A Brief History of the Miami & Erie Canal at Cincinnati

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II. History of the Miami and Erie Canal in Cincinnati

Dreams of a canal system that would cross Ohio began in the 1810s, shortly after the territory achieved statehood. The early governors realized the economic necessity of connecting the farms and industries of the Ohio River Valley with the markets on the East Coast. In the early years of the Industrial Revolution, before the advent of railroads, trade was severely restricted by the difficulties inherent in the transportation of the goods. All across the country canals were being constructed to serve as “economic highways,” connecting producers and consumers, and enhancing the financial development of the young United States.

Encouraged by the progress of the Erie Canal in New York, an Ohio canal system was proposed with supplementary funds coming from private investors. This proposal passed and the Miami and Erie Canal and Ohio and Erie Canal were constructed simultaneously under the same program. Although the initial loan amount for both canals was for $400,000, the final cost of the two topped $41 million.

Construction on the Miami and Erie Canal began in July, 1825 in Middletown, and three years later the route from Cincinnati to Dayton was complete. The canal work progressed quickly, but was labor-intensive. During the height of construction there were more than 4,000 people working on the canal. Many of these individuals were poor immigrants, convicts, or subsistence farmers who worked for 30 cents per diem, “plus food, shelter and a shot of whiskey every day.” This was a reasonable wage for manual labor at the time and it allowed thousands of families to survive. Some local farmers assisted in the construction to supplement their income but many others worked on the canal because they understood the necessity and potential benefits of a major commercial transportation system in the region. Dying towns were revitalized and new towns formed by the laborers as work progressed.

The canal opened in Cincinnati in 1828, but it would take until 1845 for the entire length of the canal to be completed. By this point the State of Ohio was nearly bankrupt from the two canal projects. Yet goods were moving smoothly on the Miami and Erie and the economy of the region was swelling with trade. Whereas before it had cost $125 to move a ton of goods from the East Coast to Ohio via overland routes, it now cost only $25 to move it by water.

The physical specifications of the canal were recorded in Ohio State Senate documents and were kept consistent to facilitate transportation. The ditches were a minimum of 40 feet wide at the waterline and 26 feet wide at the bottom. This allowed a constant water depth of 4 feet with gently sloping sidewalls. The banks extended a minimum of 2 feet above the waterline and the canal was lined with clay or sandstone\(^2\) in order to limit infiltration and to control erosion. A towpath that was 10 feet wide was always on the downhill-side of the canal. The towpath was also gently sloped away from the waterway in order to allow rain to drain downhill and not overfill the canal\(^3\).

In order to control the water level in the canal a series of feeder lakes, channels, and dams were constructed. These allowed a fairly constant depth and flow in the canal to be maintained in times of high and low precipitation. Engineering reports of the time estimated that the canal required 100 cubic feet of water per minute to remain filled\(^4\). Yet some areas, particularly towards the middle of the stretch and in the higher elevations, ran dry if there was not enough rainfall. Sediment was consistently entering the canal from runoff and it had to be dredged constantly to be kept navigable. Aquatic vegetation was an additional nuisance that was ruthlessly contained by constant efforts. Winter ice proved to be another great hindrance to transportation along the canals. In the northern part of the state the canals were closed from November to April. During this time the water was drained and routine maintenance was performed.

Most of the Miami and Erie was not carved into the bedrock like the Ohio and Erie. The Miami and Erie cut through mostly glacial sediments along its entire stretch. Although there were a few large terminal moraines that required excavation, the work did not require incision into the bedrock and was carved out of unconsolidated, Pleistocene deposits. Local stones were usually used for lock construction and a survey of the canal provides a geological cross section of the state. Two types of limestone that were widely used in the Cincinnati area were the “Hill Quarry Beds” (assumed to be Fairview Fm.) and “River Quarry Beds” (assumed to be Point Pleasant Fm.)\(^5\).

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\(^2\) Hannibal, Joseph T., Geology Along the Towpath: Stones of the Ohio & Erie and Miami & Erie Canals, Ohio Department of Natural Resources; Columbus, 1998: pg. 3
\(^3\) Hannibal, pg. 3–4
\(^4\) Hannibal, pg. 3
\(^5\) Hannibal, pg. 6
In Cincinnati the canal construction had to deal with alluvium, lake sediments, and glacial detritus. Its southernmost terminus was along the Ohio River near Sawyer Point and the I-471 bridge. From there it headed northwest along the modern Eggleston Ave before turning 45° to follow Plum Street to the west and then Central Parkway to the north. The canal continued generally northward, keeping to the east side of Camp Washington until it reached the location of Ludlow Ave and Mill Creek. It paralleled the creek to the northeast for a ways until the town of St. Bernard where it diverged and continued north. Along the canal and across from Spring Grove Cemetery there was also a large stone spillway that allowed excess water to drain into Mill Creek. Although the entire length was theoretically navigable, problems with upkeep and congestion meant that most canal boats stopped in downtown Cincinnati before reaching the Ohio and goods were transported by horse to and from the river.

At least five small feeder lakes existed along the canal in the Cincinnati area. As the metropolitan area expanded northward these lakes were slowly surrounded by the city and were potentially used for recreation. As commerce flourished the city built up around the canal. Buildings were built right up to its edge and the many small businesses and breweries in town used it for long- and short-length transport. The canal became a fixture of life in the city, rising above its logistical purpose.

Despite the success of the canal, inland waterways were not the transportation venue of the future. Even before the canal was complete it was competing with the burgeoning railroad industry. Although early trains were inefficient and severely limited, the technology quickly expanded and became profitable. A locomotive was faster than a horse, could carry more than a barge, and could operate in almost any climate. Constant flooding impeded the canal but the state continued to fund and support it for decades.

The Miami and Erie Canal reached its peak in the 1850s and was actually a revenue-producing asset for a brief period of time. It greatly contributed to the development of the region and continued to be used to transport bulk goods for many years. By the 1860s, however, the railroad system was just too efficient for the canal to compete against and business along the waterway began to rapidly decline. Private investors leased the canal in 1861 for 17 years but
were unable to make a profit off of it. When the canal was returned to the state in 1878 it was in poor condition.

Financial difficulties, the success of railroads, and the development of more modern road systems resulted in the canal being neglected for years. By the late Nineteenth Century many parts of the canal were not maintained and had become un-navigable. It was during this time that the city of Cincinnati expanded far into the hills north of the Ohio River. The canal up by St. Bernard became a country attraction and potentially a type of park for the wealthy who lived in the area. Barge traffic had slowed considerably and the canal must have seemed like a relic from a bygone day.

Yet the State of Ohio made one last attempt to restore the canal that had cost their great-grandparents so much. Between 1904 and 1909, a large-scale attempt to rebuild the Miami and Erie was undertaken. Channels were dredged and wooden locks were replaced by concrete ones. By 1910, however, the state government had lost interest in the project and the renovations were stopped. Three years later a massive flood finally decimated the canal beyond use. By this point the canal had become more of an open sewer in downtown Cincinnati and had lost all potential as a commercial waterway. It was never rebuilt and was formally abandoned by the state in 1929.

The canal was briefly given a second life in Cincinnati in the 1920s in the form of a subway line. Converting the broad ditch of the remnant canal into an underground mass transit system was initially proposed in 1910 after years of traffic problems and trolley accidents along the city’s overwhelmed roads. World War I delayed construction until the 1920s but work progressed rapidly once begun. By October, 1928 the canal in downtown Cincinnati was completely covered and Central Parkway was officially opened as a major automobile thoroughfare. Costs kept increasing and the onset of the Great Depression the next year caused a cease in further construction. By the end of World War II the subway project was abandoned. Today, the Central Parkway remains the clearest reminder of the canal’s former presence in the heart of Cincinnati.