

From the Sea to the Commonwealth's Heart: The Short-Lived Blackstone Canal

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Moving goods by water has always been the cheapest method; indeed, we still "ship" packages today, even if by rail, truck, or airplane. In 1822 a Worcester, Massachusetts, resident observed that it cost less to ship merchandise 3,000 miles from England to Boston than to cart those same goods the last 40-some miles overland to Worcester.¹ Where nature did not provide navigable water, enterprising Americans dug canals in the early nineteenth century as the best alternative to land transportation. On a level path lubricated by water, a horse could pull twenty-five times as much weight in a boat as in a wagon. Building a canal involved much more than simply digging a ditch, however laborious that was with only shovels. First capital had to be raised; the easiest route determined, surveyed, and property rights secured before the canal itself was dug and scores of locks built. Unpredictable soil conditions, the difficulties of ensuring adequate water supplies to operate the canal and its locks, political contention over the route, and the necessity of raising huge amounts of capital in a cash-poor economy all made canal building an expensive, complicated, and daunting proposition.

The Middlesex Canal Company was the first in Massachusetts, incorporated in 1793. It opened a decade later, carrying lumber and farm goods down the Merrimack River to Boston. In 1808 United States Secretary of the Treasury Albert Gallatin boldly proposed the construction of several canals (as well as roads) along the eastern seaboard, confident that this would dramatically expand commerce and prosperity. The government took no action, however. In 1817 the famed and hugely successful Erie Canal was begun in New York, financed by a combination of private investment and state funds. When completed in 1825, it ran 363 miles across the Empire State, linking the rich lands of western New York, Ohio, and the Great Lakes country to the Hudson River and ultimately the Atlantic Seaboard. Even before completion it sparked imitation. There were fewer than 100 miles of canals in the United States before the Erie was completed, yet by 1840 the country boasted over 3,000 miles of artificial waterways. Forty-five miles of this total were a canal that ran from the seaport of Providence, Rhode

1. *An Account of the Proposed Canal from Worcester to Providence...*, "Published by order of the Committee for the County of Worcester" (Worcester, Mass.: William Manning, 1822).

Island, to the still small shire town of Worcester in central Massachusetts: the Blackstone Canal.

"From its inception the canal was a Rhode Island enterprise."² Providence merchant John Brown first proposed a canal along the Blackstone River in 1796 to link his wharves with the interior of Massachusetts and Rhode Island. Interstate canals were especially problematic, however. Brown's petition to the Rhode Island legislature was approved, but the necessary companion bill in the Massachusetts legislature was defeated. Massachusetts entrepreneurs were planning a rival canal from Boston to Worcester and then beyond to the Connecticut River at Springfield. Neither canal became a reality.

The Blackstone River has been described as the birthplace of the American Industrial Revolution; mile for mile it was the hardest working river in America. It drops 438 feet over its 46-mile course, farther than the Colorado River falls through the entire Grand Canyon. In 1791 the Blackstone's waters powered America's first mechanized cotton spinning factory at Pawtucket, Rhode Island. Owner Samuel Slater's success brought augmentation and imitation, creating steadily expanding demands for labor and raw materials. Local farmers increased production to feed, house, and warm the growing army of factory workers. This generated a need for a better avenue of commerce than rutted dirt roads.

Although good for powering mills, the Blackstone River had too many twists, turns, falls, shallows, and rapids to be navigable for any distance. In the winter and spring of 1821–22 meetings were held in Worcester and towns down the Blackstone valley to discuss the construction of a canal to carry goods to and from the wider world. A circular letter to all Worcester county towns stated that "extensive business done on the banks of the [Blackstone] river, and in the adjacent country [would] fully justify" building a canal. It would "reduce the expense of transportation... from one-half to one-fourth of what it now is. It will probably open to us a market for many products which we cannot now send abroad, by reason of the expense of transportation, and will enable us to carry on, with success, many branches of industry, which cannot now be pursued."³ The letter asked what each town produced for sale and what each most wanted from the wider world. Most towns responded favorably, sure that their lumber, cider, grain, and other produce would find ready markets

2. Zelotes W. Coombs, "The Blackstone Canal," *Worcester Historical Society Publications* 1, no. 8 (April 1935): 458.

3. Circular letter dated 14 May 1822, signed Levi Lincoln, et al. American Antiquarian Society collections, Worcester, Mass.

given a canal. Most were eager to buy such bulky items as lime with which to plaster their houses and sweeten their acidic soil.⁴

Committees of prominent citizens were formed in both Worcester and Providence, who subscribed enough money to hire experienced canal engineer Benjamin Wright to make a topographical survey of the proposed route. Wright had recently been the chief engineer on the middle section of the Erie Canal, then still under construction. Wright was also charged to work out the problems of supplying enough water for the proposed canal's locks, examine the soil conditions along the route, and estimate how much such an undertaking would cost. Wright and his two assistants completed the plans by September 1822, and the published proposal was favorably received.

Encouraged by the prospect of dramatically increased commerce, dual canal corporations were approved by both Massachusetts and Rhode Island by the summer of 1823. Unlike the Erie Canal, however, the Blackstone was entirely a privately funded enterprise. Subscriptions for stock in the canal were nominally priced at \$100.00 a share, but in reality they sold for \$37.50 each. When more shares were offered in 1829, the price had fallen to only \$15.00. To sweeten the deal canal company stock was tax exempt for eight years. Initially people were so eager to invest that after all shares in the Rhode Island company were sold, profit-hungry Providence investors chartered an express stage to Worcester so that they could snatch up any unsold shares in the Massachusetts company; but there were none. Ultimately, Rhode Islanders, with more wealth and more to gain, invested half a million dollars in the project, and Bay State investors put up a quarter of a million dollars. They came to regret it, but at the time optimism reigned and profits loomed.

Additional detailed surveys were conducted, rights-of-way were bought up, and contracts signed. Construction began in Providence in 1824. Yankee laborers provided a majority of the workforce. Yet Irish immigrants with experience working on British canals also did a substantial amount of the backbreaking toil of digging, damming, blasting, and building. These Roman Catholic foreigners were often ridiculed and despised by the Protestant Yankees, but work on the canal brought the Irish into the countryside and upland towns decades before their numbers were swelled by the famine of the 1840s. Many remained, working as agricultural laborers after the canal was completed.

4. Canal Questionnaire replies. Worcester County Papers, Oversize Manuscript, Folder 3, Worcester Historical Museum. Twenty-seven towns replied. Worcester itself, for example, boasted "ship-lumber, an inexhaustible quantity of building stone and anthracite to exchange for large additional supplies of cotton goods, lime, plaster, salt, etc." Leicester expected it could export an additional "50 tons hay, 500 bushels grain, 4000 bushels potatoes, 200 barrels cider, 15 [thousand barrel] hoops, 100 bushels beans, and [a canal] would increase the demand for most of the heavy articles." Smithfield, Rhode Island, had limekilns that could send products both up and down the canal.

The canal was 32 feet wide at the top, 18 feet wide at its bottom, and 3 or 4 feet deep. It took advantage of the natural river channel and the slack water of ponds for about a tenth of its route, entering and leaving the river sixteen times. This proved to be a major flaw in the canal design, as boats were often stranded at these points by drought or damaged by the swift currents and dangerous debris of floods. Tow paths for the draft horses that pulled the boats were constructed along the bank. (The canal mules celebrated elsewhere seem not to have been common on the Blackstone.) In all, the canal used forty-nine locks to raise boats the 451.5 feet from tidewater in Providence to Thomas Street in Worcester, 45 miles away, a rise of over 10 feet per mile.⁵ The canal commissioners decided to spend more to build for the long term, choosing granite blocks (from a quarry along the canal route in Northbridge, Massachusetts) instead of wood for all but one of the locks, at a cost of \$1,000.00 more per lock.

The canal required a prodigious amount of water. Raising a single boat 8 feet sent 5,600 cubic feet of water irrevocably downstream. Locks, leakage, and evaporation necessitated storage ponds to be built along the canal to hold water until needed. Millers in the Blackstone valley were concerned about their continued access to water for power, and their political clout forced the company to make many promises to them before it received its charter. For example, the canal's Rhode Island charter gave mill owners access to the gates of the canal's storage ponds so that the water they needed to turn their mill wheels would not be denied them. This policy was not followed in practice, however, and hoarding of water resources later cost the canal owners dearly. But that was in a darker, as yet unimagined future.

The year 1825 saw the Massachusetts and Rhode Island companies merged into a single corporation. There were three directors from each state, although two-thirds of the stock was held by Rhode Islanders. On 8 July 1826 ground was broken at the northern terminus of the canal, near Thomas Street in Worcester. A particularly wet fall and the withdrawal of some contractors thwarted plans for the expected 1827 opening. Spring rains in 1828 further slowed digging and washed out canal embankments in several places. Undeterred, optimistic newspaper advertisers in Worcester began to solicit business by April 1828 for the as yet unfinished canal.

By early summer of 1828 the lower section of the canal up to Albion, Rhode Island, was complete. On the first day of July the canal's first boat, the *Lady Carrington*, passed the first lock in Providence to the boom of cannon salutes and the cheers of an assembled crowd. The boat, named in honor of the wife of canal commissioner Edward Carrington,

5. The original plans called for sixty-two locks.

had been built on Eddy's Point in Providence at a cost of \$2,500. It was 68 feet long, 9.5 feet wide, weighed 22.5 tons, and was surmounted by a 45-foot cabin. For its maiden voyage the *Lady Carrington* was painted white and elegantly fitted out with red curtains in its cabin windows for the accommodation of fifty distinguished passengers including Rhode Island governor James Fenner, two of the canal commissioners, and an eight-piece band. Eventually, over a score of boats, bearing the names of towns along the canal, influential personages, and famous American statesmen joined the *Lady* on the waters of the Blackstone. Although sharp at the bow, these boats drew only eight or nine inches of water when empty and only thirty inches fully loaded. Each boat could carry 20 to 40 tons of goods, depending on their bulk, and was manned by a captain and two assistants, one of whom drove the two horses, which walked one in front of the other at a pace of four miles an hour. For the maiden voyage a special six-horse hitch was employed and veteran East Indies skipper James Esdall was the captain.⁶ On this joyous occasion they passed through nine locks up to the factory in Albion before returning to Providence.

Festivities over, the *Lady Carrington* then began its less exalted career as a packet boat and excursion craft even as construction on the northern part of the canal continued, moving goods and people as far up the canal as navigation allowed. In August 1828, for example, a Providence newspaper announced:

Canal Packet *Lady Carrington* will leave the Mill-Dam To-morrow afternoon at half past 1 o' clock, for Horton Grove and Scott's Pond, to accommodate those who may wish to partake of the Clam Bake and Chowder at Horton Grove.⁷

These canal boat trips were new and convenient ways for large groups to travel together and also provided the novel experience of riding up and down the locks. Within a few years, however, they became as commonplace to residents of the Blackstone valley as air travel is for modern Americans.

By 6 October 1828 the canal was at last complete from end to end. That afternoon the *Lady Carrington* was again towed north, this time with four commissioners aboard and a paying cargo of corn and salt instead of a brass band. At 11:00 the next morning it tied up in the basin at Worcester to the sound of cannons, ringing bells, and cheering crowds. First selectman of Worcester, Col. Pliny Merrick delivered a welcoming speech from the deck of the boat itself to those assembled. The dignitaries then retired to the mansion of Worcester resident Gov. Levi Lincoln for a banquet. The *Massachusetts Spy* marked the occasion by including

6. "The Blackstone Canal," *Providence Press*, 3 July 1880, and *Directory of Providence* (Providence, R.I.: H. H. Brown, 1828).

7. *Manufacturers and Farmers Journal*, Providence, R.I., 7 August 1828.

an announcement noting the boat's arrival, boldly titled "Marine News."⁸ Forty-five miles from salt water, Worcester was now a seaport! The boat then gave rides up and down nearby locks and sat on display for two weeks to satisfy the curious before returning to Providence with a load of butter, cheese, paper, sundry domestic goods, and coal.

Boston merchants did not celebrate. They had already seen some of their trade with the interior diverted through New York. The Blackstone Canal was sure to draw off even more business. Some Bostonians already talked of building a railroad to Worcester as the best way to safeguard Boston's role as the principal port of New England. Boston newspapers took notice of the canal's opening and the economic threat to their city that it embodied. The *Boston Daily Advertiser*, however, dismissed contemporary talk of a competing railroad, claiming investors would never sink money into a railroad when they could get higher returns elsewhere.⁹

As the festivities ended, traffic increased. The canal was soon served by competing boat lines, with new start-ups and multiple reorganizations over the years, and several independently operated boats as well. Eventually over a score of boats plied its waters. Shippers sometimes even leased a boat to move their own goods with their own crew and horses. The first boat to be built and launched in the new "port" of Worcester was the *Washington*, the first vessel of the Worcester Boating Company. It was constructed on Summer Street near the county jail, placed on

8. *Massachusetts Spy*, Worcester, 8 October 1828. It also ran an original poem welcoming the vessel:

What mean those guns, and that tremendous shout?
The town 'twould seem by demons is assail'd;
What can this fuss and fluster be about?
Has Adams or the Jacksonites prevail'd?
"The boat's arrived!" the children in the street
Exclaim, partaking of the general fright;
"The boat's arrived," from every quarter greet
Our ears while pressing forward to the sight.
Where are thy wheels, or hast thou none to show?
Thy runners then, or what is thy machine?
The water in our little "ditch" we know
Can boast great things, but never have we seen
So large a car by tandem drawn along
On wheels or sled with such apparent ease;
And then the multitude thy quarters throng!
How canst thou them contain, tell if thou please.
She comes! "The Lady Carrington" appears
In letters on her stern; 'tis then the boat,
The long expected visitant; for years
The promis'd guest in our canal to float.
We bid thee welcome, welcome to "the heart,"
The bone and sinew of this Commonwealth;
In cups of sparkling wine, before we part,
We'll drink to thee and thy successors' health.

9. Reprinted in *Manufacturers and Farmers Journal*, Providence, R.I., 30 October 1828.

wheels, and moved overland to the canal for launching. The Rhode Island-based Providence and Worcester Canal Boat Company was their main rival.

On November 8, six boats, each carrying 30 to 40 tons of cargo, put into Worcester. They carried such heavy items as plaster, grindstones, shingles, iron, lead, grain, cotton, molasses, salt, oil, flour, and assorted groceries. In newspaper advertisements, stores boasted of all the goods newly arrived by canal. Boat companies began opening stores of their own by 1830, seizing more of the profits that cheap transportation brought. Worcester did not receive all of the canal's traffic, however. Many boats simply dropped off cargo at towns further down the canal and returned to Providence. These short trips were often more profitable than longer ones, since more trips could be made in the same amount of time, but shippers in Worcester were often left waiting impatiently for bottoms to carry their goods.

By mid-December 1828, ice forced the cessation of canal traffic for the year, which became the normal pattern of operations for the canal. But all was not completely quiet through the winter months. A group in the northern Worcester County town of Sterling, Massachusetts, met to plan an extension of the Blackstone Canal that would reach all the way to Nashua, New Hampshire. Although local farmers and merchants were enthusiastic about the prospect of increased business opportunities, the extension, like hundreds of similar impractical schemes, was never built.

Navigation resumed in April 1829 and canal traffic continued to increase. Worcester saw an average of seventy-five or eighty arrivals or departures a month that spring. At first, boats simply left when they were full or whenever the captain tired of waiting for a full load. By summer, regular scheduled service was instituted, partly in reaction to Worcester shippers' complaints about short hauls on the lower canal. The Worcester Boating Company began by offering two scheduled trips a week; the Providence and Worcester Company countered with three. By July the Providence and Worcester made daily trips, forcing the Worcester Line to expand its fleet and follow suit. Some of the independent carriers also tried to offer a regular schedule for shippers and occasional travelers.

For moving bulky freight such as grain, coal, cordwood, lumber, shingles, butter, cheese, iron, salt, flour, molasses, bales of cotton and wool, plaster, and leather, the canal saved shippers \$3.80 per ton over wagon transportation.¹⁰ Limekilns and stone quarries along the route, which produced extremely heavy materials, shipped their products both up and down the canal and experienced a burgeoning demand for their commodities. The increased commercial activity caused taverns, warehouses, and yet more factories to spring up along the route of the canal. Worces-

10. Edward A. Lewis, *The Blackstone Valley Line: The Story of the Blackstone Canal Company and the Providence and Worcester Railroad* (Seekonk, Mass.: Baggage Car, 1973), 10.

ter and its environs too took on a new bustle, as reported by the *Massachusetts Spy*:

There is a prospect of full employment at present of all the boats on the Canal, which have now become considerably numerous. The lading and unlading of boats, the arrival of teams with freight to put on board of them, and the constant passing of trucks with goods brought by the boats . . . presented scenes of activity and bustle . . . which afforded a gratifying contrast with the appearance of the same place four years since. . . when the land occupied now by the canal and basin, was used for a mowing field.¹¹

Business boomed even more for Providence merchants, who traded up and down the valley and throughout Worcester County. Their prosperity reflected not merely a shift of business from the port of Boston but real economic growth in the greater Blackstone valley. One sign of this was the chartering of the Blackstone Canal Bank in 1831 by Rhode Island merchants and manufacturers in need of more working capital.

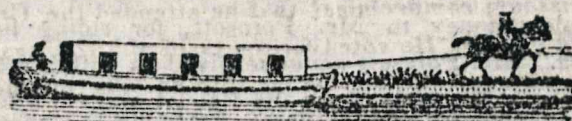
Like a turnpike, the canal itself was just a highway, not a transportation service. The boats using the canal charged customers a fee per ton/mile for shipping, and then added the toll charged by the canal company. The original canal charter called for a toll of \$.06 per ton/mile, even charging empty boats for their full capacity. Surviving freight records indicate, however, that the actual toll charged for most goods was only \$.03 per ton/mile, or \$1.35 per ton for a complete trip. Stone was shipped at the bargain rate of only \$.01 per ton/mile. In addition to a toll on cargo, each boat also paid a toll of \$.02 per mile. Agents to collect tolls were appointed at various locations; each received a salary of \$100.00 per year, the same as that of Thomas Burgess, the company's director/treasurer. In 1829, the canal's first full season of operation, \$8,606.00 in tolls was collected. The total shot up to \$12,016.82 in 1830, went to \$14,944.67 in 1831, and peaked at \$18,907.45 in 1832.

Freight rates charged by boat operators varied slightly over time and according to the specific cargo but seem to have remained generally consistent for the life of the canal. In 1829 and 1830 most items went from Providence to Worcester for \$.16 per 100 pounds (which works out to a bit more than \$.07 per ton/mile). Building materials such as lumber, shingles, lead, marble, nails, and bricks went for only \$.14 per 100 pounds, and plaster was shipped for the bargain price of \$.125 per 100 pounds. Many items shipped in bulk in easily moved barrels soon went for a special "per barrel" rate. A 400-pound cask of lime went for \$.52 and by the summer of 1829 made the trip for only \$.36, saving the shipper \$.28 off the general rate, or \$.14 off the rate for plaster. A barrel of

11. *Massachusetts Spy*, Worcester, 25 April 1829.

he Steam-Boat wharves. August 3

**NEW LINE TO WORCESTER
ON TUESDAYS AND FRIDAYS.**



THE new line Packet-Boat GOV. LINCOLN,
will leave the Mill Pond for Worcester, **THIS DAY.**

Freight for Worcester, 14 cents per 100 lbs. Passage to do \$1; do to intermediate places, 3 cents per mile. Apply to

C. F. HOWELL, Agent,
August 18 No. 15 Canal-street, (up stairs.)

Figure 1. Advertisement of a new line on the Blackstone Canal between Providence and Worcester on the packet boat *Gov. Lincoln*. From: *Rhode-Island American*, 18 August 1829. Courtesy, American Antiquarian Society.

flour, gross weight 214 pounds, went for \$.30 in 1829 and \$.25 in 1831 (or \$.09 less than the general rate).¹²

With competition among the boat lines and independent operators increasing, rates dropped slightly by the early 1830s. Most items went to Worcester for \$.14 per 100 pounds, with "liberal discounts" offered "for large lots of heavy goods."¹³ Since boats tended to carry about twice as much cargo on their way up the canal as they did back down to Providence, boat lines hoping to fill their vessels advertised much more extensively in Worcester newspapers than they did in Providence journals. They also began to charge a lower rate of \$.125 per 100 pounds for goods going from Worcester to Providence. Competition also prompted them to waive commission and storage fees, and some offered free pickup and delivery service within the city. Boating companies even arranged ocean transport of goods sent down the canal to anywhere in the world. When winter ice shut down the canal, the boat companies used their draft horses to haul goods in wagons and sleds, albeit in much smaller amounts.

The canal did not revolutionize passenger travel. Regular stagecoach service had been in place between Worcester and Providence since 1821, and it continued to be the preferred mode of personal transportation. Al-

12. Canal ledgers, 1828–1831, kept by Providence and Worcester Boating Company agent Anthony Chase, Worcester Historical Museum.

13. *Massachusetts Spy*, Worcester, 8 September 1830.

though primarily a freight line, the canal offered passenger service for the bargain rate of \$.03 a mile or \$1.00 compared to \$2.25 for the same journey by stagecoach. Some boats often ran special excursions, carrying church groups, people attending college graduation ceremonies, or militia companies going on picnics. Non-excursion travelers had to find space on freight boats where they could: most had no special accommodations for passengers. While canal transportation was novel, cheap, convenient for large groups, and spared riders a jarring stagecoach ride, it was slow and unreliable. Company policy kept speeds to less than four miles per hour, ostensibly to prevent racing, but more importantly to limit erosion of the canal's earthen banks. Travel was also officially restricted to daylight hours. High water in the spring and low water in the summer, particularly where the canal route followed the natural river channel, could leave boats stranded for days or even weeks. Once an early freeze kept some boats stranded for an entire winter. These conditions were an inconvenience for freight shippers, for whom low rates were crucial, but they made the canal far less appealing for personal transportation. The boat companies advertised for riders and posted regular schedules, promising that an early morning departure would put people at their destinations by that same evening. But since canal transport was restricted to daylight hours, trips could sometimes take two days and might well necessitate a night's stay in a tavern along the way.¹⁴

Boston merchants saw much of their trade with central Massachusetts diverted to Providence. Just a few years earlier some of their ocean-going trade had been drawn off to New York City by the formidable Erie Canal system. The *Boston Sentinel* feared: "If something is not done to counter the effect of the Blackstone Canal, Boston will in a manner of years be reduced to a fishing village."¹⁵ Indeed, Boston was losing tons and tons of freight business to and from the greater Worcester area. As a contemporary observed, "However strong habits of business may be, the love of gain is stronger; and whatever may be the force of attachment to old channels of trade, and old methods of intercourse, they...give way to the powerful attraction of making money."¹⁶ By sending goods to Providence on the canal rather than over the land route to Boston, upland merchants saved almost \$4.00 a ton. In May 1830 alone, for example, Providence sent 1,019 tons of goods up the canal, and upland ports sent another 551.25 tons back down to Providence.¹⁷

14. The record time was set by the *Lady Carrington* in June of 1829 when it made the run from Providence to Worcester in only fourteen hours.

15. Quoted in Lewis, *The Blackstone Valley Line*, 9.

16. *An Account of the Proposed Canal from Worcester to Providence*.

17. *Massachusetts Spy*, Worcester, 16 June 1830.

Boston merchants were not taking the loss of trade with the "Heart of the Commonwealth" lying down. Some of them revived the old 1790s plan of a canal to Worcester and Springfield, this time including a link with the Blackstone Canal itself. But its costs were projected to be well over a million dollars, which cooled the enthusiasm of many; like most proposed canals, it was never dug. Other Bostonians began to plan for an even costlier avenue of commerce, but one that would not freeze over for four months every winter and perhaps run dry for another month or two in summer: a railroad. By 1835 the Boston–Worcester Railroad was completed, and construction of lines towards the Hudson continued. The railroad was faster, more reliable, ran year-round, and soon was cheaper than canal transport. In just its first six months of operation, the railroad earned \$18,828 in freight charges, and collected a whopping \$72,912 in passenger fares. The Blackstone Canal did not generate half that revenue in the entire year!¹⁸ The economic focus of Worcester County was definitely back on Boston.

The Blackstone Canal's days were numbered. "Canal fever" and the volume of canal traffic were waning even before the first railway cars rolled into Worcester. Canal revenues began to decrease in 1833, with \$17,545 in tolls collected, down over 7 percent from the previous year. Decline was steady from then on. Toll collected on the Blackstone Canal were only \$11,500 by 1836, a year that also marked the last time a dividend was paid to canal shareholders (a modest \$.25 per share, compared to \$1.00 per share in the banner year of 1832).

Competition from the railroad was not the only problem faced by the proprietors of the Blackstone Canal. With economic growth, more and more mills (their number nearly doubled in the 1830s) crowded along the banks of the Blackstone River, competing with each other and with the canal for the finite amount of waterpower available. While the ponds created by the canal company to store water to work the locks probably created more stable water levels, each locking up or down of a single boat sent over 40,000 gallons of precious water downstream. Waterpower could lift a heavy boat or turn a mill wheel, but it could not do both at the same time and place.

Blackstone valley mill owners were jealously resentful of the canal's control and feared the loss of the water they needed to run their spindles and looms. When dropping water levels threatened to shut down canal operations, canal management did not, as promised, immediately replace water taken from the river or allow the mills open access to their storage pond dam gates. In 1829 a factory owner destroyed a canal feeder near

Millbury, but at first the courts and public opinion sided with the canal, and he was forced to repair the damage. Tensions continually increased in the early 1830s. Mill owners dumped rocks into the canal locks by night to disable them and prevent the canal from drawing off water. Angry canal men threatened to retaliate, forcing factory owners to post guards at their mills to protect them from arson.

The issue finally went before the courts. In 1833 a group of factory owners sued the canal corporation over water rights. Not only had the canal management violated its own charter which provided open access to the water for millers, but the pattern of legal interpretation in early nineteenth-century New England increasingly favored the rights of mill owners to the water they needed. After years of delays, in 1837 the canal company was ordered to pay a fine of \$8,450; appeals put off execution until 1840. The hefty fine was more than the canal company's gross revenue for that entire year. The court, it seemed, intended that such a huge sum would be largely symbolic; the hope was that the canal company would be stunned into husbanding the water more carefully and allowing mill owners freer access to the water resources. It was not expected that the mill owners would actually pursue payment of such a large sum. Inflamed passion, old grudges, and greed made this wishful thinking, however. The mill owners pressed the financially strapped company, and in May of 1841 the company unsuccessfully attempted to change its charter to avoid payment. Ironically, floods that season did \$3,000 worth of damage to the canal. Breached banks and dams could not hold back enough water for navigation, and tons of late-summer produce from Massachusetts's farms rotted on landings and boats unable to get to market. This failure to serve its customers turned even more shippers away from use of the canal.

By the early 1840s it was obvious that the Blackstone Canal, booming just a decade before, was in deep trouble. In 1833 companies were incorporated to build railroads from Worcester to New London, Connecticut (the Norwich and Worcester), and from Worcester to Springfield, Massachusetts (the Western Railroad). Both were operational by 1840. Perhaps to cover the cost of so many empty runs and the constriction of the money supply known as the panic of 1837, the canal's boat companies raised their rates slightly in the late 1830s just as railroad rates were declining. This ill-advised rate increase in response to declining sales betrayed the desperate and parochial mindset of the canal directors. The final newspaper advertisements for shipping on the canal appeared in 1840. After multiple buy-outs and reorganizations, many left the canal-boat business, and only one line remained in operation. With effective competition on the canal itself gone, the final version of the Providence and Worcester Boating Company no longer offered discounts as it had just a few years before, but warned it would now charge extra for "bulky

18. These statistics are from William Lincoln, *History of Worcester* (Worcester, Mass.: Moses D. Phillips, 1837), 372–73. Toll in 1835 were \$14,433.08. This figure has been used to estimate freight fees for that year at somewhat more than \$30,000, since surviving freight books for this period have not been located.

or risky freight.”¹⁹ Needless to say, this only served to further discourage canal use. As the canal itself often did in summer, business on it was drying up.

In 1844 the Providence and Worcester Railroad, which paralleled the canal's route, was chartered to directly serve the bustling Blackstone valley. The following year much of the now infrequently used Massachusetts route of the canal was sold to the new railroad, as sections of the level towpaths made convenient roadbeds for the tracks. In Worcester, sections of the canal were converted into sewers or simply covered over and forgotten. Granite blocks from most of the canal's locks were sold off to settle company debts and used in new construction projects. The company's few buildings along the canal were sold, and creditors, especially factory owners who were still owed damages, fretted about the insolvent canal company abandoning its remaining properties before they were paid what they were owed.

What began with the bang of cannon salutes ended with a whimper. Occasional use was made of the lower portion of the canal through the 1840s until the last toll was collected in Woonsocket, Rhode Island, on 9 November 1848. In 1847 the cars had begun running on the Providence and Worcester Railroad, making the canal completely obsolete. Since it was no longer an avenue of commerce, the canal's right-of-way reverted to its original owners, and the remaining properties were sold off. The once eagerly sought stock was now virtually worthless, and investors had only received \$2.75 per share in total dividends. When the company's books were closed, almost \$1,900.00 was still due the treasurer. The canal boats rotted away in Providence or were broken up for scrap. Like most American canals except the mighty Erie, the Blackstone turned out to be a financial failure for its builders and investors. A reveler at the celebration of the Providence and Worcester Railroad toasted to “The two Unions between Worcester and Providence. The first was weak as water, the last is strong as iron.”²⁰

The Blackstone Canal was far from a complete failure despite the financial loss to stockholders and boat operators. (As early as 1837, Worcester historian William Lincoln presciently observed that it was of greater benefit to the public than to the overseers of the company.)²¹ For several years it brought increased trade, wealth, and economic development to the region. By 1840 Providence had a population of 23,171, and Worcester had almost doubled its size in just ten years to 7,497 residents. The area received its first significant influx of foreign residents with the

Irish canal workers.²² The Blackstone Canal also fostered economic development in communities beyond its direct route. For example, by the mid-1830s timber-rich towns in northern Worcester County, such as Gardner, Sterling, and Templeton, were manufacturing well over half a million wooden chairs a year, sending most of them off to the wider world down the Blackstone Canal. “Chairs, chairs, everlasting in number, brought into town in large loads from the northern parts of the county, seemed to me to be the principle loading of the boats down the canal,” a contemporary recalled of 1830s Worcester's wharves.²³ The canal minimized flood damage by regulating water levels in the Blackstone valley. Despite the perceptions, protests, and fatal lawsuit by mill owners, its storage ponds ultimately made for more dependable waterpower for area factories.

The canal had a less direct but still critically important influence in the region by temporarily shifting a good deal of business away from Boston. It thus sped construction of Massachusetts's railroads by giving merchants more powerful reasons to invest in them. Indeed, many who had initially invested in the canal saw that it was being superseded by a new technology and also invested in the railroads.

Finally, in one more way, the Blackstone Canal was both a parent and a child of the American Industrial Revolution. With canal networks bringing in cheap western flour and feed, New England farmers turned decisively away from mixed agriculture centered around stock raising and cereal production. While dairying remained important throughout the region, and many farmers focused on special products for expanding center village and urban markets, New England agriculture as whole began a slow decline. Optimistic predictions of the 1820s that a canal would help area farms failed to take into account the fact that produce from other regions with more productive land would then compete with the fruits of New England's tired, stony fields. More and more, those inclined towards farming abandoned New England and moved west. Those who stayed turned increasingly to commerce, manufacturing, and urban life. From about 1850 onwards forests began to reclaim the land. Certainly the Blackstone Canal was not solely responsible for this transformation, but for central Massachusetts and Rhode Island, and even for Boston and Providence, it definitely played a significant part. Although the Blackstone Canal is long gone, its effects remain with us to this day; and the path of the Blackstone Canal now serves as the trunk of a National Heritage Corridor.

19. *Massachusetts Spy*, Worcester, 25 March 1840.

20. *Centennial History of the Town of Millbury, Massachusetts, Including Vital Statistics, 1850–1899* (Millbury, 1915), 118.

21. William Lincoln, *History of Worcester* (Worcester, Mass.: Moses D. Phillips, 1837), 340.

22. These were some of the first Roman Catholics to settle in Puritan Worcester; today Worcester and its environs have so many Catholics that it is a diocese of the Roman Catholic Church.

23. John S. C. Knowlton, and Clarendon Wheelock, *Carl's Tour in Main Street* (Worcester, Mass.: Sanford and Davis, 1889), 123.