hard workdays for engine and train crews.⁷ The line laid out a little better for heavy tonnage coal trains in the westward (northbound) direction.

There were active coal mines on the Pomeroy Subdivision for much of its existence, with a number in Eastern Hocking County near Starr, and others in Vinton and Jackson Counties. Jackson County was nearly the top coal producer in Ohio for a time around 1900, shipping some 1.5 million tons yearly with a good portion of it moving up to Columbus over the HVRR. But these on-line mines had largely "played out" by the 1950s. The Benedict Mine at Creola (MP 70) was the last to close, and by the mid-1960s no coal was being loaded on the Pomeroy Subdivision. A mine at Minerton (MP 92) later reopened in 1982 to serve the AEP Gavin Power Plant on the Ohio River at Cheshire (MP 125), keeping the southern portion of the railroad in existence up into the 1990s.⁸

Separate figures for coal originating on the Pomeroy Subdivision are not available. Looking at reported coal origination for the HVRR before it merged into the C&O, the 1916 annual report shows on-line origin coal being 3.6 million tons, all of which would have come from the Athens and Pomeroy Subdivisions. Other reports show about 2.5 million tons of coal handled annually at the Nelsonville Yard in this era, which would likely have accounted for most of the Athens line volume, meaning the on-line coal on the Pomeroy was probably 1.0 - 1.5 million tons per year.

HVRR Mergers and Reorganizations - 1881 through 1910

The Athens Subdivision predecessor Hocking Valley Railroad, the Columbus & Toledo Railroad, and the Ohio & West Virginia Railway's Pomeroy line, which had previously been under common ownership and control for some years, merged in the summer of 1881, creating Columbus, Hocking Valley and Toledo Railway (CHVTR).

The CHVTR, like almost all Ohio railroads, struggled through financial upheavals in the mid-1890s, and was reorganized in 1897-99, emerging as the Hocking Valley Railway (HVR). In mid-1903, the ownership of the HVR was allocated to a number of other railroad shareholders groups, with one-third of the HVR going to the predecessor of the Pennsylvania Railroad, and one-sixth apiece going to the C&O, B&O, NYC and Erie.

The C&O gained control of the HVR by 1910, but had no physical connection to the HVR and initially could not integrate it into the C&O's system or leverage it to any economic advantage. The C&O had built through Northern Kentucky to Cincinnati and Louisville and had merged in the Chicago, Cincinnati & Louisville Railroad from Cincinnati to the Chicago area. But the CC&L

⁷ Thanks to Jim Evans for supplying a great wealth of information, documents and materials regarding the Pomeroy Subdivision and Monday Creek Subdivision in their latter days.

⁸ Notes from interview with C&O historian Jim Evans, 2014. Also see recollections of a former C&O Pomeroy Subdivision trainman: <https://railroad.net/viewtopic.php?t=7521>

had some steep grades and was not ideal for heavy coal traffic. In particular the C&O wanted to take advantage of the HVR's high-capacity Lake Erie coal docks to bring a portion of its massive Appalachian coal traffic into the rapidly-expanding Lakes coal market. To link up with the orphan HVR, the C&O's preferred strategy was to acquire the Kanawha & Michigan Railroad, a T&OC ancestor running from West Virginia to Corning, Ohio. The K&M connected with the C&O main line at Charleston, on its southern end, and with the HVR at Armitage and Beaumont near Athens, and with the Pomeroy line at Kanauga, near Gallipolis. But this effort was brought up short when the Interstate Commerce Commission, invoking the Sherman Antitrust Act, forced the C&O to sell the K&M to its NYC-controlled rival the T&OC in 1914.⁹

Stymied by the government, the C&O soon sought an alternative path forward to connect with the Hocking Valley lines that would much more dramatically alter the Central Ohio landscape and economy.



Emergence of the C&O

Far removed from Columbus or the Hocking Valley in time and geography, the earliest forebears of the C&O included the James River & Kanawha Canal Company, organized in 1785 with affiliations to George Washington, followed by the Louisa Railroad, established in Virginia in 1836. Like Ohio and various other states, before steam power and railroads were conceived, Virginia imagined the way to expand economically into new country west of the Allegheny ridges was development of canals. The initial plan was to follow the James River, the major navigable inland waterway from the Chesapeake Bay through Richmond, westward through the Allegheny ridges to the Kanawha River, and on to the Ohio River from there. Of course, during this era before losing its western counties during the Civil War, Virginia stretched all way to the Ohio River. Like the Ohio experience, the railroad concept appeared on the Virginia scene just when the canals reached their feasible physical limitations as the grades got steeper. The Louisa Railroad opened its first stretch of track in 1837. Renamed the Virginia Central Railroad in 1850, the company soon built several hundred miles of railroad from Richmond up through Charlottesville into the Blue Ridge mountains, reaching a western terminus at Mechum's River by 1852.

The State of Virginia began investing public funds in prospective railroad construction as early as 1816. In 1849, the state established the Blue Ridge Railroad for the purpose of building a line over the Allegheny summit to connect the Virginia Central and adjoining railroads that served the Virginia Piedmont area between the mountains and the seacoast with railroads in the Shenandoah Valley in the interior "Transmontaigne" part of the state. The valley lines, including the B&O,

⁹ <https://www.timetoast.com/timelines/history-of-the-c-o-railroad> The ICC was the world's first government regulatory agency when established in 1887. The Sherman Act, championed by Senator John Sherman of Lancaster Ohio, brother of Civil War General William Tecumseh Sherman, was enacted in 1890. The Sherman Act bars unreasonable agreements in restraint of trade, such as the massive railroad monopolies that emerged in the 1880s.

carried traffic northward toward Baltimore. Virginia hoped to bring a greater portion of its western counties' wealth down through the Tidewater area.

The universally lauded accomplishment of the Virginia Central, and its chief engineer Claudius Crozet, were four tunnels carrying the line over the precipitous summit of the Blue Ridge at Rockfish Gap. The most significant **tunnel**, at 4,237 feet the longest in the U.S. and among the longest worldwide at the time, was the Blue Ridge Tunnel near the eponymously-named town of Crozet. Notably, the state contracted for the labor of some 300 slaves held by nearby landowners to do much of the heavy work building this line.

By 1856, the Virginia Central reached Clifton Forge, Virginia, connecting with the Shenandoah Valley railroads. The state also chartered and heavily subsidized another line, the Covington & Ohio Railroad, to build westward up the Alleghany grade, and did considerable work on numerous tunnels over the mountain and into Virginia's western counties toward Ohio. The Covington & Ohio built much of the rail works around Charleston and along the Kanawha River.

Just as all this set the stage for a grand leap westward, the Civil War intervened. The Virginia Central, like the B&O, was heavily fought over and frequently damaged by the cavalry and infantries of both armies. In 1863, Virginia's western 50 counties, rich with mineral wealth, especially coal, but largely devoid of slave holders, broke away to become West Virginia, leaving the railroad split between warring nations.

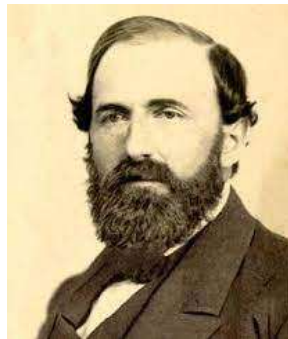
Stalled by lack of capital, the Virginia railroads had the good fortune to connect with Californian Collis P. Huntington, whose eastward-building Central Pacific Railroad was then nearing its historic link up with the westward-building Union Pacific in Utah to create the transcontinental line. Huntington envisioned linking the Pacific lines up with a railroad running through to the East Coast, under common management. He saw the Virginia and Blue Ridge lines connecting with Virginia's portentous deep tidewater harbor facilities at Norfolk, the largest ice-free seaport in the eastern states, as the best candidate for this enterprise.



The west portal of the 4,200-ft. C&O Blue Ridge Tunnel, at Rockfish Gap near Crozet, Virginia, completed in 1852. This tunnel, now on a hiking trail, was replaced in the 1940s by a larger bore nearby with a lower grade.

Collis Potter Huntington (1821-1900), along with his partners California Governor and later U.S. Senator Leland Stanford, Charles Crocker and Mark Hopkins comprised the legendary "Big Four" who built the Central Pacific Railroad in 1862-69. All from humble beginnings as hardware merchants transplanted from Upstate New York and Connecticut birthplaces to California during the 1849 Gold Rush, they combined exactly the elements needed to pull off their monumental undertaking. Perhaps the first among equals, Huntington was the financial wizard who moved to New York, and arranged for money, rails and locomotives flowing in ships from the East Coast around Cape Horn, a hazardous 4-5 month sailing ship voyage, and up to Sacramento and the western railhead. Distinguishing himself from many of his so-called "robber baron" contemporaries, Huntington aligned the Big Four's personal visions of vast enrichment with the objective of actually building the railroad, one of the outstanding engineering feats of the 19th Century, rather than just profiting from government contracts and stock manipulation.

Upon connecting with Huntington and his broader horizons, the Virginia railroads soon found themselves playing on a far grander stage. The Virginia Central, Covington & Ohio and Blue Ridge lines merged in 1868, forming the Chesapeake & Ohio Railroad. Between 1869-73, energized by Huntington, the line built across what had become West Virginia, reaching the Ohio River. The city established at this wilderness railhead now bears the name Huntington.



Collis P. Huntington, circa 1870.

With the panic of 1873, and Huntington's capital spread a bit thinly across many ambitious rail projects, and the rich natural resources wealth of West Virginia not yet being developed substantially, the line stalled at Huntington. It went through a reorganization, emerging as the Chesapeake & Ohio Railway Company in 1878. During the next ten years under Huntington, the C&O built and strengthened its lines eastward from the inland Port of Richmond to the Chesapeake Bay. The C&O set up huge marine loading piers at Newport News to receive its increasing flow of Appalachian coal to be transshipped up and down the coast to industrializing eastern cities.

However, in 1888 Huntington lost majority control of the C&O to banker J.P. Morgan and William K. Vanderbilt (1849-1920), grandson of "Commodore" Cornelius Vanderbilt of New York Central Railroad fame. The Morgan-Vanderbilt alliance took over the C&O through business alignments that likely would have been outlawed a few years later by the Sherman Act, and for all his cunning and resources, Huntington could not hold onto control. Morgan and Vanderbilt nominated as C&O president Melville Ingalls, who was also president of the Cleveland, Cincinnati, Chicago and St. Louis Railroad (the "Big Four"), which Vanderbilt controlled. Ingalls appointed George Stevens

as the General manager of the C&O. From 1889 onward, Ingalls and Stevens upgraded the C&O, building sturdier steel bridges, improving grading, adding more robust ballast and laying heavier rail over the main lines, replacing older rolling stock with larger modern locomotives and cars.

In that same year, the C&O also acquired the Richmond & Alleghany Railroad, built upon the former towpath of the George Washington-inspired James River Canal. This gave the C&O a route with easier grades from Richmond to Clifton Forge than those of the Blue Ridge summit line. The C&O also built its Cincinnati Division on the south shore of the Ohio River west from Huntington through Kentucky, connecting the C&O with the Big Four, L&N and other major north-south lines at Cincinnati, and then building onward to Louisville.

In 1910 the C&O merged in the previously-acquired Chicago, Cincinnati & Louisville Railroad. Virtually all of what would be the heart of the modern C&O was then in place, connecting its array of coal field lines with the Chicago market and Midwest rail hubs on its western side, and the largest east coast markets and port cities on the other. With its vast network in Appalachian coal country, the C&O was well on its way to loading upward of 60 million tons of coal annually. But the C&O's attempt to link directly with the Hocking Valley lines through acquisition of the Kanawha & Michigan remained blocked by the ICC.

Linking the C&O and the Hocking Valley - The Russell Subdivision

The C&O's second-best option to access the Hocking Valley lines was an interchange agreement with the Norfolk & Western. The latter railroad's southern main line entered Ohio in Lawrence County via a bridge from Kenova, Kentucky, where the C&O had an interchange with the N&W, and ran along the north shore of the Ohio to Portsmouth. There the N&W's Scioto Valley line branched due north to Columbus via Waverly, Chillicothe and Circleville. This N&W line intersected the Hocking Valley line at Valley Crossing, five miles southeast of Columbus. The N&W agreed to host C&O traffic. By 1916, the HVRR was handling some 5.5 million tons of northbound coal traffic interchanged onto the line, largely arriving via the N&W. Together with the 3.6 million tons originating on the HVRR Athens and Pomeroy Subdivisions, the HVRR was then moving some 9.2 million tons of coal into and through Columbus annually.

The N&W-C&O arrangement had certain mutual advantages. The N&W terminated at Columbus, and the C&O could take N&W coal northward to the Lake and Michigan markets. By 1921, the HVRR's coal facilities at Presque Isle were loading more than four millions tons annually on Great Lakes steamers, rivaling the volume shipped through the railroad's eastern marine terminal facilities at Newport News, Va. But as head-to-head competitors over virtually their entire distance from tidewater Virginia to Cincinnati, and essentially to Chicago as the N&W had access there through a close alliance with the PRR, the situation with the N&W was awkward and unsatisfactory. The C&O sought to find a better solution to realize the full advantages of owning the Hocking Valley lines and Lake Erie docks.

By 1914, with no possibility of an alternative rail link to acquire, the C&O determined to build its own new railroad from its east-west main line south of the Ohio to replace this N&W interchange. Starting at Limeville, Kentucky, near its huge coal traffic terminal at Russell, the C&O laid out an ultra-modern, high-efficiency railroad through to Columbus. The planned 91-mile route¹⁰ crossed the Ohio River at Sciotoville, via a massive bridge to be built, and paralleled the existing N&W Scioto Valley route up to Valley Crossing, where it joined the existing HVRR route into downtown Columbus. This project was unique in U.S. rail infrastructure, being purely an "air line" with no stations, on-line shippers or rail interchanges, built with double track, 130-lb. rail, 125-car center passing tracks, virtually no at-grade rail or highway crossings, no challenging long grades or tight curves. It was engineered solely to permit high speed freight throughput at least operating cost.¹¹

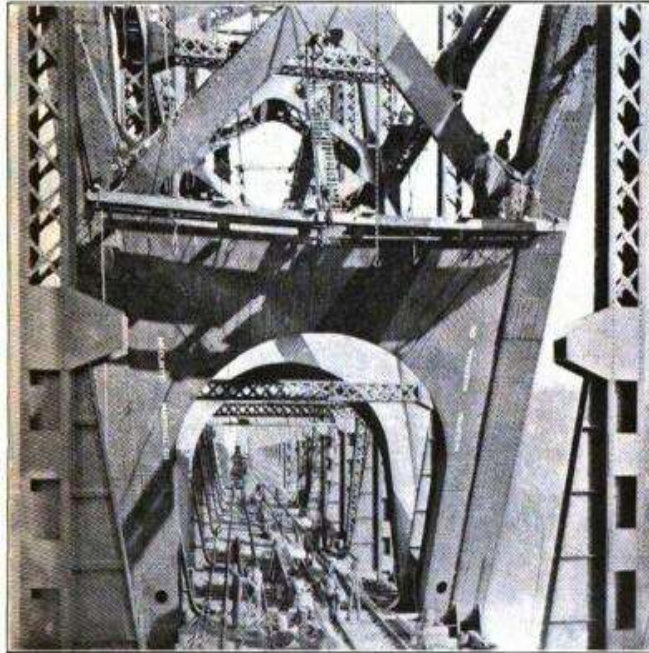
Known initially as the C&O Northern line, the new railroad also featured newly-built immense and impressive facilities at either end. Parsons Yard is the largest in Columbus with a capacity of 4,872 cars, a 27-stall roundhouse and 115-foot turntable, able to handle the biggest steam locomotives then in existence. On the south end, the monstrous Sciotoville Bridge spanned the Ohio River. Designed by Austrian engineer Gustav Lindenthal and erected in 1914-17, this bridge was the longest continuous truss span in the world when opened. A century later it is still the largest riveted truss bridge in the United States.¹²

By 1916, construction reached a connection point with the N&W and Detroit, Toledo & Ironton Railroad at Waverly, 64 miles south of Valley Crossing, and work on the Sciotoville Bridge was completed in 1917. However, with World War II and other intervening events, there was a construction hiatus, leaving the C&O still reliant on the N&W for trackage rights up to Columbus. Work on the remaining portion of the line from Gregg, just south of Waverly, to Valley Crossing was finally finished in 1927. By the time this mighty rail link was completed, the C&O had begun sending more of its Appalachian coal volume west than east.

¹⁰ The Russell Subdivision is 111 miles long in the C&O ETT, including the distance from Russell to Limeville.

¹¹ For excellent details about the C&O Northern line construction, see Columbus Railroads 1928 article reprint at: http://www.columbusrailroads.com/new/live/05Steam_Railroads/12Chesapeake_&_Ohio/081927_Construction/c&o_construction_1927.pdf

¹² <https://bridgehunter.com/oh/scioto/sciotoville/>



The Sciotoville Bridge on the C&O Russell Division nearing completion in 1917. With two 775-foot spans, this was the world's longest continuous truss bridge until 1945. Go to the Bridge Hunter link here to enlarge and see what a truly massive structure this is: <https://bridgehunter.com/oh/scioto/sciotoville/>

The Vans

Any narrative of C&O history must devote ample attention to the meteoric rise and fall of Oris and Mantis Van Sweringen, Ohio's most unlikely national "railroad barons" of the 1920s. Born in 1879 and 1881 to a family of moderate means, raised in Wooster, moving to Cleveland in 1890, the "Vans" teamed on various business ventures throughout their lives. After early failures, the brothers finally found success as developers of real estate at Shaker Heights in 1909. Initially they sought to acquire a local railroad only for the purposes of initiating commuter service between their residential tracts and downtown Cleveland in 1915. But the Vans suddenly found themselves awash in cash and began to elbow their way into the fast lanes of railroad stock speculation and empire building.



Mantis (L) and Oris (R) Van Sweringen

During first several years of the booming 1920s, the Vans bought up controlling stock of the C&O, including its HVRR, positions in the Pere Marquette Railway in Michigan and Ontario, and the Erie Railroad. Beginning in 1923, they also famously led the effort to build the landmark Terminal Tower in downtown Cleveland. In 1925, they sought ICC approval to merge their four railroads into the Nickel Plate (New York, Chicago and St. Louis Railroad), in which they were also accumulating large holdings. The ICC rejected this scheme, also virulently opposed by other C&O shareholders, finding its capitalization to be inadequate.

In the later 1920s, the brothers formed a number of rail holding companies, and teamed with the NYC and B&O to buy the Wheeling & Lake Erie, and sought to construct a broader empire around the C&O, seeking to transfer the Erie and Pere Marquette into the C&O. They also acquired control of the Chicago & Eastern Illinois and Missouri Pacific. The Vans' aggressive maneuvering in outgunning the great railroad tycoons of the day to acquire the Missouri Pacific won the grudging admiration of Wall Street's ultimate apex rail predator, Otto Hermann Kahn (best known as the caricature with the silk top hat and white handlebar moustache in the "Monopoly" board game). But Kahn, roosting at his profligately ostentatious Oheka Castle on Long Island, the second-largest private residence ever built in North America, warned that the brothers' reckless tactics would eventually lead to a defeat of Napoleonic proportions.

During early 1929, the Van Sweringens' net worth soared to over \$3 billion. However, this was largely a product of the overheated stock exchange, which collapsed in October of that year. The Vans' fortunes and rail holdings deflated rapidly, soon being dispersed in receivership sales.

The Vans resided together in their 57-room Roundwood Manor mansion at Hunting Valley, near Cleveland. Neither ever married. Mantis died in 1935. Oris suffered a fatal heart attack while on a train in 1936, passing with a net worth of only \$3,000.

However, the Vans' lasting legacy is far larger than just their erratic style and curious personalities. Unlike most who made and lost railroad fortunes, the brothers also harnessed the spectacular liquidity created by soaring 1920s capital markets to upgrade and strengthen the C&O lines into a resilient integrated enterprise. The expensive 1927 construction of the Russell Subdivision with its unique robust infrastructure is the prime example. But a look at C&O track charts shows constant upgrading of rail and roadbed over the whole system in this period, expenditures that few other railroads were making to any comparable degree. The C&O also built and ordered the most modern and largest locomotives and high-capacity rolling stock in the 1920s. As a result, the C&O was able to survive the 1930s depression, meet the challenges of World War II and the often devastating impact of a changing economy on railroads in the 1950s and 60s, emerging as one of the four large U.S. rail systems in the modern era.

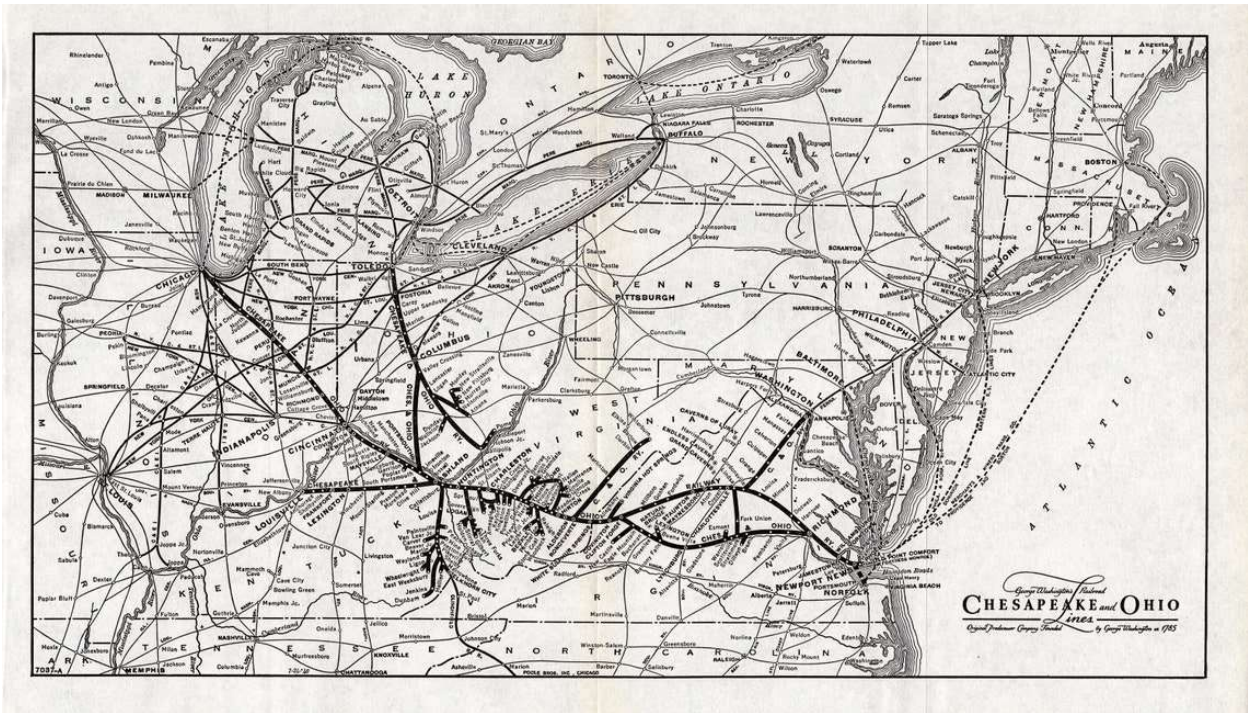
In 1930 the C&O merged in the Hocking Valley, and its final configuration as a coal hauler through Columbus was complete. The C&O, including the Hocking Valley lines, spread over some 2,985 miles of main line and branch rights-of-way at the time of the merger, later reaching 5,067 miles by the end of the peak coal era and major financial upheavals of the 1970s.¹³



C&O 120-ton six-axle "battleship" gondola, c. 1920.

The C&O has nearly always been a strong line economically. Despite the fact that over half of American railroads went into receivership during the Great Depression, it not only avoided bankruptcy, but took advantage of then-cheap labor and materials to completely rebuild itself. During hard economic times, C&O was boring new tunnels, double tracking, rebuilding bridges, upgrading the weight of its rail, and regrading its roadbed, all with cash flow from its principal haulage commodity - coal. Even during the Depression, coal was something that had to be used everywhere, and C&O was sitting astride some of the best bituminous seams in the country.

¹³ A considerable volume of West Virginia coal also reached Columbus from the 103-mile C&O and New York Central joint venture railroad, the Nicholas, Fayette & Greenbrier, named after the three southern West Virginia counties through which its tracks ran. Assembled from several local short lines with some significant new construction in the late 1920s through 1931, the NF&G connected end to end with the T&OC at Swiss, WV and with the C&O at Rainelle, WV. The NF&G was almost purely a coal hauler, with its trains handled by brawny NYC H-class Mikados and C&O H-class 2-6-6-2s. Among the NF&G on-line coal sources was the Peters Creek Branch, which loaded about one million tons annually which passed through Columbus over the T&OC and C&O.



Chesapeake & Ohio Railroad, System Map, 1923

As detailed below, eventually the C&O acquired the B&O, merged in the Western Maryland and later merged with several southern railroads to become CSX, among the very largest and most prosperous modern rail enterprises.



Coal on the Hocking Valley

The HVRR was built to move mineral products, including clay, brick and tile from Hocking and Athens County kilns. But from the beginning, coal overshadowed all other traffic. The HVRR was loading 250 cars of coal daily in its first year of operation, with coal constituting 85-90 percent of the line's tonnage. It quickly produced the highest profit per mile of any railroad in Ohio.¹⁴

Early annual reports for the HVRR do not break down freight bookings by commodity type. However, the 1873 annual report states that 1,000 of the company's 1,200 freight cars were coal cars, and that private shippers using the line also provided 808 eight-wheel and 100 four-wheel

¹⁴ *The Columbus and Hocking Valley Railroad*, https://www.ohioswallow.com/extras/0821416588_sample.pdf (This appears to be an excerpt from Edward H. Miller, *The Hocking Valley Railway*, Ohio University Press (2007).

coal cars, meaning that 90.5 percent of the freight rolling stock was for moving coal.¹⁵ The 1890 annual report shows the HVRR purchased 1,675 coal cars, most of which were of 25-ton capacity supplied by the Indianapolis Car and Manufacturing Company at a cost (including financing) of \$346 per car. After these additions to the fleet, coal cars numbered 6,368 of 7,979 total cars, or 79.8 percent of the HVRR's total rolling stock.¹⁶ Bituminous coal carried by the HVRR in 1890 totaled 2,122,671 tons, of which 2,076,770, almost 98 percent, originated on the line, with only 45,901 arriving from connecting railroads. Coal provided 65.3 percent of annual freight tonnage, rising to over 70 percent by the mid-1890s, when bituminous coal volume surged to 2.5 million tons annually¹⁷.

Later reports show some reduction in the number of coal cars in the fleet but with the capacity of new cars gradually increasing to 30 tons per car by 1894.¹⁸ However, as noted below, the percentage and capacity of coal hoppers on the HVRR continued to surge upward over time.



The HVRR's Monday Creek Branch, running through Nelsonville Yard, c. 1890. Photo from E.H. Miller collection.

The peak period for the HVRR's on-line mines in Hocking, Perry and Athens Counties was around World War I. By 1916, the HVRR was reporting a total of 1.6 billion ton-miles of freight handled, and showing some 42 percent of car movements as deadheading of empties. This figure is very

¹⁵ Fifth Annual Report of the Columbus and Hocking Valley Railroad, for the Year Ending December 31, 1873. https://www.google.com/books/edition/Annual_Report_of_the_Columbus_and_Hockin/6ig1AQAAAMAJ?hl=en&bpv=1&dq=annual+report+hocking+valley+railroad&pg=PP1&printsec=frontcover

¹⁶ Tenth Annual Report of the Columbus, Hocking Valley & Toledo Railroad, year ending December 31, 1890.

¹⁷ Thirteenth Annual Report of the Columbus, Hocking Valley & Toledo Railroad, year ending December 31, 1893.

¹⁸ Fourteenth Annual Report of the Columbus, Hocking Valley & Toledo Railroad, year ending December 31, 1894.

consistent with coal traffic, as mines depend heavily on availability of hoppers for loading at all times. Annual coal loads reached 9.2 million tons, representing 70.7 percent of all freight traffic. Coal cars, including both fixed bottom and dump-bottom hoppers, comprised 11,397 of 15,292 total cars, or 74.8 percent. HVRR on-line coal mines contributed 3.6 million tons in 1916, while interchange coal received onto the line was 5.5 million tons.¹⁹ The HVRR maintained a fleet of 72 2-8-0 Consolidation and 11 2-8-2 Mikado locomotives for its freight service and coal drags, including helper service for the grade north from Columbus.

With the Athens Subdivision accounting for 2.5 - 3.0 million annual tons of coal around this period, the Pomeroy Subdivision mines in Jackson, Vinton and Gallia Counties were probably supplying about one million tons annually. Since the C&O had not then completed its connection into Ohio at Sciotoville or opened its Russell Subdivision route to Columbus, the 5.5 million tons of interchange coal handled by the HVRR would have included transfers off the T&OC at Kanauga, just north of the former line's big Ohio River bridge, or at Armitage or Beaumont near Athens. But these seem unlikely sources for much volume, and the small interchange layout at Kanauga was never set up for northbound through movements onto the HVRR. The Columbus Subdivision received much of its interchange coal from the N&W and other lines at Columbus for movement to the Lake and Michigan destinations.²⁰ Given coal shippers' tendency to route traffic over multiple lines to negotiate better rates, the HVRR Toledo line may also possibly have picked up interchange coal for its Toledo docks at its interchanges with the Nickel Plate and B&O at Fostoria.

After World War I, coal production at the HVRR on-line mines on the Athens and Pomeroy Subdivisions began to decline as their coal seams became exhausted. But having built the southern segment of its Russell Subdivision north to its N&W connection near Waverly, the C&O was in position to move substantial Appalachian coal tonnage north ("west" by C&O terminology) toward Columbus, Toledo and Michigan. By the mid-1920s, following the advent of vastly more powerful engines on the C&O and affiliate roads supplied by Lima and other builders, the HVRR was stabling a fleet of 100 freight locomotives. These included the same older 11 Mikados and 48 Consolidations, but also 16 Santa Fe 2-10-2s, with some based or turning at Logan, and 25 articulated H-class 2-6-6-2s. Coal traffic continued to dominate, and by 1926 coal hoppers grew to a high of 91.1 percent of all HVRR rolling stock.²¹

By 1926, just before the HVRR was finally merged into the C&O, the HVRR's ton-miles had increased to 2.6 billion, and its empty car repositioning percentage had increased to 46 percent, again consistent with expanding coal haulage. The bituminous coal portion of all freight revenue tons on the line reached 91.9 percent, with 18.3 million total coal tons handled of the line's overall freight haulage of 19.8 million tons. Notably, the on-line originating coal on the HVRR had

¹⁹ Eighteenth Annual Report of the Hocking Valley Railway Company, for the Year Ending December 31, 1916. <https://babel.hathitrust.org/cgi/pt?id=mdp.39015069992280&view=1up&seq=11&skin=2021>

²⁰ Rick Tipton, *The Pennsylvania Railroad in Columbus, Ohio*, The Pennsylvania Railroad Technical & Historical Society 2011, pp. 135-40.

²¹ Twenty-Eighth Annual Report of the Hocking Valley Railway Company, for the Year Ending December 31, 1926, p. 26. <https://babel.hathitrust.org/cgi/pt?id=uc1.b2896758&view=1up&seq=30&skin=2021>

declined by over 70 percent from ten years before, and was only 1.3 million tons, while the coal interchanged onto the HVRR from other lines more than doubled to 17.1 million tons.²² The Russell Subdivision did not have on-line mines, but obviously was the source for most of this traffic. The Columbus Subdivision also received northbound coal at Columbus from the N&W and occasionally the T&OC.

C&O Coal Interchange in Columbus

The C&O had interchanges with all four of the other big railroads in Columbus, including both of the NYC's lines. With the exception of the B&O, these connections were well suited to transfer of large blocks of loaded coal hoppers and returning empties.

<i>Railroad</i>	<i>C&O Interchange Points</i>
<i>PRR</i>	Grandview Yard and C&O Yard "A"
<i>N&W</i>	Bannon - Watkins Yard
<i>B&O</i>	4th Street Yard and C&O Yard "A"
<i>NYC T&OC</i>	South Columbus, Mound Street and Frankfort Street Crossover.
<i>NYC Big Four</i>	C&O Yard "A"

Source: <http://www.columbusrailroads.com/new/pdf/map-1934-steamroad.pdf>

The majority of C&O coal arriving at Columbus off the Russell Subdivision, as well as the Athens and Pomeroy Subdivisions, went straight through onto the C&O Columbus Subdivision, bound for Lakes loading or onward into Michigan. We do not find C&O traffic broken out by Subdivisions after the HVRR merger in 1930. But available late 1920s corporate annual reports of the HVRR just before the merger and ensuing Great Depression downturn showed the HVRR handling 18.3 million tons of coal, including 17.1 million tons annually interchanging from other railroads, which would have been predominantly the traffic arriving off the still-separate C&O Russell Subdivision. Virtually all these loads, minus only local deliveries in Central Ohio, would have moved in from the south on the Russell Subdivision, and/or north on the Columbus Subdivision.

C&O had significant coal traffic arriving at Cincinnati from its own lines, as well as the L&N. The C&O line from Cincinnati to Chicago had significant grades. One solution was to bring this traffic up the Russell Subdivision to Columbus and interchange it in 125-hopper blocks to the PRR Bradford Line, which had been reengineered in 1900 to eliminate its steepest grades. The bulk of the PRR's Bradford line coal moving from Columbus to Chicago was off the C&O and N&W.²³

²² *Ibid.*, p. 22.

²³ Rick Tipton, *The Pennsylvania Railroad in Columbus, Ohio*, p. 139-40. The south receiving tracks at Grandview Yard became known as the "HV Tracks".

C&O coal destined for the U.S. Steel Gary Works arrived at Columbus at Parsons Yard and departed on the PRR. C&O transfer crews took it to the south edge of Grandview Yard's receiving tracks. From there the PRR could dispatch a pair of J1 2-10-4s to pull a full-size train of hopper loads, on symbols PDS-1 and PDS-3, toward Bradford and Logansport, with a J1 road engine plus another as a helper on the front end up out of Columbus. Solid coal trains arriving at Columbus via the C&O also interchanged to the PRR Sandusky Branch. This included coal for Lake shipments, transferred at Grandview Yard as noted above, and at Grogan Yard.²⁴

While the C&O and T&OC had numerous interchange points around Athens, Pomeroy and Columbus, there was little practical advantage to coal flowing from one to the other. They both sourced coal traffic from their Hocking, Perry and Athens county coal fields and joint venture NF&G in West Virginia, and much of it was destined for Toledo, where the C&O's Walbridge yard was only a mile from the T&OC's Stanley Yard, with easy transfers between the two on the Toledo Terminal Railroad. Both railroads had their own high-capacity Lake Erie coal docks. However, the close proximity of the C&O and T&OC led to numerous opportunities for cooperation on the handling of coal trains, including using each other's tracks to overcome congestion, blockages caused by wrecks, or just for improved efficiency. An interesting example was a 1901 arrangement between the two roads under which the T&OC provided a southbound "loop" route for C&O empty hoppers.²⁵

C&O Lake Coal Docks



C&O Coal Docks and adjacent terminal yard at Toledo.

The predecessor HVRR owned a coal loading facility from the time of completion of its Toledo line in the late 1870s. The successor C&O Coal Dock at Presque Isle is a three pier marine terminal located in Oregon, Ohio, just to the east of Toledo near the mouth of the Maumee River. Each

²⁴ Id., p.p. 166-7.

²⁵ See *Findlay Republican* April 1901 article reprinted at Columbus Railroads, November, 2020: <http://www.columbusrailroads.com/new/pdf/articles%20newspaper/1901%20t&oc-hv%20cooperation.pdf>

pier is outfitted with heavy duty car dumper coal loading and ore unloading equipment. The C&O's adjacent yard supporting this facility had over 100 tracks at its peak.²⁶ The HVRR and C&O have always accessed Presque Isle via the Toledo Terminal Railroad. By the 1930s Toledo was among the largest coal handling ports in the U.S., moving 16 million tons annually.

Coal Hauling Power on the C&O

The C&O never cut corners when it came to powering up its coal drags. Nothing was too good for its No. 1 commodity. By 1910, the C&O concluded its outdated Mikados could not deliver the power and efficiency needed to handle coal on the demanding profile of its Appalachian lines, and started turning to articulated compound designs. The C&O soon preferred versatile 2-6-6-2 compound models, which could go anywhere and had the muscle for West Virginia, Kentucky and Ohio grades. The H-1 prototype exceeded expectations, demonstrating ability to lug 3,500 tons over the road's most challenging division at 20-24 mph.²⁷ The C&O invested in 300 2-6-6-2s, of which 25 1917-built H-3s were assigned to the Hocking Valley.

The C&O also bought 16 Baldwin F-1 2-10-2 Santa Fe-type engines from the Lehigh Valley Railroad, delivered to the Hocking Valley in 1920. Some of these lasted until the end of steam on the C&O in 1952.²⁸ To accommodate these engines' 99.5-ft. wheelbase, five bays at the Logan roundhouse were extended from 71 to 110 feet. Like the H-type articulateds, the F-1s' modest axle loadings were also suitable for the Athens Subdivision's 100-lb. rail and loading gauge. With 100 ft.² fire grates and 74,457 lb/ft of tractive effort, they were muscular enough for the grade north from Columbus, and could deliver good speeds over level ground.

The T-1s

Just after completing the Russell Subdivision and merging in the Hocking Valley, unleashing a floodtide of northbound Lakes coal onto its Columbus rails, the C&O turned to the nearby Lima Works for an order of 40 new-generation superpower giant "Texas" type engines. These locomotives were designated as Class T-1, and were assigned road numbers 3000 through 3039. They had 69" diameter drivers, 29" x 34" cylinders, a 265 psi boiler pressure, exerted 93,345 lb/ft of tractive effort. Each weighed 490 tons. These locomotives were equipped with Baker valve gear, and a trailing truck booster that added 15,275 lb/ft of tractive effort.

²⁶ Note 1966 diagram for the Hocking Division Presque Isle Yards at p. 211 of the C&O Main Line Track Charts: <http://www.multimodalways.org/docs/railroads/companies/C&O/C&O%20Track%20Charts/C&O%20Main%20Lines%20Track%20Chart%2011-1966.pdf>

²⁷ *American Engineer and Railroad Journal*, Volume 84, No 12 (December 1910), pp. 471-472.

<https://archive.org/details/americanengineer84newy/page/470/mode/2up?view=theater> See also an excellent and detailed summary of research on the C&O H-class Mallet designs at:

<https://www.steamlocomotive.com/locobase.php?country=USA&wheel=2-6-6-2&railroad=co#15843>

²⁸ <https://www.steamlocomotive.com/locobase.php?country=USA&wheel=2-10-2&railroad=co#477>



Columbus bound C&O T-1 2-10-4 barrels across the Sciotoville Bridge, 1943.

<https://www.american-rails.com/t-1.html>

The T-1 firebox grate area was a massive 121.7 ft.², the size of an average house kitchen. The boiler's nine-foot diameter enclosed the biggest heating surface of any two-cylinder locomotive ever delivered, an evaporative area of 6,624 ft.² with a superheater adding 3,030 ft.² more, giving it a combined surface of 9,654 ft.²

The C&O ran most of its 2-10-4s from Russell to Toledo, with a few used in eastern Virginia. The T-1s required a minimum rail size of 124 lbs., precluding assignment on the Athens or Pomeroy Subdivisions, but the heavy-gauge Russell and Columbus Subdivisions with 130-140 lb. rail were ideal for them. A typical train pulled by a T-1 would consist of 160 loaded hoppers manifested at 13,500 tons. The C&O Texas design was the model the War Production Board required the PRR to use for its classic J1 "War baby" engines, which did much of the same duty on the PRR Sandusky Branch.

The Alleghenys

While the T-1s were the work horses of the HVRR and C&O steam era coal haulage through Columbus, the H-8 2-6-6-6 Alleghenys will likely always get more celebratory attention due to their spectacular dimensions. Built by Lima in batches of 45 and 15 respectively and delivered in 1941 and 1948, these 600-ton, 113 ft. wheelbase machines were among the largest and most powerful locomotives ever constructed.



With 67" drivers, Baker valve gear, four high-pressure cylinders, 135.2 ft.² grate area and 10,246 ft.² of combined heating and superheating surface, the Alleghenys boasted 110,000 lb/ft of tractive effort with a rated output of 6,900 horsepower, and up to a massive 7,400 horsepower at full throttle by some alternate measuring methods.

Originally conceived for the C&O's steeper Appalachian divisions, the H-8s were gradually shifted over to the Ohio lines. There they could not only lug heavy coal drags up the hill from Columbus, but they could also make better use of their high horsepower to move these big trains at much higher speed. The relatively flat Russell Subdivision, and the Columbus Subdivision north of the 20-mile grade above Columbus, were ideally suited for these high-performance engines.

The C&O in Central Ohio Today

The C&O had acquired control of the Pere Marquette Railroad in Michigan and Ontario during the 1920s under the Van Sweringens, linking it with the C&O's connections at Chicago and Toledo, merging it into the parent company in 1947. In 1963, the C&O outbid the bigger NYC to acquire control of the Baltimore & Ohio, and also took over Western Maryland Railroad, rebranding the three roads in 1972 as the "Chessie System," using the name of its venerable napping kitten mascot. In 1984, the Chessie System merged with Seaboard System, a combination of the Atlantic Coast Line, Seaboard Air Line, Louisville & Nashville, Clinchfield and others, naming the emerging new parent company CSX Corporation.

In 1997-8, CSX took over 43 percent of Conrail, the federal government-managed aggregation of failed eastern U.S. railroads formed in 1976, comprised of the bankrupt Penn-Central (birthed by a 1967 merger of the NYC, PRR and New Haven), and the Ann Arbor Railroad, Erie Lackawanna, Lehigh Valley, Reading, Central of New Jersey and Lehigh and Hudson River Railway, all then under bankruptcy court protection. CSX now operates more than 20,000 miles of rail lines

stretching from Montreal and Boston to Miami, New Orleans, Memphis, St. Louis and Chicago. CSX is a Fortune 300 company, with 21,000 employees and stock value above \$75 billion.

Columbus and Russell Subdivisions

The heavy-duty C&O north-south lines through Columbus continue as CSX centerpiece infrastructure, but now operate between Columbus and Toledo in parallel with the T&OC line which the C&O acquired through the Conrail privatization. With traffic rationalized between the two, the double track has been removed on portions of the Columbus Subdivision. This perhaps represents the end-stage realization of the 1901 arrangement mentioned above between the HVRR and T&OC to operate their combined lines as a "loop" between Toledo and Columbus.²⁹ The Russell Subdivision running from Kentucky to Columbus continues much as before.

The Athens Subdivision

A portion of the venerable Athens route continues to operate under a Genessee & Wyoming short line house flag, the Indiana Ohio Railway, serving local traffic at least as far as Lancaster and Logan, and looks to be in pretty good condition. There is still track in place past Logan running to Nelsonville, but no sign of freight activity at the eastern end. The tracks of the Straitsville Subdivision north from Logan, abandoned 81 years ago, are still in place up to a glass plant north of town. The Snow Fork and Brush Fork Subdivisions were abandoned in 1940. The Monday Creek Subdivision, which somehow survived on the C&O until 1972 and later as part of the Scenic Railway, is now completely gone. The Sugar Creek Branch was abandoned in 1939.

The HV Scenic Railway operates north on the old main line from Nelsonville to Logan, based at the reconstructed Nelsonville station. The HV main line rails are still in place for a short distance to the east of Nelsonville across the through truss double track bridge over the river, where the Hocking College campus now sits atop the former right of way. The old Nelsonville coaling tower is gone, demolished fairly recently as a hazard, and the tracks beyond the college were pulled out in the early 1980s. The roundhouse has been demolished, but the adjoining HVRR machine shop is still there, next to the engine house built by the HV Scenic Railway. The former HVRR roadbed beyond Nelsonville is in part a bike path down through The Plains to Armitage. The T&OC and its Armitage siding are still there, active now as part of the Kanawha River Railroad, a Watco company. Remnants of the former T&OC-HVRR interchange track extend for a few car lengths north of the switch in the passing track. The C&O bridge across the Hocking there is now decked over as part of the bike trail. The HVRR connection onto the B&O in Athens is now long gone,

²⁹ See *Findlay Republican* April 1901 article reprinted at Columbus Railroads, November, 2020: <http://www.columbusrailroads.com/new/pdf/articles%20newspaper/1901%20t&oc-hv%20cooperation.pdf>

like the B&O itself, abandoned and built over by development spurred by growth of Ohio University. The freight house and depot in Athens were gone by the mid-1980s.



Nelsonville, 2016. Salvaged HVRR machine shop building, waiting to be repurposed. The roundhouse sat at the far end to the east. Photo taken by author from the north side, on the former site of Nelsonville Yard.

The Pomeroy Subdivision

The Pomeroy Subdivision main line between Kanauga (MP 119) and Hobson (MP 128) survives, carrying trains of Watco's Kanawha River Railroad, which acquired the T&OC line south from Columbus from Norfolk Southern, which took it over from Conrail. The track east of Hobson to Pomeroy was abandoned after a flood in 1979. The line between Oldtown and Dundas was pulled up in 1986. The stretch west of Kanauga re-flourished for a while in the 1980s and 1990s, loading coal from Minerton (MP 92) for the AEP Gavin Power Plant (MP 125), but the track was pulled up once that arrangement ended. Track between Kanauga and Dundas was removed in 1992-3.³⁰

The C&O-NYC joint venture Nicholas, Fayette & Greenbrier Railroad, which fed West Virginia coal onto both the C&O and T&OC, was abandoned in 1997-2006.³¹

Acknowledgments: Much credit goes to Alex Campbell and Columbus Railroads, for editing suggestions, concepts and overall encouragement.

Special acknowledgement is due the author's elementary school Scoutmaster W.R. Henkle, a civil engineer with the C&O Ashland-Russell Division, who kindled youthful interest in all things railroading. Mr. Henkle found time to instruct us on the Whyte Notation for locomotive wheel

³⁰ <https://railroad.net/viewtopic.php?t=7521>

³¹ <https://abandonedonline.net/location/nicholas-fayette-greenbrier-railway/>

arrangements, and how to read a track chart, along with the usual Boy Scout manual subjects of first aid, fire safety and identification of poisonous snakes. He planned hikes, camp-outs and canoe trips near C&O rights-of-way to see what goes on there. He suggested, wisely, that some time in the employ of a railroad in any capacity would be an excellent first step in any career.

Notes and References:

Corrections, Clarifications and Additions Welcome. These articles flow from a combination of research into ancient railroad corporate records and news sources, inferences from maps and satellite images, railroaders' and others' personal recollections and anecdotes. These are often of the hearsay variety, which may occasionally be inconsistent, incomplete or incorrect (or perhaps exaggeration or fantasy). Comments are most welcome.

Mileage and Mileposts. This can be a confusing topic on the original HVRR lines. References to mileage and length of rail lines in this article are from the 1958 C&O Employee Timetable at http://www.columbusrailroads.com/new/pdf/c&o_ett-p1-16.pdf Milepost (MP) numbers are approximate and taken from C&O track charts.

The most authoritative source for HVRR history is Edward H. Miller, *The Hocking Valley Railway*. Ohio University Press (2007).

The Columbus Railroads website Steam Railroads C&O pages provide excellent brief histories of the Hocking Valley Lines and the Russell Division, including Rowlee Steiner's detailed 1952 manuscript, and a reprint of a February 1928 *Engineering News Record* article detailing the 1927 construction of the portion of the Russell Division between Waverly and Columbus: http://www.columbusrailroads.com/new/?menu=05Steam_Railroads&submenu=12Chesapeake_%26_Ohio

Also see: O.C. Hooper, *History of the City of Columbus, Ohio*, at Columbus Railroads website: <http://www.columbusrailroads.com/new/pdf/clbs%20history%201920%20railroads.pdf>

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Chessie - Fine needlework of the author's wife Susan, this favorite always hangs in the youngest child's bedroom.