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GREATER BOSTON URBAN RESOURCE GRANTS EVALUATION

An Interactive Qualifying Report

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by

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1. Environment
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ABSTRACT

The Greater Boston Urban Resources Partnership (GB-URP) aims to help disadvantaged communities in the Boston area improve their quality of life by funding environment-based projects. The goal of this project was to give the GB-URP the tools for cataloging existing projects and evaluating the distribution of urban natural resource grant money. A database was constructed to hold pertinent information and maps were created to analyze grant distribution. Our primary finding is that the GB-URP has largely succeeded in targeting the neighborhoods it seeks to help.

EXECUTIVE SUMMARY

With the help of the Greater Boston Urban Resources Partnership (GB-URP), a program under the jurisdiction of the United States Department of Agriculture (USDA), Boston has been able to make great strides in improving and maintaining their natural resources. The GB-URP, a coalition of neighborhood organizations and branches of government, helps urban communities carry out strategies that link social, economic, and environmental concerns. Over the last three years, dozens of public and private organizations have received funding from the GB-URP to work with underprivileged and minority groups to aid in the improvement of their urban natural resources. Since the Partnership currently relies on non-standardized progress reports submitted by the grantees, the GB-URP has no set methodology to measure the success of their natural resource grants program. In addition, accurate socioeconomic pictures have not been presented to show clearly where their funds are being distributed. This hinders the ability of the GB-URP to truly ensure the success of the positive environmental and educational effects that they have set out to make.

Our project goal was to aid the GB-URP in determining the effectiveness of their urban natural resources program and to catalog their existing project information. Fulfilling this goal will give the GB-URP much needed and important tools that are necessary to target its grants to Boston's most underprivileged communities and to give the Partnership the tools to evaluate the projects it funds. To complete this project we approached the following three objectives in sequential order. Our first objective included collecting specific information on all of the GB-URP's projects, in addition to projects funded by the Grassroots program. We also researched and collected pertinent socioeconomic data on Boston's fifteen neighborhoods and the cities of Chelsea and Somerville that will provide the criteria for the GB-URP to determine where grant money is most needed. The second objective was to create a database and a standardized report outline for grantees to follow which will provide the Partnership with the appropriate information for evaluating the success of the projects it supports. Our final objective was to analyze where the grant money has and is currently being distributed versus where it is in reality most needed.

The results of our methodology are: a project database, a standardized report outline, and analysis documenting GB-URP grant effectiveness. The database will be used by the Partnership to catalog their current projects and to easily enter information on new projects from the GB-URP and other environment programs. The standardized report outline represents a critical methodology whereby the Partnership can receive and evaluate a standardized set of data from each project. Currently, the GB-URP has no such methodology in place. Finally, the analysis of how the GB-URP distributes its grant money to provide the Partnership with comprehensive findings on which areas in Boston are most in need of them.

To aid the GB-URP and Grassroots programs in organizing past and future grants a database was created. This database stores all of the specific grant and organization information. Front-end application forms ease the process of updating and retrieving data. Users can browse the data using these forms and easily find the information on the organization or project they are inquiring about, or input new data as necessary. A second database was made to hold the project site photographs and linked to the main project database.

A report outline was created for the grantees to complete to ensure that future projects could easily be included in the database, and to help the GB-URP standardize the information that they collect on each project. This outline asks for basic project information, such as the project name, the organization under which the project is running, and project start and finish dates. Also included in this outline is more specific information that is useful for data entry for the database as well as before and after photographs. In addition, the specifics of the project, such as the type and description of the curriculum for the educational projects, and the number of trees and shrubs planted and the site acreage of the site for the environmental projects are asked for. All of this information will help the GB-URP to make conclusions on the effectiveness of their grants program.

Our main focus was analyzing the total amount of grant money that has been distributed to each neighborhood by the GB-URP versus various neighborhood socioeconomic data, such as: median income level, percentage of population in poverty, percentage of minority groups, concentration of asthma cases, and severity of lead poisoning cases. We found that, with few exceptions, the majority of the GB-URP and

Grassroots projects are focused in the neighborhoods with a low median income and a high percentage of the population in poverty. We also found that the Partnership has aided the neighborhoods with the highest percentages of minorities. Boston is also diverse with respect to certain health aspects. Finally, after analyzing certain health-related data, we were able to make preliminary conclusions that the GB-URP and Grassroots have primarily distributed their funds to the areas with the highest concentration of asthma and most severe lead poisoning cases.

We successfully conducted this preliminary analysis in order to make educated recommendations to the Partnership. We presented our progress and results at two monthly meetings of GB-URP and Environmental Protection Agency Partners. Upon completion of this project, we were able to give the GB-URP the tools that, over time, will enable the Partnership to determine which communities most need grant money and to evaluate the progress made with respect to these community projects. In addition, an intern has been hired by the GB-URP to continue the analysis begun by us. The groundwork laid by this project and the continuation of our work will provide environmental programs throughout the Boston area with the tools to both catalog and evaluate their projects, in addition to ensuring that the communities that are most in need receive adequate funding.

AUTHORSHIP

All sections were written and revised by all team members. If one person wrote the majority of a section originally, it was reviewed, revised, or completely rewritten (when needed) by one or both of the other team members. Each member contributed equally to every chapter of this paper, also including writing as a team simultaneously. Therefore, the sections cannot be broken down to one definite author per section.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 INTRODUCTION

During the years of severe urban decline in the late seventies and early eighties, the federal government continued to dramatically cut its direct assistance to major cities. The resulting decay of the urban environments in these cities provided a strong impetus for city governments to finally take extreme actions in the 1980s to improve many aspects of their cities, such as infrastructure, sanitation programs, environmental preservation, and public safety. These revitalization efforts were often focused on the most visible parts of many cities. This urban redevelopment succeeded in stemming the effects of the two decades of urban retrenchment. However, these success stories came at a price, as many cities had to pull already declining resources from neighborhoods to give a boost to downtown cores. Since then, the country has sustained significant economic growth throughout the 1990s, which has considerably helped in the economic and environmental revitalization of the poorest segments of many cities, such as Boston, through aid from the federal government.

Riding this wave of renewed federal investment, on Earth Day in 1997, the city of Boston received a $200,000 grant from the United States Department of Agriculture (USDA) to aid in the cleaning of Chelsea Creek, the second most polluted river in Massachusetts. Mayor Thomas Menino announced that Boston had become the ninth city in the country to join the federal Urban Resources Partnership (URP), a program created under the joint jurisdiction of the USDA and the Environmental Protection Agency (EPA) in an effort to help local communities invest resources in their local urban environments. These partnerships are based on a coalition of public and private organizations that provide financial and technical assistance towards achieving these common goals of environmental revitalization and preservation.

For the last three years, the Greater Boston Urban Resource Partnership (GB-URP) has been distributing USDA grant money to public and private agencies that work with underprivileged and minority groups, to aid in the improvement and maintenance of natural resources in the Greater Boston area. While the GB-URP has seen much success, there is room for improvement. Currently, the GB-URP has no standardized methodology to measure the progress and success of their natural resource grant programs. The

agency relies strictly on non-standardized reports submitted by the grantees. This lack of standardization makes determining the success of these grant programs difficult. In addition, the GB-URP has no way of ensuring that their grants are being distributed to the groups that they strive to aid, namely, underprivileged and minority groups.

Our project focused on these urban natural resource grants that were funded by the USDA. Our goal was to give the GB-URP the tools necessary for cataloging existing projects and evaluating how they distribute urban natural resource grant money. To do this, we worked with the City of Boston Environment Department, specifically, the Greater Boston Urban Resources Partnership. Our project liaison was Ali Noorani, director of the GB-URP.

Our project report is organized as follows: The background covers Boston's environmental and urban history, focusing on topics such as the history of the Boston Parks System and the creation of the Boston Redevelopment Authority. This history will give insight into the progressive ideas that led to the creation of programs such as Boston's Environment Department and the GB-URP. Also discussed is the creation and purpose of the City of Boston Environment Department, including its past accomplishments and goals for the future. Next, the USDA and the Natural Resources Conservation Service (NRCS) are introduced. The NRCS is a state-run agency that operates under the jurisdiction of USDA and provides technical assistance to GB-URP grantees. A brief history of both departments and a discussion of their wider functions are included, in addition to a background of the USDA's history with the GB-URP. Finally, the Grassroots program is introduced as being a program of the Department of Neighborhood Development (DND). To gain a better picture of the neighborhoods that are receiving funds, the projects funded by Grassroots have been mapped along with the GB-URP programs and analyzed in a similar method.

Our methodology chapter discusses the major tasks that have been completed in order to achieve the main goal of our project. By thoroughly investigated the current methodology that the Partnership uses in evaluating their grant programs, we were able to determine the factors that are important to the GB-URP's success.

Discussed first is the methods we used to collect demographic, economic and health-related data, along with the GB-URP and Grassroots grant information. Next, the database created is described as a useful and easy-to-use tool, which holds all of the pertinent socioeconomic information on Boston's neighborhoods and grants. Several thematic maps were constructed which show the socioeconomic and health-related data visually, neighborhood by neighborhood. Also created was a standardized report outline that will be administered to each agency using USDA urban natural resource grants to analyze the success of their program.

In the analysis of our data and results, we aimed to create tools that would help the GB-URP evaluate their projects. We examined graphical correlations between each neighborhood's socioeconomic data and the amount of grant money that has been distributed to that neighborhood. Also, the total number of hardscapes (number of trees and shrubs planted), and the number of youth involved in a project have been compared against the socioeconomic data per neighborhood. Color schemes were used on our thematic maps to show various economic, demographic and health information. The juxtaposition of this data gave us the means to determine whether or not the GB-URP is targeting its grants to the areas most in need of them.

Clearly, our project has several important social implications. When the Environment Department reevaluates the distribution of its natural resource grants, it may conclude that grants could be more effectively distributed. The end result may be that grant money from existing projects in wealthier neighborhoods will be redirected to new projects in neighborhoods of greater need. These newly funded projects will have positive impacts on the communities by introducing programs that improve and maintain urban natural resources. Because wealthier communities have more monetary and other resources than poorer ones, we believe that the positive implications of our recommendations significantly outweigh any negative ones. The recognition of and response to Boston's most important natural resource needs in underprivileged areas due to our final proposal to the GB-URP will be far more vital to the city in the long run than the possible reduction of grant funding for wealthier areas.

2 BACKGROUND

The GB-URP arose out of a realization that there was a need for conservation and improvement of Boston's urban natural resources in traditionally underprivileged communities. By mobilizing these communities through local grassroots action groups and encouraging involvement instead of regulating programs strictly through federal organizations, more effective change has been possible. This progressive thinking has roots in the past and continues to evolve to this day. Environmental conservation efforts in the city of Boston began in the nineteenth century with the formation of the Boston Parks Commission and the subsequent creation of the "emerald necklace", Boston's elaborate park system. A history of this park system, in addition to Boston's continuing urban development in the twentieth and into the twenty-first century are discussed here. This will provide reasons why organizations such as the GB-URP were formed, and why they are and will continue to be crucial in aiding the communities of large cities such as Boston as it continues to evolve.

The framework of the government of the City of Boston, focusing on the city's Environment Department, is included to provide necessary background information. A thorough history of the Greater Boston Urban Resources Partnership, including its mission, goals, and organizational structure is presented. All agencies associated with the Partnership are also introduced, as are the GB-URP's past accomplishments and current projects, to illustrate the types of projects that the Partnership focus on. A background of the United States Department of Agriculture (USDA) and the Natural Resources Conservation Service (NRCS), and their current environmental grants programs is also provided. A large percentage of funding for the Partnership comes from the USDA, and so knowledge of this organization is important to understanding the GB-URP's creation and funding sources. Finally, we give a brief description of the City of Boston Department of Neighborhood Development and the Grassroots Program, which funds and supports the building of community gardens. This program funds projects similar to those of the GB-URP, and these projects may also be cataloged in the final database and analyzed along lines similar to the GB-URP projects.

2.1 Boston: A Brief History

Two important aspects of Boston's history are the Boston Park system and Boston's unique urban design and ongoing development. The Boston Park System represents Boston's first concerted effort at environmental preservation and the city's first foray into the progressive ideas leading to the creation of the Greater Boston Urban Resources Partnership, which focuses heavily on the creation, care, and preservation of Boston's neighborhood parks. A history of Boston's urban transformation throughout the last century will show how public-private partnerships were first formed, and will also show why environmental education and protection programs such as those promoted by the GB-URP are crucial as urban development continues.

2.1.1 History of the Boston Park System

The Boston Park Movement began in the late 1850's, in response to the creation of Central Park in New York City. The primary impetus for this movement came from the belief among the city's business owners that a lack of large park spaces would discredit the city nationally, hurting Boston's economy, as well as from popular support among the citizenry. The Boston Public Garden was first proposed in 1859. Initially, there were obstacles since not many grounds in Boston could be transformed into parks due to the fact that East and South Boston were too removed from the rest of the city. Finally, land was secured for park purposes in 1859 and improvements began on the existing Public Gardens in Boston. Architect George F. Meacham and City Engineer James Slade were hired to design a park with a natural atmosphere. Construction of the Garden was completed in the early 1860s!

Despite these improvements, public outcry for a true public park system did not subside with the completion of the Public Garden. In May 1875, the Park Act was passed, which allowed for the creation of a municipal park commission, consisting of three commissioners appointed by the mayor. The commission's first action was to advertise in Boston's papers asking for any "civil and landscape engineers" to present their

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[1] Zaitzevsky, Cynthia. Frederick Law Olmsted and the Boston Park System. Cambridge: Harvard University Press, 1982, 33-34.

views on the future Boston's park system at a public hearing[2]. Throughout 1875 and 1876, more than eighty proposals were submitted and carefully considered. No action was taken, however, because most of the applicants were simply citizens with ideas for a park, not educated landscape gardeners or engineers.

The commission finally sought out the advice of Frederick Law Olmsted, whose design of Central Park for the City of New York in 1858 had won him national fame. Olmsted's early years as a farmer in Connecticut then in New York developed his knowledge of land management[3]. Olmsted believed that a park should be a place where city dwellers could find rural peace and relaxation in the midst of their urban lives[4]. Olmsted criticized the views and the proposals of the commission, suggesting "greater liberality in the new parkways and bolder and more sweeping improvements of existing streets leading toward the park."[5]

Olmsted's recommendations led to an ambitious report by the commission, which projected a long-term proposal for Boston's park system, justified on the grounds of "population density, economics, and sanitation."[6] Emphasis on accessibility by all classes of the populace was included in the report. Citizens at a public meeting at Faneuil Hall in June 1876 overwhelmingly approved the report, and $450,000 was appropriated for purchase of parklands in July of that year.

Olmsted eventually signed on to oversee the development of the park system in 1878 after initial hesitation, feeling handicapped and embarrassed because the commission had not given him a definite professional responsibility. Eventually completed in 1895, Boston's park system has come to be known as the "Emerald Necklace." Two thousand acres of land were transformed into five major parks including Jamaica Park (renamed Olmsted Park in 1900) and Franklin Park and their connecting parkways[7].

Olmsted's ideas of what parks should represent, his park designs and his innovative use of parkways for Boston remain his greatest achievement, and help to cement the idea of open space and environmental

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[2] Ibid., 42-43.
[3] Lambert, Phyllis. Viewing Olmsted. Cambridge, MA: Canadian Center for Architecture, 1996, 10.
[4] Zaitzevsky, 23.
[5] Ibid., 44.
[6] Idem.
[7] Ibid., 43.

protection as being essential to urban quality of life[8]. These ideas are still fundamental today to the GB-URP's current support of new and existing park systems in the city of Boston.

2.1.2 Urban Development in Boston

In the twentieth century, Boston has made remarkable progress with respect to its urban development, transforming it from a classic European-style city to a modern-day metropolis[9]. This transformation will continue well into the twenty-first century as technological breakthroughs continue to make innovations in Boston's infrastructure possible. These breakthroughs have also raised many questions on the impact of development on Boston's urban environment, which is the focus of the GB-URP's initiatives. Through the years, these urban innovations have also led to the establishment of public-private partnerships in urban progress, a concept that is central to the success of the GB-URP.

At the turn of the century, in response to the pollution and filth of urban life, many of Boston's inhabitants began to move to suburbs in search of clean water and air. The invention of the automobile accelerated this "exodus", and Boston's population decreased at a geometric rate. As the people moved outward, so did industry and employment opportunities. Boston Harbor, once the greatest port in the nation, became neglected, and turned into acres of rotting warehouses and abandoned apartment buildings[10].

Efforts to remedy this urban decay were weak in the 1950's, and the city continued its post-World War II free fall until the election of Mayor John F. Collins in 1959. In 1960, in response to the Federal Urban Renewal Act, the Boston Redevelopment Authority (BRA) was formed to rebuild the city's crumbling downtown and deserted harbor area. Led by Edward J. Logue, who also headed an urban renewal plan in New Haven, CT, a $90-million redevelopment package was proposed to revitalize the Inner Harbor as a place for commerce, industry, transportation, housing and recreation[11]. Removal of older buildings, improvements in automobile access and parking locations, and the separation of automobile and pedestrian zones were

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[8] Heckscher, August. Open Spaces: The Life of American Cities. New York: Harper and Row, 1977.
[9] Trancik, Roger. Finding Lost Space: Theories of Urban Design. New York: Van Nostrand, 1986, 128.
[10] Ibid., 139.
[11] Ibid., 140-142.

among the strategies utilized by the BRA. Ten design objectives were proposed for the harborfront alone, and led to impressive urban redevelopment. One of these objectives was entitled "development synergy, in which public and private activity were brought together to create sufficient force to transform the urban district."[12] This concept will be one that is reinforced when examining the Greater Boston Urban Resources Partnership.

At the beginning of the twenty-first century, a number of massive projects are underway to continue Boston's remarkable urban transformation. The most notable of these is the Central Artery Tunnel Project, or "Big Dig," which will extend the Massachusetts Turnpike under the harbor on through to Logan International Airport and put the Central Artery underground. This project will create 150 acres of new parks and open space, including 27 acres downtown where the current elevated Central Artery now stands. First proposed in 1982 at a cost of $2.6 billion, the budget has since ballooned to an incredible $13 billion and an estimated completion date in 2004.[13]

In addition to the "Big Dig", several other impressive projects are scheduled, including the Seaport Project, the Millennium Place, and the Logan Airport Modernization Project. The Seaport Project, which will continue the Boston Redevelopment Authority's work started in the 1950's, will transform acres of unused warehouses into a new neighborhood near the harbor front in South Boston. According to recent estimates from city officials, it could take several decades to complete. Pieces of the project are already underway, such as the new federal courthouse and the Convention Center, a 600,000 square-foot complex scheduled to open in 2003.[14]

The Millennium Project is a proposed 59-story building that will add to the skyline of the Back Bay along with the Prudential Building and the Hancock. The Massachusetts Turnpike Authority wants to lease the air rights over the turnpike at Massachusetts Avenue to the developers of this project. The proposal also reportedly wants to deck over the turnpike as far west as Brighton for additional development.

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[12] Ibid., 141.
[13] Central Artery/Tunnel Project. 02-01-2000. <http://www.bigdig.com>
[14] Mega-Boston. 2000. <http://www.boston-online.com/mega.html>

An additional runway has been proposed for Logan Airport, which has been met with initial objections from many, including the mayor, who do not want the nearby residents to bear the additional noise burden. This proposal is not included in Logan's massive $1 billion modernization plan, begun in 1998.[15]

These projects, while creating enormous momentum for Boston as it enters the 21st century, also raise many questions about the environmental impact on the area and on the underprivileged sector of the population. Our study will focus on these aspects of Boston's future.

2.2 Boston's Government Organization

The Greater Boston Urban Resources Partnership is considered a program of the City of Boston Environment Department, and operates under its purview.[16] In this section, we discuss the Environment Department in order to understand its role and jurisdiction within the city government. The Environment Department's mission and sub-agencies, in addition to the Environmental Blueprint of 1997, are also discussed.

The current mayor of Boston is Thomas M. Menino. The mayor has a cabinet that advises the mayor on specific decisions relating to various areas of expertise. In addition, there are over fifty governmental departments in the city of Boston, which specializes in areas such as civil rights, housing, and public works. Each department has an executive director who oversees activities and reports to the city council. Our focus will be on the city's Environment Department.

Legislation calling for the creation of the City of Boston Environment Department was passed in 1978, and the department began its activity in 1980. The Department's self-stated mission is to "to enhance the quality of life in Boston by protecting air, water, and land resources, and by preserving and improving the integrity of Boston's architectural and historical resources."[17] The Department itself has many sub-agencies under its jurisdiction, such as the Boston Water and Sewer Commission and the Commission on

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[15] Mega-Boston. 2000. <http://www.boston-online.com/mega.html>
[16] Interview with Ali Noorani, 2/4/2000.

Environmental Justice. Some of these agencies, such as the Boston Park Commission, which has already been discussed, have been in existence since the nineteenth century.[18]

In 1997, the city's third Environmental Blueprint was published, emphasizing the continued goal of improving the quality of life for Boston's residents. In addition, a strong connection was made between environmental concerns and other concerns that equally affect the city: education, public safety, and health care. Successes such as the cleanup of Boston Harbor and the restoration of the Boston Public Library's McKim Building were reported. Finally, the importance of environmental education in public schools was stressed.[19] Many of the Department's programs, such as the GB-URP, are committed to carrying out the ideas set forth in this blueprint.

2.3 The Greater Boston Urban Resources Partnership

The Greater Boston Urban Resources Partnership (GB-URP) was founded on March 1, 1995, in response to a need for community development through the preservation and constructive utilization of environmental resources. The first community project undertaken using federal funds was the Chelsea Creek Action Group, begun in 1997. This project provided the impetus for the inclusion of Boston into the Federal URP program. Since then, the partnership has developed into a coalition of community organizations and agencies, businesses, and local, state, and federal government agencies, supporting thirty projects since 1997.[20] The GB-URP strives to focus its resources exclusively on low-income neighborhoods and minority groups. The GB-URP's mission is realized by activist community groups engaging business and government to create solutions to these problems in their communities.[21]

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[17] City of Boston Official Site. 2000. <http://cityofboston.com/environment>.
[18] Zaitzevksy, 3-4.
[19] City of Boston – Environment. 2000. <http://cityofboston.com/environmnet/overview.asp>
[20] Greater Boston Urban Resources Partnership. Progress Report to Partners. Boston, MA: Greater Boston Urban Resources Partnership, 1999.
[21] Greater Boston Urban Resources Partnership, 6.

2.3.1 Mission and Goals

The GB-URP's stated mission is "to help urban communities carry out strategies that link social, economic, and environmental concerns." Its primary goals are:

- To create a healthier, safer, more economically sustainable urban environment.
- To support economically sustainable projects and initiatives that enhance quality of life and foster diverse community involvement through innovative agency collaborations.
- To employ a teamwork approach to delivering services and mobilizing leadership that supports the urban environment.[22]

2.3.2 Organizational Structure

The organizational framework of the GB-URP can be broken down into three main areas: the network, technical assistance, and financial assistance. Each area has its own advantages, which will be discussed here.

The Network:

The GB-URP is committed to creating a network of organizations, businesses, and government agencies, each bringing their own unique resources that will aid towards a common goal such as those listed above. Typically underprivileged or underrepresented groups are also recognized as equal partners in the strategic planning and execution of these endeavors.

Technical Assistance:

Private, public and nonprofit groups all bring their own technical expertise to help in improving the urban environment. The network of various businesses and organizations ensures that wide ranges of specialties are available. Much of the assistance provided is pro-bono work.

Financial Assistance:

Financial support is provided by the United States Department of Agriculture (USDA) – Forest Service and Natural Resources Conservation Service, the Environmental Protection Agency (EPA) – Region 1 and the City of Boston "in an effort to:

- Foster community involvement, serve community needs, and provide community benefits.
- Foster cooperation among residents and government officials for the enhancement of the urban environment.

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[22] City of Boston Official Site. April 1999. <http://cityofboston.com/environment.april99.asp>.

- Serve and involve low-income and minority communities that have traditionally had little access to environmental resources.
- Plan for long-term sustainability and improvements for community needs and activities."[23]

2.3.3 GB-URP Funding Sources

The Partnership has only been receiving federal and local funding since April 1997, and is currently in its third year of the USDA's five-year seed-funding program. Thirty-nine agencies, organizations, businesses and individuals have committed either financial or technical assistance to the GB-URP. Nearly $700,000 in USDA funds has been granted for urban natural resources projects. These funds have been matched with $1,072,282 of non-federal financial and technical resources.

As of 1999, a total of $150,000 to $300,000 was expected in grant money, depending on congressional appropriations. Individual grantees generally receive from $20,000 to $50,000. All organizations are required to provide non-federal matching funds in the form of technical or financial assistance (which the GB-URP aids in finding).[24]

2.3.4 Grant Application Procedure

The organization seeking project funding must complete a pre-application form that outlines the project summary, the technical assistance required by the organization, and an outline of the time and budget breakdown of the project. Upon receiving approval of its pre-application by the GB-URP, the organization submits a formal project proposal, up to eight pages long, containing a detailed budget breakdown, a copy of the organization's tax status, a list of current Board of Directors, resumes of three project staffers, and letters of support from other organizations that make specific time commitments for technical, financial and other assistance.[25]

All applicants, to be considered, must work with minority or low-income community organizations, and must be supported or be part of a local or state level of government, or have nonprofit organizational tax

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[23] Ibid.
[24] Greater Boston Urban Resources Partnership. Pre-Application Form. Boston, MA: Greater Boston Urban Resources Partnership, 1999, 1.

status. The project should satisfy community needs, promote community service, encourage community and government collaboration to improve the urban environment, involve low-income and minority groups that in the past have had limited access to urban environmental resources, and have plans for "long-term sustainability" through community activity.[26]

Priority is given to projects that strive to meet one or more of the following criteria:

- Improve, maintain, or protect natural resources through the management of trees, shrubs, ground cover, and other vegetation.
- Include installation of a physical item, or clearly define an outcome.
- Include an education component, linking natural resources to the lives of community residents.
- Help communities to identify, clarify, organize, and address issues that link social, economic, and environmental concerns.

Finally, the GB-URP requires the organization to provide: dollar-for-dollar matching funds by non-federal resources, documentation of the site where the funds are being used with photographs, a semi-annual progress report, and public recognition of the GB-URP in advertising for community activities.[27]

2.3.5 The Chelsea Creek Action Group

The project that became the spark for the creation of the GB-URP was the Chelsea Creek Action Group (CCAG). This initial project represents a good encapsulation of the types of goals that the Partnership strives to achieve through partial funding and community involvement. A brief description of the problems that faced Chelsea Creek and the solutions created by the community follows.

Chelsea Creek runs between East Boston and the city of Chelsea. Before community efforts, the area near the creek had been set aside for the oil/petroleum industries, metal recycling plants, and salt pile storage. Also in the area near the creek were neighborhoods receiving the negative effects from these industries and from the nearby airport, including asthma among children and hypertension and hearing loss in adults.

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[25] Ibid.
[26] Ibid., 2.
[27] Noorani, Ali. Personal Interview. 04 February 2000.

Three community action groups, led by the East Boston Ecumenical Community Council, the Neighborhood for Affordable Housing, and the Chelsea Green Space and Recreation Committee, obtained $75,000 in USDA funds from the city of Boston and $121,203 in matching funds to lead efforts to increase resident awareness and involvement, creating solutions to these problems.

In May 1998, the community action groups organized an Environmental Fair in Chelsea, which drew 1000 residents who participated in various environmental activities, including water quality testing and visiting the creek for educational tours. These action groups also worked together with the Partnership to put pressure on the Amerada Hess Corporation to remove ten abandoned oil tankers from the Chelsea Creek that had been there for twenty years.

The community action groups coordinated a Tufts University Field Study Project that documented land use patterns and sensitive receptors within the Chelsea Creek watershed. This information was placed in a Geographical Information System (G.I.S.) and made accessible to the community. In addition, the CCAG received a bequest to a one-acre community park near what was once a parking lot. Finally, Chelsea became the first ever community to participate in the National Pollution Discharge Elimination System permitting process with the help of federal GB-URP members?[28]

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28 Ibid., 14, City of Boston – Environment. 2000.
<http://www.cityofboston.com/environment/success.asp>

2.3.6 Current GB-URP Projects

Table 1 shows the currently scheduled projects of the GB-URP for 1999-2000. These are provided to give examples of the types of community projects that the GB-URP funds. As one can see, a vast majority of these projects involve environmental conservation and awareness efforts. Appendix 7.4 provides more detail about past GB-URP projects.

	Organization	Project Name	Neighborhood or City
1)	Alternatives for Community and Environment	Youth Action to Enhance Roxbury's Environmental Resources	Roxbury
2)	Boston Schoolyard Funders Collaborative	Green Schoolyards: Planting the Seeds of Environmental Stewardship	Boston
3)	Chelsea Human Services Collaborative	Chelsea Creek Action Group	Chelsea and East Boston
4)	Eagle Eye Institute	Rainbow Stewards Program	Somerville
5)	EarthWorks Projects	Native and Edible Demonstration Projects	Roxbury/Dorchester
6)	Neighborhood of Affordable Housing	East Boston Schoolyard Initiative	East Boston
7)	Shirley-Eustis House	History Roxbury Orchard Project	Roxbury
8)	Children's AIDS Program	Imani Community Garden for Children and Families	Mattapan
9)	Food Project	West Cottage Street Sustainable Development Initiative	Roxbury
10)	Greater Boston Food Bank	Community Composting Network	Boston
11)	The Nonquit Street Neighborhood Association and Land Trust, Inc.	The Nonquit Street Green	Dorchester
12)	Boston Parks and Recreation Department/Urban Wilds Initiative	Condor Street Beach Urban Wild Restoration	East Boston
13)	Suffolk County Conservation District	Urban Forestry and Gardening Through Effective Collaboration	Mattapan, Roxbury, Dorchester

Table 1: GB-URP Projects for 1999-2000[29]

2.4 Federal Grants and the United States Department of Agriculture

Federal grant programs have an important and highly visible role in the United States today. Funding is given to businesses, universities, and non-profit organizations to assist in a multitude of research and

projects. An overview of federal grants is discussed to provide a background on how grants came to be such an integral part of America's economy and society. The United States Department of Agriculture (USDA) provides a large portion of the federal funding to the GB-URP. The department's key functions are discussed to provide the reader with the Department's goals and scope of its services in an effort to explain, in greater detail, how the GB-URP receives its funding. Also discussed is the Natural Resources Conservation Service (NRCS), a state-run department overseen by the USDA. The NRCS works closely with the GB-URP by providing technical and financial assistance. The history and goals of the NRCS will be discussed. Again, knowledge of this department's principles is important for understanding the network of organizations that aid the GB-URP in carrying out its mission.

2.4.1 Federal Grants: An Overview

The Federal Government of the United States, through grant-making organizations, provides partial or full funding to thousands of institutions, and is the largest single source of grant funds in the world. Sixty different federal departments administer grants to thousands of programs throughout the country. Many of these programs provide monetary support and services to various state and local organizations[30]

Direct government grants date back only to the late 1950s, a surprising fact because of the many official grant services preceding that time. Prior to the 1950s, these grants from the government only came in the form of tax immunity, which encouraged investment in research and development in a wide variety of categories.[31]

Much of the government's research is conducted in federal laboratories at colleges and universities and is funded through grants. Support for the advancement of knowledge through basic sciences was largely ignored by federal funding sources up until World War II. This has improved greatly in the post-war period,

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[29] Progress Report to Partners, 26.
[30] White, Virginia P. Grants: How to Find out About Them and What to do Next. New York: Plenum Press, 1975, 35.
[31] Ibid., 7.

and continues to improve to this day because of quantum physics breakthroughs and other incredible scientific findings that have since occurred.[32]

2.4.2 The United States Department of Agriculture

The United States Department of Agriculture (USDA) is the third-largest civilian department in our government. It employs over 100,000 people in 15,000 locations situated in every state and also in 80 other countries. In Massachusetts alone, there are approximately 340 USDA employees. It was initially established to enhance the quality of life for Americans by helping provide safe, affordable, nutritious, and accessible food. Since its inception, the department has also taken on the responsibility of overseeing all agricultural, forest lands, and range lands. In addition, the USDA supports the development of rural communities and provides economic opportunities for farmers and foresters that expand the global market for agricultural and forest products and services. Through the Agricultural Research Service (ARS), the USDA also conducts research programs for the purpose of providing new knowledge and technology that will help to conserve the environment and help increase efficiency of food production. In addition, grants are given for research in agriculture and forestry through the Cooperative State Research Service (CSRS), an agency overseen by the USDA.[33]

Along with its immense size is a large but shrinking budget. The USDA annual budget (cash from the Federal Treasury) is predicted to decrease by 13% from its 1993 level to $55.2 billion in 2000. Approximately 28% of total USDA outlays are for the programs including management of the National Forests and Grasslands and State and Private Forestry programs. The remaining 72% are delegated to mandatory programs. This program level will decrease from $44.2 billion in 1999 to $40.1 billion in 2000. The budget will also set aside funding for: providing additional assistance to the conservation of natural resources, protecting farmland and preserving open spaces, protecting the environment through debt

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[32] Ibid., 37.
[33] Ibid., 68-69.

forgiveness, enhancing the ability of the National Forest Service to meet their demands, and providing the scientific foundation for sound management of public forest and range lands.

2.4.3 The Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS) is a private lands conservation agency that the USDA oversees. It aids in the conservation of natural resources by providing local, technical assistance to the GB-URP's programs.

Originally founded to deal with the problems of soil erosion in the 1930's, the NRCS today provides technical assistance and manages a wide range of programs that help solve the Nation's natural resource problems. The mission of NRCS is to provide national leadership, using a cooperative partnership approach, and to help people conserve, improve, and sustain their natural resources and environment.[34] The original principles that the NRCS was founded upon still hold true today. These principles are:

- To assess the resources on the land, the conservation problems and opportunities.
- To draw on various sciences and disciplines and integrate all their contributions into a plan for the whole property.
- To work closely with land users so that the plans for conservation mesh with their objectives.
- To contribute to the overall quality of the life in the watershed or region through implementing conservation on individual properties.[35]

Because many natural resources are interrelated (such as soil and water), the NRCS programs are also interrelated to allow the programs that help one resource help others as well. By improving the environment, and conserving natural resources, the economic future of communities throughout the United States is significantly improved.

2.4.4 The USDA and the GB-URP

In celebration of Earth Day on April 22, 1997, USDA undersecretary Richard Rominger awarded a $200,000 grant to the City of Boston in an effort to help the city clean up the Chelsea Creek, the most

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[34] About USDA. 02-01-2000 <http://www.USDA.gov/about.htm>

polluted tributary of Boston Harbor, and the second most polluted body of water in Massachusetts. On the steps of Faneuil Hall, Mayor Thomas Menino announced that Boston had been added to the Urban Resources Partnership (URP) program.

At the time, there were twenty-one URP programs nationally, and eight cities officially participated in the URP program: Atlanta, Chicago, Denver, East St. Louis, Los Angeles, New York, Philadelphia, and Seattle. From 1994 to 1997, when Boston was added to the program, $14 million had been committed by the USDA. Seven other federal agencies participated in the URP, in an effort to "protect, improve and rehabilitate critical urban environments."[36] In addition, the USDA planned to invest $68 million for 43 communities in 30 states to improve water and sewage facilities.

2.5 City of Boston Department of Neighborhood Development

Another department focused on improving the livability of Boston's communities is the City of Boston Department of Neighborhood Development (DND). The mission of the Department of Neighborhood Development is to make Boston "the most livable city in the nation" by building strong communities through the strategic diversion of public funds and resources[37]

Services and programs are provided through five operating divisions: Capital Construction, the Office of Business Development, Housing Service, Real Estate Services, Homeowner Services, and Home Buyer Assistance. These divisions are responsible for the construction and maintenance of public buildings, the revitalization of neighborhood business districts, the preservation of affordable housing and open space within the city, and the offering of information to homeowners on financial and technical assistance.

The strategy of the DND recognizes that neighborhood development is dependent upon the leadership of people within their own communities. The DND and the community work together to ensure

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[35] History of the Natural Resources Conservation Service. 2000. <http://www.nhq.nrcs.usda.gov/CCS/history/NRCShist.html>
[36] USDA Website. 2000. <http://www.usda.gov/news/releases/1997/04/0126>
[37] City of Boston Official Site. 2000. <cityofboston.com/dnd>.

residents get the assistance they need. In doing so, they contribute to the security of the neighborhoods and enhance the quality of life, in addition to improving local economies and infrastructure.

The Grassroots Program operates under the jurisdiction of the Department of Neighborhood Development to provide funding for the creation and maintenance of community gardens. This program funds only nonprofit organizations and focuses on proposals related to educating the community on how to make improvements on local landscapes. Projects are currently reimbursed in amounts of up to $20,000 as work is accomplished. Proposals must meet certain criteria to receive funding from Grassroots. Parks must be built to professional standards, and matching contributions equal to 25% of the DND's funds must be provided by the grantee. Grassroots does not give funding for any acquisition of land or other real property. The DND must pass all proposals through Grassroots to determine the availability of the site for community open space use. Priority is given to proposals that aim to improve community garden projects, which have previously been successful. There are some criteria for giving this priority. The garden must be a physical asset to the neighborhood, providing for the community's needs and educational purposes. Before the project is funded, a completed development schedule, including deadlines, must be drawn and the organization must prove that safety and health provisions have been made. If all of these criteria are completed to the satisfaction of the Grassroots Project, then the chance for funds being distributed greatly increases.

3 METHODOLOGY

The GB-URP plays a major role in the conservation of urban natural resources within the City of Boston. With the financial backing of the USDA and the technical assistance of the Natural Resources Conservation Service (NRCS), the GB-URP distributes federal funds to aid in the rehabilitation and revitalization of these resources in Boston's most underprivileged neighborhoods. The GB-URP's mission to help Boston's most disadvantaged communities cannot be fully realized without up-to-date knowledge about these communities or without a complete and proper method of evaluation of the success of these projects. Our goal is to aid the GB-URP in targeting its grants to Boston's most underprivileged communities and to give the Partnership the tools to evaluate the projects it funds. To fulfill this goal, we have set three objectives that we will apply to each of Boston's 15 neighborhoods, along with the cities of Chelsea and Somerville. In this chapter we will discuss in detail the logical progression of tasks beginning with our techniques for data collection and concluding with the presentation of our results and analysis.

To complete this project we approached the following three objectives in sequential order. Our first objective included collecting specific information on all of the GB-URP's projects, in addition to projects funded by the Grassroots program. We also researched and collected pertinent socioeconomic data on Boston's fifteen neighborhoods and the cities of Chelsea and Somerville that will provide the criteria for the GB-URP to determine where grant money is most needed. The second objective was to create a database and a standardized report outline for grantees to follow which will provide the Partnership with the appropriate information for evaluating the success of the projects it supports. Our final objective was to construct a thematic mapping system using the G.I.S. computer program, MapInfo. This map enabled us to conduct analysis on where the grant money has and is currently being distributed in Boston versus where it is in reality most needed. Upon completion of this project, we were able to give the GB-URP the tools necessary for both determining which communities most need grant money and for evaluating the progress made with respect to these community projects.

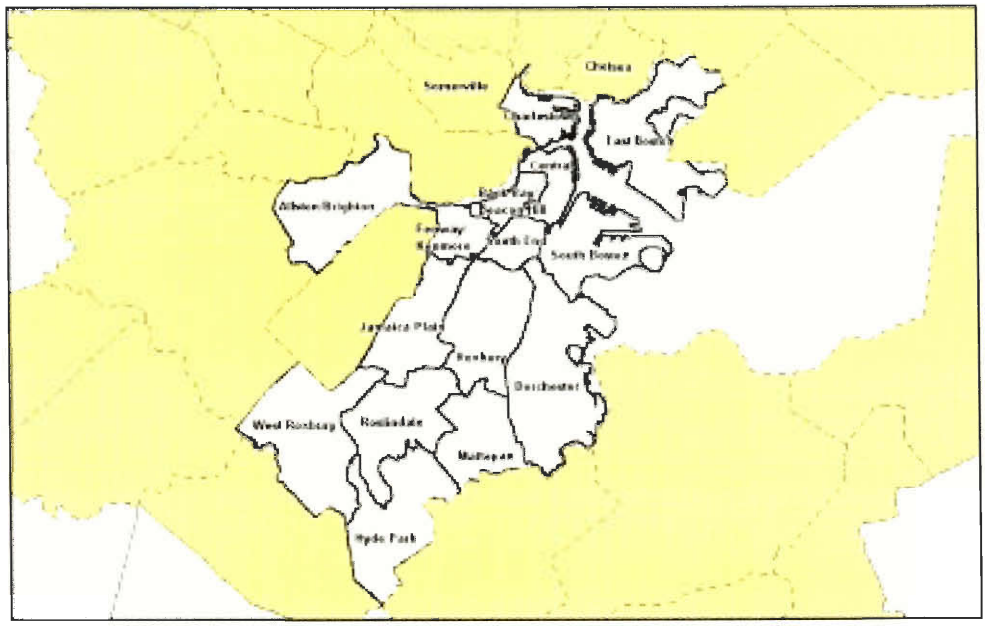

Figure 1: Map of Boston's Neighborhoods, Chelsea and Somerville (see Table 3)

3.1 Socioeconomic and Grant Information

Determining the criteria for where grants are most needed is essential to the evaluation of the success of the GB-URP's urban natural resource grants program. To accomplish this, there were two types of data that we needed to collect and utilize: socioeconomic data on the cities of Boston, Chelsea, and Somerville, and GB-URP project information. In this section, we will discuss the types of data that we have obtained and the collection methods that we have used.

Table 3 in Section 3.2 lists the names of Boston's neighborhoods and their corresponding Boston Redevelopment Authority (BRA) Planning District numbers. The locations of these districts can be seen on the map in Figure 1. The three main factors of socioeconomic data that were determined to be the most crucial for study in these neighborhoods were median income level, poverty level and ethnic percentage make-up. Upon contacting our project liaison, we found that the Boston Department of Neighborhood Development (DND) and the BRA would be the best sources for obtaining this socioeconomic information in its most up-to-date form. Hence, our first task was to contact these departments and request these data, in both electronic and paper form. Through the Boston Redevelopment Authority, we were able to obtain a

comprehensive set of population, income, housing, employment, and ethnic statistical information from the 1990 Census for Boston's neighborhoods. Similar data for Chelsea and Somerville were collected from the Massachusetts Institute for Social and Economic Research website.[38]

In addition, the following 1990 Census data was given to us through a contact in the Boston DND. These data were available in electronic form through a G.I.S. map of Boston's Housing and Urban Development (HUD) Census tracts. These tracts fit within Boston's neighborhoods, and were used to calculate citywide population density and to represent certain health measurements throughout the city; namely, the number of reported lead and asthma cases in Boston.

The second type of data gathered pertained to each of the GB-URP's projects. This data was obtained primarily from two sources: the GB-URP Progress Report to Partners, and the individual proposals and reports from the grantee organizations that were submitted to the GB-URP. Our project liaison also aided in filling in any missing information. The specific data that was obtained from these sources will be discussed in more detail in Section 3.2.

3.2 Database of Projects and Standardized Report Outline

To catalog the GB-URP grants, we created a comprehensive database to store the specific grant information obtained from the GB-URP Progress Report and the reports submitted to the Partnership by the grantee organizations. A computerized database is the most efficient way to keep the individual project and grant data organized, and provides the easiest methods of data summary and entry. In addition, we created a standardized report outline for grantee organizations to follow when writing progress reports to the GB-URP. This outline will roughly follow the format of the database to standardize the collected information from each organization.

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[38] The Massachusetts Institute for Social and Economic Research. 2000. <http://www.umass.edu/miser>.

3.2.1 Computerized Database Construction and Format

The database was constructed using Microsoft Access 97, using the filename *GB-URP_grants_data.mdb*. We determined Access 97 to be the best software program for this task because of its ease-of-use and, more importantly, its compatibility features. MapInfo 5.5 is currently not compatible with Access 2000, and because we imported data into MapInfo from the database, it was important to choose database software that was fully compatible.

Several tables were constructed to hold the project, organizational, and grant information. Table 2 lists the names of the data tables that are included in our database and the specific fields each table contains. Each table was organized according to which types of data are similar in nature, such as project description and results, and administrative information. In addition, tables were constructed to associate unique project and organizational codes that enabled us to link data together. This linking of data between tables through the use of codes will ease the process of generating queries and reports as more data is entered in the future. Finally, forms were constructed for data viewing and updating. These forms will provide a front-end application for users of the software to enter and view project information in a method simpler than navigating through the individual data tables.

Table Name	Data Fields Included
Projects	Project name, project code, grant program, contracted start date, locations, project status, USDA grant amount, matching funds, total funds, funding authority
Organizations	Organization name, organization code, contact name, address, phone, fax, e-mail address
Proj_description	Project code, detailed project description
Project_results	Project code, curriculum type, total participants, no. youth involved, no. adults involved, no. acres, no. trees, no. shrubs, cubic yds. soil transplanted, site address
Administrative_data	Type of contract (city, state, federal), document ID, vendor ID
Neighborhoods	Neighborhood name, neighborhood code

Table 2: Tables in MS Access Database with field name headings

We have given the neighborhoods in Boston unique six-letter codes, which were used to identify each neighborhood in the database that we construct. This information can be seen in Table 3. Because certain projects operate within multiple neighborhoods, these codes were used to link each project to their respective neighborhoods through tables in the relational database.

Planning District	Neighborhood	Database Code
1	East Boston	EASTBO
2	Charlestown	CHARLE
3	South Boston	SOUTHB
4	Central	CENTRA
5	Back Bay – Beacon Hill	BACKBA
6	South End	SOUTHE
7	Fenway – Kenmore	FENWAY
8	Allston – Brighton	ALLSTO
9	Jamaica Plain	JAMAIC
10	Roxbury	ROXBUR
11	North Dorchester	NORTHD
12	South Dorchester	SOUTHD
13	Mattapan – Franklin	MATTAP
14	Roslindale	ROSLIN
15	West Roxbury	WESTRO
16	Hyde Park	HYDEPA
	Chelsea	CHELSE
	Somerville	SOMERV

Table 3: List of Boston's Neighborhoods and BRA Planning District Nos., along with MS Access Database Codes[39]

Table 4 lists all of the projects that the GB-URP has funded, which have been included in the database. All of the detailed information discussed above is catalogued in separate database tables for each agency and project in the table. A large number of these projects are located in the neighborhoods of Dorchester, Roxbury, Mattapan, and East Boston, in addition to the cities of Chelsea and Somerville. These geographic areas will be the primary targets of our mapping system and analysis, discussed in the next section.

[39] Boston Redevelopment Authority. Facts About Boston's Neighborhoods. Boston, MA: Boston Redevelopment Authority, February 1995.

Organization	Project Name	Neighborhood or City
Chelsea Creek Action Group	Chelsea Creek Action Group, A Boston URP Pilot Project	East Boston/Chelsea
Boston Urban Gardeners	Fields Corner Open Space Renovation	Dorchester
Mt. Calvary Church	A Church Based Environmental Stewardship Program	Dorchester/Mattapan
S. End/Lower Roxbury Land Trust	Bessie Barnes Garden Extension	South End/Lower Roxbury
Earth Works	Historic Fruit Orchard and Demo Orchard Proj.	Mattapan
Food Project	Lots of Growth	Roxbury
Boston Natural Areas Fund	Community Garden and Neponset River Access	Mattapan
Save the Harbor/Save the Bay	Harbor Vision Crew 1998	Roxbury/ Dorchester/East Boston
Food Project	Safe Food from Langdon Street	Roxbury
Boston Urban Gardeners	Community Land Management and Restoration	Dorchester/Roxbury
Egleston Social Action Group	The Peace Garden	Roxbury
Chelsea Creek Action Group	Chelsea Creek Action Group	East Boston
Chelsea Community Connections	Chelsea Community Gardening and Education Project	Chelsea
Edward L. Cooper Senior Community Gardening and Education Center	Cooper Greenhouse	Roxbury
Earth Works	Historic Fruit and Orchard Demonstration Project	Mattapan
Somerville Public Schools	Water in the City	Somerville
Alternatives for Community and Environment	Youth Action to Enhance Roxbury's Environmental Resources	Roxbury
Boston Schoolyard Funders Collaborative	Green Schoolyards: Planting the Seeds of Environmental Stewardship	Boston
Chelsea Human Services Collaborative	Chelsea Creek Action Group	Chelsea and East Boston
Eagle Eye Institute	Rainbow Stewards Program	Somerville
Earth Works Projects	Native and Edible Demonstration Projects	Roxbury/Dorchester
Neighborhood of Affordable Housing	East Boston Schoolyard Initiative	East Boston
Shirley-Eustis House	History Roxbury Orchard Project	Roxbury
Children's AICS Program	Imani Community Garden for Children and Families	Mattapan
Food Project	West Cottage Street Sustainable Development Initiative	Roxbury
Greater Boston Food Bank	Community Composting Network	Boston
The Nonquit Street Neighborhood Association and Land Trust, Inc.	The Nonquit Street Green	Dorchester
Boston Parks and Recreation Department/Urban Wilds Initiative	Condor Street Beach Urban Wild Restoration	East Boston
Suffolk County Conservation District	Urban Forestry and Gardening Through Effective Collaboration	Mattapan, Roxbury, Dorchester

Table 4: GB-URP Projects[40]

[40] Progress Report to Partners. 13-32.

3.2.2 Standardized Report Outline

A standardized report outline was constructed for grantee organizations to follow and submit to the GB-URP on a semi-annual basis. This outline roughly follows the structure of the database and will be used by the organizations to submit to the GB-URP for evaluation and cataloging purposes. This report outline will help the Environment Department normalize the information on existing and future grants programs, and to construct a more accurate "before-and-after" picture on whether or not a particular grant has made a positive impact in the community in which it was distributed.

The outline requests criteria that correspond to the various fields in the database, such as the number of youth and adults involved, and the number of trees and shrubs planted. This correspondence with the database will help in the comparison of past and future grants by obtaining standardized information from them. To create this evaluation outline, we investigated older reports from the GB-URP in an effort to get additional ideas for the structure of this outline. Working in conjunction with our project liaison, we found the necessary qualitative and quantitative criteria that will give the Partnership the information necessary to determine the success (or lack thereof) of the projects that they fund. These criteria include both numerical data and written reports that will provide the Partnership with a finalized "series of indicators and measurements" to evaluate their programs.[41]

3.3 G.I.S. Mapping and Analysis

Once the data discussed in Section 3.1 was collected and electronically catalogued, an analysis of this data was performed. Using MapInfo, thematic maps and various types of graphs were generated that allowed us to perform this analysis and draw conclusions that will be useful to the GB-URP. A visual presentation of the data and analysis is easier to comprehend and can paint a powerful picture that quickly conveys an idea or a concept.

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[41] Noorani, Ali. Personal Interview. 04 February 2000.

Our primary tool for analysis will be thematic maps generated using the software program MapInfo. Each distinct table of corresponding data is referred to as a "layer" within MapInfo. Through a contact at the City of Boston Department of Neighborhood Development, we obtained layers for the boundaries and names of Boston's neighborhoods, in addition to all of the city boundaries in Massachusetts, which were used to identify the cities of Chelsea and Somerville with respect to Boston. In addition, a layer of TIGER streets (Topologically Integrated Geographic Encoding and Referencing System) was obtained, which includes a complete layout of the street system for the cities. These layers gave us the spatial boundaries necessary to visually define our area of study.

The project data in the database and the socioeconomic data that we have collected were imported into MapInfo as mappable tables. A layer was created for the locations of both the GB-URP and Grassroots projects within the cities of Boston, Chelsea and Somerville. Each project site was spatially mapped using geocoding, a feature of MapInfo that locates the position of a specific street address of an object in a table using the TIGER street data. One of the fields in the project table was the properly formatted geocode address. Each project was distinguished by "pushpin" symbols, differentiated by the granting organization (GB-URP and Grassroots). Clicking on each symbol shows all of the pertinent data that was imported into MapInfo from the database.

The demographic data collected was also layered onto the maps, which enabled us to conduct analysis for the GB-URP. The analysis included determining where the project sites are in comparison to certain demographic data. The demographics that we focused on were poverty levels, unemployment levels, median income, and percent of minority groups, in addition to health data such as asthma and lead rates. We used color codes to help differentiate the demographic data from the grant information to aid in data correlation. These thematic maps were also overlaid against open space maps, which gave an additional level of analyses and conclusions to the GB-URP. In addition to these thematic maps, we generated graphs using Microsoft Excel that summarized neighborhood data. These graphs were superimposed over each other to provide insight as to how the GB-URP is distributing its money versus other pertinent data.

The completion of these objectives represent for us the achievement of our overall goal of aiding the GB-URP in focusing its grant distribution on Boston's most underprivileged communities and giving the Partnership the tools to evaluate the projects it funds. By successfully completing the database, mapping system, and standardized report forms, the Greater Boston Urban Resources Partnership's evaluation of the success of their urban natural resource grants programs will be significantly improved.

4 RESULTS AND ANALYSIS

The accomplishments of our project were twofold. The first step included constructing a database and standardized report outline to give the GB-URP and other environment-based programs the tools necessary for cataloging their project information. We catalogued approximately thirty GB-URP projects and forty Grassroots projects spread throughout Boston, Chelsea, and Somerville (see Figure 2). As the reader can see, the majority of these projects are in a rather centralized location. Are these areas receiving the majority of grant monies the areas that are most in need of them according to the GB-URP's criteria? In this chapter, we addressed this question by first understanding the socioeconomic, demographic and health aspects of Boston, Chelsea and Somerville. This enabled us to determine which areas are most disadvantaged, and are therefore most in need of funding. Next, we examined various project data versus these criteria. This step represented the second component of our project accomplishments. The chapter concludes with a discussion of the database that was constructed and the corresponding report form.

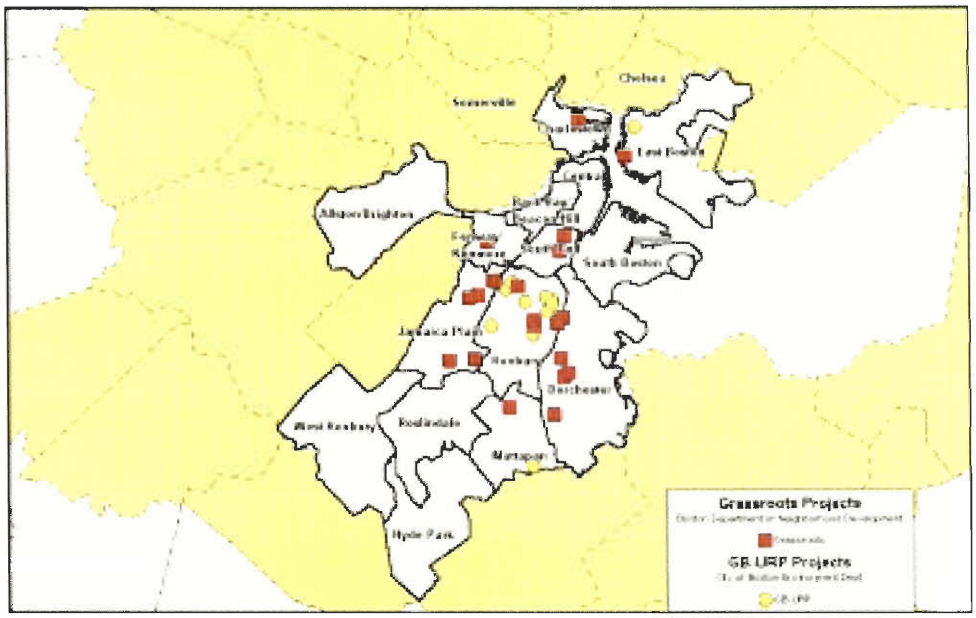

Figure 2: Location of Projects throughout the City of Boston

4.1 Socioeconomic Make-up of Boston

Boston is a city of rich diversity. In order to determine if grant money is being distributed to the most underprivileged communities, it was necessary to understand the economic and quality of life disparities that exist across its neighborhoods. We addressed this issue by looking at economic/demographic data (4.1.1) and health/quality of living indicators (4.1.2). What we have found is that all of these factors vary greatly across Boston's fifteen neighborhoods, as well as in Chelsea and Somerville.

4.1.1 Economic and Demographic Data

The three indicators that we used to examine the socioeconomic and demographic differences across Boston are median income levels, percentage of the population in poverty, and the percentage of minority groups within the total population. These indicators were used because of their importance to the GB-URP in determining need for assistance. A summary of this data, obtained from the BRA, is shown in Table 5. As one can observe from the table, each indicator reveals varying levels of inequality within the areas studied.

Neighborhood	Median Income	Percent of Minority Groups	Percent of Poverty
South Boston	$25,539	4.2	17.3
West Roxbury	$39,509	4.9	4.9
Charlestown	$35,706	5.1	12.7
Back Bay/Beacon Hill	$38,853	11.3	12.4
Roslindale	$34,211	22.3	10.9
East Boston	$22,925	23.6	19.3
Central	$30,061	26.8	16.9
Allston/Brighton	$29,384	26.9	20.1
Hyde Park	$35,916	28.1	7.2
Fenway/Kenmore	$18,645	28.4	36.1
Dorchester	$29,892	49.8	17.9
Jamaica Plain	$29,864	50.2	19.2
South End	$27,156	59.9	23.3
Mattapan	$29,316	92.9	24.2
Roxbury	$20,518	94	29.6
Chelsea	$25,144	41	23.8
Somerville	$32,455	15.6	9.5

Table 5: 1990 Census Neighborhood by Neighborhood Socioeconomic Data (inc. Chelsea and Somerville)[42]

[42] Boston Redevelopment Authority. Facts About Boston's Neighborhoods. Boston, MA: Boston Redevelopment Authority, February 1995.

One of the most important indicators of a neighborhood's need for environmental funding is median income level. As seen in Figure 3, Fenway/Kenmore, Roxbury and East Boston have the lowest median incomes in the Boston area, each having less than $23,000 per household, nearly half of the highest median income of over $39,000. The factor of two between the poorest and richest neighborhoods reiterates Boston's extreme diversity.

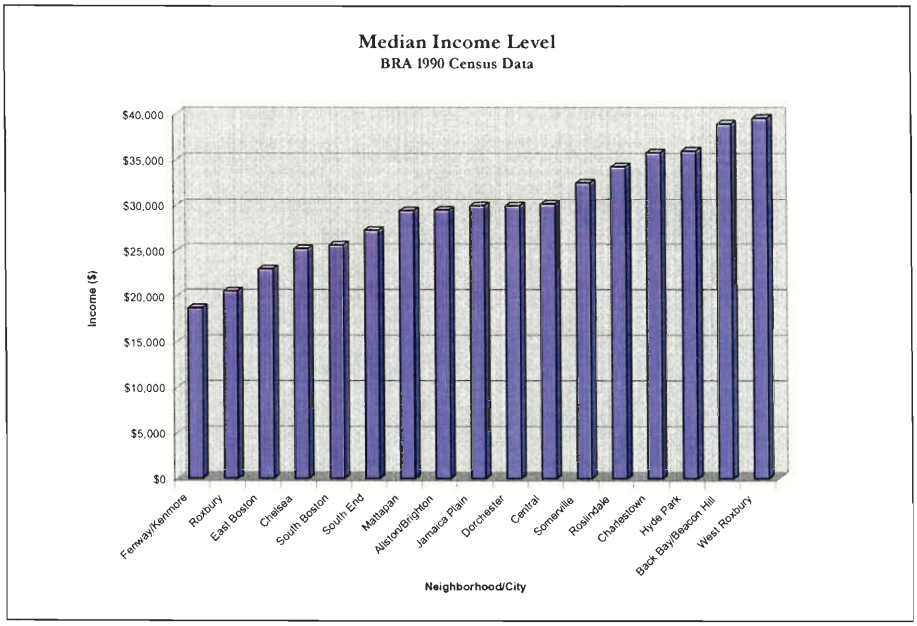

Figure 3: Median Income Level of Boston's Neighborhoods and cities of Chelsea & Somerville

Upon examining poverty levels across the Boston area, we found that the most impoverished neighborhoods, by as much as a factor of seven over the wealthiest neighborhoods, are Fenway/Kenmore, the South End, Mattapan, Roxbury, and the City of Chelsea (see Figure 4). Looking at Figure 3 and Figure 4, it is clear that there is a fairly inverse relationship between median income and the percentage of the population below the poverty line, which is expected. To ease the cross reference comparisons between the graphs, the neighborhoods have been left in the same order along the x-axis for this section.

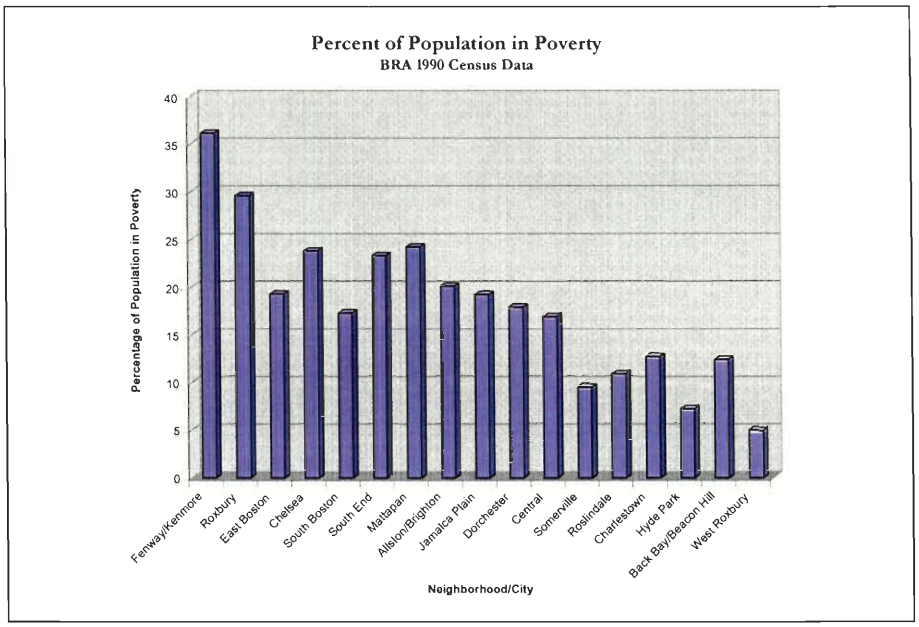

Figure 4: Percentage of Population in Poverty (inc. Chelsea & Somerville)

The GB-URP also strives to provide assistance to those neighborhoods with high percentages of minority groups. Roxbury, Mattapan, the South End, Dorchester and Chelsea have the highest percentages of minority groups, with Roxbury and Mattapan over 90%. Several neighborhoods, such as Charlestown, West Roxbury, and South Boston, have minority percentages at around only 5%. Figure 5 shows the percentages of minorities, which, as discussed earlier, vary by a factor of nearly twenty. These demographic statistics are extremely important to the GB-URP, as it helps them to recognize their target neighborhoods amid the wide range of ethnicities in Boston. Also, one may notice that there is no correlation between percentage of minority groups and median income or poverty levels. This observation will be of importance in the analysis section of this chapter.

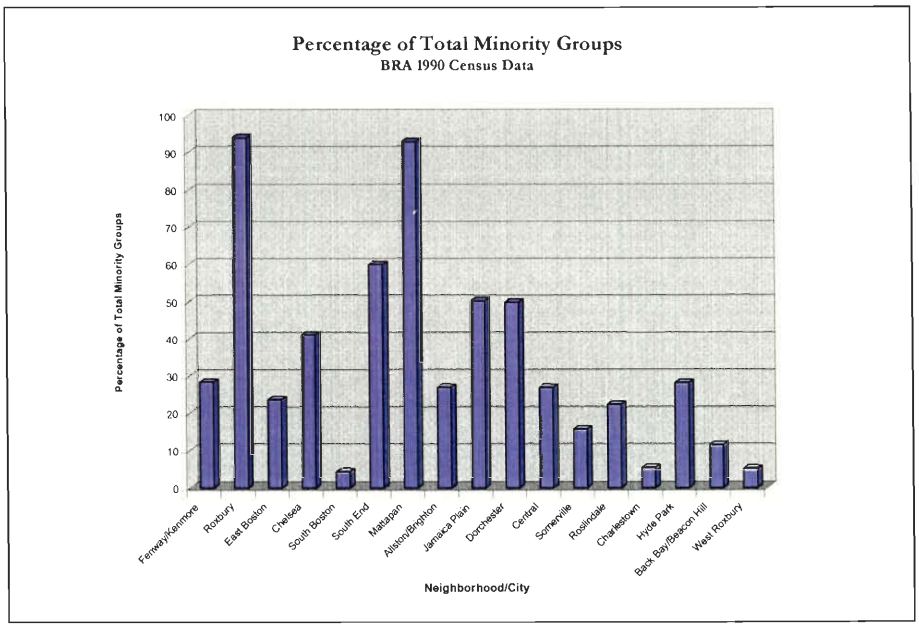

Figure 5: Percentage of Total Minority Groups Population (inc. Chelsea & Somerville)

In Section 4.2, these data will be layered on maps of Boston's neighborhoods, Chelsea, and Somerville. These maps present striking image of the data in Table 5, similar to those in the next section. When these data are superimposed against other data that have been collected, powerful pictures will be painted which will help to shape the way in which the GB-URP targets its future grants.

4.1.2 Health and Quality of Living Indicators

Like its economic and demographic make-up, Boston's health data varies greatly between neighborhoods and along lines related to the data discussed in the previous section. There are certain indicators of health and quality of life that are important to the GB-URP for determining which areas are most in need of environmental improvement and education. Factors such as the number of asthma cases and the severity of reported lead poisoning cases are two such indicators that are of particular interest due to the possible correlation between open space and overall health. In addition, more general quality of life data such as population density and open space are also useful in determining which areas require aid. Again, this area is extremely diverse with respect to these indicators, with wide ranges of variation.

It is clear that relatively disadvantaged neighborhoods such as Mattapan, Roxbury and Dorchester have reported more severe cases of lead poisoning than wealthier neighborhoods such as West Roxbury and Charlestown. To visually represent lead poisoning severity, a grid map was generated and shaded according to the severity rating of each individual lead poisoning case (Figure 6). The vast majority of the over 45,000 reported cases given to us had a severity rating ranging from one to twelve. To present an accurate picture of the areas with the most cases, this range of values was used. The data interpolation was calculated for every two-tenths of a square mile area over the map of Boston, with the severity of all cases within each grid being averaged. Regions with shades of orange and red represent areas where the concentration of the most severe cases of lead poisoning has occurred.

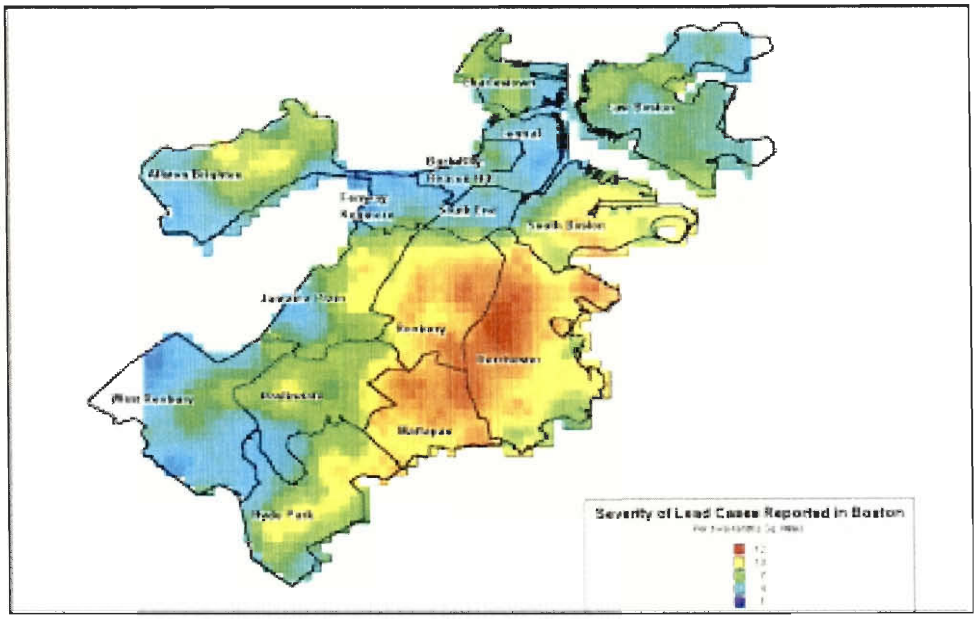

Figure 6: Concentration Map of Severity of Reported Lead Poisoning Cases in Boston per two-tenths Square Miles

The neighborhood of Roxbury suffers from the worst concentration of asthma cases compared to the lowest cases by a factor of greater than five, along with areas in Mattapan, Dorchester, Back Bay, the South End, and Beacon Hill. Figure 7 was generated similar to the lead poisoning map. In this case, the map represents the concentration of the slightly less than 1,400 individual cases of asthma reported, regardless of severity. Again, a two-tenths of a mile grid size was used to aggregate the data in the most accurate manner

possible. The highest concentration of asthma cases found per grid was approximately 5.1, with one or less per every two-tenths miles being the lowest.

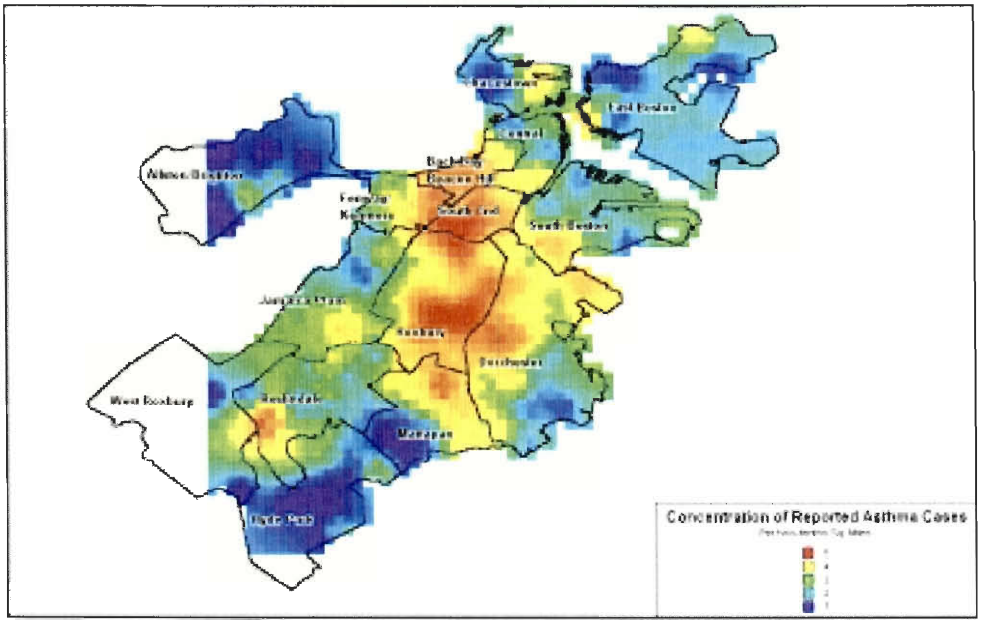

Figure 7: Concentration Map of Reported Asthma Cases in Boston per two-tenths Square Miles

The majority of Roxbury, Western Dorchester, Mattapan and the South End suffer from both high population density with over 31,000 people per tract and, with the exception of large parks such as Franklin, little access to open space. In contrast, wealthier districts enjoy a much lower population density and have much greater access to abundant open space. To illustrate this point, we have created Figure 8 and Figure 9 which show the population density of Boston by Census tract and the open space land parcels in Boston, respectively.

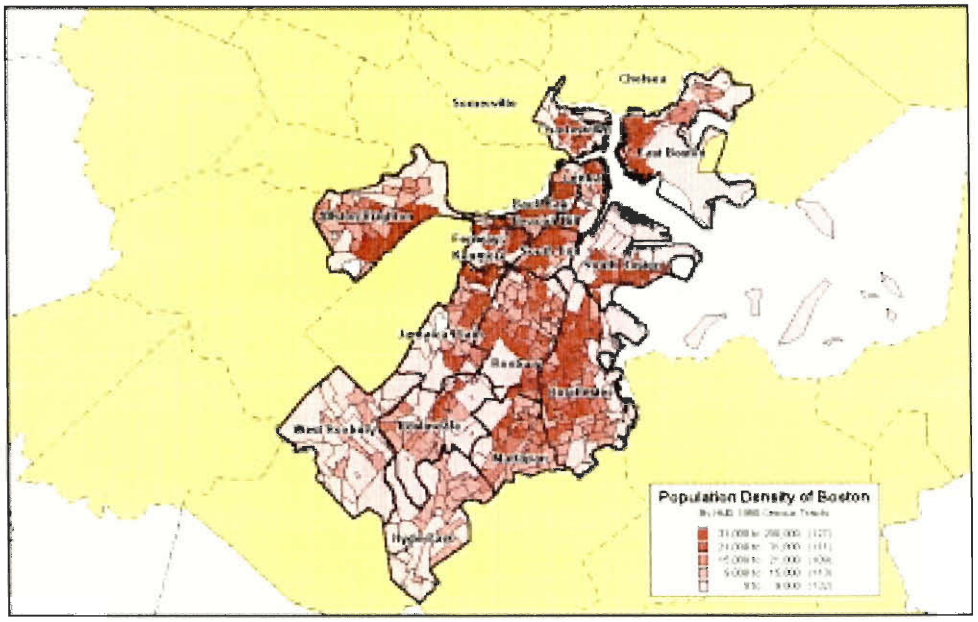

Figure 8: Map of Population Density in City of Boston by Census Tracts within Neighborhood Boundaries

Visual images of these data in a stand-alone format can present very clearly the disparities which exist in Boston and which areas require the most assistance from organizations such as the GB-URP and Grassroots. When these are mapped in conjunction with the socioeconomic data discussed earlier in our analysis chapter, we will attempt to answer more in-depth questions such as: is there any correlation between concentration of asthma cases and availability to open spaces? If any correlations do exist, then the GB-URP will have an additional level of indices to determine where it distributes its grant money.

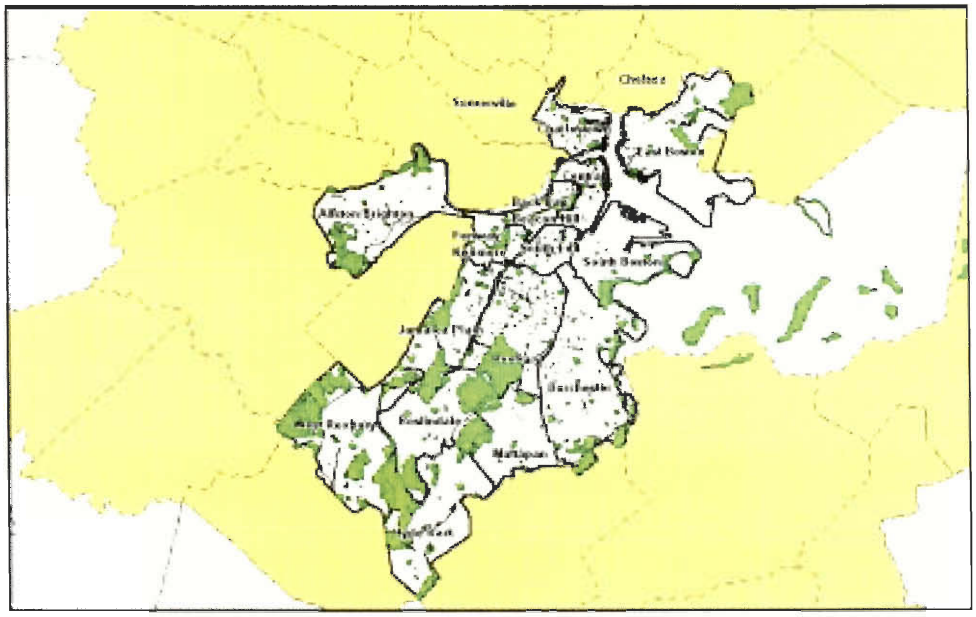

Figure 9: Map of Open Spaces in City of Boston

4.2 Socioeconomic and Project Data Analysis

Now that the disparities in the socioeconomic make-up of Boston and its surrounding areas has been established, we address the issue of how the GB-URP has fared in dealing with them. To do this, we examined the following four themes regarding collected project data: 1) the physical location of the projects with respect to the data collected 2) overall distribution of grant money 3) hardscape improvements to the neighborhood (the number of trees and shrubs planted) and 4) the number of youth participants involved in these projects. This examination of these themes with respect to socioeconomic data has provided the GB-URP with useful insight into the factors that it should evaluate when distributing its funds. Based on our preliminary findings, the Partnership, with few exceptions, has distributed its to the areas that it strives to target.

4.2.1 Economic and Demographic Analysis of GB-URP Grants

The socioeconomic data discussed in the previous section gives us a basis for determining how well the GB-URP addresses the city's disparities. Once the data for each individual project was collected and

catalogued, this data was juxtaposed against the socioeconomic data on a neighborhood-by-neighborhood basis using both MapInfo's graphical tools and Microsoft Excel. The results indicate that, with respect to median income, percentage of the population living in poverty, and the percentage of the population represented by minority groups, the GB-URP has distributed its funds to those areas most in need of them. It should be noted however that the reasons for giving grant money depends on a combination of different factors, so one must be careful not to jump to conclusions without examining all facets of Boston's socioeconomic make-up.

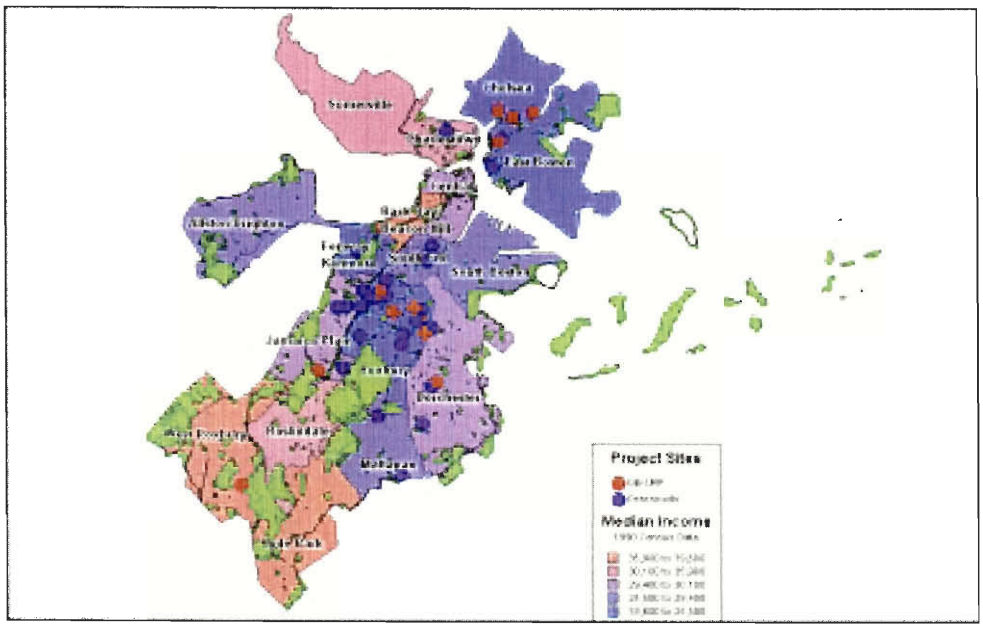

Figure 10: Map of Project Site Locations versus Median Income and Open Space

As the Partnership strives to aid disadvantaged communities such as these, a study of project location versus neighborhood median income is necessary. What we have found is that the projects are located largely within neighborhoods with low median incomes, which incidentally are also areas that are lacking in available open space. This can be seen in Figure 10, a map that provides the basis for the comparison of project information versus median income. Both GB-URP and Grassroots projects are represented in the map, along with open space areas (in green).

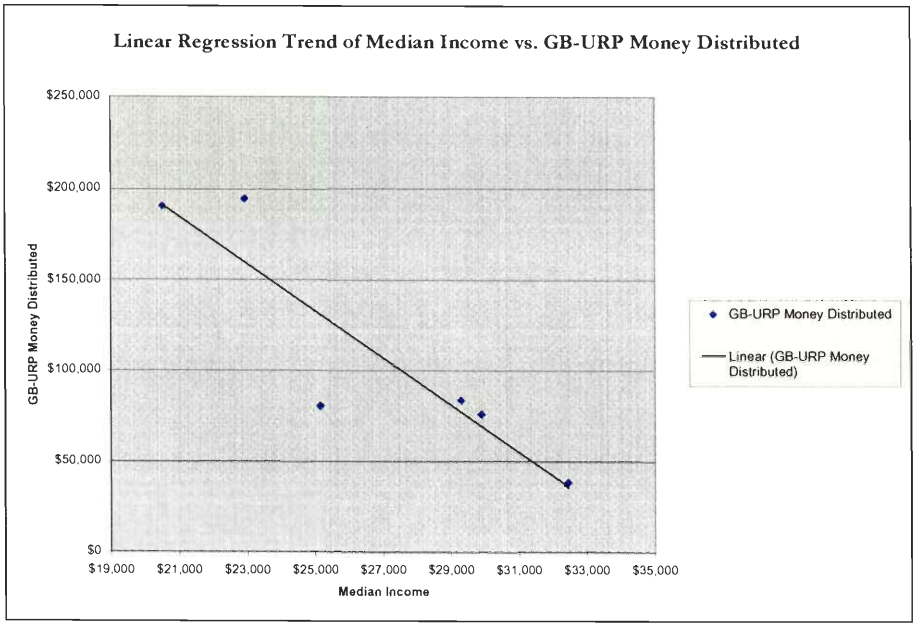

Figure 11: Graphical Analysis of Neighborhood Median Income vs. GB-URP Money Granted

As expected, there is a noticeable trend demonstrating that more grant money is being distributed to disadvantaged areas, and less grant money is being distributed to wealthier communities. This is most clearly seen in Figure 11, where a definite inverse trend exists whereby grant distribution decreases as median income increases. Although this finding is significant, we must not ignore the anomalies. One may notice in Figure 12, a graph of median income versus grant money distributed by neighborhood, that Fenway/Kenmore, the neighborhood having the lowest median income, is not receiving any GB-URP money. Also, why does Somerville, which has a median income of approximately $32,500, receive more grant money than South Boston, whose median income is just slightly over $25,000? The answer may be that there are additional factors that the GB-URP weighs more heavily while distributing its funds, such as the percentage of minorities per neighborhood or a lack of requests for funding in these areas. These factors and others will be examined and discussed next to provide answers to questions such as these.

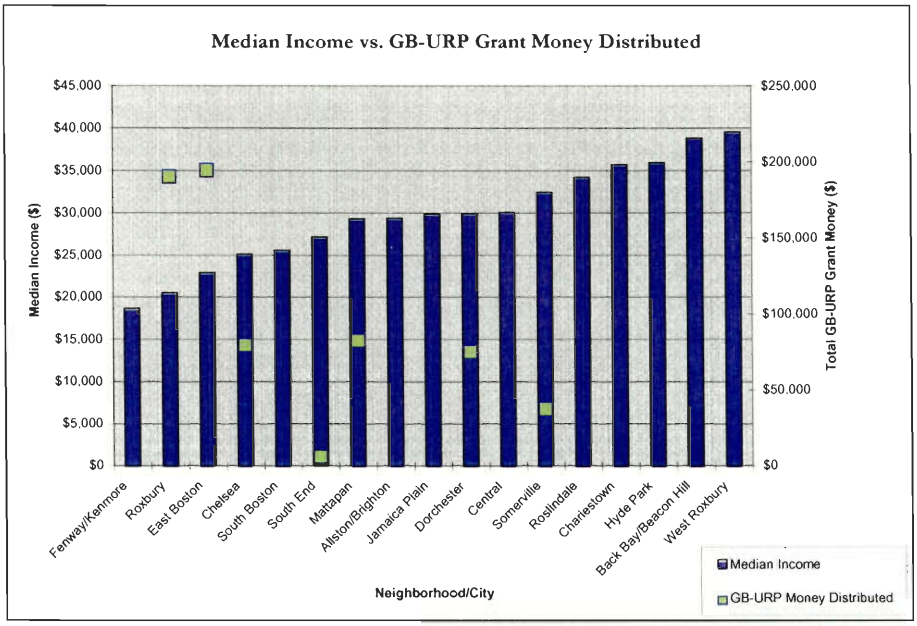

Figure 12: GB-URP Money Distributed vs. Median Income

In addition to median income, the percentage of the total population living in poverty is a useful indicator of where aid such as the kind the GB-URP provides is needed. We found that the locations of the projects are mainly concentrated in the areas with the highest poverty percentages, as seen in Figure 13,. However, some inconsistencies again include the neighborhood of Fenway/Kenmore, which has a high percentage of poverty (36.1%), yet receives no funding. While this may be a surprising find, as we shall see, from Figure 16, Fenway/Kenmore also has a low percentage of minority groups, which may diminish this neighborhood's qualifications for funding from the GB-URP's perspective. More will be said on this later.

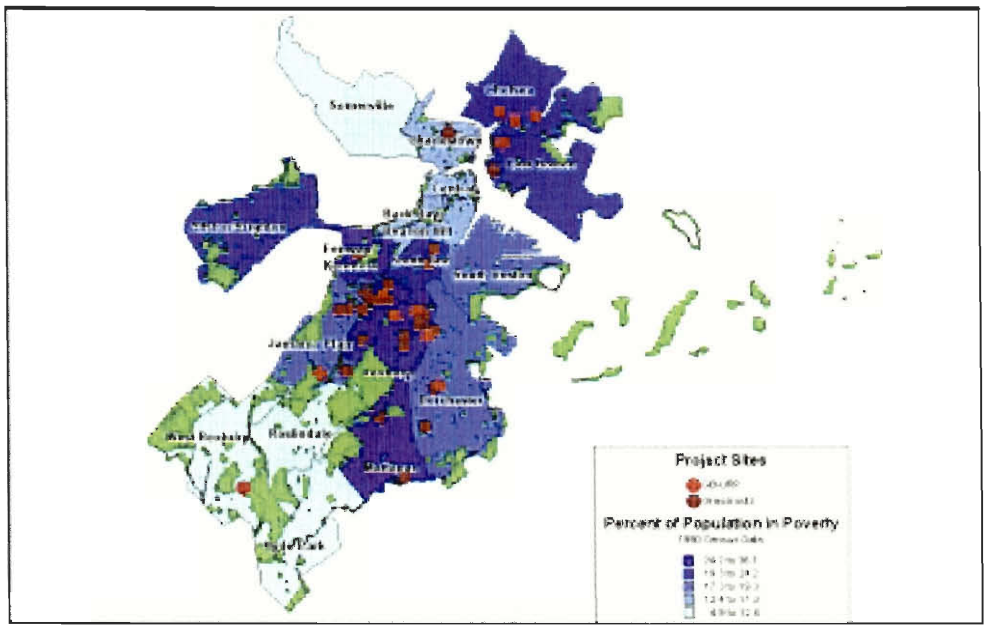

Figure 13: Map of Project Sites vs. Percentage of Poverty with Open Spaces

Continuing the discussion on poverty levels, a general trend exists whereby as the percent of poverty decreases, the amount of money granted decreases as well. Figure 14 demonstrates this relationship between poverty percentages and total grant money distributed per neighborhood. Again, one major inconsistency that can be seen immediately is that Fenway/Kenmore, the neighborhood with the highest percentage of the population living in poverty (36.1%) currently receives no funding. Additionally, Allston/Brighton has a relatively high percentage of poverty (20.1%), yet receives no funding. However, as again seen in Figure 16, this area, while being impoverished compared to other neighborhoods, has a relatively low percentage of minority groups.

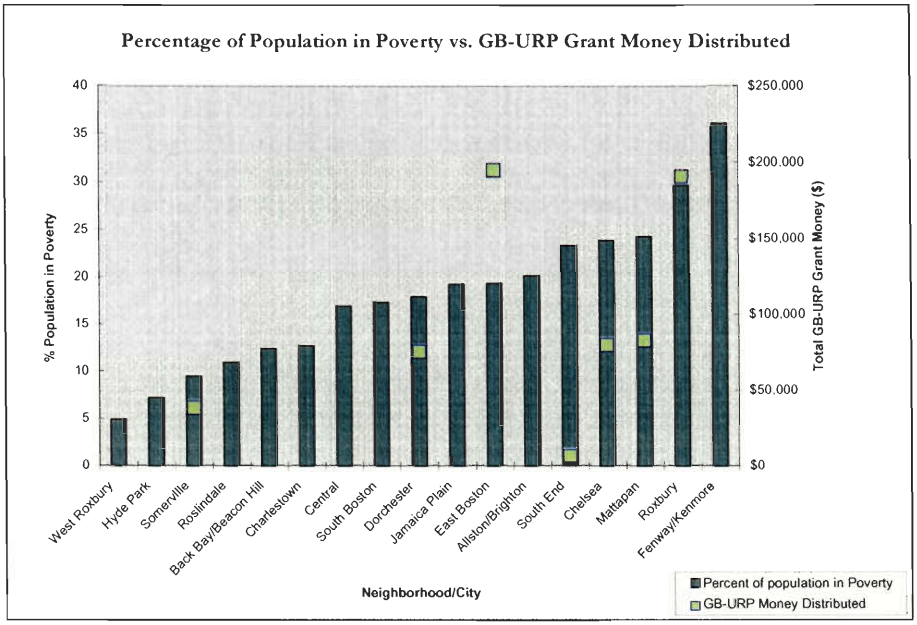

Figure 14: Graphical Analysis of Percentage of Population in Poverty vs. GB-URP Money Granted

Because the GB-URP's mission is not only to aid the lower income neighborhoods, but also those with a high percentage of minority groups, it was necessary to look at both sets of data versus the amount of grant money distributed. We find that the majority of the projects are located within neighborhoods comprised primarily of neighborhoods with large minority percentages. Figure 15 displays a map that represents the percentage of minority groups throughout the city of Boston as well as Chelsea and Somerville. The yellow shaded neighborhoods are those with the highest percentage of minorities. One may notice, as previously discussed, that many of the projects are located within Roxbury, Mattapan, Dorchester, and Chelsea, areas with high minority percentages (94%, 92.9%, 49.8, and 41%, respectively). Additionally, Fenway/Kenmore (28.4%), Allston/Brighton (26.9%), and especially South Boston (4.2%), which have been previously discussed as possible anomalies, have low percentages of minority groups, which may counterbalance their relatively weak economic standing as far as GB-URP funding consideration is concerned.

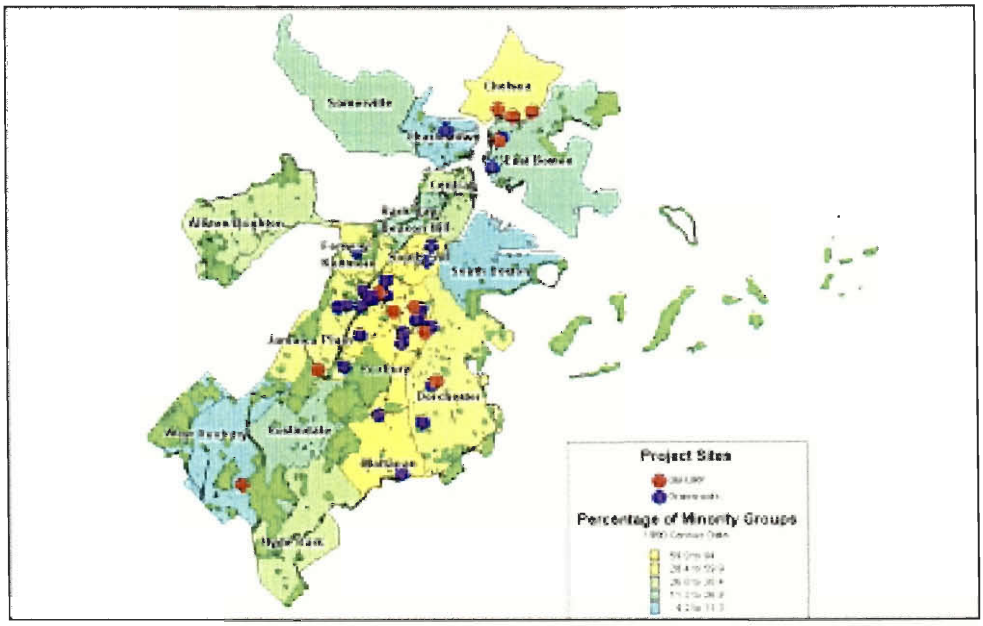

Figure 15: Map of Project Site Locations versus Percentage Minority Groups and Open Space

Another useful indicator analyzed was the total amount of grant money distributed to each neighborhood with respect to minority percentages. We found that the neighborhoods with high percentages of minorities are receiving a majority of the total distributed grant money. However, there are some exceptions. The South End, being the third highest in minority percentage (59.9%), has received very little grant money and East Boston, having a low percentage relative to other neighborhoods (23.6%), receives the most grant money (see Figure 16). One possible explanation for these discrepancies is that organizations such as those that the GB-URP works in conjunction with are not numerous in the neighborhoods where we have found exceptions to the general trends regarding these data. In addition, requests for project funding simply may not be coming to the GB-URP from these areas. In considering causes such as these, it is clear that no one aspect of our analysis can provide the entire picture.

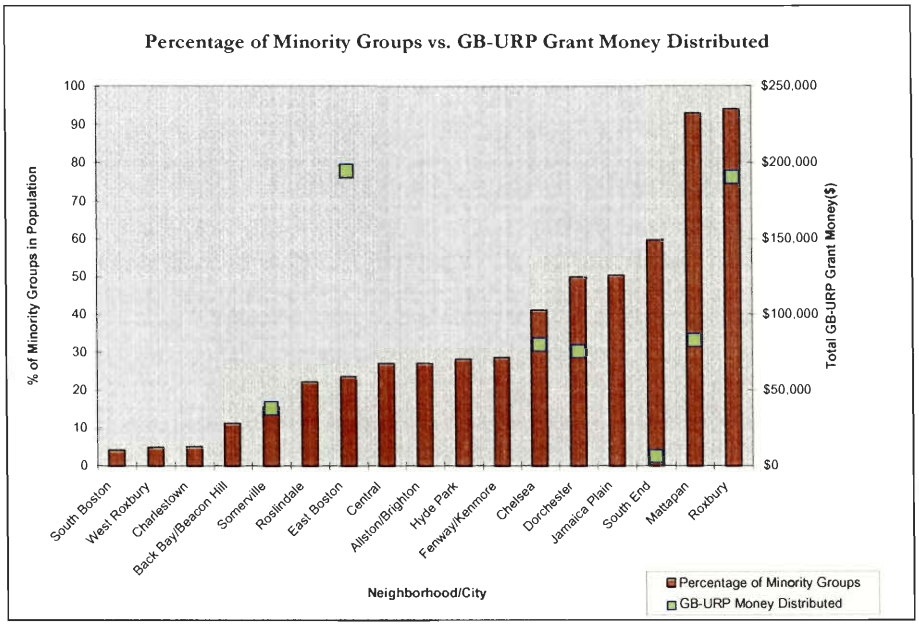

Figure 16: Graphical Analysis of Minority Group Percentage vs. GB-URP Money Granted

The analysis conducted thus far indicates that, with few exceptions, the GB-URP has performed well in fulfilling its mission of aiding those neighborhoods with traditionally disenfranchised and underprivileged groups. The next section will focus on the health and quality of life indicators that have been previously discussed. This analysis will provide the Partnership with a more complete picture of how its grant money has thus far been distributed.

4.2.2 Health Indicators and Quality of Life Analysis of GB-URP Projects

In Section 4.1.2 certain health factors were introduced as being important indicators of where the GB-URP should distribute its money. In this section we examine what relationships exist between the location of GB-URP project sites and these health factors. What we found is that, again, the GB-URP has mostly fulfilled its goals of helping communities where these health factors are most severe.

The GB-URP and Grassroots programs are mainly focused in the areas most congested with cases of asthma. The concentration of asthma cases, as shown in Figure 17, vary throughout Boston's neighborhoods, but are most concentrated in Roxbury, Northern Mattapan, and the South End. The regions

shaded in red and orange are the most concentrated, having five or more cases per two tenths of a mile and then it decreases uniformly to one or less cases per two tenths of a mile, represented by the blue shades. As one can see, the funds are centered in the areas with the most cases of asthma. However, the South End is one region in which asthma rates are nearly as high as the others but has very few project sites located there.

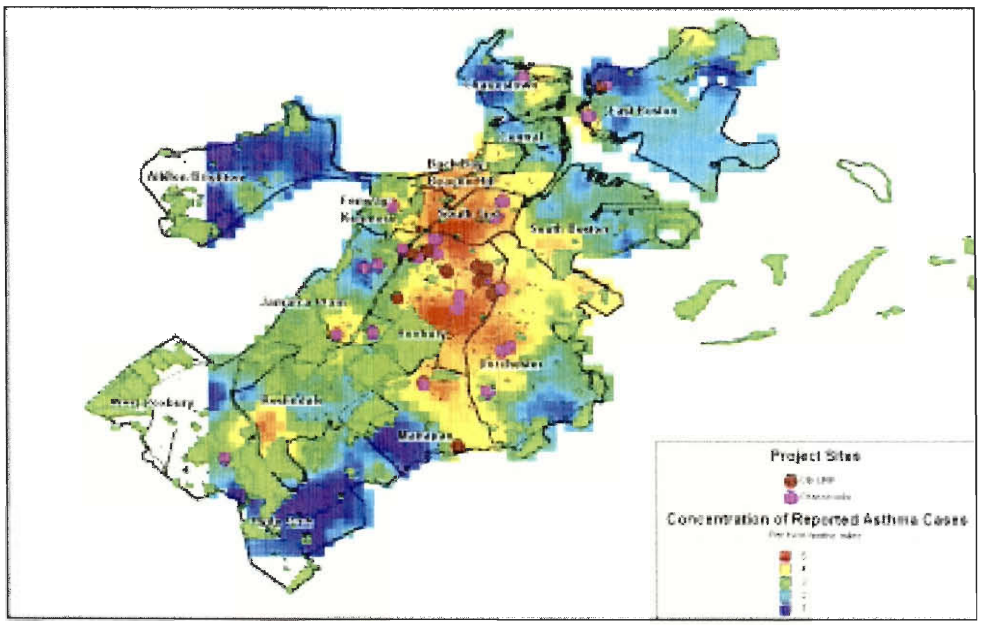

Figure 17: Map of Project Sites vs. Concentration of Asthma Cases with Open Space

The other health factor examined was the severity of individual lead poisoning cases throughout Boston's neighborhoods. We have found that, although Dorchester seems to have the most severe cases of lead poisoning, the majority of the projects are located in Roxbury. Figure 18 provides a visual aid to the concentrations of the lead severity ratings. Looking at this map, the darker red regions represent the areas with the most severe lead cases, such as sections of Roxbury, Mattapan and South Boston have fairly high lead severity ratings.

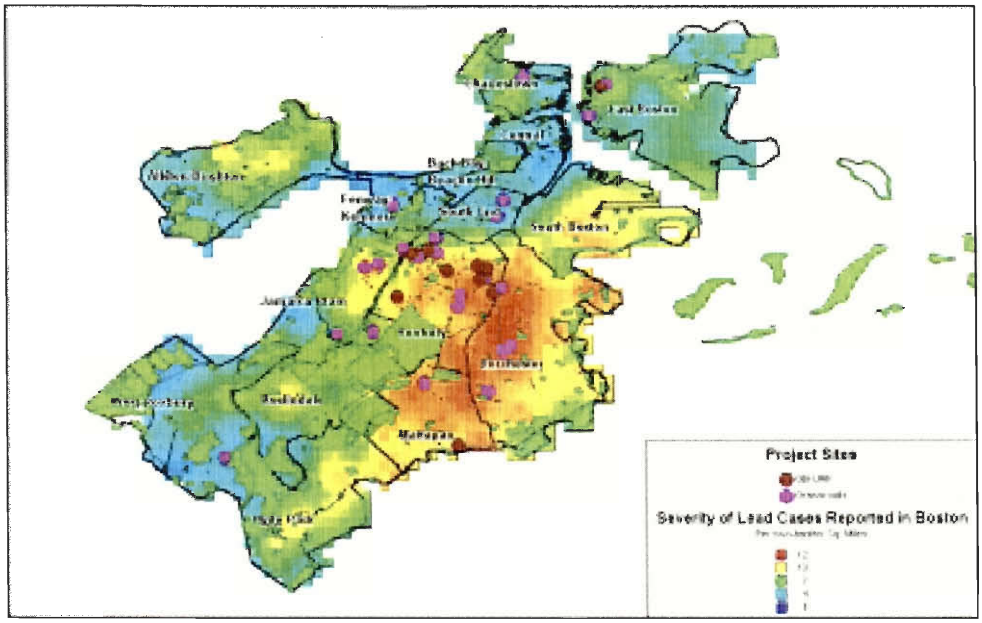

Figure 18: Map of Project Sites vs. Severity of Lead Cases with Open Space

The final quality of life factors that we will analyze are amount of open space and population density. The results of this analysis show that the GB-URP has targeted heavily populated areas and areas with little open space. Figure 19 shows an overlay of project locations against the population density of Boston by Census tract and also the open space layer. Many of the lower income neighborhoods suffer from high population density and lack of access to open space, two conditions adverse to health, quality of life and environmental well being. This map shows that the majority of projects are located within the areas of high population density and in areas where access to abundant open space is scarce. Areas of Dorchester, however, seem to have even less access to open space than Roxbury, yet have fewer project sites.

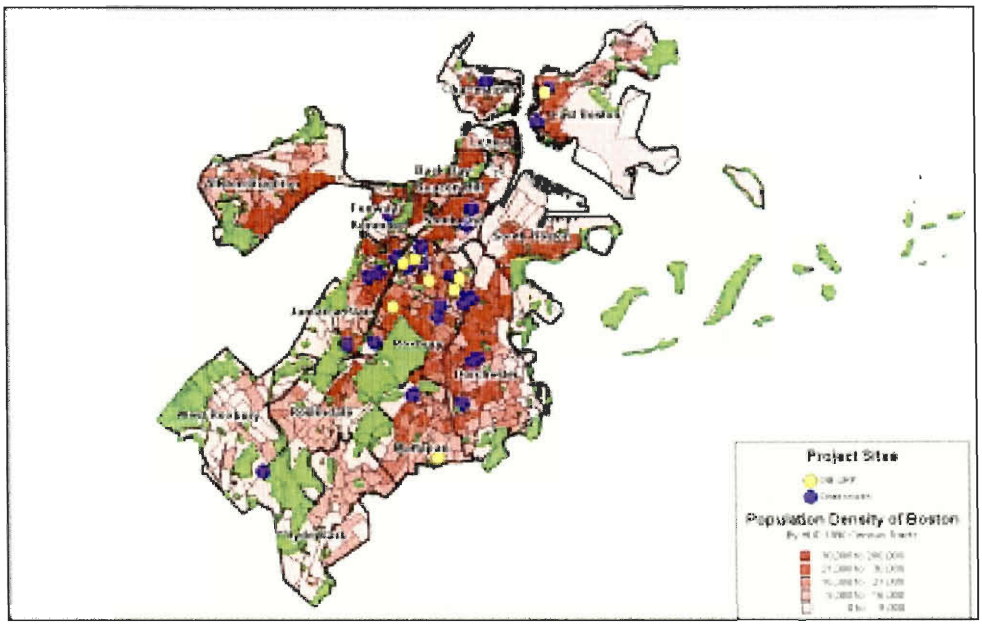

Figure 19: Map of Project Sites vs. Population Density with Open Space

Though no direct correlations or conclusions should be made from these maps, it is interesting to see the potential of mapping project sites over health data. In the future, as more projects are funded and additional data is collected, the GB-URP will hopefully be able to arrive at more meaningful conclusions.

4.2.3 Project Outcomes

The analysis performed in the previous sections indicate very strongly that the GB-URP has performed well in targeting the communities that are most in need of assistance. In addition to these analyses, we will now introduce several other juxtapositions of data dealing with the outcomes of the projects. Several unsubstantiated trends were found from these juxtapositions, but the possibilities for future analysis given a larger, more complete data set make discussion worthwhile.

Hardscapes are the physical entities that help to improve the park such as the number of trees and shrubs planted at a specific project site. By graphing the total hardscapes planted versus the amount of money distributed by neighborhood, we may be able to find certain trends that show where grant money is most spent. After comparing the total number of hardscapes to GB-URP grant money, we have found that a

fairly direct correlation exists (see Figure 20). Although the data set is too small to be conclusive, it is interesting to note that, as more data becomes available, analysis such as this can be performed.

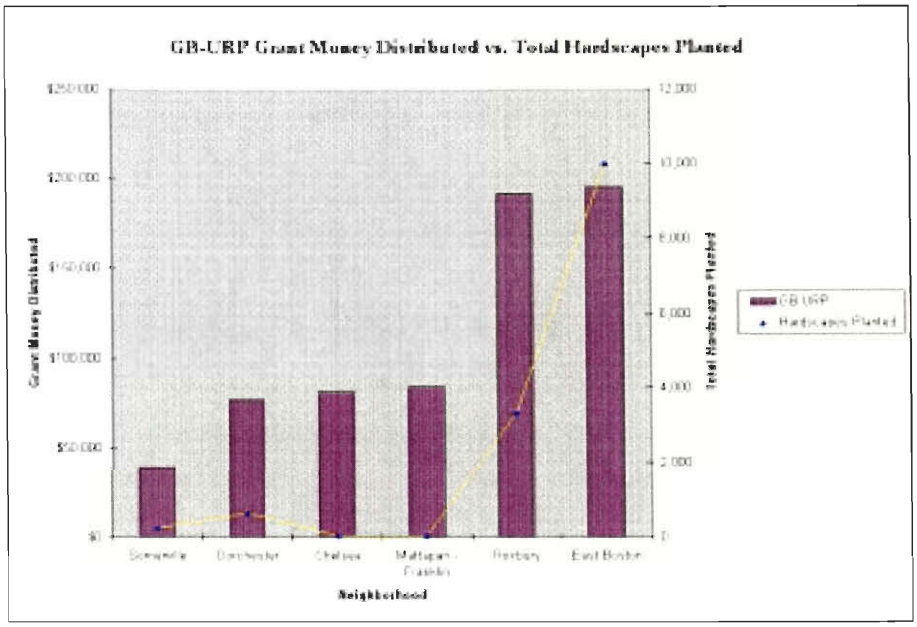

Figure 20: Graphical Analysis of GB-URP Grant Money Distributed vs. Total Hardscapes Planted

The number of youth that participate in the projects is important to the GB-URP because one of its primary objectives is to educate youth with the intent that it will help the community in the future. There again appears to be a trend where as grant money increases, the number of youth involved increases. However, as seen in Figure 21, the number of youth involved in East Boston breaks the upward trend. Looking back at Figure 20, over 10,000 hardscapes were planted in East Boston compared to just under 4,000 hardscapes in Roxbury. A conclusion that could be drawn is that hardscapes cost far more than involving youth, and that is where East Boston is focusing its resources. Again, it must be stressed that these results are not conclusive but instead help to illustrate the types of analysis that are possible as the data set is increased.

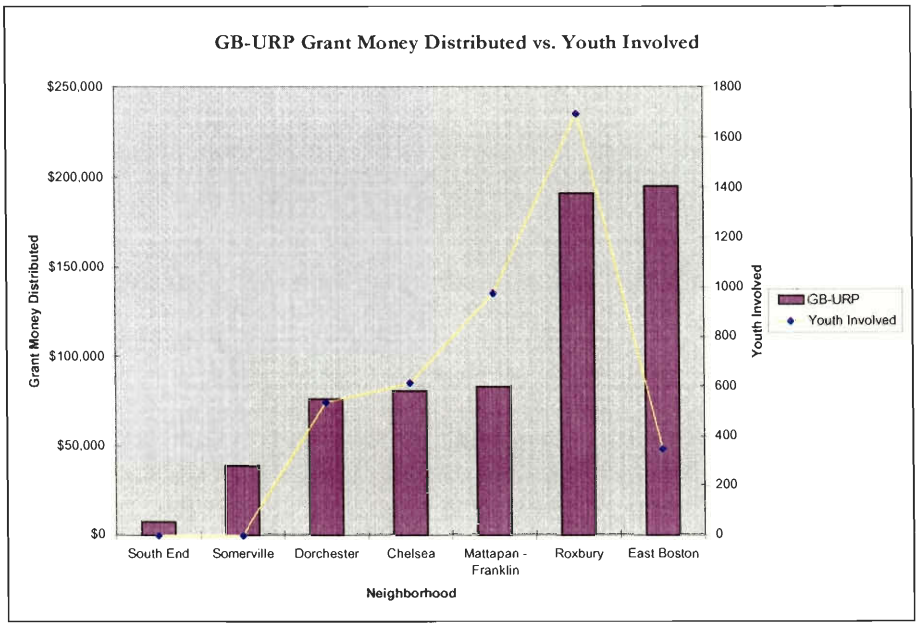

Figure 21: Graphical Analysis of GB-URP Grant Money Distributed vs. Total Number of Youth Involved

4.3 Database of Projects and Organizations

A database is the most efficient way to systemize the project information that was compiled. The compilation and utilization of socioeconomic data for Boston and surrounding areas discussed in the previous section was the first step of data collection in our methodology. Once the second step of data collection for GB-URP and Grassroots projects was complete, it was necessary to construct a database to hold project and organization information. A computerized database was determined to be the best way to keep GB-URP, Grassroots, and other environment based program data organized, as discussed in the methodology chapter. The database also allows us to run queries and easily import data into MapInfo to map project locations. The primary database components include several tables and forms to store, view, and update data. A second database is necessary to hold the project site photographs. This database will be linked to the report form that holds the specific project information.

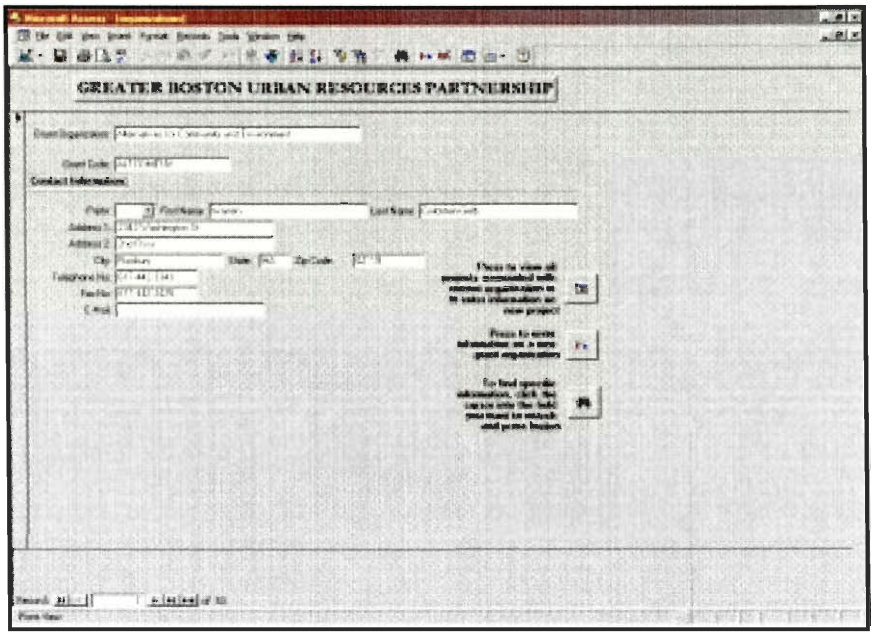

Figure 22: Access Form for Organizational Information

Figure 22 above shows an example of one of the forms constructed as the front-end application of the Access database. This is the first form that the user will encounter and holds all of the identification and contact information for the organizations that sponsor the projects. As one can see, several functions and brief instructions are built into the form to ease the process of navigating through records.

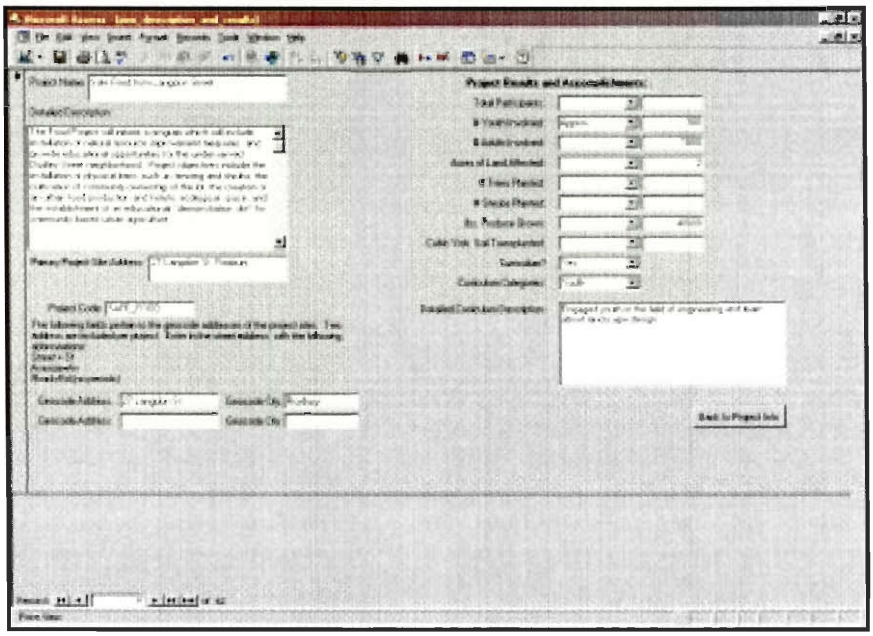

Figure 23: Access Project Description and Results Form

Figure 23 and Figure 24 show two other forms constructed for the database: project description and results and project site photographs. These are included to give a more detailed description of the format of the database. The next section deals with how to use this database effectively, which will hopefully become a powerful tool to the GB-URP for data cataloguing and retrieval.

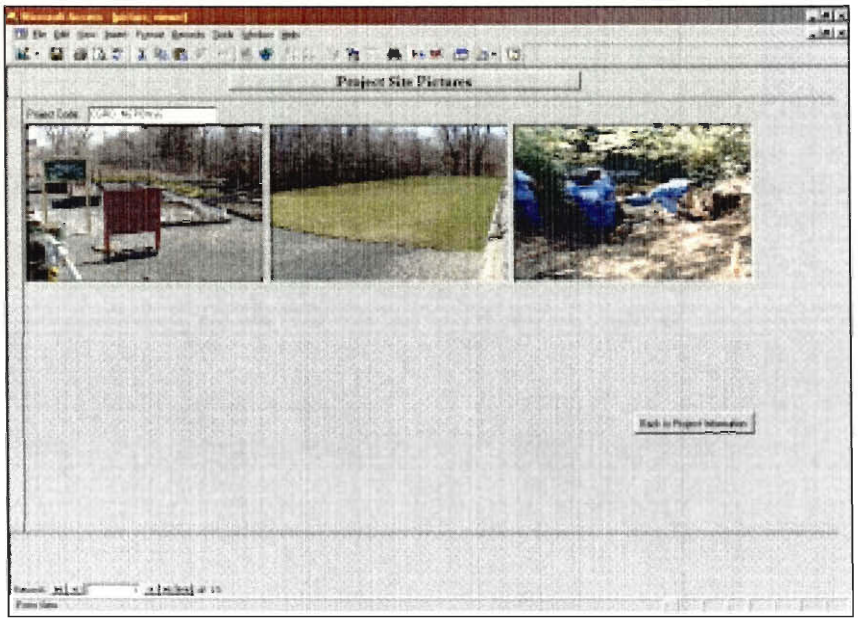

Figure 24: Access Project Photograph Viewer Form

4.4 Standardized Report Outline

Currently, grantees that receive assistance from the GB-URP submit their own reports to the Partnership to provide updates on the progress of their project. The format of these reports is completely dependent upon the grantee organization. This makes standardized evaluation of project success and progress difficult for the GB-URP. To make this process easier and more effective, we will be creating a standardized report outline for grantees to complete on a semi-annual basis. This outline will follow the fields in our database, which will ease data entry, to maintain a high level of data organization.

The standardized report outline will ask for information that is important in determining the success of the project. General questions will include the project name, organization information, the address of the project site, start and finish dates, and before and after pictures. More specific information that will be asked for is the project type, whether it is an educational, an environmental or a restoration project, and a more detailed description of it.

The first important information that will be asked for is the project name. Though this may seem obvious, it came to our attention that the project name was very difficult to find, and was sometimes buried

deep into the progress report. Since the GB-URP has already funded nearly thirty projects, and because some organizations run more than one project, it is necessary to keep the project names indisputable.

Specific organization information will also be asked for. Contact information, such as the organization name, address, phone number, fax number and email address will be entered into the database to keep track of the organization information. Also, project liaison information will be asked for, such as their name and specific skills.

It is also very important to know the exact address of the project site. Since the goal of the GB-URP is to help Boston's most underprivileged communities, it is a helpful to visualize the project sites versus the demographic data on the mapping system that we have constructed. This is the reason we decided to ask for the exact address of the project sites. This will allow the GB-URP to include future projects on the maps.

To have a better understanding of what types of projects the GB-URP is funding, the report outline will ask the organization to categorize the project as either educational, environmental or restoration, and to include a detailed project description. If the project is educational, a description of the type of curriculum will be asked for, along with the number or youth and adults affected. If the project is environmental, the number of trees and shrubs planted, the cubic yards of soil introduced, the pounds of produce produced, and the acreage of the site will be asked for.

Finally, the project start and finish dates will be asked for, along with corresponding 'before and after pictures. On the whole, the outline will contain a series of indicators and measurements, which will aid the Partnership in evaluating project success. Both qualitative and quantitative information will be asked for in the report outline which will give an overall picture of how each individual project is progressing. This standardization will make analyzing these report forms a great deal easier for the Boston Environment Department, and will provide a common baseline for projects to be evaluated upon. See Appendix 7.1 for an overview of the outline created.

Using the standardized report outline and the database described earlier, the Partnership will be able to operate more efficiently and provide the most effective assistance to Boston's underprivileged community organizations and agencies. By using visual analytical tools, such as bar graphs and thematic maps, we were

able to examine the relationships between the socioeconomic and project data to draw conclusions. Though there are some inconsistencies in the analysis of the data, we believe that the Partnership has been fulfilling their mission of distributing the grant money to neighborhoods with low median income, high percent minority, and high occurrences of lead and asthma cases. These results represent the completion of our goal for this project. By using the tools described above, the GB-URP will be able to operate more efficiently due to our efforts, and in the process, will provide the most effective assistance to Boston's underprivileged community organizations and agencies.

5 CONCLUSIONS AND RECOMMENDATIONS

The GB-URP's mission is to help urban communities carry out strategies that link social, economic, and environmental concerns. In attempting to fulfil its mission, the Partnership strives to assist low-income neighborhoods and minority groups. In this study, we have examined the factors that would lead us to conclude whether or not the Partnership's stated mission has thus far been accomplished. In particular, what we have found based on our preliminary study is that, with few exceptions, the GB-URP has met its goals of aiding underprivileged and traditionally disenfranchised peoples. In this chapter, we will discuss our findings, make recommendations to the GB-URP on how to possibly proceed with their program, and suggest extensions for this project in the future.

5.1 Summary of Findings and Accomplishments

What we have found is that the GB-URP has distributed a great deal of its resources to those communities most in need of them. Although we only had a small data set to work with, we were able to come to some strong conclusions by analyzing maps that overlaid various citywide socioeconomic data versus project location and graphs that showed trends in grant distribution versus these same data. There are however several exceptions. Fenway/Kenmore has both the lowest median income of the areas studied and the highest percentage of people living in poverty, but receives no funding. However, Fenway/Kenmore also has a very low percentage of minority groups and few of the community organizations that the GB-URP focuses on. South Boston and the South End also have relatively low median incomes but receive little or no funding. In addition, the South End has a high percentage of minority groups in its population.

With respect to the health and quality of life indicators that we investigated, the GB-URP has performed extremely well. A vast majority of the projects are located in areas where asthma and lead poisoning severity is widespread and highly concentrated. Because there are possible correlations between open space and health issues such as these, the GB-URP should and has focused its resources on these areas; namely, Roxbury, Dorchester, and northern Mattapan. Overcrowding and lack of access to abundant open

space in areas of Roxbury, western Dorchester and Mattapan can adversely affect the quality of life of their residents. The creation of parks and the rehabilitation and improvement of existing open space, made possible by funding through the GB-URP, can possibly over time reverse these negative effects in the areas discussed. Again, one problem area discovered is the South End, which has a concentration of asthma cases as high as those areas mentioned above and yet receives little funding.

5.2 Recommendations and Possible Topics For Further Study

Based on our findings, we recommend that funding for projects should continue to be emphasized in Roxbury, Dorchester, Mattapan, East Boston and the cities of Chelsea and Somerville due to their economic, demographic, and health standing with respect to the city as a whole. These areas are in the higher end of the percent of population in poverty and the percentage of minority scales and in the lower end of the median income scale, for the most part. In addition to continue supporting these areas, we have found that the South End (although having one project), South Boston, and Fenway/Kenmore are additional neighborhoods that would greatly benefit from the types of projects that the GB-URP promotes.

The results of our project provided the GB-URP with analysis of Boston and its surrounding areas. The groundwork laid by this project opens many opportunities for expansion. We will now propose several possible areas of continuation that could extend this project in future years, either for the summer intern hired to follow our work, or for future WPI projects.

The project layer used in MapInfo to create the thematic maps is currently not complete. In addition, there are other environmental programs within Boston and in surrounding areas that support the same types of projects as the GB-URP and Grassroots. These projects, in addition to those that were not initially mapped by us, could be mapped to increase the sample of projects. In doing so, a more accurate picture can be presented when analyzing how projects sites are created with respect to socioeconomic indices.

The Grassroots projects that have been cataloged in the database are very incomplete. Aside from the project name, location and grant amount, no information has been entered due to time and resource restrictions. Updating the fields for these projects and entering in the remainder of Grassroots project sites

would aid in the increasing the data set for analysis of environmental fund distribution. Project site photographs should also be updated to complete database records.

Finally and most importantly, the missing data layers for the cities of Chelsea and Somerville (open space, population density, lead and asthma cases) should be obtained to complete the analysis and to make comparisons between Chelsea and Somerville, and the existing data already in place for Boston.

6 Bibliography

Bauer, David G. The "How To" Grants Manual, Successful Grant Seeking Techniques for Obtaining Public and Private Grants. New York: Macmillan Publishing Company, 1984.

Boston Redevelopment Authority. Facts About Boston's Neighborhoods. Boston, MA: Boston Redevelopment Authority, February 1995.

Central Artery/Tunnel Project. 02-01-2000. <www.bigdig.com >

City of Boston Official Site. 2000. <cityofboston.com/environment >.

Department of Housing and Urban Development Official Site. 2000. <www.huduser.org/publications/pdf/statecit.pdf >

Heckscher, August. Open Spaces: The Life of American Cities. New York: Harper and Row, 1977.

Greater Boston Urban Resources Partnership. Pre-Application Form. Boston, MA: Greater Boston Urban Resources Partnership, 1999.

Greater Boston Urban Resources Partnership. Progress Report to Partners. Boston, MA: Greater Boston Urban Resources Partnership, 1999.

History of the Natural Resources Conservation Service. 2000. <www.nhq.nrcs.usda.gov/CCS/history/NRCShist.html >

Lambert, Phyllis. Viewing Olmsted. Cambridge, MA: Canadian Center for Architecture, 1996.

McQuade, Walter. Cities Fit to Live In. New York: The MacMillan Company, 1971.

Mega-Boston. 2000. <www.boston-online.com/mega.html >

Meier, Robert L. Planning for an Urban World *The design of Resource-Conserving Cities.* Cambridge, MA: The MIT Press, 1974.

Portney, Paul ed. Natural Resources and the Environment,*The Reagan Approach* Washington D.C.: The Urban Institute Press, 1984.

"Regional Roundup – Environmental Parks." BioCycle. 40.7. 1999, 20.

Simonds, John Ormsby. Garden Cities 21. New York: McGraw Inc, 1994.

Trancik, Roger. Finding Lost Space: Theories of Urban Design. New York: Van Nostrand, 1986.
USDA 2000 Budget Summary 1999. <www.usda.gov/agency/obpa/Budget-Summary/2000/text.html# intro >

Walzer, Norman, and Jacobs, Brian D., eds. Public-Private Partnerships for Local Economic Development. Westport: Praeger Publishers, 1998.

White, Daphne. "Forging, Founding, & Funding." Foundation News and Commentary. 35.4. July 1994, 22.

White, Virginia P. Grants: How to Find out About Them and What To Do Next New York: Plenum Press, 1975

Zaitzevsky, Cynthia. Frederick Law Olmsted and the Boston Park System. Cambridge, MA.: The Belknap Press of Harvard University Press, 1982.

7 APPENDICES

7.1 Standardized Report Outline

-Project Name

-Contact Information

~Organization Name

~Address

~Phone Number

~Fax Number

~E-mail

-Project Liaison

~Skills

-Street Address of Project Site/ Neighborhood(s) benefiting

-Project Description

~Type

Educational: Type of curriculum: -Youth, Adults, Residents, Conservation

Number of youth and adults involved with project

Environmental: # trees, # shrubs, cubic yards of soil, lbs. of produce, acreage of site Restoration

~Questions

Were there community organizers on staff that provided outreach and education to residents?

What resources were used to work directly with residents?

Did the project translate into other resources for the program or project?

-Start and Finish dates

-Before and After pictures

7.2 GB-URP Project Database Instructions

Form Navigation:

1. Open the *GB-URP_grants_data.mdb* database
2. Click on the *Forms* tab in the database window
3. Double-click *View all project Information* form to view all grant and project information

Record Navigation (these buttons are located in the lower left hand section of the form):

Press  to view the next record

Press  to view the last record in the table

Press  to view the previous record

Press  to view the first record in the table

Navigate to other project data tables by pressing the buttons:
Project Description and Results
Liaison Information
Administrative Information
View Project Pictures
Press the *Back To...* buttons to return to the previous form

Searching for Data:

Click cursor in field to search

Press  to open search options window, either on the form, on the toolbar, or click Edit -Find

Enter information to search for and set search parameters

Entering New Data:

NOTE: For proper data filtering and query running, the project and organizational codes must match for all data entered. If the codes do not match, data will not be linked to the proper projects and organizations.

1. Press  to create a new record, either on the form, on the toolbar, or click Insert-New Record
2. When entering a new project associated with an existing organization, click the *Organizational Code* field and press Ctrl – Apostrophe to re-insert the organizational code when a new project is entered
3. Enter all valid information

Inserting Pictures into the *Picture Viewer*:

1. Right click inside picture frame and click *Insert Object*
2. Click *Create from File*
3. Click *Browse* and locate picture
4. Click *Ok*

7.3 Annotated Bibliography

7.3.1 Bauer, David G. The "How To" Grants Manual, Successful Grant Seeking Techniques for Obtaining Public and Private Grants.

This book was helpful by making the grant process clear. The purpose of this manual is to find the grant opportunities that are right for a specific organization, and how to go about obtaining that grant.

There are over 300,000 non-profit organizations (NPOs) competing for grants funds in the U. S. The grant seeking process is very competitive because NPOs and profit making companies compete for the same dollars. In 1984, $20-30 billion of federal government budget was awarded through a grants mechanism.

The steps necessary to produce a grant application are very logical and follow a definite order, but many people feel overwhelmed by the process. When presenting the application for funding it is important to remember to make it clear that there is a compelling need for this grant, and that the organization is uniquely suited to carry out the project. What the funding source wants and what the organization can provide is what is important, not what the organization "needs".

There is a federal grants research to keep track of the federal grants being investigated (Bauer, 69). Before getting involved in government grants, one should review the grant management circulars. Chances for success go up 300% when one contacts the funding source before the proposal is written.

7.3.2 Heckscher, August. Open Spaces: The Life of American Cities.

This book focuses on the positive force of "open spaces" in cities such as parks. The author writes that the 1960-1970s saw many achievements both by the private and public sectors in "shaping a more hospitable urban environment" (Heckscher, 2). Open space is emphasized as improving "livability", defined as the inherent quality of urban life (Heckscher, 4). Basically, the book defines what an urban "open space" is and reviews the spatial organization that have been achieved in several cities.

This book is fairly outdated but may provide a rudimentary background on the inherent need for natural open space in urban areas for a minimum standard of living.

7.3.3 McQuade, Walter. Cities Fit to Live In.

This book is a study of problems that plagued U.S. and international cities in the early 1970s and still do today. Drug use, violence, racial polarization, pollution and waste management are discussed at length, in addition to how urban policy is being affected by them, from internal politics and law enforcement to physical city planning and its inhabitants.

One again, this book is outdated, but may provide some background on the reason why partnerships such as the GB-URP were formed.

7.3.4 Meier, Robert L. Planning for an Urban World: The Design of Resource-Conserving Cities.

Resources can be seen as "inputs" for communities. These inputs can be converted to outputs to create modern environments for cities and towns.

> "What is a resource? ... Each of us puts minerals and forests and waterfalls into the category almost automatically... The common meaning of the word is based upon these agreements between people with quite different personal experience."

Other types of natural resources can include fisheries, soil, microorganisms, worms, moisture, humus, and also highly unusual environments can be categorized as scenic resources. A resource is said to have real value only if the effort invested in its use is more than compensated for by the returns to people (Meier, 13). Resources become valuable when they are scarce and the prices on the output of the resource increase considerably. However, natural resources are doomed for depletion, because many are not reusable. Therefore a virtually measureless amount of effort and time have been dedicated to finding reusable resources and cutting back on the usage of nonrenewable natural resources.

This reading helps to define a natural resource. It also reminds us that many natural resources are nonrenewable. Many people see natural resources as inputs that have to be converted to outputs, however,

agencies such as the Environmental Protection Agency (EPA) try to conserve these resources for future generations.

7.3.5 Portney, Paul ed. Natural Resources and the Environment: The Reagan Approach.

According to the author, the Reagan administration's performance in natural resource policy was poor. At the beginning of the Reagan's administration, ambitious goals were set, but were never quite met. The Reagan administration did not seek any major changes in natural resources legislation, but rather centered its focus on legislation reforms. Many sources agree that the administration did not place importance on program goals but rather focused on the administrations political advancements. The businesses of the federal natural resource policy would have preferred an administration that had provided more stability and less political exploitation. The final turnout of the Reagan administration's natural resource policy was that of few lasting changes.

This reading helps our project because it introduces us to federal administrations and natural resource policies. This will enable us to further investigate the government's contributions to urban natural resources in the Boston area. Continued research on more up-to-date policies will need to be conducted; however, this gives us a background and a history of the Reagan administration's involvement.

7.3.6 Simonds, John Ormsby. Garden Cities 21.

Garden Cities 21 focuses on the future of existing cities, as well as planning for new urban areas. The importance of urban renewal, pollution abatements, resource management, open space planning, and new types of parks are highlighted in reference to the planning of new cities. The new cities in the future expected to be much more functional and less wasteful with open space being maximized.

This book allows us to see what a functional and non-wasteful city should incorporate. Federal involvement was however not discussed and funding for these new cities was not detailed. The focus was mostly on housing development and planning, and not on urban natural resources.

7.3.7 Trancik, Roger. Finding Lost Space: Theories of Urban Design.

This book examines the theory and issues of urban spatial design. It defines "open space" to the reader and examines the criticality of it to improving life in an urban environment. The loss of urban space is discussed, including the five major factors leading to its loss: the automobile, the Modern Movement in architectural design, urban-renewal and zoning policies, the dominance of private over public interests, and changes in land use in the inner city.

Chapter 5 provides several case studies, including one on Boston, which proved particularly useful in examining the urban history of Boston and the projects that have been undertaken to improve its initially erratic design, including redesigning Boston Harbor, the urban renewal program of the 1950's and 1960's, and improving transportation between the core and the harbor front.

7.3.8 Walzer, Norman, and Jacobs, Brian D., eds. Public-Private Partnerships for Local Economic Development.

This book examines the details of public-private partnerships worldwide, including various organizational structures, policy decisions, and several national case studies.

Chapter three examines public-private partnerships in U.S. cities. This chapter finds that a vast majority (nearly 80%) view public-private partnerships as "important" or "very important"), and that the number of partnerships in U.S. cities has increased by 60.5% in the last 5 years. The author also states that due to the "ambiguous nature of partnerships and the varied ways in which they are managed make systematic data collection and analyses difficult." (Walzer, 40)

Chapter five examines measuring the success of a partnership. Due to conflicting interests, there is a need for a coherent approach to evaluation (Walzer, 110). There may be conflicting views on what is and what is not "successful," based on who is doing the evaluation (the public sector, the private sector, etc.). The community impact evaluation (C.I.E.) attempts to measure the effects of a partnership on not just the primary partners involved, but on the wider community, which is more along the lines of what we are going to be focusing on (Walzer, 111, 113-118).

This book could possibly serve as a valuable guide to measuring the success of the GB-URP using the C.I.E. The effects on Boston's localized communities would most likely be focused on, since neither the public nor private sectors' primary goal is profits, but rather aiding the Boston's communities.

7.3.9 White, Virginia P. Grants: How to Find out About Them and What to do Next.

This book explained in detail how to research grants that are right for a particular organization and how the government chooses the grants that are to be given out. It also offers advice to the agency looking for a government grant.

Almost half a million institutions in the U.S. are supported by grant-making organizations. However, grants are not as easy to obtain as they used to be. Through the Agricultural Research Service (ARS), the United States Department of Agriculture (USDA) conducts research programs for the purpose of providing new knowledge and technology that will help to conserve the environment.

The current level of funding for the USDA is $500-600 million dollars. All applications for governmental support undergo review by staff members of the funding agency. In 1974, the U.S. Court of Appeals ruled that applications for research grants submitted to the federal government should be open to anyone who requests one. There were problems with grants being given out too easily with insufficient people to review them, so they created this new rule. In Massachusetts, the foundation center is located at:

Associated Foundation of Greater Boston
1 Boston Place, Suite 948
Boston, MA 02108

7.3.10 Zaitzevsky, Cynthia. Frederick Law Olmsted and the Boston Park System.

"It is practically certain that the Boston of today is the mere nucleus of the Boston that is to be"

-- Public Parks and the Enlargement of Towns, 1870.

Frederick Law Olmsted designed a park system for the Boston Park Commission. The core of the park was known as the emerald necklace. It consisted of 5 major parks and their parkways. The park system was most important as a prototype. Many architects duplicate Olmsted's planning of open spaces today. This book helps in reviewing some of the early background of Boston.

In 1625, Reverend William Blaxton settled on Beacon Hill. Five years later, John Winthrop came to the area with the Massachusetts Bay Company. The settlers quickly turned Boston into a similar version of London, where most of these people came from. By 1645, every marsh in the city boundaries had been changed in some way. The population would eventually increase by more than three times between 1790 and 1825. With the railroad's installation, the Boston of the 19th century had transformed into the "hub" of New England. The older sections of Boston became slums, where immigrants lived in unhealthy conditions. Early on, Bostonians weren't concerned with the preservation of "open space". In the late 19th century, Boston's common pastures were turned into wooded parks, and Boston slowly turned into the important and well-known city it is today.

7.4 Interviews

7.4.1 Ali Noorani – 02-04-2000

Are you considered a sub-department of the City of Boston Environment Department?

We are considered a program within the Environment Department.

What is your agency's definition of an Urban Natural Resource?

There is no technical definition of an Urban Natural Resource. We keep the definition "fuzzy."

Do you have any type of existing criteria for determining the success of your grant program?

Project reports and reimbursement requests are submitted by the grantees.

As far as juxtaposing these grants against recent socio-economic data – could you elaborate on this? What do you have in mind for this "socio-economic data"? In other words, what do you feel would be relevant to our project, and where could we find it?

We need to be able to look at the various neighborhoods in Boston and ensure that our grants are being distributed where they are most needed, i.e. Higher income vs. lower income neighborhoods. This will be used in evaluating future project distributions.

This data would include mostly demographic data and economic data such as income level. This data could be found through either the United States Housing and Urban Development or the Boston Neighborhood Development Department..

What exactly would you like to get out of our doing this project?

A set form with a series of indicators and measurements for grant evaluation.

A G.I.S. system and database that will give a "before-and-after" picture of the neighborhood where the grant was issued, both qualitative and quantitative.

A way to replicate this information onto other grants programs.

Can we meet with you sometime, and if so, when and where?

A meeting can be arranged in the future.

How would you like us to contact you normally? We would prefer e-mail, and if you don't mind, any relevant material could be attached via Word documents.

E-mail and Word documents are fine. I will be sending you three Word documents that are standard project reports.

7.5 Social Implications of Urban Natural Resource Project

The Boston Urban Natural Resources Grants project will have several social implications. These implications may have a combination of positive and negative effects on Boston's communities. Our goal is certainly to minimize any negative effects that are felt either by the Greater Boston Urban Resources Partnership or by Boston's communities.

Our basic thought is that, because we are attempting to help the GB-URP's grants program, and because their grants program directly impacts Boston's underprivileged communities in a positive way, we are in essence indirectly helping Boston's underprivileged communities.

Upon evaluating the success of the urban natural resources grants program, we may find that the United States Department of Agriculture (USDA) grants should be distributed differently. Our recommendations may lead the Partnership to discover that there are several Boston neighborhoods that are in need of grant money and are not receiving it, while others may be found to have less need than was previously thought and may have funds cut from their current level or stopped entirely.

First, we will focus on some of the positive implications. Neighborhoods that have lower average incomes may have a greater need for urban natural resource grants, and may not be receiving them due to insufficient organization or readily available data. If our goals are achieved, it will be possible for these neighborhoods to make improvements within their community, such as improved environmental education in schools, increased community awareness towards environmental issues, and community action groups who provide the impetus for positive change in their communities.

Another positive implication that may come out of our project is the GB-URP finding better and more efficient uses of its grant money, thereby allowing the Partnership to function more effectively from both a fiscal and an organizational level. Our standardized report forms will allow the Partnership to more

easily evaluate community organizations' success with their grant programs, and will allow the partnership to make more effective decisions regarding future grant programs with that community organization.

Our review of the distribution of USDA grants for urban natural resources may also come to have several negative implications. Existing organizations that have been using the GB-URP's resources for the improvement and maintenance of natural resources may have to be severed or diminished in order to redistribute the grants more fairly based on the need of Boston's neighborhoods. Since the Partnership strives to aid traditionally underprivileged groups, neighborhoods with higher median income levels or more resources than was previously realized may have to be cut out of funding. This will have direct effects on the existing natural resources grants, which may include the termination of certain programs. However, even though this will have a negative short term negative impact on the communities where funding was cut, we believe that the community motivation for these changes will result in action and groups looking for funding and assistance from other organizations.

Clearly, the Urban Natural Resource project will have several positive and negative social implications. When the Environment Department reevaluates the distribution of their natural resources grants, they may conclude that the grants should be more efficiently distributed. The end result will be that the grant money from existing grants will diminish, with the result of possible termination of certain programs, and new grants will be issued to neighborhoods of greater need. These new grants that are distributed will have positive impacts on the community by introducing programs that improve and/or maintain urban natural resources. Since the wealthier communities have more monetary resources than poorer ones, we believe that the positive implications of our project significantly outweigh the negative implications. The recognition of and response to Boston's most important natural resource needs will be more of a reward than the possible termination of grant funding for wealthier communities.

7.6 GB-URP Progress Report to Partners: An Appendix

The Greater Boston Urban Resources Partnership

"Connecting Community and Environment"

Progress Report to Partners And the Community March 1, 1995 - September 30, 1999

October 5, 1999

One City Hall Square, Room 805
Boston, MA 02201
(617) 635-2518

Greater Boston Urban Resources Partnership

"Connecting Community and Environment"

c/o The Environment Department
One City Hall Square, Room 805
Boston, MA 02201

A Partnership of:

Local Non-Profit
Chelsea Community Connections Coalition
Chelsea Greenspace and Recreation Committee
Chelsea Human Services Collaborative
EarthWorks Projects
East Boston Recreation, Master Planning, Land Use Advisory Council
Neighborhood of Affordable Housing
STRIVE/Boston Employment Service, Inc.

Regional Non-Profit
Appalachian Mountain Club
Boston GreenSpace Alliance
Boston Natural Areas Fund, Inc.
Boston Schoolyard Funders Collaborative
Community Outreach Group, Inc.
Environmental League of Massachusetts
Garden Futures
Save the Harbor Save the Bay
The Food Project
The Watershed Institute

Private Sector
Andrew Klein, P.E., Environmental Engineer
The BSC Group
DJT Enterprises
Greenleaf Composting
Jennifer McGraw (Policy analyst)
The Synergy Organization, Inc.

Academic
Roxbury Community College, Center for Environmental Education
UMass Boston, Urban Harbors Institute

Local Government
City of Boston Environment Department,
City of Boston Parks and Recreation Department
City of Boston Sustainable Boston Initiative
City of Boston Department of Neighborhood Development
City of Somerville Department of Public Works

State Government
Massachusetts Bays Program
Massachusetts Coastal Zone Management Program
Massachusetts Department Fisheries, Wildlife and Environmental Law Enforcement
Massachusetts Department of Environmental Management – Urban Forestry Program
Metropolitan Area Planning Council

Federal Government
US Department of Agriculture-Forest Service
US Department of Agriculture-Natural Resources Conservation Service
US Environmental Protection Agency, Region 1 – Urban Environmental Initiative
US Department of Housing and Urban Development

October 5, 1999

Dear Friend,

It is with pleasure we issue this report of the Greater Boston Urban Resources Partnership's (GB-URP) accomplishments from June 1, 1995 to September 30, 1999. The progress we have made as a coalition of community organizations and agencies, business, and federal, state, and local governments is extraordinary.

In the past year and a half alone, the Partnership has matured considerably: Each Partner signed a memorandum of agreement committing a financial or technical resource; We saw a three-fold increase in the number of grant applications and a proportional increase in total dollars requested; And, less than 15% of our total budget is used for administrative costs. Entities are substantively involved in our work, we have more work to do and we have proven an ability to work efficiently.

The time is here to make the difficult decisions. Three years into our five-year seed funding from the USDA, we need to decide what our future will look like. In the short term, we need to use our grant funds more effectively to better leverage resources. In the long term, we need to decide to decide if the Partnership is valuable enough to sustain. If so, how do we continue to help urban communities carry out strategies that link social, economic, and environmental concerns?

The pages that follow describe many of our accomplishments since March 1, 1995. Although federal and local funding did not arrive until April 1997, a group of progressive environmental leaders developed the Partnership and brought resources to underserved areas of the region. Since so much of our work facilitates intangible results, a comprehensive report of project accomplishments would not do our work justice!

Simply put, this report is a chance for us to look back and take in what we have done – together. It is important to celebrate our achievements as we move to new goals. Effective collaboration to initiate urban environmental change will be the legacy of the Greater Boston Urban Resources Partnership.

Regards,

Indira Balkissoon
Chair

Ali Noorani
Director

Ali Noorani, Director
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Web: www.cityofboston.com/environment/

Table of Contents

Executive Summary

Since March 1, 1995 the Greater Boston Urban Resources Partnership (GB-URP) has embarked upon a mission of helping urban communities address social, economic and environmental concerns. With financial support from the USDA-Natural Resources Conservation Service and Forest Service, the US Environmental Protection Agency - New England and the City of Boston's Environment Department, the Partnership hired a Director on June 24, 1998 to coordinate daily activities and develop the Partnership's structure, and financial and technical resources. The Massachusetts Department of Environmental Management has acted as fiscal agent for all federal funds since September of 1998.

To date, 39 agencies, organizations, businesses and individuals have signed a Memorandum of Understanding committing either financial or technical resources to the activities of the GB-URP. This collaborative effort has allowed the Partnership to administer a USDA funded re-granting program, to secure funding for an environmental health mapping project and to help initiate a Boston-wide coalition promoting sustainable development.

These goals have been achieved with less than 15% of the Partnership's cumulative budget allotted to program administration. Indeed, we have been able to re-grant $696,998.19 in USDA funds for urban natural resources projects, and have matched this amount with $1,072,282 that have taken form as non-federal financial or technical resources. Simply put, since 1995, the Partnership has played a significant role in at least $1.8 million of urban natural resources projects!

The GB-URP has focused efforts on the low income neighborhoods and communities of color in Boston, Chelsea and Somerville. Of the cumulative awards made, 80% fall within the Boston neighborhoods of East Boston, Dorchester, Mattapan, Roxbury and Jamaica Plain. The Partnership's ability to share information (electronically and personally) transcends organizational and geographical boundaries to promote regional efforts.

GB-URP: Making the Connection

In 1995, forward thinking government agencies met forward thinking community groups. The issue at hand was the social, economic, and environmental health of urban communities. The Chelsea Creek – or as Edith de Angelis, East Boston resident and environmentalist, puts it, "This is a working river not a creek: This is the Chelsea River." – served as the area for action.

This long neglected environmental resource became the catalyst for a collaboration of community groups, businesses, and government agencies: The Greater Boston Urban Resources Partnership (GB-URP). Suddenly, introductions developed into conversations, and conversations into solutions.

> *Gladys Vega, lifelong Chelsea resident, sums it up best, "The GB-URP helped us take environmental problems and turn them into community solutions."*

Within a year, the GB-URP had rallied local, state and federal agency resources to work with low-income communities and those of color in East Boston and Chelsea. The Chelsea Creek Action Group, a coalition of 3 community organizations, became the pilot project of the GB-URP. Power in numbers was seen immediately as early victories included: Green space returned to community soccer players, pro-bono legal and technical advice arrived, and polluting industries closed their doors.

At nearly the same time, the United States Department of Agriculture initiated a national program called the Urban Resources Partnership. It was a natural fit. In 1997, the GB-URP was awarded funding to re-grant to community organizations and agencies throughout Greater Boston.

Since 1997, GB-URP has financially supported 30 projects, ranging from canoe launches to urban gardens to environmental education. The positive social and economic impacts of these efforts are realized everyday, and will continue to be realized for years to come. This success is due to the fact that one of the goals of the GB-URP is, "Economically sustainable projects and initiatives that enhance the quality of life and foster diverse community involvement through innovative agency and organization collaborations." For this reason, our projects transcend time much as they transcend political and organizational boundaries.

The Partnership's financial assistance is augmented by technical assistance. What started as an explanation of permitting processes, has become hands-on assistance with landscaping, soil erosion, legal issues and grant writing – to name a few. This teamwork approach to delivering services and mobilizing leadership in support of the urban environment is another of the Partnership's goals.

Understandably, the collaborative nature of our work has been very popular. In 1999 the Partnership received 42 pre-applications requesting a total of $1.3 million for community-based natural resources enhancement projects – more than three times the number of applications and dollars requested in previous years.

This has led to a unique role for the GB-URP in the region: The mission has matured to that of helping urban communities address social, economic, and environmental concerns. The number of active partners committing a financial or technical resource has grown to more than 39 organizations, agencies, and individuals. The GB-URP has evolved to financially and technically support projects that:

THE MISSION

The Greater Boston Urban Resources Partnership is a coalition of community organizations and agencies, business, and federal, state, and local governments. *The Partnership's mission is to help urban communities carry out strategies that link social, economic, and environmental concerns.*

To that end, the Partnership's members will:
- work together to build stewardship and support services, and
- coordinate and provide expertise, funding, and in-kind services.

SOCIAL

Boston Medical Communities Project

Chelsea River Comparative Risk Assessment

Boston Medical Communities Project

Working with EPA Office of Pollution Prevention and Toxics, the JSI Center for Environmental Health Studies, the Bowdoin Street Health Center and the GB-URP are coordinating efforts to implement the Boston Medical Communities Project: *To develop an Environmental and public Health Community Profile System for health care providers and communities. The system is designed to serve as a tool enabling linkages of public health and environmental data, organization and mapping of the information.* The Bowdoin Street Health Center will serve as the Boston pilot site for this project. It is anticipated that this initial effort will lead to a region-wide collaboration of community health centers sharing program models and information regarding environmental and public health concerns.

Chelsea River Comparative Risk Assessment

The GB-URP worked with EPA-New England Urban Environmental Initiative, US EPA and the Chelsea Creek Action Group to get funding for a Comparative Risk Assessment (CRA) of the Chelsea River watershed. Slated to begin Fall 1999, the CRA will capture the output and process of the many public, private, and non-profit led projects in East Boston and Chelsea under an umbrella of risk identification, prioritization, and management. Within this process, all participants will gain an understanding of East Boston and Chelsea residents' environmental concerns on a level beyond the anecdotes and rhetoric familiar to typical community processes, and existing projects will improve their ability to address community concerns. The inclusion of technical expertise increases the value of the final product in the eyes of all stakeholders, while the inclusion of all parties along the Chelsea River increases the value and depth of dialogue and priorities. The accumulation of these many activities and their respective strengths within the Chelsea River Comparative Risk Assessment will result in a long term environmental strategic plan for the city of Chelsea and the community of East Boston.

ECONOMIC

Boston Coalition for Sustainable Development

Boston's Indicators of Progress, Change and Sustainability

The Boston Coalition for Sustainable Development

The Boston Coalition for Sustainable Development (BCSD) currently includes the City of Boston's Sustainable Boston Initiative, EPA-New England Urban Environmental Initiative, the Asian Community Development Corporation, the Boston Redevelopment Authority, the Boston Edison Company, and the GB-URP. The BCSD has identified three cluster projects that have emerged through networking and coalition building. These projects were presented at a national conference sponsored by BCSD in February 1999, "Eco-Industrial Development: Successful Strategies and Tools for Economic Development." The Coalition is pursuing other funding sources (public and private) to enhance these projects and others.

1) ***The Neighborhood Cluster:*** provides assistance to the Asian CDC's (ACDC) Strategic Plan, and identifies technical advisors as needed to implement it. ACDC has worked with EPA Region I/Boston, under the Sustainable Boston program, since November, 1998. The Chinatown Waste Reduction Initiative (CWRI) and the Medical Equipment Remanufacturing for Chinatown Urban Revitalization (MERCURY) projects have been developed since our Coalition's inception. The two projects share the common principle of achieving sustainable economic development through profit enhancement for local businesses, and creation of community employment and business opportunities.

2) ***The Institutional Cluster:*** implementation of the EPA/AHA (American Hospital Association) MOU which MASCO will manage in the Medical Area to reduce hospital waste by 50% by 2010.

3) ***The Industrial Cluster:*** supports the high/electric technology incubator that Boston Edison is developing in South Boston which is supporting green strategies in the building, providing job training/jobs and assisting in the use of shared resources and waste reduction techniques.

The Partnership has been working closely with the BCSD on strategic planning and fundraising. These efforts will continue into the future to promote sustainable development efforts throughout the region.

Boston's Indicators of Progress, Change and Sustainability

With the Indicators of Progress, Change and Sustainability, Boston will have an opportunity to look at the pattern of relationships between the individual and the system, the neighborhoods and the city, the city and the region – in essence, Greater Boston as a complex organism. Working with hundreds of stakeholders throughout Boston, the Partners have contributed their time and knowledge to this report due for release in final form December 1999.

ENVIRONMENT

As of September 30, 1999, the Partnership has re-granted nearly $700,000 in USDA-Forest Service and Natural Resources Conservation Service funds for urban natural resources related projects. Each project is required to provide a one-to-one match of every GB-URP dollar granted. This match takes form as non-federal financial or technical assistance provided to the project.

1997-1998 Projects

	Organization	*Project Name*	*Neighborhood or City*
1)	Chelsea Creek Action Group	Chelsea Creek Action Group, A Boston URP Pilot Project	East Boston/Chelsea
2)	Boston Urban Gardeners	Fields Corner Open Space Renovation	Dorchester
3)	Mt Calvary Church	A Church Based Environmental Stewardship Program	Dorchester/ Mattapan
4)	S. End/Lower Roxbury Land Trust	Bessie Barnes Garden Extension	South End/Lower Roxbury
5)	EarthWorks	Historic Fruit Orchard and Demo Orchard Proj	Mattapan
6)	Food Project	Lots of Growth	Roxbury
7)	Boston Natural Areas Fund	Community Garden and Neponset River Access	Mattapan
8)	Save the Harbor/Save the Bay	Harbor Vision Crew 1998	Roxbury/Dorchester/ East Boston

1. CHELSEA CREEK ACTION GROUP - A Boston URP Pilot Project

A coalition of: East Boston Ecumenical Community Council (EBECC), Neighborhood of Affordable Housing (NOAH), Chelsea Green Space and Recreation Committee (CGRS)

Kevin Whalen, EBECC
28 Paris St., East Boston, MA 02128
Phone (617) 567-2750; Fax: (617) 569-5946
Stacy Chacker, NOAH
22 Paris Street, East Boston, MA 02128
Phone (617) 569-0059 x-13; Fax (617) 569-2007
Gladys Vega, CGRS
300 Broadway, Chelsea, MA 02150
Phone (617) 889-6080; Fax (617) 889-0559

Location:	East Boston & the city of Chelsea
Grant Amount:	$75,000
Matching Funds:	$121,203
Total:	$196,203

Funding Authority:
USDA-Forest Service

Technical Assistance Liaisons:
Ken Fields, BSC Group; Indira Balkissoon, Environmental Protection Agency; Phillip Rodbell, MA Department of Environmental Management, Urban Forestry; Anne Livingston, MA Department of Fish, Wildlife, and Environmental Law Enforcement; Andrew Klein

Project Status:
Complete

Project Description:
Chelsea Creek flows between the East Boston neighborhood of the city of Boston and the city of Chelsea. A large part of the Creek is a designated port area lined with industry ranging from Oil/Petroleum, metal recycling, storage of salt piles to parking for airport and related services. Behind the industrial edge and waste-land there are lively communities, cultures, growing children, youth, working adults, and elders who look to urban natural resources as a source of recreation and livelihood. Chelsea and East Boston share recreational, health, cultural, community, as well as transportation resources. They also share the negative impacts of industry, the airport, traffic, and the pollution generated by uses that benefit Greater Boston. The three community-based groups that form CCAG are leading the effort to help East Boston and Chelsea residents develop and implement a vision for the Chelsea Creek in the years to come. Improving the ecological function of the watershed through natural resources protection and enhancement is a central goal of CCAG.

Accomplishments:
- CCAG's ability to increase environmental awareness led to an **Environmental Fair** in May 1998 that drew 1,000 community residents who participated in water quality testing, storm drain stenciling, and educational tours of the Creek.
- As a direct result of community education and collaboration with federal GB-URP Partners, Chelsea was the first community to ever be involved with the **National Pollution Discharge Elimination System** permitting process.
- Outreach and education efforts were conducted in a manner culturally appropriate to the **Cambodian, Latin, Vietnamese, and Brazilian** populations of East Boston and Chelsea.

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2. Fields Corner Open Space Renovation Project

Boston Urban Gardeners at the Community Farm
Robert Meek, Executive Director
46 Chestnut Ave., Jamaica Plain, MA 02130
Phone (617) 522-1259; Fax (617) 522-1666

Location: Dorchester
Grant Amount: $ 10,000
Matching: $ 13,968
Total: $ 23,968

Technical Assistance Liaisons:
Anne Livingston, MA Department of Fish, Wildlife and Environmental Law Enforcement; John Berg, City of Boston Department of Neighborhood Development

Funding Authority:
USDA-Forest Service

Project Status:
Complete

Project Description:
The Fields Corner Open Space Renovation project is an urban-renewal collaboration project between Boston Urban Gardeners (BUG) and the residents and businesses in the Fields Corner community of Dorchester. GB-URP funds are being provided to support the second year activities of this community building, which helped people, organize crime-watch groups and decision-making bodies with a unified vision for the area. The project has already leveraged in-kind and financial contributions from the city, area merchants, universities, and philanthropy. This Year 2 phase of the project will take community visions to make substantive physical improvements such as tree planting and greening on vacant lots, and building a memorial dedicated to youth killed as a result of urban violence in the area.

Accomplishments:
- Upgraded the Fields Corner CDC's park and established a **permanent space for natural vegetation**.
- Planted **30 street trees** to combat summer heat, as well as over 500 perennial bulbs.

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3. *Tending Our Garden Inside and Out: A Church-Based Environmental Stewardship Program*

Mt Calvary Holy Church of America's
(501 – c3)
Susan Youmans
1 Taft Dr., Winchester, MA 01890
Phone and Fax (781) 729-4921

Location: 9-15 Otisfield Street, Dorchester
Grant Amount: $ 7,500
Matching: $ 7,500
Total: $ 15,000

Funding Authority:
USDA-Forest Service

Technical Assistance Liaisons:
Marc MacQueen, USDA-Natural Resources Conservation Service; Russ Lopez, Environmental Diversity Forum; Betsy Johnson, Garden Futures

Project Status:
Active

Project Description:
This project, building from the base of a strong black church (well rooted in the community), will begin the process of involving faith based communities in environmental action. GB-URP funds are used for environmental education classes for Dorchester's faith community. Matching efforts enhance this program from one focusing on urban natural resources to an educational series making the connection to broad environmental health issues such as air quality, food security and asthma.

Accomplishments:

- More than **20 people** attended a seminar on why urban spaces protecting natural resources benefit neighborhoods' and individuals' physical, social and psychological health.
- Church members participated in the **planting and maintenance** of a vacant parcel.
- Several churches participated in a meeting on faith-based involvement in the **environmental justice movement**.

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4. YouthBuild Garden Project

YouthBuild Boston
Gregory Mumford
173A Norfolk Ave., Roxbury, MA 02119
Phone (617) 445-8887

Location:	Roxbury
Grant Amount:	$ 10,000
Matching:	$ 14,000
Total:	$ 24,000

Funding Authority:
USDA-Forest Service

Technical Assistance Liaisons:
Philip Parker, The Synergy Organization, Inc.; Greg Gale, The Food Project

Project Status:
Complete

Project Description:
The project will revitalize a vacant lot and develop a youth education and training component for landscape management. Youth Build currently has a building construction training program for high-school drop-outs and troubled youth between the ages of 18 – 24 yr. GB-URP funds and technical assistance matched with Youth Builds funds and resources will extend the building trades component to include environmental fields. The program will also be linked with Youth Build's Charter School to ensure long term sustainability of the curriculum and training.

Accomplishments:
- **25 YouthBuild Boston students** and 5 community volunteers worked to clean up and landscape a vacant piece of land.
- Various methods and materials were installed to **reduce soil erosion** and encourage proper use of the site.

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5. Bessie Barnes Garden Extension

South End/Lower Roxbury Open Space Land Trust
Lanae Handy
585 Tremont St., Boston, MA 02118 (P.O. Box 180923)
Phone and Fax (617) 536-2488

Location: Lower Roxbury/South End, Boston	
Grant Amount:	$ 5,000
Matching:	$ 7,954
Total:	$ 12,954

Funding Authority:
USDA-Forest Service

Technical Assistance Liaisons:
Thomas Melone, US Dept of Housing and Urban Development; Betsy Johnson, Garden Futures

Project Status:
Active

Project Description:
A vacant lot will be revitalized used to teach children about urban natural resources, with an emphasis on inter-generational exchange. The project will extend to an existing community garden and envisions elements such as rock garden, herbs and wild-flowers that attract birds and butter-flies; circulating pool of water for goldfish and frogs, fruit trees and a gazebo powered by solar power – where adult environmental education classes will also be held. At the initial phase (funded by GB-URP) the site will be developed as a nursery for plants and trees that will be relocated at the adjacent community garden, while the community completes its planning phase.

Accomplishments:
- **Installed** soil beds, a water system, fruit trees, shrubs perennials, herbs and landscaping borders.
- Planned and have initiated an **environmental/horticultural program** for neighborhood youth.

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6. *Historic Fruit Orchard and Demonstration Orchard Project*

EarthWorks Projects
Maurice Loiselle
46 Chestnut Ave., Jamaica Plain, MA 02130
Phone and Fax (617) 983-9463

Location: Mission Hill, Mattapan
Grant Amount: $ 7,500
Matching: $ 14,874
Total: $ 22,374

Funding Authority:
USDA-Forest Service

Technical Assistance Liaison:
Phillip Rodbell, MA Department of Environmental Management; Greg Murphy, Greenleaf Composting

Project Status:
Complete

Project Description:
The Urban Orchards project consists of two physical components: Historic Fruit Orchard and Demonstration Orchard Project at two sites in Boston. The Demonstration project will provide an urban fruit tree, shrub and vine ecology component to the extensive green space component at the Boston Nature Center being built by the Mass. Audubon Society, in coordination with community gardeners and community organizations. The fruit and nut plantings will add genetic bio-diversity to the eco-system, food and habitat for pollinators, and the multitude of benefits from trees. The Historic Orchard will feature heirloom varieties of apples and pears to expand on the existing old apple trees and other fruit and nut trees planted by Earth works. These trees will be planted on the site of a historic orchard in the nineteenth century

Accomplishments:
- Added **57 historic apple and pear trees** and access paths to the Boston Nature Center.
- Held **3 classes** and involved 4 Boston Youth Cleanup Corp members in on-site work.

---

6. Lots of Growth

The Food Project
Pat Gray
P.O. Box 705, Lincoln, MA 01773
Phone (781) 259-621; Fax (781) 259-9659

Location:	Roxbury
Grant Amount:	$ 15,000
Matching:	$ 15,000
Total:	$ 30,000

Funding Authority:
USDA-Forest Service

Technical Assistance Liaison:
Maria Van Dusen, MA Department of Fish, Wildlife and Environmental Law Enforcement; Marc MacQueen, Natural Resources Conservation Service

Project Status:
Active

Project Description:
GB-URP funds provided to The Food Project will help create a new model of youth and community development through transforming vacant urban land for local food production and consumption. Funding will be used specifically to clean up a contaminated lot in the Dorchester neighborhood of Boston and transforming it into a place where youth can enhance urban natural resources. The Food Project will leverage this federally funded cleanup and natural revitalization to earn funding to produce food for the neighborhood Farmer's market and local soup kitchens and food pantries. In the process of production, sales and distribution, youth will learn skills that range from organic food production, to employment and business skills, and social responsibility.

Accomplishments:
- Devoted more than **4000 hours** to clean and cultivate a one and a half acre urban lot;
- **Removed 500 pounds** of rubbish, debris and hazardous objects;
- Spread **1,500 cubic yards** of sub soil and leaf compost over contaminated soil;
- Cultivated, planted and tended more than **1,500 individual plants and additional row crops**; and,
- Involved **10 neighborhood youth** and **62 Food Project youth** in the work.

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7. Community Garden and Neponset River Access: Mattapan's Kennedy Park Revitalization

Boston Natural Areas Fund, Inc.
Valerie Burns
59 Temple Place Room 585, Boston, MA 02108-4608
Phone (617) 542-7696; Fax (617) 542-7679

Location:	Mattapan
Grant Amount:	$ 15,000
Matching:	$ 23,847
Total:	$ 38,847

Technical Assistance Liaison:
Marc MacQueen, USDA-Natural Resources Conservation Service

Project Status:
Complete

Funding Authority:
USDA-Forest Service

Project Description:
The project will build new needed open space and access to a little known local natural resource, the Neponset River. Funding will be used to upgrade an urban open space with permanent vegetation and build a canoe launch for access to the river. The project will support a long standing grassroots effort initiated by the Boston Natural Areas Fund (BNAF) to develop a greenway along the River. The improvements will be made by BNAF's youth conservation corps and will include new environmental education programs for a historically under served community.

Accomplishments:
- Youth built a **21-step canoe launch** to provide one of only two local access points to the Neponset River for 35,000 Mattapan residents.
- Compost and organic matter were installed to **stabilize and improve the productivity of community garden soil**.
- The newly improved and user-friendly park has become a **community venue for neighborhood events** to reclaim the area as a community-gathering place.

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8. Harbor Visions Crew 1998

Save the Harbor/Save the Bay
Cate Doherty/Claudia Smith-Reid
25 West St., 4th Floor, Boston, MA 02111
Phone (617)451-2860; Fax (617)451-0496

Location: Greater Boston, with a focus on Roxbury, Dorchester, Mattapan, East Boston and the City of Chelsea

Grant Amount:	$ 5,000
Matching:	$ 21,750
Total:	$ 26, 750

Funding Authority:
USDA-Forest Service

Technical Assistance Liaison:
Elizabeth Grob, MA Costal Zone Management

Project Status:
Complete

Project Description:
The project is aimed at educating inner city youth about the Boston Harbor and its connection, through watershed tributaries, to local neighborhoods. Youth will learn about the health, resources and quality of water and explore landside environmental issues, specifically in the areas of pollution and waste management. They will learn presentation and public speaking skills and use these skills to educate people in communities about the Harbor and its resources. In view of the recent designation of the Harbor Islands National Park and the current 'hot' issues around access to the waterfront – this project is seen as critical to building awareness in communities.

Accomplishments:
- Introduced nearly **1,000 youth** to Harbor-related and environmental issues.
- Worked on the **restoration and maintenance** of Belle Isle March in East Boston, the Chelsea Community Garden, and the Boston Harbor Islands.
- Hosted a **youth charette** and developed a newsletter highlighting its outputs.

1998 - 1999 Projects

	Organization	*Project Name*	*Neighborhood or City*
1)	Food Project	Safe Food from Langdon Street	Roxbury
2)	Boston Urban Gardeners	Community Land Management and Restoration	Dorchester/Roxbury
3)	Egleston Social Action Committee	The Peace Garden	Roxbury
4)	Chelsea Creek Action Group	Chelsea Creek Action Group	East Boston
5)	Chelsea Community Connections	Chelsea Community Gardening and Education Project	Chelsea
6)	Edward L. Cooper Senior Community Gardening and Education Center	Cooper Greenhouse	Roxbury
7)	Earthworks	Historic Fruit and Orchard Demonstration Project	Mattapan
8)	Somerville Public Schools	Water in the City	Somerville

1. Safe Food from Langdon Street

The Food Project
Pat Gray
P.O. Box 705, Lincoln, MA 01773
Phone (781) 259-8621; Fax (781) 259-9659

Location:	Roxbury
Grant Amount:	$ 25,000
Match:	$ 34,469
Total:	$ 56,469

Funding Authority:
USDA-Natural Resources Conservation Service

Technical Assistance Liaison:
Marc MacQueen, Natural Resources Conservation Service

Project Status:
Active

Project Description:
The Food Project will initiate a program which will include installation of natural resource improvement measures, and provide educational opportunities for the under-served Dudley Street neighborhood. Project objectives include the installation of physical items such as fencing and shrubs, the cultivation of community ownership of the lot, the creation of a urban food-production and holistic ecological space, and the establishment of an educational "demonstration site" for community based urban agriculture.

Accomplishments:
- **Installed physical items** to improve the ecological productivity of the site and reduce soil erosion.

---

2. Community Land Management and Restoration

Boston Urban Gardeners
Robert Meek, Executive Director
46 Chestnut Ave., Jamaica Plain, MA 02130
Phone (617) 522-1259; Fax (617) 522-1666

Location:	Fields Corner, Dorchester
Grant Amount:	$ 17,202.19
Match:	$ 25,664
Total:	$ 42,867

Funding Authority:
USDA-Natural Resources Conservation Service

Technical Assistance Liaison:
Philip Parker, The Synergy Organization, Inc.

Project Status:
Ongoing

Project Description:
With GB-URP resources, BUG will replace lead contaminated soil with clean, safe topsoil for a community garden, purchase tools and equipment for tool-lending program, and complete a comprehensive, bilingual land-use reference guide.

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3. *The Peace Garden*

Ecumenical Social Action Committee
Elaine Senechal
3134 Washington Street
Roxbury, MA 02130
Phone: (617) 524-2555; Fax: (617) 524-2315

Location:	Roxbury
Grant Amount:	$ 26,576
Match:	$ 41,955
Total:	$ 68,531

Funding Authority:
USDA-Natural Resources Conservation Service

Technical Assistance Liaison:
Stacey Chacker, Neighborhood of Affordable Housing; Marc MacQueen, USA-NRCS

Project Status:
Active

Project Description:
This project will transform a vacant lot at the corner of Washington and School Streets into a green space, community gathering plaza, and educational "science" laboratory for residents and students. Community members will be involved in the design and planning of the garden, as well as the cleanup and development of the site. Community members and students will also maintain the garden in the future.

Accomplishments:
- Students have worked with NRCS liaisons to **conduct a topographical survey** of the lot.
- GB-URP affiliated landscape designers have **taught students the fundamentals of urban landscape design and construction**.
- The class has surveyed community members regarding the design of the park and the feasibility of a **neighborhood composting program**.

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4. *Chelsea Creek Action Group*

A coalition of: East Boston Ecumenical Community Council (EBECC), Neighborhood of Affordable Housing (NOAH), Chelsea Green Space and Recreation Committee (CGRS)

Kevin Whalen, EBECC
28 Paris St., East Boston, MA 02128
Phone (617) 567-2750; Fax: (617) 569-5946
Stacy Chacker, NOAH
22 Paris Street, East Boston, MA 02128
Phone (617) 569-0059 x-13; Fax (617) 569-2007
Gladys Vega, CGRS
300 Broadway, Chelsea, MA 02150
Phone (617) 889-6080; Fax (617) 889-0559

Location:	Chelsea & East Boston
Grant Amount:	$ 100,000
Match:	$ 116,330
Total:	$ 216,330

Funding Authority:
USDA-Forest Service

Technical Assistance Liaison:
Ken Fields, BSC Group; Indira Balkissoon, Environmental Protection Agency; Charlie Lord, Watershed Institute; Tim Smith, City of Boston Parks and Recreation Department; Richard McGuiness, City of Boston Environment Department; Maria Van Dusen, MA Department of Fish, Wildlife, and Environmental Law Enforcement; Andrew Klein

Project Status:
Ongoing.

Project Description:
In order to develop a true cross-creek community, a CCAG coordinator will work with organizations and residents on both sides of the Creek. The CCAG coordinator, in collaboration with organization staff will implement a workplan ranging from the planning of pocket parks to education efforts around environmental issues to organizing environmental conferences and workshops. In essence, the coalition will work together to improve the ecological function of an urban watershed.

Accomplishments:
- Commenced **community vision and design** for the Condor Street Urban Wild along Chelsea Creek;
- Created and developed a **multi-cultural Chelsea Creek resident committee** that converses in five diverse languages (English, Spanish, Portuguese, Khmer and Vietnamese);
- Conducted a **landscaping program** along the Meridian Street Chelsea Creek Corridor where residents adopted planters and youth placed a symbolic planter on the Meridian Street bridge between Chelsea and East Boston.

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5. *Chelsea Community Gardening and Education Project*

Chelsea Community Connections Coalition
Sheila McMahon
c/o Chelsea Human Services Collaborative
300 Broadway
Chelsea, MA 02150
Phone (617) 889-6080; Fax (617) 889-0559

Location:	Chelsea
Grant Amount:	$ 20,000
Match:	$ 20,425
Total:	$ 40,425

Funding Authority:
USDA-Natural Resources Conservation Service

Technical Assistance Liaison:
Betsy Johnson, Garden Futures

Project Status:
Active

Project Description:
The proposal looks to expand the garden's mission to a year round educational program offered through the Chelsea Community Schools program to develop a gardening/environmental course to be offered twice a week at the community schools. A young person will be trained to maintain the garden and assist gardeners.

Accomplishments:
- A **Chelsea business donated** the materials and costs for water installation on the site.
- An environmental crew of 5 youth and a supervisor have completed **construction of raised garden beds** and maintained the common areas of the site.

---

6. Cooper Greenhouse

Edward L. Cooper Senior Community Gardening and Education Center
V. Paul Deare
32 Linwood Street
Roxbury, MA 02119
Phone: (617) 445-1234; Fax: (617) 698-6360

Location:	Roxbury
Grant Amount:	$ 25,000
Match:	$ 25,000
Total:	$ 50,000

Funding Authority:
USDA-Natural Resources Conservation Service

Technical Assistance Liaison:
Tom Melone, Housing and Urban Development

Project Status:
Active

Project Description:
With funding from the Partnership, the Cooper Center will be completed as a community environmental educational center complete with classrooms, a library and a functioning greenhouse available to residents.

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7. Historic Fruit and Orchard Demonstration Project

EarthWorks Projects
Maurice Loiselle
46 Chestnut Street., Jamaica Plain, MA 02130
Phone and Fax (617) 983-9463

Location:	Mission Hill; Mattapan
Grant Amount:	$ 27,500
Match:	$ 32,747
Total:	$ 60,247

Funding Authority:
USDA-Forest Service

Technical Assistance Liaison:
Tim Smith, City of Boston Parks and Recreation Department, Urban Wilds Program

Project Status:
Active

Project Description:
The project will add vines and plant material and fences to Demonstration Orchard at Boston Nature Center. In addition, EarthWorks will expand the McLaughlin Playground Historic Orchard to diversify the site's ecology. At the Holland Elementary School in Dorchester, GB-URP funding will establish additional plantings in the schoolyard and train teachers to use the orchard and greenspaces with a curriculum

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8. Water in the City: Urban Garden Connections

Somerville Public Schools
Lisa Brukilacchio
93 School Street
Somerville, MA 01243
Phone: (617) 776-4160; Fax: (617) 666-4325

Location:	Somerville
Grant Amount:	$ 16,200
Match:	$ 16,200
Total:	$ 32,400

Funding Authority:
USDA-Natural Resources Conservation Service

Technical Assistance Liaison:
Anne Livingston, MA Department of Fish, Wildlife, and Environmental Law Enforcement

Project Status:
Active

Project Description:
Somerville Public Schools plans to expand elementary after-school programming to a year round program, develop a small-scale greenhouse project to support youth programs, propagate native plants, design and install a Mystic River model at the Community Growing Center.

1999 - 2000 Projects

	Organization	*Project Name*	*Neighborhood or City*
1)	Alternatives for Community and Environment	Youth Action to Enhance Roxbury's Environmental Resources	Roxbury
2)	Boston Schoolyard Funders Collaborative	Green Schoolyards: Planting the Seeds of Environmental Stewardship	Boston
3)	Chelsea Human Services Collaborative	Chelsea Creek Action Group	Chelsea and East Boston
4)	Eagle Eye Institute	Rainbow Stewards Program	Somerville
5)	EarthWorks Projects	Native and Edible Demonstration Projects	Roxbury/Dorchester
6)	Neigborhood of Affordable Housing	East Boston Schoolyard Initiative	East Boston
7)	Shirley-Eustis House	History Roxbury Orchard Project	Roxbury
8)	Children's AIDS Program	Imani Community Garden for Children and Families	Mattapan
9)	Food Project	West Cottage Street Sustainable Development Initiative	Roxbury
10)	Greater Boston Food Bank	Community Composting Network	Boston
11)	The Nonquit Street Neighborhood Association and Land Trust, Inc.	The Nonquit Street Green	Dorchester
12)	Boston Parks and Recreation Department/Urban Wilds Initiative	Condor Street Beach Urban Wild Restoration	East Boston
13)	Suffolk County Conservation District	Urban Forestry and Gardening Through Effective Collaboration	Mattapan, Roxbury, Dorchester

1. Youth Action to Enhance Roxbury's Environmental Resources

Alternatives for Community & Environment
Warren Goldstein-Gelb
2343 Washington Street, 2nd Floor
Roxbury, MA 02119
Phone (617) 442-3343; Fax (617) 442-2425

Total: $ 98,825

Funding Authority:
USDA-Forest Service

Technical Assistance Liaison:

Location:	Roxbury
Grant Amount:	$ 30,000
Matching:	$ 68,825

Project Status:
Active

Project Description:
Building on the success of youth action at two sites in Roxbury (Dudley and John Eliot Square traffic islands), the Roxbury Environmental Empowerment Project (REEP) will educate youth about erosion, impervious surfaces, and the connections between land use and air quality. REEP will also support youth internships to build the capacity of the next generation of urban leaders to be proponents and stewards of natural resources in the urban environment.

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2. Schoolyard Arboretum Pilot Project

Boston Schoolyard Initiative
Kirk Meyer
c/o The Boston Foundation
One Boston Place, 24th Floor
Boston, MA 02108

Total: $ 34,000

Funding Authority:
USDA-Forest Service

Technical Assistance Liaison:

Location:	Project site to be determined
Grant Amount:	$ 15,000
Matching:	$ 19,000

Project Status:
Active

Project Description:
The Initiative will work with the Arnold Arboretum to create a model for incorporating meaningful educational endeavors into the design of a schoolyard arboretum. Further, the project would support an ongoing program that would continue to use the school grounds for educational purposes, by preparing teachers to implement a yearlong study of trees into their curriculum. The site for this project will be a schoolyard, in a low-income neighborhood or a community of color, chosen by the Initiative.

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3. Chelsea Creek Action Group

A coalition of: East Boston Ecumenical Community Council (EBECC), Neighborhood of Affordable Housing (NOAH), Chelsea Green Space and Recreation Committee (CGRS)

Kevin Whalen, EBECC
28 Paris St., East Boston, MA 02128
Phone (617) 567-2750; Fax: (617) 569-5946
Stacy Chacker, NOAH
22 Paris Street, East Boston, MA 02128
Phone (617) 569-0059 x-13; Fax (617) 569-2007
Gladys Vega, CGRS
300 Broadway, Chelsea, MA 02150
Phone (617) 889-6080; Fax (617) 889-0559

Location: Chelsea and East Boston
Grant Amount: $ 50,000
Matching: $ 50,000
Total: $ 100,000

Funding Authority:
USDA-Forest Service

Technical Assistance Liaison:
Ken Fields, BSC Group; Indira Balkissoon, Environmental Protection Agency; Charlie Lord, Watershed Institute; Tim Smith, City of Boston Parks and Recreation Department; Richard McGuiness, City of Boston Environment Department; Maria Van Dusen, MA Department of Fish, Wildlife, and Environmental Law Enforcement; Andrew Klein

Project Status:
Active

Project Description:
CCAG will coordinate the implementation of specific projects being undertaken by community groups in the watershed. This implementation phase pushes the community into planning and realizing a sustainable vision for the area.

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4. Rainbow Stewards

Eagle Eye Institute
Anthony Sanchez
1 Summer Streeet
Somerville, Ma. 02143
Phone (617) 666-5222

Location: Somerville
Grant Amount: $ 22,500
Matching: $ 26,525
Total: $ 49,025

Funding Authority:
USDA-Forest Service

Technical Assistance Liaison:
Edith Makra, MA Department of Environmental Management

Project Status:
Active

Project Description:
The project will recruit participants and direct natural resource professionals to train Stewards in tree identification, determination of a tree's health, tree climbing, maintenance, and proper pruning techniques. Youth of color will learn about urban natural resources preservation and enhancement and assist City of Somerville with data collection for a GIS system

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5. Native and Edible Plants and Erosion Control Project at Warren Gardens Housing Cooperative

EarthWorks Projects
Maurice Loiselle
46 Chestnut Avenue
Jamaica Plain, MA 02130
Phone/Fax: (617) 983-9463

Location: Roxbury, Dorchester
Grant Amount: $ 35,000
Matching: $ 35,432
Total: $ 70,432

Funding Authority:
USDA-Forest Service and USDA-Natural Resources Conservation Service

Technical Assistance Liaison:

Tim Smith, City of Boston Parks and Recreation Department

Project Status:
Active

Project Description:
At the Warren Gardens Housing Cooperative in Roxbury, EarthWorks Projects will reconstruct paths/edges with 200 trees and plant 100 native trees. Boston youth, as well as Cooperative residents and staff will participate in the completion and maintenance of the project.

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6. East Boston Schoolyard Initiative Program

Neighborhood of Affordable Housing (NOAH)
Stacey Chacker
22 Paris Street
East Boston, MA 02128
Phone (617) 569-0059; Fax (617) 569-2007

Total: $ 10,898

Funding Authority:
USDA-Forest Service

Technical Assistance Liaison:

Location:	East Boston
Grant Amount:	$ 5,000
Matching:	$ 5,898

Project Status:
Active

Project Description:
NOAH will coordinate a regular environmental education program with Boston Urban Gardeners (BUG) at the O'Donnell Elementary School, and occasionally three other schools. BUG will work with the 1st, 2nd, and 4th grads (approximately 100 students) as students will learn about enhancing soil quality, caring for trees, composting, water conservation, growing plants, and other natural resources. In the winter, BUG will have GrowLabs to use as an educational tool.

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7. Historic Roxbury Orchard Project

Shirley-Eustis House Association
Tamsen George
33 Shirley Street
Roxbury, MA 02119
Phone (617) ; Fax (617)

Total: $ 30,000

Funding Authority:
USDA-Forest Service

Technical Assistance Liaison:

Location:	Roxbury
Grant Amount:	$ 15,000
Matching:	$ 15,000

Project Status:
Active

Project Description:
At a historic home in Roxbury, the project will embark upon a 2-year planting and maintenance project working in partnership with other organizations to install a 27+ tree orchard.

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8. The Imani Community

Children's AIDS Program
Martha Vibbert
253 River Street
Mattapan, MA 02126
Phone (617) ; Fax (617)

Location:	Mattapan
Grant Amount:	$ 15,000
Matching:	$ 18,080
Total:	$ 33,080

Funding Authority:
USDA-Natural Resources Conservation Service

Technical Assistance Liaison:

Project Status:
Active

Project Description:
This project will expand a garden used for outdoor education and therapy by 150% to 36' x 24' in order to increase space for planting beds and increase the number of containers for gardening to provide handicapped children greater access to gardening activities. In addition to improving the general landscape of the area, classes will be taught regarding natural resources conservation.

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9. West Cottage Street Sustainable Development Initiative

The Food Project, Inc
Pat Gray
P.O. Box 705, Lincoln, MA 01773
Phone (781) 259-8621; Fax (781) 259-9659

Location:	Roxbury
Grant Amount:	$ 1,600
Match:	$ 1,600
Total:	$ 3,200

Funding Authority:
Natural Resources Conservation Service

Technical Assistance Liaison:
Marc MacQueen, Natural Resources and Conservation Service

Project Status:
Active

Project Description:
As part of the continuing cleanup and reivtalization of the Dudley Street neighborhood, the Food Project will work at their West Cottage street site to plant an urban orchard, various ground covers and install fence.

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10. The Boston Composting Project

Greater Boston Food Bank
Karen Kraut
99 Atkinson Street
Boston, MA 02118-2701
Phone (617) ; Fax (617)

Location:	Greater Boston
Grant Amount:	$ 28,420
Matching:	$ 33,250
Total:	$ 61,670

Funding Authority:
USDA-Natural Resources Conservation Service

Technical Assistance Liaison:

Project Status:
Active

Project Description:
A broad partnership of food waste generators, academics, private sector composting businesses, various non-profits, and others, will develop and implement an urban composting system. This system is anticipated to go from in-house waste collection to delivery to improved composting techniques in a space limited urban area.

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11. Nonquit Street Green

Nonquit Street Neighborhood Association and Land Trust, Inc.
Ruth Clarke
21 Nonquit Street, Box 255410
Dorchester, MA 02125-5410
Phone (617) ; Fax (617)

Location:	Dorchester
Grant Amount:	$ 10,000
Matching:	$ 10,000
Total:	$ 20,000

Funding Authority:
USDA-Natural Resources Conservation Service

Technical Assistance Liaison:
John Berg, City of Boston Department of Neighborhood Development

Project Status:
Active

Project Description:
On a 13,000 square feet vacant lot in the Uphams Corner area of Dorchester, the project will install plantings. During Fall 1999, construction funded by the city of Boston Department of Neighborhood Development, and others, will begin on the site.

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12. Condor Street Beach Urban Wild Restoration Project

City of Boston Parks and Recreation Department
Tim Smith
1010 Massachusetts Avenue
Boston, MA 02118
Phone (617) ; Fax (617)

Location:	East Boston
Grant Amount:	$ 25,000
Matching:	$ 25,000
Total:	$ 50,000

Funding Authority:
USDA-Natural Resources Conservation Service

Technical Assistance Liaison:
Ken Fields, BSCGroup; Richard McGuinness, City of Boston Environment Department; Stacey Chacker, Neighborhood of Affordable Housing; Charlie Lord, Watershed Institute

Project Status:
Active

Project Description:
At a 4-acre urban wild bordering the Chelsea River, the City of Boston will create a passive recreation area. In order to reduce site erosion and restore the natural habitat, the project will plant approximately 5,000 native species plants.

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13. Urban Forestry and Gardening Through Effective Collaboration
Suffolk County Conservation District
Matthew Goode
1A Highland Street
Roxbury, MA 02119
Phone (617) ; Fax (617)

Location:	Mattapan, Dorchester, Roxbury
Grant Amount:	$ 35,000
Matching:	$ 45,700
Total:	$ 80,700

Funding Authority:
USDA-Natural Resources Conservation Service

Technical Assistance Liaison:
Marc MacQueen, USDA-Natural Resources Conservation Service

Project Status:
Active
Project Description:
The project will work with Boston Nature Center (BNC) gardeners to improve growing practices via education and training. The project will also coordinate bulk seed purchase and growing of seedlings, as well as conduct mentoring sessions regarding composting, fertilizing, insect control.

FINANCIAL STATEMENTS

Operating Budget, 6/25/98-6/24/99

Budget Category	Proposed Federal*	Actual Federal	Balance	Proposed Match**	Actual Match	Balance
Personnel						
Director's Salary	$ 40,000.00	$ 40,098.76	$ (98.76)	$ -		
Director's Fringe @ 24.46%	$ -	$ -	$ -	$ 9,808.16	$ 9,808.16	$ -
Intern/Assistant	$ -	$ -	$ -	$ 7,500	$ 5,000.00	$ -
Non-federal staff	$ -	$ -	$ -	$ -	$ 26,000.00	$ -
Support Staff	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal	**$ 40,000.00**	**$ 40,098.76**	**$ (98.76)**	**$ 17,308**	**$ 40,808.16**	**$ -**
Supplies						
Space	$ -	$ -	$ -	$ -	$ -	$ -
Telephone	$ -	$ -	$ -	$ 1,000	$ 1,000.00	$ -
Equipment	$ -	$ -	$ -	$ 500	$ 500.00	$ -
Misc. Supplies	$ 2,500.00	$ 566.99	$ 1,933.01	$ 1,000	$ 1,000.00	$ -
Postage	$ -	$ -	$ -	$ 500	$ 500.00	$ -
Copying/printing	$ -	$ -	$ -	$ 1,000	$ 1,000.00	$ -
Subtotal	**$ 2,500.00**	**$ 566.99**	**$ 1,933.01**	**$ 4,000**	**$ 4,000.00**	$ -
Travel						
URP Annual Meeting	$ 1,000.00	$ 716.98	$ 283.02	$ -	$ -	$ -
Local Travel	$ 500.00	$ 113.00	$ 387.00	$ -	$ -	$ -
Subtotal	**$ 1,500.00**	**$ 829.98**	**$ 670.02**	$ -	$ -	$ -
Contractual						
Facilitation	$ 1,000.00	$ 1,000.00	$ -	$ -	$ -	$ -
Subtotal	**$ 1,000.00**	**$ 1,000.00**	$ -	$ -	$ -	$ -
GB-URP Program						
Re-granting funds***	$ 265,000.00	$ 257,478.19	$ 7,521.81	$ 265,000.00	$ 265,000.00	
Subtotal	$ 265,000.00	**$ 257,478.19**	**$ 7,521.81**	$ 265,000.00	**$ 265,000.00**	
COLUMN TOTALS	**$310,000.00**	**$299,973.92**	**$10,026.08**	**$286,308.16**	**$309,808.16**	**$ -**
* Includes NRCS, FS, and EPA contributions, ** Non-federal (cash or in-kind), ***Includes rollover from previous years' balance						
Revenue						
FS and NRCS staff/program support	$ 35,000.00	$ 35,000.00	$ -	$ -	$ -	$ -
FS and NRCS grant funds	$ 265,000.00	$ 265,000.00	$ -	$ -	$ -	$ -
FS and NRCS rollover from previous years	$ 22,521.81	$ 22,521.81	$ -	$ -	$ -	$ -
EPA contribution	$ 10,000.00	$ 10,000.00	$ -	$ -	$ -	$ -
Project match (1:1)	$ -	$ -	$ -	$ 265,000.00	$ 265,000.00	$ -
City of Boston	$ -	$ -	$ -	$ 13,600.00	$ 44,808.16	$ 31,208.16
Intern (Umass Boston and JFK KSG)	$ -	$ -	$ -	$ 7,500.00	$ 5,000.00	$ (2,500.00)
COLUMN TOTALS	**$ 332,521.81**	**$332,521.81**	$ -	**$ 286,100.00**	**$ 314,808.16**	**$ 28,708.16**
Excess (Deficit)	$ 22,521.81	$ 32,547.89	$ -	$ (208.16)	$ 5,000.00	

RE-GRANTING PROGRAM: YEARLY SUMMARIES

1997-1998 Grants

	Organization	*Project Name*	*Neighborhood or City*	*Funding Authority*	*Project Status*	*URP Award*	*Match*	*Total*
1)	Mt Calvary Church	A Church Based Environmental Stewardship Program	Dorchester/ Mattapan	USDA-FS	Active	$7,500.00	$7,500.00	$15,000.00
2)	S. End/Lower Roxbury Land Trust	Bessie Barnes Garden Extension	South End/Lower Roxbury	USDA-FS	Active	$5,000.00	$7,954.00	$12,954.00
3)	Chelsea Creek Action Group	Chelsea Creek, A Boston URP Pilot Project	East Boston	USDA-FS	Complete	$75,000.00	$87,120.00	$162,120.00
4)	Boston Natural Areas Fund	Community Garden and Neponset River Access	Mattapan	USDA-FS	Complete	$15,000.00	$38,600.00	$53,600.00
5)	Boston Urban Gardeners	Fields Corner Open Space Renovation	Dorchester	USDA-FS	Complete	$10,000.00	$73,440.00	$83,440.00
6)	Save the Harbor/Save the Bay	Harbor Vision Crew 1998	Roxbury/Dorchester/ East Boston	USDA-FS	Complete	$5,000.00	$39,874.00	$44,874.00
7)	EarthWorks	Historic Fruit Orchard and Demo Orchard Proj	Mattapan	USDA-FS	Complete	$7,500.00	$19,175.00	$26,675.00
8)	Food Project	Lots of Growth	Roxbury	USDA-FS	Complete	$15,000.00	$15,000.00	$30,000.00
9)	Youth Build	Youth Build Garden Project	Roxbury	USDA-FS	Complete	$10,000.00	$26,519.00	$36,519.00
10)	City of Boston Environment Department	GB-URP Operating/Admin	Greater Boston	USDA-FS, US-EPA, City of Boston Environment Department	Complete	$0.00	$0.00	$0.00
		Total '97 - '98				**$150,000.00**	**$315,182.00**	**$465,182.00**

1998-1999 Grants

	Organization	Project Name	Neighborhood or City	Funding Authority	Project Status	URP Award	Match	Total
1)	Food Project	Safe Food from Langdon Street	Roxbury	USDA-NRCS	Active	$25,000.00	$34,469.00	$59,469.00
2)	Boston Urban Gardeners	Community Land Management and Restoration	Dorchester/Roxbury	USDA-NRCS	Active	$17,202.19	$25,664.34	$42,866.53
3)	Egleston Social Action Committee	The Peace Garden	Roxbury	USDA-NRCS	Active	$26,576.00	$41,955.00	$68,531.00
4)	Chelsea Creek Action Group	Chelsea Creek Action Group	East Boston	USDA-FS	Active	$100,000.00	$116,330.00	$216,330.00
5)	Edward L. Cooper Senior Community Gardening and Education Center	Cooper Greenhouse	Roxbury	USDA-NRCS	Active	$25,000.00	$25,000.00	$50,000.00
6)	Chelsea Community Connections	Chelsea Community Gardening and Education Project	Chelsea	USDA-NRCS	Active	$20,000.00	$20,425.00	$40,425.00
7)	Somerville Public Schools	Water in the City	Somerville	USDA-NRCS	Active	$16,200.00	$16,200.00	$32,400.00
8)	Earthworks	Historic Fruit and Orchard Demonstration Project	Mattapan	USDA-FS	Active	$27,500.00	$32,747.00	$60,247.00
9)	City of Boston Environment Department	GB-URP Operating/Admin	Greater Boston	USDA-FS and - NRCS, US-EPA, City of Boston Environment Department	Active	$45,000.00	$45,000.00	$90,000.00
		Total '98 - '99				**$302,478.19**	**$357,790.34**	**$660,268.53**

1999-2000 Grants

	Organization	*Project Name*	*Neighborhood or City*	*Funding Authority*	*Project Status*	*URP Award*	*Match*	*Total*
1)	The Nonquit Street Neighborhood Association and Land Trust, Inc.	The Nonquit Street Green	Dorchester	USDA-NRCS	Active	$10,000.00	$10,000.00	$20,000.00
2)	EarthWorks Projects	Native and Edible Demonstration Projects	Roxbury/Dorchester	USDA-NRCS and -FS	Active	$35,000.00	$35,432.00	$70,432.00
3)	Boston Parks and Recreation Department/Urban Wilds Initiative	Condor Street Beach Urban Wild Restoration	East Boston	USDA-NRCS	Active	$25,000.00	$25,000.00	$50,000.00
4)	Greater Boston Food Bank	Community Composting Network	Boston	USDA-NRCS	Active	$28,420.00	$33,250.00	$61,670.00
5)	Children's AIDS Program	Imani Community Garden for Children and Families	Mattapan	USDA-NRCS	Active	$15,000.00	$18,080.00	$33,080.00
6)	Food Project	West Cottage Street Sustainable Development Initiative	Roxbury	USDA-NRCS	Active	$1,600.00	$1,600.00	$3,200.00
7)	Neigborhood of Affordable Housing	East Boston Schoolyard Initiative	East Boston	USDA-FS	Active	$5,000.00	$5,898.00	$10,898.00
8)	Suffolk County Conservation District	Urban Forestry and Gardening Through Effective Collaboration	Mattapan, Roxbury, Dorchester	USDA-NRCS	Active	$35,000.00	$45,700.00	$80,700.00
9)	Eagle Eye Institute	Rainbow Stewards Program	Somerville	USDA-FS	Active	$22,500.00	$26,525.00	$49,025.00
10)	Shirley-Eustis House	History Roxbury Orchard Project	Roxbury	USDA-FS	Active	$15,000.00	$15,000.00	$30,000.00
11)	Chelsea Human Services Collaborative	Chelsea Creek Action Group	Chelsea and East Boston	USDA-FS	Active	$50,000.00	$50,000.00	$100,000.00
12)	Boston Schoolyard Funders Collaborative	Green Schoolyards: Planting the Seeds of Environmental Stewardship	Boston	USDA-FS	Active	$15,000.00	$19,000.00	$34,000.00
13)	Alternatives for Community and Environment	Youth Action to Enhance Roxbury's Environmental Resources	Roxbury	USDA-FS	Active	$30,000.00	$68,825.00	$98,825.00
14)	City of Boston Environment Department	GB-URP Operating/Admin	Greater Boston	USDA-FS and -NRCS, US-EPA, City of Boston Environment Department	Active	$57,250.00	$45,000.00	$102,250.00
		Total '99 - '00				**$344,770.00**	**$399,310.00**	**$744,080.00**

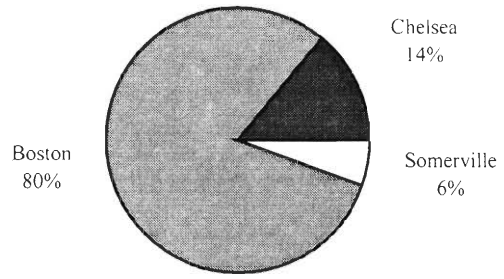
1995 – 1999
Budget Summary

Cumulative GB-URP Budget 1997-2000	$797,248.19
Cumulative Match	$1,072,282.34
Cumulative Project Amount	$1,869,530.53
Cumulative Community Grants	$694,998.19
Percent of Cumulative Budget for GB-URP Operating/Admin Costs	13%

Cumulative GB-URP Awards by municipality:

Municipality	Project award	% of Cumulative Community Grants
Boston	$560,298.19	81%
Chelsea	$96,000.00	14%
Somerville	$38,700.00	6%

Cumulative GB-URP Awards by Municipality



GB-URP PARTNERS AND OFFICERS

GB-URP Partners

Local Non-Profit

1. Chelsea Community Connections Coalition
2. Chelsea Greenspace and Recreation Committee
3. Chelsea Human Services Collaborative
4. EarthWorks Projects
5. East Boston Recreation, Master Planning, Land Use Advisory Council
6. Neighborhood of Affordable Housing
7. STRIVE/Boston Employment Service, Inc.

Regional Non-Profit

8. Appalachian Mountain Club
9. Boston GreenSpace Alliance
10. Boston Natural Areas Fund, Inc.
11. Boston Schoolyard Funders Collaborative
12. Community Outreach Group, Inc.
13. Environmental League of Massachusetts
14. Garden Futures
15. Save the Harbor/Save the Bay
16. The Food Project
17. The Watershed Institute

Private Sector

18. Andrew Klein, P.E., Environmental Engineer
19. The BSC Group
20. DJT Enterprises
21. Greenleaf Composting
22. Jennifer McGraw (Policy analyst)
23. The Synergy Organization, Inc.

Academic

24. Roxbury Community College, Center for Environmental Education
25. UMass Boston, Urban Harbors Institute

Local Government

26. City of Boston Environment Department,
27. City of Boston Parks and Recreation Department
28. City of Boston Sustainable Boston Initiative
29. City of Boston Department of Neighborhood Development
30. City of Somerville Department of Public Works

State Government

31. Massachusetts Bays Program
32. Massachusetts Coastal Zone Management Program
33. Massachusetts Department Fisheries, Wildlife and Environmental Law Enforcement
34. Massachusetts Department of Environmental Management – Urban Forestry Program
35. Metropolitan Area Planning Council

Federal Government

36. US Department of Agriculture-Forest Service
37. US Department of Agriculture-Natural Resources Conservation Service
38. US Environmental Protection Agency, Region 1 – Urban Environmental Initiative
39. US Department of Housing and Urban Development

GB-URP Executive Committee

Chair:	Indira Balkissoon (Environmental Protection Agency)
Co-chair:	Maria Van Dusen (MA Riverways)
Treasurer:	Phillip Rodbell (Department of Environmental Management)
Clerk:	Marc MacQueen (Natural Resources and Conservation Service)
At Large:	Edith G. De Angelis (East Boston Resident)
At Large:	Bryan Glascock (City of Boston, Environment Department)
At Large:	Tom Melone (Housing and Urban Development)
At Large:	Betsy Johnson (Garden Futures)
At Large:	Ken Fields (BSCGroup)
At Large:	Ed Marakovitz (Chelsea Human Services Collaborative)