THE PAST, PRESENT AND FUTURE POSSIBILITIES FOR RIVER STREET

New Haven, CT

By

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A Masters Project submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Regional Planning in the Department of City and Regional Planning

Chapel Hill

April 14, 2005

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ABSTRACT

New Haven, Connecticut has lost much of its historic industrial development due to misguided urban renewal, deterioration and other factors. The River Street section of Fair Haven, a neighborhood of New Haven, contains unique industrial buildings from the late 19th and early 20th Century. Yet the buildings are in decay, a large portion of the land and buildings are vacant or underutilized, and scrap yards are also located along the street. Despite these conditions, some manufacturing and other businesses have succeeded on River Street. The River Street Municipal Development Plan seeks to save this area from further decay and blight and improve the conditions that exist today. Some steps have already been taken, but further efforts are needed to ensure that this historic landscape is preserved and the area becomes a place for the neighborhood, city, and others to enjoy.

This paper will explore the historical conditions that led to the decline of River Street in the broader context of New Haven, the neighborhood context of Fair Haven and the immediate context of River Street. Then, I will present an analysis of the current condition of the River Street area and the progress of the Municipal Development Plan to date. I will also evaluate the existing concepts and design for the area with special attention to the layout of the streets, the waterfront park design, and the uses within the area. Finally, based on this analysis, I will present new options for the redevelopment of River Street through a series of renderings and plans. As this paper will illustrate, I feel that this area would most benefit from an increased mix of uses, infill development to erase the gaps in the urban fabric, streetscape improvements along River Street and the park and facade improvements to buildings not slated as part of the redevelopment.
**INTRODUCTION**

River Street, a historic industrial corridor in the Fair Haven neighborhood of New Haven, Connecticut is ripe for revitalization. Once the home of railroad-related industrial complexes built in the late 19th and early 20th Century, it began to decline after World War I and continued to experience decay through the turn of the 21st Century.

![River Street Conditions 2001](image)

**Figure 1: River Street Conditions 2001**

At the time of the photographs in Figure 1, 2001, River Street was home to historic structures with boarded up windows, scrap yards, unused oil tankers, and a road and sidewalks in poor condition.

The River Street Municipal Development Plan was approved in 2002 to revitalize the area and is currently being implemented through the Economic Development and City Plan Departments of the City of New Haven. The plan received $10 million in funding to implement a revitalization of the 41% vacant historic industrial area along the Quinnipiac River in New Haven, Connecticut. In the drafting of the plan, an initial design was created, as shown in Figure 2.
A waterfront park, adaptive reuse of historic structures, and new infill development (shown in bright yellow) are the main concepts behind the plan. By acquiring and the disposing of the highlighted properties, the city aims to replace the blight created by the boarded up buildings, scrap yards, and vacant oil tankers and create a vibrant urban district. The plan calls for mainly light industrial uses with some mixed use, including residential properties, in the historic industrial buildings. The light industrial focus of the area is intended to create living wage jobs for the residents of the surrounding Fair Haven neighborhood. This is particularly important as the 2000 per capita income in this community was $11,020, which is 33 percent below the city average.

The site is not without challenges. It is bordered by the Quinnipiac River, which has high levels of contamination. Further, a waste processing facility is located across the river on the opposite side of the highway, and the Port of New Haven is home to
heavy industrial use. Despite these challenges, River Street has many positive attributes including its unique historic structures, existing parks abutting the property, access to the river and existing successful businesses in the area.

Since the inception of the plan, the city of New Haven has acquired the majority of the parcels, carried out environmental assessments through Phase III, re-paved the street, conducted historical analysis on the two main industrial complexes, put in new sidewalks and planted new street trees. The city is still in the process of acquiring the remaining parcels and finalizing the master plan for the area. Allan Dehar Associates, a local architecture and planning consulting firm, conducted historical analysis of the two main historic industrial complexes, Bigelow Boiler Works and National Pipe Bending, and is currently working on finalizing a master plan. Other design ideas have come from Anton Nelessen, a professor at Rutgers University, who created a conceptual design for the riverfront park, as seen in Figure 3.

![Figure 3: Conceptual Rendering by Anton Nelessen](image)

Although Allan Dehar does not have a publishable master plan to date, the firm’s concept includes the addition of a road along the river to create a continuation of the
existing neighborhood block structure. However, the city of New Haven is concerned about the costs associated with the new road.

The River Street area has great potential to become a memorable and vibrant urban space. The historic factories that line the western portion of the site provide an excellent opportunity for adaptive reuse that will serve as an anchor for the entire redevelopment of the area. Some features of the original design by the city, such as the parking along sections of River Street, do not create a street presence and the mainly light industrial use may not create enough activity in the area. Allan Dehar’s proposed road along the River, would help to create a more connected space, but may be too expensive for the city of New Haven unless they secure additional funding.
A BRIEF HISTORY OF NEW HAVEN

Known as the “Elm City” due to the many elm trees which once lined its streets, New Haven has experienced many of the trends in urban development shared by other northeastern cities. Originally a maritime town in colonial times, focused on farming and oystering, it moved to become an industrial city in the 19th century and grew exponentially. After this surge in growth, the city began to decline and conditions worsened causing many to flee to the suburbs starting in the 1920s and increasing post World War II. As many of the elm trees fell to Dutch Elm disease, so did the industrial economy due to the movement of people and industry to the suburbs.

Early Years

The first inhabitants of the New Haven region were of the Quinnipiac Tribe, who lived off the land and rivers through fishing, hunting, and maize farming. Yet, others were lured by the tales of the “rich and godly meadows of the Quinnipiac” (Shumway, p.10) and in 1638, two Puritans from Boston, the Reverend John Davenport and Theophilus Eaton, a wealthy London merchant, led 500 Puritans to settle adjacent to the harbor. The Quinipiac tribe agreed to sell them their land in return for protection from hostile tribes and for use of the land on the east side of the Quinnipiac. The founders hoped to create a Christian utopia and commercial empire that would take advantage of the wide mouth of the Quinnipiac River and control Long Island Sound. Just two years after they arrived, they established a government and the independent colony of New Haven. At this time, the government established a town plan based on nine squares, the center of which would be a central common square. Figure 4 shows the “Brocket” map of the nine
8

squares as of 1641, when the town had 800 inhabitants. (New Haven Online) In 1660, the colony lost it independence to the state of Connecticut and began to decline.

Figure 4: New Haven in 1641 (Shumway, p.17)

In 1701, New Haven regained some of its former clout as this village center of a mainly agricultural township became the co-capital of the state. Seventeen years later, in 1718 Yale College moved from its former location in Old Saybrook to New Haven. In the late 1700s New Haven experienced an increase in trade, bringing the port back to life. In addition, New Haven started to flourish in tanning, shoemaking, hardware, and carriage making. In 1784, Roger Sherman became the first mayor and New Haven became incorporated as a city and renowned as the home of the best harbor in New England. The city grew physically and in terms of the population. Additional roads were added making the nine squares twenty-nine in 1802; this expanded the road network while keeping the development pattern centralized.
Some key figures in the development of the city during this time were James Hillhouse, Ezra Stiles, Timothy Dwight, and Eli Whitney. Hillhouse was a United States senator and capitalist who owned a lot of land in the northern portion of town and was largely responsible for planting the elm trees that would eventually become a signature of the city. Stiles and Dwight were presidents of Yale from 1778-1795 and 1795-1817 respectively. During their tenure, they helped to turn Yale into the largest college in America. Whitney invented the cotton gin, which revolutionized the cotton industry in the South, and also established a gun factory on the New Haven/ Hamden border. At his factory he created a streamlined gun-manufacturing system which others adopted to improve their manufacturing processes. The presence of Eli Whitney together with Yale University’s work in pioneering science established New Haven as a center for inventors and scientists.

Manufacturing continued to grow and overtook the maritime industry in the 19th Century. James Brewster, a prominent carriage maker, built the first railroad in New Haven from 1833-1839. This advanced the city’s manufacturing potential by opening its market to other areas not reachable by sea. The carriage industry continued to flourish and the production of other goods, namely clocks, rubber goods, pianos, began during this period.

The Civil War period (1861-1865) created economic ups and down for New Haven. By 1873 it lost its position of co-capital, lost trade to the South due to the war, and lost its carriage industry to Detroit. However, it was able to recover and become an industrial city nonetheless due to inventions in manufacturing and its immigrant labor force. At the beginning of the Civil War, the population was 40,000 and by the turn of
the century it had more than doubled to 108,000 people. (History of New Haven) The increase in population was due mostly to immigration from southern Europe, especially Italy and these immigrants provided labor for the industrial boom. The majority of the physical growth in the city took place at the height of its industrialization from 1895-1910. Large manufacturing plants emerged and smokestacks and railroads overtook the landscape.

20th Century

As early as the 1920s, the upper and middle classes began moving to the suburbs. The problems of the industrial city, such as pollution, contributed to the suburban trend and the Great Depression worsened the living situations within the city. As the suburbs grew rapidly, the population of the city grew at a slower pace through World War II and reached its peak in 1950 with a population of 163,443. (See Figure 5) Like many cities, after World War II, the availability of the automobile, affordable mortgages, the redlining of stable neighborhoods, new roads leading to the suburbs, and new tensions related to race caused an exodus of the middle class and economic decline in New Haven.
Figure 5: Population Change in New Haven from 1850-1980. (Data from Shumway, p. 55)

In response to this decline, in 1954, in his first of eight terms, Major Richard Lee launched one of the earliest and most ambitious urban renewal programs in the United States. Inspired by his efforts, more than 300 million dollars was spent in public and private “renewal” construction. His renewal efforts were unparalleled in terms of energy, money, and construction. The construction included new office complexes, hotels, and large shopping malls to replace the old downtown. However these suburban style developments were not sustainable in the city. For example, Macy’s and Malley’s department stores and the Chapel Square Mall, all results of this construction, took business away from small businesses even as their own life-spans proved to be short lived. In 1962, Malley’s moved to a new location along the highway, and closed in 1982. In 1993 Macy’s closed and the Chapel Square Mall, which had been struggling since the 1980s, closed shortly after. (Bass, 1997)

The construction of Interstates 91 and 95 during Lee’s tenure further assisted the flight to the suburbs and, partially as a result, from the 1960s to the 1990s New Haven’s
economy and total population declined. Douglas Rae (2003) comments that many thought the highways would bring industry to the area just as the railroads had. But instead they had the opposite effect and helped decentralized the city. This in turn led to a significant loss of manufacturing jobs. In 1947 the city had 34,500 manufacturing jobs and by 1980 this number dropped to 14,800 jobs. Conversely, suburban manufacturing increased dramatically during this same time period from 19,400 jobs in 1947 to 101,000 jobs in 1980. (Shumway, p.60)

Transportation is said to be the “spinal cord” of a city. New Haven’s history supports this truth as its economic vitality and geographic expansion are directly linked to developments in transportation. The original nine square plan established a basic system of roads and an identifiable center in the town green. From this center, the trolley then radiated outward from Church and Chapel Streets. In the 1860s railway came to New Haven first in the form of horse drawn “omnibuses” which radiated out further to other areas of New Haven, including Fair Haven. Horse drawn was soon replaced with the electrical streetcar in 1893. During the 1920s the automobile and new roads further expanded the transportation network and stimulated growth to the suburbs. This trend increased post World War II with the increasing availability of the car and the construction of interstate highways. As people moved to the suburbs so did economic growth, leaving declining industry in the center city.

Further accelerating the departure of the white middle class was the arrival of poor blacks from the rural South, part of the “Great Migration.” Approximately 150,000 southern blacks arrived in New Haven from World War II to the mid 1970s. Many were seeking high paying industrial jobs, but just at blacks began to arrive in large numbers in
the 1950s, industrial wages declined as manufacturing businesses closed. In addition, the presence of the growing black and later Hispanic population in New Haven increased the flight of the white middle class as displayed in Figure 6.

![Graph showing population changes in New Haven by race from 1860 to 2000. The graph indicates a significant increase in the black population from 1860 to 1920, followed by a decline. The Hispanic population shows a steady increase from 1860 onwards. The white population peaks around 1920 and then declines, signifying the flight of the white middle class.]

Figure 6: Black, Hispanic and White Populations in New Haven (Rae, 259)
HISTORY OF FAIR HAVEN

Fair Haven is a neighborhood in the eastern part of New Haven bounded by the Mill and Quinnipiac Rivers. After its original status as an oystering village, it later evolved into a street-car suburb in the 1860s, followed by a part of the city of New Haven in the 1870s. In the late 19th century in early 20th century industrial complexes such as Bigelow Boiler Works moved to the area. As a part of New Haven, Fair Haven follows many of the same trends yet has some unique characteristics due to its particular location and history. Today it is a neighborhood with a strong Latino population and higher than average level of poverty.

The Early Years

The Quinnipiac Tribe originally used the land that makes up Fair Haven for farming. When early Puritan settlers arrived they referred to land as the “Neck.” In 1679, forty-one years after the founding of New Haven, Herman Hotchkiss founded Fair Haven as a village for oyster houses and housing for workers. The far shore was named “Dragon;” some say this was due to the seals sleeping on the banks and others say it was the name of a tavern.

Figure 7: 1856 Map of New Haven (Shumway, p. 68)
By 1784 Fair Haven had become part of the city of New Haven. Grand Avenue became the main growth lane running from town to the ford across the Quinnipiac River. In 1785, ferry service crossed the river to East Haven. Ferry service stopped with the construction of the Dragon Bridge in 1791. At the ends of the bridge on either side of the River, the village grew up as seen in Figure 7. This further illustrates the impact of transportation in shaping growth patterns.

Despite the improvements in transportation, Fair Haven was still a relatively small neighborhood. In 1808 Fair Haven had fifty houses and in 1820 the first apartment building was built. It experienced more growth during the Civil War and Fair Haven became home to the barracks of Camp Terry. After World War I, Fair Haven experienced growth due to an influx of Irish, German, Polish, Italian and Russian immigrants. In 1837, it asserted independence and withdrew from the New Haven jurisdiction. In 1860, local businessmen initiated a horse car line between Fair Haven and Westville and in 1861 the Fair Haven and Westville Horse Railroad opened. (See Figure 8) This railroad would be an important factor in the location of River Street industry.

On the Mill River side of Fair Haven, the railroad created a streetcar suburb in the 1860s and 1870s. This suburb was mainly from upwardly mobile Irish immigrants from the New Township. This area contains a concentration of vernacular architecture of the 1870s. Figure 9 shows the relationship of Fair Haven to New Haven and the New Township.
Figure 9: Map highlighting historic sections of New Haven including Fair Haven and the New Township (Brown)
In 1870, Fair Haven rejoined the jurisdiction of New Haven. By the middle of the 19th Century the oystering village was flourishing and the port of Fair Haven became second in oyster trade to Baltimore. The village grew fast and oystermen’s houses were built along the riverbanks. Larger houses were built on the higher slopes. Eventually growth from the streetcar suburb on the west met growth from the oyster village on the east at Ferry Street, the main north/south access. Fair Haven Heights, on the east side of the Dragon Bridge, became one of the city’s most affluent suburbs after the Civil War.

20th Century

Fair Haven follows a similar history to that of New Haven. It continued to flourish until sometime after World War I. Industrial growth in the form of railways and factories, including the River Street area, of the early 20th Century caused decline and in response to the noise and pollution of railroads and heavy industrial complexes, the Irish began to move out to further suburbs. Other groups from the New Township moved in and houses began to become converted to multiple uses and new tenement housing appeared. Also at this time, the oyster industry began to fade due to pollution, economic changes, starfish and hurricanes. By the time of the Great Depression, slums were developing in the along the edges of the railroad and river.

Major Richard Lee targeted Fair Haven for urban renewal in the 1960s. In his efforts, he created several housing projects and initiated other governmental programs. During this time, the population of Fair Haven changed, and many Latinos moved to the neighborhood. (Swerdloff) Despite the renewal efforts by Lee, the area maintained many of its historic housing stock and historic industrial buildings. In 1978, a local historic
district was established that encompasses the historical industrial buildings along River Street. Yet, this status has not afforded the buildings much protection, as evidenced by the physical decline of the buildings. In the early 1980s many of the buildings on Grand Ave, Fair Haven’s main commercial strip, were renovated. In addition, the 1980s brought new residential construction along Front Street and a park was created. This created a more “trendy” area and many “yuppies” moved in. Another initiative, the Mill Street Municipal Development Plan, was initiated and carried out in the 1990s. This is a similar initiative to the River Street Municipal Development Plan and has brought light industrial business to the area, but lacked the historic restoration component focused on River Street.

**Evolution of River Street**

As stated in a city report on the architectural and historical background of River Street, it is the “best surviving example of the railroad-related industrial architecture which was once widespread in the city.” (New Haven, 1989) The period in which River Street was built, from 1870 to World War II, is evident from the tightly packed buildings along the railroad frontage, the beveled corners of many buildings that allowed freight cars to enter factory yards, and until recently, the tracks along the road. River Street is the only surviving example of this type of development in New Haven as industrial decline, urban renewal and highway development has caused the loss of many of these streetscapes.
Hobart B. Bigelow was the main engine of development on River Street. Bigelow, who later became Major of New Haven and Governor of Connecticut, was first the founder of the Bigelow Company on Whitney Ave in 1861. A flourishing business caused him to move his steam engine and boiler works to River Road (now River Street) in 1869. This area along River Road, known as “Grapevine Point” at the time, was home to twelve Civil War barracks of which Bigelow occupied one until he constructed new facilities. Wiswell & Company and F.J. Plumb Company, both carriage manufacturers, were the only other occupants of River Road at the time; however, their buildings are no longer extant.

Originally Bigelow’s company manufactured portable steam engines, sugar mill machinery and boilers for the West Indian sugar industry. From 1869 to 1884, the company shifted to focus on fabricating large steam boilers for major industries, which is evident by the large arched openings of the building shown in the right hand side of Figure 10 and 11. (Shumway)
As the company grew, Bigelow Boiler Works expanded by adding new buildings to it complex. The structures that make up the complex shown in plan view in Figure 12, labeled A through H, were built from 1873-1915. In 1873, two brick factory buildings (A and B) initiated the development and in 1886 a brick erecting building (C) was added. In 1889, another brick factory building (D) was constructed in 1900 another brick factory (E) joined the structure. In 1902 an office building (F) was added and in 1915 the two final
structures, a garage (G) building and a steel frame erecting building (H), encased by glazed windows, completed the Bigelow Boiler Works Complex.

The success of the Bigelow Boiler Works and the easy access of River Street to the Fair Haven Westville Railroad caused industry to flourish. In addition to expanding the Boiler Works Company, Bigelow expanded River Street industry through other businesses. In 1883, he co-founded National Pipe Bending, now 196 Chapel Street, to make internal parts for boilers. In 1885 he co-founded the New Haven Nail Company, which specialized in horseshoe nails. In 1890 National Pipe Bending outgrew its facility and moved across the street next to the Boiler Works, now 142 River Street. The 1883 National Pipe Bending building then became occupied by Lavigne Manufacturing Company briefly, and later the home of Kilborn and Bishop. Kilborn and Bishop’s business involved casting, forging and machining iron and steel products. Kilborn and Bishop also outgrew the building and thus constructed a new building next to the 1883 National Pipe Bending building from the 1900s to 1910s. In 1915 additions were made to National Pipe Bending. At the turn of the century, River Street was a center for metalwork related industry. The three main complexes on River Street today are the Bigelow Boiler Works, National Pipe Bending and Kilborn and Bishop.

Other companies moved to the area to take advantage of its location along the rail and economic advantages of being close to other industry. In 1904, Fosket and Bishop, a plumbing contractor that also made feed-water heaters for boilers, built a small factory on the corner of Blatchley Avenue. The railroad also built a warehouse and office building in 1905 on River Street. With the expansion of the automobile industry, Flint Dutee
Wilcox Assembly Plant was established in 1920, just west of the Bigelow Complex, a regional assembly plant of the Ford Motor Company. River Street offered many advantages due to its location along the railroad as well as the harbor. The area reached its peak from the Civil War through World War I. Following this time period, the area began to decline as many industries closed. Yet some companies were able to withstand the difficult times. Bigelow Boiler Works and National Pipe Bending, for example, were able to remain active until the 1970s.

A National Register Historic District was established in 1978 (see Figure 15) yet despite this designation many of the buildings have decayed and lost some of their historic attributes, including the Pipe Bending sign (See Figure 13) and monitor like structure of the Boiler Works (See Figure 14). Since the 1970s, artists’ workspaces and illegal residences have occupied the Bigelow Boiler Works space. Additionally, a scrap yard company began operating on the “lawn” behind the Boiler Works. They are believed to have demolished the steel glazed building in the rear. Yet despite this, some companies have remained strong in the area, such as Fair Haven Woodworks, and new businesses have also been established and succeeded. However, a large portion of the space is vacant or not being used to its fullest capacity and the area lacks aesthetic appeal.

Figure 13: Pipe Bending Sign that has been removed since photograph. Photo from City of New Haven files
Figure 14: Steel Frame Structure H of the Bigelow Boiler Works Complex that is no longer present

Figure 15: Historic District Site Plan from Allan Dehar Associates
**Historic Buildings in the River Street Area**

Nonetheless, given the strength of the architecture and the unique buildings on River Street, the potential to create a great urban district can be visualized. Table 1 describes the main historic structures architectural characteristics and location. Figure 15 shows the location of most of these buildings on River Street. The tightly knit historic structures along this urban street invite planners to bring them back to life.

The architectural style of the River Street area include Late Greek Revival, Victorian Italianate, Queen Anne, and Beaux Arts, Victorian Gothic and Art Deco. Most of the houses in the area are made of a combination of brick, wood shingle, and clapboard. The historic industrial buildings are made of masonry, brick and cut stone.
<table>
<thead>
<tr>
<th>Address</th>
<th>Original Company</th>
<th>Year Built</th>
<th>Designation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 River St</td>
<td>Connecticut Company Depot (railroad)</td>
<td>~1905</td>
<td>New Haven inventory</td>
<td>Large early 20th Century warehouse and depot with chaotic arrangement of window and door openings.</td>
</tr>
<tr>
<td>135-137 River St</td>
<td>Fosket &amp; Bishop Plumbing Company</td>
<td>1904</td>
<td>Contributing</td>
<td>Early 20th Century two-story brick industrial building, with a flat roof, segmented arched openings and stepped parapet.</td>
</tr>
<tr>
<td>142 River St</td>
<td>National Pipe Bending</td>
<td>1890-1915</td>
<td>Contributing</td>
<td>Three-story brick late 19th Century manufacturing plant with low-pitched gable roof. Segmental-arched openings on the first and second floors and smaller stone linteled multi-paned windows on the third floor. A stringcourse emphasizes the third floor and a small denticulated cornice lines the top of the building and the pediments.</td>
</tr>
<tr>
<td>143 River St</td>
<td>New Haven Nail Works</td>
<td>1885</td>
<td>Contributing</td>
<td>Two story small masonry and frame manufacturing plant, altered slightly with stucco and asphalt siding with near flat roof. Additions in 1990 to rear and an ell in 1945.</td>
</tr>
<tr>
<td>198 River St</td>
<td>H.B. Bigelow and Company Complex a.k.a. Bigelow Boiler Works</td>
<td>1873-1915</td>
<td>Contributing</td>
<td>Mostly intact, late 19th, early 20th Century Industrial Complex. The brick bearing walls have segmented arched openings and the buildings have near flat roofs. The complex consists of seven connected buildings and one detached garage.</td>
</tr>
<tr>
<td></td>
<td>Flint, Dutee Wilcox Company Automobile Assembly Plant</td>
<td>1920</td>
<td>Contributing</td>
<td>One story, flat-roofed brick building with rectangular windows.</td>
</tr>
<tr>
<td>196 Chapel St</td>
<td>Kilborn and Bishop Company Complex*</td>
<td>1883-1915</td>
<td>Contributing</td>
<td>The complex includes seven structures. The 1883 National Pipe Bending Building is a two-story brick factory building with central freight doors, near flat roof with ridge monitor and segmental arched openings. Two buildings from 1899: a frame storage building and brick boiler house with gabled roof. 1915 buildings include a one-story brick factory with gabled roof and rectangular windows and pilasters and a brick office building with a stepped parapet, cornice and lintels. Additional these buildings are connected by a pilastered brick wall built in 1915. An additional 1946 industrial building is present and non-contributing.</td>
</tr>
</tbody>
</table>

*Complex includes 142 River, original National Pipe Bending Building also occupied by Lavigne Manufacturing. 

Table 1: Historic Property Description for River Street buildings. Information gained from 1988 National Register Nomination
REVITALIZATION PLANS FOR RIVER STREET

Plans to revitalize River Street date back at least to the 1980s (a city document entitled “River St.doc” dates to December 19th, 1984). The document highlights the existing conditions of the area. It states that forty businesses were located in the area including manufacturing, service and distribution/warehousing along with several smaller retail stores. At that time, many of the historic manufacturing buildings were vacant or being used for less intensive uses and in poor condition. The author suggests that part of the reason for the dilapidation is suburban competition; even though the River Street area has inexpensive rents and low purchase prices, it still can not compete with the suburban market with its modern buildings and competitive rates. Other factors, such as a high city tax rate, crime rates, and lack of employee parking, may contribute to the problem.

Despite the fact efforts to revitalize River Street have been in the works since at least the 1980s, no big plans were initiated until 2000. According to Michael Piscetelli from the New Haven City Plan Department, the impetus for the Municipal Development Plan “…started with the alders and local blockwatch but then expanded to the entire Fair Haven community, with meetings with the management team.” (Email Correspondence) Through meetings and other research, the River Street Municipal Development Plan (MDP) was drafted and first approved on December 7th, 2001. On this date, $10 million dollars was allocated for property acquisition, development, public improvements, and other costs. (River Street MDP) Other community outreach was conducted by Helen Rosenberg of the City Economic Development Department who met one on one with the local business owners.

Additionally, other meetings took place with local artist who currently live at 198 River Street. They wanted to turn the Bigelow Boiler Works building into an artisan
apprenticeship program for local youth and live/work space for artists. However, at the meeting doubt emerged to whether they could get sufficient funds to acquire the property and set up the program. According to the city, the group has not been actively pursuing this option lately.

**KEY COMPONENTS OF RIVER STREET MUNICIPAL DEVELOPMENT PLAN**

The main concept of the River Street MDP is: “A light industrial and mixed use area with opportunities for new housing and retail stores, organized around a new waterfront park area and linear trail.” While the funds were allocated in December 2001, the actual River Street Municipal Development Plan was approved in January 2002. The area encompassed by the plan is 53 acres, of which 23 acres are vacant or underutilized. The five core initiatives of the plan are:

1. Redevelopment of vacant land and buildings for new light industrial and manufacturing uses
2. Restoration and adaptive reuse of historic Bigelow/National Pipe Bending Complex
3. Development of a waterfront park and linear trail along the Quinnipiac Riverfront
4. Improvement of public infrastructure, including reconstruction of River Street itself
5. Implementation of new design controls to create more appealing and sustainable environment

Through redevelopment into light industrial and manufacturing uses, the city estimates the project will create 400 well-paying jobs and $39 million dollars of private investment. The city sees a market for these uses in New Haven due to a shortage of land...
for commercial and industrial development, the low rate of industrial vacancy, and lack of affordable office space. Also, the city hopes that the job creation will benefit Fair Haven residents, who have lower than average income levels and will give them the opportunity to walk to work. According to the 2000 census, Fair Haven’s per capita income was $11,020 – 33 percent below the citywide average, and 34 percent of Fair Haven residents live below the poverty line. This is contrasted with 24 percent in poverty in the city and 9.5 percent in New Haven County. Due to the level of poverty, the River Street MDP is located within the federal empowerment zone and state enterprise zone. This could allow for federal funding and offer businesses tax benefits for those located in the River Street area.

**Progress of River Street MDP**

During the spring of 2004, the city began reconstructing the road and sidewalks and planted street trees. Also, the scrap yard that was located along the river behind 198 River has been removed. (See Figure 16.) Figure 17 shows the progress, i.e. the new road, sidewalk and trees in front of 198 River Street.

![Figure 16: Shoreline view in 2001 (left) versus 2005 (right), scrap yard has been removed.](image-url)
As can be seen by the barely visible branches, the trees did not take well after being planted in the late spring of 2004. There is hope that this spring of 2005 will bring new life to them, otherwise new trees will need to be replanted.

The City of New Haven has been working to acquire the designated properties and has made significant progress. However, a few properties are still not in their hands due to insufficient funds. Table 2 shows the status of the properties in the area. At the time of this report, in April 2005, there are four properties that are still not officially in the hands of the city: 100 River Street (Hess Oil), 46 River Street, and 198 River Street (formerly Bigelow Boiler Works), and the Reagan Metals/New Haven Brass Rod properties.

The Hess Oil Company had been in negotiations with the city for 100 River Street and a purchase and sale agreement has been drafted and will be executed “soon!” according
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Table 2: Acquisition Status of River Street Properties. Information from Online Assessors Database and City of New Ha
to city officials. The Development Commission has just approved a deal to acquire 46 River Street from Dupont. The city then plans to merge it with 56 River Street and sell it to Vega Industries for a new manufacturing business. The deal for 46 River is scheduled to close in June, barring unforeseen environmental issues. The city has been unable to work on a deal with 198 River Street, the former home of the Bigelow Boiler Works, as the owner is holding out for a higher than market value sale. Other setbacks include a fire in a portion of the building causing the city to condemn part of the building. In addition, the city has run out of funds, due to high acquisition costs for some of the properties and the cost of road reconstruction. The city is waiting to receive additional funds from the state to be able to secure deals at the Bigelow building and at the Reagan Metals/New Haven Brass Rod properties.

On a positive note, the Economic Development Administration (EDA) recently awarded the city a $1.5 million dollar public works grant from to cover infrastructure work including the shoreline stabilization but they will likely need more funding for acquisition of the additional properties.

**NEW POSSIBILITIES**

The following section will explore new options for the design of River Street taking into account plans by the city and others, environmental and design considerations. It will analyze prior design concepts and present new design concepts and visions for what River Street could be in the future. The main guiding principles for the design are establishing an anchor for development through the rehabilitation of the industrial complexes, creating a
greater mix of uses throughout the area, and the creating a strong sense of place and street character through design features.

**Site Analysis**

The design process takes into account potential development constraints and opportunities for River Street. Currently River Street contains several opportunities for development as well as several successful businesses. Figure 16, highlights the location of the existing businesses, the historic properties and opportunities for redevelopment. On many of the sites for redevelopment, remediation is needed to remove contamination from previous uses of industry, scrap yards, and oil tankers. However, many of these considerations are being addressed in the acquisition process. For example, in drafting the deal with Hess Oil for 100 River Street (shown as E, F, and G in Figure 16), Hess has agreed to clean up the site prior to selling to city.
The businesses on River Street include custom furniture (Fair Haven Woodworks), millwork, metalwork, crafters & business service providers like printers (Hardy Press, Phoenix Press). See Appendix A for existing land use map. The majority of the site is industrial use; the next largest presence is commercial followed by a small portion of residential.

In addition to the businesses highlighted in the River Street brochure, is also home to a self-storage facility (New Haven Self-Storage), a scrap yard (Reagan Metals) and some other smaller businesses. The current zoning is mostly heavy industrial as shown in Appendix B. Some business and residential sections exist between Chapel and River Street.

As mentioned previously, the site has experienced heavy use and environmental contamination. None of the sites however have been classified as “superfund” sites, as seen
in Figure 19 from the Environmental Protection Agency (EPA). The EPA identifies multiple sources of contamination. Most of the sources are classified as hazardous waste.

![EPA Map of Hazardous Sites in the River Street Area](image)

**Figure 19: EPA Map of Hazardous Sites in the River Street Area**

Another environmental consideration is the location of the River Street properties within the floodplain. The land between River Street and the Quinnipiac River is located within a 100-year flood zone, meaning the chance of a flood in any given year is 1-in-100. Between River and Chapel Streets, some of the land is in the 100 year floodplain and other land is the 500 year floodplain. (See Appendix C for Floodplain Map) However, since this area already is developed and part of an urban network, its location within the floodplain does not become a limiting factor in development. Another site consideration is the topography of the site – no significant slopes exists on the site; overall the site is very level. (See Appendix D for topography map.)
In addition to analyzing the site specific conditions such as land use, zoning, floodplains, and topography, it is important to look at the broader context of the character and uses in the area. Two recycling facilities are located across the Quinnipiac River—Waste Management and Active Oil, recycling solid waste and oil respectively. (See Appendix E for map and pictures) Criscuolo Park lies to the west of the River Street and has baseball fields, playgrounds and other park amenities. (See Figures 23 and 24) Front Street Park lying to the east offers a walking trail, accented with benches and pedestal lights offers a nice place to walk along the River and view of Fair Haven Heights, a more affluent section of Fair Haven. Also to the east, at the foot of the Ferry Street Bridge, is the Brewery Square Apartments, a historic brewery that has been converted into 102 housing units. Chapel Street is the main division between the residential uses of the area to the north and the business related uses to the south. Many of the streets running south into the development contain historic houses. In particular, James Street and Blatcheley Avenue display many Italianate and Victorian historic residences of the 1860s and 1870s.

Figure 20: View of Quinnipiac River from Criscuolo Park showing from left to right, Waste Management, Active Oil, and I-95 bridge
Uses for River Street

Debate between members of government and residents as to most appropriate use for River Street have arisen recently. Departmental and individual differences have been expressed at city hall. Some residents think residential uses would be most beneficial for the area. Some desires come from the Front Street residential area and park. New housing was built in the 1980s along Front Street, which has fluctuated in terms of popularity. Those arguing for a greater residential presence want to mimic the current success of the Front Street properties on River Street. However, while the Bigelow Boiler Works and National Pipe Bending buildings could have residential components, other properties are unlikely to have a strong residential component if the city sticks to its original plans. The city plans to dispose of its first properties to an industrial company. Part of the argument of those in favor of light industrial uses, is that living wage jobs are needed in Fair Haven and that the some of the surrounding uses are not compatible with residential. Waste Management, a recycling facility, is located across the River and the Port of New Haven and the Port of New Haven is not far away, just across the I-95 Quinnipiac Bridge.

The combination of residential, retail, and business uses in addition to the light manufacturing would create a place that has life through the day and night. As Fair Haven
Woodworks draws shoppers from across the state, additional retail could help make River Street a destination—a destination for shoppers, workers, businesses, residents, history buffs, and recreation seekers. Further, this mix of uses could help integrate the street more into the neighborhood and not just create an industrial park where people go to work and then leave.

Existing Plans

The City of New Haven’s plan was created for the publishing of the River Street Municipal Development Plan. However they are not tied to the implementation of their original plan and have hired Allan Dehar to complete a conceptual design and master plan for the area. Others such as Anton Nelessen, a professor at Rutgers University, have offered conceptual renderings for sections of the development and local high school students also have created models for the area.

The City of New Haven’s plan shown in Figure 20, includes new infill development in bright yellow and the addition of a waterfront park and a cul-de-sac at the end of Blatcheley Avenue.
The large amount of parking along the south side River Street on either side of Blatcheley does not promote a strong urban streetscape on River Street and creates gaps in the existing fabric.

Anton Nelessen envisions a boardwalk lining the shore with buildings abutting the boardwalk as seen in Figure 23. Anton Nelessen’s vision is very appealing and the city has used it to advertise their efforts, this concept would shrink the size of the park.
Allan Dehar Associates through a mentorship program worked with local high school kids, some of which lived in the area, to create a model for River Street. Their model is shown in Figure 24 includes a “Museum of Technology” and a “Sports Complex.” The idea of a museum in the area, which could tie the history industry in the area to advances in technology is especially appealing. The kids also wanted to create a place with a lot of pedestrian activity as does Allan Dehar Associates.

Lisa Yates, an architect and planner at Allan Dehar Associates has been the main contact for the River Street project. She expressed to me the firms desire to “stimulate site circulation.”(Email) In order to create greater circulation they are proposing to connect all the dead end streets and to create pedestrian connections from the River Street Park to Criscuolo Park and Front Street Park, as well as offering a pedestrian walkway underneath the Ferry Street Bridge. By connecting the dead end streets, blocks would be created. Allan Dehar Associates is proposing cooperative development for each block, with shared parking in an interior courtyard. Another point made by Yates, “We are also trying to fill in some of the missing teeth along River Street, encouraging new construction to go right up to the sidewalk.” This would eliminate the gap created by parking, and align the street in the original city grid.
In order to fill in the holes along River Street and create new buildings consistent with the scale of the existing historic buildings, the city will need to acquire additional properties on the north side of River Street and institute design controls to ensure incongruous development does not occur. In any case, hopefully the design and principles behind it are compelling enough that the style of development will be contagious and some of the other properties along the road will take new form to mimic the existing development without requiring acquisition. In addition, greater community involvement in the project would be beneficial. Community members should be involved in determining the best uses and the design of the area and park. As part of the process, residents then have motivation to be stewards of the area when it becomes redeveloped and also be more likely to use the area.

**Conceptual Design**

The following two plans express two possibilities for the design of River Street. Building on the plans created to date, the following design options for River Street explore ways to create a connected and vibrant urban space with and without an additional road (See Figure 25 and 26). Figure 25 adds an additional road, Grapevine Point, to create connectivity throughout the area and creates more street frontage. Figure 26 instead focuses the development along River Street and creates a pedestrian bikeway along the edge of the buildings and park. This accomplishes connectivity as well but not for vehicular purposes and may be more economical.
Figure 25: Conceptual Plan for River Street- Version 1

Figure 26: Conceptual Plan for River Street- Version 2
CONCLUSION

The industrial decline and suburban flight during the 20th Century led to the decline of River Street. As argued by Douglas Rae in his book *Urbanism and its End*, the end of urbanism hit New Haven and Fair Haven and River Street hard. River Street lost its clout as a railroad-oriented industrial powerhouse, the buildings began to decline and other noxious uses such as scrap yards and oil tankers took over. However there is hope that the 21st Century can bring new life to River Street and a new sense of urbanism can be created. By recreating the tight knit building presence along River Street, incorporating a more significant mix of uses, and making streetscape improvements beyond a new sidewalk and trees, River Street will become a destination for Fair Haven residents, businesses and visitors.
WORKS CITED


Owen, Beth Research Proposal: Heavy metal contaminant levels and transport dynamics of polluted Quinnipiac River sediments in New Haven, CT.

Quinnipiac River Watershed http://dep.state.ct.us/wtr/watershed/quinnriv.htm


APPENDIX

Appendix A- Land Use Map
Appendix B- Zoning Map
Appendix C- Acquisition Schedule Map
Appendix D- Topographic Map
Appendix E- Waste Facilities Location
Appendix F- Greenway Map for Fair Haven
Appendix G- Floodplain Map of River Street Area
Appendix H- Pictures of 142 River Street, National Pipe Bending
Appendix I- Pictures of 198 River Street, Bigelow Boiler Works
Appendix J- Pictures of 196 Chapel Street, Kilborn and Bishop
Appendix C

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GRAPHIC SCALE

1/5000 = 1" = 1 A.F.

RIVER STREET
MUNICIPAL DEVELOPMENT PLAN
CITY OF NEW HAVEN, CT
Topography Map
The park along the shore in the Rive Street Plan will eventually become part of the planned greenway system.
Flood ZoneMap (dark grey indicates 100-year flood zone, light grey indicates 500-year flood zone) from City of New Haven Files

River Street
Rear of 142 River Street, looking north along Lloyd Street

View of River Street, looking west, 142 River Street is on the left, red paint has covered the original brick
198 River Street, former Bigelow Boiler Works, Building F on corner of Lloyd and River

198 River Street, former Bigelow Boiler Works, view of buildings A, B, C, looking east on River Street
196 Chapel Street, building E of the Kilborn and Bishop Complex on the corner of Lloyd and River Streets.

196 Chapel Street, former Kilborn and Bishop Complex, building A, now occupied by Lynn Laders.