Part II - The New York Central System - Big Four, Toledo & Ohio Central, Columbus Sandusky & Hocking and Zanesville & Western¹



Coal on the Big Four

The Big Four operated a 137-mile line between Columbus and Cleveland via Delaware, Galion and Shelby, and a 122-mile line south from Columbus to Cincinnati via London, Springfield and Dayton. The Big Four did not have active mines on its rights-of-way, but hauled a great deal of coal received from other railroads to Cleveland and Lake Erie ports.

Among the earliest railroads to reach Columbus, the Big Four ancestor Cleveland, Columbus & Cincinnati Railroad (CC&C), built on rails imported from England, entered service between Columbus and Cleveland in 1851. Of all the rail lines serving Columbus, this one was among the most continuously financially successful. Much of the northern portion of this line was double-tracked as early as 1861. Under the leadership of its energetic founder, financier and chief executive, Alfred Kelley, the CC&C was a premier early U.S. railroad in terms of engineering and haulage capacity. This was the route of the Lincoln funeral train between Cleveland and Columbus in April, 1865.

The CC&C originally reached Cincinnati via acquisition of a partially-built line from Delaware to Springfield, connecting with various short lines south and west of Columbus built during the 1850s and 60s. After an 1868 consolidation with a line to the west, the CC&C became known as the Cleveland, Columbus, Cincinnati & Indianapolis Railroad. The company completed a direct connection between Cincinnati and Columbus via London in 1873. After a further consolidation with lines in Indiana and Illinois, in 1889 it became the Cleveland, Cincinnati, Chicago & St. Louis Railroad (CCC&St.L), picking up the popular "Big Four" name.

The New York Central acquired the Big Four in 1906, but operated it as a separate entity until 1930. With a board of directors populated with Vanderbilts and Rockefellers, the Big Four was a major U.S. railroad in its own right through the late 1920s. Headquartered in Indianapolis, the Big Four operated 2,381 miles of owned and leased track, reaching western termini in Chicago, Peoria

¹ This summary of coal traffic and interchange on the New York Central Railroad in Columbus covers only a small portion of the complex history of the Big Four and Toledo & Ohio Central, which became the NYC in Central Ohio during the first half of the 20th Century. For a good summary of this background detail, see *Roots of the Yew York Central Railroad in Columbus, Ohio*, an unpublished 1952 manuscript by Rowlee Steiner, available on the Columbus Railroads website at:

and Cairo, Illinois, and crossing the Mississippi River at St. Louis, with a steam locomotive fleet peaking at 925 engines.

Unlike other major railroads that grew by corporate acquisitions and consolidations, the New York Central's component parts tended to retain much of their original identity and culture. The Big Four and the other NYC Columbus line, the Toledo & Ohio Central (T&OC), while sharing the 20-stall West Columbus roundhouse from the 1930s onward after the Big Four's ancient Dennison Avenue Roundhouse was closed, did not combine Columbus yard facilities until the ill-fated successor Penn Central opened Buckeye Yard in 1969. The Big Four and T&OC switch keys were different, with some switches near NYC interchanges having a metal bar through the lock slot with a T&OC lock in a hole on one end, and another lock with the Big Four's distinctive comma-shaped key opening on the other.

In its early stages, there is no evidence of the CC&C hauling coal to or from Columbus. Annual reports from the 1850s-60s show the line's freight equipment including only boxcars, stock cars and flatcars. Coal does not appear on the line's list of commodities carried.² By the later 1860s the CC&C was still using wood as its principal locomotive fuel, annually consuming 38,000 cords of wood but only 3,400 tons of coal.



View looking eastward at Grandview Tower, where the Big Four double track main toward Cincinnati (foreground) crossed the single-track T&OC main toward Toledo diagonally at the two diamonds. Curving interchange tracks are just to the right and left of the diamonds. The west throat of the T&OC West Columbus Yard is just beyond Grandview Avenue, where a vehicle can be seen crossing. The small tower to the left is for a crossing guard. West Columbus Roundhouse is to the right. Photo circa 1940 from E Miller/BJ Kern collection, as shown on Columbus Railroads.

² See, Annual Reports of the Cleveland, Columbus and Cincinnati Rail Road, 1855-57.

<a href="https://www.google.com/books/edition/Annual_Report_of_the_Directors_of_the_Cl/IKQpAAAAYAAJ?hl=en&gbpv=1&dq=Cleveland+Columbus+%26+Cincinnati+Railroad+annual+report&pg=PP1&printsec=frontcover

But coal soon began to play a substantial role. By the time of the Big Four's original consolidation in 1889, the CCC&St.L owned and leased 3,668 "coal and coke cars," about 23 percent of its overall fleet of 15,995 cars. By the early 1900s, the Big Four was hauling 12 million tons of bituminous coal annually, representing about 45 percent of its traffic. The line's 1914 annual report indicates it owned 5,653 "coal and coke cars," plus 50 steel coal and coke cars, which constituted over 25 percent of its overall 20,474-car fleet of rolling stock.³ The Big Four might have been its own biggest coal customer, as its locomotives consumed some two million tons of coal in 1913. At its peak in 1925, the Big Four had 16,411 "coal cars" representing 46 percent of its total fleet of 35,204 cars, and hauled over 27 million tons of coal annually, 60 percent of its tonnage.⁴

From the 1890s onward, due to the rapid pace of rail consolidation, available corporate records for Ohio railroads generally aggregate coal traffic figures on a system-wide basis, not breaking out coal haulage volumes to and from Columbus. However hard to quantify, coal traffic handled by the Big Four in and through Columbus was clearly significant. During the last quarter of the 19th Century and all of the 20th, the Big Four hauled both full trains and blocks of coal hoppers from Columbus to Cleveland and Ashtabula for loading to steamships bound for delivery points on the upper Great Lakes.

The Big Four had access to a substantial volume of northbound coal at Cincinnati coming off the L&N, via Undercliff Yard. From Cincinnati, the Big Four was the major hauler of steam coal to utilities such as Dayton Power & Light up through the 1970s, delivering some 1.7 million tons annually in L&N hoppers plus additional volume off the N&W, B&O and C&O to DP&L's generating stations. From the Columbus end, the Big Four moved coal southwest to DP&L, reaching over 300,000 tons annually in the 1960s. This volume originated at the Peabody Sunnyhill mine in Perry County, and was brought to West Columbus Yard by the T&OC, where it interchanged over to the Big Four at Grandview Tower.

The Big Four also carried L&N coal north from Cincinnati to Springfield and then onto its Sandusky Branch up through Bellefontaine, Kenton and Tiffin to the Sandusky Docks, or onto the T&OC Western Branch at Ridgeway or T&OC Eastern Branch at Berwick to reach the Toledo Lakefront Docks or Michigan destinations. The NYC had abandoned a portion of this line (originally the Mad River & Lake Erie Railroad, one of Ohio's very first rail lines built in the 1830s) between Sands, just south of Kenton, and Belle Center in the 1960s. After that, Big Four northbound coal trains had to proceed from Bellefontaine onto the Big Four's Cleveland main line to Ridgeway, and then onto the T&OC northward toward Toledo. The T&OC had a steep and sharply curving interchange track connecting back onto the Big Four Sandusky Branch at Kenton, but this could only accommodate southbound trains, and the Big Four's L&N coal could no longer reach Sandusky Docks via this route.

³ Annual Report of the Board of Directors, The Cleveland, Cincinnati, Chicago and St. Louis Railroad, Dec. 31, 1914, Ohio State Univ. Library, https://babel.hathitrust.org/cgi/pt?id=osu.32435064254527&view=1up&seq=41

⁴ Thirty-Seventh Annual Report, The Cleveland, Cincinnati, Chicago and St. Louis Railroad, Dec. 31, 1925, https://babel.hathitrust.org/cgi/pt?id=mdp.39015080119574&view=1up&seq=1&skin=2021



Coal on the T&OC

Built mainly for coal traffic from its origins, the Toledo & Ohio Central connected many of the richest coal mining areas in Southeast Ohio and West Virginia with Columbus, and onward to the Lakefront Docks in Toledo and major heavy industries and power stations in Michigan.

At its point of greatest expanse between 1900 and World War II, which coincided with peak coal production in Southeast Ohio, the T&OC operated some 800 miles of railroad stretching from Toledo to Swiss, West Virginia. The main components of the T&OC were the 197-mile Western Branch from Corning through Columbus, Marysville, Kenton and Findlay to Stanley Yard in Toledo, the 147-mile Eastern Branch running from Thurston (Milepost 160 on the Western Branch) through Johnstown, Bucyrus and Fostoria to Stanley Yard, the 172-mile Southern Branch (formerly the Kanawha & Michigan Railroad) south from Corning through Hobson, over the Ohio River via a ponderous 3,932-foot through-truss bridge at Point Pleasant, West Virginia, and on through Charleston to Swiss. These lines were supported by roundhouses and shops at Stanley Yard, Kenton, West Columbus, Bucyrus, Thurston, Corning and Hobson in Ohio, and Charleston and Dickinson Yard, West Virginia. Although built and operated to run dense traffic of mixed freight, coal and industrial commodities trains, the line was virtually all single track, with only a 5.5-mile stretch of double track in Columbus.



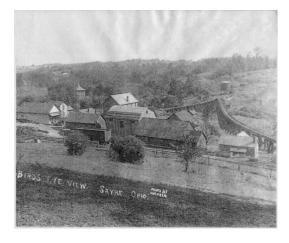
T&OC Depot at 379 West Broad Street, Columbus, built in 1895, which mimicked the pagoda-style Macklin Hotel just across the T&OC tracks to the right. The tracks were elevated above Broad Street in 1911. The T&OC moved is passenger service to Union Depot in 1930.

T&OC branches included the 60-mile St. Marys Branch from Peoria (Western MP 98 Western) via Bellefontaine and Wapakoneta to St. Marys, the 6.2-mile East Columbus Branch, a switching

track north from Truro (Western MP 141) to Woodland Avenue which originally was the Columbus Shawnee & Hocking (CS&H) main line into downtown Columbus, the 16-mile Federal Creek Valley Railroad (Marietta, Columbus & Cleveland Railroad) which ran east from Palos (Southern Branch MP 8) to Lathrop, Ohio, the 8-mile Buckingham Branch north from Glouster to Drakes, and the Hitop Branch, a 43-mile track from Charleston through coal-mining valleys up to Hitop (originally the Kanawha & West Virginia Railroad, later "orphaned" from the T&OC and only reachable via the B&O). There were also smaller branches such as the seven-mile Bailey Run, Sugar Creek & Athens Railway, running west from Chauncey, and a pea vine of mine tracks running off the T&OC up nearly every wooded hollow between New Lexington and Hobson.

A major coal traffic contributor on the T&OC system in its earlier years was the 108-mile Zanesville & Western Railroad. This line originally reached Columbus in 1880 via Thurston and Truro as the Columbus, Shawnee & Hocking Railroad, terminating at an interconnection with the B&O and Panhandle line at East Columbus (then called Alum Creek Junction), running its trains the last four miles into downtown over the Panhandle tracks. The CS&H built its own line from East Columbus to Union Depot in 1886 via Shepard, Milo and the Fairgrounds. The CS&H reached Zanesville, Corning, Shawnee and McConnelsville to the east via new construction and several acquisitions of other lines during the 1880s. During the early 1890s the CS&H was consolidated with the recently-completed Sandusky Short Line, with the two railroads operating under the common name Columbus, Sandusky & Hocking, but conveniently keeping the original "CS&H" corporate logo. The CS&H operated roundhouses near Cleveland Avenue in Columbus and at its major junction points in Thurston and Fultonham. The CS&H lived and died for coal traffic, with over 80 percent of its rolling stock in the mid-1890s being coal hoppers.

After financial disruptions and a major reorganization in 1902, the CS&H was divided, with the portion west and north from the CA&C diamond going over to the Pennsylvania Railroad and becoming the PRR Sandusky Branch, and the part east and south of the CA&C crossing becoming the Zanesville & Western Railway (Z&W) and becoming affiliated with the T&OC and eventually the New York Central.





Deep in Coal Country about 1910: Sayre on the Zanesville & Western Railway, in Perry County, (L) and the Old Palmer Mine at Glouster on the T&OC (R). www.littlecitiesarchive.org

The NYC also operated 103 miles of track south from Swiss, West Virginia as a joint venture with the Chesapeake & Ohio, trading as the Nicholas, Fayette & Greenbrier Railroad (NF&G), named after the three West Virginia Counties in which it ran. The NF&G also linked the T&OC with its former Peters Creek Branch, a highly productive coal feeder running to the Cornelia Mine from a switch seven miles south of Swiss.

The T&OC and its feeder branches prospered loading Ohio coal at dozens of on-line mines in Perry, Muskingum, Morgan, Athens, Meigs and Washington Counties. The T&OC main line twisting and turning back and forth over Sunday Creek between Corning and Chauncey (MP 16.9 on the Southern Branch) had more than one active mine per mile during the height of the coal era. The Z&W branches served over 100 mines at the coal production peak in 1914. There were other active mines on the Federal Creek Valley Railroad. These ranged from major multi-mine corporate industrial giants each loading hundreds of cars per week, down to small operations with only a handful of miners, shipping a few cars weekly.

The nerve center of the T&OC coal business was in Corning, which featured a 12-stall roundhouse and machine shop and a mile-long complex of yard tracks snaking down Sunday Creek Valley. The T&OC had seven tracks across Main Street there. Long trains of empties returning from Columbus had to be held a mile north at Rendville, until a track could be cleared out for them at Corning. Virtually everyone in this area worked either for the mines or the railroad. For some years, the T&OC operated morning and afternoon commuter trains of coaches between Corning and Chauncey to take the great mass of miners to and from their jobs. Corning High School sports teams were originally the "Miners," and later the "Railroaders."



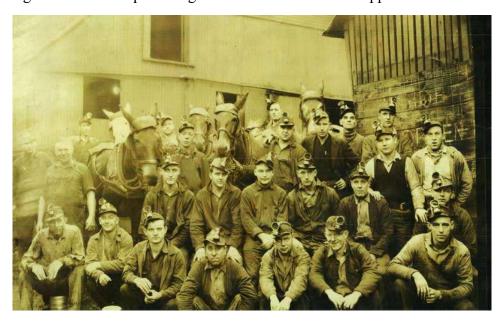
The T&OC and Kanawha & Michigan roundhouse at Corning, Ohio, 1953. <u>www.littlecitiesarchive.org</u> Built in 1891, and employing 280 during the peak coal hauling era, the roundhouse was closed shortly after the last steam engine departed in 1952, and was demolished in 1962.

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⁵ http://www.genealogytrails.com/ohio/athens/coal.htm

Chauncey, at the south end of this continuous belt of coal mining industry, also had a large classification yard for receiving and distributing empty hoppers to mines, and for making up coal drags to pull northward. Just south of Chauncey, at Beaumont, on the Hocking River and astride the remnants of one of Ohio's early canals, the T&OC had one of its several coal traffic interchanges with the Athens Division of the Chesapeake & Ohio.

Massive volumes of coal originated between New Lexington and Albany. Through the 1970s, Peabody's Sunnyhill Mine at Claybank (Western MP 189.8) was shipping 1.4 million tons north annually, with some 1.1 million tons making up twice-weekly unit trains of Peabody's distinctive yellow 100-ton "bathtub" gondolas bound for a power plant at Essexville, Michigan, and another 300,000 tons for Dayton Power & Light via the Big Four. Other producers, such as the JT Mine just south of New Lexington, and the Congo Mine at Drakes on the Z&W, which had the distinction of producing reportedly the single largest single chunk of coal ever mined, a 13.8-ton behemoth exhibited at the Chicago World's Fair in 1893, and a myriad of smaller tipples, provided in the aggregate many hundreds of weekly loads for northbound coal trains to Columbus, and corresponding southbound empties drags of NYC 40 and 50-ton hoppers.



At the Congo Mine, circa 1910. https://littlecitiesarchive.org/tag/congo/

Meigs County was also a source for T&OC northbound coal. Meigs mines originated up to six million tons of coal annually at their peak, much of which moved toward Columbus on the T&OC and over the C&O's Pomeroy Division.

But the T&OC was much more than an Ohio coal hauler. This line reached deep into southern West Virginia, where the earth was giving up even greater quantities of bituminous treasure. First among numerous principal sources was a steady stream of northbound Virginian Railroad coal traffic interchanging onto the T&OC at Deepwater Bridge, south of Dickinson Yard (MP 157.2 on the Southern Branch). Deepwater was the western terminus of the Virginian. Much of this Virginian volume from the T&OC went north from Columbus over the PRR Sandusky Branch, heading for the Sandusky Coal Dock. Older Columbus train crews in the 1960s recalled that

Virginian's 120-ton six-axle "battleship gondolas" used for Lake coal loading tended to derail riding over the rail joints at certain slow speed ranges. These were rebuilt for maximum 105-ton loads prior to the 1959 Virginian-N&W merger.

In the 1960s and 1970s, the T&OC also occasionally handled unit trains of 102-ton Consol bathtub gondolas. These big four-axle cars had black livery with one end painted a bright red. T&OC crews called them "woodpeckers" after the familiar red-headed bird.

The T&OC also received an enormous flow of coal via the NF&G off its orphan Peters Creek branch, also largely destined for transloading to Lakes steamships. As late as 1970 the Peters Creek Branch originated some 6,900 annual loads of Lake coal, with 6,000 for Ashtabula, and 900 to Toledo. The Lady Dunn mine of the Cannelton Coal Company on the NF&G shipped metallurgical coal to steel mills at Sault Ste. Marie, Ontario, using big 100-ton PRR "Yellow Ball" hoppers during the Penn Central era, sending 1,775,000 tons annually via the T&OC to Toledo Lakefront Dock. The Semet-Solvey West Virginia mines produced 190,000 tons of coal annually for the T&OC, with Morris Fork adding 725,000 tons, and Hitop accounting for another 410,000 tons. While a significant portion of the coal originating on the T&OC and the NF&G was absorbed by big industries in the Kanawha Valley around Charleston, overall an average of more than 2.5 million tons of West Virginia coal moved north into Ohio on the T&OC annually.

Fortunately the T&OC also served many enormous industrial chemical producers in the traffic-rich Kanawha Valley, which made up the bulk of the line's daily NT-5 and NT-7 manifest trains. These shippers sustained the T&OC once the Lakes navigation season closed every winter, and were its ace in the hole as steam coal movements began to decline in the 1970s.

Coal-Hauling Steam Power on the NYC

Unlike its principal competitors in Ohio, the New York Central never developed an iconic late-steam era "super-power" engine capable of lugging legendary tonnages over challenging Appalachian grades. The NYC did not build articulated or compound-working locomotives, like the N&W, C&O or B&O, or long-framed brutes like the C&O's or PRR's Texas-type 2-10-4s. There were many reasons for this, including the Central's famed "Water-Level Route" from New York, which avoided heavy grades over eastern mountain ridges, as well as the NYC's eastern ancestral lines mostly having lighter, lower and tighter loading gauges (*i.e.*, controlling height, width and per axle weight limits). The Central also dealt with engine crew labor agreements that paid higher compensation based on the weight on the engine's driven axles. For these and other reasons, the NYC stuck with smaller but robust locomotive designs for its demanding coal traffic, largely Class H 2-8-2s, along with some Class L dual-service 4-8-2s.

Starting with its H-5s which arrived in 1912-13, and culminating with the technologically-advanced H-10bs⁶ built in 1922-24, the bulk of the coal behind the drawbar on the NYC System

⁶ The best New York Central historical resources include R.S. Curl's detailed articles about locomotive designs and deployments on the Central's various divisions. See: https://nycshs.files.wordpress.com/2014/10/mikados.pdf
Another "must read" on NYC steam locomotives is Richard Leonard's New York Central Collection: https://www.railarchive.net/nyccollection/

was pulled by its stout Mikados. Most were built by the prolific ALCO predecessor Brooks Locomotive Works at Dunkirk, New York, with others, especially the later H-10s, coming from Schenectady and Lima.



An 1894 Brooks Locomotive Works nameplate

Although designed and built in the early 1920s, decades earlier than steam era end-stage giants like the PRR J-1s and the C&O Alleghenies, the H-10s were among the more advanced single-working engines ever delivered. Riding on 63-inch drivers, they featured fuel efficient combustion chamber design, oversized state of the art superheater systems, enlarged steam passages between the superheater and the throttle, innovative double poppet valve throttles located forward near the cylinders, big six-axle tenders, and a steam booster on the firebox truck bringing the total drawbar pull up to 77,000 ft./lbs., all designed to put the maximum possible power and tractive effort atop the Central's limited maximum axle loadings. The boosters were removed in 1948 owing to a combination of substantial maintenance demands and the extra hourly wage levels of engine crews operating them under collective bargaining agreements.



Lima-built No. 2118, delivered 1922, photo by Otto Perry, Denver Public Library Digital Collections.

The H-10s were not easy on the eye, with a big Elasco feedwater heater cylinder perched ahead of the stack, air pumps usually on the leading pilot platform, covered with external piping and equipment everywhere. But projecting the very image of rugged muscle and reliability, these engines were absolutely blue-collar beauties.

Of course, unlike a PRR J-1, with 110,000 ft./lbs. of pull with its booster cut in, or a C&O Allegheny with its 135.2 ft.² firebox (more than double that of an NYC Mikado's) an H-10 could not march 125 hoppers north from West Columbus up the seemingly endless grade. It took two of them, or more. The T&OC maintained helper territory up from Grandview Tower (Western Branch MP 130) to "Helper Siding" at MP 112.5, and also provided some helpers up the hill just north of Kenton (MP 69-71). South of Columbus, the T&OC ran multiple helpers on the rear of coal trains north from Corning over the unforgiving Moxahala Hill (known as "Drawbar Hill" locally), with one helper cutting off at New Lexington (MP 185), and another staying on up over Johnstown Hill if the train was dispatched on the Eastern Branch.

The H-10s, along with virtually all other NYC steam locomotives, were retired and scrapped in 1952, their work done.

Lakes Coal

As much as half the coal moving north from Columbus on the New York Central lines during April through December was destined for transloading to Great Lakes steamships.

Ohio's Lake Erie Coal Docks	Principal Affiliated Railroads
Toledo Lakefront Dock	NYC (T&OC), C&O (Hocking Valley)
Sandusky Docks 1, 2 and 3	PRR (Sandusky Short Line), B&O, NYC (Big
	Four)
Lorain Coal Dock	B&O
Huron Dock	Wheeling & Lake Erie
Cleveland - Coal Dock 24, also Docks	PRR, NYC (Big Four), Erie, B&O
1,2,3 and 6 and Whiskey Island	
Fairport Harbor Coal Dock	B&O
Ashtabula	N&W, B&O, PRR
Conneaut	N&W

The expansion of iron ore mining around Lake Superior in Minnesota and Upper Michigan in the 1880s, the advent of reliable steam navigation and major expansion of the locks around the Sault Ste. Marie rapids connecting Lakes Superior and Michigan to Lake Huron, spawned a huge waterborne trade in iron ore. Most of this ore moved south to steel mills in Michigan, Ohio, Pennsylvania, New York and Ontario and on the Ohio River. The same ships also hauled metallurgical coal north to primary industries on the Upper Lakes, especially in Chicago and Northern Indiana, and steam coal to northern electric utilities.

By the early 1890s, marine terminal facilities had developed car dumping machinery that could load a ship at the rate of 1,000 tons per hour. By 1896, Lake Erie ports, including Erie and Buffalo along with some eight Ohio terminals, were loading about 10 million tons of coal annually.



Toledo's Lakefront Docks and adjoining rail facilities, 1940s.



Rail car dumper facilities, Toledo, 1940s. National Museum of the Great Lakes: https://nmgl.org/coal-dumpers-lakefront-dock/

Ohio railroads rose to meet this demand. During the Lakes navigation season, traffic often more than doubled on Ohio's north-south lines, moving coal north, and mostly empty hoppers back to the mines plus some iron ore unit trains south to steel centers such as Ashland, Kentucky. Many Ohio railroaders made their money on the north-south lines during the Lakes season, and then would mark up on the Panhandle and other east-west freight haulers to hang on during the winter. Driven by the industrial surge during World War II, coal shipments through Lake Erie south shore ports peaked at 49.7 million tons in 1945.

Coal continues to move over Ohio railroads to these docks today. CSX's three Toledo Lakefront Docks, Norfolk Southern's Sandusky Dock No. 3, coal docks at Huron and Lorain, Cleveland Dock 24, and Ashtabula docks are still active, moving about 20 million tons annually. After the decline in steam coal shipment as utilities migrated to gas-fueled and now renewable generation

technologies, virtually all the Lake Erie transload volume is now metallurgical coal destined for the steel industry on the Upper Lakes.

NYC Coal Interchange in Columbus

Both the NYC Big Four and T&OC had direct interchanges with all four of the other big railroads in Columbus, as well as with each other where they crossed at Grandview Tower:

NYC Columbus Interchange Points		
Railroad	Big Four	T&OC
Pennsylvania	Big Four East Yard - Just East of	LM Crossing - Little Miami
	Union Depot	Transfer also known as the Auburn
		Track
N&W	Second Avenue, Just East of Union	Bannon - N&W Watkins Yard and
	Depot and 11th Avenue by Grogan	T&OC South Columbus Yard
	Yard	
C&O	C&O Yard "A" near HV Crossing	Frankfort Street Crossover, C&O
		Mound Street Yard
<i>B&O</i>	Big Four East Yard - Just east of	T&OC West Columbus Yard, near
	Union Depot	GN Tower
NYC T&OC	Grandview Crossing - T&OC West	
	Columbus Yard	
NYC Big		Grandview Crossing - T&OC West
Four		Columbus Yard

Source: 1934 Unification Committee Map, Columbus Railroads at: http://www.columbusrailroads.com/new/pdf/map-1934-steamroad.pdf

Grandview crossing was at a fairly sharp angle, less than 30 degrees, making it simple to accommodate interchange tracks for southbound Big Four movements northbound onto the T&OC, and northbound Big Four movements southbound into the T&OC West Columbus Yard. This worked well for certain traffic, especially T&OC Peabody New Lexington unit trains crossing over southbound onto the Big Four for Dayton Power & Light. Also, Grandview siding, on the T&OC just north of the crossing, was a useful 120-car facility for dropping and picking up long blocks of coal interchange cars. However, for through northbound coal unit trains, this was all just exactly backwards. T&OC coal needing to head up the Big Four toward Cleveland or the Ashtabula coal dock could not easily make that move at Grandview, and likewise northbound Big Four trains of Eastern Kentucky coal arriving from Cincinnati could not readily move northbound onto the T&OC for Toledo. Southbound NYC empties on both lines faced that same difficulty in reverse. Those moves would have entailed changing of ends out on the busy Big Four main, using Grandview Siding, or pulling in to the always-overloaded West Columbus Yard and taking up two tracks to reform a T&OC train to head in the same direction.

As a solution, in 1964 the NYC concocted a "wye" interchange track in the southwest quadrant of the Grandview crossing. This was a tight looping interconnection with south-facing points on the Big Four and north-facing points on the T&OC. This sharply curving track, at the bottom of a grade on both lines, was apparently a conspicuous failure, unable to handle the sideways stress, resulting in derailments. It fell into disuse, at least for heavy train purposes, and was eventually removed after Conrail took over and the Big Four track east of Miami Crossing was pulled up.

Lack of same-direction interchange capability between the Big Four and T&OC at Grandview also led to some very awkward solutions for Big Four interchanges with the N&W. During the Penn Central era, often characterized by inability of the merged PRR and NYC to make efficient use of their mismatched physical facilities, the PC accepted N&W unit train deliveries to haul to Cleveland and Ashtabula for Lakes transloading. To get the returning southbound empty hopper trains on the Big Four line right way around for redelivery to the N&W, the PC routed them through Union Depot and northwest up the Bradford Line past Mounds, then south through Buckeye Yard and onto the Miami Line eastward, onto the T&OC through the Auburn track at LM Crossing, and thence to Bannon to interchange back to the N&W. This added 16 miles and untold hours of movement through many of the most congested interlockings in Columbus.⁷

The Big Four's interchanges with the PRR and N&W were downtown, just east of Union Depot, and its connection to the C&O was at HV Crossing, at which points there were a lot of train movements and lack of immediately adjacent long-track receiving yards, sometimes making coal loads and empty hopper interchange at that point problematic. N&W coal also moved onto the Big Four at 11th Ave. just below Grogan Yard. It appears that at best, most of the Big Four's interchange points were not ideal for coal movements.

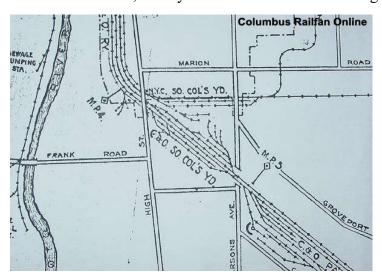


Steelton Block Station on the T&OC, 1945, looking west toward the T&OC's main coal interchange facility, South Columbus Yard. Photo by BJ Kern, from Edward Miller Collection, courtesy of Columbus Railroads.

The central point of T&OC coal interchange was its well-designed and located South Columbus Yard, with eight tracks, the longest of which held 130 cars, and a total capacity of 415 cars. This yard was at T&OC Western MP 134.9, between the point where the T&OC curved eastward under

⁷ Jerry Taylor's *A* Sampling of Penn *Central, Southern Region on Display* has a photo and good description of these Penn Central T&OC - Big Four interchange movements.

High Street and the South Columbus Industrial Track switch. It was just west of the Steelton Block Station, at Western MP 137.4 near Lockbourne Road, which was less than a mile west of the T&OC-N&W crossing at Bannon. Bannon featured interchange tracks in both its southwest and southeast quadrants, plus a connecting track parallel to the T&OC main all the way to Steelton, where the T&OC double track ended prior to its eventual extension all the way to Bannon. This arrangement allowed blocks of loaded or empty hoppers, or complete unit trains, to move easily between the two railroads and the adjacent South Columbus Yard and N&W Watkins Yard. Prior to 1964, the N&W had no line north from Columbus, and transferred most of its inbound coal, especially Lakes transload cars, to other railroads, including to the T&OC for Toledo and the Big Four for Cleveland and Ashtabula, as well as to the C&O for Toledo and the PRR Sandusky Branch. Even after the N&W acquired the Sandusky Line, the N&W still delivered a lot of Pocahontas Coal to the NYC at Bannon, mainly bound for Toledo and Michigan.



Location of T&OC South Columbus Yard, just east of High Street, from Columbus Railfan Online: http://www.trainweb.org/columbusrailfan/colyards/nycsouthcolumbus/nycsouthcolumbusyard.htm

The T&OC's interchange with the Pennsylvania Railroad in Columbus was the Auburn track, at LM Crossing. This track was set up for southbound on the T&OC to eastbound on the PRR Miami side, and vice versa. In later years, there was also an interchange track between the T&OC and the PRR Bradford side at Mounds, which accommodated northbound T&OC to westbound PRR Bradford Line movements. The T&OC and PRR also interchanged cars for local switching at East Columbus, but this location was not suitable for coal traffic.

The T&OC received coal off the C&O at Frankfort Street where the C&O and T&OC double track lines were parallel for several miles between LM Tower and High Street, just north of Parsons Yard. Even though C&O had its own mostly double-track line to Toledo and access to Lake Front

⁸ Compare the 1934 Unification Committee Map on Columbus Railroads, which does not show this Mounds interconnection, with the 1979 Conrail map, which shows it in place. http://www.columbusrailroads.com/new/pdf/1979%20conrail-columbus%20vicinity%20map.pdf

Docks, some northbound C&O coal occasionally came over to the T&OC for the run up the Western Branch.

The T&OC Eastern Branch, while bypassing Columbus at some 30 miles' distance, often had a major impact on Columbus interchange of coal traffic. The T&OC tended to operate the Eastern Branch as more of a southbound route, especially for Big Four trains moving from Toledo to Bellefontaine, with northbound traffic predominating on the Western Branch. The Western and Eastern Branch junction at Thurston (Western MP 160.8) was well equipped for handing coal trains and returning empties, with a 148-car long track on the Columbus side and a 123-car track to the east side of the main track south of the junction, plus a small five-track storage and classification yard and a wye for turning locomotives.

For a time, just after the advent of the diesels in the early 1950s, the T&OC also hauled Toledo coal from South Columbus to Thurston and north up the Eastern Branch to Stanley. Veteran railroaders would speak of runs from West Columbus with four purring new F7 covered wagons in an ABBA consist, picking up 100 or more loaded hoppers at South Columbus, running through the new south wye at Thurston and up through Bucyrus to Stanley. Then without going off duty, they would have a Stanley yard crew pop their caboose onto 100 empty hoppers in Yard "E" or "O," the engine crew would change ends on the diesels and couple on for a sprint back to Thurston or Columbus, giving them up to 352 paycheck-inflating miles in a single 16-hour workday.

The Eastern Branch was also oddly in play in a 1901 agreement between the T&OC predecessor Ohio Central Railroad and the C&O predecessor Hocking Valley line. The railroads agreed that beginning in May of that year, southbound cars of the HVRR would run from Toledo to Columbus over the Eastern Branch, "practically making a loop between Columbus and Toledo, the northbound through freight of both roads going over the Hocking Valley and the 'empties' returning over this division of the Ohio Central." It is hard to imagine how this would have worked, although at the north end the two railroads' respective Stanley and Walbridge yards were only a mile apart with a ready interconnection over the Toledo Terminal Railroad, and there was also a direct OC-HVRR interchange at their crossing at Fostoria, 35 miles south of Toledo. The south end of the "loop" also could have been at Frankfort Street and what was then the HVRR's Mound Street Yard, via Thurston and the Ohio Central track through South Columbus. A more efficient possible southern interchange for coal traffic and empty hoppers might have been at Beaumont, between Chauncey and Athens, where the OC and HVRR had an interchange in the very center of the two railroads' on-line coalfields. This track led directly onto the HVRR's Athens Division near its junction with the HVRR Monday Creek Division and its huge Nelsonville yard which fed empty hoppers out daily to dozens of active mines. But how and if this clever plan may have actually worked is lost to history.

Both the Big Four and T&OC interchanged some traffic with the B&O, with the Big Four's connection being just east of Union Depot, a congested area with no immediately convenient yard for either railroad suitable for long coal hopper cuts. The T&OC interchanged cars with the B&O

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⁹ 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

over the Big Four and the Grandview transfer tracks and at GN Crossing just east of the west Columbus Yard Office. While the regular overnight "B&O Transfer" engine crew often dominated the chatter on the locomotive radios in the 1960s, there seemed to be little coal traffic involved. The B&O's main coal volume from Zanesville to the east, and off its Rock Run branch to Shawnee, likely moved through Lake Erie Crossing in Newark due north to the B&O's Lake Erie coal docks in Lorain and Fairport. While the B&O had at least some coal volume moving up from Cincinnati to Columbus, it did not seem to transfer in any large part onto the NYC.

Today

Notably, the north-south coal hauling lines such as the T&OC and Big Four's Columbus-Cleveland main line tended to be the survivors during the catastrophic rail upheaval in the 1960s and 70s, which saw the CA&C vanish, the PRR Bradford and Miami Lines largely disappear and the mighty Panhandle laid low. The T&OC Western Branch north from Columbus and Big Four Columbus to Cleveland main line, both post-Conrail CSX acquisitions, remain intact and have flourished. Norfolk Southern took over the NYC Western Branch south of Columbus, and the Southern Branch south of Corning down to southern West Virginia. Much of this remains in place and operating as the Kanawha River Railroad (KRR) between Bannon and Gauley Bridge, West Virginia under the Watco flag, but the former NYC and NF&G "pea vine" branch tracks in West Virginia are now long gone. Both CSX and Norfolk Southern continue to operate Lake Erie coal docks fed with unit trains moving up through Columbus on these former NYC lines.

Most of the NYC Eastern Branch, once the express route for millions of tons of Lakes coal, was abandoned in the 1980s. The former Big Four south of Columbus exists only as a switching track for a short distance west of Miami Crossing, although the former PRR C&X Miami line traffic moves over the old Big Four west of London heading to Springfield and beyond.

West Columbus Yard is now developed commercial and industrial real estate. The former bustling Buckeye Yard, hoped-for savior of the Penn Central, is rapidly yielding to development as prime suburban commercial land.

The former Columbus, Shawnee & Hocking and Zanesville & Western tracks, other than the 22-mile Truro-Thurston leg that survives as part of the KRR, were already disappearing by the 1960s. A little stub of the Z&W between the former CA&C Pennor Crossing and Leonard Avenue is still in use as an industrial lead for some very active industrial rail shippers. Aside from a couple tiny fragments at street crossings not yet pulled out, the former NYC East Columbus Branch on the old Z&W right-of-way has disappeared. A short stretch of the Z&W south from downtown Zanesville to some switching points remains in service. The rest of the CS&H and Z&W out to Corning, Shawnee and McConnelsville is rapidly-fading history.



Z&W in 2017. The author's brother Paul Cavanaugh surveys a rare fragment of the Zanesville & Western Railway, embedded in a little-used block of 4th Avenue in the Rarig's neighborhood. Many millions of tons of coal from Perry, Athens and Muskingum Counties passed over these rails on their way to Columbus and Sandusky between 1886 and 1902.

Author's Note: These articles are based on various sources, including railroaders' recollections, which often are difficult to verify from published sources. Comments and corrections are very welcome!

Notes and Additional References:

The best visual reference for the T&OC is a 1932 NYC Map showing the dates of construction and predecessor railroads of both the T&OC, Z&W and NF&G lines and their many branches:

North Portion: http://www.columbusrailroads.com/new/pdf/T&OCMap-01-100.pdf

South Portion: http://www.columbusrailroads.com/new/pdf/T&OCMap-02-100.pdf

NYC H-Class Mikados: https://nycshs.files.wordpress.com/2014/10/mikados.pdf

NYC H-10 Locomotive Database:

https://www.steamlocomotive.com/locobase.php?country=USA&wheel=2-8-2&railroad=nyc#15862

NYC L-Class Mohawk Locomotives Database (NYC/Big Four):

https://www.steamlocomotive.com/locobase.php?country=USA&wheel=4-8-2&railroad=nyc

1906 Poor's Manual:

https://www.google.com/books/edition/Poor_s_Manual_of_Railroads/8dAhAQAAMAAJ?hl=en_&gbpv=1&dq=Turkey+Foot+Coal+Branch&pg=RA1-PA267&printsec=frontcover_

NYC System Engine and Car Shop Locations:

https://nycshs.files.wordpress.com/2016/12/nyc-structures-and-facilities.pdf