

## Mission Statement

Comprised of the oldest and most comprehensive collection of railroad history in the Western Hemisphere, the Baltimore & Ohio Railroad Museum, Inc. is a unique cultural and educational asset for the city and the region. An unparalleled roster of the 19th and 20th century railroad equipment, original shop buildings, and surviving tracks at the historic Mt. Clare site provide an integrated resource to present virtually every aspect of American railroad development and its impact on our society, culture and economy.

## The Birthplace of American Railroading

The site upon which the Baltimore & Ohio Railroad Museum was established in 1953 is designated a National Historic Landmark by the United States Department of the Interior. As a major Baltimore Attraction, this 40-acre historic site and its buildings and structures hold a unique and significant place in American history.

Universally recognized as the birthplace of American railroading, the Museum's site represents the vision, establishment, development and creation of the first common carrier railroad in the Western Hemisphere. The first 1.5 miles of mainline railroad right of way carries visitors on seasonal train rides to the site where the First Stone of the Baltimore & Ohio Rail Road was laid on July 4, 1828 by Charles Carroll of Carrollton, last living signer of the Declaration of Independence.



Architecturally and historically significant railroad buildings and structures are preserved and interpreted as a part of the Museum's collection. These include: Mt. Clare Depot (1851); Roundhouse [Passenger Car Shop], (1884); Annex Building (1884), Baltimore & Ohio Passenger Car Works (1869-1870), Freight Car Repair Shop [ruins] 1919 and the historic 1.5 mile right of way.

At Mt. Clare the birth, growth, zenith and legacy of the American railroad can be experienced like nowhere else in the World. The Mt. Clare Shops, established here in March 1829, are the oldest continually operating railroad shops in the World. An extensive list of historical and technological firsts was accomplished here. From the perfection of the flanged wheel, and the building and operation of the first American built steam locomotive to the construction of the World's first air conditioned passenger car; Mt. Clare was a laboratory of American ingenuity.

## History of the Museum

In the late 19th century, an overzealous publicity agent developed a trade show exhibit for a major American railroad headquartered in Baltimore, Maryland. This exhibit survived the railroad that sponsored it and grew to become a "national treasure" of railroad artifacts. Today, it comprises the collection of the Baltimore & Ohio Railroad Museum, the oldest, most comprehensive American railroad collection in the world.

Located among Baltimore City's historic southwest neighborhoods, at the original site of the historic Mt. Clare Shops, the B&O Railroad Museum is recognized universally as the *birthplace of American railroading*. It was here within the Museum's 40-acre campus that Baltimore businessmen, surveyors, and engineers set about building the B&O Railroad in 1829, laying the first commercial long-distance track, building the first passenger station, and inventing America's unique railroad. Railroad work has been conducted at Mt. Clare for over 130 years. And it continues today. A National Historic Landmark, Affiliate of the Smithsonian Museum, and independent educational resource, the B&O Railroad Museum collects, preserves and interprets artifacts related to early American railroading, particularly the Baltimore & Ohio, Chesapeake & Ohio, Western Maryland, and other mid-Atlantic railroads to the delight of over 200,000 visitors a year. Nearly 200 pieces of locomotives and rolling stock provide a continuum of railroad technology history from 1830 through the present day, and hundreds of thousands of small artifacts provide a unique glimpse of railroading through tools, exquisite time-pieces, fine art, presentation silver, uniforms, furniture, and personal memorabilia. Additionally, an extensive collection of scale models and toy trains illustrate America's long fascination with trains and railroading. And the grounds of the Museum encompass significant historic structures, many of which are restored as well as bridges, earthworks, and archaeological resources.



The B&O Railroad always maintained a keen awareness of its history. As America's first commercial long-distance railroad, the B&O was also a railroad of "firsts." Pioneers in the technology of American railroading, they initiated hundreds of innovative ideas throughout their history from operating the first American built steam locomotive to debuting the first air conditioned train. The American Railroad Journal of November 1835 called the B&O "...the Railroad University of the United States..." calling their annual reports "*textbooks*," and their road and workshops "...a lecture room to thousands."

The first published history of an American railroad was William Prescott Smith's "*A History and Description of the Baltimore and Ohio Railroad*" published in 1853. At the 1876 United States Centennial

Exposition in Philadelphia, the B&O Railroad exhibited not only its newest and most powerful locomotive, but also the oldest in existence. This moment initiated the B&O's commitment to preserving its heritage as "America's First Railroad" and set in motion a corporate philosophy of heritage preservation. By the 1880s, with fierce competition at hand, the B&O chose to advertise itself as America's most historic railroad traveling through America's most scenic countryside. The B&O became the first railroad to hire a publicity agent. In 1880, "Major" Joseph G. Pangborn, a western newspaper publicist and showman, was hired to market and create an advertising program for the Railroad. In the course of promotion, Pangborn saved a number of the B&O's wheezing, ancient, obsolete but historic locomotives for an extensive exhibit planned for the World's Columbian Exposition to be held in Chicago in 1892-93. In addition, he designed and built a series of full-sized wooden replicas of the world's pioneering locomotives and mounted an exhibit documenting the continuum of railroad history heretofore unmatched in size, completeness, and significance. For its creative look backward in history, in the midst of a celebration of "modern" technology, the B&O received the highest honors awarded. This magnificent collection and its exhibit were destined to be part of a new museum of technology proposed by Marshall Field. In the process of planning, however, the Field Museum elected to concentrate on natural history, and the collection was returned to the B&O.

The B&O expanded and redeveloped their exhibits for the 1904 Louisiana Purchase Exposition in St. Louis and, again, walked away with gold medals in every applicable category. Following this display, much of the collection was stored in an unused roundhouse in Martinsburg, West Virginia. From time to time the railroad sent the relics to fairs, local events, and celebrations where a public relations benefit was achievable. Often their eldest locomotive was sent with their newest to reinforce the ideals of modernism. Nonetheless, history and historic preservation had become part and parcel of the B&O corporate fabric.



When the B&O reached its centennial in 1927, it was the oldest continuously-operating railroad in the world. To mark this significant anniversary, the railroad staged an elaborate pageant called "The Fair of the Iron Horse" in Halethorpe, Maryland. In addition to inviting railroads from around the world to participate, the B&O restored all of her historic locomotives to operating order, recreated some long extinct and paraded them around a grandstand in front of over two million people in twenty-three days. Other exhibits, models, and historic artifacts were collected and on display in pavilions in world's fair style. The Fair pavilions almost became the world's first railroad and transportation museum, except for the economic despair prompted by the Great Depression and a devastating hurricane in 1935 which severely damaged the structures and many objects in the collection.

For nearly twenty years, the B&O kept the collections in storage in a Roundhouse once located at the site of Baltimore's M&T Stadium-home of the Ravens NFL team. When the passenger car department abandoned the magnificent roundhouse at Mt. Clare, however, the Public Relations Department saw an opportunity to consolidate all of its historic collections in one location. The Museum's Roundhouse, originally constructed as a passenger car shop, was designed by noted architect, E. Francis Baldwin. Fully enclosed, it was the largest circular industrial building in the world when completed covering more than an acre of ground and rising 125 feet into the air. With the oldest and most significant railroad collection in America in hand, the railroad opened the B&O Transportation Museum at Mt. Clare on July 4, 1953. The Museum and its collections were designated a National Historic Landmark by the U.S. Department of the Interior. Following mergers with the Chesapeake & Ohio Railway into the Chessie System Railroads and, finally, CSX, the B&O Railroad ceased to exist as a corporate entity in 1987. During several periods of the museum's corporate history, the Museum and the collection's fate hung in the balance. In the early 1970s, Hays T. Watkins, the Chairman and CEO of the Chessie System, Inc., and later CSX, was largely responsible for saving the museum and collections. His personal sacrifices and commitment to railroad history combined with his friendship with then-Baltimore Mayor William Donald Schaefer, allowed the oldest American railroad collection and museum to be preserved, restored, and grow.



In 1990, the museum broke all corporate ties and became an independent nonprofit education institution. CSX deeded the buildings, real estate and collections to the newly formed Museum board and provided for a significant endowment. Shortly thereafter the Museum initiated its active rolling stock restoration program, continuing the unbroken continuum of railroad work at Mt. Clare since 1830.

In 1999 an historic affiliation agreement was signed between the Smithsonian Institution and the Baltimore & Ohio Railroad Museum. The Museum became the first of seven museums in America so honored.

On Presidents' Day, February 16, 2003, amid a record-breaking snowfall, one half of the Museum's massive roof collapsed. The collapse occurred as a result of the weight of drifting snow on the western side of the building. Eyewitness accounts depict the drifts nearly six feet in depth. The first alarm was received at approximately 11:40 PM on February 16th. Museum officials responded to find two sections of the 22-sectioned roof collapsed. Two more sections fell on the opposite side of the building around 5:30 AM the following morning. The remaining seven sections caved in before 9:00 AM on the 17th. As a result of the roof collapse, tons of snow, slate, wood, and cast

iron fell upon some of the most historic and important locomotives, rolling stock, Pangborn models, and small artifacts in the Museum's collection.

A forensic structural engineering study was commissioned and determined that a number of architectural and engineering design flaws existed in E. F. Baldwin's original plan. This, combined with age deterioration and the extreme weight of the drifted snowfall, caused the roof system to fail.

Work on restoration of the Roundhouse and rebuilding the Museum began immediately. Following a 22-month effort and a heroic fund raising campaign, the Museum reopened to the public on November 13, 2004. New and expanded visitor facilities and public programs were unveiled and an on-site, state-of-the-art locomotive and rolling stock restoration facility was designed to restore the damaged collections.

## Collections

The Baltimore & Ohio Railroad Museum possesses the oldest, most historic and most comprehensive American railroad collections in the world. Dating from the beginning of American railroading, the collection contains locomotives and rolling stock, historic buildings, and small objects that document the impact of the Baltimore & Ohio Railroad (B&O) on the growth and development of early railroading and cover almost every aspect of an industry that left a permanent mark on the folklore and culture of America.

The Museum's locomotive and rolling stock collection contains many unique examples of historically significant pieces from the B&O and other Maryland railroads and includes the finest collection of 19th century steam locomotives. The Museum's roster of locomotives and rolling stock represent the first, last, best or only of their kind in existence today.



The small object collection covers almost every facet of railroading and includes clocks, pocket watches, textiles, lanterns, dining car china, silver, fine art, communication devices, signals, shop equipment, and an assortment tools and artifacts used on historic occasions such as the laying of the B&O's ceremonial First Stone on July 4, 1828, which marked the beginning of construction of America's first railroad.

## Restoration Facility



The Museum's state-of-the-art Restoration Facility opened in 2005. It was built in response to the tragic collapse of the 1884 Roundhouse roof in February, 2003. The collapse of Roundhouse roof dropped tons of snow, slate, iron, and wood onto some of the premier pieces in the collection. The wooden cabs of the locomotives were smashed, windows broken out, and the metal boilers and tenders bent and twisted in unnatural ways. Initial repair estimates for the damaged pieces were millions of dollars. Cost estimates coupled with the ongoing need to maintain and restore our operating fleet of diesel, steam engines, and historic rolling stock, led the Museum to invest in the future of the collection and provide much needed and improved facilities.

Today the Restoration Facility houses the Museum's rail operations and our award-winning restoration department. The 27,000 square foot shop is equipped with state-of-the-art and historic railroad and restoration equipment specifically chosen to address the needs of the B&O's holdings. It contains 4 repair and maintenance tracks, a wood working shop, a metal shop, a locomotive inspection pit, and fully enclosed paint booth capable of handling equipment up to 100' in length.



Selections from: <http://www.borail.org/>

# Baltimore and Ohio Railroad



*B&O's Columbian crossing the Potomac River at Harpers Ferry, West Virginia, 1949*

The **Baltimore and Ohio Railroad** (reporting marks **B&O**, **BO**) is one of the oldest railroads in the United States and the first common carrier railroad. It came into being mostly because the city of Baltimore wanted to compete with the newly constructed Erie Canal (which served New York City) and another canal being proposed by Pennsylvania, which would have connected Philadelphia and Pittsburgh. At first this railroad was located entirely in the state of Maryland with an original line from the port of Baltimore west to Sandy Hook. At this point to continue westward, it had to cross into Virginia (now West Virginia) over the Potomac River, adjacent to the

confluence of the Potomac and Shenandoah rivers. From there it passed through Virginia from Harpers Ferry to a point just west of the junction of Patterson Creek and the North Branch Potomac River where it crossed back into Maryland to reach Cumberland. From there it was extended to the Ohio River at Wheeling and a few years later also to Parkersburg, West Virginia.

It is now part of the CSX Transportation (CSX) network, and includes the oldest operational railroad bridge in the USA. The B&O also included the Leiper Railroad, the first permanent horse-drawn railroad in the U.S. In later years, B&O advertising carried the motto: "Linking 13 Great States with the Nation." Part of the B&O Railroad's immortality has come from being one of the four featured railroads on the U.S. version of the board game *Monopoly*, but it is the only railroad on the board which did not serve Atlantic City, New Jersey, directly.

When CSX established the B&O Railroad Museum as a separate entity from the corporation, some of the former B&O Mount Clare Shops in Baltimore, including the Mt. Clare roundhouse, were donated to the museum while the rest of the property was sold. The B&O Warehouse at the Camden Yards rail junction in Baltimore now dominates the view over the right-field wall at the Baltimore Orioles' current home, Oriole Park at Camden Yards.

At the end of 1970 B&O operated 5552 miles of road and 10449 miles of track, not including the Staten Island Rapid Transit (SIRT) or the Reading and its subsidiaries.

**History:** The fast-growing port city of Baltimore, Maryland faced economic stagnation unless it opened routes to the western states, as New York had done with the Erie Canal in 1820. In 1827, twenty-five merchants and bankers studied the best means of restoring "that portion of the Western trade which has recently been diverted from it by the introduction of steam navigation." Their answer was to build a railroad—one of the first commercial lines in the world.<sup>[1]</sup>

Their plans worked well, as the railroad grew from a capital of \$3 million in 1827 to a large enterprise generating \$2.7 million of annual profit on its 380 miles (610 km) of track in 1854, with 19 million passenger miles. The railroad fed tens of millions of dollars of shipments to and from Baltimore and its growing hinterland, thus making the city the commercial and financial capital of the region south of Philadelphia.<sup>[2]:17,75</sup>

**Charters:** Two men — Philip E. Thomas and George Brown — were the pioneers of the railroad. They spent the year 1826 investigating railway enterprises in England, which were at that time being tested in a comprehensive fashion as commercial ventures. Their investigation completed, they held an organizational meeting on February 12, 1827, including about twenty-five citizens, most of whom were Baltimore merchants or bankers. Chapter 123 of the 1826 Session Laws of Maryland, passed February 28, 1827, and the Commonwealth of Virginia on March 8, 1827, chartered the **Baltimore and Ohio Rail Road Company**, with the task of building a railroad from the port of Baltimore west to a suitable point on the Ohio River. The railroad, formally incorporated April 24, was intended to provide not only an alternative to, but also a faster route for Midwestern goods to reach the East Coast than the

seven-year-old, hugely successful, but slow Erie Canal across upstate New York. Thomas was elected as the first president and Brown the treasurer. The capital of the proposed company was fixed at five million dollars,<sup>[3]</sup> but the B&O was initially capitalized in 1827 with a three million dollar issue of stock. Virtually every citizen of Baltimore owned a share, as the offering was oversubscribed.<sup>[4]</sup>

**Early construction:** Cornerstone of the B&O, laid July 4, 1828 by Charles Carroll of Carrollton, now displayed at the B&O Railroad Museum. Construction began on July 4, 1828, when Charles Carroll of Carrollton did the groundbreaking. The initial tracks were built with granite stringers topped by strap iron rails. The first section, from Baltimore west to Ellicott's Mills (now known as Ellicott City), opened on May 24, 1830. Developers decided to follow the Patapsco River to a point near Parr's Ridge (now known as Mount Airy), where the railroad would cross a height of land and descend into the valley of the Monocacy and Potomac rivers. Further extensions opened to Frederick (including the short Frederick Branch) December 1, 1831, Point of Rocks April 2, 1832, Sandy Hook December 1, 1834 (the connection to the Winchester and Potomac Railroad at Harpers Ferry opening in 1837), Martinsburg May 1842, Hancock June 1842, Cumberland November 5, 1842, Piedmont July 21, 1851, Fairmont June 22, 1852, and its terminus at Wheeling, West Virginia (then part of Virginia) on January 1, 1853. The narrow strip of available land along the Potomac River from Point of Rocks to Harpers Ferry caused a legal battle between the B&O and the Chesapeake and Ohio (C&O) Canal, as both sought to exclude the other from its use.<sup>[5]</sup> A later compromise allowed the two companies to share the right of way.



The State of Maryland granted the B&O a charter to build a line from Baltimore to Washington, D.C., in 1831, and the Washington Branch was opened in 1835.<sup>[6]:157</sup> This line joined to the original mainline at Relay, Maryland, crossing the Patapsco on the Thomas Viaduct, which remains one of the B&O's signature structures. This line was partially funded by the state, and was operated separately until the 1870s, with the state taking a 25 percent cut of gross passenger receipts. This line was built in stone, much like the original mainline. By this time, however, strap rail was no longer used for new construction. Most of the stone bridges on the Old Main Line did not last long, being washed out by the periodic flooding of the Patapsco River and replaced at first by Bollman Truss bridges. The Annapolis and Elk Ridge Railroad to Annapolis connected to this line at Annapolis Junction in 1840. As an unwritten condition for the charter, it was understood that the state would not charter any competing line between Baltimore and Washington.

**Early engineering:** When construction began on the B&O in the 1820s, railroad engineering was in its infancy. Unsure exactly which materials would suffice, the B&O erred on the side of sturdiness and built many of its early structures of granite. Even the track bed to which iron strap rail was affixed consisted of the stone.

Though the granite soon proved too unforgiving and expensive for track, most of the B&O's monumental bridges have survived to this day, and many are still in active railroad use by CSX. Baltimore's Carrollton Viaduct, named in honor of Charles Carroll of Carrollton, was the B&O's first bridge, and is the world's oldest railroad bridge still carrying trains (world's oldest railway bridge is Causey Arch, UK). The Thomas Viaduct in Relay, Maryland, was the longest bridge in the United States upon its completion in 1835, and remains in use as well. The B&O made extensive use of the Bollman iron truss bridge design in the mid-19th century. Its durability and ease of assembly aided faster railroad construction.



*Carrollton Viaduct*

As the B&O built the main line west to Parrs Ridge, it had limited information about the operation of steam locomotives. Consequently, the company was uncertain if the engine's metal wheels would grip the metal rails sufficiently to pull a train up to the top of the ridge. The railroad decided to construct two inclined planes on each side of the ridge along which teams of horses, and perhaps steam-powered winches, would assist pulling the trains uphill. The planes, about a mile long on each side of the ridge, quickly proved an operational bottleneck, and before the decade of the 1830s ended the B&O

built a 5.5-mile (8.9 km) long alternate route that became known as the Mount Airy Loop. The planes were quickly abandoned and forgotten, though some artifacts survive to the present.

**First telegraph line:** In 1843, Congress appropriated \$30,000 for construction of an experimental 38-mile (61 km) telegraph line between Washington, D.C., and Baltimore along the B&O's right-of-way. The B&O approved the project with the agreement that the railroad would have free use of the line upon its completion. An impressive demonstration occurred on May 1, 1844, when news of the Whig Party's nomination of Henry Clay for U.S. President was telegraphed from the party's convention in Baltimore to the Capitol Building in Washington. On May 24, 1844, the line was officially opened as Samuel F. B. Morse sent his famous words "What hath God wrought" from the B&O's Mount Clare station to the Capitol Building along the wire.<sup>[2]:59–60</sup>



*Francis Blackwell Mayer. The Founders of the Baltimore and Ohio Railroad (1891), represents the B&O's history (left to right) beginning with its founding in 1827 to 1880. Philip E. Thomas, George Brown, Charles Carroll of Carrollton, and others are gathered at left. Samuel F. B. Morse is seated at center left (with telegraph tape) and John W. Garrett is seated at right. The original painting is now at the headquarters of CSX Transportation in Jacksonville, Florida. A replica is at the B&O Railroad Museum.*

**Innovations:** The Baltimore and Ohio Railroad became the first chartered railroad in the United States; twenty thousand investors purchased \$5 million in stock to import the rolling stock and build the line. It was a commercial and financial success, and invented many new managerial methods that became standard practice in railroading and modern business. The B&O became the first company to operate a locomotive built in America, with the "Tom Thumb" in 1829. It built the first passenger and freight station (Mount Clare in 1829) and was the first railroad that earned passenger revenues (December 1829), and published a timetable (May 23, 1830). On December 24, 1852, it became the first rail line to reach the Ohio River from the eastern seaboard.<sup>[2]</sup>

**Conflicts in the early years:** Operation of the railroad was hampered by its partial government ownership. Of the thirty members on its board of directors, twelve were elected by shareholders while the other eighteen were appointed either by Maryland or the Baltimore City Council.<sup>[7]</sup> These had conflicting interests: the directors appointed by the state and city desired low fares and all construction funded from corporate revenues while the directors elected by shareholders desired greater profits and dividends. These conflicts became more intense in the 1850s after the completion of the C&O Canal, which brought additional competition to the B&O for transport services. In 1858, after being nominated by large shareholder and director Johns Hopkins, John W. Garrett became president of the B&O, a position he would hold until his death in 1884.<sup>[8]</sup> In the first year of his presidency, corporate operating costs were reduced from 65 percent of revenues to 46 percent,<sup>[7]</sup> and the railroad began distributing profits to its shareholders.

Abolitionists stopped a train during John Brown's raid on the federal arsenal at Harpers Ferry, Virginia (later part of West Virginia). Garrett telegraphed the Secretary of War, and a B&O train carried federal troops led by Robert E. Lee to capture the abolitionists and John Brown.<sup>[7]</sup>

**Civil War period:** At the outset of the Civil War, the B&O possessed 236 locomotives, 128 passenger coaches, 3,451 rail cars and 513 miles (826 km) of rail road, all in states south of the Mason–Dixon line. Although many Marylanders had Southern sympathies, Garrett and Hopkins supported the Union. The B&O was instrumental in supporting the Federal government during the Civil War, as it was the main rail connection between Washington, D.C., and the northern states. As a result, 143 raids and battles during the war involved the B&O Railroad, many resulting in substantial loss.

**1861–1862:** The opening move of the Civil War was a massive series of raids conducted by Stonewall Jackson. By the end of 1861, 23 B&O railroad bridges had been burned, 102 miles (164 km) of telegraph line were cut down, 36.5 miles (58.7 km) of track was torn up or destroyed, 42 locomotives were burned, 14 locomotives were captured

and 386 rail cars stolen and destroyed. Through these actions operations on B&O Railroad were completely shut down for ten months. It was not until the end of March 1862 that service on the B&O Railroad was restored, and even then train movements were sporadic and subject to frequent stoppages, derailments, capture and attack.

**1863–1865:** Advertisement for the Baltimore and Ohio in an 1864 Baltimore city directory, promoting its repairs and reopening at one point during the war.

The second half of the Civil War was characterized by near continuous raiding, which severely hampered the Union defense of Washington, D.C. Incompetent Union forces and leaders often failed to properly secure the region, despite the vital importance of the rail company to the Union cause.



"There is no interest suffering here except the Baltimore and Ohio Railroad and I will not divide my forces to protect it."  
 — General Philip Sheridan<sup>[9]</sup>

This military strategy, or lack thereof, allowed Confederate commanders to contribute significantly to the length of the war, by conducting free-ranging military operations against the region and railroad.

The B&O and Garrett are particularly remembered for their part in the Battle of Monocacy. Agents of the railroad began reporting Confederate troop movements eleven days prior to the battle, and Garrett had their intelligence passed to authorities in the War Department and to Major General Lew Wallace, who commanded the department that would be responsible for defense of the area. As preparations for the battle progressed, the B&O provided transport for federal troops and munitions, and on two occasions Garrett was contacted directly by President Abraham Lincoln for further information. Though Union forces lost this battle, the delay allowed Ulysses S. Grant to successfully repel the Confederate attack on Washington at the Battle of Fort Stevens two days later. After the battle, Lincoln paid tribute to Garrett as:

"The right arm of the Federal Government in the aid he rendered the authorities in preventing the Confederates from seizing Washington and securing its retention as the Capital of the Loyal States."

**Westward by merger :** A steel and stone bridge was built across the Ohio River between Bellaire, Ohio and Wheeling, West Virginia in 1871, connecting the B&O to the Central Ohio Railroad, which the B&O had leased starting in 1866. This provided a direct rail connection to Columbus, Ohio, and the lease marked the beginning of a series of expansions to the west and north.

The Chicago and Alton Railroad was purchased by the B&O in 1931 and renamed the Alton Railroad. It was always operated separately and was eventually bought by the Gulf, Mobile and Ohio Railroad after receivership in 1942.

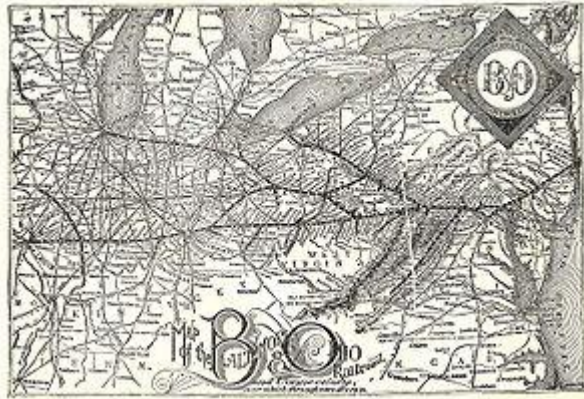
*Blockade of engines at Martinsburg, West Virginia, during strike in 1877*

As a result of poor national economic conditions in the mid-1870s following the Panic of 1873, the B&O attempted to reduce its workers' wages. After a second reduction in wages was announced in the same year, workers began the Great Railroad Strike of 1877 on July 14 in Martinsburg, West Virginia. The strike spread to Cumberland, and when the governor of Maryland on July 20 attempted to put down the strike by sending the state militia from Baltimore, riots broke out resulting in 11 deaths, the burning of parts of Camden station, and damage to several engines and



cars.<sup>[12]</sup> The next day workers in Pittsburgh staged a sympathy strike that was also met with an assault by the state militia; Pittsburgh then erupted into widespread rioting. The strike ended after federal troops and state militias restored order.

**New lines in Maryland:** In 1866 the B&O began constructing the **Metropolitan Branch** west out of Washington, and was completed in 1873 after years of erratic effort. Before this line was laid, rail traffic west of Washington had to travel first to Relay or Baltimore before joining the main line. The line cut a more or less straight line from Washington to Point of Rocks, Maryland, with many grades and large bridges. Upon the opening of this



line, through passenger traffic was rerouted through Washington, and the Old Main Line from Point of Rocks to Relay was reduced to secondary status as far as passenger service was concerned. The Washington to Gaithersburg section of the Met Branch was double-tracked during 1886–1893.<sup>[13]</sup> Rebuilding in the early 20th century and complete double tracking of the branch by 1928 increased capacity; the "branches" became the *de facto* mainline, though the Old Main Line was retained as a relief route.

*B&O route map of 1891*

Meanwhile, the Pennsylvania Railroad (PRR) outmaneuvered the B&O to acquire the B&O's northern connection, the Philadelphia, Wilmington and Baltimore Railroad in the early 1880s, cutting off the B&O's access to Philadelphia and New York. The state of Maryland had stayed true to its implicit promise not to grant competing charters for the Baltimore/Washington line, but when a charter was granted in 1860 to build a line from Baltimore to Pope's Creek in southern Maryland, lawyers for the Pennsylvania RR picked up on a clause in the unfulfilled charter allowing branches up to 20 miles (32 km) long, from any point and in any direction. The projected route, passing through what is now Bowie, Maryland, could have a "branch" constructed that would allow service into Washington. The Pennsylvania picked up the charter through the agency of the Baltimore and Potomac Railroad and in 1872 service between Baltimore and Washington began. (See Pope's Creek Subdivision.) At the same time the PRR outmaneuvered the B&O and took control of the Long Bridge across the Potomac River into Virginia, the B&O's connection to southern lines.

In response, the B&O chartered the Philadelphia Branch in Maryland and the Baltimore and Philadelphia Railroad in Delaware and Pennsylvania and built a parallel route, finished in 1886. The Baltimore Belt Line, opened in 1895, connected the main line to the Philadelphia Branch without the need for a car ferry across the Patapsco River, but the cost of constructing the Howard Street Tunnel drove the B&O to bankruptcy in 1896. Two other lines were built in attempts to reconnect to the south. The Alexandria Branch (now called the Alexandria Extension) was built in 1874, starting from Hyattsville, Maryland, and ending at a ferry operation at Shepherd's Landing. The ferry operation continued until 1901 when the trackage rights agreement concluded as part of the construction of Washington Union Station saw the south end of the branch realigned to link to the PRR trackage in Anacostia, across the Anacostia Railroad Bridge, into the Virginia Avenue Tunnel, through Southwest Washington, D.C. to Potomac Yard in Alexandria, Virginia. (See RF&P Subdivision.) The Alexandria Branch trackage to Shepherd's Landing was heavily used during World War II when traffic congestion on the Long Bridge caused the U.S. Army Corps of Engineers to construct a bridge along the original plan of the B&O: Alexandria to Shepherd's Landing, Washington. Trains of empty freight cars were routed north and south over the structure, which was demolished after the end of World War II.<sup>[14]</sup>

After a flood damaged the C&O Canal in 1877, the B&O acquired a majority interest in the canal mainly to keep its property and right of way from potential use by the Western Maryland Railroad.<sup>[5]</sup> The canal was operated by the B&O until 1924 when it was damaged in another flood. The canal's property was later transferred to the U.S. government in 1938 in consideration for obtaining a loan from the federal Reconstruction Finance Corporation.<sup>[5]</sup>

In 1895 the B&O introduced electric locomotives over 3.75 mi (6.04 km) of line near Camden, initially using an overhead electric slot system.<sup>[15]</sup>

**The 20th century:** Following its emergence from bankruptcy, control of the B&O was acquired by the Pennsylvania Railroad in 1901. A rising young PRR Vice President, Leonor F. Loree, was appointed President.



Loree shared the Pennsy management's belief in infrastructure and B&O at that time needed some of that. New classes of engines were built to haul longer, heavier trains faster. The Old Main Line was reworked, sections of the original right-of-way cut off by the straightening of curves and replacement of old, weight-restricted bridges with newer, heavier bridges. Most of Loree's work on the B&O physical plant remains evident today. Many iron and steel bridges on the railroad were replaced with stone (Pennsy preferred stone to the preference of the Reading and Lackawanna Railroad for concrete).

*Replacement of retaining wall of B&O in Hazelwood, Pittsburgh, 1906*

The Chesapeake and Ohio Railway took financial control of the B&O in 1963. The B&O already had a controlling interest in the Western Maryland Railway. In 1973 the three railroads were brought together under one corporate identity, the Chessie System, although they continued to operate as separate railroads. The Western Maryland was merged into the B&O in 1976. In 1980 the Chessie System and Seaboard Coast Line Industries, a holding company that owned the Seaboard Coast Line, the Louisville & Nashville, the Clinchfield, and the Georgia Railroad, agreed to form CSX Corporation. SCL Industries was renamed the Seaboard System Railroad (SBD) in 1983. SBD was renamed CSX Transportation (CSX) in 1986. In April 1987 the B&O's corporate existence ended when it was absorbed into

CSX Transportation.<sup>[16]</sup>

In railroading's golden age the B&O was one of several trunk lines uniting the northeast quadrant of the United States into an industrial zone. It was the southern border as the New York Central was the northern border. The Pennsylvania Railroad controlled the center, and smaller roads like the Lackawanna, Lehigh Valley, and the Erie survived largely through the Interstate Commerce Commission. The corners of this map are Baltimore in the southeast, Boston in the northeast, Chicago in the northwest, and St. Louis in the southwest.



*The Columbian on Thomas Viaduct, Relay, Maryland, in 1949*

## Notes

1. An 1827 report shows the motivations of early boosters: *Woody, William (1827). "Baltimore and Ohio Railroad. Proceedings of sundry citizens of Baltimore, convened for the Purpose of Devising the most efficient Means of Imprpvoing the Intercourse between that City and the Western States". The North American Review (Boston: Frederick T. Gray) 25 (56): 62–73.*
2. *Stover, John F. (1987). History of the Baltimore and Ohio Railroad. West Lafayette, IN: Purdue University Press. ISBN 0-911198-81-4.*

3. *Moody, John (1919). "Crossing the Appalachian Range". The Railroad Builders, A Chronicle of the Welding of the States. Chronicles of America Series, Vol. 38. New Haven, CT: Yale University Press. Retrieved April 6, 2006.*
4. *Samson, William D. & Previts, Gary John: Reporting for Success: The Baltimore and Ohio Railroad and Management Information, 1827–1856, Business and Economic History, 1999, volume 28, no.2, p.238 [1]*
5. *Lynch, John A. "Justice Douglas, the Chesapeake & Ohio Canal, and Maryland Legal History". University of Baltimore Law Forum 35 (Spring 2005): 104, 112–125.*
6. *Dilts, James D. (1996). The Great Road: The Building of the Baltimore and Ohio, the Nation's First Railroad, 1828–1853. Palo Alto, CA: Stanford University Press. ISBN 978-0-8047-2629-0.*
7. *Fee, Elizabeth (1991). "Evergreen House and the Garrett Family: A Railroad Fortune". In Fee, Elizabeth; Shopes, Linda; and Zeidman, Linda (eds.). The Baltimore Book: New Views of Local History. Philadelphia: Temple University Press. pp. 11–27. ISBN 0-87722-823-X.*
8. *Hall, C. C. (1912). Baltimore: Its History and Its People 2. Lewis Historical Publishing Co. pp. 458–461.*
9. *Ramage, p. 206*
10. *"John W. Garrett, President, B & O Railroad." U.S. National Park Service, Monocacy National Battlefield, Frederick, MD. Accessed 2005-11-14.*
11. *Daddow, Samuel Harries; Bannon, Benjamin (1866). Coal, Iron, and Oil. Pottsville, PA: Benjamin Bannan.*
12. *Scharf, J. Thomas, History of Maryland From the Earliest Period to the Present Day, vol. 3 pages 733–42, Heritage Press: Hatboro, Pa., 1967 (reissue of 1879 edition)*
13. *Soderberg, Susan C. (1998). The Met: A History of the Metropolitan Branch of the B&O Railroad, Its Stations and Towns. Germantown, MD: Germantown Historical Society. p. 10.*
14. *National Railway Historical Society, Washington, D.C. Chapter. "Timeline of Washington, D.C. Railroad History." Accessed February 27, 2011.*
15. *Ferneyhough, Frank (1975). The History of Railways in Britain. Reading: Osprey. ISBN 0-85045-060-8.*
16. *Volin, Rudy (July 6, 2006). "Perryville and Havre de Grace, Md.". Trains. Retrieved March 10, 2009.*
17. *Harwood, Jr., Herbert H. (1979). Impossible Challenge: The Baltimore & Ohio Railroad in Maryland. Baltimore, MD: Barnard, Roberts. ISBN 0-934118-17-5.*
18. *<http://www.abandonedonline.net/railroads/marietta-and-cincinnati/>*

Selections from: [https://en.wikipedia.org/wiki/Baltimore\\_and\\_Ohio\\_Railroad](https://en.wikipedia.org/wiki/Baltimore_and_Ohio_Railroad)