

# **HISTORIC PRESERVATION IN BOSTON: AN ASSESSMENT OF PETITIONED LANDMARKS**

## **An Interactive Qualifying Project**

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## **ABSTRACT**

This project assessed all sites petitioned for landmark designation in the neighborhoods of Allston/Brighton, Downtown, and Roxbury. A database was created containing general information on petitioned sites in all of Boston's neighborhoods, and condition ratings and photographs from the sites visited. The database was structured to facilitate a user-friendly interface for the Boston Landmarks Commission (BLC). An analysis of the results revealed that outer Boston neighborhoods might need more petitioned landmark sites when compared to downtown.

## **ACKNOWLEDGEMENTS**

Throughout the past weeks a few noteworthy people have helped us along our way. We would now like to take the time to thank them, as their help was invaluable. First and foremost, we would like to give our most sincere thanks to our liaison, Jennifer Goold and the Boston Landmarks Commission. Her support and willingness to field all of our questions and critique all of our work aided our progress greatly. Her knowledge and expertise on the subject matter was invaluable. We would also like to thank the members of the Boston Landmarks Commission and the Environment Department for sponsoring our project and allowing us use of their office space and resources for the time we were in Boston.

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## EXECUTIVE SUMMARY

Boston is the largest city in New England and is constantly growing and expanding to accommodate its population and economy. As a result of this constant evolution, many buildings and other properties come under the threat of demolition, because they lie in the path of a new development or some type of construction within the city. The threat of demolition can sometimes be remedied by a landmark designation by the Boston Landmarks Commission (BLC). However, this is not always the case. Not every site petitioned for landmark status is designated, and even within those designated, some still are not saved from the wrecking ball. The Boston Landmarks Commission, a subdivision of the Environment Department located in Boston's City Hall, is the government agency responsible for historic preservation in Boston. The main purpose of the agency is to identify and protect architecturally and historically significant properties by designating them as historic districts or landmarks for the benefit of society.

Ten registered voters can petition sites for landmark designation. Once a site is petitioned, a detailed report is also written and filed at the BLC. The BLC is inundated with these petitions, reports, and survey forms concerning sites and areas from all over the city. This agency is not only concerned with new petitions and those which are pending, but they must also address the issue of maintaining the sites that have already been designated. Assessing the condition of the designated sites is not a small task. It requires visiting the sites, located throughout Boston's sixteen neighborhoods, and taking the time to analyze any damage to them. This procedure is not only time consuming, it also requires the ability to recognize different kinds of damage and their severity.

The tasks of managing the petition requests and maintaining designated sites create a large amount of paperwork and time consuming fieldwork for the limited BLC staff. In order to process this information as efficiently as possible, the BLC requires a method of organizing this data and placing it all in one easy to access location. The goal of this project was to aid the BLC in organizing and preserving their current data on Boston sites petitioned for landmark designation, as well as to develop a method of analyzing their condition. There were three main objectives involved in completing this goal: compiling the permanent data on every pending, designated, or denied site in the city, assessing the current condition of the sites through fieldwork and organization of this information into a database, and an analysis of the results.

The first phase of the project involved organizing the static, or permanent data about each site, which includes name, address, date built, architect, significance, noteworthy characteristics, a brief description, owner(s), etc. This data was gathered from forms and reports filed within the office of the BLC. The project's second objective was multifaceted. It required the creation of a field form to thoroughly and efficiently record the condition and ornamentation of the buildings

visited. Due to time constraints, this was restricted to the three neighborhoods of Allston/Brighton, Downtown, and Roxbury. Next, we planned and mapped routes for each site we would visit. At each site, the condition was assessed and photographs were taken. Finally, the data collected was compiled into a second database. This database was linked to a third database, containing the photographs from each site.

The final stage of this project involved analysis of our organized results. Once this work was completed, the three databases were linked to give the user easy access to all of the information on a particular site. Using these linked databases, we analyzed the data for any trends or patterns. This analysis allowed us to make suggestions to the BLC about which areas need the most renovation or repair, or which neighborhoods could be improved by more landmark designations.

The general trend that seemed to stand out from our results was that Downtown was the dominant neighborhood in regards to the best-maintained sites. In comparison to Downtown, Roxbury and Allston/Brighton have far fewer petitioned and designated sites. A comparison of the two outer neighborhoods of Allston/Brighton and Roxbury revealed that the sites in Allston/Brighton were in noticeably better condition than those in Roxbury. The majority of the sites Downtown were large, commercially owned buildings that are most likely taken care of by large corporations. Conversely, the sites in Allston/Brighton and Roxbury were primarily residential homes, churches, schools, and small commercial buildings owned by families or small companies. Another pattern that emerged was the difference in the principal material of the sites, whether it was stone, brick, or wood. Those located Downtown were almost always constructed of stone and brick, which are both durable materials that have the ability to withstand harsh conditions, pollution and other types of abuse. However, the sites in the remaining neighborhoods were constructed of various materials, ranging from wood and clapboard to brick and stucco. These materials were often in need of paint or had sustained significant damage due to weathering or neglect. The building types, commercial, institutional, or residential were also analyzed, but seemed to reveal no definitive trend when compared to the overall condition of the sites. These analyses led to the conclusion that the outer, less commercial neighborhoods in Boston, such as Roxbury and Allston/Brighton, appear to receive less attention than the more significant area of Downtown. In the future, we hope to see more landmark designations and more repair to these neighborhoods.

Overall, this project has aided the BLC by providing a completed database of permanent information for all currently petitioned sites, as well as the foundation for an update on the current condition of the sites in three of the sixteen Boston neighborhoods. We have also provided the basis of a web page for the BLC with the databases produced in our project. We hope that we have successfully created a basis for others who may want to continue on with this project and assess other Boston neighborhoods. It may also provide a means for future petitioned site and landmark

cataloging. In conclusion, this project has had a positive effect on Boston's society, by helping to continue historic preservation in the city.

# **AUTHORSHIP PAGE**

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# 1 INTRODUCTION

The Boston Landmarks Commission has almost 200 petitions for landmark designation in the City of Boston within its files and has compiled over 12,000 survey forms on the city's historically significant buildings and properties.<sup>1</sup> Carrying out these designations is a lengthy process that requires research, a large amount of paperwork, and several public voting sessions, ending with the Mayor of the city making the final decision. The main purpose of the designation process is historic preservation in the city of Boston. The city has an abundance of examples of rare architectural types that have evolved throughout its rich history. Many of these sites are threatened, especially as a result of new development projects in Boston. In these cases, the BLC will often step in to delay demolition or to possibly save the building with landmark designation.

Preserving historic landmarks can be important to a city's heritage for many reasons. For example, landmarks are educational, providing visual examples to illustrate facts found in textbooks. In Boston, the city's individual landmarks represent many different architectural styles throughout periods of this country's history. Many of the city's historic buildings and sites are also works of great American architects, such as Charles Bulfinch and Frederick Law Olmstead. For these reasons and others, historic sites also promote tourism, which greatly contributes to a city's economy. Finally, landmarks provide a unique means for recreation and inspiration for the people of Boston. They promote patriotism and city pride throughout Boston.

Giving a site a landmark designation is only the first step in historic preservation. Once this has been accomplished, the sites must be properly managed and maintained. Since monitoring the preservation of the sites is a time consuming, involved job, it is a necessity that things are done efficiently. Having a database in which both current and permanent information about all petitioned sites is organized, would contribute to expediting the process and making it more efficient. In addition to a database containing this information, there is also a need for those sites that have already been petitioned to be assessed concerning their state of conservation or condition. An assessment would provide the BLC with current data that would allow them to be notified of sites that have been demolished since they were petitioned, or that are in immediate need of repair.

The goal of this project was to help the Boston Landmarks Commission manage their data on the individual Boston Landmarks, in order to promote historic preservation in Boston. Completing our goal involved updating, organizing, and computerizing the existing information about the Boston Landmarks. In order to complete this goal, we visited the petitioned properties in three of Boston's neighborhoods, gathered descriptive information on each, took digital

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<sup>1</sup> "What is the Boston Landmarks Commission?" The Boston Landmarks Commission, 1999.

photographs, and finally incorporated this data into several databases. Through completion of this project, we hope to provide the BLC with a computerized system to easily access to this information.

The Boston Landmarks Commission is a division of the Environment Department of the City of Boston. This agency is the city's official historic preservation and protection agency. It is responsible for the identification of historic buildings and places, protection and recognition of historic properties, preservation planning, and public and technical assistance. The individual in charge of monitoring and supervising our progress is the Boston Landmarks Commission's architectural historian, Ms. Jennifer Goold.

The remainder of this project report will provide a background to the significance of the project and how it relates to society as a whole. The background chapter offers a look at the cultural history of Boston and its landmarks. It also addresses how historic preservation fits into the scheme of Massachusetts State government, as well as city planning, zoning, and property taxation and regulation. The concept of historic preservation, in general, is also discussed. Historic preservation and landmark designation criteria on a global, national, state, and municipal level is important in understanding the impact and benefits this project will have. Defining historic preservation agencies and organizations on each of these levels will allow us to successfully portray these impacts and benefits. A more detailed description of the Boston Landmarks Commission is also included in the Background section.

The next two chapters illustrate our methodology and results and analysis. As stated above, completion of this project included visits to the individual petitioned sites in the chosen areas, gathering information about them, and taking digital photographs. Once these steps were completed, this updated data was put into several databases for use by the Boston Landmarks Commission. After completion of our fieldwork, we compiled our results, and presented them in a manner which aided our analysis. This entailed creating graphs to show the statistical landmark information about the visited Boston neighborhoods, for example percentage of restored sites by neighborhood. Maps were also used to illustrate important trends about the overall condition of the sites. Our analysis revealed any trends in landmark type, condition, material, etc., throughout the three neighborhoods of Allston/Brighton, Downtown, and Roxbury. From our analysis, one important conclusion was drawn. The outer neighborhoods of Boston are in need of more petitioned sites and landmark designations to protect their historically important buildings and sites.

## 2 BACKGROUND

There are many aspects of city life and city government that are involved in historic preservation and landmark designation. In order to fully grasp the nature of this project, it is important to recognize and understand these aspects. In this chapter, we have researched and presented overviews of several topics related to our project and Boston landmarks in general. A brief overview of Boston's rich history provides a means for appreciating the origin of many of Boston's landmarks. City planning, zoning, and property taxation are some parts of city government that may be involved with historic preservation and designation of landmarks. Because of the complex nature of historic preservation, several different agencies on global, national, and state levels have been established to maintain and manage the tasks involved. The background of this project explains information necessary to understand what will follow. These topics include the history of Boston, zoning, property value, land taxation, historic preservation, historic preservation agencies, and criteria for landmark designation. Throughout the following pages, the nature of this project and the significance of historic preservation will be made clear.

### 2.1 History of Boston

The history of Boston is perhaps one of the richest in our country. Many events that helped shape the future of our country occurred here. Today, the locations or significance of many of these events are marked throughout the city by landmarks. To completely grasp the historical importance of the landmarks in Boston, one must first examine the history that created them.

Boston began as a 750-acre peninsula covered in hilly, treeless terrain. The local Massachusetts Indians called this area *mushawomuck* ("tide fishing area"). With the arrival of Anglo-Saxon settlers, this name was shortened to "Shawmut." In 1630, Governor John Winthrop led the Massachusetts Bay Colony settlers into Charlestown. Later that year, they relocated to the nearby Shawmut peninsula and renamed it Boston on September 7, 1630. The first transformations to the Boston coastline began as early as 1641, when Valentine Hill built warehouses and wharves to better accommodate incoming ships. Over the next three hundred years, the hills, valleys and tidal lands of the Shawmut peninsula were leveled off and filled in to produce what is now known as Boston.

During the next century, Boston continued to grow and expand both in size and population. The early 1700's brought the establishment of burying grounds for the different sections of Boston. King's Chapel was the

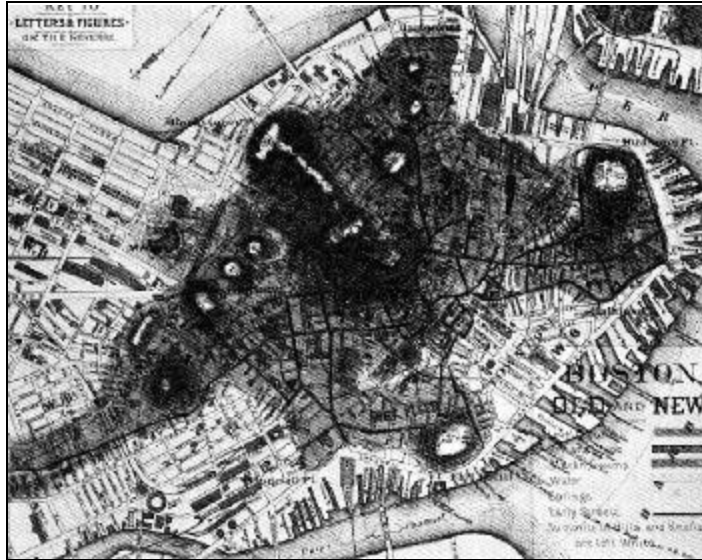


Figure 1. An Overlay of Boston Past and Present

original burying ground established in 1631. Copp's Hill became the burying ground for the North End and the Granary Burying Ground served the South End and central Boston areas.<sup>2</sup> These first burying grounds are currently recognized as National landmarks. In 1723, the Christ Church was founded and the Town Granary was moved to the site of the Park Street Church.

During the early eighteenth century, several National landmarks were erected in Boston. In 1723, the Christ Church, Boston's oldest surviving church, was constructed in the North End. This church, now called the "Old North Church," became famous for its contribution to the American Revolution. It was from this steeple that Paul Revere received warning of the approaching British troops.

In 1742, Faneuil Hall was completed. Wealthy merchant Peter Faneuil provided the funding for this building, the city's first central marketplace. After being almost completely destroyed by a fire in 1761, it was rebuilt to the form seen in

Figure 2. Later, in 1805 it was redesigned to its present form by one of Boston's most notable architects, Charles Bulfinch. (see Figure 3). Bulfinch is also known for his design of the new Statehouse, which was completed in 1798. Today, Faneuil Hall is a designated Boston landmark, and is still used as a marketplace.

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<sup>2</sup> *Ibid* p. 27



Figure 2. Faneuil Hall 1742



Figure 3. Faneuil Hall 1805

During the late 1700's, tension began to increase between the British Colonies and Great Britain. The Revolutionary War was on the horizon. The first event leading to the war was the Boston Massacre, on March 5, 1770. This event began with a group of angry Bostonians throwing snowballs and taunting British Troops. The soldiers opened fire into the crowd, killing five people. Today, the site of this massacre is a stop on Boston's Freedom Trail. The Boston Tea Party, the next significant event leading to the Revolution, occurred in December of 1773. Boston citizens, calling themselves the "Sons of Liberty," dressed as Indians and boarded British ships, dumping over three hundred crates of tea into the Boston Harbor, in protest of the newly imposed tea tax. These events brought about the passing of the Intolerable Acts by Great Britain, as a punishment to the insubordinate citizens of Boston. The Intolerable Acts sparked the beginning of the Revolutionary War in April of 1775.

Boston's involvement in the American Revolution began on the night of April 18, 1775, with Paul Revere's famous ride. When the colonists received word that the British were to arrive, a lookout was placed in the bell tower of the Old North Church, and instructed to hang lanterns, "One if by land, Two if by sea" to signal the approaching troops. The next day, April 19, 1775, the battles of Lexington and Concord took place, marking the beginning of the War for Independence. The war continued in the colonies for almost a decade, until the early 1783 when it ended with the signing of the Treaty of Paris.



Figure 4. The Battle of Lexington

After the war, and with the introduction of a new system of government, things settled and Boston resumed its role as a major shipping and commercial city. In 1785, a bridge was built over the Charles River. At 1500 feet in length and a cost of £15,000, the bridge was considered “the greatest that had ever been projected in America.”<sup>3</sup> It was such a success that a second bridge was soon built over the Charles River that was twice as long. This second bridge enabled the rapid development of the West End. Renowned architect Charles Bulfinch worked extensively in the West End, building and designing mansions and elegant buildings. All of this development gave better access to the West End. Further work on this area of Boston was carried out in 1823, when Mayor Josiah Quincy formed a House of Correction and attempted to clean up the area.

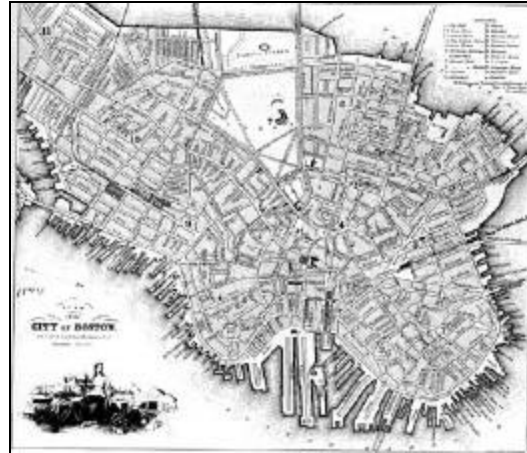


Figure 5. Boston in 1844

The nineteenth century brought great expansion and growth for the city of Boston and gave us additional historically significant buildings and places. The 1820's brought the construction of Quincy Market, adjacent to Faneuil Hall, in response to Boston's growing economy. This time period was also one of further changes to the landscape and shorelines of Boston. Land filling expanded the shorelines and the year 1824 marked the completion of the reduction of Beacon Hill to its current size.

In the mid-1800's, following the Industrial Revolution that was occurring across the Atlantic, the focus of industry and transportation shifted toward the building of railways in Boston. Several lines were constructed, connecting Boston to Providence, Worcester, New York, and Hartford. The railroad industry inspired the design of new wharves and an extended coastline. However, these changes to the coastline did not last as Boston continued to expand. Today, Chinatown now stands on the site of where these nineteenth century wharves were built.

Industry and business began to take over many of the residential areas of Boston during this century. Many of the elegant private homes in Boston, such as those on Franklin, Pearl, and Summer Streets began to be replaced by growing businesses in the late 1800's, along with the development of the South End towards Roxbury. In the meantime, the center of town was busy with the construction of a subway system. This was to be the first subway in American history. New areas of the city were also being developed, as businesses grew even larger. For example, Huntington Avenue

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<sup>3</sup> *Ibid* p. 49

expanded as a result of this growth. Unfortunately, this undaunted growth would soon be held back by one of the largest and most costly disasters in Boston's history.

Boston experienced a major setback in its industrial expansion with the Fire of 1872, which obliterated much of the financial district, destroying over 65 acres of land. It began on Summer Street, continuing through Franklin Street, Congress Street, Federal Street, and literally to the door of the Old South Meeting House. Its cause is unknown, but fire chief John Stanhope Damrell had predicted its arrival. Fortunately, Boston was eventually rebuilt and further expanded, giving us the city we know today.

At the end of this century and in the early twentieth century, colleges and universities were being built all around Boston. Northeastern University was completed in 1938, and Boston University was also established in the 1930's with its central campus on Commonwealth Avenue. MIT, founded in Boston in 1861, crossed the Charles River and settled in nearby Cambridge.

Boston's growth and development continued throughout the 1900's. In the 1950's Boston went through yet another period of change as the West End endured urban renewal. In 1959, the Urban Renewal Program began, but no buildings were removed until 1962. This renewal totally demolished large areas with no regard for those who had lived there or for any historically significant sites. Although the West End suffered, Urban Renewal built today's Government Center over the deteriorated area of Scollay Square. The Prudential Center was constructed as well as the new City Hall and the John Fitzgerald Kennedy building. All of this renovation was great for the modern development of the city, but in return, it resulted in the destruction of much of the significant historical and architectural work of people such as Charles Bulfinch.

Today, Boston is still a city of rapid change and development. New buildings such as the Fleet Center and projects like the Big Dig are indications that the city is still growing and continuing to improve. Boston's size and reputation as one of the greatest cities in America means that the city must constantly change to keep up with the growing population and swelling economy. As a city like Boston continues to grow in size, it is important to protect the property rights of the citizens. It is also important to protect the city's cultural and historic resources, through means of historic preservation and landmark designation. This can be accomplished by paying attention to laws of city planning and by instituting zoning regulations, which will be covered in the next several sections.

## 2.2 City Planning and Zoning

City planning and zoning affect all citizens, corporations and organizations of a city. Zoning laws exist to control land use for the overall benefit of the citizens of a city. In Boston and elsewhere, there are rules or sections in the State Zoning Code that are applicable to historic preservation. Although zoning is not directly connected to the designation of landmarks, zoning

regulations may control any further development of a historic property. Also, the type of district a landmark is in, residential, commercial, or industrial, may affect the state of conservation of the property. It is important to have an understanding of zoning to better understand the way historic preservation fits into the organization of a city. A comprehension of zoning is also important in order to know what protective regulations and ordinances exist in regards to historic property.

A city's zoning regulations are taken into consideration in the process of city planning. City planning is an important part in the successful development of the city of Boston and other large American cities. The modern concept of city planning, which began to take shape in the United States in the late 1960's, is an ongoing process that concerns physical design, social, economic, and political policy issues. City planning attempts to control the development of cities and their surroundings, and can be conducted at local, county, state, and federal levels. It involves the general plans that summarize the objectives of land development, zoning, plans for traffic control, economic strategies for revitalization of economically depressed urban and rural areas, supportive strategies for disadvantaged social groups and guidelines for environmental protection and preservation.<sup>4</sup>

### **2.2.1 Zoning**

A major part of city planning in the United States is the process of zoning, which originates from the nuisance doctrine of the mid-1800's. This doctrine prohibits any landowner from creating or acting in any way that is a nuisance to their neighbors in the community. Zoning is most commonly defined as the act of dividing a county or municipality into districts for the purpose of regulating land use. Some common purposes for zoning are to lessen congestion in the streets, to secure safety from fire and other dangers, to promote health, morals, or general welfare, to provide adequate light and air, to prevent overcrowding of land and buildings, and to avoid undue concentration of population.<sup>5</sup> The third purpose listed, the promotion of health, morals and general welfare, is relevant when considering historic preservation and landmark designation.

Zoning divides a community into districts and specifies permitted and prohibited uses of each district. The Boston Zoning Code defines the different districts that the city is divided into. These districts are further divided into three separate classes: residential use, commercial use, and industrial use. In a residential zone, only residential housing can be constructed. In commercial zones, businesses can be built as well as residences. Industrial zones can include industrial buildings, as well as the two previously mentioned types. By dividing a city into these three classifications,

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<sup>4</sup> Encarta Online. <<http://encarta.msn.com>>

<sup>5</sup> Smith, Herbert H. The Citizen's Guide to Zoning. West Trenton, New Jersey ChandlerDavis, 1965.

each function of the community is allowed to have a proper amount of land in a location suitable to its needs, so it does not interfere with other functions.<sup>6</sup>

Zoning regulations are established in a document called a zoning ordinance. Zoning ordinances are made up of the map that divides the community into zones and text that stipulates what can be built in each zone and how each structure may be used. Also included in this text are site plans, uses of structures, structure characteristics, and procedural concerns. Zoning ordinances are passed under the authority of the state. The administration of zoning includes a zoning board of appeal, which has the function of considering individual cases related to general public interest. Zoning ordinances may be changed by amendment, addition, or repeal, according to Chapter 40, Section 5, of the Massachusetts' general laws.<sup>7</sup>

Another element involved in zoning is called a "taking," which is the process of gaining control or ownership of a property. Under Chapter 80A, Section 1 of Massachusetts' general laws, a board of officers is given the authority to "institute proceedings of real estate or any interest therein."<sup>8</sup> To conduct the taking of a property, this board must first adopt an "order of intention to take," which includes a description of the property to be taken and the purpose for which the property will be taken.<sup>9</sup> No property can be taken without the consent of the owner of the property, unless at least thirty days notice, prior to the taking, is given to the owner.<sup>10</sup> The general takings law states that a taking of a landowner's property must not occur without just compensation to the landowner.<sup>11</sup> This component of zoning and others are often involved with preservation of historic properties.

### **2.2.2 Zoning and Historic Properties**

Zoning may indirectly have effects on a historic landmark. The type of district a landmark is located in may be related to the overall condition of the property. For example, if a historic property is located in a residential zone, it is more likely that it will be in better condition than a landmark in a commercial or an industrial zone. Residential zones are subject to far less pollution from automobiles or factories than commercial or industrial zones. Landmarks in commercial or industrial zones are often the targets for demolition to make way for development in an expanding city. Graffiti may also be more of a problem for buildings in non-residential zones. A landmark in a residential zone is considered as part of the community it is surrounded by, and therefore will be protected and maintained by the people of the community.

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<sup>6</sup> *Idem*

<sup>7</sup> <http://www.state.ma.us/legis/laws/mgl>

<sup>8</sup> <http://www.state.ma.us/legis/laws/mgl>

<sup>9</sup> *Idem*

<sup>10</sup> *Idem*

<sup>11</sup> Callies, David L. Takings. American Bar Association, 1996.

Although zoning does not directly play a part in the process of designating Boston landmarks, zoning regulations may help to protect them from demolition or alteration. In order to protect historically and environmentally valuable properties in the city of Boston from detrimental alterations and demolition, development review requirements have been established under Section 31-5 of the Boston Zoning Code and Enabling Act (amended through December 13, 1994). This article is set up for the review of large-scale development projects in the city of Boston. It gives the public the opportunity to review and comment on development proposals. This section of the Code is made up of five components. These components are transportation, environmental protection, architectural design, historic resources, and infrastructure systems. The component that is applicable to the development of historic land is the historic resources component, established under Section 31-9. This section states that an applicant, the person having interest in a proposed development project, must submit an analysis which sets forth measures intended to mitigate, limit, or minimize any adverse effects on historical, architectural, archaeological, or cultural resources of a district, site, building, or structure. After its review by the Boston Redevelopment Authority, this analysis is then forwarded to the appropriate government agency for further review and comment. In a historic case, the agency contacted would be the Boston Landmarks Commission.<sup>12</sup>

Zoning is only one of the important aspects of city government that may involve designated landmarks and the Boston Landmarks Commission. Other related elements of city government include property value and tax assessment, which will be addressed in the following section.

### 2.3 Property Taxes and Easements

The single largest source of income to local governments is property tax. Property tax is calculated as a percentage of the total property value, or a percentage of the property income. When a property is designated as a historic landmark the tax rates on that property do not change, however the amount of tax paid may change. There are many different reasons for this, for example the assessed value of the site may increase or decrease causing a change in the amount of tax assessed to the owner or a historic easement may be obtained which may result in a tax break, as will be discussed later. There is no official evidence to back up any trends in this area, however speculation can be made.

In order for a property to become a designated landmark, the owner must consent. As previously stated, when a property is designated a landmark, its tax rate does not change, what does change however, is the property value. This change inadvertently affects the amount of tax paid. For this reason, owners may not want their property to be designated. While it is an indirect route, it

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<sup>12</sup> Boston Zoning Code and Enabling Act As Amended Through December 13, 1994. Published by

shows that landmark designation can affect taxation. The government, more specifically the BLC, cannot afford to buy all of these properties to save them, so incentives are given to the owner to allow the designation. Another option available to the owner of a historic property is a historic preservation easement.

An easement, in general, is defined as a right of way giving individuals other than the owner permission to use a property for a specific purpose. There are several different kinds of easements, such as agricultural or scenic.<sup>13</sup> Specifically pertaining to this project are historic preservation easements. A preservation easement gives permission to a preservation agency to use the property as a landmark or a generally significant historical site. It is defined as a voluntary, legal agreement that protects historically, archaeologically, and culturally important resources.<sup>14</sup> In exchange, the owner is guaranteed that the property will be protected, even if somebody else buys the land. There are also several opportunities for tax benefits offered by the government.

The advantages of a preservation easement are numerous. The easement allows the property owner to retain possession of the land and to receive financial benefits from it. The landowner is assured that the easement will remain in place for as long as they own the land as well as for any future owners, therefore the site will always be protected and maintained. The most substantial benefits of a preservation easement are the income tax deductions that can be received, providing certain criteria are satisfied. Because the government looks upon an easement as a charitable donation, the owner can claim a charitable deduction on their federal income taxes up to the value of the easement. The value of the easement is usually established to be between the assessed value of the land before and after the easement was in place. The value of the land may decrease as a result of the restrictions on development placed on it by the easement. Land that cannot be developed, in general, has a lower assessed value than land that can be. This reduction in the value of the property can result in lower property taxes.

Before all of these tax deductions and benefits can begin, the Internal Revenue Service (IRS) has a set of criteria that must be met. First, the easement must preserve a “certified historic structure” or a “historically important land area”. The IRS defines a “certified historic structure” as any structure that is in the National Register of Historic Places, or is in a registered historic district and is recognized by the United States Department of Interior as historically significant to that district. A “historically important land area” is defined as any independently significant area that meets National Register Criteria, or a land area within a historic district.<sup>15</sup> Second, the site must be accessible to the public. The degree of accessibility depends on the type of site and the specifications

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the Boston Redevelopment Authority.

<http://www.investorwords.com/e1.htm#easement>

<sup>14</sup> “Historic Preservation Easements.” <http://www2.cr.nps.gov/tps/tax/easment.htm>

<sup>15</sup> *Ibid* p. 20

within that particular easement. If these two criteria are satisfactorily met, the aforementioned tax benefits can be bestowed upon the owner.

There are disadvantages to a preservation easement as well. An easement does not only come with tax deductions, it also comes with restrictions. An easement of this kind usually prohibits demolition, and any renovations must be approved by the preservation agency that holds the easement. This holding agency may also require the owner to make improvements to the property, or hold the owner financially responsible if any specifications of the easement are not properly followed. This can result in extra expenses that the property owner may not be prepared to pay. Improvements made to a property as directed by the easement holder can actually be advantageous, because the easement holder may require a high standard of quality from the company performing the work. This is an important consideration when examining the advantages and disadvantages of preservation easements.

While tax deductions and historic easements are established for owners of historic sites, we have not yet discussed what is done to protect the historic properties themselves. In the next several sections, the issue of historic preservation will be discussed. Landmark designation will also be explained, as it is carried out throughout the world, the country, and the state of Massachusetts.

## 2.4 Historic Preservation

Historic preservation provides the means by which landmark sites become recognized and retain significance. Historic preservation can be described as the maintenance of historic sites and the recognition that they are significant and should not be demolished. The point of historic preservation is to retain and restore, rather than destroy or demolish. “Historic preservation isn’t just about aesthetics, it’s about identity...Like an endangered species, once a historical structure is gone, it’s gone forever.”<sup>16</sup>

There are five general advantages to historic preservation: education, recreation, inspiration, economic uses and ecologic uses. Historic preservation educates by acting as reinforcement to the written word. Actually visiting a historic building is a much more profound experience than just reading about what it looks like in a book, or seeing a picture of it. Historic preservation is recreational because it is entertaining for those who visit these sites. Viewing historic landmarks can inspire people with patriotism or pride in their culture. Finally, these sites are historically and often architecturally valuable, and can be put to economic uses in society.<sup>17</sup>

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<sup>16</sup> Williams, Norman; Kellogg, Edmund; Gilbert, Frank. Readings in Historic Preservation. New Brunswick, New Jersey, 1983.

<sup>17</sup> *Ibid* p. 63

As previously stated, historic preservation has several economic benefits. Since actual preservation of a site is labor intensive, it can create jobs. Restoring buildings necessitates several workers to correct structural damage and restore a site to its original state. It also stimulates the private sector to invest because preserving an old building is often less expensive than constructing a new one.<sup>18</sup> More specifically, historic preservation of landmarks brings many benefits, regardless of the type of area or district where the landmarks are located. Landmarks in commercial districts attract more consumers. In residential areas, they may set the style of community life, increase property values and prevent urban blight. Historic districts benefit the city, since well known landmarks generate more tourists. A prime example of this can be seen in the City of Boston where tourists contribute a substantial amount of money into the economy.

As stated above, economic improvements in quality of life and ecological benefits are major reasons for historic preservation. Preserving historic buildings can encourage better life patterns in a community or neighborhood. Resources are preserved when historic buildings are saved because significantly fewer new materials have to be used when restoring a site. This also has the environmental implications of not having to demolish the remains of the building and then place the trash in a landfill or dump, therefore creating less waste to dispose of.

There are numerous causes of destruction to historically significant sites. Fire can be particularly devastating to old buildings made primarily of old, dry wood. Simple neglect of a structure can result in damage that requires costly restoration. Abandoned buildings left alone for years are at the mercy of harsh weather conditions. Changes in the use of a building can also result in harmful effects. Urban renewal programs and the construction of highways and other infrastructures can lead to the demolition of older sites to make room for improvements and development.<sup>19</sup>

Because of the valuable nature of landmarks and the threats to their continued existence, it is important to have private and public agencies to protect and preserve them. One major method used to protect an important site is landmark designation. Preservation agencies on all levels help to generate interest for, and illustrate the importance of landmarks and other historically and culturally significant sites.

## 2.5 Landmark Designation

Historic preservation is the reason landmarks are protected and recognized as important to our society and culture. Landmarks are designated on many levels, from global all the way down to local town and city designations. Historic preservation also exists on all of these levels to regulate

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<sup>19</sup> *Ibid* p. 70

how landmarks are designated and to create laws to protect and maintain them. This section will discuss the different levels of preservation agencies and how they work.

### **2.5.1 Landmark Designation Around the Globe**

The highest recognition a historic site can receive is to be deemed a global landmark. This recognition means that the site is important not only to the city, state, and nation, but its disappearance would be an irreplaceable loss for all mankind. The City of Boston has no historical sites that have achieved this status, however, learning the criteria and process that a site goes through to be considered a global landmark will help in understanding landmark significance at all other levels.

The World Heritage Committee was set up at the 17th meeting of the UNESCO General Conference in 1972. This committee is the governing body that maintains and updates the World Heritage List. This list contains all sites that are considered to be global landmarks. The World Heritage Committee consists of three advisory bodies: International Council on Monuments and Sites (ICOMOS), International Union for Conservation of Nature and Natural Resources (IUCN), and the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM). ICOMOS and IUCN are the committees that evaluate and decide what sites should be inscribed on the World Heritage List, while ICCROM provides expert advice on restoring monuments. The criteria used to determine whether a site should be on the World Heritage List consists of two different categories: Cultural Properties and Natural Properties. These criteria can be found in Appendix 3A.

### **2.5.2 Landmark Preservation in the United States**

The City of Boston has a rich history that is a very important part of the history of the United States. This history has left behind many important and meaningful historic places throughout the City of Boston. Many of these historic places have been determined to be landmarks for all of the United States and not just the City of Boston. Boston, along with many other governmental and private historic preservation agencies throughout the United States, have based their landmark designation criteria and how the agency is run, in general on the United States government and its historic preservation agencies. Because of this, it is important to learn about historic preservation throughout the United States and how a historic site would qualify to be designated a National landmark.

In 1966, the National Historic Preservation Act was passed. This act was passed because it was apparent that the present governmental and non-governmental historic preservation programs and activities were inadequate to insure future generations a genuine opportunity to appreciate and

enjoy the rich heritage of our nation. From this act, the National Register of Historic Places was established. The National Register of Historic Places (NRHP) is the official list of the American cultural resources worthy of preservation. The United States Department of Interior National Park Service is in charge of maintaining this list. The National Register of Historic Places includes districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. Criteria have been set up by the Secretary of Interior of the United States to determine if a property falls under this significance. These criteria are listed in Appendix 3B.

### **2.5.3 Landmark Designation in Massachusetts**

Massachusetts has several agencies responsible for identifying historic buildings and places, recognition and protection of historic landmarks, and providing public information and assistance. The Massachusetts Historical Commission, which is the State Historic Preservation Office (SHPO) for Massachusetts, is the primary source for state preservation activity and information. The Massachusetts Historical Commission (MHC) is under the direction of the Secretary of the Commonwealth. The professional staff of the Commission includes historians, architects, archaeologists, geographers, and preservation planners.

The MHC is authorized to identify, evaluate and protect the state's important historic and archaeological resources. They administer state and federal preservation programs. These programs include historic preservation planning, assisting communities with listing properties in the National Register of Historic Places and establishing local historic districts. They review construction plans, grant assistance, and provide public information and activities.<sup>20</sup> The MHC is also responsible for keeping a register called the State Register of Historic Places. The state register contains historic and archeological sites that are important to the Commonwealth of Massachusetts. It also contains sites that are determined to be local landmarks by any town or city in Massachusetts and all properties listed in the National Register of Historic Places. The MHC uses the criteria set forth in the Massachusetts General Laws (MGL) Chapter 9, Section 26, which is found in Appendix 3C, to determine a site's eligibility for listing in the state register.

### **2.5.4 Landmark Designation in Boston**

Boston's primary preservation agency, the Boston Landmarks Commission (BLC), is administrated within the city's Environment Department. This commission is very important to protecting the city's historical and cultural resources, as well as promoting historic preservation in neighborhoods throughout the city.

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<sup>20</sup> Massachusetts Historical Commission. <<http://www.state.ma.us/sec/mhc/mhcidx.htm>>

The BLC was established in 1975 to be the City of Boston's historic preservation and protection agency. It is a division of the Environment Department, in the City of Boston. The Environment Department's mission is to enhance the quality of life in Boston by protecting its natural resources, air, water, and land, and by preserving and improving the integrity of Boston's architectural and historical resources. The BLC works with this department to ensure that these goals are attained. They strive to enforce city ordinances that protect historic buildings and places, to mark historic sites, to advise owners of historic buildings on preservation issues, and to research and publish information about the architectural history of the city. The enforcement of these ordinances and accomplishment of these goals promotes public welfare by preserving and protecting the resources of Boston, and making the city a more attractive and desirable place to live and visit.<sup>21</sup>

One of the BLC's responsibilities is preservation planning and reviewing historic aspects of development projects. The BLC encourages new structural designs that are compatible with an area's historic setting by first conducting reviews to determine any possible adverse effects on historic resources. Then it finds ways to avoid, minimize, or mitigate these adverse effects. The BLC staff conducts these reviews in cooperation with other city and state agencies. Some examples are the Boston Redevelopment Authority, the Massachusetts Environmental Protection Agency, and the National and State Register of Historic Places. Under Article 85 of the Boston Zoning Code, the BLC can delay demolitions for a period of 90 days in order to give communities the opportunity to participate in public discussions of a proposed demolition and offer alternatives to demolition.<sup>22</sup>

The BLC and its staff serve as a resource for Boston preservation information. The staff maintains an archive of information, including maps and photographs of buildings and neighborhoods. They offer professional assistance and public information programs for neighborhood groups, property owners, and developers. Interested individuals can arrange meetings and site visits. The commission staff may also consult with owners of historic buildings or locations to discuss preservation issues.

A major task of the BLC is to protect historic sites through landmark and district designations. The landmarks reflect distinctive features of the architectural, cultural, political, economic or social history of Boston. The Commission also carries out studies of neighborhoods for possible landmark district status. A group of properties may be protected together and designated as a historic neighborhood or district. Through the same process, an individual property may also be protected as a designated landmark.<sup>23</sup>

In order to determine which properties may be eligible for landmark designation, the BLC hires private consultants to survey all properties in an area of interest in Boston. These consultants

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<sup>21</sup> "City of Boston." 1996. <<http://www.ci.boston.ma.us/>>

<sup>22</sup> *Idem.*

record all the fundamental characteristics of each property, such as date built, architect and builder, architectural style, materials, ornamentation, noteworthy characteristics, and any historical or architectural significance. Over 25 years, the BLC has compiled over 12,000 survey forms on individual historic buildings and places throughout the city. These forms include brief development histories of the properties and neighborhoods throughout the city. Many of these sites are also listed in the State and National Registers of Historic Places.

When an inquiry is made on the landmark designation qualification of a property, these survey forms are consulted. They provide the essential information for the BLC to determine whether a property may be eligible for designation, on the city, state, or national level. It is interesting to note that landmark designation on the national level is usually carried out primarily to receive federal funds for upkeep and preservation. On the city level, designation is usually carried out for the protection of the property.

While the BLC is a very important agency for Boston's historic sites, there are also several private agencies in Boston, and throughout the state, which are responsible for protecting the state's cultural heritage, through historic preservation.

### **2.5.5 Other Historic Preservation Agencies in Massachusetts**

This section describes how historic preservation is carried out by other public and private organizations throughout the state of Massachusetts, and in the City of Boston. As stated above, although there are public agencies established by the government for maintenance of historic places and landmark designation, there are also many private organizations. These organizations are responsible for a significant amount of protection and preservation of many of the state's historic resources.

A significant private organization located in Massachusetts, the Society for the Preservation of New England Antiquities (SPNEA), is also responsible for promoting much of the state's historic preservation. This agency is a member of the Boston Preservation Alliance, a prominent group in Boston historic preservation. SPNEA is not under the direction of the state of Massachusetts. This organization is a museum of cultural history that collects and preserves historic buildings, landscapes, and other items dating from the 1600's to the present. The headquarters are located in Boston, Massachusetts, with museums in Connecticut, Maine, New Hampshire and Rhode Island. Founded in 1910, SPNEA serves to protect New England's historic, cultural, and architectural heritage. Through its Stewardship Program, SPNEA protects over 50 privately owned historic properties and seeks preservation restrictions on important buildings throughout New England. SPNEA staff also

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<sup>23</sup> City of Boston Environment Department. Guide to the City of Boston's Environment

offer information concerning maintenance and preservation of old houses, National and State Register listings, styles of architecture, and general resources for property owners.

As mentioned above, another private preservation organization in Massachusetts is the Boston Preservation Alliance. The Alliance is made up of more than 50 organizations and hundreds of individual citizens. Some of these organizations include the Boston Landmarks Commission, the Boston Society of Architects, the Society of Architectural Historians, and the Society for the Preservation of New England Antiquities. They provide “a voice” for preservation in Boston and view Boston's distinct architectural heritage as a national treasure that contributes greatly to the economy of the city and the quality of life for its residents and visitors.<sup>24</sup>

This concludes the Background chapter, which provides an introduction to the Boston Landmarks Commission, historic preservation in Massachusetts and elsewhere, and other important factors that are involved with historic landmarks, such as taxation and zoning. It provides insight into how this project can affect the communities of the City of Boston and how it is involved in the structure of Massachusetts' government.

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Department. 1999.

<sup>24</sup> <sup>24</sup> The Boston Preservation Alliance. <<http://www.bostonpreservation.org/>>

### 3 METHODOLOGY

The Boston Landmarks Commission currently has an abundance of data pertaining to the historic sites within the city. The information is found within several separate resources and is all on paper. The fact that this information is spread out in this manner makes it difficult for the BLC to efficiently access it when they are questioned about a specific property. Furthermore, the risk of misplacing a survey form or petition for a certain site is greater with this current system. Our goal was to bring all of this data together, along with current information pertaining to condition, into one organized system that includes databases, photographs, and maps. There were three main objectives necessary to reach this goal. First, we gathered the permanent information for all pending, designated and rejected sites in Boston from the survey forms in the BLC. Next, we went out into the field to gather data and take current photographs in the assigned neighborhoods (seen in Figure 6), using our established condition field forms. Finally, we organized our information, both permanent and dynamic, into databases and used them as the basis for our analysis.

Our field studies and project work were carried out in the City of Boston. We were centrally located in the office of the Environment Department in City Hall, where the BLC operates and stores all of the previously gathered information on the landmarks and petitioned sites.

When we were not working in this office, we were out in the field visiting sites and collecting data. The Boston Landmarks Commission has the landmarks organized by neighborhood. Due to time constraints, we limited our field studies to three neighborhoods: Allston/Brighton, Downtown, and Roxbury, which are highlighted in Figure 6.

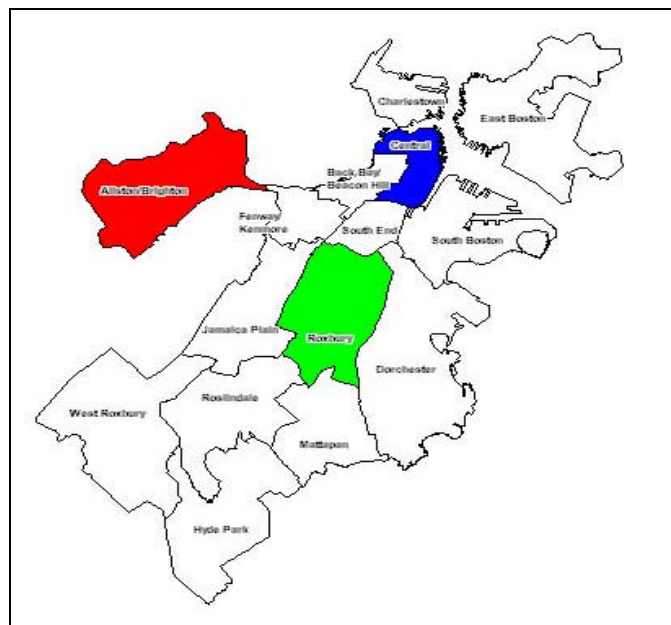


Figure 6. Boston's Neighborhoods

#### 3.1 Permanent Information

The first phase of our project, organizing the permanent information, was subdivided into two parts. We first decided what data was necessary to collect, and then gathered this data from the BLC. Second, we created a database for this information. Some of the permanent information gathered included site name, address, date built, architect, significance, etc.

As stated above, the first objective in gathering permanent information was to decide what data was necessary to collect and then gather it. The Boston Landmarks Commission has one general survey form that is used for all landmarks. All of these forms are filed in the BLC. We reorganized the current survey forms in such a way as to facilitate the efficient construction of our database. Because the information included on our reorganized forms was already collected for the existing sites, we did not actually go into the field and put this form to use. The main purpose of this field form was to establish a template for our database and for future groups and surveyors to use.

Our second objective was to put all of the gathered information into a database that was user friendly and accessible to the BLC and the public. This objective required gathering survey forms or petition reports on all of the designated, pending, and rejected sites, from the BLC files. The information for our database was taken from these sources. While we included separate sections in the database for each landmark type, they all have several characteristics in common. The database provides the following general information for all sites: BLC form number, lot area, name, location, date of construction, owner, architect, builder, brief description, noteworthy characteristics, significance, and assessed value at the time of the petition. Once this information was entered, we added in more data, specific to each landmark type as shown in Figure 7.

The screenshot shows a Microsoft Access form titled "General Info Form" with the following fields and values:

Petition	5	Area	Downtown	Status	Noted 4/25/76	Landmark	Yes
Address	45 Milk Street	BLC Form					
Name	International Trust Company Building	Significance	Monumental building architecturally significant as a major work by a prominent Boston architect as well as an early example of Beaux Arts office construction and an early example of the proto-				
Sub Area	Financial	Noteworthy Characteristics	Prominent side with three street facades and no setback				
Date Built	1892	Lot Area	7200				
Builder	Geoch & Pray	Num of Stories	9				
Architect	William Gibbons Preston	Materials	Stone				
Type	Building	Exterior Alterations	minor				
Type Residential		Alteration Comments					
Type Non-Residential	Commercial	Map Number	25N13E				
Owner Present	(Frank Sawyer) 65 Bedford St. Inc.						
Owner Past	International Trust Company						
Brief Description	Square 5th bay Beaux Arts commercial building divided into horizontal units of varying sizes and classical decorative treatments, central entrance on Milk St. marked by heavy Baroque pediment.						
Assessed Value at Petition	0						
Assessed Value in 1999							
Roof	flat						
Themes	Architectural, Commerce						
Religious Denomination							
Patron Saint							
Open Space Type							
Miscellaneous Type							

Figure 7. Permanent Information Database

We categorized each site as one of the following types: buildings, churches, open spaces, and miscellaneous. For buildings, there is a field for type, which is either residential or non-residential. If it is residential, then it must be categorized as a single, double, row, two - family, three decker, tenement, or apartment. If it is characterized as non-residential then the categories are: commercial, theatre, hospital/medical, industrial, or educational. The number of stories was also entered. This was counted from the first floor to the cornice, which is the molded projection that crowns or completes a building. The principal material was also recorded for buildings, as listed at the time of the petition. The exterior material was recorded as clapboards, shingles, stucco, asphalt, asbestos, aluminum/vinyl, brick, stone, concrete, iron/steel/aluminum, or other. The theme or themes of the building was added to the database as well. Examples of such themes include architectural, educational, or recreational. The churches section includes religious denomination, such as Roman-Catholic, Jewish, Protestant, or other. If known, the patron saint of the Catholic churches is contained in this section as well. The materials of the church at the time of the survey were also recorded. For open spaces the type, whether it is a park, cemetery or farm was selected from a list in the database. The final category, miscellaneous, contains only a field for type, a brief description of exactly what the site contains, or what the landmark is.

For each neighborhood, we created a unique code for use on our field forms and later in our database to make the data easier to sort and trends easier to illustrate. We designated codes for all of the neighborhoods because general data was collected for all of the sites in each neighborhood. The neighborhoods and codes are listed in Table 1. These codes were used throughout our project and in the databases as part of unique identifiers for the different sites.

Table 1. List of Neighborhoods and Codes

<i>Neighborhood</i>	<i>Code</i>	<i>Neighborhood</i>	<i>Code</i>
<b>Allston/Brighton</b>	ALB	Fenway	FEN
<b>Back Bay</b>	BBA	Jamaica Plain	JPL
<b>Beacon Hill</b>	BEH	North End	NOE
<b>Boston</b>	BOS	Roxbury	ROX
<b>Charlestown</b>	CTN	South Boston	SOB
<b>Dorchester</b>	DOR	South End	SOE
<b>Downtown</b>	CBD	West End	WTE
<b>East Boston</b>	EBN	West Roxbury	WRO

The general information database was completed based on our field forms, with only the information gathered from the BLC files. Our next step was to enter into the field and survey the condition of the petitioned sites within the neighborhoods of Downtown, Allston/Brighton and Roxbury.

## 3.2 State of Conservation Data Collection

In addition to permanent information about the petitioned sites in Allston/Brighton, Downtown, and Roxbury, we assessed their state of conservation, which is their current state of repair or lack thereof. For example, some sites may be newly restored, well maintained, of average condition, dirty, worn down, or just falling apart. In order to assess the current condition of the landmarks, we completed the following steps. First, we created a state of conservation form on which we recorded specific information about the extent of any damage, restoration, and overall appearance of the landmarks. Next, we went into the field and examined each landmark from different viewpoints and took digital photographs. Lastly, we created a new database, linked to the general information database, which included all information gathered in the field.

### 3.2.1 State of Conservation Field Forms

The first objective involved in the assessment of the condition of the petitioned sites was creating a field form. The field form we developed contained three sections: a header with the neighborhood, address, date, recorder, and petition number, a table for condition ratings, and a table for ornamentation descriptions and ratings. The condition ratings were recorded by section (foundation, body, and cornice/roof) on the front, back, left, and right facades. For each section and façade the material and extent of any damage was also recorded. The damage was recorded in terms of a 0-4 rating of water damage, cracks/holes, stains, exfoliation, and mortar deterioration. Exfoliation is described as the peeling or flaking away of the top layer of stone or brick. Mortar deterioration was noted on all stone and brick building sections with any mortar. A zero rating indicates no damage, a one would mean minimal damage, a two would indicate average condition, a rating of three illustrates a large amount of damage, and four means the site is in very poor condition. In addition to this, any obvious signs of and any comments pertaining to restoration were reported on the form. Comments were noted for ratings of three or four or for any noteworthy characteristics.

The ornamentation on the sites was also analyzed using this form, in a similar manner to the damage assessment. The state of any ornamentation can indicate significant damage to a building, which may not be seen by assessing other parts of the building. It is especially important to assess the condition of any structural ornamentation, such as columns or arched windows, since they are important to the overall structural status of the building. Applied ornamentation may show excessive staining and water damage. Some examples of applied ornamentation are carvings or statues. The type of ornamentation, material(s), whether it was structural or applied, and its condition were recorded for the foundation, body, and cornice, where applicable. A final overall rating of each site was also included on the field form. This rating and the ornamentation rating was based on the zero to four scale used for all other damage assessments. A copy of our condition form can be seen in Appendix 2B.

### **3.2.2 Data Collection**

After the form was finalized and reviewed by our liaison, we began our fieldwork. The purpose of this phase of our project was to actually see the petitioned sites in their current condition and assess them in a consistent manner with one established field form. One of the most important aspects of assessing the state of conservation is consistency. It was imperative that we remained constant between each person, and from site to site, when rating damage and condition throughout our survey. This required training from our liaison in regards to basic judgment of damage and restoration to make sure our ratings did not vary. We also tested ourselves by visiting the first few sites together to discuss our finalized methods of rating. Before starting out, we mapped out two routes for each day, one for each team. This facilitated visiting more sites each day with less time wasted searching for their locations. At each site, we filled out the field form, assessed the state of conservation and gathered as much information as possible.

In order to save time we completed the fieldwork in groups of two, with one person dictating and the other recording. In addition to filling out the field form, we took several digital photographs from different perspectives of the site to better illustrate its current condition. These photographs were mainly of the front façade and/or entrance, and of any noticeably different left, right or rear facades of each site. Detailed, close up photographs were also taken of any significant features or damage. The photographs were used to aid in our analysis of the state of conservation and helped to show any discrepancies in our ratings.

### **3.2.3 Condition Database**

The second database we created was for the state of conservation data that was collected in the field. This database was organized by individual landmarks and only included data on the sites

that we visited in our three assigned neighborhoods. Each landmark has an assessment of condition in the form of a general rating, as well as a description of the specific damage that it may have sustained.

The main objective in creating these databases was to present all of the information on the landmarks in an organized manner. We created three linked databases for the general information, condition information, and photographs. Since the many photographs we took resulted in a very large file, we created a separate database for them and linked it to the condition database. We now have general information, historical significance, current condition, and photographs available in linked databases for all of the landmarks that we visited. This provides a simplified way to obtain any information about the landmarks. An example of this database can be seen in Figure 8.

The screenshot shows a Microsoft Access window titled "Microsoft Access - [Condition Form Query]". The form contains the following fields and data:

- Petition:** [Empty]
- Neighborhood:** Downtown
- Overall Condition:** 1
- Name:** International Trust Company Building
- Landmark:** yes
- Address:** 45 Milk Street
- Date:** 3/29/00
- Restoration:** [Empty]
- Recorder:** Etsreglis
- Restoration Comments:** Very clean, cracks filled.
- Additional Comments:** Front: Lower half appears stained, water damage above windows. LHS: Left side stained. RHS: Significant water stains where building is in the shade.

**Facade Conditions Table:**

Section	Facade	Material	Water Damage	Cracks/Holes	Exfoliation	Stains	Mortar Deterioration
Foundation	Front	Stone	0	0	0	0	0
Foundation	Left	Stone	0	0	0	0	0
Foundation	Right	Stone	0	0	0	0	0
Body	Front	Stone	2	1	0	1	0
Body	Left	Stone	1	0	0	1	0

**Dissemination Conditions Table:**

Facade	Section	Type	Material	Structural/Applied	Condition
All	Body	Carvings	Stone	Applied	0

**Dissemination Comments:** Front: Extremely detailed stone carvings around archway Columns around all windows. Carvings all over. LHS: Carved statues, ornamental circular window in center

Figure 8. Conditions Database

### 3.3 Analysis of Preservation Assessment

An analysis of the data we collected was the final step in our methodology. This is possibly the single most useful part of our entire project, because it illustrates trends and patterns in landmark preservation, and it could further help the BLC in managing Boston's historic properties. In addition to simply pointing out such trends, we hope to provide useful explanations for them.

Our analysis was structured in such a way as to be included within our results. It was organized first with an overall picture of our results and a basic description of the obvious trends that appeared over the course of our fieldwork. The analysis continued on with a separate section for each neighborhood assessed. Within each section we examined the overall condition and then compared the condition to the designation status, material, and building type of each site. This analysis was best represented and reinforced in charts and graphs, which provided a visual image of any patterns that emerged. Maps aided in analysis by providing a spatial distribution of our data. We produced thematic maps to pinpoint the location of each site visited. These sites were also color coded by overall condition. The shape with which each site was depicted showed the designation status, whether they were denied, pending, designated or demolished. Another thematic map layer distinguished the neighborhoods by the number of petitioned sites within them.

These methods of analysis illustrated regions where petitioned sites were in greater need of preservation. This will provide the data necessary to present the BLC with recommendations as to where the most immediate preservation is necessary. Our results and analysis will be explained in detail in the following chapter.

### 3.4 Summary

Simply stated, the methodology of our project was divided into three parts with multiple steps within them. The first series of steps was to gather information on the permanent physical qualities of all sites petitioned for designation and enter this data into an easy to use database. The next phase involved visiting the sites in Allston/Brighton, Downtown, and Roxbury, which included filling out our unique field forms and taking digital photographs. The concluding phase was to carry out an analysis of our organized results and draw conclusions from this analysis.

## 4 RESULTS AND ANALYSIS

Analysis of our fieldwork, through detailed organization and study of our results, is the final goal of the project. Several aspects of the neighborhoods visited were compared and contrasted, including building type, material, designation status, and overall condition. Another process of this project was the linked databases created for the BLC. As well as helping this agency, the databases served as a means for our data manipulation and analysis.

One of the most important and useful parts of our project was the creation of the databases. The main purpose for these is to assist the BLC in organizing and managing the information they have on the petitioned sites. To facilitate this, a user interface was created that allows a user to easily utilize the most common functions of the database. Although the databases were designed for a person with little computer literacy, they also were created so someone with more knowledge of databases can use them for more specific, powerful functions. These databases have also been used to connect the information that was obtained from the BLC with the information that was collected from the fieldwork. Many of the maps and graphs seen throughout this chapter were created with the use of these databases.

The results obtained from the databases were structured in a manner that revealed some noteworthy trends, and allowed us to explain possible reasons for these trends, in a clear and logical manner. For example, most of the sites we visited were located Downtown, and were in above-average condition. It became clear from the results that the designation status of the Downtown sites may be directly related to their overall condition. Although Allston/Brighton and Roxbury had few sites in comparison to Downtown, some general trends were seen. Allston/Brighton sites were in very good condition, unlike those in Roxbury. This can be attributed to the economic status of the two neighborhoods. By comparing the results of each neighborhood to the others, we found that the outer Boston neighborhoods have been given far less attention than Downtown.

This chapter is divided into three distinct analytical sections. First, an overview of all survey results has been provided. The next sections include separate results and analyses for each of the three neighborhoods visited. In the final section, the results and analyses of each neighborhood were compared to the others, and conclusions were made. By studying our results in this manner, we have produced possible explanations for the trends exhibited, and can make recommendations to respond to problematic trends. With the completed databases and final results and analyses, we have established an easier way to manage Boston's historic sites.

## 4.1 Survey Results: An Overview

A total of 67 petitioned, designated, and denied sites were visited in the neighborhoods of Allston/Brighton, Downtown, and Roxbury. Special attention was paid to the designation status, primary material, building type, and the geographic distribution of these sites. These characteristics were then compared to the overall condition ratings recorded throughout each neighborhood. To preview our field results from an overall standpoint, most were commercial buildings located Downtown, made primarily of stone and brick. The following section provides an overview of the results of our fieldwork, and an introduction to the remainder of the results and analysis.

### 4.1.1 Location and Type

There are thousands of sites throughout Boston that have been petitioned and designated as National, State, and Boston landmarks. This project dealt with only the sites petitioned for designation by the city of Boston. These sites include buildings, churches, open spaces, street plans, historic districts, and other miscellaneous sites, including the tugboat “Luna,” found in Charlestown. While the sites petitioned for landmark designation are distributed in different areas throughout the city, the Downtown neighborhood has a considerably greater number, with 39% of the total petitioned sites. This is illustrated in Table 2, which shows the geographic and typological distribution, by neighborhood.

Table 2. Breakdown of Petitioned Site Type by Neighborhood

	Buildings	Churches	Open Spaces	Miscellaneous	Total
<b>Allston/Brighton</b>	8	0	0	2	<b>10</b>
<b>Back Bay</b>	11	3	0	3	<b>17</b>
<b>Beacon Hill</b>	4	1	0	0	<b>5</b>
<b>Charlestown</b>	3	0	0	5	<b>8</b>
<b>Dorchester</b>	5	0	1	3	<b>9</b>
<b>Downtown</b>	58	1	2	9	<b>70</b>
<b>East Boston</b>	4	0	0	3	<b>7</b>
<b>Fenway/Kenmore</b>	3	0	2	3	<b>8</b>
<b>Hyde Park</b>	0	1	0	0	<b>1</b>
<b>Jamaica Plain</b>	5	1	0	0	<b>6</b>
<b>Mission Hill</b>	1	0	0	1	<b>2</b>
<b>North End</b>	0	2	0	2	<b>4</b>
<b>Roxbury</b>	7	1	1	3	<b>12</b>
<b>South Boston</b>	1	0	0	0	<b>1</b>
<b>South End</b>	7	3	0	2	<b>12</b>
<b>Theatre District</b>	15	0	0	0	<b>15</b>
<b>West Roxbury</b>	0	1	1	0	<b>2</b>
<b>Total</b>	<b>132</b>	<b>14</b>	<b>7</b>	<b>36</b>	<b>189</b>

After Downtown, with its 79 petitioned sites, 8 of the other neighborhoods have only 5 to 10. Back Bay/Beacon Hill is a notable exception, with 20. Only four of the neighborhoods have two or less petitioned sites. This is shown in the thematic map in Figure 9, which is color-coded to show the number of petitioned sites in each of Boston's neighborhoods. The two other neighborhoods we chose to examine more closely were Allston/Brighton and Roxbury. These two neighborhoods have 8 and 10 petitioned sites, respectively, which is approximately the average for most of Boston's neighborhoods.

After examination of the data contained in Table 2 and Figure 10, it is apparent that some numbers within the neighborhoods are not consistent. This is due to several factors. Some sites included in the totals of the table are historic districts, which are not included on the map. This accounts for discrepancies in all neighborhoods, with the exception of the Central or Downtown neighborhood. On the map, the Central district includes all sites in Downtown, the Theatre District, and the North End. The Theater District has a greater amount of sites in the table because many of the sites in this area are petitioned for both the interior and exterior, and this is considered to be two separate petitions. The map does not show the same amount however because both petitions still have the same location and are therefore mapped only once.

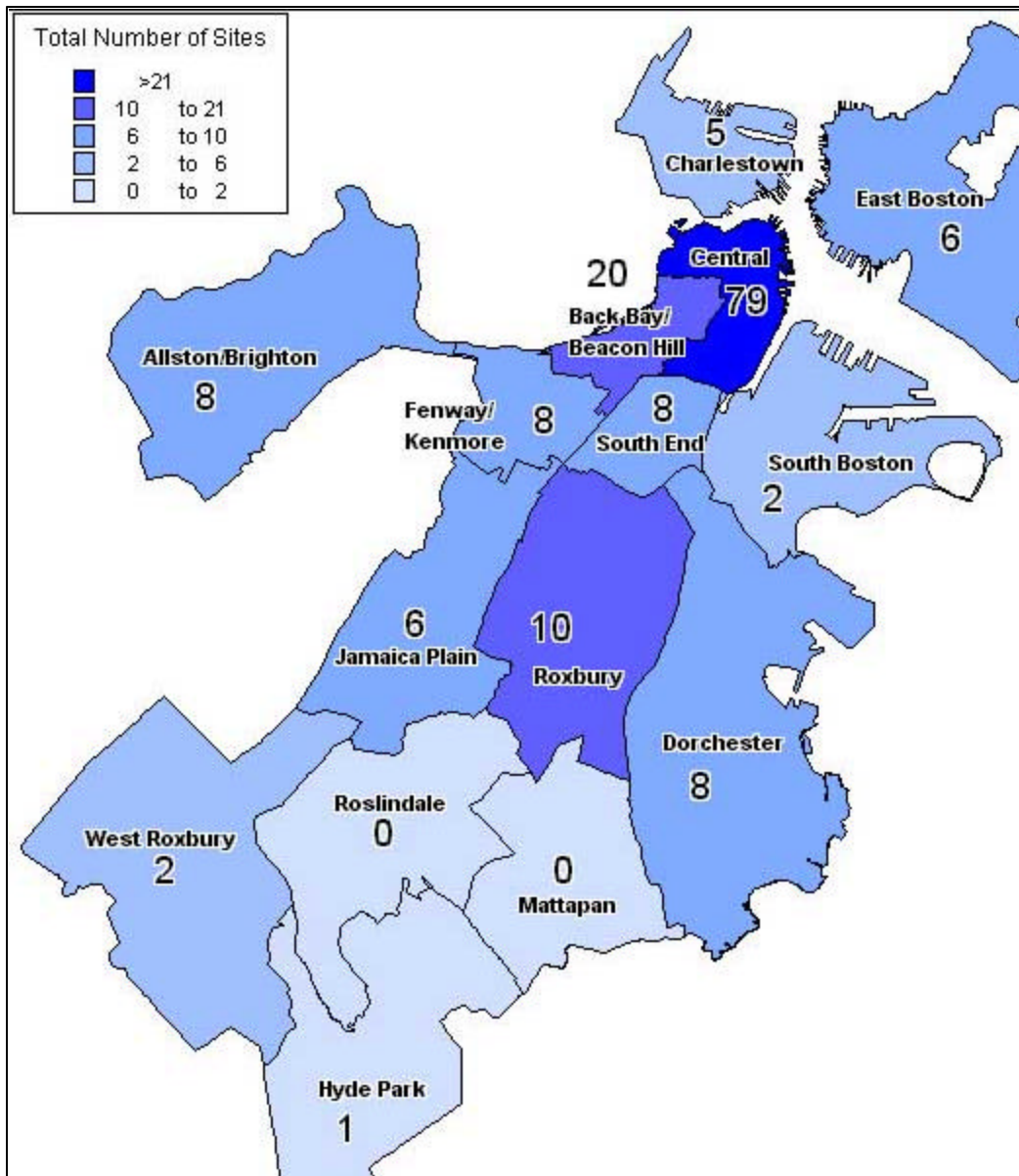


Figure 9. Thematic Map of Spatial Distribution of Petitioned Sites

While there are many different types of petitioned sites, including buildings, open spaces, and churches, it is clear from Table 2 that buildings are the most abundant type of petitioned property, followed by the miscellaneous category, which includes historic districts, street plans, or “The Ropewalk,” found in Charlestown. Although this is not the case for some individual neighborhoods, such as the North End, buildings account for the majority of the sites, covering 70% of all sites petitioned. See Figure 10 for a percentage breakdown of the typology of petitioned sites.

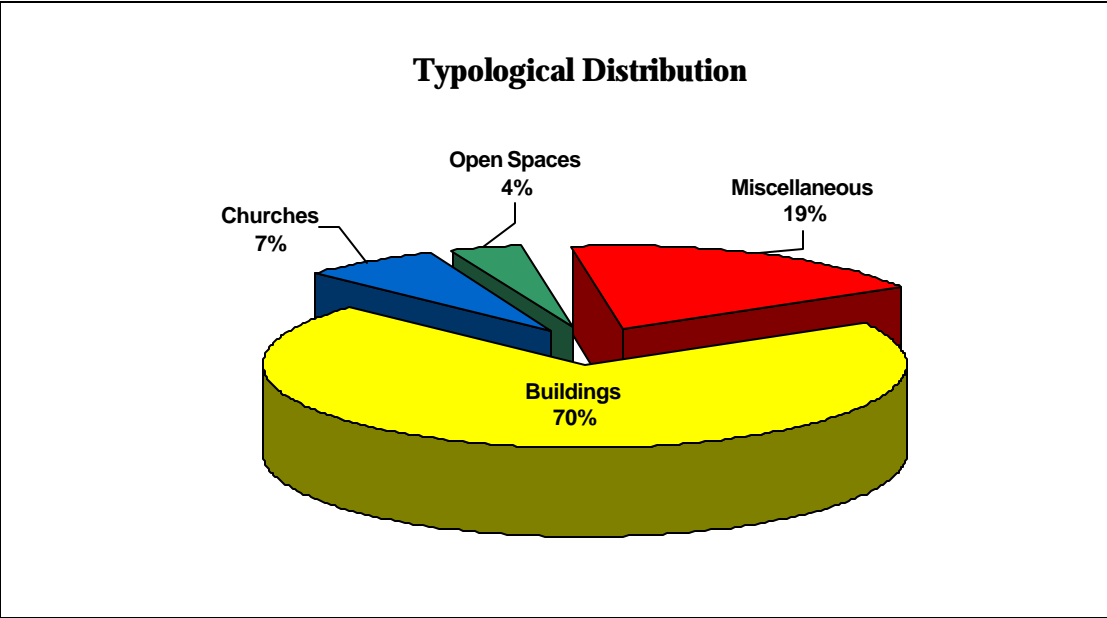


Figure 10. Typological Distribution of Petitioned Sites

As stated previously, our investigation was focused on the sites in the Allston/Brighton, Downtown, and Roxbury neighborhoods. Of all types of petitioned sites, we were only able to properly assess buildings and churches, due to time constraints and our limited assessing ability. Open spaces, historic districts, designated street plans, the interior of buildings, or any other miscellaneous sites were not visited. Therefore, the number of sites visited is 67, as seen in Table 3. Despite the reduction in the number of sites visited, the same geographic and typological trends were seen throughout these three neighborhoods. The Downtown neighborhood dominates the city with the most petitioned sites while buildings account for the majority of the sites we visited.

Table 3. Breakdown of Types by Neighborhoods Visited

	Buildings	Churches	Total
<b>Allston/Brighton</b>	7	0	<b>7</b>
<b>Downtown</b>	52	1	<b>53</b>
<b>Roxbury</b>	6	1	<b>7</b>
<b>Total</b>	<b>65</b>	<b>2</b>	<b>67</b>

As stated, the Downtown Boston neighborhood clearly dominates the city with the largest number of sites petitioned for landmark designation. There are several ways to explain this trend. First, this is one of Boston’s oldest neighborhoods, along with Charlestown and Dorchester, resulting in more significant historic buildings and sites. Also, this is the neighborhood where most of the city’s tourist attractions are located. To keep this aspect of Boston’s economy active, it is

important that the neighborhood be in good condition, and aesthetically pleasing. Through landmark designation, these sites are more likely to receive funding for restoration. Also, landmark designation is one way for a community to protect its historic resources from demolition and severe alteration. The Downtown neighborhood is the prime location for business growth and expansion. New corporations are looking for prime areas for business, and this area is ideal for new development. This places many of Boston's important historic buildings in danger of demolition. Perhaps many of the sites in this area have been designated or petitioned to save them from the effects of the booming economy.

#### 4.1.2 Overall Condition and Ornamentation

The condition of each section and any ornamentation of each of the assessed sites were given an overall rating from zero to four, based on the guidelines established in our Methodology chapter. To briefly reiterate, a zero was indicative of no damage, and a building given a four rating was in poor condition. As a whole, the sites of the neighborhoods examined are in above-average condition. Of the 67 sites, more than 50 % were given ratings of excellent or above average. Only 12 % had significant amounts of damage, and few were rated as poor, or had been demolished. Figure 11 shows a clear illustration of these results.

The ornamentation on these sites is all in relatively good condition, with the majority having an above average rating. Figure 11 below also shows the overall condition of each ornamentation type in the neighborhoods studied. It is apparent that arches were all in the worst condition, with only an average rating. In the neighborhoods visited, arches were usually found as part of a window's exterior structure. This section of a building is prone to more water damage and stains due to runoff of rain.

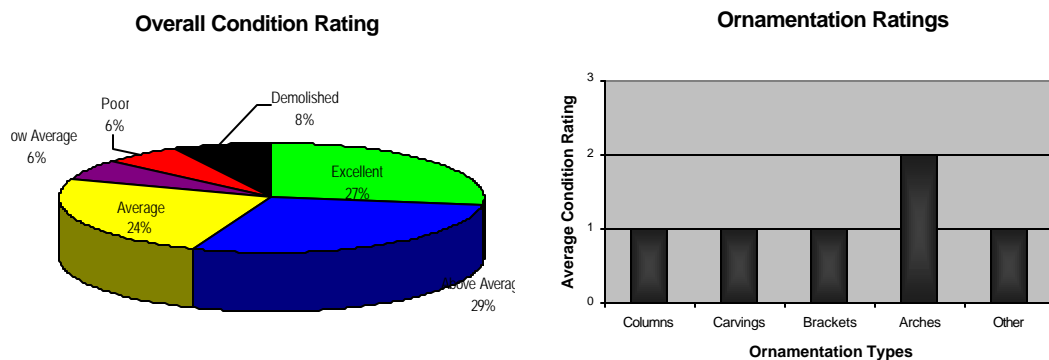


Figure 11. Overall Condition Ratings of all Sites Visited

### **4.1.3 Designation Status**

The designation status of a site is whether it has been designated as a landmark, has been denied, or its petition is still pending. Of all sites visited, only 18% had been denied landmark designation. Approximately 32% of the sites are pending and 50% of the total have been granted designation. The trend of designation status throughout the assessed sites will further be explained in the latter sections of this chapter.

### **4.1.4 Material**

In the field, a site's primary material was recorded. These were classified as stone, brick, wood, or other. Some examples of "other" are cast iron or vinyl siding. The primary material of a site can often be directly related to its overall condition. Strong materials, such as stone and brick can stand up to adverse conditions and show few signs of water damage, cracking or staining.

Most buildings assessed were made of brick or stone, making up 40% and 50% of all sites visited, respectively. Since these are stronger, they received better ratings than other materials. In general, stone buildings were rated better than brick, unless the brick buildings were recently restored. However, if brick buildings were not restored, the mortar appeared to be deteriorated and the bricks were pitted with pieces missing.

Wood and metal buildings were found less frequently than brick and stone, making up only 10% of all assessed sites. Wood was usually in the worst condition because it is very susceptible to water damage. Once this material has sustained significant damage, it must be completely replaced in order to maintain the condition of the building. Although cast iron can be quite strong, it quickly rusts, which leads to severe staining on any bordering materials and can have a negative impact on the appearance of a site. Sites that had copper or bronze were always green in color, because these materials turn green once exposed to the elements. While this does not indicate structural damage, these materials are not found in their best condition unless they are new.

### **4.1.5 Summary**

To summarize, most petitioned sites are located in Downtown Boston, the majority of which are buildings. Most sites in Allston/Brighton and Roxbury were also categorized as "buildings." The high number of petitioned and designated sites found Downtown can be explained by the age of this area, its popularity with tourists, and the city's continuous growth. Of all buildings we visited, only few were in below-average condition, or demolished. The independent ornamentation ratings, given at each site, reflected the good condition of the neighborhoods overall.

Downtown Boston dominates the other neighborhoods in numbers of sites, which means this neighborhood has more influence over the overall condition results seen in Figure 11, and may

result in inaccuracy. In order to effectively analyze our results and inform the BLC, it was important to examine the overall condition of each neighborhood in detail, according to designation status, material, and building type.

## 4.2 Condition of Downtown

Of the three neighborhoods visited, Downtown Boston contained the most petitioned sites. In this study, 53 of the 70 listed sites were assessed. As the following section will illustrate, the majority of the sites are designated or pending, their primary material is brick, and they are mostly commercial buildings that are generally in above average or excellent condition. In the following pages we discuss the overall conditions of the Downtown sites, according to their designation status, material, and building type.

### 4.2.1 Status

Downtown has the majority of designated sites in the City of Boston. The largest percentage of sites (52%) is designated, and 33% are pending. Only 15% of the sites downtown have been rejected. Figure 12 illustrates the distribution of designation status in Downtown. The abundance of designations in this area can be explained in several different ways. There are more landmark designations Downtown simply because there are more petitioned sites. Another obvious reason is that Downtown Boston is the center of the city and therefore architects were probably involved in the design of almost every building. Since this neighborhood is one of Boston's oldest, there are more sites with historic significance.

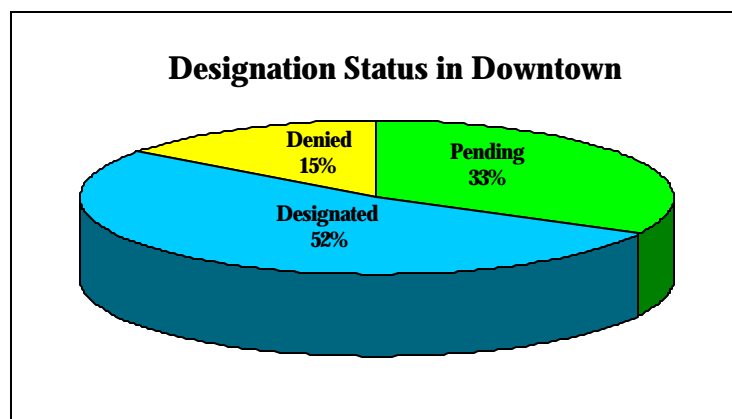


Figure 12. Designation Status

In accordance with most sites being approved for landmark designation, the majority of the sites have been well maintained, in excellent condition, and most have undergone recent restoration. A large amount of sites received a rating of zero, which means the building was in nearly flawless

condition. As shown in Figure 13, almost all of the sites that received a zero rating were designated landmarks. The only sites that received the worst rating, a four, were denied designation, while no designated or pending sites were given this poor rating. The designation status of a site appears to have a direct relationship to its condition in this neighborhood. As seen in Figure 13, as the condition of the sites degrades, the number of designations decreases.

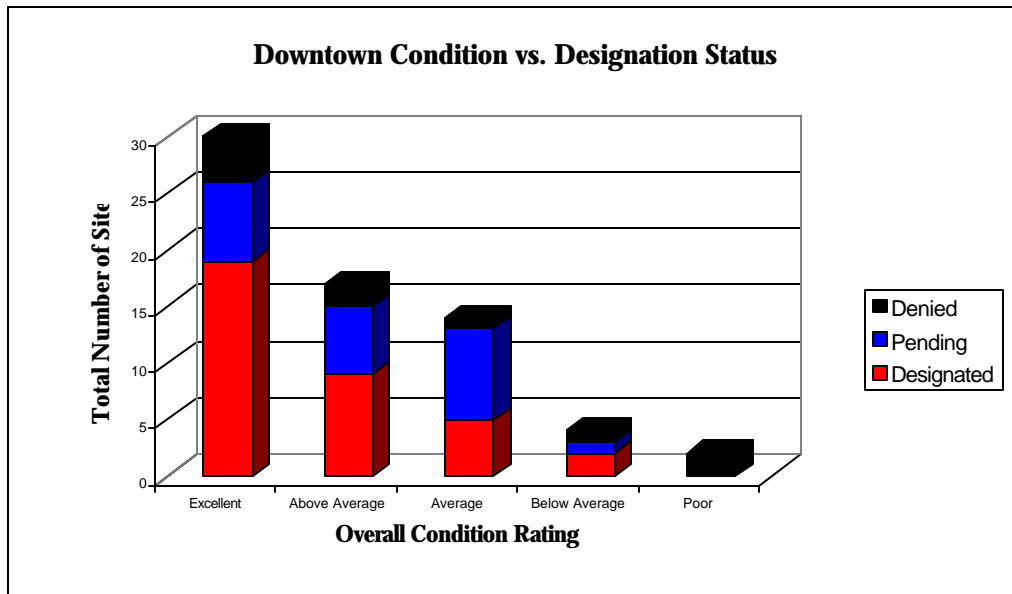


Figure 13. Downtown Condition Vs. Designation Status

#### 4.2.2 Material

Stone and brick were by far the most plentiful materials found Downtown, which may explain why many sites Downtown were in above average condition. 42% of the sites were stone, 54% were brick, and the remaining 4% were other materials such as cast iron or stucco. As seen in Figure 14, the majority of buildings made of stone and brick received an excellent rating. Stone buildings were very rarely in poor condition. No stone buildings received a rating of poor and only one received a below average rating.

Although a large number of brick buildings received ratings of excellent and above average, a considerable amount was also given average and below-average ratings. Many of the brick buildings had not been restored and were composed of their original bricks. Throughout the years, weather and projects like the Big Dig within the area have probably contributed to the degradation of the bricks of these buildings. Also, in many cases, the mortar of these brick buildings had been replaced by concrete. Unlike mortar, concrete is harder than brick, and therefore rain water causes more damage to the bricks than the concrete.

In regards to material, the issue of money is again brought forward. Downtown is generally a wealthy area and businesses can afford to use the more expensive, but more durable materials. There is also more money available for expensive restorations. Because the buildings downtown are usually more than one or two stories high, stronger, more durable materials are a necessity. Wood and other materials are not as commonplace as they are most commonly used in smaller, residential structures.

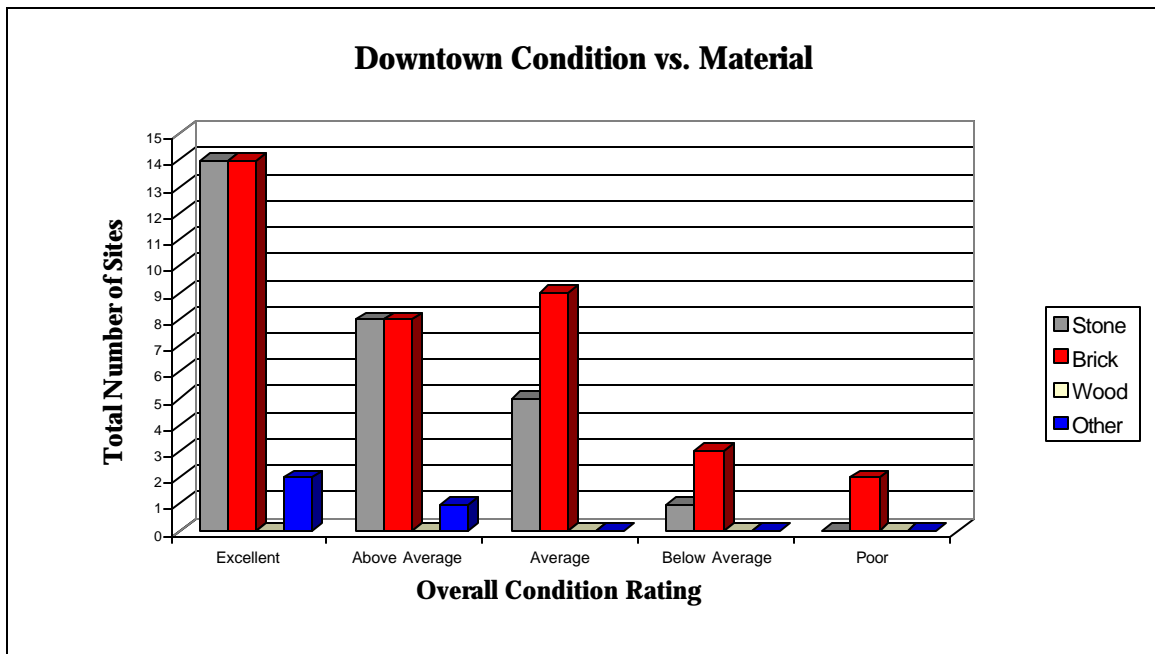


Figure 14. Downtown Condition vs. Material

### 4.2.3 Type

The final analysis of Downtown buildings focuses on the building type, whether they were characterized as residential, commercial or institutional. Commercial buildings composed 93% of the sites Downtown. The percentages of residential and institutional buildings were a mere 6% and 1% respectively. This was expected, since Downtown is a commercial area, full of stores, restaurants, and corporate offices housed in large skyscrapers or high-rises. Figure 15 illustrates the prevalence of commercial buildings throughout all of the condition ratings. The data contained in this figure is consistent with the trends seen in the previous two subsections. Most of the buildings were given above average ratings. However, there was not enough variance in the buildings types in this neighborhood for a more in depth analysis to be made.

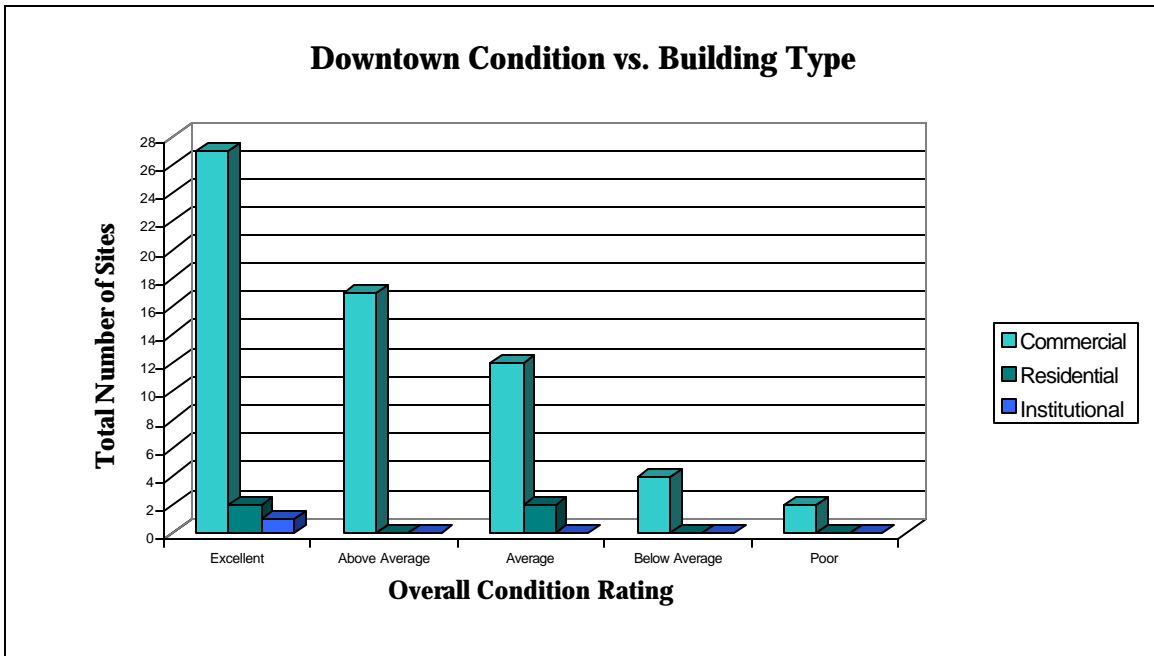


Figure 15. Downtown Condition Vs. Building Type

The assessed sites in the neighborhood of Downtown are in good condition, with many of the petitioned sites having been designated. Most buildings were made of stone and brick, the strongest of all materials encountered. After examining the results of the Downtown neighborhoods, it is important to also analyze the data gathered from the outer Boston neighborhoods of Allston/Brighton and Roxbury.

#### 4.3 Condition Of Allston/Brighton

Of the ten petitioned sites in Allston/Brighton, six were assessed. Of the four sites not assessed, two were demolished and two were conservation districts, which fell under the miscellaneous category. Compared to Downtown, there were few sites in Allston/Brighton, but they were in good condition. The materials of the sites varied more than the previous neighborhood, but the designation status had a similar distribution throughout the buildings. Due to the small number of sites, the results did not show any definitive trends. The following sections will detail the condition of the sites and compare according to designation status, the material, and the building type.

### 4.3.1 Status

In general, the neighborhoods of Boston other than Downtown have few sites designated or petitioned for landmark designation. Following this trend, the predominantly residential neighborhood of Allston/Brighton does not have many petitioned sites. In this neighborhood, 50% of the assessed sites were designated landmarks. The lack of petitioned sites in Allston/Brighton could be due to the fact that it is not a center of commerce and tourism like the Downtown area. It is less recognized and not as well known, but nonetheless, there are significant historic sites there, which deserve to be recognized and protected. As seen in Figure 16 below, no assessed sites were given a rating of below average or poor. Two out of the three designated sites were given an excellent rating. However, the denied sites were also in good condition, with one site receiving an excellent rating and the other an above average rating. Designation status, in this case, does not appear to be directly related to the neighborhood's condition, since designated, denied and pending sites were given similar ratings.

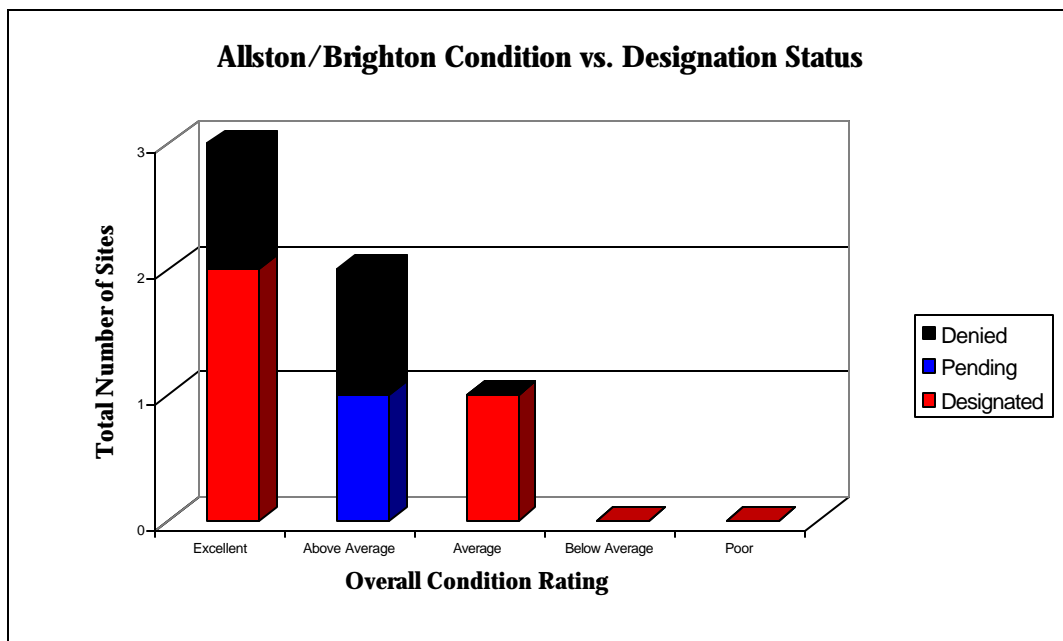


Figure 16. Allston/Brighton Condition vs. Designation Status

### 4.3.2 Material

The materials that make up the sites in Allston/Brighton are fairly diverse. The breakdown is as follows: two stone, two brick, one each of wood and stucco, as illustrated in Figure 17. Again, the condition does not seem to be directly related to the material in this neighborhood. A good illustration of this can be seen in the stone buildings, with one having an excellent rating and the

other with an average rating. This lack of significant trends can be explained by the small amount of sites in Allston/Brighton.

Although wood and other materials such as stucco are less durable than stone and brick, buildings of these materials were all well maintained and given a good overall rating. However, the lack of petitioned sites seems to suggest that there need to be more sites petitioned and designated in the smaller neighborhoods.

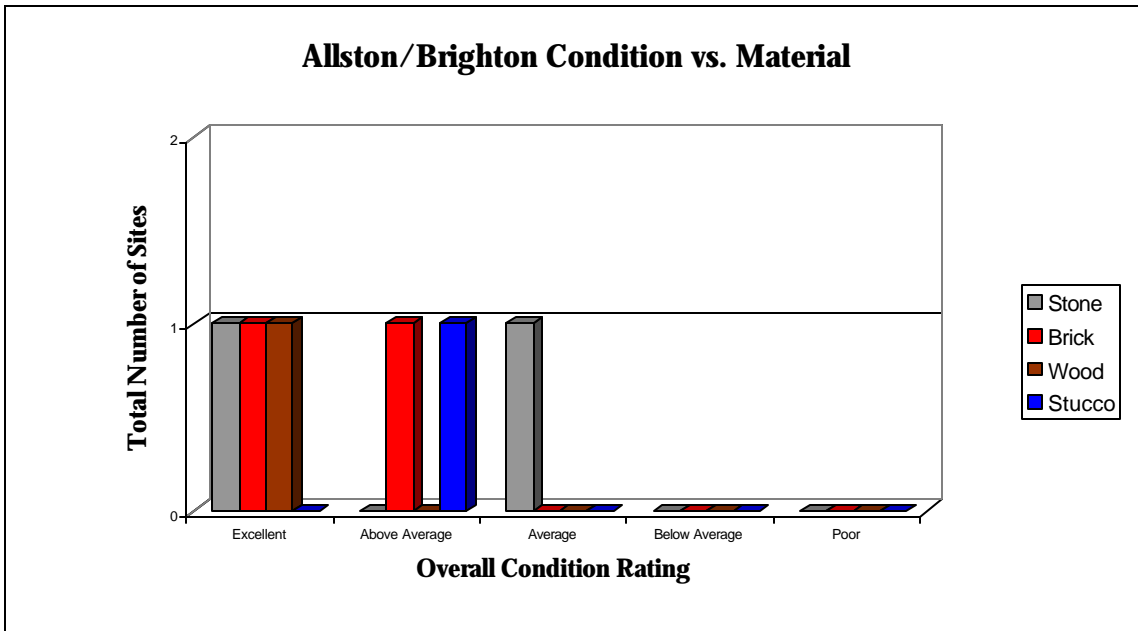


Figure 17. Allston/Brighton Condition vs. Material

### 4.3.3 Type

As can be seen in Figure 18, three of the sites visited in Allston/Brighton were institutional, two were commercial, and one was residential. Two of the three institutional buildings were given a perfect rating, and the other was given an above average rating. The single residential building was also given above average, while the two commercial buildings received ratings of excellent and average. There does not seem to be a direct correlation between building type and condition. The typological distribution is varied but more data is needed to make any meaningful analysis.

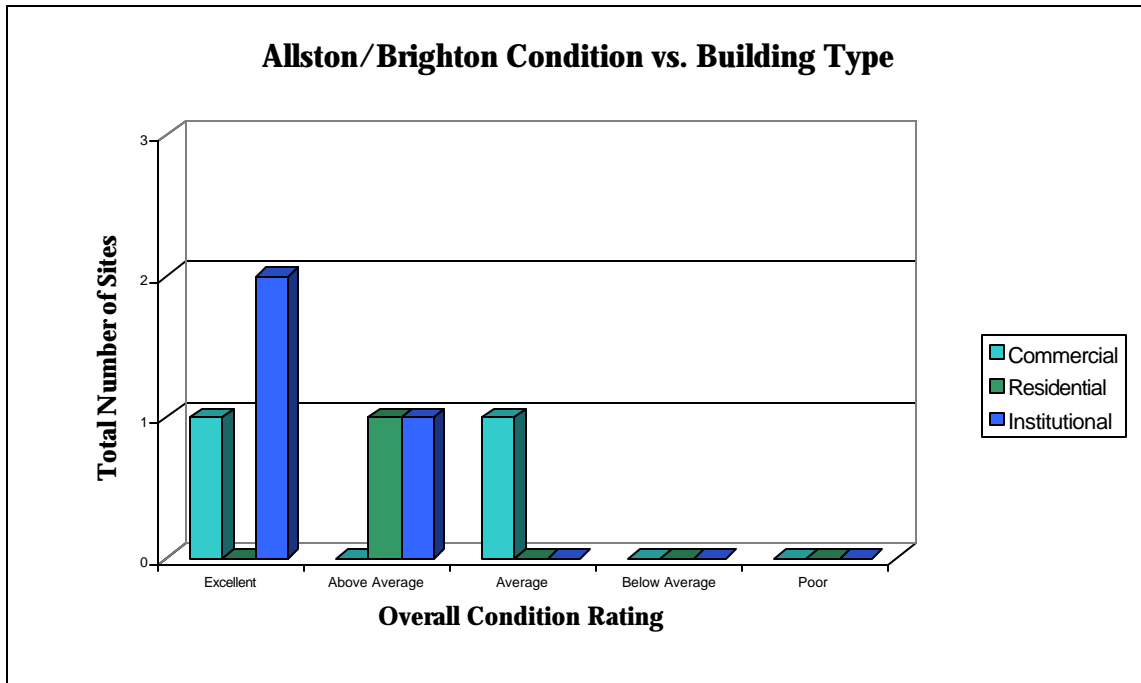


Figure 18. Allston/Brighton Condition vs. Type

Overall, the petitioned sties in Allston/Brighton are in good condition. Even those buildings made of less durable materials have been well maintained. The sites that were denied landmark designation are in better condition than some of the pending sites. This neighborhood shows no real problems in maintenance or restoration of its historic sites, but when compared to Downtown, it is lacking in the number of sites that have been petitioned.

#### 4.4 Condition Of Roxbury

The final neighborhood visited was Roxbury, which was similar to Allston/Brighton due to its small number of petitioned sites in comparison to Downtown. This made it more difficult to find underlying trends in the gathered information. Of the twelve petitioned sites in this neighborhood, only six were assessed. We had been informed of one demolition, and discovered another while completing our fieldwork. The remaining four sites consisted of three conservation districts and one open space.

##### 4.4.1 Status

The other two neighborhoods analyzed in this project had similar patterns in designation status. In both cases, at least one half of the petitioned sites had been designated, and a much smaller percentage had been denied. These neighborhoods also showed good overall condition

ratings among the majority of their sites. On the contrary, of the total petitioned sites in Roxbury, only four have been designated. The same number of sites have been denied or are still pending.

The smaller percentage of sites designated in Roxbury and the lower condition ratings were expected, due to socioeconomic issues within the neighborhood. The rating and status of each site reviewed are shown in Figure 19. Twice as many sites were given a poor rating, as were given a perfect rating. Of the sites rated as poor, none were designated. The only site to receive an excellent rating was designated. Even though only six sites were evaluated, Figure 19 shows a connection between designation status and state of conservation, and a potential problem in the state of Roxbury’s historic buildings.

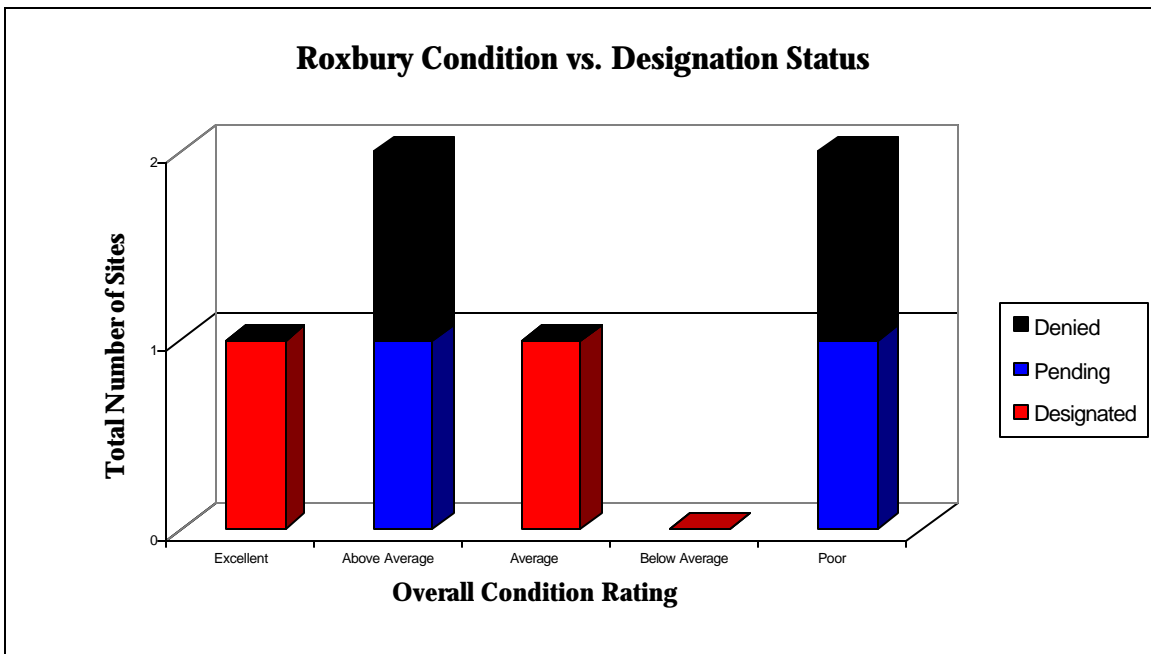


Figure 19. Roxbury Condition Vs. Designation Status

#### 4.4.2 Material

The sites assessed in Roxbury were primarily made of stone, brick, and wood. Of the sites examined, three were made of wood, while those remaining were composed of stone and brick. One of the stone buildings was in excellent condition, while the other was in poor shape. The only brick building was also given a poor rating. The three wooden buildings were in good condition, considering this is one of the weaker materials. These results are illustrated in Figure 20. A concise conclusion cannot be drawn from these results. There does not seem to be any direct connection between building material and overall rating.

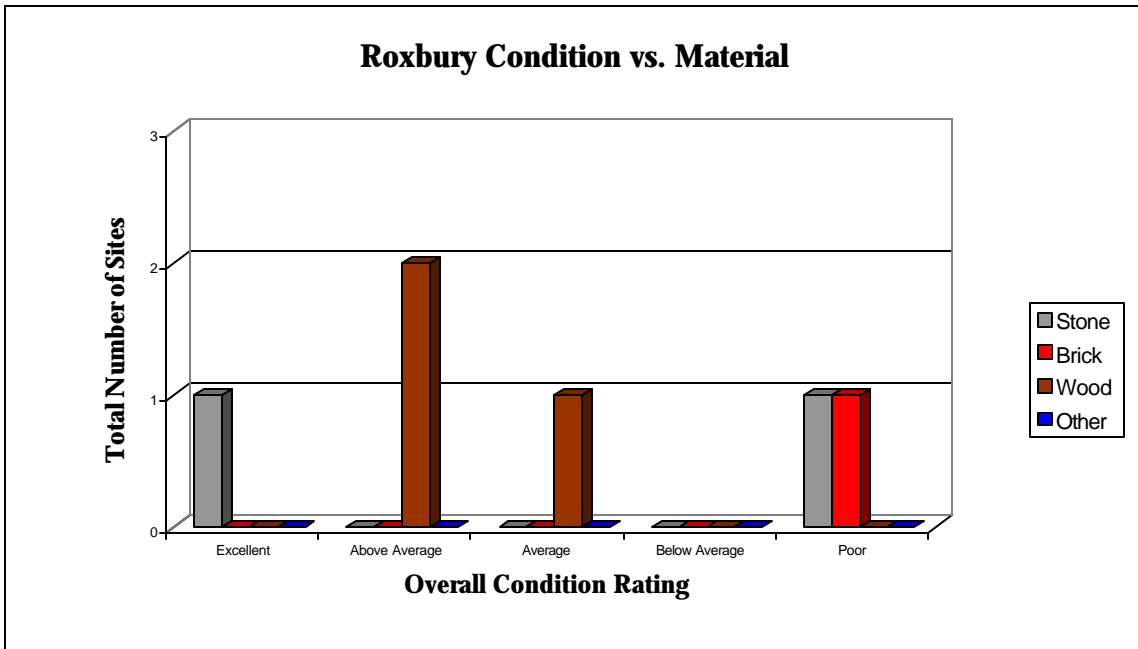


Figure 20. Roxbury Condition vs. Material

#### 4.4.3 Type

Among the building types in Roxbury, no one type is most prominent. This neighborhood is made up of residences, commercial buildings, institutional buildings, parks, etc. As seen in Figure 21, of the sites visited, three are classified as commercial, two are residential, and the last is institutional. The two buildings that were given poor ratings were both commercial buildings, while the other commercial building was in above average condition. One of the residential buildings was in average condition while the other was above average. The sole institutional building was evaluated as above average. Once again, a clear trend has not emerged from comparing this data. There is no distinct connection between building type and overall rating in Roxbury.

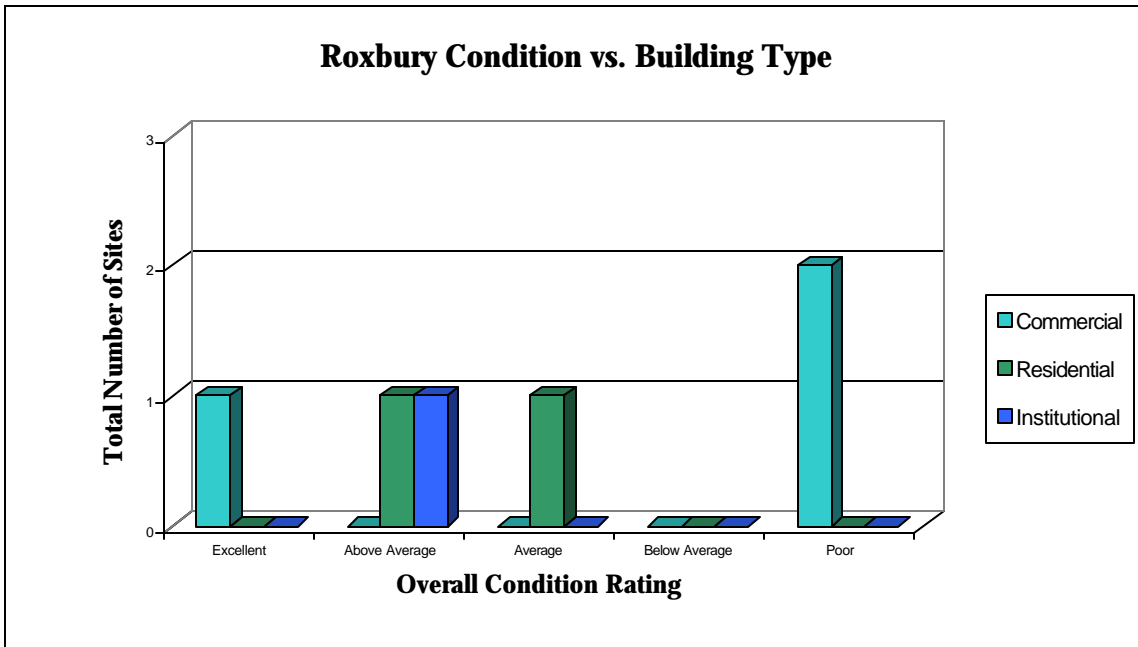


Figure 21. Roxbury Condition vs. Building Type

Among these sites, the designation status shows a different pattern than in the previous two neighborhoods. More sites have been denied than are designated or pending. This neighborhood has a much larger percentage of sites with poor overall ratings than Allston/Brighton or Downtown. It is very likely that this is due to weaker building materials and the lack of designations. The following section will compare the conditions of the three neighborhoods with their designation status, primary material and building type.

#### 4.5 Comparison of Neighborhoods

Now that we have examined the individual neighborhoods and any effects that designation status, building material, and building type had on the overall condition, it is necessary to compare how Allston/Brighton, Downtown, and Roxbury relate to each other in these areas. This comparison will further show that Downtown dominates the city, and more attention needs to be paid to smaller neighborhoods to preserve Boston's heritage.

##### 4.5.1 Condition

The individual condition of each neighborhood may show trends within a specific area, but a comparison of the three neighborhoods points out a pattern within the City of Boston. As illustrated in Figure 22, Downtown has high percentages of assessed sites with ratings of average or better. Allston/Brighton has a higher percentage, but it is important to bear in mind that there are fewer sites involved. 33% of Roxbury's sites received a poor rating, which was the most in this category.

Downtown was the only neighborhood to present a definitive trend in condition. A large amount of sites exist in this area and the majority of them are in excellent condition. The percentages for Allston/Brighton and Roxbury do not seem largely different than those from Downtown, but when one considers the fact that Downtown has more than seventy sites, and Allston/Brighton and Roxbury each have about ten, it is evident that Downtown emerges as the most significant neighborhood in terms of site condition.

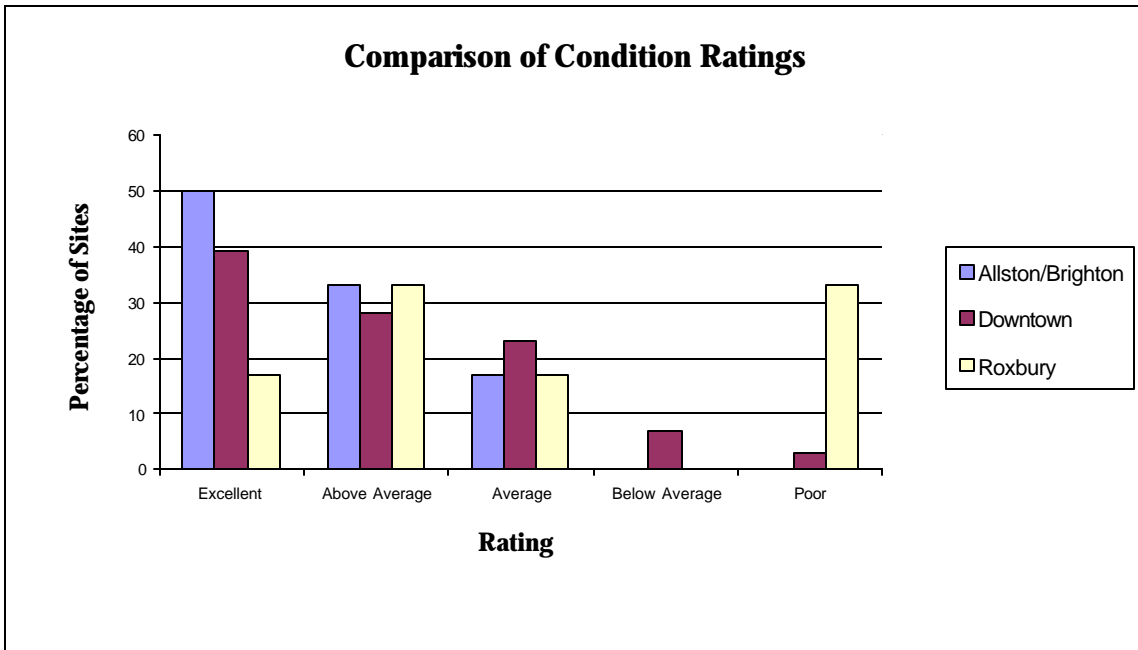


Figure 22. Percentage of Ratings Throughout Neighborhoods

One of the major contributions to the superior condition of buildings Downtown is the fact that many of the buildings have been restored. Allston/Brighton has a large percentage of restored sites as well, when compared to its small quantity of sites. Roxbury was the least restored neighborhood, with some of its buildings appearing as though they had not been touched in years and were approaching demolition by neglect. The numbers for buildings demolished show that Downtown had the most demolished sites. Figure 23 shows the number of restored buildings in each neighborhood compared to the number of demolished buildings, and the total number of sites.

Clearly, Downtown has the largest number of restored properties. Obviously, the reason that Downtown has the majority of its sites restored and in excellent condition is due to the fact that it is the most commercial, developed neighborhood in Boston. Other factors may also contribute to the overall condition of this area such as material, designation status, and building type, as will be discussed in the next few sections.

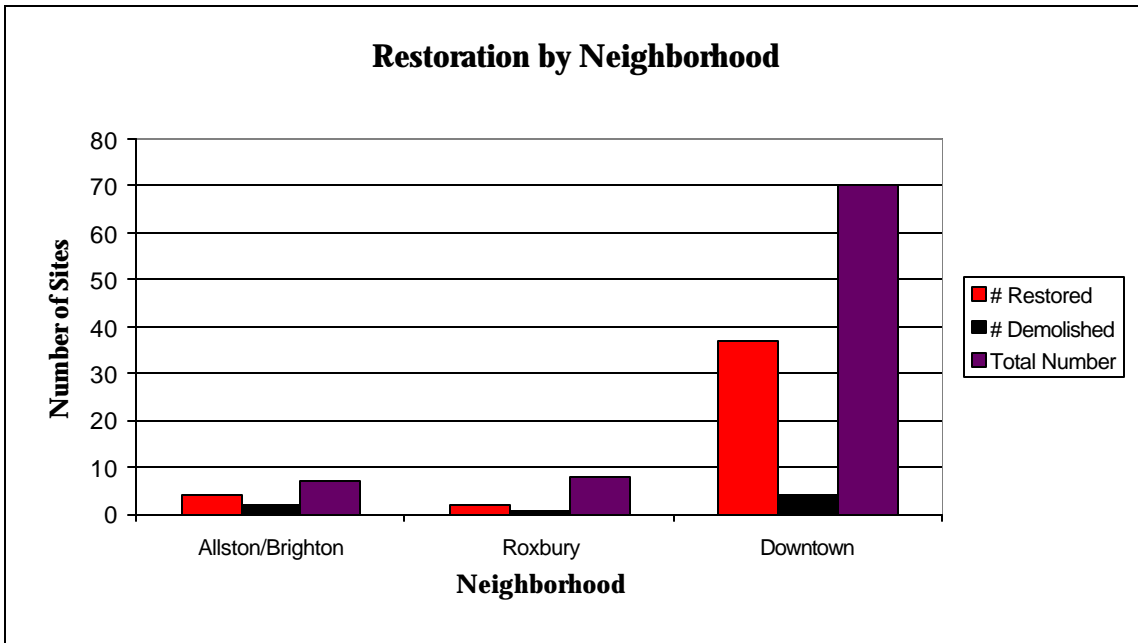


Figure 23. Restoration By Neighborhood

#### 4.5.2 Status

In Allston/Brighton and Downtown, the good overall condition reflected the large percentage of designated sites. The designation status of the petitioned sites in all of Boston's neighborhoods can be seen in Figure 24. This map includes every neighborhood and it depicts the trend of Downtown's dominance, both in number of sites and number of sites designated, over all of the other neighborhoods, including the two that we assessed. When the amount of sites from all of the other neighborhoods is totaled and compared to that of just Downtown, the remaining fifteen neighborhoods have only about twenty more sites than Downtown alone.

It seems that designated sites are more likely to be in good condition in each neighborhood, whereas denied sites are often in poor shape or have been demolished since their denial. This trend in denial, poor condition, and demolition was evident in the Roxbury sites. This pattern should serve as a warning sign.

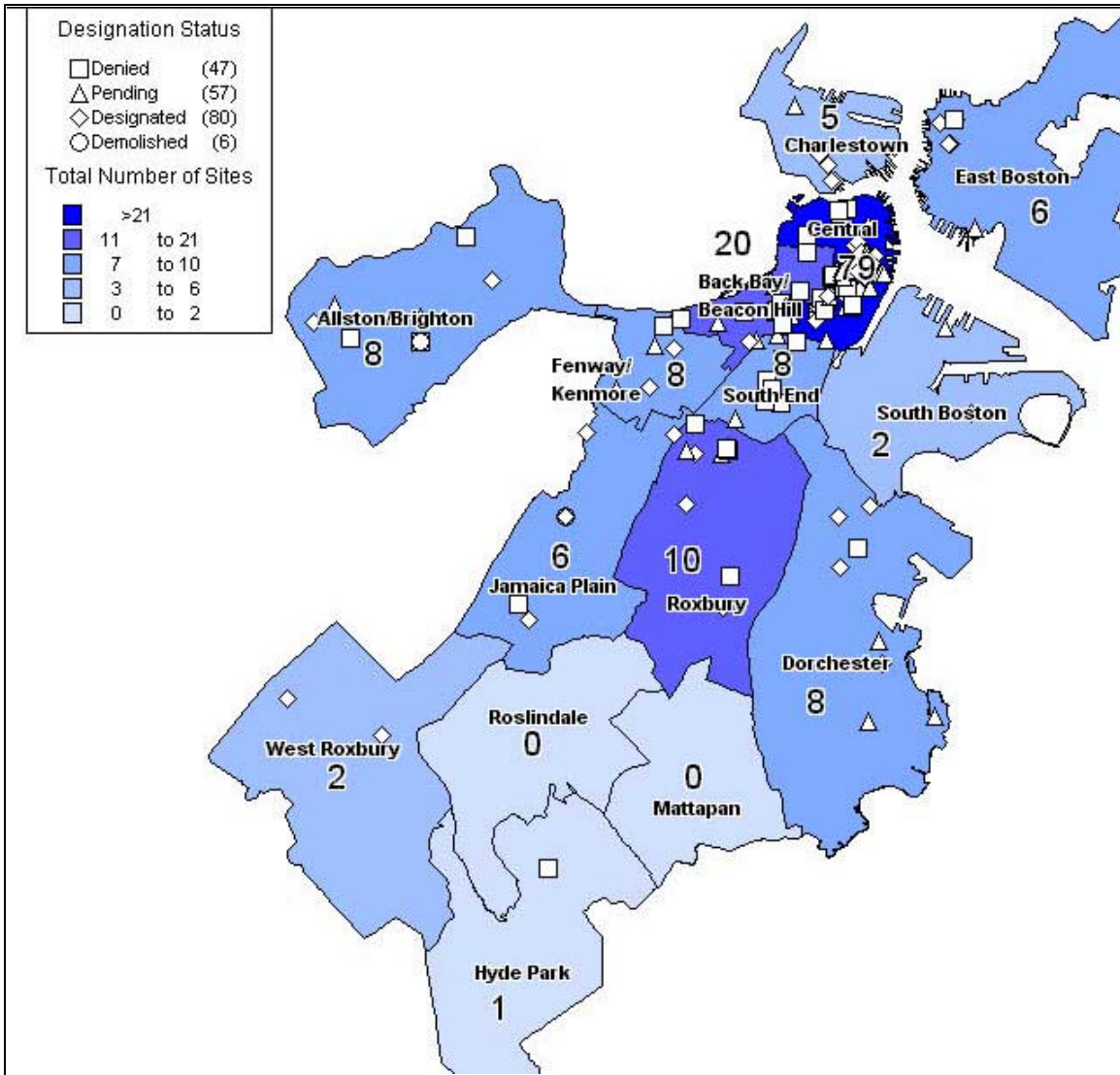


Figure 24. Designation Status in Boston

### 4.5.3 Other Comparisons

Although material and type were examined in each neighborhood, it was somewhat difficult to draw any significant conclusions from the data gathered. Therefore, a comparison of the neighborhoods yields little evidence of any real patterns. There are, however, a few points to be made concerning these topics.

In terms of material, all three neighborhoods exhibited a widespread use of brick and stone. This is most likely because they are both strong materials that can survive many kinds of damage and still be structurally sound. As stated in the previous sections, Downtown had brick as the most prominent material with stone a close second. Allston/Brighton had a diversified range of materials, with the majority being stone, while Roxbury had the most wooden buildings, but also contained two

sites made of stone and one of brick. The materials that were stronger were obviously in better condition throughout all of the neighborhoods, but since Downtown had so much of the strongest material, stone, it stood above the other neighborhoods in the ratings throughout.

The building type seems to have little effect on the overall condition, other than the fact that if a building was commercial, and owned by a large corporation, it was usually restored or better maintained. Corporate ownership means that there is more money available for restoration projects, regular cleanings, repairs and overall maintenance. Corporations are more concerned about the appearance of their building than a private owner or small company can afford to be. Residential and institutional buildings are usually owned by small businesses or individually, resulting in less available funding for restoration. This explains the lower percentage of excellent ratings throughout Roxbury.

#### 4.6 Summary

In conclusion, within two of the three neighborhoods we examined, Allston/Brighton and Downtown, similar trends were defined. These trends were based upon condition and site designation. A large percentage of the sites in both neighborhoods were designated or pending, and in relatively good condition. This is a logical trend, since a site is more likely to be in good condition if it is designated as a landmark. Downtown had the most of everything; petitioned sites, landmark designations, good ratings, restorations and strongest materials. For these reasons, it is obvious that this neighborhood's sites were in the best condition. While Allston/Brighton only had a few petitioned sites, they were all well maintained. Whether the sites were pending, denied, or designated, Allston/Brighton remains a remarkably good example of an urban New England neighborhood, with its houses, schools, and churches. The third neighborhood, Roxbury, had few sites with inconsistent data. A high percentage of these sites were denied designation and in need of repair. The only evident conclusion that can be made from this neighborhood is that more sites need to be petitioned. The lack of further detail did not allow us to surmise any other noteworthy patterns.

## 5 CONCLUSIONS AND RECOMMENDATIONS

The current system used by the BLC to manage their information on Boston's historic sites consists of many paper folders, files, and binders. Although this system is sufficient for their purposes, over the past 25 years, important information has been misplaced or lost. In order to efficiently handle the increasing number of petitioned and designated sites in Boston, this agency is in need of a computer-based system. Creating a foundation for this system was one of the accomplishments of this project. Through creation of a database in which to enter all petition information as well as site condition and pictures, the BLC has been presented with a more efficient manner of processing their information on all petitioned and designated sites throughout the city.

A second goal established was to assess the condition of the sites petitioned for designation in Allston/Brighton, Downtown, and Roxbury. Of all sites visited, most were in good condition. After completing the analysis of the field results, our main finding was that Downtown dominates the city with the number of sites petitioned and designated, the condition of these sites, stronger materials, and more attention and restorations, overall. This can be attributed to the age, tourist attraction, and commercial nature of Downtown.

Due to the small number of sites in the outer neighborhoods of Allston/Brighton and Roxbury, it is difficult to make accurate conclusions when comparing them to Downtown. For this reason, the analyses of these two neighborhoods were compared and contrasted to each other, and conclusions were drawn. The few assessed sites in Allston/Brighton were constructed with varying materials, and showed good overall conditions throughout all sites. Roxbury also had a small number of petitioned sites, and only two of them were designated. The materials found in this neighborhood also varied, but the conditions of the buildings were noticeably worse. A possible reason for the differences in condition between these neighborhoods is the socioeconomic status of each neighborhood. The median income of Allston/Brighton is almost ten thousand dollars more than that of Roxbury.<sup>25</sup> Roxbury is not an affluent neighborhood, which results in less money available from the community for historic preservation. This difference in condition may also be due to the fact that Roxbury is older than Allston/Brighton; therefore the petitioned sites are older and more worn.

From the data collected over the course of this project, we have concluded that more attention needs to be paid to the outer Boston neighborhoods. Allston/Brighton and Roxbury are in need of more petitioned and designated sites, in order to continue to preserve the city's heritage. Downtown Boston is the most well known area of the city. Many people may not even be aware that the other neighborhoods are actually part of the City of Boston. More petitions and designations in

these neighborhoods could bring more recognition and awareness of the historic contributions of the neighborhoods that are equally important to Downtown Boston. More petitions in these neighborhoods could also lead to additional access to city resources, such as road repair, sidewalk maintenance, etc. Landmark petitions and designations could also attract tourists to the smaller commercial areas within the neighborhoods, creating economic benefits for the city.

With these final conclusions made, we have completed our project and accomplished the goals initially established. The Boston Landmarks Commission now has the foundation for a computer-based system to manage their information on Boston's historic sites. Through the assessment of all petitioned sites in Allston/Brighton, Downtown, and Roxbury, we have been able to provide a basis for possible future assessment of the remaining Boston neighborhoods. Along with our analyses and conclusions, we will also make several recommendations to the BLC and to others who may continue where our project has left off.

Throughout the seven weeks we have worked in Boston, we have come across certain aspects of the project that we may have been able to complete in an easier or less time consuming manner. We have also found that many suggestions made to us have greatly aided in the completion of our project goals. If other project teams from Worcester Polytechnic Institute are to continue on with our work and update our information, they may find certain suggestions useful. We also have some suggestions, which may help the BLC to use our results to their fullest extent.

There are several recommendations we have for future project groups and for others that may want to continue with our project. Many of the well-known historic landmarks in Boston are listed on the National Register of Historic Places. Unlike the city's National Landmarks, most of Boston's Individual Landmarks have been designated because of their architectural importance to the city. When carrying out research for the project and writing a background chapter, a section on the history of the city should be centered on the different architectural styles emerging throughout the different periods of Boston's history.

When conducting fieldwork, it was very important to plan ahead for each day and each neighborhood. We suggest that others do the same, to ensure the most accurate and efficient data collection. When collecting condition data, it was important that we all remained consistent with our condition ratings. In order to accomplish this, it was very helpful to first be trained by our liaison concerning what types of damage to look for and how to rate their severity. Following this, we went as a group on a test run and found that we were all able to agree on ratings for different types of damage on different sites. For these reasons, we are confident that our results are accurate and complete. When conducting our assessments, we saved significant time and effort by mapping out a route for each of the two groups to follow, prior to entering the field. When we visited these neighborhoods, we discovered several demolished sites, which had not been properly documented at

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<sup>25</sup> 1990 U.S. Census.

the BLC. It would save time in the field if all demolished sites were found and recorded before entering into fieldwork.

It may be very useful to the BLC if another group continued with our project and assessed more neighborhood sites in the same manner as with our project. Due to the limited amount of time for fieldwork and analysis, we were unable to cover some aspects we feel are important to assessment of the state of conservation of Boston's historic sites, such as assessed values, and economic information of each neighborhood. These areas of study can reveal other trends about the city's neighborhoods that we were not able to find.

First, we were only able to assess three of Boston's sixteen neighborhoods for the condition of their petitioned sites. Although our results and analyses are accurate for these three neighborhoods, no conclusions can be drawn about other outer neighborhoods, or Boston as a whole. In our results, we found that the Downtown neighborhood dominated Allston/Brighton and Roxbury in practically every area. It had many more petitioned sites, which were in better condition than many of the sites in the outer neighborhoods. We suggest that future groups visit the remaining neighborhoods and compare the overall condition of their petitioned sites to each other and find how their results compare to those we collected from Downtown.

Also, it may be interesting to compare the assessed value of designated sites at the time they were petitioned to their current values. This may show how buildings and other sites can improve through landmark designation. We also realized that the average income of a community might have a great impact on the extent of any damage to the sites in a neighborhood. This would be an important aspect to research and include with any analysis on the overall condition of outer neighborhoods. By including these objectives in any related future work, our findings may be enforced and more helpful trends will be revealed for use by the BLC.

Along with these suggestions, we feel we may be able to further aid the BLC in using our results, maps, and database. Although their current system of filing and data management may be sufficient for their purposes, we feel the information in our database is easier to access and less likely to be lost or misplaced. Our database and maps have the potential to save time and effort if the BLC staff can become confident using them. For this reason, we have included two appendices, which give instructions on how to use Microsoft Access and MapInfo. Since computerized data is easier to use and access, we recommend that all future contractors enter all survey information directly into computerized form. To continue computerizing the BLC's information, all new petitions and designation information should also be added directly into computer format. This will eliminate the need for a "middle man" to enter the information from paper to the computer.

In summary, we feel that our project work will be very helpful to the BLC. While the databases we developed throughout the course of this project do not contain condition information on all of all the petitioned sites in Boston's neighborhoods, it will hopefully serve as the foundation

for the computerization of all of the data pertaining to Boston's petitioned landmark sites. Future projects carried out in this subject will hopefully fill in the remaining information from other neighborhoods and fill in any gaps that we may not have had the time to sufficiently address.

# Appendix

## APPENDIX 1: ANNOTATED BIBLIOGRAPHY

1) Callies, David L. Takings. American Bar Association, 1996.

This book provided a basic explanation of the legal process called a taking. It gave a general description and overview of what a taking is.

2) Campbell, Robert. "Preservation or Invasion? The Colonial Theater Debate." The Boston Globe. 27 July, 1990.

This source gave a descriptive example of how historic preservation, and in turn, this project, can affect a city and its communities.

3) City of Boston Environment Department. Guide to the City of Boston's Environment Department. <http://www.ci.boston.ma/> 1999.

This is the Boston Environment Department's homepage, which gave a general description of the Environment Department and also provided useful links to other Massachusetts agencies, including historic preservation organizations.

4) Deihl, Janet. The Conservation Easement Handbook. The National Trust for Historic Preservation, San Francisco, CA: 1988.

This book was extremely useful in defining what an easement was as well as what it meant to a historic piece of land. It also gave some insight as to what an owner can do to a piece of land that may have historic value, and what kind of benefits and tax breaks this can bring about. Although it didn't specifically mention property with landmarks on it, this was a good base for gaining knowledge in the general area of property value and assessment.

5) Encyclopedia Americana. Vol.29. pp. 794-795. Danbury, CT: Grolier, 1995.

The section from this encyclopedia, titled "zoning," gave us a description of zoning and how it fits into city planning.

6) Freese, J.W. Historic Houses and Spots. Ginn and Company Publishers, Boston, MA: 1897.

Even though this book is rather dated, it still contains many historical spots in and around Boston. It also gives simple explanations as to why some of the buildings became landmarks. It was helpful in piecing together Boston's history from a landmark perspective.

7) International Conference of Building Officials. Uniform Zoning Code. Whittier, CA: 1992.

This book provided additional information about zoning ordinances, and gave alternative definitions for what zoning is.

8) Marzulla, Nanci G., and Roger J. Marzulla. Property Rights. Rockville, Maryland: Government Institutes, 1997.

The issues and a citizen's rights involved in a taking were found in this book. This was helpful when considering the social implications of our project.

9) Wiessler, David A. "When Developers Bump Up Against Tradition." U.S. News & World Report. 26 July, 1982.

This article also showed us an actual example of how the communities of a city are involved and are affected by historic preservation.

10) Whitehill, Walter Muir. Boston: A Topographical History. The Belknap Press of Harvard University Press, Cambridge, MA: 1975.

The history of Boston is rather broad, and this book sums it beautifully into a concise easy to read format. It contained all of the important events in Boston's history and each chapter was very detailed. This made findings events much easier than rummaging through many large novels. Information was easy to find and to the point

11) Williams, Norman, Edmund Kellogg, and Frank Gilbert. Readings in Historic Preservation. New Brunswick, New Jersey, 1983.

Historic preservation is an important topic when considering landmarks. The book Readings in Historic Preservation was extremely helpful for providing information on this topic. The sections on *What is Historic Preservation?*, *Economic Benefits of Historic Preservation*, *Landmark Preservation*, and *Opportunities for Historic Preservation* were especially informative. The book in general contained a substantial amount of general information on why historic preservation is important, the effects it has on community, and actual descriptions describing how certain sites are preserved.

12) The World Heritage Committee. "About the World Heritage Committee."

<http://www.nla.go.jp/heritage/chishiki/joyaku-e.html#iinkai>

This is the webpage devoted to the World Heritage Committee. It provided us with a lot of the information about this agency and the global criteria for landmark designation.

13) National Parks Service. "National Historic Landmarks." 4 November 1998.

<http://www.cr.nps.gov/>

This web site contained a lot of our information that was needed in researching national landmark criteria and preservation on the National level.

14) Society for the Protection of New England Antiquities. "What is SPNEA?"

<http://spnea.org/about>

15) Encarta Online. <http://encarta.msn.com>

This online encyclopedia provided information on city planning, which involves the use of zoning and historic ordinances.

16) Massachusetts Historical Commission.

<http://www.state.ma.us/sec/mhc/mhcidx.htm>

17) The Boston Preservation Alliance. <http://www.bostonpreservation.org/>.

18) "Investor Words Investing Glossary." <<http://www.investorwords.com/e1.htm#easement>>.

This site was helpful for generally defining terms such as easement.

## APPENDIX 2: FIELD FORMS

### Appendix 2A: General Information Field Form

**Form #** \_\_\_\_\_ **Area** \_\_\_\_\_

Type: Building      Church      Open Space      Statue/Monument

Miscellaneous (specify) \_\_\_\_\_

Address: \_\_\_\_\_

Map No. \_\_\_\_\_      Sub Area \_\_\_\_\_

Date Built: \_\_\_\_\_      Architect: \_\_\_\_\_

Builder: \_\_\_\_\_

Owner: Past \_\_\_\_\_      Present: \_\_\_\_\_

Brief Description:

Lot Area \_\_\_\_\_ ft<sup>2</sup>

Noteworthy Characteristics:

Significance:

### Buildings:

Type: (Residential)    Single    Dbl    Row    2-Fam    3-Deck    Ten    Apt

(Non Res)    Commercial    Theatre    Hospital/Medical    Industrial    School

No of Stories (1st to Cornice):\_\_\_\_\_

Materials: (Frame) Clapboards Shingles Stucco Asphalt Asbestos Alum/Vinyl

Brick Stone\_\_\_\_\_ Concrete/Iron/Alum Other:\_\_\_\_\_

Themes: (check all that apply)

Agricultural	_____	Conservation	_____	Recreation	_____
Architectural	_____	Education	_____	Religion	_____
The Arts	_____	Exploration/	_____	Science/	_____
Commerce	_____	Settlement	_____	Invention	_____
Communication	_____	Industrial	_____	Social/	_____
Community/	_____	Military	_____	Humanitarian	_____
Development	_____	Political	_____	Transportation	_____

### Churches:

Religious Denomination: Roman Catholic Jewish Protestant Other:\_\_\_\_\_

Patron Saint:\_\_\_\_\_

Materials: Brick Stone\_\_\_\_\_ Concrete/Iron/Alum Other:\_\_\_\_\_

### Open Spaces:

Type: Park Cemetery Farm Other\_\_\_\_\_

Upkeep/Maintenance: Good Fair Poor

### Statues/Monuments:

Materials: Brick Stone\_\_\_\_\_ Concrete/Iron/Alum Other:\_\_\_\_\_

Inscription(s):

### Miscellaneous:

Type:

Brief Description:

Appendix 2B: State of Conservation Field Form

**Neighborhood:**  
**Landmark Code:**  
**Address:**

**Date:**  
**Recorder:**  
**Petition #**

**Landmark State of Conservation Data Sheet**

Material Codes: B = Brick; S = Stone; T = Terracotta; W = Wood; I = Cast Iron; Br = Bronze or Copper; O = Other

Conservation Ratings: 0 = Excellent/None; 1 = Above Avg/Few; 2 = Average; 3 = Poor/Several; 4 = Bad/Countless

**Overall:**

	<b>Foundation</b>				<b>Body</b>				<b>Cornice</b>			
	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>
<b>Material</b>												
<b>Water Damage</b>												
<b>Cracks/Holes</b>												
<b>Exfoliation</b>												
<b>Stains</b>												
<b>Mortar Deterioration</b>												

**Restoration (Yes/No)**

**Comments:**

Appendix 2C: Ornamentation Field Form

**Ornamentation**

Material Codes: B = Brick; S = Stone; T = Terracotta; W = Wood; I = Cast Iron; Br = Bronze or Copper; O = Other

Type Codes: C=Columns; G=Gargoyles; K=Greek Keys; S=Statues; O=Other; B=Brackets; Ca=Carvings

Conservation Ratings: 0 = Excellent/None; 1 = Above Avg/Few; 2 = Average; 3 = Poor/Several; 4 = Bad/Countless

	<b>Foundation</b>				<b>Body</b>				<b>Cornice</b>			
	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>
<b>Type 1</b>												
<b>Material</b>												
<b>Structural/Applied</b>												
<b>Condition</b>												
	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>
<b>Type 2</b>												
<b>Material</b>												
<b>Structural/Applied</b>												
<b>Condition</b>												
	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>	<i>Front</i>	<i>Back</i>	<i>Left</i>	<i>Right</i>
<b>Type 3</b>												
<b>Material</b>												
<b>Structural/Applied</b>												
<b>Condition</b>												

**Comments:**

## APPENDIX 3: LANDMARK DESIGNATION CRITERIA

### Appendix 3A: Global Criteria

#### **D. Criteria for the inclusion of natural properties in the World Heritage List**

43. In accordance with Article 2 of the Convention, the following is considered as "natural heritage": "natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view; geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty."

44. A natural heritage property - as defined above - which is submitted for inclusion in the World Heritage List will be considered to be of outstanding universal value for the purposes of the Convention when the Committee finds that it meets one or more of the following criteria and fulfils the conditions of integrity set out below. Sites nominated should therefore:

i. be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features; or

ii. be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals; or

iii. contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance; or

iv. contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation; and

a. also fulfil the following conditions of integrity:

i. The sites described in 44(a)(i) should contain all or most of the key interrelated and interdependent elements in their natural relationships; for example, an "ice age" area should include the snow field, the glacier itself and samples of cutting patterns, deposition and colonization (e.g. striations, moraines, pioneer stages of plant succession, etc.); in the case of volcanoes, the magmatic series should be complete and all or most of the varieties of effusive rocks and types of eruptions be represented.

ii. The sites described in 44(a)(ii) should have sufficient size and contain the necessary elements to demonstrate the key aspects of processes that are essential for the long-term conservation of the ecosystems and the biological diversity they contain; for example, an area of tropical rain forest should include a certain amount of variation in elevation above sea-level, changes in topography and soil types, patch systems and naturally regenerating patches; similarly a coral reef should include, for example, seagrass, mangrove or other adjacent ecosystems that regulate nutrient and sediment inputs into the reef.

iii. The sites described in 44(a)(iii) should be of outstanding aesthetic value and include areas that are essential for maintaining the beauty of the site; for example, a site whose scenic values

depend on a waterfall, should include adjacent catchment and downstream areas that are integrally linked to the maintenance of the aesthetic qualities of the site.

iv. The sites described in paragraph 44(a)(iv) should contain habitats for maintaining the most diverse fauna and flora characteristic of the biographic province and ecosystems under consideration; for example, a tropical savannah should include a complete assemblage of co-evolved herbivores and plants; an island ecosystem should include habitats for maintaining endemic biota; a site containing wide-ranging species should be large enough to include the most critical habitats essential to ensure the survival of viable populations of those species; for an area containing migratory species, seasonal breeding and nesting sites, and migratory routes, wherever they are located, should be adequately protected; international conventions, e.g. the Convention of Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention), for ensuring the protection of habitats of migratory species of waterfowl, and other multi- and bilateral agreements could provide this assurance.

v. The sites described in paragraph 44(a) should have a management plan. When a site does not have a management plan at the time when it is nominated for the consideration of the World Heritage Committee, the State Party concerned should indicate when such a plan will become available and how it proposes to mobilize the resources required for the preparation and implementation of the plan. The State Party should also provide other document(s) (e.g. operational plans) which will guide the management of the site until such time when a management plan is finalized.

vi. A site described in paragraph 44(a) should have adequate long-term legislative, regulatory, institutional or traditional protection. The boundaries of that site should reflect the spatial requirements of habitats, species, processes or phenomena that provide the basis for its nomination for inscription on the World Heritage List. The boundaries should include sufficient areas immediately adjacent to the area of outstanding universal value in order to protect the site's heritage values from direct effects of human encroachment and impacts of resource use outside of the nominated area. The boundaries of the nominated site may coincide with one or more existing or proposed protected areas, such as national parks or biosphere reserves. While an existing or proposed protected area may contain several management zones, only some of those zones may satisfy criteria described in paragraph 44(a); other zones, although they may not meet the criteria set out in paragraph 44(a), may be essential for the management to ensure the integrity of the nominated site; for example, in the case of a biosphere reserve, only the core zone may meet the criteria and the conditions of integrity, although other zones, i.e. buffer and transitional zones, would be important for the conservation of the biosphere reserve in its totality.

vii. Sites described in paragraph 44(a) should be the most important sites for the conservation of biological diversity. Biological diversity, according to the new global Convention on Biological Diversity, means the variability among living organisms in terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part and includes diversity within species, between species and of ecosystems. Only those sites which are the most biologically diverse are likely to meet criterion (iv) of paragraph 44(a).

45. In principle, a site could be inscribed on the World Heritage List as long as it satisfies one of the four criteria and the relevant conditions of integrity. However, most inscribed sites have met two or more criteria. Nomination dossiers, IUCN evaluations and the final recommendations of the Committee on each inscribed site are available for consultation by States Parties which may wish to use such information as guides for identifying and elaborating nomination of sites within their own territories.

#### **E. Procedure for the eventual deletion of properties from the World Heritage List**

46. The Committee adopted the following procedure for the deletion of properties from the World Heritage List in cases:

- a. where the property has deteriorated to the extent that it has lost those characteristics which determined its inclusion in the World Heritage List; and
- b. where the intrinsic qualities of a World Heritage site were already threatened at the time of its nomination by action of man and where the necessary corrective measures as outlined by the State Party at the time, have not been taken within the time proposed.

47. When a property inscribed on the World Heritage List has seriously deteriorated, or when the necessary corrective measures have not been taken within the time proposed, the State Party on whose territory the property is situated should so inform the Secretariat of the Committee.

48. When the Secretariat receives such information from a source other than the State Party concerned, it will, as far as possible, verify the source and the contents of the information in consultation with the State Party concerned and request its comments.

49. The Secretariat will request the competent advisory organization(s) (ICOMOS, IUCN or ICCROM) to forward comments on the information received.

50. The information received, together with the comments of the State Party and the advisory organization(s), will be brought to the attention of the Bureau of the Committee. The Bureau may take one of the following steps:

- a. it may decide that the property has not seriously deteriorated and that no further action should be taken;
- b. when the Bureau considers that the property has seriously deteriorated, but not to the extent that its restoration is impossible, it may recommend to the Committee that the property be maintained on the List, provided that the State Party takes the necessary measures to restore the property within a reasonable period of time. The Bureau may also recommend that technical co-operation be provided under the World Heritage Fund for work connected with the restoration of the property, proposing to the State Party to request such assistance, if it has not already been done;
- c. when there is evidence that the property has deteriorated to the point where it has irretrievably lost those characteristics which determined its inclusion in the List, the Bureau may recommend that the Committee delete the property from the List; before any such recommendation is submitted to the Committee, the Secretariat will inform the State Party concerned of the Bureau's recommendation; any comments which the State Party may make with respect to the recommendation of the Bureau will be brought to the attention of the Committee, together with the Bureau's recommendation;
- d. when the information available is not sufficient to enable the Bureau to take one of the measures described in (a), (b) or (c) above, the Bureau may recommend to the Committee that the Secretariat be authorized to take the necessary action to ascertain, in consultation with the State Party concerned, the present condition of the property, the dangers to the property and the feasibility of adequately restoring the property, and to report to the Bureau on the results of its action; such measures may include the sending of a fact-finding mission or the consultation of specialists. In cases where emergency action is required, the Bureau may itself authorize the financing from the World Heritage Fund of the emergency assistance that is required.

51. The Committee will examine the recommendation of the Bureau and all the information available and will take a decision. Any such decision shall, in accordance with Article 13 (8) of the Convention, be taken by a majority of two-thirds of its members present and voting. The Committee shall not decide to delete any property unless the State Party has been consulted on the question.

52. The State Party shall be informed of the Committee's decision and public notice of this decision shall be immediately given by the Committee.

53. If the Committee's decision entails any modification to the World Heritage List, this modification will be reflected in the next updated list that is published.

54. In adopting the above procedure, the Committee was particularly concerned that all possible measures should be taken to prevent the deletion of any property from the List and was ready to offer technical co-operation as far as possible to States Parties in this connection. Furthermore, the Committee wishes to draw the attention of States Parties to the stipulations of Article 4 of the Convention which reads as follows:

"Each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State..."

55. In this connection, the Committee recommends that States Parties co-operate with the advisory bodies which have been asked by the Committee to carry out monitoring and reporting on its behalf on the progress of work undertaken for the preservation of properties inscribed on the World Heritage List.

56. The World Heritage Committee invites the States Parties to the Convention Concerning the Protection of the World Cultural and Natural Heritage to inform the Committee, through the UNESCO Secretariat, of their intention to undertake or to authorize in an area protected under the Convention major restorations or new constructions which may affect the World Heritage value of the property. Notice should be given as soon as possible (for instance, before drafting basic documents for specific projects) and before making any decisions that would be difficult to reverse, so that the Committee may assist in seeking appropriate solutions to ensure that the world heritage value of the site is fully preserved.

## Appendix 3B: National Criteria

### **THE NATIONAL HISTORIC LANDMARKS CRITERIA**

The quality of national significance is ascribed to districts, sites, buildings, structures, and objects that possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archeology, engineering, and culture and that possess a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- That are associated with events that have made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of United States history and from which an understanding and appreciation of those patterns may be gained; or
- That are associated importantly with the lives of persons nationally significant in the history of the United States; or
- That represent some great idea or ideal of the American people; or
- That embody the distinguishing characteristics of an architectural type specimen exceptionally valuable for a study of a period, style or method of construction, or that represent a significant, distinctive and exceptional entity whose components may lack individual distinction; or
- That are composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture; or
- That have yielded or may be likely to yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Such sites are those which have yielded, or which may reasonably be expected to yield, data affecting theories, concepts and ideas to a major degree.

### **NATIONAL HISTORIC LANDMARK EXCLUSIONS**

Ordinarily, cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings and properties that have achieved significance within the past fifty years are not eligible for designation. If such properties fall within the following categories they may, nevertheless, be found to qualify:

- A religious property deriving its primary national significance from architectural or artistic distinction or historical importance; or
- A building or structure removed from its original location but which is nationally significant primarily for its architectural merit, or for association with persons or events of transcendent importance in the nation's history and the association consequential; or
- A site of a building or structure no longer standing but the person or event associated with it is of transcendent importance in the nation's history and the association consequential; or
- A birthplace, grave or burial if it is of a historical figure of transcendent national significance and no other appropriate site, building, or structure directly associated with the productive life of that person exists; or
- A cemetery that derives its primary national significance from graves of persons of transcendent importance, or from an exceptionally distinctive design or an exceptionally significant event; or
- A reconstructed building or ensemble of buildings of extraordinary national significance when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other buildings or structures with the same association have survived; or

- A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own national historical significance; or
- A property achieving national significance within the past 50 years if it is of extraordinary national importance.

## Appendix 3C: Massachusetts Criteria

### **Sec. 26. Massachusetts Historical Commission.**

There shall be in the department of the secretary of state a Massachusetts historical commission, hereinafter and in sections twenty-six A to twenty-seven D, inclusive, called the commission. Said commission shall consist of the state secretary, or an officer or employee from his department designated by him, who shall be the chairman; the commissioner of environmental management; the commissioner of commerce; two persons to be appointed by the governor; and twelve persons to be appointed by the state secretary of whom one shall be selected from a list of three nominees submitted by the Bay State Historical League, one from a list of three nominees submitted by the Massachusetts Historical Society, one from a list of three nominees submitted by the Society for the Preservation of New England Antiquities, one from a list of three nominees submitted by The American Antiquarian Society, one from a list of three nominees submitted by The Trustees of Reservations, one from a list of three nominees submitted by the New England Historic Genealogical Society, and one from a list of three nominees submitted by The Massachusetts Archeological Society, Incorporated, one from a list of three nominees submitted by the Boston Society of Architects chapter of the American Institute of Architects, one from a list of three nominees submitted by the New England Chapter of the Society of Architectural Historians, one from a list of three nominees submitted by Old Sturbridge Village, one from a list of three nominees submitted by The Museum of Afro-American History and one from a list of three nominees submitted by the Home Builders Association of Massachusetts; and the secretary of the executive office of communities and development. Upon the expiration of the term of an appointive member his successor shall be appointed in like manner for a term of three years. The chairman shall appoint a state archeologist who shall be responsible for the preservation and protection of the archeological resources of the commonwealth as the commission may direct, and in accordance with the provisions of sections twenty-six A to twenty-seven C, inclusive, and who shall not be subject to chapter thirty-one or section nine A of chapter thirty. The commission, the state archeologist and the board of underwater archeological resources established pursuant to section one hundred and seventy-nine of chapter six shall advise the state secretary on matters relating to the historical and archeological assets of the commonwealth and assist him in compiling and maintaining an inventory of such assets. The commission shall encourage all governmental bodies and persons considering action which may affect a historical or archeological asset of the commonwealth to consult with the commission to avoid any adverse effect to such asset. The state secretary may on behalf of the commonwealth for the purposes of this section and section twenty-seven accept gifts of real and personal property, including papers, documents and moneys and he may provide technical and other assistance, and publish, furnish and disseminate information of an historic nature. All moneys received hereunder shall be transmitted forthwith to the state treasurer, who shall administer the same as the trust fund in the manner provided by section sixteen of chapter ten. The members of the commission shall serve without compensation but shall be reimbursed for actual expenses incurred by them in the performance of their duties as such members.

### **Sec. 26C. State Register of Historic Places.**

The commission shall establish and maintain a state register of historic places, known as the state register. The state register shall contain the following properties:

1. all districts, sites, buildings, or objects determined eligible for listing or listed in the National Register of Historic Places;
2. all local historic districts established pursuant to chapter forty C or a special law;
3. all landmarks designated under local ordinance or by-law;

4. all structures and sites subject to a preservation easement approved or held by the commission pursuant to section thirty-two of chapter one hundred and eighty-four;
5. all historical or archeological landmarks certified pursuant to section twenty-seven and
6. all districts, structures, buildings, and sites listed in the state register of historic places pursuant to section twenty-six D.

The commission shall periodically update the state register.

**Sec. 26D. Commission to Promulgate Regulations for Properties Listed in State Register of Historic Places;**

Inclusion of Nominated Properties in Register.

The commission shall promulgate regulations as may be necessary for:--

1. nominating properties for listing in and removal from the state register of historic places; and
2. establishing criteria for properties to be listed in the state register of historic places. The commission shall use the criteria for listing in the National Register of Historic Places as a guide in establishing criteria for listing in the state register.

The commission may accept a nomination from any local government or state agency for listing of a property in the state register of historic places. The commission may include in the state register of historic places any property for which a nomination is made if the commission determines that the property is eligible in accordance with the regulations promulgated under this section.

## APPENDIX 4: Using Mapinfo

MapInfo Professional 5.0© is a mapping tool that was used throughout the course of this project to help visually portray information relating to our results and analysis. MapInfo is a program that is multifaceted, but it does allow complete user configuration. For this project MapInfo was used to plot the landmark sites, and for thematic maps to show the trends and patterns that were discovered through our analysis. All of the techniques and processes used to create these maps will be discussed in this user's guide.

### Getting Started

The first step in using any software is installation. The MapInfo program must be purchased and step-by-step installation instructions will be provided with the software package. Included with this project will be a CD-ROM which contains the maps that we created as well as all of the base layers which were used in created them, allowing future maps to be produced. A directory should be created for which to save the MapInfo files in. This can be done by clicking on the **START** menu and selecting **Programs->Windows Explorer**. Once windows explorer is open, click once on the c:/ drive icon on the left hand side. This will show all of the folders and programs that are in the hard drive on the right hand side of the screen. Right click in any blank space on the right hand side and select **New->Folder**. This will move the screen to the bottom of the list where there will be a New Folder with no name. The name block underneath the folder should be highlighted, if it is not, right click on the folder and select **Rename**, if it is still highlighted type in the new name for the folder, such as Maps or MapInfo.

When files are opened in MapInfo, (maps, tables, etc.) the program creates four different files when it is saved. It is important to keep all of these files in the same place, and also if transferring files by disk or some other medium, it is imperative that all four files are transferred or else the maps will not open. The four file types are \*.DAT, \*.ID, \*.MAP, and \*.TAB. The last file, \*.TAB will show up with the MapInfo icon and will not have an extension.

There are two options for opening a file, either opening MapInfo and selecting **Open Table** (Figure 25), from the **File** menu or opening the MapInfo folder and double clicking on the icon for layer to be opened, this method will then start MapInfo if it is not running and open the selected layer. When saving, if multiple layers are open it is best to save as a workspace. A workspace will save all of the tables that are open in one file. When opening a workspace, **Open Workspace** must be selected from the **File** menu. Saving a workspace creates only one file, however in order to transfer this file, all of the layers, and their files, must also be transferred. If any of the layers or tables are moved to a different directory or folder the workspace will try to open and will bring up an error screen saying that it cannot find the file and the user has to manually reselect all of the files that were moved.

MapInfo is a layers-based program, which means that every file that is opened is given its own layer. Manipulating the layers is the basic key to understanding MapInfo; once this is achieved anything can be done. Using the **Layers Control Box** layers can be added, deleted, updated, hidden, changed, and labeled. The **Layers Control Box** can be opened in two ways, the easiest is to right click anywhere on the map and select it from the list that appears, the alternative is to go to the **Map** pull down list and select **Layer Control** from there.

Maps are viewed in **Map** windows and any tables, charts and databases are viewed in **Browser**

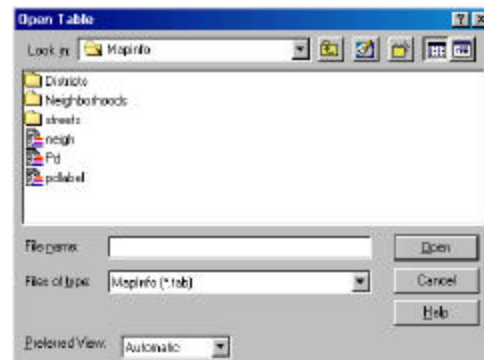


Figure 25. Open Table Menu

windows. If, for example, a table needs to be referenced to find the column(s) needed for **Thematic Maps** (as will be discussed later on), or just to see the information, select **Window New Browser Window** and a list will appear asking which table to browse.

## Mapping

There is one layer that is automatically created by MapInfo, this is the **Cosmetic Layer**, any thing that is done cosmetically, such as plotting Landmarks, or making regions with the draw tool should be done here. In order to do this, the cosmetic layer must be made editable. Making the layer editable is accomplished by clicking on the up arrow at the bottom of the screen then in the block that says Editing: none, selecting **Cosmetic layer**. Opening the **Layer Control Box** (Figure 26) and checking the box in the column with the pencil for the **Cosmetic Layer** will also make the layer editable. Once all the objects are mapped or drawn, this layer can be saved by selecting **Map->Save Cosmetic Objects**, which will bring up a prompt to name the layer that was just created.

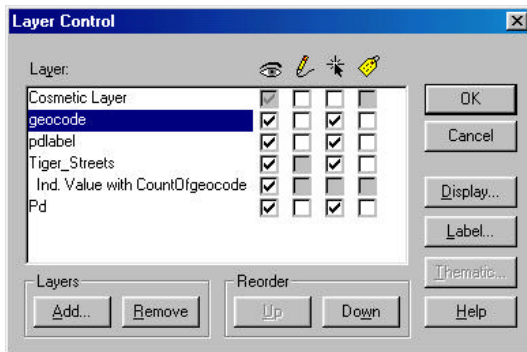


Figure 26. Layer Control Window

In order to plot objects in the **Cosmetic Layer** (once it is made editable) select the **Pin** tool (located in the drawing toolbar) and click wherever a marker is to be plotted. The **Label** tool can be used to find the location desired for the plot. This requires that a layer with street names or some other form of identification be open. In the **Layer Control Box**, select that layer and click **label** at the top of the dialog box, which opens a pull down menu. This will allow the user to select what they would like the label to appear as; there can be many different labels, most of which are not useful for easy identification. Once this has been set to the desired label, click **OK** at

the bottom of the box and close the **Layer Control Box**. Select the **Label** tool and click anywhere on the map. Once the location where the desired object is to be plotted is found, select the **Pin** tool and click in that location. In order to change the size, shape and color of the plot select the **Selector tool** (the Arrow) from the **Main** toolbox on the right side of the screen. With this tool double click on the object plotted and click on the box next to **Style**. This will open a window with several pull down menus, which allow the user to specify the shape, size and color of the plot.

Another way of plotting, if there are too many sites to plot by manually, as in the project, is to use the **Geocode** function. The first step in using this function is to open a database, or Excel table that contains the addresses of the objects to be plotted. To map the objects select **geocode** from **Table ->Geocode**. This opens up a window, which first asks for the table to be geocoded. This is the table that was just opened containing the addresses of the sites to be plotted. The next item to be selected is the column within the table that contains the addresses. A boundary column can also be selected, which is useful when streets run into different neighborhoods, as was an issue with this project. To use this **Boundary Column**, look at the bottom of the screen where **Optional** information is, and where it asks what table to refine the search with, select another table and the column in that table with the information to link with the **Boundary Column**. **Search Table** asks for the map layer that contains the information for the addresses to be linked to, the **For Objects in Column** asks for the column in that layer that

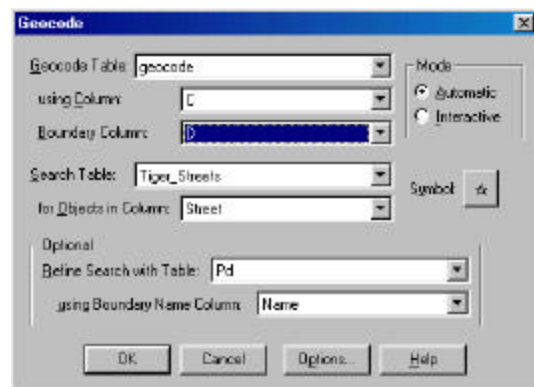


Figure 27. Geocode Dialog Box

matches with the column selected from the geocode table. **Automatic** is the default selection in the **Mode** box, this means that the computer will go through all of the settings looking for exact matches; anything that is not exact will be skipped. In **Interactive** mode, MapInfo will stop on each one that is not an exact match and allow the user to manually make the selections needed to properly map the point. It is usually easiest to run the program in **Automatic** mode first, then go back and run **Interactive** to fix all of the points that were not mapped the first time.

## Thematic Maps

Once all of the sites have been plotted, **Thematic Maps** are one of the best, visual ways of representing trends in the data. In order to create a thematic map there must be data that is constant throughout all of the sites. There are many different types of thematic maps; too many to discuss

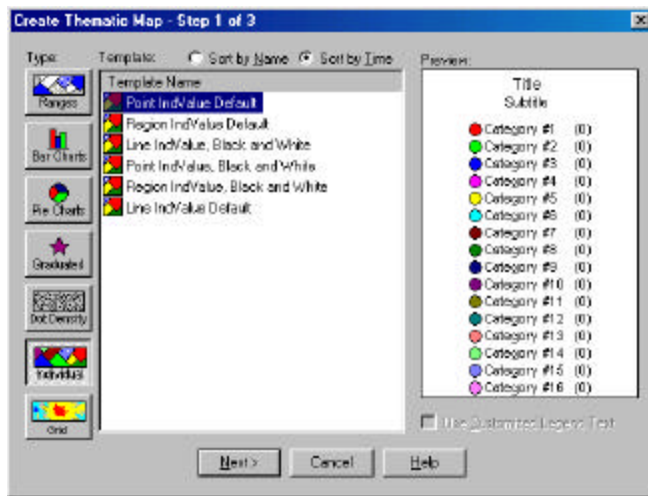


Figure 28. Step 1 in Thematic Mapping

here. This user's guide will review the process to create the maps that were used to portray our results. The types used for this project were **Ranges Region Ranges, Individual Point IndVal, Black and White, Individual Point IndVal Default**. The first thematic map that was created color-coded the neighborhoods based on the amount of landmarks within each one. This map will be referred to as the Neighborhoods map from now on, in order to eliminate confusion. The neighborhoods map was created by selecting **Map Create Thematic Map** and then selecting type **Ranges Region Ranges**, this particular setting sets each range to a different color. The number of ranges and values for each range can be set manually or MapInfo will do it

automatically. The **table** that was selected was the map layer that contains the neighborhoods. What you want to select here is the table with the regions or items to be colored. In the **Field** box, if the value that is being used to color the map is in the pull down then it can be easily selected. If the value is in a different chart however, select **Join**. In the join box that opens up, select the table that contains the value in the **Get Value From:** box (Figure 29), and then click the **Join** button next to it. In the join dialog box select the columns whose values will join the two tables. If the match will not be exact, select the option below the two columns that allows the tables to be joined if the items in one column are contained within the other column. Click **OK** at the bottom. This will then go back to the

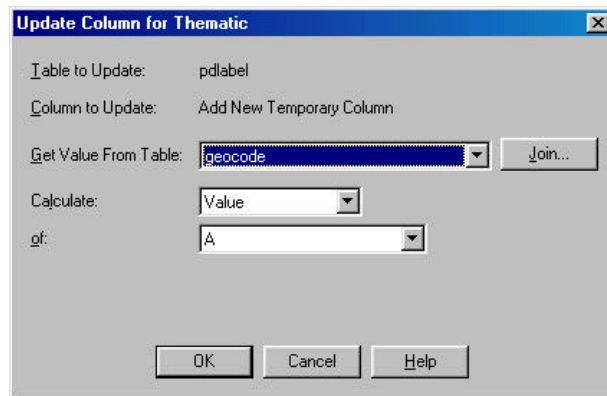


Figure 29. Update Column Box

previous box, now the value by which the map is to be charted is to be selected, in our case since we wanted to color the neighborhoods by the amount of landmarks in each one, so **Count** was selected. If the value is an actual value, as we will see later on, select **Value** and then select the column that the

value is in. It will then go back to Step 2 (Figure 30), the first dialog box, and now it is a simple manner of clicking the **Next** button. If zeroes and blanks should be skipped then be sure to check off the box next to that option before moving on. Once **Next** is selected, it will give a preview of the ranges that were found Figure 31, at this point the style, color, and legend can be modified. Pressing the final **OK** at the bottom of this screen will put the thematic map into effect on the map.

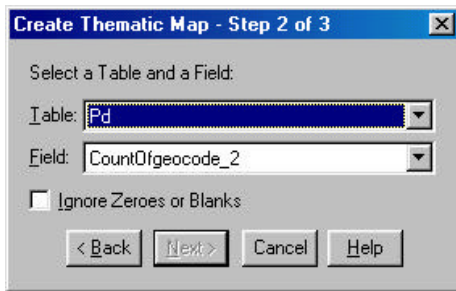


Figure 30. Step 2 of Thematic Map Creation

thematic map, selecting the map on which the ranges, or in this case markers will be changed, which is the layer that was used for the geocoding. In this case, the field desired was incorporated within the same table so the field was selected directly from the pull down menu without having to join any tables. Select **Next** at the bottom again after the selected field is chosen and change the style or legend as desired.

The last thematic map colored the landmark icons, that were now different shapes due to the last thematic map, based on their overall condition. Since only three neighborhoods were visited and rated only those neighborhoods will show the ratings, all others will remain the same. This was started in the same way as previous thematic maps, **Map Create Thematic Map** then type: **Individual Point IndVal Default**. This will give each point of a different value a different color, there were seven values which we found for our map, the ratings zero through four, demolished, and other, which would be all of the sites that we did not visit. The next step is to select which map the thematic map will be portrayed on; once again this was the geocoded layer, since it contains the markers to be colored. The next step is to select the field with the correct values, this is in a different table, so it must be joined with the geocode table through a unique, but identical code column, or in our case the petition numbers. Once the tables are joined, use the **Value** command and select the proper column with the ratings in it. In this case we do not want zeros and blanks to be skipped since zero is one of the ratings. It will then bring up the

Remember to periodically save the workspace being created!

The next map that we created was **Individual Point IndVal, Black and White**; this map changed the shape of the icons to depict their designation status. Even though it sets all of the colors of the sites to black and white, this can be changed, and even mapped thematically as we will do in the next step. The same first basic steps were followed, selecting **Create Thematic Maps** from the **Map** menu and selecting the type **Individual Point IndVal, Black and White**. It is then a matter of going through the steps described for the first

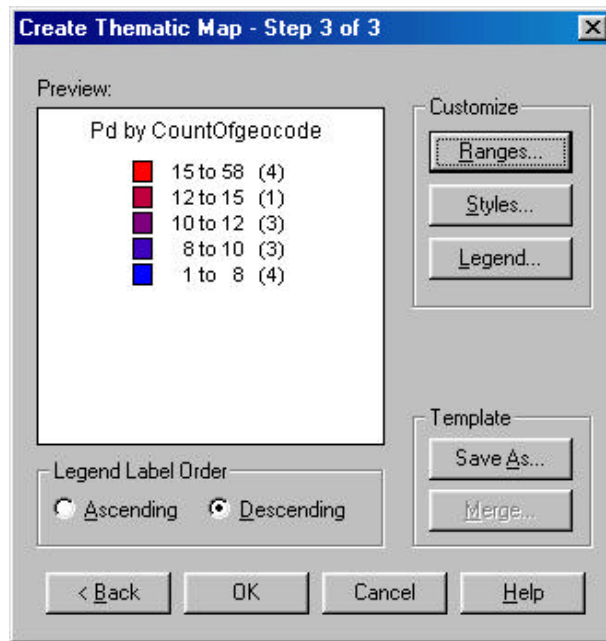


Figure 31. Final Step

preview chart and show the different values that were found in the assigned column and the colors that were assigned to them, these colors can be changed here by clicking on the **Style** button, as well

as the **Legend** by clicking on its button. The final **OK** will put the color scheme into effect on the map.

Now that all the thematic maps have been made, we want to make the legends appear within the window of the map. The **Legend Manager** must be turned on to do this. First, go to **Tools** **Tool Manager**, and scroll down until Legend Manager appears, check both boxes to the right of it, the **Load** box will load the **Legend Manager** into the **Tool** menu immediately and the **Autoload** option will load it every time MapInfo is started. Next click **OK** and go back to **Tools**, **Legend Manager** should now be in the menu. Click on **Legend Manager** and when the window opens next to it select **Create Embedded Legend**. At any time a particular legend can be modified by opening the **Layers Control** box (as discussed earlier) and selecting the layer which contains the legend to be modified and clicking on the **Thematic** box and modifying the legend form there as before.

## Finishing Up

Now that all of this has been done an informative map has been created, in order to access the information shown, select the lower case **i** tool, in the **Main** toolbox on the right and click on any of the sites plotted. An **Info Tool** box will open up and show all of the layers, click on any of those layers inside the box and it will then bring up all of the information in the table that was used for the geocoding.

If all of this has been completed successfully then congratulations, you have attained the basic knowledge needed to manipulate and work with MapInfo. There are many more functions and limitless possibilities, however, the best way to learn any large software program like MapInfo is to experiment with it and try things on your own.

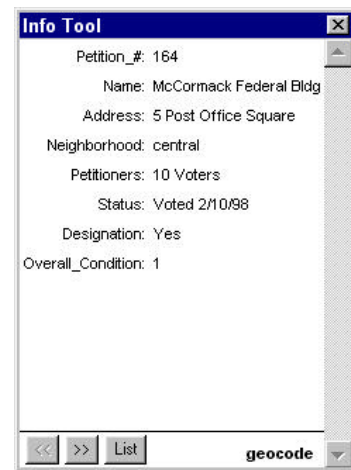


Figure 32. Info Tool Box

## APPENDIX 5: Using Microsoft Access

The databases supplied with this project were developed with Microsoft Access 2000. These databases require Microsoft Access 2000 to be installed to be used. However, since the BLC is presently using Microsoft Access 97, there is a copy of each database that is converted into an Access 97 version. This copy should have all the functionality that exists in the Access 2000 version, but whenever possible, the Access 2000 version should be used. It is assumed that the user of this software has basic knowledge of Windows software and terminology. This guide is intended to teach the user basic functions of the software and certain advanced functions that are necessary for the usability of this product. A user with more advanced training can take more advantage of this powerful database tool.

### Installation

The CD-ROM provided with this project contains the database files required for use. It does not include the necessary software to use the database: Microsoft Access 97 or Microsoft Access 2000. These software packages must be acquired and installed on the computer before this project can be used.

Once Microsoft Access is installed, the database files, found in the database folder, should be copied from the project CD-ROM onto the computer's hard disk. These files can be copied to anywhere on the hard disk, however these files have to be stored in the same folder.

### Using Microsoft Access

In order to access and use the databases, Microsoft Access has to be started up and the Landmarks database has to be opened. This can be done by either double-clicking on the database file "Landmarks.mdb" or by using the start menu to start up Access and then opening the "Landmarks.mdb" file. Once this file has been opened through Access, the user should first select the Forms icon under Objects. This brings up a list of all forms that are available for use. The user should then double-click on the Switchboard form. This action should bring up the said form, which is shown in the figure below.

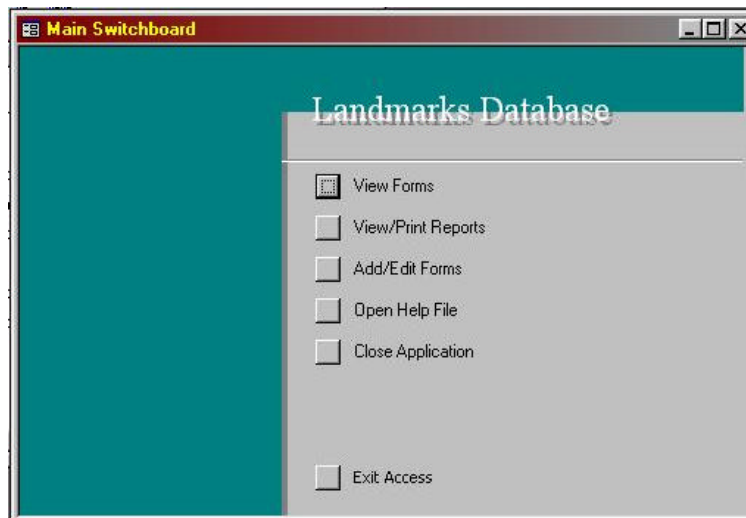


Figure 33 Main Switchboard

From the switchboard, the most common actions can be performed in a user-friendly environment.

The Main Switchboard has six selections. The first three selections lead to other switchboards with more selections. The fourth selection opens a help file. The fifth selection closes the database, but leaves Access open, while the sixth selection closes both the database and Access. This tutorial will go over the first three selections and where they can eventually lead.

The first selection is a button labeled “View Forms”. When selected, this brings up another switchboard labeled “View Forms”, which is shown below. This switchboard has selections that allow the user to view all forms that have been supplied with this database in a read-only format. Whenever a user wants to look-up or search for information, they should go to this switchboard, as otherwise they may risk changing the data in the database inadvertently.

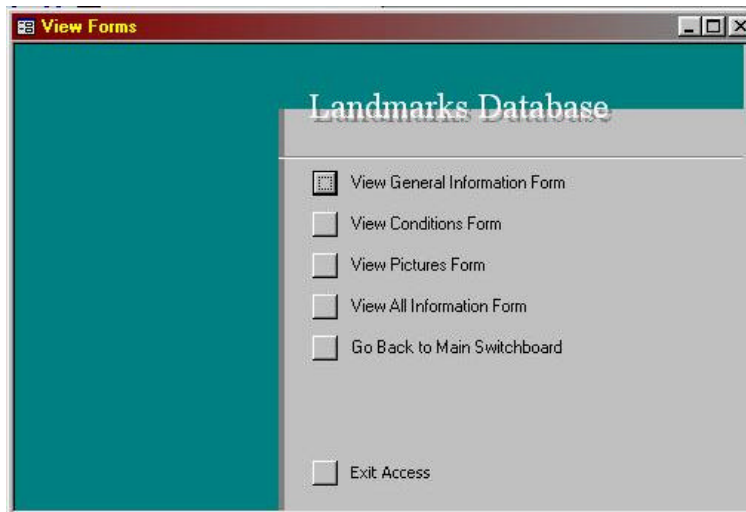


Figure 34 View Forms Switchboard

Once a user has reached this switchboard, they have six possible selections. The first four selections open up forms for the user to view, while the fifth brings the user back to the Main Switchboard and the sixth closes the database and exits Access altogether. The four forms available for the user to view are General Information, Conditions, Pictures, and All Information. General Information contains information that is more permanent about each petitioned site. Conditions contains information about the assessed condition of each site that was visited, and is blank for any site that was not visited. Pictures contains a listing of picture descriptions and the actual digital picture that was taken at each of the visited petitioned sites. All Information contains the information contained in the General Information and the Conditions forms. Also, at the bottom of each form are buttons to search for specific data in those forms, close the form, and open other forms that show more information about that site. All forms are in order of their petition number.

The second selection from the Main Switchboard brings the user to the “View/Print Reports” switchboard, which is shown below. This switchboard has selections that allow the user to view all the information contained in the different forms in the form of a report that is printer friendly. All reports are read-only.

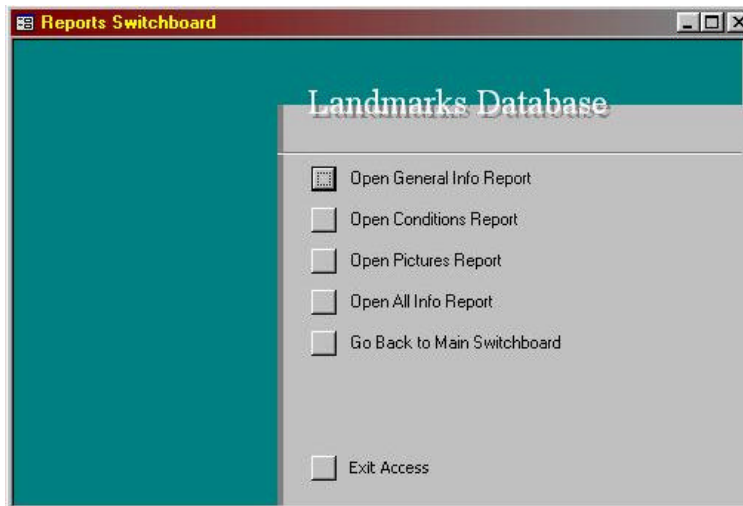


Figure 35 Reports Switchboard

Once the user has reached the above switchboard, they have six possible selections. The first four selections open reports that contain the same information as their form counterpart. As mentioned before, reports are most useful by allowing the user to easily print the information contained in the forms. The fifth selection brings the user back to the Main Switchboard and the sixth selection closes the database and exits Access altogether.

The third selection on the Main Switchboard brings the user to the “Add/Edit Forms” switchboard, which is seen in the figure below. From this switchboard, the user can add a newly petitioned site or updated information as well as edit any information that is already contained in the database. All forms accessible from this switchboard are not read-only and therefore the user should be careful when editing or entering data.

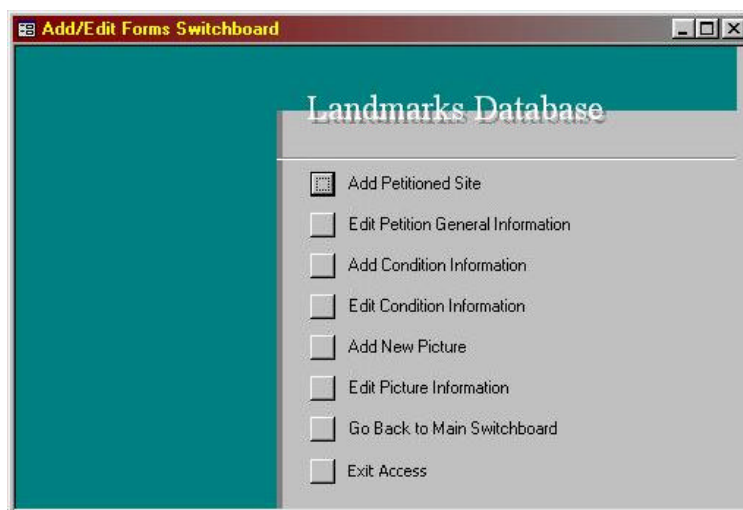


Figure 36 Add/Edit Forms Switchboard

Once the user has reached the above switchboard, they have eight possible selections. The first six involve either adding or editing other form information, while the seventh brings the user back to the Main Switchboard and the eighth closes the database and exits Access altogether. The first selection is used to add a newly petitioned site to the database. Before this is done, the user

should first search the viewable forms for this petitioned site to make sure the same petition number is not entered twice, as this will cause an error with Access. From the “Add Petition Site” form, the user selects a button to add what other information is available specific to that site, according to the type of site the user is adding in. From that form, the user can then add condition information in or pictures, but these forms can also be accessed through the switchboard. The edit information selections bring up the forms found in the “View Forms” switchboard, but in an editable state so the user can change the information or add information that was missing. The other add information selections are used to add information about sites that have been added through the “Add Petition Site” form. Before a user adds information through these selections, they should first search through the form to make sure that petitioned site does not already exist, as this would cause an error with Access.

At sometime, a user may need to go into the raw data of the database to correct an error or mistake. This is done by selecting the table icon under objects. This should be done very carefully, as it is easy to change or delete information without realizing while looking through these tables. It is suggested that if a user has to do this, they first make a copy of each database and store it somewhere else on their hard drive to have a back-up copy incase something unexpected happens. This will allow the user to revert to the copied database in this situation.

If more questions arise, Access has help files that can be opened by pushing F1 while in Access. Also, the Microsoft website can be searched as another source for possible answers.

## **APPENDIX 6: List of Petitioned Landmarks**