

Managing Change on Newbury Street

A Case Study Analysis

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Abstract

Historic residential areas are not only the carriers of urban history and culture, but also urban elements that endow cities with a unique identity. How to balance the preservation of historic residential areas and the need for the development of mixed-use commercial districts is an important issue that planners, developers, and preservationists must manage carefully. Through the examination of the evolution of Boston's Back Bay Historic District and specifically the changes to Newbury Street, this thesis will explore how these historic residential blocks have changed over time as the district has transformed in the past fifty years.

As one of the oldest cities in North America, Boston has a profound history. Newbury Street, Commonwealth Avenue, and Boylston Street in the Back Bay neighborhood of Boston were originally residential blocks. These three streets have had three different trajectories – one is still residential, one mixed use, and one largely commercial, with varying degrees of conservation of their original architecture. Newbury Street serves as a successful model of adaptive reuse and a strategy for maintaining the character of an evolving neighborhood while managing the changes needed for urbanization.

Introduction

Historic residential districts provide clues regarding local culture, economic development, and the people who live there. However, with the growth of the city and rapid development, historic residential districts are threatened by the demands of economic development and urbanization. This thesis describes the evolution of historical residential blocks in Boston where adaptive reuse has successfully transformed a street into a model of mixed-use functionality.

Motivation

In my hometown, Nanjing, a city in southern China, every First Full Moon Festival, one of the traditional festivals in China, thousands of tourists and Nanjing citizens visit the East Zhonghua-Gate Historical Cultural Block. East Zhonghua-Gate Historical Cultural Block used to be a historic residential block and a birthplace of Nanjing vernacular culture and intangible heritage, but it was demolished due to economic development in 2009. It was then recreated as a tourist attraction and commercial block although no Nanjing residents live there anymore. Except for a few original buildings, the rest of the buildings in this historic block are rebuilt pseudo-classic buildings, which imitate the architectural style of the Ming and Qing dynasties. There are also plenty of foreign restaurants, stores, and cafes, which are inappropriate within the historic block. Although this block used to be a historic block, it is no longer.

As a Nanjing citizen and a conservation student, I feel sad about the demolition of the historic residential area and its intangible vernacular heritage. Admittedly, development is sometimes unavoidable. I began to consider other feasible strategies to balance conservation and

development. When I visited Boston and first saw Boylston Street, Newbury Street, and Commonwealth Avenue, it seemed that these might serve as good models to study. Most of the buildings on Newbury Street and Commonwealth Avenue are preserved in good condition and visitors still experience the nineteenth century brick and stone architecture. Newbury Street is one of the trendiest streets in Boston. Facing the dilemma of development and the conservation of historic residential areas, this area seems to provide an inspirational method for planners and conservationists to study. The zoning codes, strategies of planning, and urban policies are different in Nanjing and Boston. However, planners and developers still could learn from Boston to find inspiration. Therefore, I took Newbury Street as the main research site to analyze how it was converted from a residential area into a residential and commercial mixed-use area.

The research area of this thesis looks at three streets within the Back Bay Architectural District - Commonwealth Avenue as the northern boundary, Arlington Street as the eastern boundary, Boylston Street as the southern boundary, and Massachusetts Avenue as the western boundary. [Figure 0.1]

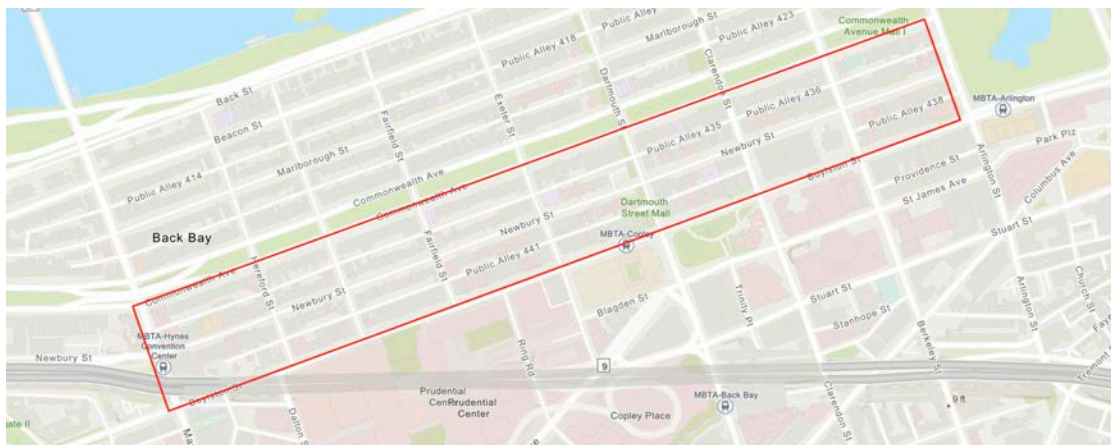


Figure 0-1 Map of Research Area.

Made by Author.

These three streets were all originally residential. Now, Boylston Street is a commercial street while Commonwealth Avenue remains a residential street. Newbury Street is a residential and commercial mixed-use street, which is an intermediate zone between Boylston Street and Newbury Street. Boylston Street, Newbury Street, and Commonwealth Avenue represent a snapshot of three different ways that historic residential streets have evolved in the City of Boston. In this research area, historic buildings, original street landscape, and original residential function are all kept while at the same time, new retail and commercial uses have been added.

Chapter 1 will introduce the history of Boston and the Back Bay district. Chapter 1 also will introduce the history of Boylston Street, Newbury Street, and Commonwealth Avenue to provide a general picture of the historic background of the research area.

Chapter 2 will focus on architectural preservation efforts in the research area. In 1966, the City of Boston established the Back Bay Architectural District and the Back Bay Architectural Commission to preserve the architecture of the Back Bay. Chapter 2 documents the creation of the Back Bay Architectural District and Back Bay Architectural Commission and provides a detailed overview of how the Back Bay Architectural Commission is responsible for conservation. The official guidelines that govern any alterations, new construction, or demolition of buildings in the Back Bay Architectural District will also be discussed.

Chapter 3 will focus on how Newbury Street is adaptively reused as a residential and commercial mixed-use area, which balances the demand of commercial development and historic preservation.

Chapter 4 will analyze the influence that the research area, especially Newbury Street put on the historic preservation in the City of Boston. Although Newbury Street s an inspirational strategy about how to balance commercial development and preservation of historic residential areas, the district is facing several challenges brought on by development during the past decades. Chapter 4 will research these challenges to gain a deeper understanding of the balance between development and preservation.

Chapter 1: History of the Back Bay Neighborhood

1.1 The history of Boston

About 7,500 years ago, there were several native American archaeological settlements located in the area now known as Boston.¹ In the 1620s, European colonists arrived in Boston and began to settle. In 1629, colonists signed the *Cambridge Agreement*, to establish a self-governing colony. In 1630, Governor Winthrop officially founded the town of Boston, naming it after the town of Boston in England.²

During the colonial era, Massachusetts and the surrounding colonies were largely linked through trade. In this period, Boston went through several major disasters such as a smallpox, earthquake, and fire, which caused serious damage to both public health and wealth.³

In the early 1770s, the Britain tried to control the thirteen colonies, mainly through taxation, which prompted the colonists to protest and launch the American Revolution. In 1775, the American Revolution broke out near Boston. Several early battles of the American Revolution, such as the Battle of Lexington and Concord, the Battle of Bunker Hill, and the Siege of Boston, all took place in or near Boston. The Boston Tea Party, a landmark event in the American Revolution and in American history took place in Boston.

¹ Ann-Eliza H. Lewis, "Archaeology and the Big Dig," in *Highway to the Past: The Archaeology of Boston's Big Dig*, ed. Ann-Eliza H. Lewis (Massachusetts Historical Commission Press, 2008), 1-6.

² "Boston, Town of (1000)," Records in the City Archives, City of Boston, accessed January 19, 2022, <https://web.archive.org/web/20130420050502/https://www.cityofboston.gov/archivesandrecords/guide/town.asp>.

³ Ballard C. Campbell, *American disasters: 201 calamities that shook the nation*, (Checkmark Books Press, 2008), 32-35.

In the middle of the nineteenth century, the economy shifted from commerce to manufacturing, which affected the development of Boston.⁴ In the nineteenth century, Boston was one of the largest manufacturing centers in the United States. Boston's population grew rapidly due to large numbers of European immigrants who came looking for jobs. From 1830-1890, to accommodate the growing city, the physical land area of Boston was tripled by filling in mud flats and marshes.⁵ The Back Bay neighborhood is a typical example of this landfill work.

In the middle of the twentieth century, the Boston economy began to decline, as factories became old and outdated.⁶ Businesses and merchants moved to other cities to look for better opportunities and cheaper labor. In the 1970s, Boston began to recover from previous the economic decline.

Now, Boston is one of the biggest cities in northeast America. In addition, it also is one of intellectual and technological centers of the United States. As one of the oldest cities in the United States, Boston plays a significant and profound role in the history of the United States.

⁴ Lawrence W. Kennedy, *Planning the City upon a Hill: Boston since 1630* (University of Massachusetts Press, 1992), 44.

⁵ William A. Newman and Wilfred E. Holton, *Boston's Back Bay: the story of America's greatest nineteenth-century landfill project*. (Boston: Northeastern University Press, 2006), 187-188.

⁶ Barry Bluestone and Mary Huff Stevenson, *The Boston Renaissance: race, space, and economic change in an American metropolis*, (Russell Sage Foundation Press, 2000).

1.2 The history of the Back Bay neighborhood

Back Bay used to be a tidal body of water and the water was used for mill operations.⁷ In the nineteenth century, strong economic development made more people wealthy, which resulted in an increased demand for luxury houses. Older residential neighborhoods were crowded and densely settled.⁸ Dams in the Back Bay caused increased water pollution.⁹ Therefore, in the middle of the nineteenth century, the government of Boston began to implement landfill projects, creating more than 450 acres of usable land. The Back Bay neighborhood was established on the land created through landfill. The Back Bay neighborhood was named after its geographic location because it was literally a bay. [Figure 1.1]

⁷ “History,” Back Bay architectural district, City of Boston, accessed February 9, 2022, <https://www.boston.gov/historic-district/back-bay-architectural-district>.

⁸ Thomas M. Menino, *Back Bay/ Bay State Road* (Boston Landmarks Commission, 1998).

⁹ Newman and Holton, *Boston's Back Bay*, 23.



Figure 1-1 Back Bay (1858).

Peter Vanderwarker, *Boston Then and Now: 59 Boston Sites Photographed in the Past and Present*, New York: Dover Publications Press, 1982, 98.

The street plan of the Back Bay neighborhood was designed by Arthur Gilman (1821-1882), who was also the architect of its earliest public building, the Arlington Street Church (1858).¹⁰ Gilman designed the Back Bay neighborhood as a great boulevard system, which Baron Haussmann had devised for contemporary Second Empire Paris.¹¹ Therefore, it is not difficult to understand that why there are many characteristics of French architecture in the architectural design in the Back Bay neighborhood, such as restricted height limits and a common cornice

¹⁰ Margaret Henderson Floyd, "Copley Square and Dartmouth Street," in *Victorian Boston Today: Ten Walking Tours*, edited by Pauline Chase Harrell and Margaret Supplee Smith, (Boston: Society Press, 1975), 41.

¹¹ Floyd, "Copley Square and Dartmouth Street," 41.

line. The grid plan of streets in the Back Bay neighborhood is different from the irregular early streets of Boston and the curving crescents of the South End, which had been the first expansion area outward from Boston.¹²

Originally, the Back Bay neighborhood was designed as a neighborhood for wealthy families.¹³ Commercial activities were excluded from Back Bay until the end of the nineteenth century. However, due to increasing consumer demand, Back Bay opened to commercial activities.¹⁴ The commercial development of Back Bay began around 1880 on Boylston Street and in the early twentieth centuries on Newbury Street.¹⁵

At the end of nineteenth century, the Back Bay neighborhood was a successful and wealthy residential area that provided a rich social and cultural life to its residents.¹⁶ By 1920, the Back Bay neighborhood began to decline, made worse by the stock market crash in 1929.¹⁷ However, the Back Bay began to recover in the early 1960s because more people wanted to live closer to the city center.¹⁸ Another important reason for the revival of the Back Bay neighborhood was the support of business leaders, who promoted redevelopment and helped bring in tax breaks for new construction.¹⁹

¹² Floyd, "Copley Square and Dartmouth Street," 41.

¹³ Newman and Holton, *Boston's Back Bay*, 187.

¹⁴ Menino, *Back Bay/ Bay State Road*.

¹⁵ City of Boston, "History."

¹⁶ Newman and Holton, *Boston's Back Bay*, 189.

¹⁷ Newman and Holton, *Boston's Back Bay*, 189.

¹⁸ Newman and Holton, *Boston's Back Bay*, 190.

¹⁹ Newman and Holton, *Boston's Back Bay*, 190.

Today, the Back Bay neighborhood is one of the most appealing neighborhoods in Boston. This neighborhood is primarily an upscale residential neighborhood with attractive luxury apartments and condominiums. It is also known for its exclusive shops, hotels, and classic Victorian architecture.²⁰

1.3 Boylston Street, Newbury Street, and Commonwealth Avenue

1.3.1 Boylston Street

In the original plan, in addition to its residential development, Boylston Street was also planned for institutional uses such as the Public Library, the Massachusetts Institute of Technology, and the Museum of Fine Arts.²¹ The commercial development of Boylston Street began in the 1880s and continues to the present day. Although the Boston and Providence Railroad Station is located at Providence Square (now Park Square), just outside the Back Bay, it stimulated the commercial development of Boylston Street because public transportation made Boylston Street accessible to the public.²² Boylston Street tended to be a combination of office and retail uses.²³

²⁰ Newman and Holton, *Boston's Back Bay*, 187.

²¹ Boston Landmarks Commission, Berkeley Building: Boston Landmarks Commission Study Report, 1985. https://www.cityofboston.gov/images_documents/Berkeley%20Building%2091_tcm3-43282.pdf.

²² U.S. National Register of Historic Places, Massachusetts Back Bay Historic District Inventory. https://catalog.archives.gov/OpaAPI/media/63796724/content/electronic-records/rg-079/NPS_MA/73001948.pdf.

²³ Back Bay, U.S. National Register of Historic Places.

Now, Boylston Street is a mixture of fashionable shops, chain stores, and office buildings.²⁴

Unlike Newbury Street, Boylston Street does not have much original architecture except several important commercial buildings. [Figure 1-2]



Figure 1-2 Street View of Boylston Street.

Taken by Author.

1.3.2 Newbury Street

Newbury Street was originally a residential street planned for wealthy and upper-middle class people. Residential buildings on Newbury Street were large and equipped with amenities. During the 1880s and 1890s, Newbury Street was considered one of the desirable places to live in within Boston. The transformation of Newbury Street from a residential street to a mixed-use commercial street happened in the early twentieth century.²⁵ Lower story commercial

²⁴ Anthony N. Penna and Conrad Edick Wright, *Remaking Boston: An Environmental History of the City and Its Surroundings* (University of Pittsburgh Press, 2009), 4.

²⁵ City of Boston, "History."

conversions and the construction of new buildings contributed to the commercialization of Newbury Street.²⁶ In addition, the beginning of the conversion of large single-family homes into apartments in the Back Bay also probably promoted the commercial development of Newbury Street.²⁷ [Figure 1-3]



Figure 1-3 Newbury Street (1880).

“Newbury Street, Boston,” Lost New England, accessed June 14, 2022,
<https://lostnewengland.com/2016/02/newbury-street-boston/>.

Today, there are also many luxury shops and galleries on Newbury Street. Compared with Commonwealth Ave and Boylston Street, Newbury Street has more restaurants, cafés, and bars. Newbury Street still has housing as well. Although the original architecture from the nineteenth

²⁶ Back Bay, U.S. National Register of Historic Places.

²⁷ Back Bay, U.S. National Register of Historic Places.

century has changed due to commercialization, there still are plenty of luxury apartments and residential properties on Newbury Street. [Figure 1-4]



Figure 1-4 Street View of Newbury Street.

Taken by Author.

1.3.3 Commonwealth Avenue

Commonwealth Avenue was also designed to attract wealthy people to purchase lots. In 1856, designer Arthur Gilman. was inspired by visiting broad Parisian boulevards and British urban garden squares.²⁸ Gilman's design was wider than a previous design, and the increased width created the "mall" in the middle of Commonwealth Avenue.²⁹ The "mall" was designed for trees, shrubbery, and other ornamental purposes.³⁰

²⁸ "Icons Among Us: Comm Ave," Boston University, accessed February 14, 2022, <https://www.bu.edu/articles/2009/icons-among-us-comm-ave/>.

²⁹ Newman and Holton, *Boston's Back Bay*, 68.

³⁰ Newman and Holton, *Boston's Back Bay*, 68.

Commonwealth Avenue did not have public transportation until 1909, so its development was slow. After 1909, with the arrival of the streetcars, Commonwealth Avenue developed rapidly.³¹

Unlike Newbury Street and Boylston Street, there are few restaurants and hotels on Commonwealth Avenue. Most buildings are luxury apartments or condominiums. [Figure 1-5]



Figure 1-5 Street View of Commonwealth Avenue.

Taken by Author.

³¹ “Icons Among Us: Comm Ave.”

Chapter 2: Architecture and Architectural Preservation

2.1 Architectural Styles Analysis

Geographically, the term *Back Bay* refers to the land created by filling in the tidal flats of the Back Bay. However, when people talk about the *Back Bay*, what first comes to mind is the appealing rows of Victorian brownstone buildings and fancy luxury stores. The Back Bay neighborhood is considered one of the best-preserved examples of nineteenth century urban design in the United States. In addition, the Back Bay neighborhood features important examples of architectural styles of the nineteenth century. In the national register nomination form for the Back Bay Architectural District, the neighborhood was described as “a superb retrospective view of American architecture in the last half of the nineteenth century.”³²

In the 1850s and 1860s, Boston followed French fashion. This trend was reflected not only in dress, decoration, and manners, but also in architecture.³³ During this period, the street plan of the Back Bay neighborhood and the architectural styles both showed a strong French influence.

From the late 1870s to the middle of the 1880s, architectural styles reflected the most individualistic and the most complex period in Back Bay history. The main architectural styles

³² “National Register of Historic Places Inventory—Back Bay Historic District,” United States Department of the Interior National Park Service, 1973, <https://catalog.archives.gov/id/63796724>.

³³ Douglass Shand-Tucci, *Built in Boston, City and Suburb, 1800-2000* (Amherst: University of Massachusetts Press, 1999), 35.

during this period were Gothic, Queen Anne, Academic Brownstone, Brownstone Gothic, and Academic Brick.³⁴

From the end of nineteenth century to the beginning of twentieth century, people's passion for French style faded. The Georgian architectural style and authentic became popular again in people's life. In this period, the main architectural styles were Georgian Revival, Italian Renaissance, and the Federal style.³⁵

2.2 Architectural Conservation in the Back Bay

Architecture plays an important role in social culture because it narrates how people construct their space and environment. Architecture also represents a community's lifestyle and people's aesthetic attitudes in different times. Preserving and maintaining architecture is important, and not only for large important buildings. Vernacular architecture in a historic district is also important because it contributes to the significance of the district as well. Most buildings on Newbury Street and Commonwealth Avenue still keep their original exterior design and are in good condition. These vernacular buildings show the unique architectural style of the Back Bay neighborhood. In addition, they also represent the urban history of Boston vividly.

In the Back Bay Architectural District, anyone desiring to change a building's exterior must apply for building permit, and the application is reviewed by the Back Bay Architectural District

³⁴ Bainbridge Bunting, *Houses of Boston's Back Bay: An Architectural History, 1840-1917* (Cambridge: Belknap Press of Harvard University Press, 1967), 167.

³⁵ Bunting, *Houses of Boston's Back Bay: An Architectural History, 1840-1917*, 287.

Commission (BBAC). This process is usually called design review. Only if the applicants obtain the approval of the Back Bay Architectural District Commission (BBAC) can the proposed project be implemented.

This section will introduce the establishment of the Back Bay Architectural District briefly. Then, this section will explore the Back Bay Architectural Commission (BBAC) and the process of design review. In addition, this section also will research the guidelines that govern the Back Bay Architectural Commission design review process. Finally, this chapter will discuss the preservation guidelines for the Back Bay Architectural District.

2.2.1 The Establishment of Back Bay Architectural District

The Back Bay Architectural District (BBAD) and Back Bay Architectural District Commission (BBAC) were established in 1966 (Chapter 625 of Acts of 1966, passed by General Court in 1966). They have subsequently been amended four times during the following decades: Chapter 463 of the Acts of 1974, Chapter 645 of the Acts of 1979, Chapter 624 of the Acts of 1981, and Chapter 624 of 1982.

According to Section 2 of Chapter 645 of the Acts of 1979, which was the last time that the boundary of Back Bay Architectural District was amended, the official BBAD boundary is:

There is hereby created in the city of Boston a district to be known as the Back Bay Architectural District, bounded and described as follows: starting at the intersection of the center line of Newbury Street and the center line of Charlesgate East, thence running northerly by the center line of Charlesgate East to the center line of Back Street; thence running easterly by the center line of Back Street to the center line of Embankment Road; thence running southerly by the center line of Embankment Road to the center line of Beacon Street; thence running easterly by the center line of Beacon

Street to the center line of Arlington Street; thence running southerly by the center line of Arlington Street to the center line of Boylston Street; thence running westerly by the center line of Boylston Street to the center line of Massachusetts Avenue thence running northerly by the center line of Massachusetts Avenue to the center line of Newbury Street; thence running westerly along the center line of Newbury Street to the point of beginning.³⁶ [Figure 2-1]

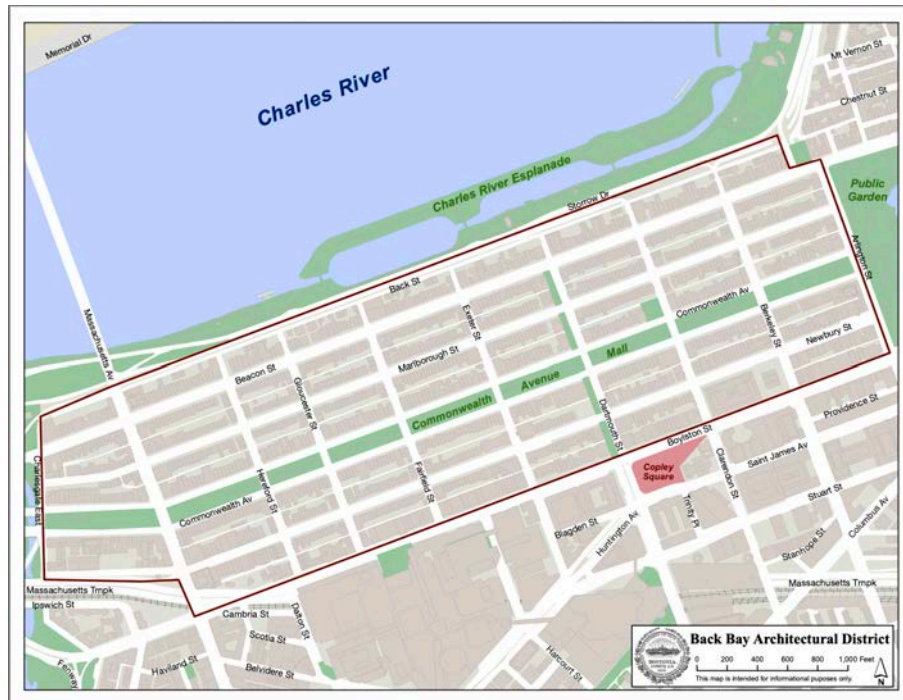


Figure 2-1 Boundary of Back Bay Architectural District.

City of Boston, “Back Bay Architectural District map,” accessed June 14, 2022,
https://www.cityofboston.gov/images_documents/Back%20Bay%20Architectural%20District%20map_tcm3-13456.pdf.

The scale of Back Bay Architectural District is smaller than the scale of the Back Bay neighborhood, which people are more familiar with. The Back Bay Architectural District excludes the Charles River Esplanade, Copley Square, and plenty of modern architecture like the

³⁶ The boundary of Back Bay Architectural District was initially enacted in the Chapter 625 of Acts of 1966, extended in the Chapter 463 of Acts of 1974 and Chapter 645 of Acts of 1979, and then most recently amended in the Chapter 624 of Acts of 1981. In the Chapter 625 of Acts of 1966, the name of “Back Bay Architectural District” used to be “Back Bay Residential District,” and it was amended as “Back Bay Architectural District” in Chapter 463 of Acts of 1974.

Skywalk Observatory and the Prudential Center. The architectural district follows the grid streets and features mainly brownstone architecture, which represents the very distinctive architectural style and history of the Back Bay neighborhood. [Figure 2-2]



Figure 2-2 Map of Back Bay District.

Boston Planning & Development Agency, “Boston Back Bay Neighborhood,” last updated August 2019.

<http://www.bostonplans.org/getattachment/4c6e5eff-0892-44b2-a8a3-7cb597879a75/>.

2.2.2 Establishment of the Back Bay Architectural Commission (BBAC)

Like the Back Bay Architectural District, chapter 625 of Acts of 1966 also establishes the Back Bay Architectural Commission (BBAC). According to Section 4 of Chapter 625 of Acts of 1966, “There shall be in the Boston Redevelopment Authority a board, known as the Back Bay Architectural Commission.”³⁷

³⁷ “Board” was amended as “commission” in the Section 3 of Chapter 463 of Acts of 1974. “Boston Redevelopment Authority” replaced by “Environment Department” by Section 5 of Chapter 624 of Acts of 1981.

The Back Bay Architectural Commission consists of nine commissioners and five alternates. All commissioners and alternates should be appointed by Mayor and nominated by the Neighborhood Association of the Back Bay, the Greater Boston Real Estate Board, the Boston Society of Architects, the Back Bay Association, and the Mayor.³⁸ If there is an opening on the commission, people who are interested in becoming a commissioner can apply for the position on the official website of the City of Boston. In Section 3 of Chapter 463 of Acts of 1974 amended, the requirements for the members of the Back Bay Architectural Commission selected by the mayor, at least one of them should have an interest in a retail business in the Back Bay Architectural District. This amendment has close relationship with the commercial and retail development on Newbury Street and Boylston Street, especially on Newbury Street. With increasing retail development in the Back Bay, more and more first floors of buildings on Newbury Street have been transformed into commercial spaces. This creates huge challenges for the preservation of architecture in the Back Bay Architectural District. In this situation, the Back Bay Architectural Commission needs a member who is interested in retail .

The purpose of the Back Bay Architectural Commission is defined in the Section 1 of Chapter 624 of Acts of 1981:

The purposes of this act are as follows: (a) to promote the economic, cultural, educational, and general welfare of the public through high standards of design throughout the Back Bay and through the preservation of the residential portion of the Back Bay area in the city of Boston; (b) to safeguard the heritage of the city of Boston by preventing the despoliation of a district in that city which reflects important

³⁸ Section 4 of Chapter 625 of Acts of 1966 enacted that the “Back Bay Architectural Commission consists of five commissioners and five alternates” and it was amended as “nine commissioners and five alternates” in Section 3 of Chapter 463 in Acts of 1974.

elements of its cultural, social, economic and political history; (c) to stabilize and strengthen residential property values in such area; (d) to foster civic beauty and (e) to strengthen the economy of the commonwealth and the city of Boston.³⁹

Generally, the statement of purpose recognizes the values and significance of architecture in the Back Bay Architectural District and defines it as the heritage of city of Boston. In addition, the statement also recognizes and emphasizes the residential function, which is the original function of the Back Bay Architectural District. The architecture in the Bay Architectural District has a close connection between architecture and Boston's cultural, social, economic, and political history. In addition, these beautiful brownstone buildings also help to cultivate citizens' aesthetic value. Considering the commercial and retail development in the Back Bay Architectural District, especially in Boylston Street and Newbury Street, it is also an important mission for the Back Bay Architectural Commission (BBAC) to both preserve architecture and create economic development at the same time.

The main duty of the Back Bay Architectural Commission (BBAC) is to review the application of proposed exterior changes and alterations and decide whether to approve it. The review is not only required for ordinary maintenance like cleaning and changing exterior functional elements like ducts and air conditioners, which usually do not have much impact on the exterior architecture features, but also for major renovation and major landscaping projects.

³⁹ The "Purpose" was initially enacted by Section 1 of Chapter 625 of Acts of 1966 and amended by Section 1 of Chapter 463 of Acts of 1974, and then amended by Section 1 of Chapter 624 of Acts of 1981.

The Back Bay Architectural Commission (BBAC), when a proposed project involves the exterior architectural features of a building, considers whether the proposed project is appropriate to the Back Bay Architectural District.⁴⁰

To be appropriate, the proposed project should ensure that the architectural values and significance of the building will be kept. The proposed project should also make sure that the project will be compatible with the whole architectural district, not just in architectural style and general design, but also in exterior texture, material, and color, etc.⁴¹ Except architecture, landscape also is significant part of the architectural district. Therefore, when commission members review the application, it is necessary to consider if the landscape is in harmony with the architectural style and aesthetic value of the whole architectural district.

The architectural commission only considers the exterior architectural features and does not consider the interior design, unless it impacts the exterior. Therefore, most architecture in the Back Bay Architectural District keeps a relatively uniform architectural style. In addition, it is

⁴⁰ “Exterior architecture feature,” the architectural style and general arrangement of the exterior of a structure or any portion of it including but not limited to kind, color and texture of the building material, type and design of all windows, doors, lights, signs, and other fixtures, the location and adequacy of vehicular access, if any, type and design of landscaping, fences and walls, and the location and treatment of any parking space for motor vehicles. The definition of “Exterior Architectural Feature” was enacted by Section 2 of Chapter 625 of Acts of 1966 and amended by Section 2 of Chapter 624 of Acts of 1981.

⁴¹ In Acts of 1966, it defines the appropriateness of proposed projects clearly: “In passing upon appropriateness, the commission shall consider, (a) the historical and architectural value and significance of the structure and its relationship to the surrounding area; (b) the relationship of the exterior architectural feature of such structure to the rest of the structure and to the surrounding area and to exterior architectural features of other structures in the neighborhood; (c) architectural style, general design, compatibility with neighboring structures, arrangements, texture, materials and colors of the original structure and of the proposed change or addition; (d) any landscaping features proposed by the applicant; and any aesthetic or other factor which it deems to be pertinent.”

common that most architecture in the Back Bay Architectural District has historic exterior design but modern interior design and facilities.

Although the primary goal of the Back Bay Architectural Commission (BBAC) is to preserve the architectural district, the commission can be lenient in its judgement for specific situations. If the structure has little significance, and if the project will not seriously impair the architectural value of the surrounding structures, the BBAC can evaluate the appropriateness of a proposed project less strictly.⁴² Commission members also consider projects that seek to convert residential space to commercial space differently.⁴³ Converting residential space for commercial or retail use involves more alteration such as signs, show windows, and outdoor dining areas. To some degree, the Act and the Back Bay Architectural Commission (BBAC) encourage the transformation of residential structures into commercial structures.

2.2.3 Back Bay Architectural Commission Design Review

For the applicants, the process of Back Bay Architectural Commission Design Review can be divided into four parts, which are preparation, application submission, hearings, and decision.

In preparation, applicants need to deal with any unsolved zoning issues before they submit their application. Usually, the Back Bay Architectural Commission will not process the application unless the application complies with the Boston zoning laws or if the applicant already has a zoning variance. According to Boston zoning laws, in the Back Bay Architectural

⁴² Section 8 of Chapter 625 of Acts of 1966.

⁴³ Section 8 of Chapter 625 of Acts of 1966.

District, buildings can be no higher than 65 feet, and the mass of the building can be no more than three times the lot size.⁴⁴ Applicants will need to obtain a zoning variance if they plan to alter the shape of the structure. In addition, applicants should check the *Back Bay Architectural District Commercial Standards* and *Back Bay Architectural Commission Guidelines for the Residential District* to make sure the proposed project is allowed, and it is compliant.⁴⁵ Different applicants are required to submit different special documents, and current, clear, color photographs are required for all applications. Screenshots from Google Street View or other online mapping services are unacceptable.⁴⁶ The last step of preparation is to preview the application carefully.

After finishing the preparation, applicants should submit their application and make sure that the application is complete. The Back Bay Architectural Commission (BBAC) will not begin to deal with the application until the application is completed.

The next phase is a hearing. The Back Bay Architectural Commission meets once a month and is open to public. To be added to a hearing agenda, an application must be determined to be complete by the staff fifteen business days prior to the hearing date.⁴⁷ However, usually, there is

⁴⁴ Sue Prindle and Susie Shafer, “Introduction to the Back Bay Architectural Commission,” Neighborhood Association of the Back Bay, https://www.nabbonline.org/files/Introduction_to_the_BBAC.pdf.

⁴⁵ The *Back Bay Architectural Commission Commercial Guidelines* were adopted in November 2010, https://www.cityofboston.gov/images_documents/BBAC%20Commercial%20Guidelines_tcm3-21448.pdf; The *Back Bay Architectural Commission Guidelines for the Residential District* was adopted in February 1990, https://www.cityofboston.gov/images_documents/Back%20Bay%20Guidelines%20for%20the%20Residential%20District_tcm3-13458.pdf.

⁴⁶ “Instruction for Completing a Design Review Application,” City of Boston, 2022, https://www.boston.gov/sites/default/files/file/2022/02/Application%20%26%20Fee%20Instructions_6.pdf.

⁴⁷ “Introduction to the Back Bay Architectural Commission.”

an administrative review before the hearing. To improve the productiveness of reviewing applications, the commission usually delegates the review of certain work items such as ordinary maintenance, restoration, and replacement with minimal impact on architectural exterior features to a staff member.⁴⁸ If the application complies with the act and guidelines, the application may be approved administratively, and an applicant will not be required to attend the hearing and make a presentation. Otherwise, applicants still have to attend the hearing if the proposed project is inconsistent with act and guidelines or will impact architectural exterior features and surrounding structures.

The last part of process of design review is waiting for the decision. If an application is approved, the applicant can use the approval letter to obtain a building permit with the Inspectional Services Department (ISD). During the implementation of the project, the approval placard and building permit should be displayed at the construction site and be visible to public. However, if the application is denied, the proposed project will not be allowed. If applicants conduct an exterior alteration project without approval or violate the act, they will be punished by a fine. In addition, the commission also may bring the applicant to its Violations Committee and require that new construction to be stopped, mitigated, or moved.⁴⁹ Therefore, there is a friendly suggestion on the official website of Back Bay Architectural District that says, “Do not

⁴⁸ “Introduction to the Back Bay Architectural Commission.”

⁴⁹ “Introduction to the Back Bay Architectural Commission.”

begin any work, or buy materials until after you have received confirmation your project has been approved.”⁵⁰

2.2.4 Guidelines for BBAC Design Review

Generally, the design review of Back Bay Architectural Commission (BBAC) is in accordance with the Act and related guidelines. The Act that the design review process of the Back Bay Architectural Commission (BBAC) is based on is Chapter 625 of Acts of 1966, which was amended several times. The related guidelines are the *Back Bay Architectural Commission Guidelines for the Residential District* and the *Back Bay Architectural District Commercial Guidelines*. The *Back Bay Architectural Commission Guidelines for the Residential District* were adopted in 1990 and they are known as the “Back Bay Residential Standard.” The *Back Bay Architectural District Commercial Guidelines*, also known as the “Back Bay Commercial Standard,” were adopted in 2010 and they are a supplement to the “Back Bay Residential Standard.”⁵¹ The “Back Bay Commercial Standard” was enacted to meet the increasing need of transforming existing structures in the business zone because of the booming retail and commercial development in Back Bay Architectural District.

Chapter 625 of Acts of 1966 give overall guidance while the “Back Bay Residential Standard” and the “Back Bay Commercial Standard” give detailed and particular instruction,

⁵⁰ “Design Review Process,” City of Boston, 2022, <https://www.boston.gov/historic-district/back-bay-architectural-district>.

⁵¹ Back Bay Architectural Commission, *Back Bay Architectural District Commercial Guidelines*, 2010, https://www.cityofboston.gov/images_documents/BBAC%20Commercial%20Guidelines_tcm3-21448.pdf.

which specifically addresses the Back Bay Architectural District. The Acts of 1966 and two guidelines provide a comprehensive source for commissioners to refer to when they review applications.

In Chapter 625 of Acts of 1966, there were no explicit actions prohibited. However, the Act does instruct the commission that it shall not prevent the construction, reconstruction, alteration, or demolition of an exterior architecture feature if this exterior architecture feature causes a risk to public safety.⁵²

The “Back Bay Residential Standard” and the “Back Bay Commercial Standard” detail what actions are expressly prohibited and give more specific instructions. In the “Back Bay Commercial Standard,” the demolition of historic buildings listed on the National Register of Historic Places is not allowed. For buildings which are not listed in the national, state, or local register of historic places, demolition is also not allowed unless the replacement is appropriate with the architecture and surrounding street.⁵³ There are also several situations that are generally not allowed, but still can be approved based on a specific situation. For example, video cameras: externally mounted surveillance cameras are considered inappropriate unless the cameras are installed within the frame of the windows. In addition, encapsulating surveillance cameras within decorative lighting fixtures also may be appropriate.⁵⁴

⁵² Section 9 of Chapter 625 of Acts of 1966.

⁵³ In the “Back Bay Commercial Standard”, it states: “Demolition, not generally allowed, unless it is clearly demonstrated that any replacement is justifiable architecturally as well as in its urban design impact on the street.”

⁵⁴ Back Bay Commercial Guidelines, Back Bay Architectural Commission, 2010, 6.
https://www.cityofboston.gov/images_documents/BBAC%20Commercial%20Guidelines_tcm3-21448.pdf.

In the “Back Bay Residential Standard,” the demolition of historic structures in the residential portion of the district is prohibited.⁵⁵ Removing significant architectural features and altering historic facades are inappropriate and will not be approved. Destroying a portion of a structure may be acceptable when it involves removal of an inappropriate alteration or addition to a building.⁵⁶

Both the act and the guidelines underscore the importance and necessity of respecting and preserving the exterior architecture features and surrounding landscape in the Back Bay Architectural District. There is no explicit standard of approval because each structure and each application are unique. In addition, except demolition of historic structures and several definitive prohibited situations, most other situations are not expressly forbidden and can be discussed on a case-by-case basis.

2.2.5 Preservation Guidelines of the Back Bay Architectural District

Under the National Historic Preservation Act (NHPA), the Secretary of the Interior enacts professional standards and guidance, *The Secretary of the Interior’s Standards for the Treatment of Historic Properties*. The standards are widely used. They can be applied to historic properties

⁵⁵ There is no clear definition of “historic structure.” The author assumes the demolition part of the “Back Bay Commercial Guideline” is the supplementary instruction for the “Back Bay Residential Guideline”. Therefore, the “historic structures” in the “Back Bay Residential Guidelines” means structures listed as contributors to the National Register Historic District.

⁵⁶ “Back Bay Residential Guidelines.”

of all types, materials, construction, sizes, and use.⁵⁷ The standards also address exteriors, interiors, and a property's landscape features, site, environment, as well as related new construction.⁵⁸ Federal state and local agencies all use these standards to guide design reviews and preservation projects. However, *The Secretary of the Interior's Standards for the Treatment of Historic Properties* are general advisory guidelines. Local agencies can enact specific preservation guidelines according to its own architectural characteristics.

Based on *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, the Back Bay Architectural Commission enacted the "Back Bay Residential Standard," which provides detailed instruction for exterior alterations, changes, and demolition in the Back Bay Architectural District. Except roof, window, masonry, door and entrance, these building features mentioned in *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, "Back Bay Residential Standard" also enacts guidelines for other features like ironwork, rear yard, and landscaping, according to the specific situation of the Back Bay Architectural District.

2.2.5.1 Roof

A roof is an important design element of historic buildings and it also one of the key points in a preservation project. For roof preservation, the "Back Bay Residential Standard" mainly makes provisions for roofing materials.

⁵⁷ "The Treatment of Historic Properties," National Park Service, accessed 2022, <https://www.nps.gov/tps/standards.htm>.

⁵⁸ "The Treatment of Historic Properties."

Under normal circumstances, it is not recommended to use materials different from the original material, unless the original material is very rare.⁵⁹ In the Back Bay Architectural District, the replacement slate shall match the original in design, color, coursing, and texture. According to the “Back Bay Residential Standard,” synthetic slate and asphalt shingles are inappropriate.⁶⁰ In addition, the roofing materials should be nonreflective and dark in color. For a penthouse, the renovation of penthouses shall be appropriate with all building elevations. The appropriate materials should include slate, copper, and standing seam metal; end walls or party walls should be brick.⁶¹

In addition, original roof configurations and dominance of historic cornice lines shall be maintained on both the front and rear elevations.⁶² The “Back Bay Residential Standard” also has specific cornice guidelines. As the decorated projection at the top of a wall provided to protect the wall face or to ornament and finish the eaves, a cornice is one of the important elements of a roof. Historic cornice lines should be maintained. It is inappropriate to build new dominant cornice lines. Replacing cornices is acceptable, but the replacement shall replicate the existing forms and materials.⁶³

2.2.5.2 Rear Yard

⁵⁹ Donald W. Insall, *The Care of Old Building Today, a Practical Guide*, (London: The Architectural Press, 1972), 93.

⁶⁰ “Back Bay Residential Standard.”

⁶¹ “Back Bay Residential Standard.”

⁶² “Back Bay Residential Standard.”

⁶³ “Back Bay Residential Standard.”

The Back Bay neighborhood is compact. Although the Back Bay neighborhood was originally planned as a residential neighborhood, most residential buildings are townhouses, which usually do not have yards like single family residential houses usually have. Therefore, in most situations, the rear yard in the “Back Bay Residential Standard” refer to alleys. For example, there is an alley between Newbury Street and Boylston Street.

The guidelines for rear yards aim to restore historic or characteristic architectural features, and to encourage alterations which facilitate the service function of the alleys while enhancing their residential character.⁶⁴

According to the statement of the purpose of guidelines, the removal of historic landscaping is inappropriate, which means it will not be approved by the Back Bay Architectural Commission.

The maintenance and addition of historic gardens and garden walls are encouraged, but the material should be carefully picked. The wall and fence for rear yards and parking courts will appropriate in brick, wrought iron, or vertical board painted in appropriate color.⁶⁵ Chain link or stockade fencing, and barbed or razor wire do not suit the architecture and surrounding.⁶⁶ For the paving, the “Back Bay Residential Standard” also gives suggestions for materials, like brick and other unit pavers.

⁶⁴ “Back Bay Residential Standard.”

⁶⁵ “Back Bay Residential Standard.”

⁶⁶ “Back Bay Residential Standard.”

2.2.5.3 Windows

Windows is one of characteristics that usually used to distinguish the architectural style.

Therefore, like a roof, windows also are notable elements in the architectural preservation. In the

“Back Bay Residential Standard,” there is an expressly stated preservation guideline:

Original window material shall be retained whenever possible; if it is beyond repair, the existing openings, sash, glass, lintels, sills, shutter hardware, frames, surrounds, and all other details shall be duplicated in the same configuration, dimensions, style, and materials as existing. Retention of original historic material such as curved, leaded, or stained glass is mandatory.⁶⁷

In addition, the paint color shall be appropriate to the whole district. Most buildings in the Back Bay Architectural District are brownstones with strong architectural style like the Queen Anne, the Brownstone Gothic, and the Academic Brownstone styles. Matte, dark, and reddish colors are appropriate for the district. Appropriate paint colors for dark masonry buildings include but are not limited to semigloss black, slate gray, dark brown, dark red, gray brown, and deep green.⁶⁸

According to the architectural styles of the Back Bay Architectural District, the “Back Bay Residential Standard” also gives specific suggestion for materials. Inappropriate materials include but are not limited to multi-paned aluminum, vinyl, metal-clad or vinyl-clad replacement sash. Among these materials, vinyl was not widely used until the late twentieth century and is not appropriate to the architectural style of this district. In the Back Bay Architectural District, wood is the main material for windows.

⁶⁷ “Back Bay Residential Standard.”

⁶⁸ “Back Bay Residential Standard.”

From the design and shape perspective, alteration to the design and arrangement of window openings on the historic façade only can be restored to documented historical condition. In addition, the size or shape of the opening is unchangeable.

2.2.5.4 Masonry

Among historic building materials, masonry is one of the most lasting materials, it is also very susceptible to damage by exposure, improper maintenance or repair, abrasive cleaning, or the application of non-permeable coatings.⁶⁹ Therefore, it is necessary to preserve and maintain masonry professionally and carefully. In addition, in the Back Bay Architectural District, masonry is the main construction material, and it is the most distinguishable characteristic of the architectural style. To preserve the Back Bay Architectural District, masonry must be treated carefully and seriously.

Since improper cleaning will damage masonry and cause irreversible effects, all the cleaning projects shall adopt most gentle method. Wire brushing sandblasting, and other abrasive techniques are not allowed.⁷⁰ Compared with other cleaning and maintenance projects, the commission pays close attention to masonry cleaning. All proposed masonry cleaning and ordinary maintenance needs be reviewed by the commission prior to the work.⁷¹ In order to keep masonry for a longer time, the treatment used on the masonry should be as simple as possible.⁷²

⁶⁹ The Secretary of the Interior's Standards for the Treatment of Historic Properties, National Park Service, 4.

⁷⁰ "Back Bay Residential Standard."

⁷¹ "Back Bay Residential Standard."

⁷² "Back Bay Residential Standard."

Any materials and coatings related to the brownstone needs to be reviewed. Unless it is approved by the commission, paint is not allowed.

Except repair and preservation, during the process of repointing, masonry also needs protection. The new mortar used in the repointing shall have a high sand and lime content to preserve the softer nineteenth-century brick. Methods and specifications of repointing all need be reviewed by commission prior to the work.

In general, compared with other features, the commission requires more careful and serious treatment for masonry because masonry is one of the most important architectural features in the Back Bay Architectural District.

2.2.5.5 Doors and entrances

Entrances and porches are often the focus of historic American buildings since they are significant in defining the historic character of a building.⁷³ In the Back Bay Architectural District, most buildings do not have decorative porches. However, the details of doors and entrances are still very significant to the architectural style.

The alterations to the design, proportions, and arrangement of door openings on the historic façade only can be restored to documented historical conditions. The original doors, transoms, and sidelights should be retained and repaired, if possible. For the front façade, entry vestibules, porticos, and porches shall not be altered, removed, or enclosed.

⁷³ The Secretary of the Interior's Standards for the Treatment of Historic Properties, 14.

Replacements are allowed. However, all replacement of doors shall maintain the original materials, colors, proportion, and forms. If it is difficult to use original materials or colors, the replacement shall use materials or colors that are appropriate to the original design and architectural style. Existing doors with inappropriate elements, such as aluminum doors, sliding doors, and flush doors, should be replaced with more historically appropriate elements.

Hardware and house numbers shall follow the original forms and materials. House numbers should be brass or bronze, no more than six inches in height.⁷⁴ Mailboxes, buzzers, and intercoms should be small in size and brass or a dark finish.

2.2.5.6 Landscaping

For landscape, the “Back Bay Residential Standard” has few guidelines. Historic front yard configurations shall not be altered or moved. Restoration is encouraged when the traditional alignment method of brick was changed.⁷⁵

2.2.5.7 Ironwork

Metal features are usually highly decorative and practical elements in architecture and are important in distinguishing the overall character of historic American buildings.⁷⁶

⁷⁴ “Back Bay Residential Standard.”

⁷⁵ “Back Bay Residential Standard.”

⁷⁶ The Secretary of the Interior’s Standards for the Treatment of Historic Properties, 6.

In the Back Bay Architectural District, the ironwork should be painted black or a dark color appropriate to the district. The restoration of perimeter fencing, and original iron or stonework handrails are encouraged. The materials and color should be appropriate to the original design.

2.2.5.8 Public areas

To enhance the historic and architectural character of the Back Bay Architectural District, proper preservation of public areas is necessary. Existing granite, brick, or concrete sidewalks should be repaired and restored in kind. If the original materials of sidewalks have been replaced, it is necessary to restore them. In addition, in the open space, historic fabric should be reflected in the design of public spaces.

Chapter 3 Adaptive Reuse in Newbury Street

Introduction

The Back Bay neighborhood was originally designed as a residential district for upper class people. With the need of urbanization and economic development, today's Back Bay district is not only one of the most attractive residential districts with well-preserved nineteenth century brown brick architecture in Boston, but also a trendy shopping and commercial center.

Commercial activity is one of the most important aspects of the Back Bay neighborhood and is concentrated on Boylston Street and Newbury Street. Commonwealth Avenue continues to serve its original function as a wealthy residential street while Boylston Street and Newbury Street have both changed. Boylston Street has completely converted into a commercial area while Newbury Street keeps some of its original residential function and architecture. Newbury Street adaptively reused buildings by altering interiors and making limited exterior design alterations to change the function of the buildings. The adaptive reuse method not only preserves the original buildings and the residential function of Newbury Street, but also meets the commercial and economic needs of the neighborhood.

Generally, Newbury Street provides an answer, which is worth learning, about how to preserve historic residential area and develop economic viability at the same time, when facing the huge demand of commercial development. This chapter will focus on Newbury Street to research the process of how adaptive reuse has been applied. First, this chapter will introduce the essence and basic information of adaptive reuse. In addition, this chapter will analyze several

adaptive reuse methods as well. Then, author will research a case study about adaptive reuse on Newbury Street.

3.1 What Is Adaptive Reuse?

3.1.1 The definition of Adaptive Reuse

Compared with adaptive reuse, people maybe are more familiar with the construction of new architecture and demolition of old architecture. However, in fact, people have been reusing buildings for centuries.⁷⁷ The adaptive reuse of buildings happens more than people might expect. For example, plenty of unused factories in American cities are now adaptively reused as apartments.

Scholars give different definitions for adaptive reuse with subtle differences:

- A change of function, of a building whose previous use is now obsolete and therefore is changed to accommodate a new function, with new occupiers with different needs and priorities.⁷⁸
- Any work to a building over and above maintenance to change its capacity, function, or performance (i.e., any intervention to adjust, reuse or upgrade a building to suit new conditions or requirements).⁷⁹

⁷⁷ Sally Stone, *Undoing Buildings: Adaptive Reuse and Cultural Memory* (New York: Routledge Press, 2020), xv.

⁷⁸ Stone, *Undoing Buildings: Adaptive Reuse and Cultural Memory*, 4.

⁷⁹ James Douglas, *Building Adaption*, 2nd ed, (Amsterdam: Butterworth-Heinemann Press, 2006), 1.

- Rehabilitation or renovation of existing buildings or structures for any uses other than the present uses.⁸⁰
- A process that changes a disused or effective item into a new item that can be used for a different purpose.⁸¹

Although these definitions have subtle differences, it is not hard to see the nature of adaptive reuse is the conversion that changes the original architectural design to suit new requirements and conditions. The term also can be used to describe improvement work such as changes to buildings for use by disabled or elderly people. Adaptive reuse may involve converting a building to undertake a change of function required by new or existing owners.⁸²

3.1.2 Why Adaptive Reuse?

With rapid urbanization, plenty of buildings become obsolete and inappropriate. Some buildings are discarded because of political and cultural reasons. Dealing with obsolete buildings can be a challenge.

Destroying obsolete and inappropriate buildings, and constructing new buildings seems a direct and effective solution. In fact, it is not an advisable option. In consideration of global warming and other environmental problems, protecting the environment is a factor that must be

⁸⁰ Fay Dolnick and Michael Davidson, *A Glossary of Zoning, Development, and Planning Terms*, (Chicago: American Planning Association Press, 1999), 28.

⁸¹ Australian Government Department of the Environment and Heritage, *Adaptive Reuse: Preserving Our Past, Building Our Future* (Canberra: Department of Environment and Heritage, 2004), 3.

⁸² Peter A. Bullen, and Peter E.D Love, "Adaptive Reuse of Heritage Buildings," *Structural Survey*, no.5 (2011): 412.

considered. Buildings are the largest source of the world's carbon emission. Of those total emissions, building operations are responsible for 28% annually, while building materials and construction are responsible for an additional 11% annually.⁸³ During the process of construction, material transportation will also produce carbon emission. Therefore, constructing new buildings puts more pressure on the current serious environmental issues.

The other reasons that why adaptive reuse is a better choice is that most buildings are resilient and sustainable.⁸⁴ The dynamic nature of occupation and ownership determines that any building can have many uses and forms throughout its life. In addition, another reason is that adaptive reuse plays a profound role in sustainable development. It is a more environmentally friendly method than redevelopment.⁸⁵ The existing structure and fabric of the building usually can be fully utilized, which also avoids unnecessary waste of material. Adaptive reuse may help to reduce the environmental and economic costs of continual urban development and expansion.⁸⁶ It is usually much cheaper to adapt an existing building than to demolish it and construct a new one. Besides, adaptive reuse also avoids wholesale demolition of buildings, which is expensive and wasteful activity. In addition, adaptive reuse helps to revitalize existing neighborhoods efficiently.

⁸³ "Why the Building Sector?" Architecture 2030, accessed by April 2022, <https://architecture2030.org/why-the-building-sector/>.

⁸⁴ Stone, *Undoing Buildings: Adaptive Reuse and Cultural Memory*, 3.

⁸⁵ Douglas, *Building Adaption*, 15.

⁸⁶ Bullen and Love, "Adaptive Reuse of Heritage Buildings," 412.

Generally, rapid urbanization, serious environmental issues, and abundant obsolete buildings motivate designers, architects, and developers to seek a solution. Compared with redevelopment, adaptive reuse is a better choice because adaptive reuse is a sustainable method.

3.1.3 Adaptive Reuse and Heritage Conservation

It goes without saying that heritage has a profound meaning to human beings and the whole world. Heritage can often refer to the idea of a monument.⁸⁷ The Convention concerning the Protection of the World Cultural and Natural Heritage adopted by the UNESCO General Conference at its seventeenth session in Paris, on 16 November 1972, states the definition of monuments very clearly:

Monuments are architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art, or science.⁸⁸

Based on the evaluation of historic, aesthetic, cultural, and scientific values, architecture can be categorized as heritage.⁸⁹ As immovable heritage, architecture is one of the most valuable components of cultural heritage, both in terms of direct material value and in relation to the wide array of possibilities of embedding extra-cultural components.⁹⁰ Historic architecture also has

⁸⁷ Ionut Dohotariu and Andrei Purcaru, "Adaptive Reuse of Heritage Ensembles and Buildings. Architectural Conversion," *Buletinul Institutului Politehnic din Iasi. Sectia 6, Constructii, Arhitectura* 66, no.2 (2022): 68.

⁸⁸ United Nations Educational, Scientific and Cultural Organization, *Basic Texts of the 1972 World Heritage Convention*, (Paris: United Nations Educational, Scientific and Cultural Organization Press, 2021), 3.

⁸⁹ Dohotariu and Purcaru, "Adaptive Reuse of Heritage Ensembles and Buildings. Architectural Conversion," 69.

⁹⁰ Dohotariu and Purcaru, "Adaptive Reuse of Heritage Ensembles and Buildings. Architectural Conversion," 68.

close connections with individuals. Historic architecture creates a sense of continuity and sense of belonging to people.⁹¹ Heritage does not just constitute the history and memory for each individual, but also for the community, nation, and even the whole world. Historic buildings provide a valuable glimpse of history and lend character to communities and societies. Therefore, historic architecture should be conserved for the future generations.

The scope of heritage conservation and the increased number and variety of listed buildings and sites make it impossible to conserve all heritage assets in a strictly restorative manner.⁹² Therefore, among the methodological approaches of heritage conservation, adaptive reuse has become increasingly important. There are several reasons that motivate the practice of adaptive reuse in heritage conservation.

The nature of adaptive reuse is conversion, which also is a regeneration of historic architecture. Adaptive reuse extends the life of historic buildings, which preserves historic architecture for future generations. In addition, usually, the adaptive reuse not only keeps most part of structure, material, and fabric, but also conserves the effort, skill, and dedication of the original constructors. In addition, adaptive reuse also helps to maintain spatial coherence by keeping the structure and materials. Spatial continuity is one of the important elements that maintains the integrity of historic architecture. Spatial continuity helps people have a sense of history and the real feeling of historic architecture. Feelings is one of the aspects of the integrity

⁹¹ Thompson Mayes, "Introduction: Why Do Old Places Matter?" *Forum Journal* 29, no.3 (2015): 7-16.

⁹² Bie Plevoets and Koenraad Van Cleempoel, *Adaptive Reuse of the Built Heritage: Concepts and Cases of an Emerging Discipline*, 1st ed, (Milton: Routledge, 2019), 1.

of historic architecture.⁹³ In addition, adaptive reuse also preserves architectural, social, cultural, and historical values.⁹⁴

Adaptive reuse both preserves the heritage and develops the urban environment at the same time. Adaptive reuse conserves the structure and exterior design of old architecture but alters the interior function. It conserves the historic architecture while also meets the need of or urban and economic development.

Adaptive reuse helps to extend the life of historic architecture and keeps the vitality of historic architecture at the same time. In addition, it preserves the historic architecture and promotes sustainable urbanization.

3.2 Adaptive Reuse in Newbury Street

In the beginning of twentieth century, commercial development began on Boylston Street and Newbury Street. The need for commerce and retail drove Newbury Street to convert from a residential area to a commercial and residential mixed-use area through adaptive reuse. In Newbury Street, plenty of residential buildings converted to residential and commercial mixed-use buildings or commercial buildings. Old buildings in Newbury Street adaptively reused their interior design to suit the new function and need rather than changing their exterior design.

⁹³ The National Register criteria recognize seven aspects of the concept of *integrity*. They are location, design, setting, materials, workmanship, feeling, and association.

⁹⁴ Bullen and Love, “Adaptive Reuse of Heritage Buildings,” 412.

3.2.1 Current Situation

Today's Newbury Street is a commercial and residential mixed-use area. Most original residential buildings on Newbury Street have been converted to commercial buildings or residential and commercial mixed-use buildings. Only few buildings still serve as solely residential buildings.

The buildings at the ends of Newbury Street are mainly commercial buildings. The east end of Newbury Street, which is near the Boston Common, has mostly luxury stores and internationally famous brand stores. The buildings on west end of Newbury Street are retail stores and chain stores. The residential and commercial mixed-use buildings are concentrated in the middle blocks of Newbury Street. In these residential and commercial mixed-use buildings, the first floors are retail, restaurants, cafes, and other commercial function stores. Many mixed-use buildings extended their basements and also use basements as commercial spaces. The upper floors continue to be used as residential space.

In terms of quantity, almost half of buildings in Newbury Street are commercial buildings. There are few solely residential buildings. The residential and commercial mixed-use buildings make up the rest. [Figure 3-1]

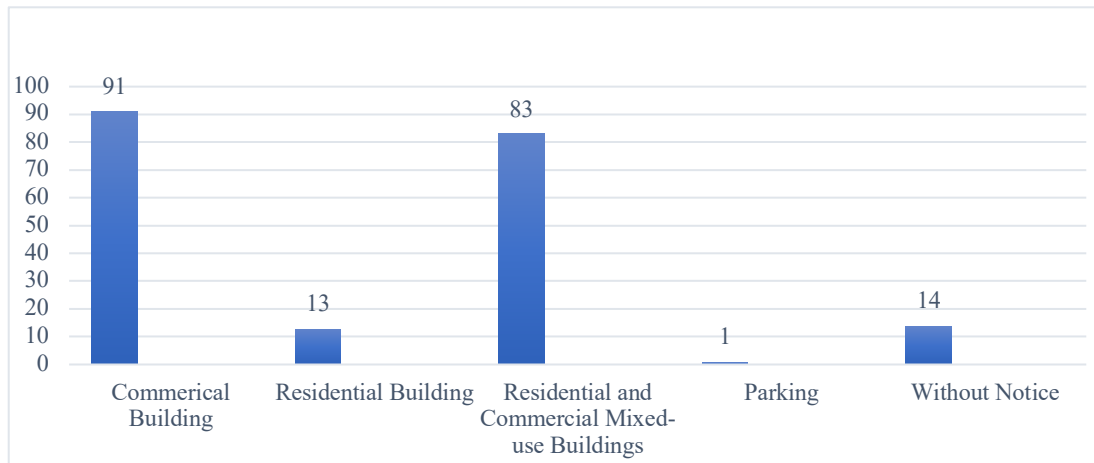


Figure 3-1 Buildings on Newbury Street Categorized by Use.

Chart by Author.

3.2.2 The Application of Adaptive Reuse in Newbury Street

The adaptive reuse of Newbury Street has a close connection with its commercial development as the adaptive reuse was caused by the commercial development on Newbury Street.

1900-1920

When the Back Bay landfilling was completed in the late 1880s, commercial development took hold. As a new wealthy neighborhood, there was a huge demand for services. In addition, the land along Boylston Street was relatively cheap and available, so that was used for mercantile purposes.⁹⁵ In the beginning of twentieth century, as a buffer zone between Boylston Street and the other residential areas in the Back Bay district, Newbury Street began to cater to wealthy

⁹⁵ Clarke G. Theodore, *Beacon Hill, Back Bay, and the Building of Boston's Golden Age* (Charleston: History Press, 2010), 104.

residents in the Back Bay district by providing upscale shopping. In 1905, the first retail store in Newbury Street opened.⁹⁶

The 1900s to 1920s was an important period as it was the first period that Newbury Street started the conversion of function and began to do adaptive reuse informally. During this period, Newbury Street began to lose its residential aspect. Many townhouses were converted to shops. By the late 1920s, Newbury Street had become a shopping destination for upper class Boston residents. At this point, it had only been decades since this street was built. Buildings in Newbury Street could not be considered as old buildings. However, the residential function of buildings in Newbury Street began to be obsolete as commercial demand increased and the original function could not satisfy the new need anymore. People did not plan the adaptive reuse consciously and it was an adventurous but successful experiment.

1920-1940

After 1920, the adaptive reuse continued on Newbury Street. Rapid development brought huge demand to Newbury Street and caused more adaptive reuse activities. If the conversions in the 1900s to 1920s were to meet the need of the wealthy residents of the Back Bay district, then the later continuous conversion was promoted by several complicated reasons. The most important reason was the development of automobiles and public transportation, which made the whole Back Bay district accessible. The accessibility of the Back Bay district brought many

⁹⁶ “Five Things You Didn’t Know about Newbury Street,” CBS BOSTON, accessed May 2022, <https://www.cbsnews.com/boston/news/5-things-you-didnt-know-about-newbury-street/>.

more people to Newbury Street and further promoted the commercial development and function conversion. During this period, Newbury Street became one of the primary commercial areas in Boston.

In the beginning of the establishment of the Back Bay district, the Back Bay was a suburban neighborhood far from the city center. The Back Bay district was hard to access because there was no convenient public transportation. To some degree, the Back Bay district was isolated from the other areas of Boston. It not only separated the Back Bay district from other areas geographically, but also separated Back Bay district sociologically. The Back Bay district only belonged to upper class and wealthy people. However, this isolation was broken because of the development of transportation. The first Model T, an automobile that launched in 1908, and the Massachusetts Bay Transportation Authority (M.B.T.A. system) both had profound impact on the future development of whole Back Bay district.⁹⁷ The Model T was designed by Henry Ford, and it was a boxlike vehicle which was easy to operate and simple to repair.⁹⁸ In addition, the price of Model T was not as high as expected. Ford even dropped the price of Model T from \$950 in 1910 to \$290 in 1924.⁹⁹ In addition, rising wages made a Model T affordable to most people. The increasing ownership of automobiles further promoted the accessibility of the whole

⁹⁷ "Transportation Revolution in the Back Bay: No More Isolation!" A Cross Section of the Back Bay accessed May 2022, http://web.mit.edu/thecity/archive/projects_2015/ledoux/template/changes.html.

⁹⁸ Kenneth T. Jackson, *Crabgrass Frontier: The Suburbanization of the United States* (New York: Oxford University Press, 1985), 160.

⁹⁹ Jackson, *Crabgrass Frontier: The Suburbanization of the United States*, 160.

Back Bay district. The opening of the Back Bay neighborhood to more people brought a huge new market to Newbury Street.

Another factor was the development of public transportation. In 1909, streetcars came to Commonwealth Avenue, which made Commonwealth Avenue develop rapidly.¹⁰⁰ Commonwealth Avenue and Newbury Street are very close. Therefore, the arrival of streetcars also made Newbury Street easier to access than before. In 1914, Copley Station, which is located in Copley Square, opened. Generally, automobiles and M.B.T.A. system were both effective and convenient transportation methods that promoted the accessibility of the whole Back Bay district greatly and laid a foundation for the further commercial development in Newbury Street.

If the development of automobiles and public transportation enabled people to be able to go to the Back Bay district easily, then how people thought of suburban areas also made people willing to go to the Back Bay district. Eastern cities were denser and compact, which was thought of as sources of illness and insecurity¹⁰¹. In the 1920s, low-density suburban development was thought of as a more advanced and elegant lifestyle. This idea drove people to swarm into the Back Bay district after the Back Bay district was not only open to wealthy people but all Bostonians. The abundant visitors brought huge market and demand.

During this period, Newbury Street was already a competitive retail and commercial area in Boston. Department stores and other downtown retailers became concerned that they might lose

¹⁰⁰ "Icons Among Us: Comm Ave."

¹⁰¹ "Los Angeles Citywide Historic Context Statement Context. Context: Residential Development and Suburbanization, 1880-1980." Los Angeles Historic Resources Survey. Survey LA, December 2020.

shoppers to Newbury Street because of lack of competitiveness.¹⁰² Compared with the downtown commercial area, Newbury Street had fewer parking prohibitions and other restrictions for wealthy automobile driving customers.¹⁰³ There were also more garages near Newbury Street than other areas.¹⁰⁴ Garages were built to store and maintain automobiles. Congested areas like downtown, high real estate prices, and existing business and traffic difficulties made the construction of garages an economic challenge.¹⁰⁵ However, constructing garages near Newbury Street was a wise economic decision because the Back Bay district was suburban, so the cost was much lower. In addition, the construction of a parking lot near Newbury Street and Boylston Street also brought convenience to automobile driving customers.¹⁰⁶

In this period, the prevalence of automobiles, development of public transportation, and the construction of automobile facilities not only opened the whole Back Bay district to the rest areas of Boston, but also brought huge demand and market to Newbury Street. Newbury Street had a larger customer base rather than just wealthy residents who lived in the Back Bay district. To meet the increasing demand caused by rapid development, more adaptive reuse happened in Newbury Street. Commercial activities and retail boomed in the Newbury Street. At this point,

¹⁰² John Christopher Spelman, "*Boston Motordom: Automobiles and the Transformation of the City, 1899-1930*" (PhD diss., Harvard University, 2014), 151.

¹⁰³ Spelman, "*Boston Motordom: Automobiles and the Transformation of the City, 1899-1930*", 151.

¹⁰⁴ Spelman, "*Boston Motordom: Automobiles and the Transformation of the City, 1899-1930*", 78.

¹⁰⁵ Spelman, "*Boston Motordom: Automobiles and the Transformation of the City, 1899-1930*", 78.

¹⁰⁶ Spelman, "*Boston Motordom: Automobiles and the Transformation of the City, 1899-1930*", 151.

residential function was not the main function of Newbury Street anymore. By 1937, single family homes decreased starkly, and shops, hotels, and apartments increased quickly.¹⁰⁷

1970s-1980s

The overall transition from residential area to residential and commercial mixed-use continued through 1940s and 1950s. After the second World War, both population and investment began to flow out of Boston into its suburbs, a trend seen in nearly every American urban center during this era.¹⁰⁸

The customer base expanded again in 1970. Boston attracted abundant students and scholars due to its rich education and academic resources. The retail market was partially fueled by the large resident student population.¹⁰⁹ Boston's rich history largely from its role as a critical site in the Revolutionary War and the strong role it has played in the nation's cultural development from colonial times brought increased tourism to the Back Bay district, particularly linked to the bicentennial celebrations of 1976, which also expanded the commercial demand. There are lots of historic sites near Newbury Street, such as Trinity Church, Old South Church, and the Boston Public Library. It was no surprise that tourism industry also brought visitors and demands to Newbury Street. Therefore, entering the 1970s, the retail trade economy continued to do well in

¹⁰⁷ "Transportation Revolution in the Back Bay: No More Isolation!"

¹⁰⁸ City of Boston, *History of Boston's Economy: Growth and Transition, 1970-1998*, Report #529, Boston: City of Boston Press, 1999, 4.

¹⁰⁹ City of Boston, *History of Boston's Economy: Growth and Transition, 1970-1998*, 10.

Boston and Newbury Street remained Boston's premier retail market.¹¹⁰ There were a lot of adaptive reuse activities in Newbury Street, which led the Back Bay Architectural District to draft and adopt the *Back Bay Architectural District Commercial Guidelines for Exterior Design* in the 1980s.

What deserves to be mentioned is that the adaptive reuse activities in Newbury Street in 1970s did not only include high-level retails and shops, but also many art galleries, music instrument stores, and other fashionable retailers. Shops in Newbury Street had maintained its high-level until 1970s. Since 1970s, Newbury Street began to be thought as a trendy commercial district.

1990s-now

Newbury Street already transformed into a residential and commercial mixed-use area and is one of the most attractive streets in Boston. In this period, Newbury Street did not change much. During the pandemic period, Newbury Street thrived, especially when the downtown shopping area is empty due to COVID and the lack of office workers.

3.2.3 How did Adaptive Reuse Happen on Newbury Street?

Generally, adaptive reuse on Newbury Street alters the function of building to meet new needs through altering the interior design and limited exterior design changes. Although during

¹¹⁰ City of Boston, *History of Boston's Economy: Growth and Transition, 1970-1998*, 10.

the adaptive reuse activities in the beginning of twentieth century, buildings in the two ends of Newbury Street did change some exterior design, most historic buildings were kept in good condition. People were careful in their adaptive reuse projects on Newbury Street, especially after the establishment of the Back Bay Architectural District and the Back Bay Architectural Commission in 1966. This section will introduce several strategies Bostonians used to convert Newbury Street into a residential and commercial mixed-use area.

The first method is to completely change the interior design to meet the new function of building but kept the exterior design intact. In the middle of Newbury Street, most buildings took this approach. This method develops the new function and preserves the original buildings' exterior design and structure at the same time. For example, the 109 Newbury Street adopted this adaptive reuse method.



Figure 3-2 109 Newbury Street, Back Bay (1942).

“230 Clarendon (109 Newbury),” Back Bay House, accessed June 14, 2022,
<https://backbayhouses.org/230-clarendon-109-newbury/>.

109 Newbury Street was a classic Victorian brick row house built in 1871 and designed by famous architect Charles Amos Cummings.¹¹¹ [Figure 3-2] 109 Newbury Street was a residential building, and Charles Amos Cummings lived in this house with his wife until his death in 1905. Then, his wife remained in the 109 Newbury Street until 1922.¹¹² In 1923, 109 Newbury Street was sold to Mary Bryant Brandeggee and by 1925, it had come a retail store and commercial office building rather than a residential building.¹¹³ It remains a commercial building.¹¹⁴ [Figure 3-3]

¹¹¹ “Architecture History: Charles Amos Cummings House,” Newbury Street Boston, accessed May 2022, <https://www.newburystboston.com/architecture-history-charles-amos-cummings-house/>.

¹¹² “230 Clarendon (109 Newbury),” Back Bay Houses, accessed May 2022, <https://backbayhouses.org/230-clarendon-109-newbury/>.

¹¹³ “230 Clarendon (109 Newbury).”

¹¹⁴ “Architecture History: Charles Amos Cummings House.”



Figure 3-3 109 Newbury Street, Back Bay (2022).

“Architectural History: Charles Amos Cummings House,” Newbury Street, accessed Jun 14, 2022,
<https://www.newburystboston.com/architecture-history-charles-amos-cummings-house/>.

The second adaptive reuse method not only changes the interior design to meet the new need, but also alters the front façade to add more commercial characteristics. This method mainly appeared in the beginning of twentieth century, and it was often used to adaptively reuse buildings in the two ends of Newbury Street. Some buildings’ façades were rebuilt with

exaggerated neoclassical details.¹¹⁵ Compared with nineteenth century, the facades of buildings in the two ends of Newbury Street changed a lot. Admittedly, rebuilding facades and adding commercial characteristics did cater to the need of developing commercial and retail stores. However, it is not a recommended choice to preserve the historic architecture. In addition, it also harms the architectural harmony of Newbury Street. When you walk on Newbury Street from the east end to the west end, you can perceive that the buildings in the middle of Newbury Street are different from the two ends of Newbury Street and express the nineteenth century's brownstone architecture. However, considering that most historic buildings on Newbury Street are kept, the scale of buildings that façade have been changed seems acceptable.

Compared with changing the façade, the more common method was to convert the first floor to retail shops and commercial space while keep the upper residential spaces, which means this method convert residential building to residential and commercial mixed-use buildings. This method also was widely used in the adaptive reuse activities in the 1920s to 1940s. It was mainly used in the middle of Newbury Street. It was this more common approach that preserved most exterior architectural designs in Newbury Street, giving today's people a glimpse of nineteenth century brownstone architecture. The biggest advantage of this method is to keep the residential function of Newbury Street. Newbury Street was design for upper class and wealthy people. The whole adaptive reuse and conversion process in Newbury Street was caused by the commercial and retail demand of wealthy residents who lived in Newbury Street. In addition, keeping the

¹¹⁵ Anthony Mitchell Sammarco, *Boston's Back Bay* (New Hampshire: Arcadia Publishing Press, 1997), 127.

original function is also helpful to keep the integrity of Newbury Street. From this perspective, converting a residential building into a residential and commercial building seems a better adaptive reuse method.

The fourth method is similar to the previous one. It altered the building into a residential and commercial mixed-use building as well. However, the two methods have distinguishable difference. The previous method alters only the first floor as a commercial area while the upper space still works as residential space. The fourth method extends the basement and uses only the basement as commercial space while the remaining building is kept as residential space. This method appeared a lot in the 1970s. [Figure 3-4]



Figure 3-4 Construction of Basement Commercial Space, Newbury Street (1970s).

“Newbury Street Now and Then,” Boston.com, accessed June 14, 2022,
http://archive.boston.com/business/gallery/newbury_street_now_and_then?pg=11.

Compared with previous methods, this one was more complicated and needed more restrictions, which is why the Commercial Guidelines were adopted in the 1980s.¹¹⁶ Mostly the effort was to dig out the front gardens to create basement space for commercial use.¹¹⁷ These basement spaces usually became retail, restaurants, and beauty shops. Buildings that dug out the basement for more commercial space are concentrated on middle of Newbury Street as well.

[Figure 3-5]

¹¹⁶ Susan D. Prindle, director of Neighborhood Association of Back Bay, interviewed by author, May 2022.

¹¹⁷ Susan D. Prindle, director of Neighborhood Association of Back Bay, interviewed by author, May 2022.

by persons with disabilities.¹¹⁸ The space of entrance of basement usually was very small and the entrance was almost always stairs. It was very difficult for disabled people and old people. Later, these basement shops got a waiver to provide alley access.¹¹⁹

3.3 Adaptive Reuse Case Study --- 252 Newbury Street

252 Newbury Street has been a residential and commercial mixed-use building since 1985.¹²⁰ Between 2001-2002, it was converted to apartment building temporarily. In 2003, it went back to residential and commercial mixed-use building and remains so.¹²¹ The adaptive reuse project was intended to redesign the storefront and entry way of basement to improve visibility of storefront and enforce the commercial characteristics.

Original Condition

252 Newbury Street is a classic brown brick row house in the Newbury Street and its exterior architectural design is kept in well condition. The bottom three floor are used for commercial purpose.¹²² The upper two floor are apartment units and used for Air BNB units. The basement was dug out as commercial space. There was a little front garden. The entrance of

¹¹⁸ "Architectural Access Board (AAB)," Massachusetts Government, accessed in May 2022, <https://www.mass.gov/orgs/architectural-access-board>.

¹¹⁹ Susan D. Prindle, director of Neighborhood Association of Back Bay, interviewed by author, May 2022.

¹²⁰ "252 Newbury Street Accessor Report," City of Boston, accessed May 2022, <https://www.cityofboston.gov/assessing/search/?pid=0503157000>.

¹²¹ "252 Newbury Street Accessor Report."

¹²² "252 Newbury Street," Google Map, accessed May 2022.

basement was on the left side of front garden. As many other basement stores in Newbury Street, space of entrance was very small. The stairs leading to the basement were winding, which was not very convenient for customers. There was fencing around the front garden, which limited the visibility of the basement. Pedestrians cannot see the basement store very clearly. [Figure 3-6]



Figure 3-6 Original Condition of 252 Newbury Street (2020).

Back Bay Architectural Commission, 252 Newbury Street Application of Design Approval, 2020

Process of Design Review

First Design Draft

The main purpose of this project was to enhance the retailer presence on Newbury Street for both the first-floor retail space and the basement retail space. There is a brief outline of the proposed project:

- Introduce a new storefront bump out to enhance the retailer presence on Newbury Street and to create a retail presence for the lower-level retail space. Glaze to be clear low E glass so existing building architecture will remain visible from the sidewalk through the new storefront bump out.
- Bump out material will be composite metal panel system to match in color the adjacent limestone detailing at 254 Newbury Street.
- New storefront glazing will be aluminum frames painted in a Black Kynar finish to match the windows in the building. Extend bump out to the lower-level retail which currently as a single door and 1/4 windows with no street visibility.
- Redesign the entryway and dig out to the lower-level retailer: remove existing garden and fencing and replace with new wrought iron fencing; introduce a center stairway from the sidewalk to the new lower level retail façade; create new planters to flank the sides of the new stairway to the lower level.¹²³

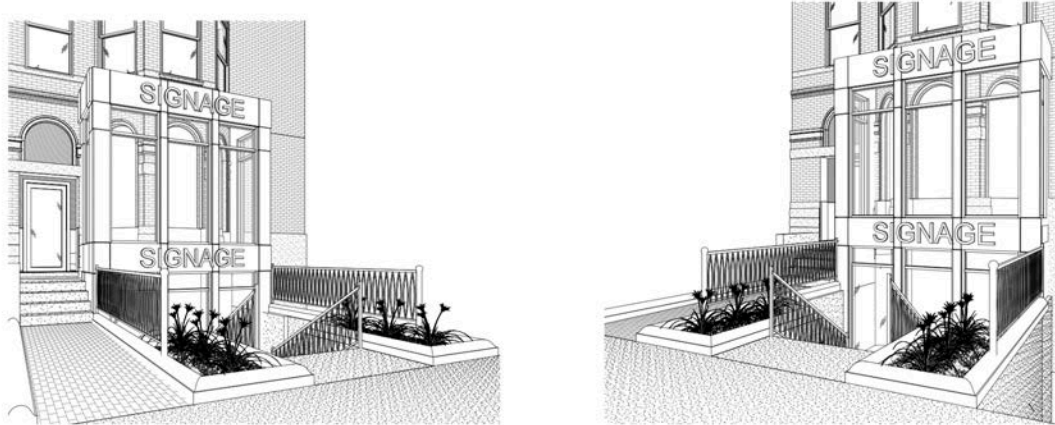


Figure 3-7 First Design Draft of 252 Newbury Street (2020).

Back Bay Architectural Commission, 252 Newbury Street Application of Design Approval, 2020.

The biggest controversy was the box design on the outside of the masonry wall. [Figure 3-7] This design aroused the disagreement of Back Bay Architectural Commission during the design

¹²³ Thomas Trykowski, 252 Newbury Street Application of Design Approval, 2020.

review. Architect Thomas Trykowski thought the box design would be helpful to improve the commercial visibility. He also believed that the box design could be altered or removed without any harm to the architecture exterior. However, members of Back Bay Architectural Commission still insisted that buildings on Newbury Street need more traditional details while the box design would be distracting and affect the original masonry wall. The commercial tenants strongly pushed for the box design. However, committee members underscored the importance of preserving the historic streetscape under the need of improving commercial viability. In the decision of the design review, the use of box structure is jarring and shows a lack of sympathy for the existing streetscape and architecture. In addition, this design also harms the symmetry of block. The box design would impact all of the buildings on this block.

Considering that nineteenth century brown brick architecture is one of reason that why Newbury Street is attractive, it is important to protect the traditional details and historic streetscape. The application was denied.

Second Design Draft

In the revised design application of 252 Newbury Street, the proposed goal was unchanged, but the design was altered. The scope of work was stated again:

- Introduce a new storefront design to enhance the retailer's presence on the Newbury Street first floor and to create a stronger retail presence for the lower level retail space.
- Remove of existing storefront material and replace it with new cast stone façade elements coated to match the remaining coated architectural details on the building.
- New storefront glazing will be aluminum frames painted in a Black Kynar finish.
- Extend storefront design to the lower level retail which currently as a single door and 1/4 windows with no street visibility.

- Re-design the entryway and dig out to the lower level retailer: remove existing garden and fencing, and replace with new wrought iron fencing; introduce a center stairway from the sidewalk to the new lower level iron fencing; create new planters to flank the sides of the new stairway to the lower level.¹²⁴

In the hearing on 21 January 2021, the revised application was approved. The biggest difference between the first draft and the second draft is the shape of the storefront window. The architect revised the design of storefront window and changed it into a bay shape.¹²⁵ The circle wall of the basement retail space also was changed into a bay shape. The new cast stone curb used new wrought iron to match the brownstone of the façade of the building. The existing steps to the lower level retail space were removed and the existing front garden area was removed as well. Brown stone cladding at side walls appropriated the architectural style and original material of the building. New steps used brown stone as well and the new steps with integral lighting. The entrance kept the design of first draft and the new entrance was at the facade center of basement retail. Although previous front garden was removed, there are two planters at the two sides of new entrance, which makes the entrance look lively. [Figure 3-8]

¹²⁴ Thomas Trykowski, 252 Newbury Street Application of Design Approval, 2021.

¹²⁵ According to Oxford Language, Bay Window is a window built to project outward from an outside wall.

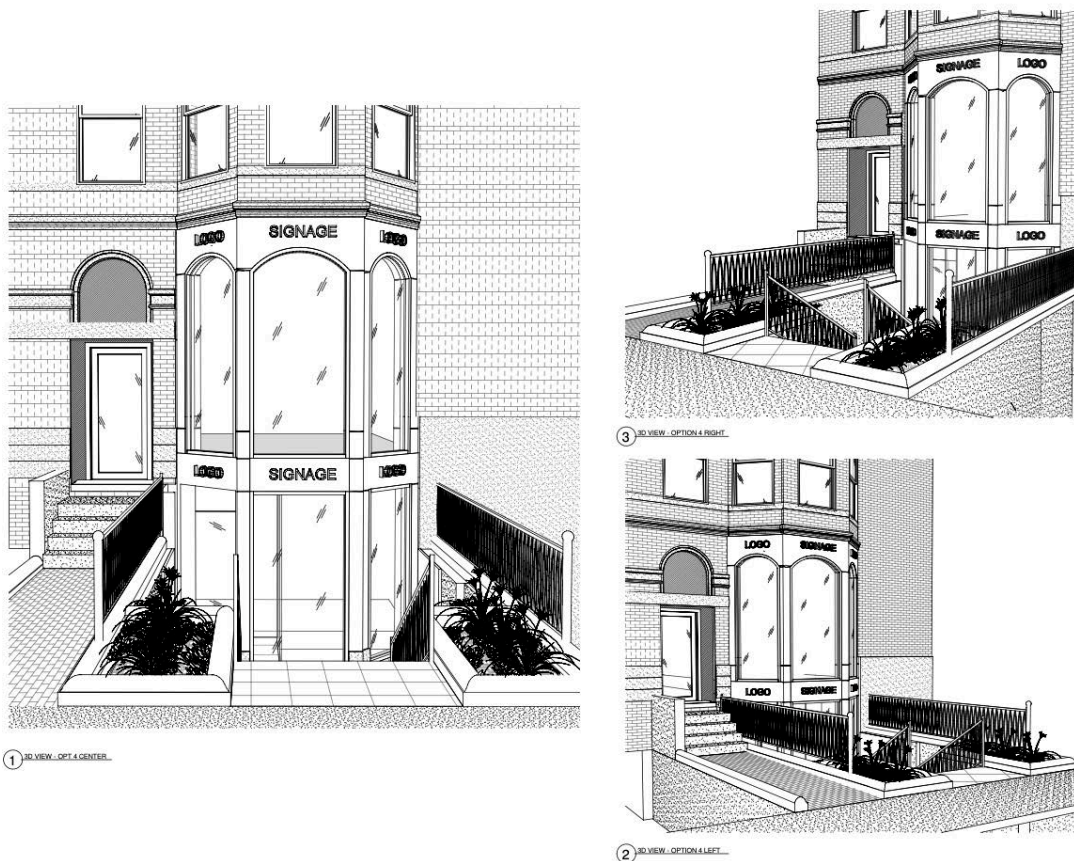


Figure 3-8 Second Design Draft of 252 Newbury Street

Back Bay Architectural Commission, 252 Newbury Street Application of Design Approval, 2021.

Outcome

The bay shape and material of the bay window appropriate with the architectural style of 252 Newbury Street was kept and it is in harmony with the surrounding environment of Newbury Street. At the same time, it also enhances the retail presence of 252 Newbury Street. The redesign of front garden and the entrance of basement retail space promote the visibility of lower floor retail space. The simple design of the entrance is convenient for visitors and customers, which improved the competitiveness of the basement retail space indirectly as well.

Generally, this project respected the original architectural style of this building and further enhanced the commercial function of 252 Newbury Street, which made the building better suited for commercial use.

Conclusion

Facing the dilemma of preservation and development, many urban historic districts lost their direction. Newbury Street provides an inspirational solution for urban planners and governs to refer. With more and more people begin to realize the importance of heritage and pay attention to preservation, adaptive reuse does a feasible method. Today's Newbury Street is one of the most attractive and prominent streets in Boston, which is not only credited to the trendy and luxury stores, but also these well-preserved architectures that present the nineteenth century architecture to visitors. For now, Newbury Street does use adaptive reuse to get a subtle balance between preservation and development. However, there still are some limitations. For example, the basement space is unfriendly to disable people. In addition, although the original residential function is kept, the commercial function is far heavier than residential function in Newbury Street. These commercial activities brought several issues to residents in Newbury Street and Chapter 4 will further discuss these issues.

Chapter 4: Influences and Challenges

Introduction

During the past several decades, the City of Boston and the Back Bay neighborhood have been committed to balancing the preservation of heritage and need for economic and urban development. Commerce and business continue to boom on Boylston Street. People enjoy the retail, luxury stores, and galleries in Newbury Street. This area still is considered as one of the best preserved nineteenth century urban designs in the United States. The preservation of the Back Bay Architectural District, especially Newbury Street has had a profound influence on the heritage preservation in City of Boston. The preservation practice of Back Bay Architectural District is affected by Beacon Hill Architectural District and Beacon Hill Architecture Commission profoundly, but also affected the preservation of historic commercial districts in the city through the Main Street Program in Boston.

However, this area also faces huge challenges. As mentioned before, the whole Back Bay district was constructed on land created by a landfilling program, which means that the foundation of most buildings in the Back Bay district are below the water table. This unique construction method of foundation brings unavoidable concerns about the stability and safety of buildings. Also, although the original residential function of Newbury Street is kept, continued commercial development in this area puts pressure on the living environment and lowers the life quality of people who live on Newbury Street.

4.1 Profound Influences

Before the establishment of the Back Bay Architectural District and the Back Bay Architectural Commission, Bostonians already had strong awareness of protecting history and heritage of the city. The public and community participated in preservation. The City of Boston established the Beacon Hill Architectural District and Beacon Hill Architectural Commission in 1955 to manage the exterior alterations of buildings in the Beacon Hill Architectural District. When the Back Bay met the challenge of preserving buildings in 1965, this district chose to imitate previous practical experience of the Beacon Hill Architectural District without hesitation. After the Back Bay Architectural District was established, the City of Boston established several architectural districts like Aberdeen Architectural Conservation District in 2001, the Back Bay Road / Back Bay West Area Architectural Conservation District in 1979, and the Mission Hill Triangle Architectural Conservation District in 1985.¹²⁶ These architectural districts all follow the Beacon Hill Architectural District and the Back Bay Architectural District precedents and use the same method to manage exterior alteration of buildings. They play an important role in the preservation of history and heritage of City of Boston because it is a good example of preserving a nineteenth century neighborhood in Boston and it has developed as one of the most attractive neighborhoods in Boston. It also strengthens public awareness of preservation one more time.

¹²⁶ “Historic Districts,” City of Boston,
<https://www.boston.gov/departments/landmarks-commission#historic-districts>.

People also can see similarities between the successful adaptive reuse of Newbury Street and the Boston Main Street Program, which is an important preservation and development program in Boston.

Boston Main Street started in 1983, when the City Councilor Thomas M. Menino brought Main Street to Roslindale.¹²⁷ In 1995, Boston cooperated with the National Trust for Historic Preservation and started the first citywide, multi-district Main Street Program.¹²⁸ The Main Street program is intended to revitalize historic commercial districts, build vibrant neighborhoods, and thriving economies.¹²⁹ The core of the Main Street program is local economic redevelopment and historic preservation. The nature of the Main Street program shares many common features with Newbury Street. Newbury Street is a relatively successful win-win example of balancing preservation and development. Although the development of Newbury Street is based on historic residential district while the development of Main Street Program is based on historic commercial district, they both emphasize the historic preservation and economic development at the same time. Although the Back Bay Architectural District and the Main Street program use different methods, these different methods all serve the same aim, which is preserving and revitalizing historic districts.

¹²⁷ “Boston Main Streets,” City of Boston, accessed in May 2022, <https://www.boston.gov/departments/economic-development/boston-main-streets>.

¹²⁸ Ryan Rinn, “*Opportunities and Challenges of Citywide Main Street Programs: Examining the Urban Environment, Coordinating Structures and Political Realities in the Application of the Four Point Approach*” (Master diss., Virginia Commonwealth University, 2012), 2.

¹²⁹ “Who We Are,” Main Street America, accessed in May 2022, <https://www.mainstreet.org/aboutus>.

Admittedly, the Main Street program was not inspired by Newbury Street, and it was developed by National Trust for Historic Preservation originally in mid-1970s. Then, Thomas M. Menino brought Main Street Program to Roslindale, which was the first time that Main Street Program came to Boston. However, it is undeniable that Newbury Street promoted the connection between Boston and Main Street Program. Newbury Street was already successful before 1985. In the 1970s, retail and commercial uses bloomed on Newbury Street.¹³⁰ At the same time, the old buildings' exterior design and structures were preserved through adaptive reuse. It proved that the concept of simultaneous preservation and development is feasible, and it also is a win-win success. At the same time, the main goal and essence of the Main Street program, preservation and development, was consistent with Boston's previous successful practical experience. Therefore, it is reasonable to say that the success of Newbury Street showed the potential success of the Main Street program.

4.2 Challenges

4.2.1 Bad Living Environment

The Back Bay district was a residential area for wealthy and upper-middle class Bostonians. Although now Newbury Street still has substantial apartments and private condos, the surrounding living environment is not like the original design anymore. The current living

¹³⁰ Susan D. Prindle, director of Neighborhood Association of Back Bay, interviewed by author, April 2022.

environment is unhygienic and noisy. In addition, there is huge traffic pressure on Newbury Street.

4.2.1.1 Terrible Traffic Condition

As two of the most prominent streets in Boston, the traffic situation on Boylston Street and Newbury Street is terrible, especially on Newbury Street. The current road cannot satisfy the large number of visitors. In addition to Newbury Street being overloaded, the surrounding roads are also very fully loaded.¹³¹ If you are driving on Commonwealth Avenue and want to turn right onto Newbury Street, you will be stressed because of the horrible traffic condition. There are two main reasons that results in the traffic pressure. [Figure 4-1]



Figure 4-1 Traffic situation in Newbury Street.

Taken by Author.

¹³¹ Wenqi Yang, “*Boston Back Bay Historic District Preservation Research*” (Master diss., Xi’an University of Architecture and Technology, 2017), 43.

The first reason is the unbalanced relationship between limited road space and the large number of visitors. Newbury Street is not very broad. The two sides of Newbury Street are both street parking, which means the space for automobiles to drive is limited. Besides, Newbury Street is one-way driving, which makes the traffic situation worse. Except visitor's private automobiles, plenty of delivery trucks visit Newbury Street every day because there are substantial retail stores and restaurants on Newbury Street. These trucks stop in Newbury Street to drop off deliveries. Unlike private automobiles, delivery trucks are bigger and occupy more space. Besides, there is no loading zone for delivery trucks to drop off deliveries. In this situation, the limited space does not allow other automobiles to pass, and cars are forced to wait. It usually causes a traffic jam. Therefore, these delivery trucks lower the traffic efficiency and worsen the traffic condition.

Additionally, there are only three public parking lots near Newbury Street. Three parking lots cannot meet the needs of visitors. The public parking lots are not convenient because people must walk several minutes to arrive on Newbury Street. The parking fees are much more expensive than street parking. Usually, visitors try to find street parking on Newbury Street first. Visitors have to drive through Newbury Street first to see if there is an available street parking. It also increases the traffic pressure in Newbury Street. What worth mentioning is that on Sunday, it is free to park on Newbury Street, which makes more people look for street parking. It also one of the reasons that why the traffic is so terrible in Newbury Street.

4.2.1.2 Unsanitary Living Environment

The retail development and commercial development bring unavoidable negative influences on the living environment on Newbury Street. The two main factors are noise and sanitation issues.¹³²

On Newbury Street, there are plenty of residential and commercial mixed-use buildings. The retail is usually on the first floor while the residential areas are usually on the upper floor. Besides, there also are many restaurants, bars, and cafes on the first floor. Among these restaurants, many of them also have outdoor dining areas. When people dine and talk, there is lots of noise. In addition, there are plenty of pedestrians and automobiles on Newbury Street. They are all the source of noise. Generally, the living environment in Newbury Street is noisy rather than quiet, especially on the weekend, when the number of visitors increase.

Another environmental issue is sanitation. As mentioned before, there are residential apartments and private condos in Newbury Street. Among these buildings, some entrances are in the front elevation while some entrances are in the rear elevations. There is an alley between Newbury Street and Boylston Street, which means that the rear elevation of Newbury Street faces the rear elevation of Boylston Street. The alley is very narrow, and it is usually used as private parking. What makes the living environment unsanitary is that many restaurants and bars in Boylston Street put their food trash cans in the alley. These food trash cans are very close to

¹³² Susan D. Prindle, director of Neighborhood Association of Back Bay, interviewed by author, April 2022.

residential area and private parking, bringing both unpleasant smells and vermin. The ground is also very dirty. [Figure 4-2]



Figure 4-2 Trash bins in residential area in Newbury Street.

Taken by Author.

Maintaining a good living environment is not just for the people who are living on the Newbury Street now, but also for the integrity of Newbury Street. Although these food trash cans are put in the rear elevation and people cannot see it from the front elevation, it still harms the whole landscape and environment of Newbury Street. The planner and managers should not just keep the residential function of Newbury Street, but also consider how to balance the living environment and restaurants and retail development.

4.2.2 Foundation Issues

As mentioned before, the whole Back Bay neighborhood was constructed on the land that created by a landfill project in the nineteenth century. How to support heavy brick and stone

buildings on the soft, filled land is a big engineering challenge. In the nineteenth century, the period of construction of the Back Bay neighborhood, the solution was to drive untreated wood piles into the ground through the landfill sediment and underlying organic soils to reach firmer layers of sand and gravel or the oxidized zone of blue clay below the fill.¹³³ The piles were tree trunks with all the branches removed and their tops cut off. Most of the piles are spruce trees measuring about twelve inches in diameter at the butt end and between twenty and forty feet long.¹³⁴ These piles are below the groundwater level to prevent rotting. The main function of the piles is to prevent buildings from sinking, tipping, or cracking.¹³⁵ Usually, two row houses in the Back Bay are supported by about 270 piles under the foundation walls.¹³⁶ Large and heavy buildings in the Back Bay like churches and other institution usually required more piles. For example, the Trinity Church in Copley Square is a massive structure with a large central tower, which weighed an estimated 9,500 tons. The tower alone required about 2,800 piles and the entire Trinity Church has over 4,500 piles under its foundation.¹³⁷ Generally, these piles play an important role in the construction of the Back Bay neighborhood because they stabilize buildings and protect the buildings from sinking, tipping, and cracking. They made the construction of

¹³³ William A. Newman and Wilfred E. Holton, *Boston's Back Bay: The Story of America's Greatest Nineteenth Century Landfill Project*, (Boston: Northeastern University Press, 2006), 164.

¹³⁴ Newman and Holton, *Boston's Back Bay: The Story of America's Greatest Nineteenth Century Landfill Project*, 165.

¹³⁵ Newman and Holton, *Boston's Back Bay: The Story of America's Greatest Nineteenth Century Landfill Project*, 165.

¹³⁶ George P. Baker, *The Formation of the New England Railroad System*, (Cambridge: Harvard University Press, 1937), 45.

¹³⁷ Newman and Holton, *Boston's Back Bay: The Story of America's Greatest Nineteenth Century Landfill Project*, 167.

buildings on the land made by landfill possible. Therefore, it is reasonable to conclude that these piles are one of the decisive factors that affect the life and future of the Back Bay neighborhood.

Now, the condition of the piles is a serious concern.

The untreated wooden piles behave satisfactorily when they are completely below the water. Once these piles are exposed to air, they rot and endanger the stability of the foundations and buildings. The main reason the piles are exposed to air is the drop of groundwater level.

There are natural factors and human factors that result in the drop of groundwater level. The main natural factor is drought. Usually, continued drought raises concerns about the building foundations in the Back Bay.¹³⁸ The main human factor is building construction urbanization.

The groundwater level can drop due to underground infrastructure like tunnels, pipes, and basements.¹³⁹ In addition, leaks also result in the drop of the groundwater level.¹⁴⁰ In the Back Bay, lower groundwater level results primarily from leakage into sewers, drains through underpasses, building foundations, and other structures.¹⁴¹ In addition, the groundwater level also drops temporarily due to pumping from excavations to facilitate construction.¹⁴²

¹³⁸ Fred Thys, “Continued Drought Spells Concern about Building Foundations in Back Bay,” *WBUR*, October 31, 2016, <https://www.wbur.org/morningedition/2016/10/31/drought-back-bay>.

¹³⁹ Amanda Stoll, “Underneath Boston: A City Built on Wood Piles Preserved by Groundwater,” last modified September 27, 2018, <https://northendwaterfront.com/2018/09/underneath-boston-a-city-built-on-wood-piles-preserved-by-groundwater/>.

¹⁴⁰ Stoll, “Underneath Boston: A City Built on Wood Piles Preserved by Groundwater.”

¹⁴¹ Newman and Holton, *Boston’s Back Bay: The Story of America’s Greatest Nineteenth Century Landfill Project*, 172.

¹⁴² Newman and Holton, *Boston’s Back Bay: The Story of America’s Greatest Nineteenth Century Landfill Project*, 172.

If the groundwater level drops below the tops of the piles, piles may be exposed to air and conditions may be favorable for fungus growth and insect attack. Once started, the fungi will slowly and steadily work through the wood cell structure and cause the wood to progressively weaken, eventually to the point where there is not enough sound wood left to support building loads.¹⁴³ Wood borer grubs, termites, and other insects may attack the exposed wood.¹⁴⁴ Fungus and insects both promote the rot of piles. Besides, the butts of piles are surrounded by sand, gravel, ashes, and cinders. These materials are more like to rot than impervious soils and they may promote the rot of piles.¹⁴⁵ It is not hard to see that these untreated wood piles are very vulnerable when groundwater level drops.

In the past hundred years, City of Boston has periodically experienced the problem of rising and falling of groundwater level and deterioration of untreated timber piles.¹⁴⁶ Since the 1930s, foundation damage in the Back Bay has been recorded, and Boylston Street, Newbury Street, and Commonwealth Avenue are not exceptions.¹⁴⁷ Since the 1930s, the structural integrity of older buildings in the Back Bay has been in jeopardy. It already has been a concern for a long time.

The situation of piles and groundwater in water is recorded:

¹⁴³ American Society for Engineering Education, *AC 2008-1977: The Problem of Groundwater and Wood Piles in Boston, an Unending Need for Vigilant Surveillance*, James Lambrechts, https://www.bostongroundwater.org/uploads/2/0/5/1/20517842/ac2008full1977_1.pdf.

¹⁴⁴ Newman and Holton, *Boston's Back Bay: The Story of America's Greatest Nineteenth Century Landfill Project*, 171.

¹⁴⁵ Newman and Holton, *Boston's Back Bay: The Story of America's Greatest Nineteenth Century Landfill Project*, 171.

¹⁴⁶ Newman and Holton, *Boston's Back Bay: The Story of America's Greatest Nineteenth Century Landfill Project*, 171.

¹⁴⁷ "Groundwater," Neighborhood Association of the Back Bay, accessed May 2022, <https://www.nabbonline.org/committees/groundwater/>.

The most recent well readings indicate that groundwater levels in 146 of the 571 wells were below five feet. This alarming statistic indicates that, within the monitoring area, roughly one fourth of wood piles are exposed to air.¹⁴⁸

The damage caused to the piles is irreversible. In addition, it is difficult and expensive to repair or replace wood piles. Although more and more citizens and organizations realize the importance of wood piles and have begun to take action, the condition of the piles still is critical. The City of Boston established the Boston Groundwater Trust to monitor groundwater levels in areas of the city where foundations are threatened by low groundwater level in 1986.¹⁴⁹ How to protect building foundation and old buildings in the Back Bay neighborhood is a serious issue that people need to solve with no time to delay because Boston will always be vulnerable to groundwater related problems.¹⁵⁰

Conclusion

Unquestionably, the study area, especially Newbury Street, is a good example of balancing historic preservation and economic development. It has a profound influence in preservation in Boston. However, there also are some challenges that this district needs to solve without any delay. Considering the unique construction method, the stability and safety of foundation of most buildings are one of these urgent issues. Although this area does keep the original residential function, the commercial developments bring unavoidable issues to the living environment.

¹⁴⁸ Tamar Shoham, “*Groundwater Decline and the Preservation of Property in Boston*,” (Master diss., Massachusetts Institute of Technology, 2006), 16.

¹⁴⁹ “Overview,” Boston Groundwater Trust, accessed May 2022, <https://www.bostongroundwater.org/overview.html>.

¹⁵⁰ “Groundwater.”

Conclusion

Facing the rapid society development and the huge demand of urbanization development and commercial development, Boylston Street, Newbury Street, and Commonwealth Avenue provide an inspirational strategy. Boylston Street completely converted to a commercial street while Commonwealth Avenue is still a residential area for upper class and wealthy people. Newbury Street is a residential and commercial mixed-use area, which acts like a buffer between Boylston Street and Commonwealth Avenue. This area both develops the economy and preserves old buildings at the same time.

From a preservation perspective, the City of Boston established the Back Bay Architectural District and Back Bay Architectural Commission to preserve the architecture of the Back Bay Architectural District. All the alterations, new construction, or demolition of the exterior design need to be reviewed by the Back Bay Architectural Commission before construction, which is called design review. The general standard is that all the alterations, new construction, or demolition of the exterior should be appropriate to the original architectural style and surrounding landscape. The Back Bay Architectural Commission and design review play an important role in preserving the Back Bay Architectural District and they give people a window into nineteenth century architecture and well-preserved street planning.

This area has also changed to accommodate the needs of commercial and economic development. Boylston Street converted into a commercial area to satisfy Bostonian's demand for commerce. More noteworthy is that Newbury Street is adaptively reused as a residential and commercial mixed-use area. On Newbury Street, most buildings' exterior designs are well-

preserved. However, the interior design is altered to meet the needs of new functions. The first floor and extended basement spaces work as commercial space while the upper space still works as residential units. Some residential buildings are completely adaptive reused as commercial buildings as well. Today's Newbury Street is one of the trendiest streets in Boston. There are abundant luxury stores, retail, and art galleries in Newbury Street. Additionally, there are also luxury apartments and residential units on Newbury Street. The well-preserved architecture is one of the reasons that attracts thousands of visitors and tourists to visit Newbury Street every year. The adaptive reuse is a win-win strategy to balance the need of development and preservation.

As one of the oldest cities in the United States, Boston has long history of preserving heritage. Therefore, it is not a surprise to find that this city provides this inspirational practical experience for planners, developers, and scholars to refer. However, this area also is facing unprecedented challenges. These challenges also are worth considering seriously and learn from it. The commercial development in Newbury Street and Boylston Street brings huge pressure on the living environment and affect quality of life for residents who live on Newbury Street and Commonwealth Avenue.

Newbury Street can also serve as a good example for other cities to study. Well-preserved historic architecture is one of reasons that why a block can be attractive. Establishing a policy to guide how planners, owners, and officials treat historic architecture is an effective method to preserve the architecture and the block. Admittedly, development is an unavoidable trend now and in the future. However, demolishing old architecture and reconstructing replicas is not

necessary. Adaptive reuse provides a better solution while and the example of Newbury Street proves that it is a feasible strategy.

Today's world goes through rapid technological, economic, and social development. More and more old places are becoming obsolete, and they cannot satisfy the new need. How to deal with these old places and how to balance preservation and development is a serious issue.

Admittedly, every city has different zoning and planning policy and standard, western countries have already gained rich practical experience in the past decades while they also met challenges. These valuable experiences can inspire other countries, regions, and cities to treat preservation and development from a fresh perspective.

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