

Steamboat Festival 1992: Pawtucket, Rhode Island

Part VIII APPENDICES

APPENDIX A

Metamorphosis of the Providence Waterfront: A Geographic Perspective

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Rivers have played an important role in the urbanization of Providence, both in the past and in the present. As its principal link to the ocean, they were the economic lifeline for much of the city's early development. In the eighteenth century the Providence River served as a transshipment point from which local products were exported and foreign goods distributed into the regional hinterland. During the nineteenth century the shores of the city's waterways were transformed by intense industrial development, much of it in conjunction with the coming of the railroad. Having lost its economic usefulness in the early twentieth century, the river became an obstacle to a city whose needs had become more dependent upon the automobile, highways, and suburban industry. Since the historic preservation movement of the 1950s, however, the waterfront has once again occupied center stage, now as a key element in the revitalization efforts of the central city.

The evolution of the Providence waterfront may be examined within the context of several geographic concepts and models. One of these is the concept of site and situation, which focuses on scale and makes a distinction between man's impact on local space and his impact on the region that lies behind it. This approach also takes into account the interdependency between the two areas, since a site responds to changes in the surrounding region, and vice versa. Another idea, sequent occupation, attempts to explain the changing patterns of living in a

settlement over time. To cultural geographers, this concept has given human behavior a new meaning, for temporal variations in economic activity or type of transportation can play a profound role in the nature of human occupation of an area. In still another approach, models of urban structure are used to show the way in which land is utilized as a city grows and develops. In these models the spatio-temporal dimension can form the basis for differentiating use activities on a waterfront and in the adjacent areas. All of these geographic approaches may be applied to put into proper perspective the events and activities that have shaped the changing landscape of an urban shoreline.

The location of a settlement is chiefly determined by the attributes of its site and situation. These attributes also affect the settlement's growth and development.¹ In an analysis of the geographic characteristics of early Providence, a distinction must be made between site and situation: the site was the river environment itself, where the settlement began; the situation encompassed the activities and resource base of the surrounding region, which influenced the economic vitality of the waterfront in later years.

The site. The founders of Providence chose the site largely because of its favorable physical attributes. The location selected had a natural spring near the mouth of a river, it was protected from the open sea, and it was well situated for the prevailing modes of

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1. Dean S. Rugg, *Spatial Foundation of Urbanism* (Dubuque, Iowa: William C. Brown, 1972), 83-88.

transportation. The local topography, dominated by Mount Hope, Federal Hill, and College Hill, formed a central basin where the downtown area later developed. That basin was traversed by the Moshassuck and Woonasquatucket rivers, which terminated at the Cove and provided the headwaters for the Providence River. As long as the settlement remained small, no significant changes in the natural configuration of the landscape were required. Farmers crossed the rivers by canoe, or at wading places, and Indian trails provided access to the immediate hinterland. The site where the downtown Arcade now stands was a small island in the Providence River. The feature most critical to the development of the colony and access to the river was the two-hundred-foot ridge known by the Indians as the Moshassuck; the colonists renamed it the Neck, but today it is more commonly known as College Hill. The top of this hill provided a panoramic view over the Cove and miles down the bay as far as Sassafras Point.

The original lay of the land, however, has since been shaped and reshaped, though dredging and filling, into a product of human engineering (see figure 1). The Providence River originally contained many shoals, which constituted a hazard to navigation as larger vessels entered the waterway. As river traffic increased, sections of the navigable channel were dredged to nine feet in 1852, to twenty-five feet in 1913, to thirty-five feet in 1937, and to forty feet in 1965. In the past most of the dredge spoil was used as fill; today, however, dredging is limited by the fact that the material is very toxic and disposal sites are difficult to find. Along the river deepwater piers, bridges, railroad lines, and warehouses have replaced the open shoreline so familiar to early settlers.

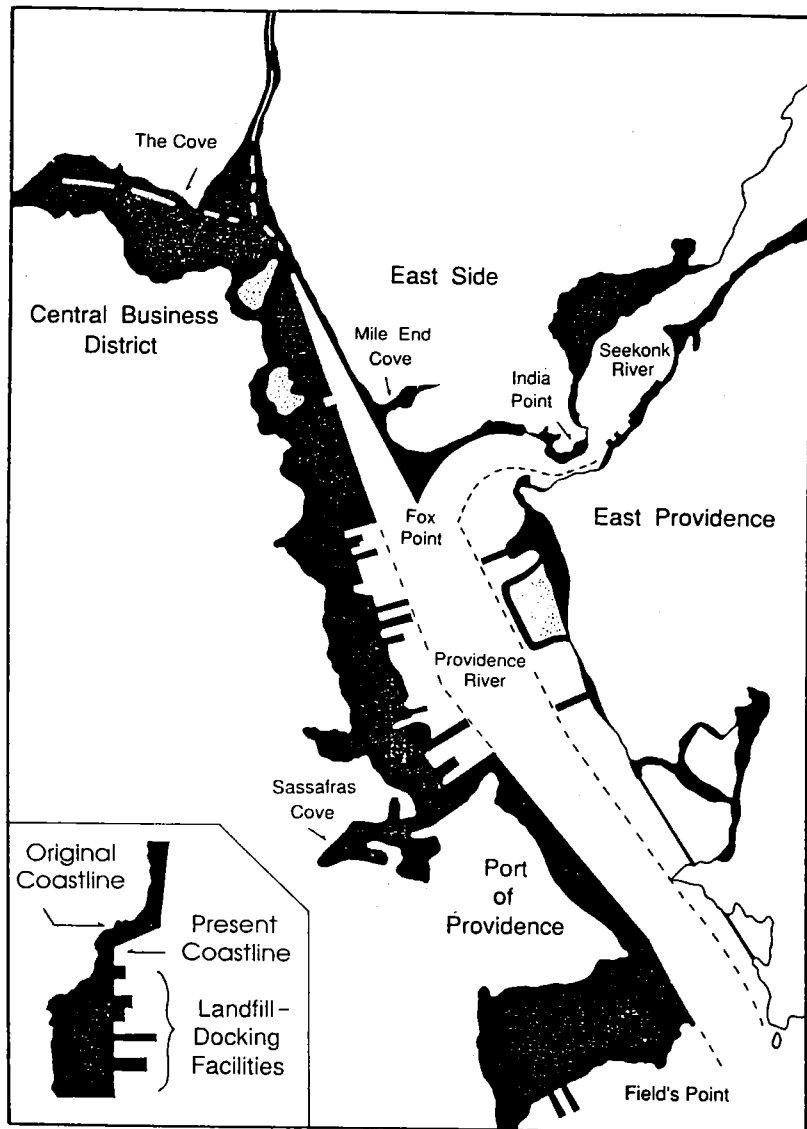


Figure 1. Changing shoreline, Providence River and port areas, 1635-1985

The situation. The region served by a port has been given various names, such as *hinterland*, *zone of influence*, and *service area*. The relationship between a port city and its hinterland is one of economic interdependence; food and raw materials come into the city, while goods and services are provided to the surrounding region. In Providence, changes in economic activities have determined the pattern of population growth, with population fluctuating in response to the health of the local economy (see figure 2). During the mercantile period of the 1700s the surplus of commodities produced by the hinterland moved toward the waterfront, from where

and shallow passage in the river.¹⁰ This ford and its rapids tended to put man and beast at risk and made the crossing to a specific landing point difficult, particularly during stormy weather. To alleviate these conditions, the town council decided to designate the central portion of the waterfront as common land and initiated steps for the construction of a permanent bridge.

The first wooden bridge across the river was built in 1660. The bridge connected the hay market on Towne Street with the Pequot Trail (later Weybosset Street), which led to the open country of the Narragansett and Pequot Indians.¹¹ The new bridge provided more reliable access to the agricultural hinterland for the transportation of produce to the marketplace.

Clearly the developments of the first few decades indicate that Providence was almost exclusively a community of planters. In a sense that was only natural, since food and shelter were the most important concerns for survival in this new habitat. During this time the riverfront emerged as the focus for most economic activities, and the town layout followed the general topography. There was little change along the shoreline; the only uses of the water's edge were at outcrops and projecting rocks, which provided landings for boats and canoes.

Maritime trade. Narragansett Bay and the Providence River had been used since the early years of the colony for occasional transportation of supplies, but their potential for shipping and sea trade was not at first realized. The years after King Philip's War, however, saw the beginning of intense maritime activities in the upper bay. During the 1675-76 conflict much of Providence was destroyed by the Indians, and as residents began the task of rebuilding, many opted for commercial ventures rather than return to farming.

The construction of wharves on the Providence River began in 1680, when Pardon Tillinghast built a wharf near present-day Transit Street. With the growth of commerce, many businessmen who owned property on the riverfront established

storage and docking facilities along Towne Street as far north as Market Square.¹² This public square, originally known as Town Parade, was created to provide a place for farmers and merchants to congregate and sell their products. To prepare the site for these activities and subsequent new buildings, the town had it graded, filled in, and supported by a retaining wall. In time many commercial establishments, such as the Market House, Roger Williams Bank, and the Coffee House, emphasized the square's function as the center of town. Near the marketplace a town dock was built which was used primarily by lobster and fish vendors who sold their products directly from the vessels. On the Weybosset side similar developments expanded into the riverbed with wharfage that was dominated by coastal shipping.

As the development of the riverfront began, the town decided to reserve certain of its rights to the water. In 1681 the General Assembly voted to set aside public lands "three poles wide" (about fifty feet) from the streets to the river's edge for the purpose of maintaining some control over building activities.¹³ This may well have been Providence's first attempt to preserve public access to a free resource, as well as to set aside land for the permanent use and benefit of all the people.

In the late 1700s the shorelands around Tockwotton Hill were developed to serve the China and East Indies (Southeast Asia) trade, and the site became known as India Point.¹⁴ Ships laden with cannons, anchors, bar iron, ginseng, and spirits ventured to Asia and returned with tea, silk, porcelain, and spices. The expansion of Providence's foreign trade required new port facilities to accommodate larger vessels and increased traffic. From Towne Street an extension called Shore Road (now part of India Street) was laid out across Mile End Cove and around Fox Point. A number of trade-related industries occupied this area, including distilleries, ropewalks, ships' chandleries, an iron furnace, a glass factory, and spermaceti candle works.

10. Welcome Arnold Greene, *The Providence Plantations for Two Hundred and Fifty Years* (Providence: J. A. & R. A. Reid, 1886), 49.

11. Cady, *Civic and Architectural Development*, 11.

12. Greene, *Providence Plantations*, 49.

13. Cady, *Civic and Architectural Development*, 15.

14. Greene, *Providence Plantations*, 69.

At the end of the Revolutionary War, Providence emerged as one of the major seaports of the new nation. The Providence River in the late 1700s was described as "a place of more navigation than any of its size in the Union, and there is a greater number of vessels belonging to this port than to New York."¹⁵ In June 1791 the port was visited by some 130 vessels, including 56 sloops, 35 brigantines, 25 schooners, and 14 ships, together carrying a total of 12,103 tons of cargo.¹⁶ These vessels represented a far-flung trade that linked Providence with ports in Latin America, Europe, Africa, and the Orient.

Like that of other port cities in New England, Providence's maritime trade was severely affected by the War of 1812. A blockade of European ports was followed by an embargo act, passed by Congress, that forbade the departure of any American vessel to foreign destinations. In 1814 a British fleet appeared in the upper bay and captured several Providence packets on their way to New York. The town immediately prepared for defense by erecting breastworks between Sassafras and Field's points and a battery of eighteen pounders at Fox Point. Fortunately these defenses, as well as Fort Independence, built at Sassafras Point in 1775, remained untested, and peace was declared in February 1815.¹⁷

In September of that year the Providence waterfront suffered the impact of a devastating hurricane, which destroyed the Weybosset Bridge and wrought havoc among the ships on the river. A 520-ton trading vessel was torn loose from her moorings and hurled onto the headlands of the Cove; other vessels followed, until the shores of the Moshassuck were filled with the wrecks of fifteen sloops, nine brigs, and seven schooners.¹⁸ When it was over, virtually all the vessels in the harbor had been driven from their moorings, and many warehouses and their contents were severely damaged or washed away.

The War of 1812 and the Great Gale of 1815 both inflicted far-reaching hardships on Providence merchants and the community. Although foreign trade resumed after these catastrophes, it never

quite regained its former vitality. Local businessmen began selling their vessels and investing their capital in textile mills; and with a decline in ocean trade, the industrial era was under way.

Industrialization. The closing years of the eighteenth century were marked by a growing emphasis on industrial activities, and it was industry that characterized the next period of occupation on the Providence River and its tributaries. Some of the earliest efforts in manufacturing were in brick-making (using the clay from Weybosset Hill) and brass founding. However, the introduction of cotton spinning by Samuel Slater in 1790 and jewelry making by Nehemiah Dodge in 1796 set the stage for what would become the two leading industries in the Providence area.¹⁹ By the turn of the century some thirty cotton mills had been put into operation along the Moshassuck, Woonasquatucket, and Pawtuxet rivers. The costume jewelry industry grew from only four shops in 1805 to ninety in 1856, when it employed several hundred artisans and craftsmen. During the Civil War the base-metal industries expanded, producing cannons, rifles, steam engines, and machinery.

In response to the demand for industrial labor, the city's population grew rapidly, especially among immigrants. There was an Irish settlement in Fox Point near the harbor, a black population along the north shore of the Cove, and a German population in South Providence adjacent to the slaughterhouses and bleacheries. All these groups lived in ill-constructed, overcrowded tenements. As industrial activities and land values increased, the complexion of the city changed dramatically, especially along the river, where factories, blue-collar neighborhoods, and railroads replaced the waterfront's traditional maritime uses.

As the nineteenth century progressed, urban development intensified on the Weybosset bank of the river, the commercial importance of North and South Main streets (the old Towne Street) declined, and College Hill became the cultural and educational center of the city. New land on the Weybosset

15. *Ibid.*, 68.

16. *Ibid.*

17. Greene, *Providence Plantations*, 72.

18. *Ibid.*

19. Cady, *Civic and Architectural Development*, 61.

side was being reclaimed, a new civic center emerged around Exchange Place, and a massive railroad terminal was built there. The shift of businesses to the west side of the river also drew banks and insurance companies to that area and consolidated the formation of the central business district (CBD). The destruction of the Weybosset Bridge in the Great Gale of 1815 and the inadequate service provided by the river ferries prompted the city to deck the river with several new bridges. By 1850 the river was spanned by the Park Bridge (1848), the Exchange Bridge (1848), the Washington Bridge (1828), and the new Weybosset Bridge (1843).²⁰ The completion of the Crawford Street Bridge in 1875 established a new head of navigation still further south of the Cove.

As a result of the extensive decking of the river, many structures formerly on the riverfront were converted to non-water-dependent uses. The introduction of trolleys and horse-drawn vehicles on the site where ships once anchored demonstrated the triumph of land transportation over water transportation. While fish stores and oyster dealers continued to sell their products into the twentieth century, the boats delivering fish were replaced by trucks, and the waterfront lost another of its former uses.

As waterfront uses of the Cove and the upper river were abandoned, industrial development of the South Providence shoreline became more important. Factories, lumberyards, coal elevators, and steamship terminals dominated the new harbor further south on the river. Schooners and barges carried such raw materials as cement, grain, and lumber, but the city's most vital import was coal, which was needed to fuel the steam engines powering the factories after 1827. The mainstay of shipping at this time was the coastal packet trade, in which sloops of fifty to one hundred tons carried freight and passengers between Providence, New York, Boston, and Baltimore. In the late 1800s these sailing packets were gradually replaced by steamboats, and the Fox Point and India Point waterfront became a center of steamship transportation. In order to

provide adequate draft for the increased size of the vessels using the river, the U.S. Army Corps of Engineers surveyed, and subsequently dredged, the channel off Fox Point for the first time. The shoreland in this area was expanded by cutting and filling so that facilities for bulk cargo storage, a railroad causeway, and larger berths for the coal packets could be built. With Providence experiencing a new wave of immigration from Europe by the turn of the twentieth century, a state pier was constructed in 1913 to accommodate the large ocean liners on which many of the immigrants were arriving.

The spread of industrialization on the Providence waterfront could not have occurred without the coming of the railroad. Initially the railroads made use of the waterfront only for the purpose of providing passenger connections to the steamboats. The Boston and Providence Line, which became the state's first railroad in 1835, had its southern terminus at India Point. With the inauguration of service on the Stonington Line in 1837, passengers could take a ferry from India Point to the west side of the river (near the present Thurbers Avenue curve on Route 95) and board a train to Stonington, Connecticut, from where they could continue on by steamer to New York City. India Point remained an important point of connection until a central railroad depot was constructed at the Cove in 1848.

The Providence and Worcester Railroad Company, established to replace the Blackstone Canal, had suggested locating its terminal at the Cove a few years earlier. The proximity of the Cove to the growing CBD, the silting of the basin, and the abandonment of the Cove's maritime uses made this area a logical choice for the railroad. Several companies recognized the benefit of a common facility and rerouted their lines to the Cove. Much of the Cove was filled in for tracks and a terminal, and an elliptical landscaped pond, circled by a promenade, was created by the railroad companies. This urban park became a popular recreational spot, and the adjacent Union Railroad Depot an attraction to sightseers. The Cove's man-made promenade

20. *Ibid.*, 145.

21. Stephen Olsen et al., *An Interpretive Atlas of Narragansett Bay* (Narragansett: University of Rhode Island Coastal Resources Center, 1984), 55.

dramatized the abandonment of maritime trade and emphasized the symmetry of the new urban design then fashionable.

Marine recreation played an integral part of the land-use dynamics between 1870 and 1920, when the city's population increased from fifty thousand to nearly a quarter million. First the city established a number of waterfront parks, including Fort Independence Park, to provide the public with access to the water. More significant, however, was the rapid growth of seaside resorts on Narragansett Bay. These were made accessible to the public by a fleet of excursion steamers leaving from the docks of South Water Street, Fox Point, and India Street. Such steamships as the *Bay Queen*, *City of Newport*, *Rhode Island*, *Mount Hope*, *Priscilla*, and *New Shoreham* became familiar to thousands of passengers as they traveled to Crescent Park, Rocky Point, Oakland Beach, Newport, Narragansett Pier, and even Block Island. At these locations were attractions ranging from dining halls and floating taverns to amusement parks, yacht races, and gambling. The less affluent thronged the beaches and picnic areas, while the exclusive sporting crowd was drawn to the casinos and private clubs.²¹ The steamboat-excursion era gradually came to an end during the first decade of the 1900s as a result of several factors. Of considerable consequence was the expansion of trolley lines to the major resorts, which resulted in a reduction in travel cost and time. Then came the development of the summer cottages—bungalows and mansions—which not only took over the coastal landscape but also replaced the need for hotels, boardinghouses, and dining halls.²² Perhaps the final blows to the shore-resort era came with the proliferation of the automobile, the 1929 Wall Street crash, and the destruction caused by the hurricane of 1938. The last bay steamer was consigned to the junkyard in 1940.

As the Providence waterfront continued its expansion and development, the quality of the environment was notably affected. Pollution control was virtually unheard of in the nineteenth century, and the raw waste generated by various activities was

directly discarded into the waterways. As early as 1790 the noxious industries of the sea trade had led to an outbreak of yellow fever among the working class at India Point. On the Woonasquatucket and Moshassuck, storm runoff and industrial waste directly entered the water from a large number of manufacturing plants. The discharge of domestic sewage into rivers was further accelerated in 1874 by the construction of 40 miles of sewer lines with three thousand private connections throughout the urban area.²³

In 1883 a plan was proposed for a comprehensive system of intercepting and treating the sewage before its final discharge. A sewage treatment plant, with precipitation tanks and sludge processing, was completed in 1903 near Sassafras Point. By this time a total of 175 miles of sewer lines provided service for almost the entire built-up area of the city. The pollution of the rivers was not abated by these efforts, however, because textile mills outside the city limits continued to discharge raw sewage into the area's streams.

Twentieth-century urbanization. The urban growth associated with the Industrial Revolution culminated with Providence's reaching metropolitan status at the opening of the twentieth century, when it ranked twentieth in size among U.S. cities. By 1930 the city's population reached a quarter million, with immigrants and their children accounting for seven out of every ten residents. Textile and machine-tool manufacturing, which had expanded rapidly during the Civil War and then reorganized for peacetime production, were major industries. Providence became the nation's leader in jewelry manufacturing and the production of wool and worsted goods, employing some eight thousand workers in each industry. The central business district took on many of its modern characteristics, including traffic congestion, a concentration of services, and a totally neglected and covered urban river system.

On the southern waterfront the narrow strip of land bounded by Interstate Highway 95, Point Street, and the Cranston city line dominated the

22. Stanford E. Demars, "Nineteenth Century Shore Resorts on Narragansett Bay," *Proceedings, New England-St. Lawrence Valley Geographical Society*, 1975, 54.

23. Cady, *Civic and Architectural Development*, 146.