



Cover photo: Wilkinson Mill (left) and Slater Mill, Pawtucket, R.I., by William Johnson

Birthplace of the American Industrial Revolution

The Blackstone River Valley illustrates a major revolution in America's past: the Age of Industry. The way people lived during this turning point in history can still be seen in the valley's villages, farms, cities, and riverways—in the working landscape between Worcester, Massachusetts, and Providence, Rhode Island. In 1790, American craftsmen built the first machines that successfully used waterpower to spin cotton. America's first factory, Slater Mill, was

built on the banks of the Blackstone River. Here, industrial America was born. This revolutionary way of using waterpower spread quickly throughout the valley and New England. It changed nearly everything. Two hundred years later, the story of the American Industrial Revolution can still be seen and told in the Blackstone River Valley. Thousands of structures and whole landscapes show the radical changes in the way people lived and worked. The way

people lived before the advent of industry also can be seen on the land, and the choices of the future are visible as well. For good or bad, each generation makes its choices and changes the character of life in the valley. Today, the rural to city landscapes tell the story of this revolution in American history. Native Americans, European colonizers, farmers, craftsmen, industrialists, and continuing waves of immigrants all left the imprint of their work on the land. The

farms, hilltop market centers, mill villages, cities, dams, canal, roads, and railroads are cultural products of tremendous social and economic power. These features show how the force of technology and invention, labor and management, commerce and government, and pollution and recovery affect us today.



The Blackstone River meanders through the valley for 46 miles from Worcester to Providence. High points provide scenic vistas such as this one from Lookout Rock in Northbridge, Mass.



The Eleazer Arnold House, a classic Rhode Island "stone house" built in Lincoln in 1687, served as a tavern to travelers on the Great Road.



In the fall, foliage adds a touch of color to the Blackstone River Gorge, one of the few remaining whitewater stretches on the river.



Canoeists can use watered sections of the Blackstone Canal in the two Blackstone River state parks.



Old factory buildings and machinery relics recall the bustling days of the Age of Industry in the Blackstone River Valley.



Chestnut Hill Meeting House, built in Millville, Mass., in 1769, served as a religious, social, and civic meeting place.



Pawtucket Falls, c. 1790



The railroad soon made the canal obsolete.



Children were employed in mills.



Newspaper ads lured farm families and immigrants.



Women tend warping creels, c. 1910-17.

A Changing Way of Life

Each civilization has its source of wealth. The Blackstone River is the force that powered this early center of American industry. The river winds 46 miles from headwaters near Worcester, Mass., to its mouth at Narragansett Bay. Native Americans and early settlers used the Blackstone for drinking water and fishing. Then, the river's steep and constant drop in elevation attracted craftsmen and would-be industrialists. They built diversions or dams at every river drop to gather and control its power. At first the rushing water turned wheels that drove gristmills, iron forges, and other small-scale rural industries that worked in such local materials as leather, wood, and metals. In the 19th century, textile mills, with their spinning machines and looms, overspread the valley, followed by other industries that dwarfed the early small-scale craft shops. By 1880 the river was considered "the hardest working river," one of the most thoroughly exploited and polluted rivers in America.

Farm to Factory

Eighteenth-century life in the valley centered around farming, but small industries were on the rise. When the British lost political control in the Revolutionary War, they tried to prevent the export to America of the new technology and skilled technicians that had made England the world's first industrial power. In this climate Samuel Slater, an ambitious manager from England's trend-setting Arkwright Mills, arrived in the United States. With money from Providence merchants and skill from local craftsmen, Slater engineered America's first successful water-powered cotton spinning mill in 1790 in Pawtucket, R.I. This transplanting of the Arkwright factory system of waterpowered carding and spinning marked the birth of the American Industrial Revolution and the transformation of America into an industrial society.

The impact of the Age of Industry was enormous. As the century began, investors raced to establish small mills with new waterpowered production technologies. Cotton and wool textiles predominated. Other industries, such as ax and tool manufacturing, hat and shoe making, and textile machine building, also flourished. The Blackstone River Valley became a place of business competition, innovation, and technological imagination. The river became a tool to power industry.

In the early mill days, factory owners recruited farmers from the surrounding countryside. This move from farm to factory was a fundamental change, from selling your farm products in the market to selling your time in the factory. Advocates insisted industry would secure American independence. But critics called the industrial system "wage slavery." The new industrialists managed a system characterized by family or partner ownership of mills and mill villages, by specialized production of a wide range of goods, and by whole families—including women and children—working in mills as laborers. Mill owners provided and controlled the jobs, housing, schools, roads, churches, stores, and recreation facilities in exchange for 60-hour work weeks and a higher degree of security than the farm. This system is called the Rhode Island System of Manufacturing.

Ethnic Diversity

The first European settlers came to the valley for religious and personal freedom—the beginnings of a struggle for control with Puritan Boston. The first colonial settler, Rev. William Blackstone, arrived in 1635. One year later Roger Williams founded Providence based on principles of religious toleration, and Quakers, Baptists, and

others settled in the valley. Puritan congregations established themselves particularly in the Massachusetts part of the valley. They were followed by Catholics, Jews, and others. The first Catholics, the Irish, arrived as cheap labor in the 1820s to help construct the Blackstone Canal. In the 1850s French Canadians by thousands fled famine in Quebec for economic opportunity in the valley. Close-knit neighborhoods preserved cultural identity. Some immigrants, including Germans and Dutch, established farms and made a living feeding mill workers. Swedes had a reputation as steelworkers and precision toolers. Later, Italian, Portuguese, Greek, Ukrainian, Polish, Armenian,



Product labels from Blackstone River Valley mills.



and Syrian immigrants came seeking work. After World War II, a new wave of African Americans was followed by South and

Central Americans and Southeast Asians. These infusions of different groups made the Blackstone River Valley the first ethnically and religiously diverse area in New England.

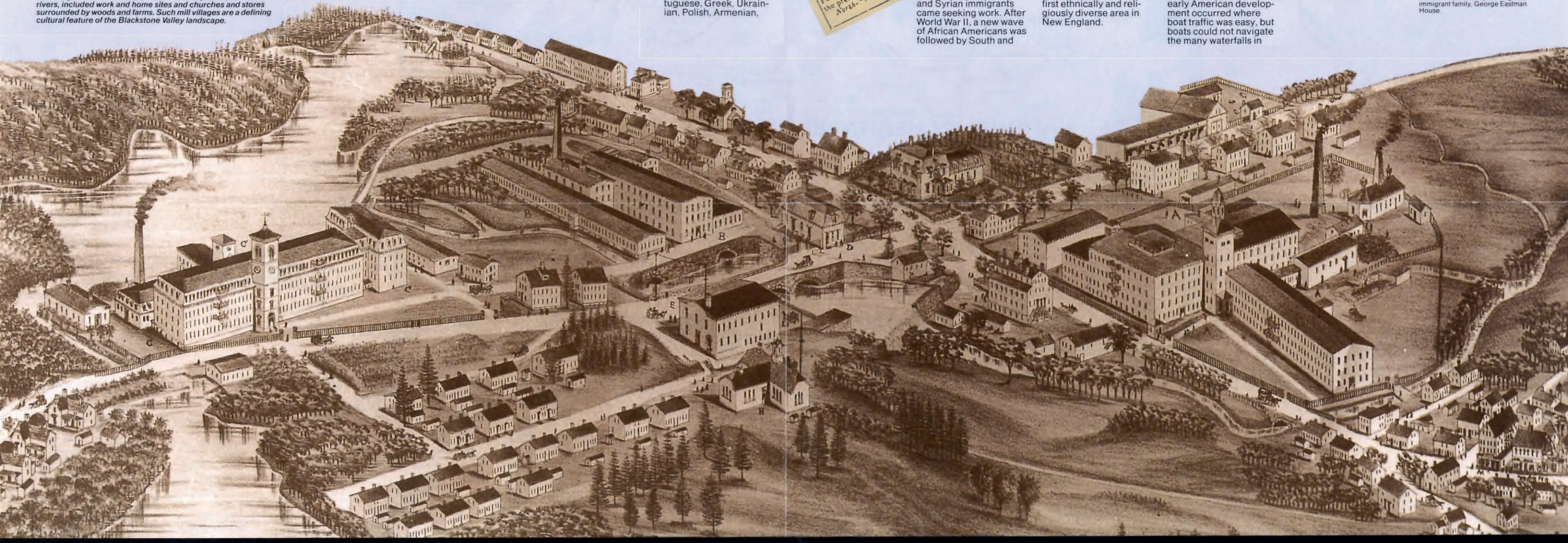
Transportation Revolution

Industry needed good means of transportation to develop the valley. Most early American development occurred where boat traffic was easy, but boats could not navigate the many waterfalls in

the Blackstone River. The poor roads were no answer. It cost as much to haul a ton of goods 30 miles overland as to ship it all the way to England. Mill owners had an inexpensive power source in the Blackstone River, but they still needed a cheap way to send their goods to market. As early as 1796, Providence merchants wanted to build a canal around the falls to Worcester, but Boston interests blocked canal access above the state border. Finally opened in 1828, the canal was used to transport goods between Worcester and Providence. The canal helped these cities become the second and third largest in New England. However, the Providence & Worcester Railroad, which opened in 1847, carried goods faster and more reliably, and, in effect, it closed the canal. Road improvements in the valley continued in the middle to late 19th century, and modern highways were built in the 20th century.

Growth and Decline
Spurred by steam power, new technologies, and a growing work force, industrial growth in the valley soared. The great climax in valley manufacturing came in the second half of the 19th century when the mills were setting international standards in size and output in many industries. But the textile industry began to move to the South to new mills often financed and outfitted by valley capitalists and by valley engineers. By 1923, the South produced 50 percent of the Nation's cotton textiles. Outdated plants and machinery, labor troubles, and climate were blamed for this downward economic trend. More mills closed in this century, and many people left the region in search of work. Of the valley's woolen and worsted mills operating at the end of World War II, about 90 percent have closed.

Credits: Pawtucket Falls and tending creels, Slater Mill Historic Site; locomotive and textile labels, Rhode Island Historical Society; child workers, Library of Congress; immigrant family, George Eastman House.



Exploring Blackstone River Valley

A New Type of Park



The John H. Chafee Blackstone River Valley National Heritage Corridor is a special type of national park. It is a region of more than 350,000 acres between Worcester, Mass., and Providence, R.I. The National Heritage Corridor includes whole cities and towns, dozens of villages, and a half-million people. The Federal Government does not own or manage land as it does in more traditional national parks. Instead, people, businesses, nonprofit historic and environmental organizations, 24 local and two state governments, the National Park Service, and a unifying commission work together to protect its special identity and prepare for the valley's future.

Visitors should stop at the Blackstone Valley Visitor Center in Pawtucket, R.I., or other sites marked with a question mark on the map, to pick up additional information on places to visit in the National Heritage Corridor. Visitors can walk along sections of the Blackstone Canal and Towpath at the state parks along the Blackstone River in Lincoln, R.I., and Uxbridge, Mass.

For information, write to: John H. Chafee Blackstone River Valley National Heritage Corridor, One Depot Square, Woonsocket, RI 02895-9501; call 401-762-0250; www.nps.gov/blac on the Internet.



Reading the Landscape

"There are places in this country that we look at every day, but we never really see. They are the landscapes of heritage; places that seem so natural that they often go unrecognized, misunderstood, unprotected, and mismanaged."

—Robert Melnick

The Industrial Revolution changed the landscape of the Blackstone River Valley and transformed life in America. You can



College Hill, Providence

discover the history in the land, if you learn what to look for. The manufacturing system left behind many vestiges and clues to the past—signs that can be seen, heard, and felt today. These vestiges include mill villages, roads

and trails, dams and mill ponds, agricultural and natural landscapes, and ethnic or Yankee traditions in neighborhoods, languages, and foods, plus scenes recalling the Age of Industry. Special places all over America have been lost to placeless suburban sprawl. Today, imaginative efforts are underway to protect the distinctive places remaining in the Blackstone River Valley. Look for the following features as you explore the valley's land-

Mill Villages

Mill villages are easy to recognize. They were built along riverbanks to harness the power of falling water. Look for a dam backing up the mill pond—the water supply—with a factory or mill, smokestack, and mill housing nearby. Mill houses are usually in small clusters of simple, often striking buildings of similar design and size. The mill, the largest building in town, also may have a straightforward design, but you will see many with imposing settings and elaborate architecture.

The first mills were generally wooden structures, not much bigger than barns. Stone mills, which were more stable and fire-resistant, became popular in the early 19th century. By the mid-19th century, mill builders generally turned to brick for the increasingly larger factories of the day. Reinforced concrete supplemented these materials by the early 20th century. Workers lived within easy walking distance of the mills, with foremen and managers often living in more substantial homes higher up the hill. Mill owners' grand homes were on the highest ground in town.

Look at the map for the location of many of the valley's mill villages. Some, such as Berkeley and



Ashton mill housing, Cumberland

Ashton in Rhode Island, have an English look; others, such as Slatersville in Rhode Island and Hopedale and Whitinsville in Massachusetts, were built according to a visionary plan.

Mill Housing

Most workers lived in neighborhoods of similar buildings clustered together. Most buildings housed 2 to 4 families. In urban areas, you will see many wooden "triple-deckers." Other areas have 1- to 2-story, duplexes, or long row houses, made of wood or brick. Generally mill housing has simple ornamentation, but sometimes it suggests elements of higher architectural styles. You can find cozy 2-family Cape Cod-style



Kelly House, Lincoln

houses in Rogersville, Mass.; Greek Revival in many places, including Whitinsville, Mass.; and mansard-roofed housing suggesting Second Empire in Albion, R.I.

Hilltop Villages

Nonindustrial villages were not built on the river. Before the Industrial Revolution, settlers established hilltop villages such as Mendon and Sutton, Mass., to serve as



Grafton Common

their centers of religious, governmental, social, and economic affairs.

Villages such as Union Village, R.I., and West Sutton, Mass., grew at and are known as "cross-roads" villages. Villages such as Grafton Common, Mass., have well-defined central greens or commons, which together with adjoining churches, shops, homes, and in many cases, a town hall,

form a distinctive architectural and spatial pattern recognizable as a typical New England town center. In Rhode Island this pattern is rare and is found in the Blackstone Valley only at Slatersville.

stone walls, farmhouses, barns, and other outbuildings. Many roads, first laid out in colonial times, follow ridge lines that pass through farmlands. Often these roads are scenic with good views. They are not designed for fast automobile travel but for an earlier and less hectic way of life.

Industrial development actually strengthened farming in the valley. Farms provided food and other products for mill workers. Clustered mill villages allowed farm-lands to exist between villages. By 1860, 70 percent of Worcester County was cleared open fields. In many places, forests have reclaimed farmlands, but stone walls separating former agricultural



E.N. Jenckes Store Museum



View from Waters Farm, Sutton

lands and pastures can be seen running between trees.

Cities
The 6 cities in the Blackstone Valley are, of course, the major population centers. Some cities, such as Woonsocket, R.I., grew out of several small mill villages that came together over time. Mill villages can still be seen within these cities. Other cities, such as Worcester and Providence, were legal or commercial centers.

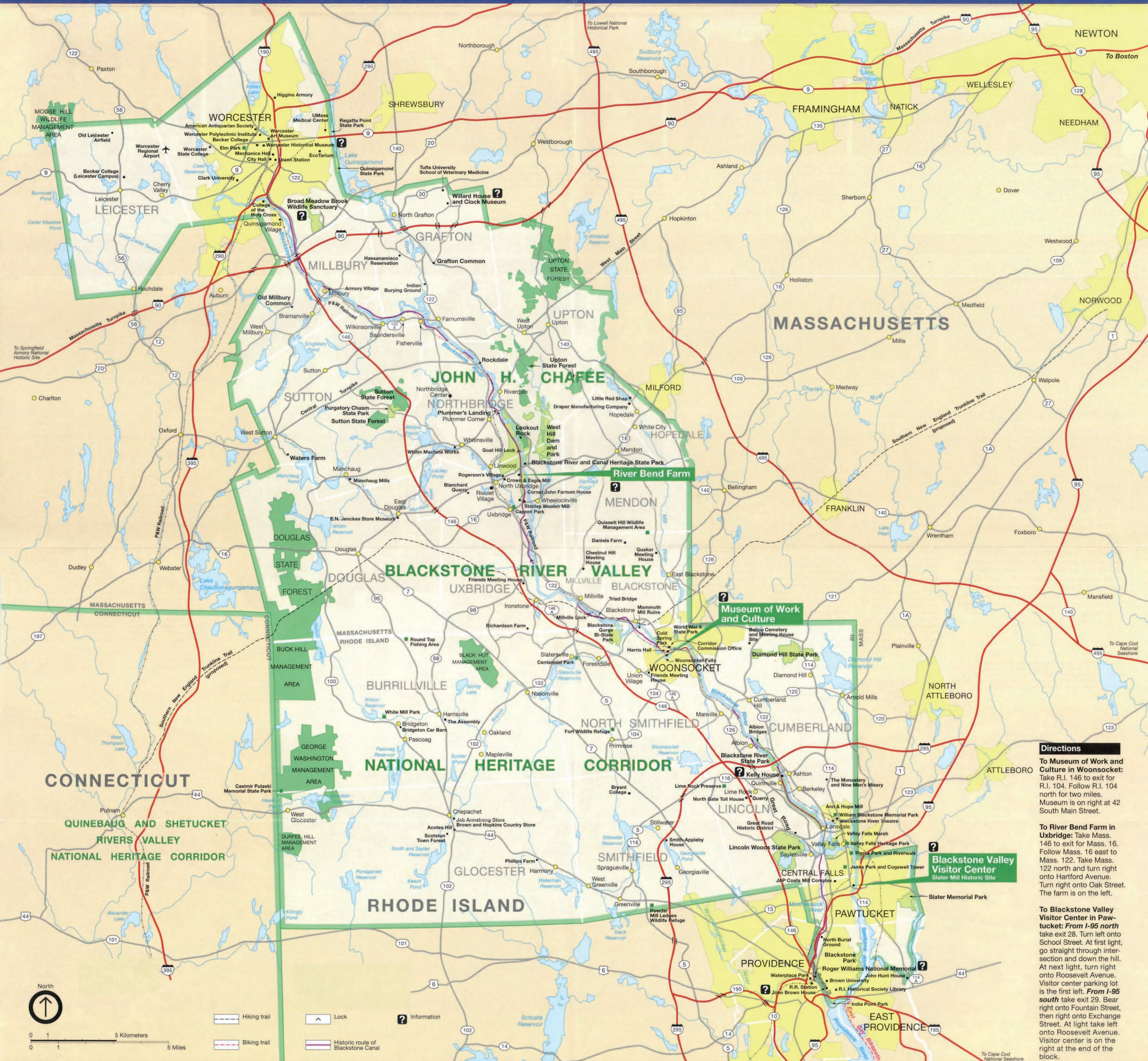
City architecture is often highly stylized and confident, showing the importance of commerce and finance to industry. Buildings were densely packed on the river's waterfront, giving the Blackstone River a hard edge as it flows through its cities.



Canal route, Providence

Worcester, once a port city, has buried the canal. Names such as Green Island and Water Street are the canal's visible remains there.

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Directions

To Museum of Work and Culture in Woonsocket: Take R.I. 146 to exit for R.I. 104. Follow R.I. 104 north for two miles. Museum is on right at 42 South Main Street.

To River Bend Farm in Uxbridge: Take Mass. 146 to exit for Mass. 16. Follow Mass. 16 east to Mass. 122. Take Mass. 122 north and turn right onto Hartford Avenue. Turn right onto Oak Street. The farm is on the left.

To Blackstone Valley Visitor Center in Pawtucket: From I-95 north take exit 28. Turn left onto School Street. At first light, go straight through intersection and down the hill. At next light, turn right onto Roosevelt Avenue. Visitor center parking lot is the first left. From I-95 south take exit 29. Bear right onto Fountain Street, then right onto Exchange Street. At light take left onto Roosevelt Avenue. Visitor center is on the right at the end of the block.