

Boston University Charles River Campus 2012-2022 Institutional Master Plan

August 10, 2012

Submitted by **Trustees of Boston University** Submitted to **Boston Redevelopment Authority** Prepared by **Fort Point Associates, Inc.** in association with: **CBT Architects Greenberg Consultants, Inc. Tetra Tech**



TABLE OF CONTENTS

EXECUTIVE SUMMARY

CHAPTER 1: INTRODUCTION

1.1	CAMPU	US HISTORY AND BACKGROUND	1-1
1.2	UNIVE	RSITY VALUES, MISSION, AND GOALS	1-3
1.3	2012-2	2022 INSTITUTIONAL MASTER PLAN	1-4
1	.3.1	PROGRESS SINCE THE LAST INSTITUTIONAL MASTER PLAN	1-5
1.4	MASTE	R PLANNING PROCESS	1-8
1	.4.1	BOSTON UNIVERSITY COMMUNITY TASK FORCE	1-8
1	.4.2	INSTITUTIONAL MASTER PLAN PROJECT TEAM	1-9

CHAPTER 2: CAMPUS DEMOGRAPHICS

2.1	INTRO	DUCTION	2-1
2.2	STUDE	NT POPULATION	2-1
2	.2.1	HISTORICAL ENROLLMENT TRENDS	2-1
2	.2.2	CURRENT POPULATION	2-2
2	.2.3	FUTURE STUDENT ENROLLMENT PROJECTIONS	2-3
2.3	EMPLC	DYMENT	2-3
2	.3.1	PROJECTED EMPLOYMENT FIGURES	2-5

CHAPTER 3: EXISTING PROPERTY AND USES

3.1	INTRODUCTION	3-1
3.2	RESIDENTIAL PROPERTIES	3-2
3.3	ACADEMIC, ADMINISTRATIVE, AND OTHER PROPERTIES	3-8

CHAPTER 4: PLANNING AND URBAN DESIGN

4.1	HISTO	RICAL CONTEXT	1
4.2	NEIGH	IBORHOOD CONTEXT	3
4.3	TRANS	SPORTATION CONTEXT	8
4.4	FRAM	EWORK AND VISION: CHARLES RIVER CAMPUS	0
4	.4.1	CENTRAL CAMPUS4-1	1
4	.4.2	SOUTH CAMPUS	2
4	.4.3	EAST CAMPUS	2
4	.4.4	WEST CAMPUS	7
4	.4.5	COMMONWEALTH LANDING	7
4.5	URBA	N DESIGN PRINCIPLES	7
4	.5.1	MIXED-USE, HIGH-DENSITY URBAN CAMPUS MASSING AND URBAN	
		INFILL	7
4	.5.2	FORGING NORTH-SOUTH CONNECTIONS/RECONNECTING TO THE CHARLES RIVER	
4	.5.3	ENHANCING THE PUBLIC REALM	8
4	.5.4	FUTURE INFRASTRUCTURE PLANNING AND ITS RELATIONSHIP TO CAMPUS PLANNING	0
4.6		IONSHIP OF PROPOSED INSTITUTIONAL PROJECTS TO URBAN DESIGN IPLES	1
4	.6.1	STUDENT VILLAGE RESIDENCE III (SITE AA)	1
4	.6.2	BOSTON UNIVERSITY SCHOOL OF LAW (SITE BB)	1
4	.6.3	ACADEMIC BUILDINGS (SITE CC)	2
4	.6.4	ACADEMIC BUILDING ADDITION (SITE DD)	3
4	.6.5	SCIENCE AND ENGINEERING RESEARCH BUILDING (SITE EE)	3
4	.6.6	ACADEMIC/ADMINISTRATIVE BUILDING (SITE FF)	4
4	.6.7	MYLES STANDISH AND MYLES STANDISH ANNEX RESIDENCE HALL REHABILITATION (SITE GG)	5

CHAPTER 5: DEVELOPMENT PROGRAM

5.1	INTRO	DDUCTION	. 5-1
5.2	ACAE	DEMIC FACILITIES	. 5-1
5	.2.1	BOSTON UNIVERSITY SCHOOL OF LAW (SITE BB)	. 5-1
5	.2.2	ACADEMIC BUILDING (SITE CC)	. 5-2
5	.2.3	ACADEMIC/ADMINISTRATIVE BUILDING (SITE FF)	. 5-3
5	.2.4	ACADEMIC BUILDING ADDITION (SITE DD)	. 5-3

5.3	RESEA	RCH FACILITIES	5-4
5.	.3.1	SCIENCE AND ENGINEERING RESEARCH BUILDING (SITE EE)	5-4
5.4	STUD	ENT HOUSING	5-5
5.	.4.1	STUDENT VILLAGE RESIDENCE III (SITE AA)	5-5
5.	.4.2	MYLES STANDISH RESIDENCE HALL AND MYLES STANDISH ANNEX Rehabilitation (site GG)	5-5
5.5	PUBLI	C REALM AND OPEN SPACE	5-6
5.	.5.1	BAY STATE ROAD/BEACON STREET POCKET PARK	5-6
5.	.5.2	COMMONWEALTH AVENUE PHASE 1A IMPROVEMENTS	5-6
5.	.5.3	COMMONWEALTH AVENUE PHASE 2A IMPROVEMENTS	5-7
5.	.5.4	COMMONWEALTH AVENUE AREA AT BU BRIDGE	5-7
5.	.5.5	CUMMINGTON PEDESTRIAN MALL	5-7
5.	.5.6	GRANBY STREET TO SILBER WAY PEDESTRIAN WAY	5-8
5.	.5.7	GRANBY STREET POCKET PARK	5-8
5.6	PROJE	CT PLANNING	5-8
5.7	ZONI	NG	5-9
5.	.7.1	GROUNDWATER CONSERVATION OVERLAY DISTRICT	5-10
5.	.7.2	RESTRICTED PARKING OVERLAY DISTRICT	5-11
5.	.7.3	ARTICLE 37 GREEN BUILDINGS	5-11
5.	.7.4	GREENBELT PROTECTION OVERLAY DISTRICT	5-12
5.	.7.5	NEIGHBORHOOD DESIGN OVERLAY DISTRICT	5-12
5.	.7.6	BAY STATE ROAD/BACK BAY WEST ARCHITECTURAL CONSERVATION DISTRICT	5-13
5.8	POTEN	NTIAL DEVELOPMENT SITES	5-13

CHAPTER 6: STUDENT HOUSING PLAN

6.1	MISSIC	DN	6-1
6.2	UNDE	RGRADUATES LIVING ON CAMPUS	6-1
6.3	UNDE	RGRADUATES LIVING OFF CAMPUS	6-3
6.4	STUDE	NT HOUSING POLICIES	6-3
6	.4.1	RESIDENCY REQUIREMENTS	6-3
6	.4.2	ASSIGNMENT PROCESS	6-4
6	.4.3	SPECIAL RESIDENCY PROGRAMS	6-5
6.5	STUDE	NT HOUSING PLAN OVERVIEW	6-5

CHAPTER 7: UTILITIES AND INFRASTRUCTURE

7.1 INTRO	2-1 DUCTION
7.2 SANIT	TARY SEWER SYSTEM
7.2.1	SYSTEM-WIDE PLANNING WITH BWSC7-1
7.2.2	SEWER FLOW REDUCTION7-1
7.2.3	INFLOW/INFILTRATION REMOVAL7-2
7.3 WATE	ER SUPPLY SYSTEM
7.3.1	SYSTEM-WIDE PLANNING WITH BWSC7-3
7.3.2	WATER CONSERVATION
7.4 STOR	M DRAINAGE SYSTEM7-4
7.4.1	SYSTEM-WIDE PLANNING7-5
7.4.2	GROUNDWATER RECHARGE7-5
7.4.3	WATER QUALITY
7.4.4	CSO REMOVAL
7.5 ELECT	TRIC SERVICE DISTRIBUTION
7.5.1	NSTAR
7.5.2	CONSERVATION
7.5.3	THE CASE CENTER
7.5.4	FLUORESCENT RETROFITS
7.6 NATU	JRAL GAS DISTRIBUTION
7.6 NATU 7.6.1	JRAL GAS DISTRIBUTION
7.6.1	SYSTEM-WIDE PLANNING IN COORDINATION WITH NATIONAL GRID7-8
7.6.1 7.6.2	SYSTEM-WIDE PLANNING IN COORDINATION WITH NATIONAL GRID 7-8 CENTRAL PLANT: 767 COMMONWEALTH AVENUE
7.6.1 7.6.2 7.6.3 7.6.4	SYSTEM-WIDE PLANNING IN COORDINATION WITH NATIONAL GRID 7-8 CENTRAL PLANT: 767 COMMONWEALTH AVENUE
7.6.1 7.6.2 7.6.3 7.6.4 7.7 STEAN	SYSTEM-WIDE PLANNING IN COORDINATION WITH NATIONAL GRID7-8CENTRAL PLANT: 767 COMMONWEALTH AVENUE7-9STEAM GENERATION FACILITY: 10 BUICK STREET7-9610 BEACON STREET, 640 AND 730 COMMONWEALTH AVENUE7-9

CHAPTER 8: TRANSPORTATION

8.1	INTRO	DUCTION	8-1
8.2	TRANS	SPORTATION GOALS	8-1
8.	2.1	TRANSPORTATION GOAL #1	8-2
8.	2.2	TRANSPORTATION GOAL #2	8-2
8.	2.3	TRANSPORTATION GOAL #3	8-3

8.3	CAMP	US DEMOGRAPHIC CHARACTERISTICS
8.4	CAMP	US COMMUTING CHARACTERISTICS
8.5	EXISTI	NG TRANSPORTATION SYSTEM8-5
8	.5.1	TRAFFIC VOLUMES
8	.5.2	TRAFFIC OPERATIONS
8	.5.3	SAFETY
8	.5.4	PEDESTRIAN VOLUMES
8	.5.5	PEDESTRIAN FACILITIES
8	.5.6	BICYCLE VOLUMES
8	.5.7	BICYCLE STORAGE
8	.5.8	PUBLIC TRANSPORTATION
8	.5.9	BOSTON UNIVERSITY SHUTTLE
8	.5.10	ON-CAMPUS PARKING FACILITIES
8	.5.11	PARKING REGULATIONS AND POLICIES
8	.5.12	TRAFFIC MANAGEMENT FOR SPECIAL EVENTS
8.6	FUTUF	RE TRANSPORTATION SYSTEM
8	.6.1	INSTITUTIONAL/PUBLIC REALM PROJECTS
8	.6.2	ROADWAY NETWORK
8	.6.3	TRAFFIC OPERATIONS
8	.6.4	PEDESTRIANS
8	.6.5	BICYCLES
8	.6.6	PUBLIC TRANSPORTATION
8	.6.7	BOSTON UNIVERSITY SHUTTLE
8	.6.8	PARKING
8	.6.9	BUILDING SERVICES
8.7	MITIG	ATION/MEASURES TO ACHIEVE TRANSPORTATION GOALS
8	.7.1	TRANSPORTATION DEMAND MANAGEMENT/SUSTAINABILITY
8	.7.2	NEW TDM/PARKING STRATEGIES
8.8	SPECIA	AL EVENT MANAGEMENT
8	.8.1	AGGANIS ARENA EVENTS
8	.8.2	NEW BALANCE FIELD EVENTS
8	.8.3	OTHER CHARLES RIVER CAMPUS EVENTS

CHAPTER 9: SUSTAINABILITY

9.1	INTRC	DDUCTION	
9.2	LEADE	ERSHIP	
9	.2.1	PUBLIC OUTREACH AND COORDINATION WITH CITY AGENCIES	
9	.2.2	EDUCATION AND RESEARCH	
9.3	OPER/	ATIONS	
9	.3.1	CLIMATE & ENERGY	
9	.3.2	WATER CONSERVATION	
9	.3.3	SOLID WASTE REDUCTION AND RECYCLING	
9	.3.4	TRANSPORTATION	
9	.3.5	DINING SERVICES	
9	.3.6	MAINTENANCE	
9	.3.7	GREEN PURCHASING ACTIONS AND GUIDELINES	
9.4	NEW (CONSTRUCTION	
9.5	METRI	ICS	
9	.5.1	CLIMATE & ENERGY	
9	.5.2	WATER	
9	.5.3	WASTE REDUCTION AND RECYCLING	
9	.5.4	DINING SERVICES	
9	.5.5	TRANSPORTATION	
9	.5.6	GREEN BUILDINGS	
9	.5.7	PURCHASING	

CHAPTER 10: ECONOMIC IMPACT

10.1 INTRO	ODUCTION
10.1.1	ECONOMIC IMPACT CALCULATIONS 10-1
10.1.2	OTHER CONSIDERATIONS
10.2 THE E	30STON UNIVERSITY COMMUNITY IN MASSACHUSETTS
10.2.1	BOSTON UNIVERSITY EMPLOYEES 10-4
10.2.2	BOSTON UNIVERSITY STUDENTS 10-5
10.2.3	BOSTON UNIVERSITY ALUMNI
10.3 ECON	NOMIC IMPACT 10-7
10.3.1	BOSTON UNIVERSITY SPENDING
10.3.2	PURCHASES OF GOODS, SERVICES, AND CAPITAL EXPENDITURES 10-8
10.3.3	STUDENT AND OUT-OF-STATE VISITOR SPENDING

10.3.4	REGIONAL ECONOMIC DEVELOPMENT	10-11
10.3.5	DIRECT PAYMENTS AND SERVICES TO LOCAL COMMUNITIES	10-12
10.3.6	EMPLOYMENT IMPACT	10-13

CHAPTER 11: COMMUNITY BENEFITS

11.1 INTRODUCTION		
11.2 NEW /	AND ENHANCED COMMUNITY PROGRAMMING11-1	
11.2.1	THE BOSTON UNIVERSITY HEALTH, FITNESS, AND WELLNESS	
	PILOT PROGRAM11-2	
11.2.2	YOUTH ATHLETIC CAMP SCHOLARSHIPS 11-2	
11.2.3	EXPANDED ICE TIME FOR ALLSTON-BRIGHTON YOUTH HOCKEY 11-2	
11.3 ECON	OMIC IMPACT	
11.3.1	PAYMENT IN LIEU OF TAXES (PILOT) PROGRAM	
11.3.2	TRANSPORTATION IMPROVEMENTS	
11.3.3	SCHOLARSHIP AID11-5	
11.3.4	EDUCATIONAL PARTNERSHIPS	
	MUNITY PROGRAMS AND SERVICES PROVIDED BY BOSTON UNIVERSITY'S OLS AND COLLEGES	
11.4.1	SCHOOL OF MANAGEMENT	
11.4.2	GOLDMAN SCHOOL OF DENTAL MEDICINE	
11.4.3	SCHOOL OF LAW11-10	
11.4.4	SCHOOL OF MEDICINE	
11.4.5	COLLEGE OF ENGINEERING11-11	
11.4.6	COLLEGE OF COMMUNICATION	
11.4.7	SCHOOL OF EDUCATION	
11.4.8	SCHOOL OF PUBLIC HEALTH 11-13	
11.4.9	METROPOLITAN COLLEGE	
11.4.10	COLLEGE OF ARTS & SCIENCES 11-14	
11.4.11	COLLEGE OF FINE ARTS 11-15	
11.4.12	SCHOOL OF HOSPITALITY ADMINISTRATION	
11.4.13	COLLEGE OF GENERAL STUDIES	
11.5 COM	AUNITY PARTNERSHIPS	
11.5.1	BOSTON UNIVERSITY COMMUNITY GRANTS PROGRAM	

11.6 SPOR	IS AND RECREATIONAL PROGRAMS	
11.7 VOLU	NTEER SERVICE PROGRAMS	
11.8 CULTI	JRAL RESOURCES	
11.8.1	THE HUNTINGTON THEATRE COMPANY	
11.8.2	BOSTON YOUTH SYMPHONY ORCHESTRAS	
11.8.3	BOSTON UNIVERSITY CAMPUS CULTURAL EVENTS .	
11.8.4	CHARLES RIVER CAMPUS ART GALLERIES	
11.9 GOVE	RNMENT & COMMUNITY AFFAIRS	

APPENDICES

APPENDIX A: SOCIAL PROGRAMS AND SERVICES APPENDIX B: ECONOMIC RESEARCH METHODOLOGY

LIST OF TABLES

TABLE 1-1	PUBLIC MEETINGS1-9
TABLE 2-1	HISTORICAL FULL-TIME UNDERGRADUATE ENROLLMENT2-2
TABLE 2-2	FRESHMAN ADMISSIONS AND ENROLLMENT2-2
TABLE 2-3	FULL-TIME UNDERGRADUATE STUDENTS
TABLE 2-4	PROJECTED FULL-TIME UNDERGRADUATE ENROLLMENT2-3
TABLE 2-5	HISTORICAL EMPLOYMENT AT THE CHARLES RIVER CAMPUS2-4
TABLE 2-6	CHARLES RIVER CAMPUS BOSTON RESIDENT EMPLOYEES,
	NOVEMBER 2011
TABLE 2-7	ALL CHARLES RIVER CAMPUS EMPLOYEES, NOVEMBER 20112-4
TABLE 3-1	SUMMARY OF TABLES BY PROPERTY TYPE
TABLE 3-2	SUMMARY OF BOSTON UNIVERSITY PROPERTIES
TABLE 3-3	LARGE RESIDENCE HALLS
TABLE 3-4	SMALL RESIDENCE HALLS/APARTMENTS
TABLE 3-5	AUDUBON CIRCLE DORMITORIES NORTH OF BEACON STREET 3-6
TABLE 3-6	AUDUBON CIRCLE APARTMENTS NORTH OF BEACON STREET
TABLE 3-7	AUDUBON CIRCLE APARTMENTS SOUTH OF BEACON STREET
TABLE 3-8	ADMINISTRATIVE AND FACULTY RESIDENCES (BROOKLINE)
TABLE 3-9	ACADEMIC, ADMINISTRATIVE, AND OTHER PROPERTIES
TABLE 3-10	COMMERCIAL PROPERTIES IN KENMORE SQUARE
TABLE 6-1	STUDENT RESIDENCE BY LOCATION6-2
TABLE 6-2	STUDENTS HOUSED ON CAMPUS6-2
TABLE 6-3	FULL-TIME UNDERGRADUATES LIVING OFF CAMPUS6-3
TABLE 6-4	PROJECTED STUDENT ENROLLMENT6-6
TABLE 9-1	LEED CERTIFIABLE BUILDINGS ON CAMPUS9-16
TABLE 10-1	THE BOSTON UNIVERSITY COMMUNITY IN MASSACHUSETTS 10-4
TABLE 10-2	BOSTON UNIVERSITY STUDENT RESIDENCES
TABLE 10-3	SUMMARY OF BOSTON UNIVERSITY ECONOMIC IMPACT
TABLE 10-4	TOTAL WAGES AND BENEFITS 10-8
TABLE 10-5	BOSTON UNIVERSITY PURCHASES OF GOODS AND SERVICES 10-9
TABLE 10-6	SPENDING BY STUDENTS AND THEIR OUT-OF-STATE VISITORS 10-11

 BOSTON UNIVERSITY EMPLOYMENT IMPACT	TABLE 10-7
 EMPLOYMENT STATISTICS FOR EMPLOYEES LIVING IN MASSACHUSETTS	TABLE 10-8
 REAL ESTATE TAX AND PILOT PAYMENTS	TABLE 11-1
 SCHOLARSHIP AID	TABLE 11-2

LIST OF FIGURES

FIGURE 3-1	BOSTON UNIVERSITY PROPERTIES	15
FIGURE 4-1	BAY STATE ROAD AT GRANBY STREET, LOOKING WEST	4
FIGURE 4-2	BAY STATE ROAD AT DEERFIELD STREET 4	-4
FIGURE 4-3	VIEW LOOKING EAST AT KENMORE SQUARE	-5
FIGURE 4-4	LOOKING EAST ALONG THE SIDEWALK AT HOTEL COMMONWEALTH	
FIGURE 4-5	PARK DRIVE AT BEACON STREET, LOOKING SOUTH	
FIGURE 4-6	BEACON STREET AT ST. MARY'S STREET, LOOKING EAST	-6
FIGURE 4-7	GARDNER STREET AT CHESTER STREET, LOOKING WEST	-6
FIGURE 4-8	ASHFORD STREET AT ASHFORD TERRACE, LOOKING EAST	-6
FIGURE 4-9	VIEW OF CARLTON STREET, LOOKING SOUTHWEST FROM MOUNTFORT STREET	-7
FIGURE 4-10	COTTAGE FARM RESIDENCES, LOOKING EAST ALONG DUMMER STREET	-7
FIGURE 4-11	AERIAL VIEW LOOKING EAST	-7
FIGURE 4-12	VIEW OF THE CHARLES RIVER4	-7
FIGURE 4-13	CONSTRUCTION OF STORROW DRIVE4	-8
FIGURE 4-14	STORROW DRIVE AFTER CONSTRUCTION	-8
FIGURE 4-15	MASSACHUSETTS TURNPIKE AND COMMONWEALTH AVENUE DURING CONSTRUCTION OF THE CARLTON STREET OVERPASS 4	-9
FIGURE 4-16	VIEW LOOKING WEST AT THE MASSACHUSETTS TURNPIKE AND ADJACENT UNIVERSITY PROPERTIES FROM THE BEACON STREET BRIDGE	-9
FIGURE 4-17	CAMPUS GROWTH	10
FIGURE 4-18	EXISTING CAMPUS PRECINCTS	13
FIGURE 4-19	NEW CAMPUS PRECINCTS	15

FIGURE 4-20	PROPOSED MASSING FOR STUDENT VILLAGE RESIDENCE III AT
	SITE AA
FIGURE 4-21	PROPOSED MASSING FOR BOSTON UNIVERSITY SCHOOL OF LAW AT SITE BB
FIGURE 4-22	PROPOSED MASSING FOR ACADEMIC BUILDINGS AT SITE CC 4-22
FIGURE 4-23	PROPOSED MASSING FOR ACADEMIC BUILDING ADDITION AT
	SITE DD
FIGURE 4-24	PROPOSED MASSING FOR SCIENCE AND ENGINEERING RESEARCH BUILDING AT SITE EE
FIGURE 4-25	PROPOSED MASSING FOR ACADEMIC / ADMINISTRATION BUILDING AT SITE FF
FIGURE 4-26	PROPOSED MASSING FOR MYLES STANDISH REHABILITATION AT
	SITE GG

FIGURE 5-1	PROPOSED INSTITUTIONAL PROJECTS
FIGURE 5-2	PUBLIC REALM IMPROVEMENTS
FIGURE 5-3	POTENTIAL DEVELOPMENT SITES
FIGURE 8-1	HISTORICAL TRENDS OF MODAL SPLITS AT THE CHARLES RIVER CAMPUS
FIGURE 8-2	DAILY TRAFFIC VOLUME TRENDS ON COMMONWEALTH AVENUE 8-6
FIGURE 8-3A	COMMONWEALTH AVENUE STREETSCAPE PLAN
FIGURE 8-3B	COMMONWEALTH AVENUE STREETSCAPE PLAN
FIGURE 8-3C	COMMONWEALTH AVENUE STREETSCAPE PLAN
FIGURE 8-4	BOSTON UNIVERSITY BRIDGE CONCEPTUAL TRAFFIC PLAN
FIGURE 9-1	ENERGY CONSUMPTION9-4
FIGURE 9-2	WATER CONSERVATION
FIGURE 9-3	TOTAL WASTE AND DIVERSION AT THE CRC

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Boston University

Boston University's Charles River Campus, located in the heart of the city at the edge of Boston's Back Bay, is a vibrant, urban university community of nearly 48,000 students, faculty, and staff. The campus of 11.8 million square feet has state-of-the-art academic, research, residential, and student life facilities extending along a mile and a half of Commonwealth Avenue from Kenmore Square to Packard's Corner.

With 16 schools and colleges, the University offers students more than 250 programs of study in the liberal arts, science and engineering, health sciences, the arts, and other professional disciplines. Our nearly 33,500 students come from all over the globe and study around the world through study abroad programs offering opportunities in more than 75 programs in 25 countries. Many of these programs are based in facilities operated by Boston University, including campuses in London, Geneva, Sydney, and Shanghai.

Community Contributions

From President Lemuel Murlin's commitment in 1911 that Boston University be "in the heart of the city, in the service of the city" to President Robert Brown's 2006 inaugural address and affirmation that Boston University stand as a "great private research university in the heart of the city, engaged in the city and the world," Boston University's commitment and contributions to the community are long-standing and impressive. Some of the University's notable contributions include:

- Scholarship Aid Since 1973 the Boston Scholars Program has awarded more than \$139 million in scholarships to 1,800 students from the City of Boston. In 2011 alone, the University committed a total of \$13.2 million in scholarship money to more than 440 City of Boston students and employees.
- Educational Partnerships Step UP, BUILD (BU Initiative for Literacy Development), Upward Bound & Upward Bound Math Science, A+ Academy, and CityLab are examples of University-sponsored academic enrichment programs offered in partnership with the Boston Public Schools Collaborative.
- Community Service Tens of thousands of hours are devoted annually to community service programs each year by the Boston University community. Individual schools and colleges offer a wide array of community programs, resources, and services through classroom ("service learning") and research programs. Students and alumni volunteer their time and energy to dozens of programs such as the First-Year Student Outreach Project,

where incoming freshmen spend the first week of their college experience collectively performing 25,000 hours of community service in and around Boston.

• Economic Benefits – With an annual budget of more than \$2.1 billion, nearly 15,000 fulltime and part-time employees, and nearly 33,500 students, the University has an annual economic impact of \$3.87 billion, of which more than \$1.1 billion directly and indirectly, benefits the City of Boston.

Charles River Campus

Beginning with the purchase of 15 acres between the Charles River and Commonwealth Avenue in the 1920s, Boston University has grown with and served the City of Boston. In 1986, the University was the first educational institution in the City of Boston to implement an Institutional Master Plan in consultation with the community and the city. As shown in Figure ES-1, Campus Growth, the University has grown significantly over time and, importantly, has increased the density of the area to create a vibrant urban campus. Through the master planning process, the University has worked effectively with city, community, and other stakeholders in developing a campus that enhances and improves the public realm and meets the needs of the University and the community.

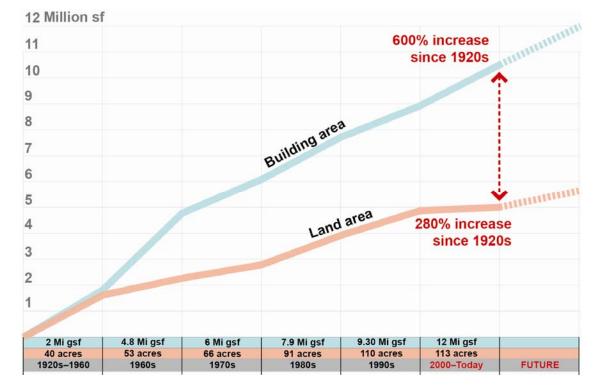


Figure ES-1, Campus Growth

Institutional Master Plan Projects

The Charles River Campus Institutional Master Plan for 2012 to 2022 includes seven (7) Proposed Institutional Master Plan Projects. Projects include the restoration of the existing Law School tower, development of new academic buildings in the Central and East Campus areas, the completion of the John Hancock Student Village on West Campus, renovation of undergraduate housing at Myles Standish Hall adjacent to Kenmore Square, and the replacement of aging research and teaching facilities in the Central Campus along Cummington Mall.

These proposed projects will be coupled with public realm improvements to create a safer and more pedestrian-oriented campus on both sides of Commonwealth Avenue and in the area of the Boston University Bridge. In total, these projects are expected to cost over \$750 million and will support thousands of construction jobs over the next decade, in addition to providing additional permanent positions.

The Boston University 2012-2022 Institutional Master Plan builds upon the success of earlier institutional master plans and the valuable assistance of the Boston University Community Task Force and City of Boston in crafting a future development framework for the campus. Boston University looks forward to working with the city and community as Proposed Institutional Projects take shape and progress through the public review and approval process over the coming decade.

Chapter 1

INTRODUCTION

CHAPTER 1: INTRODUCTION

1.1 CAMPUS HISTORY AND BACKGROUND

Boston University is the fourth-largest private nonprofit university in the nation, home each year to more than 33,000 students from all 50 states and 135 countries. The young, eager minds that descend on the University's 16 schools and colleges are guided and challenged by a distinguished roster of faculty that includes Nobel Prize winners, Pulitzer Prize recipients, former U.S. poets laureate, Guggenheim scholars, and the first biomedical engineer to receive a MacArthur Foundation "genius award." Boston University's professors and researchers are committed to a creative, interdisciplinary approach to problem solving, helping the University to become a leading global research institution backed by over \$356 million a year in sponsored program revenue. The University also offers more than 75 study abroad programs in 26 cities on 6 continents, and our students and faculty are dedicated to a range of community service activities around the country, as well as within our historic, dynamic, and endlessly fascinating home city of Boston.

Founded in 1839 when a group of laymen and ministers from Boston met in a church on Bromfield Street to lay plans for a Methodist seminary, Boston University began as the Newbury Biblical Institute in Vermont. The school then relocated to Concord, New Hampshire, and finally, in 1867, to Boston, where it was renamed the Boston Theological Seminary. Two years later, Dean William Fairfield Warren and three Boston philanthropists petitioned the Massachusetts legislature to grant a charter for a university in the City of Boston, and in 1869, Boston University, as it is known today, was formally established. The University's original commitment to social equality and inclusiveness, as articulated by its Methodist and abolitionist founders, not only found a home in the cosmopolitan environment of Boston, but has flourished here ever since.

The University has undergone dramatic physical and academic transformations since its 1867 rebirth in Boston. There was no campus to speak of during the first decades, but rather a scattering of University-owned and -leased buildings around Beacon Hill, downtown, and in the South End. Facilities were shared with nearby institutions such as the New England Conservatory of Music and the Massachusetts Institute of Technology. While the lack of a core campus was consistent with the University's original educational emphasis, which stressed graduate study and professional development over extracurricular involvement and student services, several schools and colleges were founded, and various properties were rehabilitated.

In 1920, the growing University shifted course and bought 15 acres of recently filled land between Commonwealth Avenue and the Charles River (from Granby Street on the east to present-day University Road on the west), establishing a physical and symbolic presence. The nationally renowned architectural firm Cram & Ferguson developed a master plan for the new campus, named the Charles River Campus, which was implemented through the World War II era. Though many elements of the plan were never realized, the influence of the original architectural philosophy is evident in the classically handsome campus buildings of Marsh Chapel, the College of Arts & Sciences, and the School of Theology along Commonwealth Avenue.

After World War II, the University saw a dramatic increase in enrollment. To keep pace with the burgeoning student population and the demand for new programs and services, the University witnessed several decades of tremendous physical expansion, during which a majority of the row houses on Bay State Road were acquired, as well as Braves Field and many of the commercial and industrial buildings along Commonwealth Avenue's "Auto Mile."

The Sert Complex, which includes the George Sherman Union, Mugar Memorial Library, and the Law School Tower, was built between 1962 and 1966 and marked another significant development at the Charles River Campus, along with the University's association with internationally renowned architect Josep Lluís Sert. In this same era, housing was constructed for the burgeoning student population, with more the 3,500 student beds provided in West Campus, at Warren Towers, and on Bay State Road. Boston University experienced a period of rapid physical and programmatic expansion between the 1980s and mid-1990s. The physical expansion during this era led to the development of several critically important research facilities and University initiatives, attracting top researchers in medicine, biomedical engineering, photonics, and other crucial areas. This evolution has helped to enhance not only the University's reputation as a center of innovation and enterprise, but Boston's, too. Boston University's positive influence on the physical environment is also evident in the dramatic improvements to Kenmore Square, which was once dominated by a disruptive nightclub scene and quality-of-life crimes. Hotel Commonwealth, owned and operated by the University, replaced the clubs and serves as an anchor to many successful businesses, bolstering the area economy and enhancing the student experience.

The trustees and administrators recognize the impact of undergraduate students on surrounding residential neighborhoods, and the construction of high-quality, on-campus housing has long been a top priority. In addition to continuous upgrades to existing housing stock, the University has constructed two new residential buildings at the John Hancock Student Village, which provide a total of 1,775 student beds.

Boston University has also actively pursued the development of its core campus, most notably through the construction of the School of Management, the Photonics Center, the Life Science & Engineering Building, and graduate student housing at 580 Commonwealth Avenue. With 16 schools and colleges across multiple campuses, the University is presently the largest of all private and public universities in New England.

1.2 UNIVERSITY VALUES, MISSION, AND GOALS

Since its founding, Boston University has been committed to equality of opportunity and opens its doors to all members of society, basing admission only on ability, regardless of religion, race, sex, or creed. The environment of tolerance that the founders established endures today. From the outset, women have been prominent on campus while, in the 1950s, more than half of all PhDs in religion and philosophy earned by African Americans in this country were awarded by Boston University. Martin Luther King, Jr. was among those students, and many of his most important papers reside in the University's archives.

Today, *The Princeton Review* ranks the University among the top-20 most tolerant universities in the nation, and among the most diverse. The tens of thousands of students who apply each year cite Boston University's diversity as one of its most compelling features, fostered in large part by the University's geography, which allows for a dynamic connection with the city and the world beyond. This tradition of practical engagement with the community at large is reflected in both the University's operations and curriculum. Students are enmeshed in the affairs of the community, not just by their presence in the city, but because of the substantial resources and programs devoted to community service. As President Lemuel Murlin said more than a century ago, Boston University is "in the heart of the city, in the service of the city."

In 2007, the trustees of Boston University approved a strategic plan initiated by current president, Robert A. Brown, to address the challenges and opportunities of the coming decade. All segments of the University community came together to identify issues central to strengthening programs and services in key areas. The strategic plan, called *Choosing to be Great*, articulates that the intellectual and cultural resources of Boston are important elements in the University's strength. The plan also emphasizes that upgrading the physical infrastructure of the campus is essential, not only enhancing the University's reputation, but for remaining operationally coordinated and retaining the best faculty and students.

1.3 2012–2022 INSTITUTIONAL MASTER PLAN

In recognition of the impact of institutional development on the community, colleges and universities in Boston are required under Article 80D of the Zoning Code to submit a comprehensive development plan to the Boston Redevelopment Authority (BRA) every 10 years. While Proposed Institutional Projects (PIP) are subject to further review individually, the Institutional Master Plan (IMP) allows the BRA to assess the collective impact and suitability of campus development programs. Boston University welcomes the city's participation in its development planning, viewing it as a chance to optimize its own plans and initiatives with the expertise of public agencies and to create a positive impact on the community.

Following a series of meetings with the Boston University Community Task Force and internal planning, Boston University submitted an Institutional Master Plan Notification Form (IMPNF) to the BRA in December 2011, outlining its goals for the IMP. As part of a highly transparent process, the IMPNF was subject to a lengthy comment period and garnered constructive feedback from the community, elected officials, and government agencies. On February 1, 2012, the BRA held a scoping session with public agencies; a community meeting followed, allowing for a productive conversation about the proposed IMP. On March 30, 2012, the BRA issued its Scoping Determination for the IMP to Boston University. Based on comments from the community and government agencies, the Scoping Determination serves to guide the planning process, highlighting the elements of concern to the city that should be addressed in the IMP. Once approved, the IMP will establish an Institutional Master Plan Area overlay zoning, allowing the University a greater degree of flexibility in its development program.

This IMP represents the collaborative efforts of the community, government agencies, elected officials, and Boston University. In response to the strategic plan's call to strengthen scholarship and research throughout the campus, expand and enhance the College of Arts & Sciences, and improve the residential campus and student life experience, the following Proposed Institutional Projects are included in the IMP:

- School of Law, 763–767 Commonwealth Avenue
- Academic Building Addition, 640 Commonwealth Avenue
- Academic/Administrative Building, 130 Bay State Road
- Academic Buildings, 645–665 Commonwealth Avenue
- Science and Engineering Research Building, 30–38 Cummington Mall
- Student Residence III, at John Hancock Student Village
- Myles Standish Hall and Annex Renovation, 610–632 Beacon Street

These projects support the vision outlined in the strategic plan and have been planned with careful attention to the complexities of student demographics and enrollment projections, property ownership, urban design and organizational concepts, program expansion, utility infrastructure, transportation, environmental sustainability, and the economic impact on the community at large. In accordance with the provisions of Article 80B Large Project Review and 80E Small Project Review, each of these projects will be subject to further detailed review as their individual project designs are advanced.

1.3.1 PROGRESS SINCE THE LAST INSTITUTIONAL MASTER PLAN

The 2003 IMP and 2010 IMP Amendment/Renewal for the Charles River Campus proposed many facility expansions and improvements to support the most urgent programmatic needs. The University is pleased that it has been able to implement many of the projects listed in its prior IMPs.

Academic Facilities

Life Science & Engineering Building at 24 Cummington Mall

Projections made in 1997 indicated that the bioengineering industry would triple in size within five years. The 2003 IMP documented the introduction of bioengineering to Boston University as the result of new faculty appointments. Since opening in 2005, the Life Science & Engineering Building has provided 42 cutting-edge research labs for the University's expanding programs. Its 188,500 square feet of space include approximately 47,000 square feet for cell molecular biology research and neurobiology, and 28,000 square feet for organic synthetic chemistry and biochemistry. In addition to administrative space for bioinformatics, the building provides research facilities for several faculty members from the Department of Biomedical Engineering and a computational lab for instruction and research. This expansion has enriched not only the University's goals for expanding groundbreaking research, but those of the city and region, which has become a national hub for biomedical engineering research.

School of Hospitality Administration at 928 Commonwealth Avenue, Brookline

The School of Hospitality Administration building opened in 2006 at 928 Commonwealth Avenue, providing a modern space for 400 students enrolled in the program. The innovative design reflects hotel elements, mirroring the ambience students can expect to find in their professional careers.

Administrative Facilities

Admissions Reception Center at 233 Bay State Road

The proposed rehabilitation and expansion of the former Hillel House at 233 Bay State Road is a response to the growing demand for student services and administrative space documented in the 2010 IMP Amendment Renewal. The building will house the Admissions Reception Center, currently located at 121 Bay State Road, in a fully accessible prospective student welcome center. Construction on the new facility is scheduled to commence in September 2012 and complete in the summer of 2013.

Student Life Facilities

Center for Student Services at 100 Bay State Road

Scheduled to open in August 2012, this building will enhance student services and replace dated dining facilities at several nearby student residences. This facility, with its state-of-the-art dining facility, LEED certification, and creative use of space, has encouraging support from the city and community. It was first proposed in the 2010 IMP Amendment/Renewal.

Student Housing

John Hancock Student Village at 915–925 Commonwealth Avenue

The John Hancock Student Village has been one of the most important and visible campus developments at the University in its history. The approved plan for development of the 10.2 acre site included housing for 2,300 students, indoor recreational facilities, an arena and convocation center, and parking for 1,000 cars. The first building at 10 Buick Street, opened in 2000, provides housing for 817 students. Subsequent developments include Agganis Arena (opened December 2004) and the Fitness & Recreation Center (opened March 2005). As part of the Agganis Arena project, 779 parking spaces were constructed.

Student Village Phase II at 33 Harry Agganis Way

The second phase of the John Hancock Student Village project represented a significant step towards the University's goal of increasing the number of undergraduate students housed on campus. Completed in August 2009, the residence at 33 Harry Agganis Way, Boston University's newest, accommodates 960 residents in two towers. Responding to surveys of student preference, the building includes a mix of single- and double-occupancy rooms in suite configurations, as well as a number of singles in apartment-style units.

Graduate Student Housing at 580 Commonwealth Avenue

The 2003 IMP documented the University's goal of adding units for graduate students to meet a need for housing proximate to the campus. The building at 580 Commonwealth Avenue has 220 on-campus units, in both studio and one-bedroom configurations.

Athletics

New Balance Field at 278 Babcock Street

The athletic field/parking structure at 278 Babcock Street was first proposed in the 2010 IMP Amendment. With only one general-purpose athletic field at Nickerson Field, the University has been under tremendous pressure to accommodate the growing demand for various intramural and intercollegiate programs, forcing some of its top-ranked teams to practice off campus. New Balance Field will primarily be used by the University's women's field hockey team, but will also be available for other intramural and intercollegiate uses. There will be structured parking below to maintain the existing parking. The redevelopment of this site, formerly a surface parking lot and warehouse, will continue the consolidation of the University's athletic facilities in the West Campus area. Construction of the facility is currently scheduled to commence in September 2012 with completion due in the summer of 2013.

Infrastructure Improvements

Phase I Improvements on Commonwealth Avenue

A highly successful public-private partnership between the University, the City of Boston's Department of Public Works, the Boston Transportation Department, and the state's Executive Office of Transportation has resulted in major safety, aesthetic, and transportation improvements to the portion of Commonwealth Avenue from Kenmore Square to the BU Bridge. These improvements were accomplished with the installation of wider sidewalks, street tree plantings, period streetlights, and articulated crosswalks. The removal of an unnecessary third travel lane allowed for the installation of the first bike lanes in the City of Boston. Boston University contributed funds toward the design and construction of this phase of improvements and provides ongoing maintenance of the plantings along the Commonwealth Avenue corridor.

Acquisition of Cummington, Hinsdale, and Blandford Streets

Boston University achieved a longtime goal in its 2012 acquisition of Cummington, Hinsdale, and Blandford Streets. University ownership and stewardship of this area will allow for the reconfiguration of several parcels and the eventual redevelopment of a pedestrian mall. This will be a significant improvement to the pedestrian experience, as well as the aesthetic quality of the campus.

1.4 MASTER PLANNING PROCESS

The development of a master plan for an institution as large and influential as Boston University is a major undertaking. The University has coordinated a process internally across various departments and externally across various city agencies, elected officials, and concerned citizens.

1.4.1 BOSTON UNIVERSITY COMMUNITY TASK FORCE

In 2011, the Boston University Community Task Force celebrated its 25th anniversary. In 1986, Boston University was the first institution in Boston to establish such a committee, and it has benefited from the diverse experience and perspectives of the committee's constituent members. The task force advises the city and University on the implementation of the University master plan. Representing an array of neighboring organizations, associations, and institutions, members are appointed by Mayor Thomas M. Menino. Members include:

1. Pamela Beale, Chair	9. Teri North
------------------------	---------------

2	2.	Sonia Aleman	10. Richard	Ong
2	2.	Sonia Aleman	10. Richard	On

- 3. Paul Berkeley 11. Shlomo Pinkas
- 4. Paul Creighton 12. Victor Theme
- 5. Dan Cuddy 13. Elizabeth Walsh
- 6. Jim Hynes 14. Bob Webber
- 7. Yvette Lancaster 15. Alan Weinberger
- 8. Archie Mazmanian

Since work began on the IMP in June 2011, there have been eight meetings of the Boston University Community Task Force, one of which was an advertised BRA community meeting. A representative of the BRA has been present at these meetings. Each Community Task Force meeting has focused on a different topic pertaining to the IMP. Table 1-1, Public Meetings summarizes these meetings.

Date	Group	Торіс
September 13, 2011	Community Task Force	IMP Overview
October 19, 2011	Community Task Force	Enrollment and Housing
November 16, 2011	Community Task Force	Transportation
January 19, 2012	Community Task Force	Proposed Institutional
		Projects
February 1, 2012	BRA Community Meeting/	IMPNF Comments
	BU Community Task Force	
March 6, 2012	Community Task Force	Sustainability
July 10, 2012	Community Task Force	IMP Update
July 24, 2012	Community Task Force	Transportation

Table 1-1, Public Meetings

Boston University continues to meet with various city and state agencies and elected officials, and welcomes public comments and participation. The Boston University Government & Community Affairs website (www.bu.edu/community) posts the content from these meetings and updates on institutional developments.

1.4.2 INSTITUTIONAL MASTER PLAN PROJECT TEAM

Proponent:	Trustees of Boston University
	Contact:
	Gary Nicksa, Senior Vice President for Operations
Institutional Master Plan	Fort Point Associates, Inc.
Consultant:	Contacts:
	Jamie Fay, AICP, CEP, President
	Robin Bergstrom, Planner
Architecture and Urban	CBT Architects
Design Consultants:	Contacts:
	Kishore Varanasi, Director of Urban Design
	Mahesh Wagdahare

	Greenberg Consultants
	Contact:
	Ken Greenberg
	<u>.</u>
Transportation Consultant:	Tetra Tech
Transportation Consultant:	Tetra Tech Contact:
Transportation Consultant:	

Chapter 2

CAMPUS DEMOGRAPHICS

CHAPTER 2: CAMPUS DEMOGRAPHICS

2.1 INTRODUCTION

Boston University is the fourth-largest independent, nonprofit university in the country and the largest in New England. Naturally, an institution of this size, with nearly 33,500 students and 10,000 faculty and staff on two campuses, has a significant impact on the city; its size also speaks to the magnitude of the challenges the University faces in planning its development.

Boston University is now one of the region's most competitive schools, with more than 40,000 applicants this year. While the increasing demand for admission to the University is largely to its advantage, the complex array of economic, cultural, and social factors that drive student preferences require rigorous study as the institution moves forward. The University must adapt to its growing reputation, both at home and abroad, by continuing to adjust its admissions policies and development programs to remain competitive. The same close attention must also be paid to the similarly complex forces that drive employment at Boston University, dictated by demand for services, along with the finances necessary to support them.

Boston University Institutional Research keeps an extensive database related to current, historical, and projected enrollment and employment statistics and trends at the Charles River Campus. Demographics are clearly one of the primary drivers of campus development, and the data contained in this chapter relate directly to the planning framework discussed in Chapter 4, as well as the student housing plan discussed in Chapter 6.

2.2 STUDENT POPULATION

2.2.1 HISTORICAL ENROLLMENT TRENDS

Since the 2003-2010 Institutional Master Plan, there has been a small increase in fulltime undergraduate enrollment at the Charles River Campus, from 15,064 students in 2002 to 15,540 students in 2011 (see Table 2-1, Historical Full-Time Undergraduate Enrollment). Due to Boston University's growing prestige and international reputation, the number of interested applicants has increased substantially.

		Freshman
Fall	Enrollment	Class Size
2002	15,064	4,560
2003	14,976	3,961
2004	15,186	4,352
2005	15,690	4,209
2006	15,681	4,124
2007	15,771	4,163
2008	15,540	4,131
2009	15,386	4,130
2010	15,573	4,409
2011	15,540	4,022

Table 2-1, Historical Full-Time Undergraduate Enrollment

In the last few years, the University has become increasingly selective in freshman admissions. The 2011 freshman class size of 4,022 students represents a small minority of the nearly 150,000 prospective applicant inquiries Boston University begins with each year. Of those who inquire, over one-quarter apply for admission; this number has increased steadily over the years, allowing the University a greater degree of selectivity. See Table 2-2, Freshman Admissions and Enrollment.

Admission Process	Fall 2009 Actual	Fall 2010 Actual	Fall 2011 Actual
Inquiries	145,289	146,293	145,602
Applications	37,795	38,275	41,802
Admitted	22,101	22,187	20,662
Freshman Enrollment	4,130	4,409	4,022
Interest (% of inquiries that apply)	26%	26%	29%
Selectivity (% of applicants admitted)	58%	58%	49%
Yield (% admitted who enrolled)	19%	20%	19%

Table 2-2, Freshman Admissions and Enrollment

The University initially admits more freshmen than it can matriculate, anticipating that 19 percent of those admitted will enroll. This yield, however, is subject to fluctuations each year.

2.2.2 CURRENT POPULATION

As of fall 2011, there are 15,540 full-time undergraduate students at the Charles River Campus. As shown in Table 2-3, Full-Time Undergraduate Students, this student body is made up of 4,022 freshmen and 11,518 continuing and transfer students.

,	e		
	Fall		
	2010	Fall 2011	Fall 2012
Full-Time Undergraduate Students	Actual	Actual	Forecast
Freshman Class	4,409	4,022	3,900
Continuing and Transfer Students	11,164	11,518	11,672
Total Full-Time Undergraduates	15,573	15,540	15,572
Full-Time Undergraduates Forecast*	15,376	15,311	15,331
# of Students Above (Below) Forecast	197	229	241
% Above (Below) Forecast	1%	1%	2%

Table 2-3, Full-Time Undergraduate Students

* Forecast from 2010 IMP Amendment

2.2.3 FUTURE STUDENT ENROLLMENT PROJECTIONS

Between fall 2012 and fall 2017, full-time undergraduate enrollment is expected to be relatively static, as shown in Table 2-4, Projected Full-Time Undergraduate Enrollment. The University will continue its policy of selectivity throughout the term of this master plan. Consequently, the composition of the enrolled student body will change over the plan period with an increased proportion of continuing and transfer students and a decreased share of incoming freshmen.

Fall	Enrollment	Freshman Class Size
2012	15,572	3,900
2013	15,674	3,800
2014	15,575	3,800
2015	15,577	3,800
2016	15,488	3,800
2017	15,488	3,800

Table 2-4, Projected Full-Time Undergraduate Enrollment

2.3 EMPLOYMENT

Boston University is proud to be one of the city's largest private employers. In fiscal year 2012, 6,685 people were employed at the Charles River Campus alone. This number has grown over the term of the 2003 Institutional Master Plan, as shown in Table 2-5, Historical Employment at the Charles River Campus.

Fiscal Year	Employee Headcount
1997	5,293
1998	5,293
1999	5,446
2000	5,590
2001	5,630
2002	5,938
2003	5,786
2004	5,702
2005	5,768
2006	5,952
2007	5,902
2008	5,971
2009	6,182
2010	6,275
2011	6,394
2012	6,685

Table 2-5, Historical Employment at the Charles River Campus

One-quarter of the employees at the Charles River Campus are residents of the City of Boston. Approximately 82 percent of all employees at the Charles River Campus are employed on a full-time basis. Faculty and staff constitute approximately 38 and 62 percent of the workforce, respectively. These figures are detailed in Tables 2-6 and 2-7.

	Full Time		Full Time Part Time		1	Total
	#	% of all	#	% of all	#	% of all
		employees		employees		employees
Faculty	298	4.5%	165	2.5%	463	6.9%
Staff	1,171	17.5%	40	0.6%	1,211	18.1%
Total	1,469	22%	205	3.1%	1,674	25%

	Ful	l Time	Par	t Time		Total
	#	% of all	#	% of all	#	% of all
		employees		employees		employees
Faculty	1,500	22.4%	1,022	15.3%	2,522	37.7%
Staff	3,961	59.3%	202	3%	4,163	62.3%
Total	5,461	81.7%	1,224	18.3%	6,685	100%

The economic impact of employment at the Charles River Campus is described in detail in Chapter 10, Economic Impact. The employment figures in that chapter differ from those in the tables above as they also include employees from the Medical Campus, University-related businesses, and the University's student body.

2.3.1 PROJECTED EMPLOYMENT FIGURES

Based on the 10-year historical average from 2002–2012, employment growth at the Charles River Campus could increase between 6 and 8 percent over the next five years. Future employment levels are dependent on the growth rate in academic programs and research activities. Consistent with the last 10 years, employment levels may fluctuate up or down in any given year, but it is anticipated that there will be a small, steady increase over the longer term.

Chapter 3

EXISTING PROPERTY AND USES

CHAPTER 3: EXISTING PROPERTY AND USES

3.1 INTRODUCTION

The Boston University Charles River Campus consists of 113 acres of land and 274 buildings containing approximately 11.8 million square feet of space. The campus is centered on Commonwealth Avenue, extending from Kenmore Square to Packard's Corner; existing Boston University properties are shown in Figure 3-1, Boston University Properties, and summarized in Table 3-2, Summary of Boston University Properties. In addition, the lists of properties covered by the Institutional Master Plan have been updated and are summarized below:

			Gross Sq.
Table	Title	Properties*	Ft. (gsf)
Table 3-3	Large Residence Halls	12	2,296,669
Table 3-4	Small Residence Halls/Apartments	132	1,670,945
Table 3-5	Audubon Circle Dormitories North of Beacon Street	11	112,061
Table 3-6	Audubon Circle Apartments North of Beacon Street	5	67,142
Table 3-7	Audubon Circle Apartments South of Beacon Street	8	71,849
Table 3-8	Administrative Faculty Residences (Brookline)	8	80,310
Table 3-9	Academic, Administrative and Other Properties	100	7,066,530
Table 3-10	Commercial Properties in Kenmore Square	10	473,214
		286	11,838,729

Table 3-1, Summary of Tables by Property Type

* Includes buildings and open land parcels

Table 3-2, Summary of Boston University Properties

Land Area	
Boston/Brookline (Acres)	113
Buildings	
Total Number of Buildings	274
Gross Square Feet	11,838,729
Assignable Square Feet	6,726,242
Classrooms	
Number of Classrooms	394
Seating Capacity – Classrooms	18,467
Laboratories	
Instructional Laboratories	487
Non-Instructional Laboratories	389

Total Number of Laboratories Seating Capacity – Laboratories	876 6,457	
Undergraduate Student Residences	0,457	
Total Number of Buildings	137	
Undergraduate Occupancy	11,109	

3.2 **RESIDENTIAL PROPERTIES**

Boston University's housing stock consists of a wide range of building types and ages. Housing ranges from the historic brownstones along Bay State Road, constructed in the late 1800s, to the large-scale dormitories of Warren Towers and West Campus built during the 1960s, to the modern suite-style units constructed on the Student Village in the last decade. In total, the University has the ability to house over 11,100 students on campus, as well as some faculty, staff, and graduate students. Maintaining this housing stock has been a major undertaking, requiring constant refurbishment and renewal of existing buildings and occasional construction of new housing.

					Building
	Address	Year Built	Stories	Height	Area (gsf)
1	273 Babcock Street - Claflin Hall	1963	B+13	125'	143,076
2	275 Babcock Street - Sleeper Hall	1963	B+13	136'	153,259
3	277 Babcock Street - Rich Hall	1964	B+13	136'	161,348
4	91 Bay State Road - Shelton Hall	1923	B+9	95'6"	118,821
5	140 Bay State Road - The Towers	1958	B+9	79'2"	128,887
6	512 Beacon Street - Danielsen Hall	1926	B+10	103'	70,768
7	610 Beacon Street - Myles Standish	1926	B+9	80'	185,149
8	575 Commonwealth Avenue	1963	B+8	60'	87,619
9	700 Commonwealth Avenue –				
	Warren Towers*				
	Fairfield Tower	1966	18	196'	110,168
	Marshall Tower	1967	18	196'	164,563
	Shields Tower	1966	18	196'	110,168
10	1019 Commonwealth Avenue	1989	B+6	70'	78,294
11	10 Buick Street	2000	B + 18	195'	384,971
12	33 Harry Agganis Way	2009	B+26	284'	399,578
Total	Table 3-3				1,670,945

Table 3-3, Large Residence Halls

* Commercial space and parking reported in Table 3-9: Academic, Administrative, and Other Properties

Table 3-4, Small Residence Halls/Apartments

(*indicates commercial space on lower floor)

	Address	Year Built	Stories	B Height	uilding Area (gsf)
1	11 Bay State Road	1895	B + 5	60'	8,165
2	56 Bay State Road	1900	B+4	48'	5,500
3	58 Bay State Road	1895	B+4	48′	5,414
4	59 Bay State Road	1893	B+4	55'	9,768
5	60 Bay State Road	1895	B+4	51'	6,138
6	61 Bay State Road	1893	B+4	55'	9,988
7	62 Bay State Road	1895	B+4	42'	6,057
8	65 Bay State Road	1897	B + 5	55'	10,388
9	68 Bay State Road	1896	B+4	45'	5,700
10	69–71 Bay State Road	1897	B+4	50', 48'	18,275
11	70 Bay State Road	1896	B+4	45'	5,700
12	73 Bay State Road	1901	B+4	50'	10,889
13	74 Bay State Road	1896	B+4	48'	5,800
14	75 Bay State Road	1901	B+4	56'	10,210
15	76 Bay State Road	1896	B+4	48'	6,146
16	77 Bay State Road	1900	B + 5	60'	13,298
17	78 Bay State Road	1896	B+4	55'	5,375
18	79 Bay State Road	1902	B + 5	58'	11,116
19	80 Bay State Road	1896	B + 5	45'	5,020
20	81 Bay State Road	1900	B + 5	45'	10,745
21	83 Bay State Road	1900	5	45′	10,174
22	82 Bay State Road	1899	B+4	58', 49'	6,613
23	84 Bay State Road	1899	B + 5	45'	5,700
24	86 Bay State Road	1899	B+4	42'	5,700
25	88 Bay State Road	1899	B+4	45'	6,516
26	90–92 Bay State Road	1899	B+4	45′	11,901
27	94 Bay State Road	1899	B+4	47'	5,900
28	96 Bay State Road	1905	B + 5	69'	28,600
29	110 Bay State Road	1910	B+4	50'	5,045
30	112 Bay State Road	1910	B+4	44'	4,443
31	113 Bay State Road	1897	B+4	40'	9,140
32	115 Bay State Road	1899	B+4	40'	9,488
33	117 Bay State Road	1899	B + 5	62'	9,280
34	124 Bay State Road	1913	B + 3	36'	4,970
35	131 Bay State Road	1900	B+4	48'	8,813
36	133 Bay State Road	1900	B + 3	42'	7,249

					Building Area
	Address	Year Built	Stories	Height	(gsf)
37	135 Bay State Road	1902	B+3	42'	10,412
38	139 Bay State Road	1895	B+4	41'	5,100
39	153 Bay State Road	1893	B+4	51'6"	7,838
40	157 Bay State Road	1903	B+4	45'	9,157
41	158–162 Bay State Road	1900	B+4	78', 60', 60'	14,513
42	159–163 Bay State Road	1902	B+4	42', 52', 52'	20,280
43	164 Bay State Road	1900	B+4	50'	5,942
44	166–168 Bay State Road	1901	B+4	40', 50'	10,873
45	167–169 Bay State Road	1902	B+4	50', 40'	13,349
46	171 Bay State Road	1900	B+4	40'	7,075
47	172 Bay State Road	1902	B + 3	42'	4,826
48	173 Bay State Road	1900	B+4	46'	7,151
49	175 Bay State Road	1900	B+4	47'	6,955
50	176 Bay State Road	1902	B + 3	43'	4,668
51	177 Bay State Road	1900	B+4	52'	6,580
52	178 Bay State Road	1902	B + 3	42'	5,025
53	179 Bay State Road	1900	B+4	48'	6,768
54	180 Bay State Road	1902	B+3	40'	4,846
55	181 Bay State Road	1900	B+4	52'	6,580
56	182–190 Bay State Road	1904	B+3	40', 42', 42'	22,960
57	183 Bay State Road	1899	B+4	40'	7,590
58	191 Bay State Road	1897	B+4	58'	10,486
59	192 Bay State Road	1906	B+3	41'	4,100
60	193 Bay State Road	1899	B+4	42'	6,900
61	194 Bay State Road	1907	B+3	46'	4,963
62	195–197 Bay State Road	1899	B + 5	50', 40'	13,424
63	196 Bay State Road	1900	B+3	40'	4,724
64	198 Bay State Road	1900	B + 3	46'	4,787
65	199 Bay State Road	1899	B+4	42'	6,702
66	200–202 Bay State Road	1900	B+4	46'	13,446
67	201 Bay State Road	1899	B+4	52'	6,490
68	203 Bay State Road	1899	B+4	45'	6,191
69	204 Bay State Road	1899	B+4	48'	6,819
70	205 Bay State Road	1899	B+4	45'	7,064
71	206–212 Bay State Road	1901	B+4	52', 51', 45', 40'	25,063
72	207 Bay State Road	1899	B+4	45'	7,573
73	209 Bay State Road	1899	B+4	47'	7,641
74	214 Bay State Road	1901	B+4	42'	5,738
75	517–521 Beacon Street	1901	B+4	55', 45', 54'	20,401

	Address	Year Built	Stories	Height	Building Area (gsf)
76	531 Beacon Street	1901	B+4	54'	9,071
77	632 Beacon Street	1920	B+4	49'5"	24,395
78	1053 Beacon Street (Brookline)	1891	B+4	48'	7,652
79	1 Buswell Street	1907	B+4	49'	7,568
80	1A Buswell Street	1907	B+4	60'	7,600
81	2 Buswell Street	1908	B+4	45'	10,939
82	3 Buswell Street	1894	B+4	46'	5,749
83	5 Buswell Street	1900	B+4	48'	6,070
84	6 Buswell Street	1914	B+4	46'	15 <i>,</i> 485
85	7 Buswell Street	1894	B+4	55'6"	5 <i>,</i> 800
86	10–18 Buswell Street	1924	6	68'	66 <i>,</i> 456
87	11 Buswell Street	1894	B+4	44'	6,268
88	15 Buswell Street	1900	B+4	40'	5,500
89	17 Buswell Street	1900	B+4	40'	5 <i>,</i> 975
90	22–24 Buswell Street	1914	B+4	48', 50'	35,036
91	29 Buswell Street	1896	B + 3	39'	5,736
92	31 Buswell Street	1896	B + 3	40'	4,116
93	33 Buswell Street	1896	B+4	40'	4,915
94	34 Buswell Street	1912	B + 5	55'	17,220
95	35 Buswell Street	1896	B + 3	39'	4,612
96	37 Buswell Street	1896	B + 3	55'	4,727
97	38 Buswell Street	1911	B + 5	55'	9,486
98	39 Buswell Street	1896	B + 3	39'	4,612
99	40-48 Buswell Street	1911	B + 5	60'	58,302
100	41 Buswell Street	1896	B + 3	34'	5,269
101	43 Buswell Street	1896	B + 3	39'	4,884
102	45 Buswell Street	1896	B + 3	40'	5,382
103	47 Buswell Street	1896	B + 3	40'	5,314
104	50-52 Buswell Street	1909	B+4	48'	15,117
105	55 Buswell Street	1910	B+4	45'	15,302
106	37–39 Carlton Street (Brookline)	1893	B+4	32'	15,043
107	141 Carlton Street (Brookline)	1864	B + 3	45'	9,335
108	146 Commonwealth Avenue	1896	B + 5	60'	10,276
109	481–483 Commonwealth Avenue	1920	B+4	62', 45'	16,250
110	580 Commonwealth Avenue*	2004	B+11	116'	126,333
111	625 Commonwealth Avenue	1901	B+4	48'	7,803
112	627–629 Commonwealth Avenue*	1906	B+4	48'	15,605
113	708 Commonwealth Avenue*	1875	B + 3	40'	5,400
114	710 Commonwealth Avenue*	1875	B+3	40''	5,400

				В	uilding Area
	Address	Year Built	Stories	Height	(gsf)
115	714 Commonwealth Avenue*	1875	B + 3	30'	5,300
116	722–728 Commonwealth Avenue*	1911	B + 5	51'	87,469
117	53-57 Deerfield Street	1900	B + 3	46'6"	8,900
118	7 Euston Street (Brookline)	1912	B + 3	36'	10,100
119	19 Euston Street (Brookline)	1915	B + 3	36'	5,891
120	80–82 Ivy Street (Brookline)	1920	B + 3	40'	33,700
121	83 Ivy Street (Brookline)	1912	B+4	48'	39,700
122	46 Mountfort Street	1908	B+4	48'	28,250
123	96 Mountfort Street	1908	B+4	45'	8,750
124	98 Mountfort Street	1909	B+4	45'	9,750
125	100 Mountfort Street	1909	B+4	45'	6,500
126	500–504 Park Drive	1903	B + 3	37'	13,300
127	509 Park Drive	1912	B + 5	56'	32,800
128	514–522 Park Drive	1915	B+3	36'	36,968
129	515 Park Drive	1908	B+4	43'	9,900
130	37–47 St. Mary's Street (Brookline)	1928	B + 3	36'	39,130
131	90 St. Mary's Street (Brookline)	1905	B + 3	45'	26,700
132	2 Raleigh Street	1890	B+4	60'	11,610
Total T	able 3-4				1,670,945

		Year			Building
	Address	Built	Stories	Height	Area (gsf)
1	806–820 Beacon Street ¹	1887	B+6	60'	19,310
2	824–826 Beacon Street	1890	B+3	40'	9,041
3	828 Beacon Street	1890	B+4	50'	6,042
4	830 Beacon Street	1890	B+4	50'	5,961
5	834–836 Beacon Street	1890	B+3	40', 35'	9,381
6	844 Beacon Street	1911	B + 5	40'	20,700
7	848 Beacon Street	1894	B+4	50'	6,700
8	850 Beacon Street	1894	B+4	50'	7,126
9	864 Beacon Street	1900	B+4	55'	5,700
10	866 Beacon Street	1892	B+4	50'	8,600
11	870–872 Beacon Street	1892	B+4	48'-48'	13,500
Total	Table 3-5				112,061

¹ Boston University may seek approval for commercial use in currently vacant ground floor space.

(*indicates commercial space on lower floor)								
	Address	Year Built	Stories	Height	Building Area (gsf)			
1	822 Beacon Street ^{*2}	1890?	B+3	40'	4,600			
2	832 Beacon Street	1890	B+4	50'	5,959			
3 4	852 Beacon Street 856–862 Beacon Street (860 Beacon Street*)	1894 1893	B + 4 B + 6	50' 67', 79'	6,380 35,364			
5	906–908 Beacon Street*	1891	B+4	48'	14,839			
Tota	Total Table 3-6 67,142							

Table 3-6, Audubon Circle Apartments North of Beacon Street

Table 3-7, Audubon Circle Apartments South of Beacon Street³

					Building
	Address	Year Built	Stories	Height	Area (gsf)
1	25 Aberdeen Street	1899	B + 3	36'	7,113
2	27 Aberdeen Street	1899	B + 3	36'	6,720
3	845 Beacon Street	1895	B+4	45'	6,600
4	853 Beacon Street	1894	B+4	51'	6,475
5	855 Beacon Street	1894	B+4	48'	5,700
6	867 Beacon Street	1893	B+4	48'	7,594
7	875 Beacon Street	1894	B+4		6,600
8	455–457 Park Drive	1900	B+4	36'	25,047
Tot	tal Table 3-7				71,849

					Building
	Address	Year Built	Stories	Height	Area (gsf)
1	132 Carlton Street (Brookline)	1908	B + 3		16,478
2	10 Cottage Farm Road (Brookline)	1936	B+3	32'	6,040
3	24 Cottage Farm Road (Brookline)	1850	B+2	27'	14,387
4	135 Ivy Street (Brookline)	1850	B+3	45'	16,068
5	25 Lenox Street (Brookline)	1853	B+3	27'	8,200
6	150 Mountfort Street (Brookline)	1956	B+2	34'	2,085
7	50 Worthington Road (Brookline)	2001	B+3	34'	11,261
8	53 Worthington Road (Brookline)	1939	B+3		5,530
Total	Table 3-8				80,319

² Boston University may seek approval for commercial use in currently vacant ground floor space.

³ Properties will not be used for undergraduate student housing during the term of the master plan.

3.3 ACADEMIC, ADMINISTRATIVE, AND OTHER PROPERTIES

Boston University's portfolio of academic, administrative, and commercial buildings is extensive. Although the buildings are primarily centered along the 1.5-mile stretch of Commonwealth Avenue, they also include buildings in the Ashford/Babcock Street area, non-residential buildings along Bay State Road, the science and engineering buildings along Cummington Mall, and assorted other buildings across the Charles River Campus.

Key to Academic, Administrative, and Other Property Use:					
ACD = Academic ADM = Administrative ATL - REC = Athletic - recreation CML = Commercial	LAND = Land only OPN = Open PKG = Parking				

Table 3-9, Academic, Administra	tive, and Other Properties
---------------------------------	----------------------------

					Bldg Area		
	Address	Year Built	Stories	Height	(gsf)	Land Area	Use
1	163–179 Amory Street (Brookline)		2	23'8"	37,171	21,215	CML & ADM
2	100 Ashford Street	2002	2	30'	96,262	71,764	ATH - REC
3	120 Ashford Street	1958	M + 2	30'	84,079	88,224	ADM
4	Babcock Street					14,212	LAND
5	278 Babcock Street (under construction)	2013	1	NA	110,500	141,068	ATH - REC & PKG
6	285 Babcock Street	1972	B + 5	68'	131,857		ATH - REC
7	300 Babcock Street	1926	B + 3	42'	92,623	4,960	ATH - REC & ADM
8	53 Bay State Road	1893	B + 6	67'	16,055	5,830	ACD & ADM
9	67 Bay State Road	1897	B + 4	45'	7,294	2,750	ACD & ADM
10	100 Bay State Road	2012	B + 6	90'	120,009	26,566	ACD & ADM
11	114 Bay State Road	NA	NA	NA	NA	2,560	OPN & PKG
12	116-118 Bay State Road	1910	B + 4	44'	9,185	5,104	ACD

					Bldg Area		
	Address	Year Built	Stories	Height	(gsf)	Land Area	Use
13	121-125 Bay State Road	1899	B + 4	48' 6"	22,764	10,158	ADM
14	122 Bay State Road	1913	B + 4	37'	5,280	1,490	ADM
15	126 Bay State Road (vacant)	1913	B + 4	37'	5,200	1,490	ACD
16	128 Bay State Road	1901	B + 3	37'	5,152	1,490	ACD
17	141 Bay State Road	1900	B + 3	42'	7,758	3,039	ACD & ADM
18	143 Bay State Road	1900	6	63' 56',	11,037	3,656	ACD & ADM
19	145–147 Bay State Road	1903	B + 5	73'	26,596	10,170	ACD
20	152 Bay State Road	1902	B + 5	58'	11,201	3,339	ACD
21	154 Bay State Road	1896	B + 4	46'	8,965	2,940	ACD
22	156 Bay State Road	1899	B + 4	46'	5,100	2,464	ACD
23	170 Bay State Road		NA	NA	NA	3,475	OPN & PKG
24	185 Bay State Road	1899	B + 4	50'	7,649	2,449	ACD
25	187 Bay State Road (leased portion)				2,941		ACD
26	213–217 Bay State Road	2006	B + 4	57'	130,704	7,877	ACD
27	216 Bay State Road		NA	NA	NA	6,276	OPN
28	225 Bay State Road	1905	B + 3	50'	14,701	6,267	ACD & ADM
29	233 Bay State Road (under construction)	1953	B + 3	50'	18,000	4,036	ADM
30	347 Bay State Road	1935	1		2,123	2,123	ATH - REC
31	677 Beacon Street	1915	B + 3	43'	25,997	7,300	ACD
32	25 Buick Street	1928	B + 3	59'	122,742	53,583	ADM
33	565 Commonwealth Ave.	1952	B + 2	21' 4"	12,908	16,216	ACD

Boston University

					Bldg Area		
	Address	Year Built	Stories	Height	(gsf)	Land Area	Use
			3L+				
34	595 Commonwealth Ave.	1996	9+ P	166' 2"	481,119	49,686	ACD & ADM
35	590 Commonwealth Ave.	1983	B + 5	60'	280,838	75,443	ACD
36	602 Commonwealth Ave.	1907	B + 3		21,919	13,508	ACD
	617–619–621 Commonwealth						
37	Ave.	1901	B + 4	51' 4"	22,762	9,422	ACD
38	640 Commonwealth Ave.	1956	B + 3	47'	84,022	67,232	ACD
39	635 Commonwealth Ave.	1957	B + 7	75'	113,621	19,225	ACD
40	645-665 Comm. Ave.		NA	NA	NA	41,574	РКС
41	226 Bay State Road	1913	B + 5	65'	18,048		ACD
41	220 Day State Koau	1913	D + J	05	10,040		ACD
42	232 Bay State Road	1913	B + 5	60'	34,022		ACD
43	236 Bay State Road	1913	B + 5	60'	27,149		ACD
44	264–270 Bay State Road	1913	B + 5	58'	65,016		ACD
45	675 Commonwealth Ave.	1948	B + 5	62'	54,527	561,605	ACD
			B + 6				
46	685 Commonwealth Ave.	1938	+ P	79'	141,257	(included)	ACD
			B + 6				
47	725 Commonwealth Ave.	1947	+ P	80'	132,261	(included)	ACD
48	735 Commonwealth Ave.	1951	$\begin{array}{r} B + 2 \\ B + 6 \end{array}$		14,964	(included)	ACD
49	745–755 Comm. Ave	1949	b + 0 + P		114,978	(included)	ACD
50	763-765 Comm. Ave	1962	B + 21	232' 5"	167,671	6,480	ADM
51	767 Commonwealth Ave.	1964	B + 3		28,616	(included)	ACD
			B + 6		, -	. ,	
52	771 Commonwealth Ave.	1965	ь + о + Р	114′	218,657	(included)	ACD
53	775 Commonwealth Ave.	1963	B + 5		202,105	(included)	ACD

Boston University

	Address	Year Built	Stories	Height	Bldg Area (gsf)	Land Area	Use
54	704 Commonwealth Ave.	1910	B + 5		31,552	6,480	ACD & ACM
55	718 Commonwealth Ave.	1910	B + 5	58′	22,068	5,549	ACD
56	730–732 Commonwealth Ave. (Brookline)		B + 3		58,264	118,483	ACD & ADM & PKG
57	736–738 Commonwealth Ave. (Brookline)	1939	B + 1		5,840	(included)	CML
58	742 Commonwealth Ave. (Brookline)		B + 2		64,788	(included)	РКС
59	750 Commonwealth Ave. (Brookline)	1929	B + 2		44,749	(included)	ACD
60	756–766 Commonwealth Ave. (Brookline)		NA	NA	NA	(included)	РКС
61	15 Saint Mary's Street	ca.1920	B + 1		52,767	118,582	ACD
62	785 Commonwealth Ave.	1937	B + 3	27′	54,767	84,404	ACD
63	795 Commonwealth Ave.	NA	NA	NA	NA	35,474	LAND
64	808 Commonwealth Ave. (Brookline)	1928	B + 6 + P	77'	266,029	138,710	PKG
65	830-846 Commonwealth Ave. (Brookline)		B + 2		36,153	35,433	CML
66	855 Commonwealth Ave.	1919	B + 5	81′5″	207,318	76,456	ACD
67	871 Commonwealth Ave.	1924	5	43′	95,968	41,520	ACD
68	881 Commonwealth Ave.	1926	B + 7	95′	107,773	26,000	ADM
69	888 Commonwealth Ave. (Brookline)	1924	B + 3		99,352		ACD & ADM & CML & PKG
70	890 Commonwealth Ave. (Brookline)	1915	B + 3		72,389		ACD & ADM & CML & PKG
71	915–925 Commonwealth Ave.		NA		NA	443,875	LAND
72	915 Commonwealth Ave.	2004	B + 4			286,901	ATH - REC
73	925 Commonwealth Ave.	2004	2L + 3		548,634		ATH - REC

Boston University

					Bldg Area		
	Address	Year Built	Stories	Height	(gsf)	Land Area	Use
74	900–940 Commonwealth Ave. (Brookline)	1916	B + 3		233,000	165,000	ACD - CML
75	928 Commonwealth Ave. (Brookline)	1949	3		28,560	9,885	ACD & CML
76	949 Commonwealth Ave.	1916	B + 2	28′	17,968	12,000	ADM
77	975 Commonwealth Ave. (leased portion)				7,941		ADM
78	985 Commonwealth Ave.	1920	2	30'	36,865	12,000	ADM
79	1010 Commonwealth Ave. (Brookline, leased portion)				38,416		ACD & ADM
80	Cummington Mall					97,411	LAND
81	2 Cummington Mall	1916	B + 5 B + 5	54′	61,754	11,795	ACD
82	3–5 Cummington Mall	1913	+ P B + 10	90′	149,118	47,039	Acd
83	24 Cummington Mall	2005	+ P	162′	188,575	14,551	ACD
84	30–38 Cummington Mall	1917	B + 3	40′	36,563	12,157	ACD
85	42–44 Cummington Mall	1986	B +7	112′5″	96,500	12,141	ACD
86	48–52 Cummington Mall	1917	B + 2	35′	17,800	14,927	ACD
87	64-86 Cummington Mall	1917	B +2	35′	49,163	16,112	ACD
88	96–100 Cummington Mall	1909	B + 2	35′	25,430	8,634	ACD
89	110–112 Cummington Mall	1923	B + 4		48,901	11,635	ACD
90	111 Cummington Mall	1909	B + 2	28′9″	93,831	38,525	ACD & ADM
91	10 Deerfield Street					21,138	
92	11-15-19 Deerfield Street	1925	B + 4	60′	69,435	14,008	ACD & ADM & CML
93	143 Essex St. (Brookline)	1960	NA	NA	1,500	12,914	ADM & PKG
94	32 Harry Agganis Way (incl. Nickerson Field)	1915	3 + P		15,078	458,873	ATH - REC
95	10 Lenox Street (Brookline)	1904	B + 4		17,903	22,998	ACD & CDM
96	79 Ashford St. (field)		NA		NA	73,500	ATH - REC
97	619 Memorial Drive (Cambridge)	2001	2		19,561	10,976	ATH - REC

					Bldg Area		
	Address	Year Built	Stories	Height	(gsf)	Land Area	Use
98	138 Mountfort Street (Brookline)	1903	B + 3		6,254	13,750	ACD
99	6-8 St. Mary's Street	1996	B + 9	162′6″	289,059	46,205	ACD
100	2 Silber Way	1890	B + 8	85'	86,936	18,148	ACD

Total Table 3-9

7,066,530

		Year			Bldg		
	Address	Built	Stories	Height	Area (gsf)	Land Area	Use
1	648 Beacon Street	1910	B + 4	79'	49,950	11,875	CML
2	650 Beacon Street	1910	B + 6	79′	22,882	4,178	CML
3	654 Beacon Street	1918	B + 6	79′	23,911	4,178	CML
4	656 Beacon Street	1918	B + 6	79'	25,848	4,178	CML
5	660 Beacon Street	1909	B + 6	79'	74,431	11,483	CML
6	500–528 Comm. Ave.	2003	B + 6	83'	184,208	64,821	CML
7	533 Comm. Ave	1916	B + 2		15,293	7,529	CML
8	535–539 Comm. Ave.		B + 3		31,495	7,543	CML
9	541 Comm. Ave.	1894	B + 6	70'	21,196	3,060	CML
10	601 Newbury Street	1915	B + 3		24,000	9,778	CML
Tatal	T-1-1-2 10				472 214		

Table 3-10, Commercial Properties in Kenmore Square

Total Table 3-10

473,214

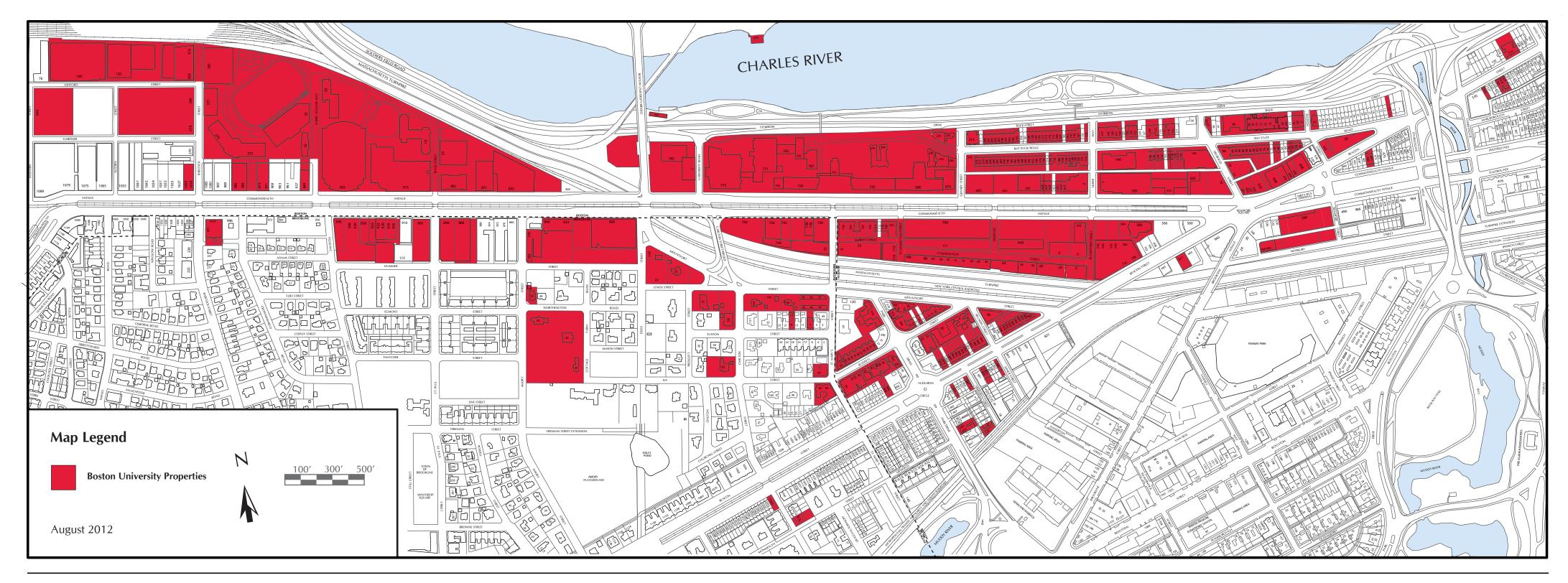


Figure 3-1, Boston University Properties

2012–2022 Institutional Master Plan Boston University Charles River Campus

Chapter 4

PLANNING AND URBAN DESIGN

CHAPTER 4: PLANNING AND URBAN DESIGN

4.1 HISTORICAL CONTEXT

For nearly 150 years, Boston University has played a vital role in the development of the City of Boston. The University has grown from an eclectic and geographically scattered collection of buildings in Beacon Hill and later Copley Square to a coherent urban campus fully integrated into the city and its surrounding neighborhoods. Over time, and particularly in the past three decades, Boston University has adopted increasingly sophisticated strategic planning practices that feature a strong commitment to a campus development process that values community input—and recognizes the institution's long-term visual, aesthetic, economic, and social impact on the city.

A century ago, the University's third president, Lemuel Murlin, was faced with a decision about where the University should develop a permanent campus. The options included a pastoral area in Brookline and undeveloped vacant land along the Charles River just west of the newly completed Back Bay. Declaring the University should remain "in the heart of the city, in the service of the city," he advised the trustees to purchase the riverfront land. During the 1920s, 15 acres of land were purchased just west of what would become known as Kenmore Square, establishing the base of the present Charles River Campus.

With land acquired for a permanent campus, the University could become more strategic in its approach to development. Since then, it has grown and evolved into a large institution with nationally and internationally renowned academic and research programs.

The 1920s and 1930s

President Murlin hired famed architect Ralph Adams Cram to develop a master plan for the new Charles River Campus. Cram was an advocate of the Gothic Revival style of college design; today, some of his most noted campuses can be seen at Princeton University and the United States Military Academy at West Point. For Boston University, Cram proposed a campus that extended, without break, to the Charles River, a linked ensemble of Gothic, cathedral-like structures facing the river, and a striking administrative tower that would tower over the academic wings. The original plan would have created a self-contained campus with ample room for expansion. In 1939, the first part of the Cram plan was implemented with the construction of the Charles Hayden Memorial Building and 675–765 Commonwealth Avenue.

The 1940s and 1950s

The consolidation of the Boston University campus was spurred by the post–World War II growth in higher education enrollment. An influx of returning veterans and the subsequent "Baby Boom" generated three decades of surging demand for higher education and a significant expansion in undergraduate education. This was coupled with increased government support for research, which fostered opportunities for leading higher education institutions to expand research programs and graduate education. At Boston University, the pressure for additional space was relieved by the transformation of Bay State Road townhouses into offices and nearby hotels into dormitories. Housing needs were also met through the acquisition of properties in Audubon Circle at 14 Buswell Street and 514–522 Park Drive. Additional elements of the Cram plan were implemented through the construction of 675–765 Commonwealth Avenue. The 10-acre Braves Field site was also acquired for future expansion.

The 1960s

The University continued to grow in the 1960s and saw the greatest potential for campus expansion in the dozens of emptying auto showrooms, warehouses, and garages that lined Commonwealth Avenue. With the exodus of car dealers from Boston's "Auto Mile" to the suburbs, the University creatively repurposed once industrial and commercial properties for academic and research uses. Around Cummington Mall, warehouses became science classrooms and laboratories; further west on Commonwealth Avenue, auto showrooms and warehouses became offices, art studios, and retail spaces.

Boston University also undertook considerable new construction to meet growing demand and to further consolidate the campus. In the early 1960s, a master plan for a portion of the campus was developed by Josep Lluís Sert, dean of Harvard's Graduate School of Design. The fruits of Sert's planning and design efforts were the construction of the School of Law and Pappas Law Library, the Student Union, and the Mugar Library. In addition to the Sert-designed buildings, the University also constructed more than 3,500 dormitory bed spaces in Warren Towers; Sleeper, Claflin, and Rich Halls on portions of the former Braves Field in West Campus; and in the Towers residence hall on Bay State Road. The College of General Studies was constructed at 811 Commonwealth Avenue in West Campus.

The 1970s, 1980s, and 1990s

From the late 1970s through the 1990s, Boston University continued to upgrade and rehabilitate various properties within its core campus. In the early 1980s, the new Metcalf Center for Science & Engineering was built on Commonwealth Avenue at Blandford Mall by combining two warehouses. Efforts to beautify the campus, including the creation of George Hart Way and Warren Alpert Mall along Bay State Road, were recognized by the Commonwealth of Massachusetts in 1976 with an environmental awareness award.

In the late 1980s, the University completed the Sargent College building on Commonwealth Avenue and additional research facilities for the Departments of Physics and Biology on Cummington Mall. Throughout the 1990s, more buildings were constructed on the core campus, including the School of Management (1996), the Photonics Center (1997), the Life Sciences and Engineering building on Cummington Mall (2005), and the graduate student residence at 580 Commonwealth Avenue (2004).

The 2000s

During the 1980s, the University had acquired the Commonwealth Armory site, which provided 10.2 acres of new land for future campus expansion. In 2000, after a lengthy master planning process with the community and the city, the first phase of housing on the site, now called the John Hancock Student Village (10 Buick Street), was completed. In 2002, the Boston University Track & Tennis Center was completed (100 Ashford Street) to replace the Armory track facility. The next phase of development at the John Hancock Student Village included the completion of the Agganis Arena (2004) and the Fitness & Recreation Center (2005). The second phase of housing on this site, at 33 Agganis Way, was completed in 2009. With these projects, the University has substantially reduced the pressure from its students on the area's private housing market. It should be noted that the development of the Fitness & Recreation Center was undertaken, in part, to increase the demand for on-campus housing by undergraduate students.

Since the original acquisition of land along the Charles River in the 1920s, Boston University has sought to create a vibrant and attractive campus, which supports academic excellence and enriches student life, in the heart of the city. Through decades of renovation, new construction, and investment in public infrastructure, the University has created a cohesive campus from a disparate series of properties. This Institutional Master Plan will help set the stage for future improvements that will continue to unify and enhance the Charles River Campus and further integrate it into the fabric of the city.

4.2 NEIGHBORHOOD CONTEXT

Boston University has developed its campus vision in consideration of its mission, riverfront location, proximity to historic neighborhoods, and the insertion of major transportation infrastructure within the heart of its campus. Boston University is now surrounded by well-established, distinctive neighborhoods, which provide a context for its ongoing development. This section illustrates the distinctive character of each precinct.

4.2.1 BAY STATE ROAD

Bay State Road weaves together historic brownstones and a mix of newer institutional buildings. The elegant, attractive, and charming brownstones overlook a tree-lined street and the Charles River; these University-owned structures have been restored and upgraded over the years using historically appropriate methods and materials. In 1994, the Boston Preservation Alliance awarded Boston University its preservation award "for the outstanding restoration and stewardship of the many historic properties of Bay State Road." Larger and newer residential and institutional buildings are typically located on the corners of intersecting streets, such as the recently completed Center for Student Services at 100 Bay State Road.



Figure 4-1, Bay State Road at Granby Street, Looking West



Figure 4-2, Bay State Road at Deerfield Street

4.2.2 KENMORE SQUARE

Kenmore Square is located at the intersection of Commonwealth Avenue, Beacon Street, and Brookline Avenue and is a major transportation hub and thriving commercial center. Considerable investments made by Boston University since the late 1970s have helped transform Kenmore Square from an unattractive collection of dated, often vacant retail establishments, bars, and clubs into a vibrant, aesthetically pleasing, pedestrianfriendly public and commercial area from the establishment of the Boston University Bookstore in the early 1980s (now Barnes & Noble @ Boston University) to the opening of the Hotel Commonwealth in 2004, Boston University's investments in the north and south areas of Kenmore Square have served to anchor major additional improvements. For example, the University contributed funding to reconstruct the MBTA Kenmore Station and the surrounding road network, streetscape, and sidewalks. This dramatic transformation of the square into a dynamic, mixed-use center at a gateway to the University campus was also accomplished with critical support and significant input from important stakeholders, including the City of Boston, the Commonwealth of Massachusetts, Kenmore Business Association, and the Boston University Community Task Force. The University's role in this public-private partnership has significantly contributed to its identity as a good neighbor.



Figure 4-3, View Looking East at Kenmore Square



Figure 4-4, Looking East Along the Sidewalk at Hotel Commonwealth

4.2.3 AUDUBON CIRCLE

Audubon Circle is a residential and mixed-use area immediately south of Boston University's Charles River Campus. The neighborhood is known for the diversity of its residents, ranging from students to families and young professionals. The Audubon Circle itself is a historic landmark at the intersection of Beacon Street and Park Drive, and is currently undergoing a redesign as part of streetscape and roadway improvements by the City of Boston.



Figure 4-5, Park Drive at Beacon Street, Looking South



Figure 4-6, Beacon Street at St. Mary's Street, Looking East

4.2.4 ALLSTON

The area of Allston abutting Boston University's West Campus includes the residential areas south of the CSX freight yards and north of Commonwealth Avenue. The area is comprised of predominantly brick apartment buildings, triple-deckers, and other multi-family homes. It has a diverse mix of residents from many ethnic backgrounds, along with a strong student presence. Nearby Packard's Corner and Brighton Avenue provide vibrant shopping districts.



Figure 4-7, Gardner Street at Chester Street, Looking West



Figure 4-8, Ashford Street at Ashford Terrace, Looking East

4.2.5 COTTAGE FARM

The Cottage Farm neighborhood in the Town of Brookline is located on the southwestern quadrant of Boston University's Charles River Campus between Mountfort Street and Beacon Street. The area is predominantly residential, with most homes dating back to the mid-nineteenth and early twentieth centuries. The Cottage Farm district is listed on the State and National Registers of Historic Places and is a Brookline Local Historic District.



Figure 4-9, View of Carlton Street, Looking Southwest from Mountfort Street



Figure 4-10, Cottage Farm Residences, Looking East Along Dummer Street

4.2.6 CHARLES RIVER

The Charles River, while not a neighborhood, is a strong element in the identities of Boston University and the City of Boston. The Charles River is an actively used recreational area, with sailing, rowing, and boating activities underway on an almost year-round basis; the Boston and Cambridge shorelines are also popular sightseeing spots.



Figure 4-11, Aerial View Looking East



Figure 4-12, View of the Charles River

The open space along the southern bank of the Charles River abuts the University's campus, and there are pedestrian overpasses providing connections to the riverside parkland. The Charles River Basin is listed in the National Register of Historic Places

and is managed by the state's Department of Conservation and Recreation (DCR). The Charles River Esplanade was designated as a Local Landmark in Boston in 2009.

4.3 TRANSPORTATION CONTEXT

During the latter half of the twentieth century, many American cities were fragmented by the introduction of highway and roadway infrastructure. The City of Boston, including the Boston University campus, was not immune to this trend.

In 1929, the Metropolitan District Commission (the forerunner of today's Massachusetts Water Resources Authority and DCR) took riverfront land from Boston University by eminent domain, creating the Storrow Embankment Park. In 1951, the state constructed Storrow Drive, disconnecting the campus from the park and the Charles River. Figures 4-13 and 4-14 show the impact of the construction of Storrow Drive.



Figure 4-13, Construction of Storrow Drive

Figure 4-14, Storrow Drive After Construction

In the 1960s, the construction of the Massachusetts Turnpike Boston Extension through the heart of the campus effectively separated the campus, north-south, into two parts. The area where the turnpike, Commonwealth Avenue, and BU Bridge intersect became, and remains, a broad expanse of merging, intersecting, and overlapping multi-lane roadways that further added to the sense of fragmentation and physical separation for both the campus and the city. Figures 4-15 and 4-16 illustrate the impact of the interstate highway on the campus and surrounding neighborhoods.

Institutional Master Plan



Figure 4-15, Massachusetts Turnpike and Commonwealth Avenue during construction of the Carlton Street Overpass



Figure 4-16, View Looking West at the Massachusetts Turnpike and adjacent University properties from the Beacon Street bridge

Since the 1970s, this web of transportation infrastructure has posed major development challenges for the University. The University has strategically assumed ownership of contiguous parcels of land along Commonwealth Avenue, resulting in a linear campus centered on Commonwealth Avenue and extending from Kenmore Square to the area near Packard's Corner. Recent improvements to Commonwealth Avenue, from Kenmore Square to the BU Bridge, have resulted in significant improvements to the public realm and pedestrian safety, as well as heralding the city's first dedicated lane for cyclists. These works were the result of a major public-private partnership between Boston University, the City of Boston, and the Commonwealth of Massachusetts.

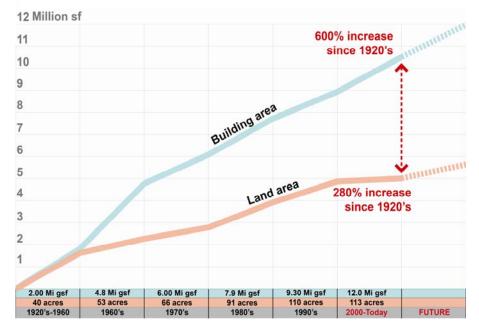
Looking to the future, the next phase of the renewal of Commonwealth Avenue, from the BU Bridge to Packard's Corner and Mountfort Street, will present the abutting neighborhoods and University with opportunities to create a safer, pedestrian-friendly, and public transit-oriented urban form. Working with the city and the state, the University can incrementally fulfill the vision of a tightly interwoven urban campus on the Charles River.

While existing and planned improvements to Commonwealth Avenue have resulted or will result in tremendous improvements to the public realm east and west of the BU Bridge, the campus still lacks a cohesive connection at its center. Rethinking the infrastructural barriers posed at the intersection of the Massachusetts Turnpike, Commonwealth Avenue, and the BU Bridge will allow the University and the city to realize future development goals.

The campus's broken connection to the Charles River remains a work in progress. In the past, the University successively planned for the enhancement of its "campus on a river" by constructing both the Marsh Chapel (1930s) and the Sert Complex (1960s). Both structures are iconic reminders of Boston University and acknowledge this special relationship to the river, setting the stage for future University development in the center of the campus.

4.4 FRAMEWORK AND VISION: CHARLES RIVER CAMPUS

Today, Boston University's Charles River Campus is a predominantly linear one with Commonwealth Avenue as its spine. Since 1960, the land area occupied by the Charles River Campus has grown by approximately 73 acres (2.8 times in size), primarily through the acquisition of vacant, underutilized, low-density parcels; building volume has increased by 10 million square feet (6 times in volume) over the same period (see Figure 4-17, Campus Growth), leading to a significant increase in the campus's urban density.





Boston University's 113 acres consist of four very active and distinct precincts, Central, West, East, and South, each separated by major infrastructure elements.

Physically, all precincts remain disconnected by infrastructure barriers and, while located near the Charles River, are separated from it. The center of the campus, at the intersection of

Commonwealth Avenue and the BU Bridge, is as an area of confluence, and tension, for pedestrians, motorists, cyclists, and public transit users. The lack of significant green spaces in all precincts also remains a significant challenge for campus identity.

In a testament to the commercial viability of the area, numerous retail and office users have established locations all along the 1.5-mile-long Commonwealth Avenue corridor. The colocation of University facilities with commercial mixed-use properties supports decades-old strategies of seeking to house more students on campus and reduce auto-dependency. Having a mixed-use urban campus, an ideal that most city universities strive for, is a major asset for Boston University.

In spite of the challenges outlined above, the University has succeeded in creating a foundation upon which to build a more vibrant and cohesive campus. Mixed-use developments in and around the core campus, coupled with on-campus housing construction and public realm improvements, have transformed the campus into a dynamic environment.

Although the Charles River Campus's four precincts (see Figure 4-18, Existing Campus Precincts) are highly active and integrated into the city, they are isolated from one another. There is an opportunity to create a more cohesive urban campus by creating new precincts or reorganizing existing precincts (see Figure 4-19, New Campus Precincts); existing precincts could also be strengthened by the reprioritization of uses and strategic addition of green spaces.

4.4.1 CENTRAL CAMPUS

Central Campus is centered on Commonwealth Avenue, south of the Charles River and north of the Massachusetts Turnpike between the BU Bridge and Silber Way. With University facilities such as Marsh Chapel, Mugar Library, George Sherman Union, and the science and engineering complex as its anchors, this area is the academic and research core of the University. New and renovated academic buildings have been proposed in this master plan for 645–665 Commonwealth Avenue and for the Boston University School of Law at 763–767 Commonwealth Avenue with each strengthening the core academic precinct while improving the public realm.

The College of Engineering and College of Communication projects located at 30–38 Cummington Mall and 640 Commonwealth Avenue, respectively, have been identified as proposed institutional projects for this section of the campus. In the near term, the focus in this area will be to create a state-of-the-art science, research, and engineering cluster around the new Cummington Mall. Cummington Mall is a reference to the former Cummington Street, which has now been acquired by the University and closed to general vehicular traffic. The mall was first referenced in the University's 1986 IMP as a potential location for a pedestrian mall. With the University's recent acquisition of the ownership of Cummington, Blandford and Hinsdale Streets from the city, the long-term vision for a more pedestrian-oriented campus can now be realized.

In the long term, the University's buildings along the turnpike will serve as gateway structures for proposed developments over the highway's air rights. Air rights development along the turnpike will provide major regional benefits and serve to knit together the Central Campus and the South Campus areas.

4.4.2 SOUTH CAMPUS

South Campus is the area south of the turnpike from Carlton Street to Beacon Street; it is isolated from Central Campus by the turnpike. In the near term, the area will remain primarily residential with a mix of undergraduate and faculty and staff housing. In the long term, South Campus will be better integrated with Central Campus through the development of turnpike air rights properties. Unlike other precincts, no institutional projects have been proposed for South Campus.

4.4.3 EAST CAMPUS

East Campus is characterized by academic, residential, office, and mixed-use properties and is proximate to Kenmore Square, bounded by Silber Way, Beacon Street, and Storrow Drive on its east, south, and north sides, respectively. This area will continue to serve as a gateway to the campus from Boston. Specific locations along Commonwealth Avenue and Deerfield Street have also been identified as potential sites for future University and mixed-use development. The Myles Standish Hall and 130 Bay State Road projects have been identified as proposed institutional projects in this area of campus. A pocket park at the intersection of Bay State Road and Beacon Street has also been proposed as a public realm project.

4.4.4 WEST CAMPUS

West Campus is located west of the BU Bridge and is primarily concentrated on the north side of Commonwealth Avenue. This area serves as the major locus of University student residential housing and athletic and recreational facilities, including Agganis Arena and the Fitness & Recreation Center. The precinct also supports significant academic and administrative use, with the College of Fine Arts, College of General Studies, and School of Hospitality Administration all located here. This precinct will likely continue to be a mix of academic, residential, and recreational uses which will be enhanced through the construction of the New Balance Field project, starting in

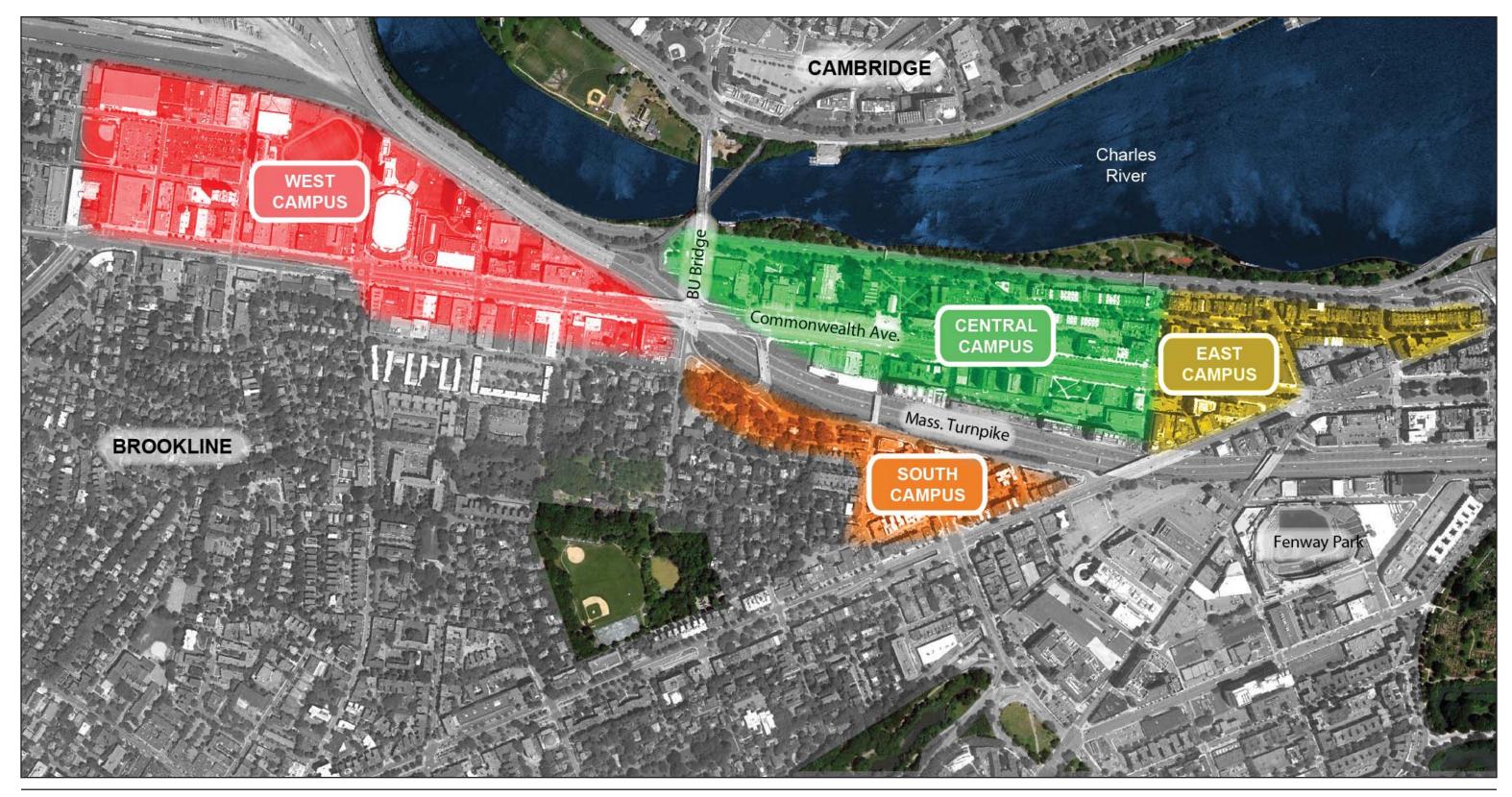


Figure 4-18, Existing Campus Precincts Boston University Charles River Campus 2012–2022 Institutional Master Plan Source: CBT Architects

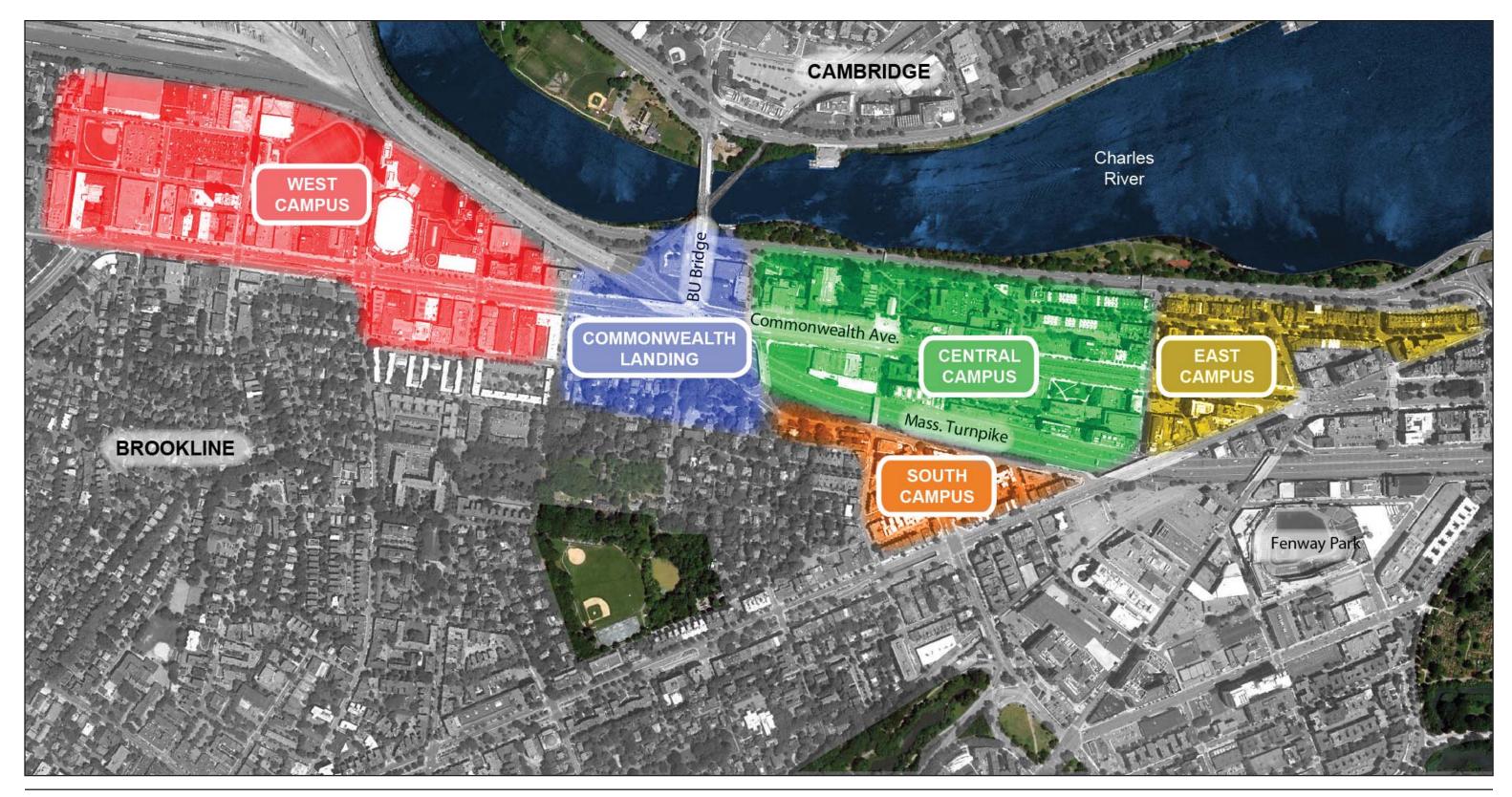


Figure 4-19, New Campus Precincts Boston University Charles River Campus 2012–2022 Institutional Master Plan Source: CBT Architects

September 2012, and the planned future construction of the Student Village III residence hall.

4.4.5 COMMONWEALTH LANDING

At present, the geographic center of the Charles River Campus is the intersection of the BU Bridge, Commonwealth Avenue, and Mountfort Street and is now referred to as "Commonwealth Landing". This intersection is a major regional vehicular, transit, and pedestrian hub for the Cities of Boston and Cambridge and the Town of Brookline. It serves as a vital vehicular link with the universities located in the City of Cambridge, the western suburbs, and the institutions of the Longwood Medical Area. A highway cloverleaf in the middle of an urban fabric, the intersection processes approximately 60,000 automobiles and 20,000 pedestrians on a daily basis; both cyclist and pedestrian numbers have nearly quadrupled in the last decade. In its existing condition, the current 1960s-era infrastructure is inefficient, unsafe, and a major barrier to future planning. In the long term, this area has the potential to serve as a major connection to the Charles River and as the location of a new and vibrant center of the Charles River Campus. Achieving this potential would require significant public resources, cooperative planning, and development efforts endorsed and supported by public and private stakeholders.

4.5 URBAN DESIGN PRINCIPLES

The University supports the long-term urban design planning principles and objectives listed below to further the goal of establishing a more cohesive campus with tangible public realm benefits. Building plans for Proposed Institutional Projects are subject to design review under Article 80B Large Project Review and this section is not intended to be a substitute for any project-specific design review that the University may be required to undertake in the future. It is, rather, an explanation of the relationship between general urban design planning principles and the institutional and public realm projects proposed for the Boston University Charles River Campus.

4.5.1 MIXED-USE, HIGH-DENSITY URBAN CAMPUS MASSING AND URBAN INFILL

There is an opportunity to grow with greater density within the footprint of the existing campus by creatively filling voids in underutilized parcels. These underutilized parcels include surface parking lots, areas gained by infrastructure transformations, "soft buildings" with greater density potential, and the Massachusetts Turnpike Air Rights Parcels 1 through 6.

Future developments will be undertaken strategically and with sensitivity to existing context, future use, environmental comfort in public spaces, and other factors. Increased massing and building height within the East, Central, and West precincts of the Charles River Campus are consistent within the current campus context. It is also vital that any density and height changes are designed carefully with use of transparency, orientation slenderness, and architectural elegance to ensure that each significant building on campus makes an important contribution to the skyline, while carefully managing the pedestrian scale on the streets and public spaces. More detailed information on Proposed Institutional Projects can be found in Chapter 5, Development Program.

4.5.2 FORGING NORTH-SOUTH CONNECTIONS/RECONNECTING TO THE CHARLES RIVER

Isolated from the Charles River by Storrow Drive and bisected by the Massachusetts Turnpike, the Boston University Charles River Campus has evolved into a predominantly east-west corridor along Commonwealth Avenue. There is now an opportunity to reconnect the campus to the river by establishing strategic north-south pedestrian axes and view corridors that are reinforced by building orientation and public realm improvements. With the cooperation and support of public and private stakeholders, the University will seek to focus a portion of its long-term planning efforts on forging north-south connections through the campus and to the Charles River at Deerfield Street, Silber Way, Granby Street, St. Mary's Street, and Essex Street—the location of the highly conceptualized vision of Commonwealth Landing in Section 4.4.5.

4.5.3 ENHANCING THE PUBLIC REALM

The Charles River Campus is notable for the lack of quality open space. However, the few major public spaces, such as the BU Beach and Marsh Plaza, are attractive and successful, and with the cooperation and support of public and private stakeholders, the University is prepared to incorporate improvements to the public realm into its long-and short-term development planning strategies.

Boston University has had a long and successful tradition of creating public realm spaces where opportunities have arisen. Examples can be found at various "pocket parks" throughout the campus (e.g., the Student Village, the corner of Granby Street and Bay State Road, and the front entrance to the College of Engineering on Cummington Mall).

Building upon the success of the Commonwealth Avenue Phase 1 project, the University is prepared to continue its involvement in public-private partnerships that serve to enhance Commonwealth Avenue as a vibrant, mixed-use boulevard. The Commonwealth Avenue Phase 2 project is currently in the design phase. In addition to improving transportation infrastructure and safety conditions for pedestrians and cyclists, this project also aims to beautify and improve the aesthetics of the area by improving sidewalks and landscaping treatments.

The University also plans to support and undertake the following public realm projects in conjunction with certain Proposed Institutional Projects and relevant stakeholders during the course of this master plan:

- Since 1986, the Boston University IMPs have called for the conversion of Cummington Street into a pedestrian mall. The University recently acquired the subject area and will carry out this commitment.
- Myles Standish Hall and Annex is a 760-bed undergraduate student residence at the corner of Beacon Street and Bay State Road. Given its location and the flatiron façade, the residence offers a unique pocket park opportunity. The University is prepared to develop plans and construct a green space that is consistent with the building's surroundings and at an appropriate budget.
- The private alley between Commonwealth Avenue and Bay State Road that runs from Granby Street to Silber Way would be transformed into a pedestrian mall.
- The intersection of Commonwealth Avenue and the BU Bridge is an uninviting area with little aesthetic appeal and heavily used by motorists, pedestrians, and bicyclists. The University is prepared to improve the pedestrian conditions on the corner of Boston University Academy with a solution that matches the Commonwealth Avenue sidewalks further to the east.
- The University is considering the placement of an appropriately scaled pocket park along a portion of Granby Street as part of the proposed institutional project located at 665 Commonwealth Avenue. This addition to the public realm will be adjacent to the aforementioned pedestrian mall on the Granby Street to Silber Way private alley.

4.5.4 FUTURE INFRASTRUCTURE PLANNING AND ITS RELATIONSHIP TO CAMPUS PLANNING

Boston University has a significant record of accomplishments in forging important public-private partnerships that have benefited both the public realm and spurred major infrastructure improvements near its Charles River Campus.

Direct University funding related to the creation of the Kenmore MBTA head house, which serves the station itself as well as ongoing University maintenance of parts of the square, has led to the revitalization of one of Boston's major residential and commercial gateways. Subsequent University funding related to Commonwealth Avenue improvements in partnership with the City of Boston and Commonwealth of Massachusetts have led to the creation of a pedestrian-friendly boulevard from Deerfield Street to University Road as well as the city's first dedicated cyclist lanes on both sides of the avenue. Landscaping improvements along this segment have also helped to beautify the core campus of the University, thereby adding to the public realm and setting the standard for future similar improvements from the area of the BU Bridge to Alcorn Street as a part of Commonwealth Avenue Phase 2 improvements.

As the potential for future infrastructure improvements near the campus emerge from the discussion to the planning stage, the University stands ready to work with the community and key stakeholders in crafting similar partnerships. As discussions continue to evolve regarding the design and creation of the Urban Ring, the University will continue its key participation in this important initiative looking for opportunistic ways to merge infrastructure improvements with benefits to the public realm in the center of the campus near the area of the BU Bridge. In the same vicinity, the University will also continue to work with key stakeholders in the realignment of roadways related to the BU Bridge, University Road, the Carlton Street Bridge, and Mountfort Street to help minimize pedestrian-vehicular conflicts and maximize the development potential of the area and for Massachusetts Turnpike Air Parcels 1 and 2. To the east, as preliminary discussions continue on the future of the Bowker Overpass and related infrastructure, the University will continue to work with the community and key stakeholders on crafting a vision that serves both the public and University's interests.

4.6 RELATIONSHIP OF PROPOSED INSTITUTIONAL PROJECTS TO URBAN DESIGN PRINCIPLES

4.6.1 STUDENT VILLAGE RESIDENCE III (SITE AA)

The final phase of housing at the Student Village site will occupy the one remaining development site in the complex and will be designed to avoid a wall effect along the turnpike edge of the site. The building will provide needed bed spaces to continue the University's efforts to house more students on campus; it also adds to the density and activity at West Campus and supports this precinct as a growing center of student life.

Figure 4-20, Proposed Massing for Student Village Residence III at Site AA

4.6.2 BOSTON UNIVERSITY SCHOOL OF LAW (SITE BB)

The proposed School of Law project continues the effort to add density to the campus through a sensitive restoration of the existing Sert-designed tower and a complementary lower-story addition. With its lower height, the addition will not detract from the singular riverfront presence of the School of Law tower and will maintain existing connections through the site to the river. The ground floor, which will have a glassenclosed three-story meeting space adjacent to a new entryway, will enliven a major pedestrian route.



Figure 4-21, Proposed Massing for Boston University School of Law at Site BB

4.6.3 ACADEMIC BUILDINGS (SITE CC)

A key parcel for development along Commonwealth Avenue, Site CC will support a building, or buildings, of significant height and density. Replacing an existing void in the streetscape along the campus spine, the building(s) will enliven Commonwealth Avenue with active uses at the ground floor. A critical north-south connection to the river along Granby Street will be articulated with a pedestrian plaza, which will lead to the existing green space at the corner with Bay State Road. Behind the building, the proposed Granby Street to Silber Way pedestrian mall will provide a quiet pedestrian connection across the campus.



Figure 4-22, Proposed Massing for Academic Buildings at Site CC

4.6.4 ACADEMIC BUILDING ADDITION (SITE DD)

The addition at Site DD will fulfill an existing need for expanded academic space and fill the void along the southern edge of Commonwealth Avenue. Fronting directly onto the street, the building will create a more lively street edge.



Figure 4-23, Proposed Massing for Academic Building Addition at Site DD

4.6.5 SCIENCE AND ENGINEERING RESEARCH BUILDING (SITE EE)

The construction of the building on Site EE will help to consolidate science and engineering on the Charles River Campus, complement the effort to convert Cummington Street to a pedestrian mall, and allow for pedestrian access to the future development related to the turnpike air rights. The height and massing of the building is appropriate for the site and complementary to nearby buildings.



Figure 4-24, Proposed Massing for Science and Engineering Research Building at Site EE

4.6.6 ACADEMIC/ADMINISTRATIVE BUILDING (SITE FF)

The proposed building at Site FF renovates and restores two existing brownstones and adds a new addition that offers full accessibility and expanded academic and administrative space. The project is consistent with the goal of using unoccupied space and would do so in a manner respectful of the historic district. The public realm along Bay State Road will be maintained by use of a massing consistent with the existing brownstones.



Figure 4-25, Proposed Massing for Academic/Administration Building at Site FF

4.6.7 MYLES STANDISH RESIDENCE HALL AND MYLES STANDISH ANNEX REHABILITATION (SITE GG)

The Myles Standish Hall and Annex renovation project will maintain the historic structure and adapt the building to current housing standards, making it more attractive to students seeking on-campus housing. The project will preserve the important urban design elements of this structure, highlighting the entrance to the Charles River Campus from the Back Bay. This project will be further enhanced by the proposed pocket park at the juncture of Bay State Road and Beacon Street.

Figure 4-26, Proposed Massing for Myles Standish Rehabilitation at Site GG



DEVELOPMENT PROGRAM

Chapter 5

CHAPTER 5: DEVELOPMENT PROGRAM

5.1 INTRODUCTION

This chapter contains information on proposed institutional projects—described below and illustrated in Figure 5-1, Proposed Institutional Projects—that Boston University plans to undertake during the term of this Institutional Master Plan. The majority require approval as "Proposed Institutional Projects," as defined in Article 80D of the Boston Zoning Code. However, in order to provide the full scope of projects planned by the University, projects previously approved through the Planned Development Area designation and enhancements to the public realm that do not require zoning relief are also included in this chapter. Information on potential development sites, which the University has no immediate development plans for but views as opportunities for future acquisition and/or development, and the relationship between the Institutional Master Plan and other aspects of city zoning and ordinances are also addressed.

Three of the projects approved as part of the 2010 Master Plan Renewal have advanced to the degree that they are no longer included as proposed projects: the East Campus Student Services Center is under construction and is anticipated to open in late summer 2012, while the Admissions Reception Center at 233 Bay State Road and the New Balance Field on Babcock Street commenced construction during the summer of 2012.

Lastly, the final student residence building at the John Hancock Student Village is included in this list of projects and is likely to be constructed during the period of this master plan. This project was previously approved under a Planned Development Area approval and does not require zoning approval under this plan.

In the project descriptions below, height is measured to the top of the highest occupied floor and project size is based on the gross floor area, as defined in the Boston Zoning Code.

5.2 ACADEMIC FACILITIES

5.2.1 BOSTON UNIVERSITY SCHOOL OF LAW (SITE BB)

For some time, Boston University School of Law has demonstrated a need for improved and modernized facilities to support contemporary methods of legal education and to retain its standing as one of the top law schools in the United States. Changes in legal pedagogy and advances in technology-based legal research methods have created a requirement for redesigned classrooms and increased collaborative space for students. Although enrollment in the School of Law has decreased somewhat since 1986, total space needs have increased, reflecting new teaching methods. The current facilities at 763–767 Commonwealth Avenue were constructed in the early 1960s and no longer adequately support the School's research and teaching needs. The current building's 48-year-old systems are approaching the end of their useful life. The University is cognizant of an obligation to balance additional classroom and library space with the historical significance of the existing Josep Lluís Sert–designed building. The proposed project includes two separate elements: the renovation of the approximately 170,000 square feet of the existing School of Law building and an addition of approximately 100,000 square feet.

Location – 763–767 Commonwealth Avenue

Project Site Area – 93,150 square feet
Existing Use – Academic use (School of Law)
Proposed Use – Academic use (School of Law)
Proposed Maximum Height – Existing tower at 264 feet
Proposed Maximum Size – Existing 170,000 square feet, addition of up to 100,000 square feet
Proposed Maximum Floor Area Ratio (FAR) – 3.0 (including Pappas Library)

Current Zoning - H-4

5.2.2 ACADEMIC BUILDING (SITE CC)

The site at the corner of Commonwealth Avenue and Granby Street has been identified as a potential development site since the first master plan was approved in 1987. Acquisition of the entire site parcel was completed in 2003, and it is currently a public surface parking lot. New academic space, which could be developed as either a singleor multiple-phase project, is proposed for the site. The size of the parcel suggests that below grade parking could be considered.

> Location – 645–665 Commonwealth Avenue Lot Area – 42,000 square feet Existing Use – Surface parking lot

Proposed Use – University use, primarily academic uses for instruction, research, offices, and ancillary uses. Below grade parking.
Proposed Maximum Height – 15 stories
Proposed Maximum Building Area – 350,000 square feet
Proposed Maximum FAR – 8.4
Current Zoning – H-4

5.2.3 ACADEMIC/ADMINISTRATIVE BUILDING (SITE FF)

The proposed site at 130 Bay State Road offers an opportunity to integrate two existing brownstones with a new addition to the west, creating approximately 60,000 square feet of academic and administrative space. The programmatic integration of this building with the adjacent School of Management will require an above grade physical connection between buildings.

Location – 130 Bay State Road Lot Area – +/- 19,000 square feet Existing Use – Academic, vacant, and open space Proposed Use – University use, including academic, research, office, and administrative uses Proposed Maximum Height – 45 feet on Bay State Road, stepping up to 75 feet Proposed Maximum Building Area – 60,000 square feet Proposed Maximum FAR – 4.0 (existing) Current Zoning – H-4

5.2.4 ACADEMIC BUILDING ADDITION (SITE DD)

The proposed academic building project would add 50,000 square feet to the existing 84,000 square foot building at 640 Commonwealth Avenue with an addition oriented toward Hinsdale Street and Commonwealth Avenue.

Location - 640 Commonwealth Avenue

Lot Area – 67,232 square feet

Existing Use – Academic use

Proposed Use – University use, primary academic uses, including instruction, research, and offices.
Proposed Maximum Height – 3 stories
Proposed Maximum Building Area – 50,000 square feet
Proposed Maximum FAR – 4.0 (existing)
Current Zoning – H-4

5.3 **RESEARCH FACILITIES**

5.3.1 SCIENCE AND ENGINEERING RESEARCH BUILDING (SITE EE)

With the acquisition of Cummington Street (now Mall) from the City of Boston, the University has the opportunity to make better use of some of the smaller land parcels abutting the Massachusetts Turnpike along Cummington Mall. These parcels, from 30 to 100 Cummington Mall, are too narrow to support modern academic buildings, but by using the additional area along or above Cummington Mall, a more efficient footprint can be achieved. The proposed project is a science/engineering research building at 30–38 Cummington Mall that will replace an existing 36,563 square foot building.

Location – 30–38 Cummington Mall Lot Area – 25,000 square feet (including portion of street) Existing Use – Academic Proposed Use – University use, primary academic uses, including instruction, research, offices, and student study spaces Proposed Height – 11 stories Proposed Maximum Building Area – 165,000 square feet Proposed Maximum FAR – 7.0 Current Zoning – M-2

5.4 STUDENT HOUSING

5.4.1 STUDENT VILLAGE RESIDENCE III (SITE AA)

Previously approved in the Planned Development Area overlay zoning for the former Commonwealth Armory site, this one remaining residential building would be located between 33 Harry Agganis Way and 10 Buick Street and would accommodate up to 523 students.

> Location – Student Village Lot Area – Part of larger parcel Existing Use – Surface parking Proposed Use – Student residence Proposed Maximum Height – 11 stories Proposed Maximum Size – TBD Proposed Maximum FAR – 3.3 Current Zoning – PDA

5.4.2 MYLES STANDISH RESIDENCE HALL AND MYLES STANDISH ANNEX REHABILITATION (SITE GG)

Myles Standish Hall, originally constructed in 1926 as a residence hotel, has served as a University dormitory since 1949. This building at 610 Beacon Street currently provides 660 student bed spaces. In 1980, the University acquired an abutting property (632 Beacon Street), now known as the Myles Standish Annex, and converted it to a residence hall providing an additional 100 student bed spaces. A total rehabilitation is planned for both of these building to bring them in line with modern housing standards and to ensure they remains an attractive option for on-campus student housing. It is anticipated that a minor expansion of the buildings may be recommended as part of the renovation project. A reduction in the number of student beds might result from the project's adherence to current building standards and codes.

Location – 610 Beacon Street (also referred to as 30 Bay State Road) and 632 Beacon Street

Lot Area – 26,100 square feet (both properties) Existing Use – Student residence

Proposed Use – Student residence

Proposed Maximum Height – Nine stories, 80 feet (existing height) Proposed Maximum Building Area – 230,000 square feet Proposed Maximum FAR – 8.8 Current Zoning – H-4

5.5 PUBLIC REALM AND OPEN SPACE

In addition to the list of Proposed Institutional Projects, Boston University has identified potential projects that will enhance the public realm of the University campus. These projects include new pedestrian ways, pocket parks, landscaped areas, and roadway and streetscape improvements. The location of these potential public realm improvements is illustrated in Figure 5-2, Public Realm Improvements.

5.5.1 BAY STATE ROAD/BEACON STREET POCKET PARK

The University proposes to create a pocket park at the intersection of Beacon Street and Bay State Road to enhance the improvements proposed to Myles Standish Hall and the Annex (see Section 5.4.2) at this important entry to the Charles River Campus. The intersection of these two thoroughfares is an unnecessarily large expanse of pavement that encourages high automobile speeds and discourages pedestrian activity. Conversion of this triangular area to a green space would provide additional open space for students and area residents while reducing vehicular speeds, improving the pedestrian environment, and beautifying the entry to the campus.

5.5.2 COMMONWEALTH AVENUE PHASE 1A IMPROVEMENTS

Contingent upon the execution of a memorandum of understanding between the Commonwealth of Massachusetts and Boston University regarding the scope and apportionment of state and University contributions to this public works project, this project will install and upgrade safety fencing along the Massachusetts Bay Transportation Authority (MBTA) reservation in Commonwealth Avenue between Kenmore Square and Carleton Street. It will complete safety improvements that were not undertaken as part of the Phase 1 improvements. This project will also make modifications to the Blandford Street platform so that it is accessible to people with disabilities. The MBTA will fund construction through a grant from the U.S. Department of Transportation.

5.5.3 COMMONWEALTH AVENUE PHASE 2A IMPROVEMENTS

Contingent upon the securement of funding by the Commonwealth of Massachusetts and other government stakeholders, this proposed project would improve access to Boston University, and its surrounding neighborhoods and communities, through improved pedestrian facilities, optimized intersection operations, and improved vehicular and cyclist thoroughfares. The project site spans one-half mile from Amory Street to Alcorn Street. Phase 2A is the westward extension of improvements similar to those made to the Kenmore Square area of Commonwealth Avenue. The project aims to improve safety conditions for all modes of transportation and beautify the street with the installation of boulevard-like elements, including street furniture, trees, benches, trash receptacles, bike racks, and lighting fixture upgrades.

Specific pedestrian safety improvements include upgrades to traffic signaling equipment, vehicular and trolley detection equipment connected to the Boston Transportation Department Traffic Management Center, and bump-outs at crosswalks. Improvements also include Americans with Disabilities Act-compliant sidewalk cross slopes, ramps, and platform modifications to all four MBTA stations within the project site. Commonwealth Avenue typically consists of three lanes outbound and two lanes inbound within the proposed project limits. This project proposes exclusive left turn pockets at intersections where left turns are allowed. Boston University has agreed to fund costs related to project design up to \$2 million.

5.5.4 COMMONWEALTH AVENUE AREA AT BU BRIDGE

In order to enhance safety and improve pedestrian circulation, Boston University intends to widen the sidewalks along Commonwealth Avenue between the BU Bridge and University Road. The existing sidewalk is fairly narrow in this high traffic area, particularly behind the bus shelter. This expansion would reduce the crossing times for the 15,000 pedestrians that traverse this area daily. Widening the sidewalk will also increase the perceived security of those walking along it and calm automobile traffic nearby.

5.5.5 CUMMINGTON PEDESTRIAN MALL

Consistent with intentions expressed in master plans since 1986, the University recently acquired Cummington Street from the City of Boston. To complement the proposed Engineering Research Building at 30–38 Cummington Mall (see Section 5.3.1) and to improve the campus pedestrian environment, the University has begun the process of creating a pedestrian mall.Automobile access is now limited to emergency vehicles, and

plans call for creation of a pedestrian-friendly open space linking the University's science and engineering buildings situated along Cummington Mall.

5.5.6 GRANBY STREET TO SILBER WAY PEDESTRIAN WAY

The University intends to construct a pedestrian way running from Silber Way to Granby Street to improve campus connectivity and provide a quiet, landscaped route connecting the Central Campus to the School of Management. The pedestrian way centers on the service alley running parallel to Commonwealth Avenue and Bay State Road. The way will need to remain accessible for service vehicles, but a substantial width is available by including rear yard areas adjacent to the alley.

5.5.7 GRANBY STREET POCKET PARK

In support of facilitating better north to south connections between the Charles River Campus, Charles River, and coincident with the development of new academic building at 645–665 Commonwealth Avenue (see Section 5.2.2), the University will create a pocket park along the Granby Street edge of Parcel CC to provide pedestrian open space and a greener streetscape leading to the river. This pocket park will align with the existing green space at the corner of Granby Street and Bay State Road.

5.6 **PROJECT PLANNING**

The projects listed above include those that the University believes can be constructed within the time frame of the 2012–2022 Institutional Master Plan. The specific timing of individual projects is subject to variability due to changes in demand for specific institutional uses, availability of University capital funds, successful fundraising, construction costs, and changes in the overall economy. The University has a successful track record of completing projects listed within its three prior master plans and, as of summer 2012, had three major building projects underway. However, the timing of any project or group of projects is subject to a number of factors beyond the University's control, and actual construction may be advanced or delayed from the time frame outlined. In total, the University anticipates the cost of these public and private improvement projects to approach approximately \$750 million.

For this master plan, it is anticipated that the following projects would be commenced within the earlier portion of the plan's stated time frame:

School of Law (Site BB) Academic Building (Site CC) Academic/Administrative Building (Site FF) Student Village Residence III (Site AA) Commonwealth Avenue Phase 1A Improvements Commonwealth Avenue Phase 2A Improvements Cummington Pedestrian Mall Bay State Road/Beacon Street Pocket Park

The following projects are anticipated to be carried out within the latter portion of the master plan time frame.

Academic Building Addition (Site DD) Science and Engineering Research Building (Site EE) Myles Standish and Myles Standish Annex Residence Hall Rehabilitation (Site GG) Commonwealth Avenue at BU Bridge Granby Street Pocket Park Granby Street to Silber Way Pedestrian Way

5.7 ZONING

The Boston University Charles River Campus spans several zoning districts within the City of Boston, as well as portions of the Town of Brookline. The campus east of the BU Bridge is generally located within the Boston Proper district as defined on Map 1; the institutional use parcels are identified with the designation of "Institutional Master Plan Area" or "Planned Development Area." A portion of the campus is located within the Audubon Circle Neighborhood District, as shown on Map 1M. The areas to the west of the BU Bridge are located within the Allston Brighton Neighborhood District, Map 7B/7D, and are designated "Planned Development Area" or "IS" for Institutional Subdistrict.

This Institutional Master Plan is the framework for the zoning controls for the University's institutional uses. While there are underlying zoning districts and overlay districts that include Boston University institutional properties, the master plan is the controlling document for zoning approvals. The primary institutional uses include college and university uses (use item #16A), dormitories (use items #11, 12, 13, and 13A), research laboratories (use item #24), recreational facilities (use item #28), and parking lots and garages (use items #58 and 59), all of which are governed by the provisions of the Institutional Master Plan. West of the BU Bridge,

under the provisions of the Allston Brighton Neighborhood District, Table C of Article 51 lists the uses which are allowed as institutional uses, including the above listed primary institutional uses. East of the BU Bridge in the Boston Proper district, such uses shall also be deemed to comply with the master plan. The Proposed Institutional Projects listed in sections 5.1–5.4 (above) include a description of the maximum dimensional limits of proposed projects as they are anticipated at the time of the Institutional Master Plan. Minor deviations from the descriptions provided may occur as specific project designs progress. Proposed Institutional Projects may be constructed in multiple phases and may also be constructed to less than the approved maximum build-out. All projects that exceed the applicable thresholds shall also be subject to review under Article 80B Large Project Review and Article 80E Small Project Review.

University-owned properties listed in the Institutional Master Plan that are used for the institutional purposes listed above are deemed to be in compliance with this master plan. Occasionally, properties may be repositioned to meet different University uses, such as the brownstones along Bay State Road, which may fluctuate among dormitory, rental housing, academic, and administrative uses. In addition, building renovations and/or small additions may be required to bring buildings into compliance with accessibility standards or current building, environmental, or energy standards. Subject to these projects being reviewed under Article 80B or 80E, as applicable, these changes are also deemed to be consistent with the Institutional Master Plan.

The section below addresses the relationship between the master plan and other zoning districts and ordinances that cover the Charles River Campus.

5.7.1 GROUNDWATER CONSERVATION OVERLAY DISTRICT

The Groundwater Conservation Overlay District (GCOD) was established under the Boston Zoning Code to protect and restore groundwater levels within the City of Boston and, by doing so, to protect and enhance the city's historic neighborhoods and structures. Many of the city's historic buildings are constructed on wood pilings in areas of historic fill and are subject to deterioration and damage if groundwater levels are not maintained. GCOD generally covers the area of the Charles River Campus north of Commonwealth Avenue to the Charles River and east of the BU Bridge.

Activities subject to GCOD include new construction, substantial rehabilitation, excavation, and paving. Projects subject to GCOD generally need to demonstrate that they will not adversely affect groundwater levels and recharge a volume of storm water equal to a one-inch rainstorm where feasible.

As the owner of many of the historic properties along Bay State Road, Boston University has been careful to ensure that new construction projects within and near the district do

not adversely affect groundwater levels. Rehabilitation projects along Bay State Road have included groundwater recharge measures where feasible. In addition, the University has cooperated with the City of Boston, the Boston Groundwater Trust, and the Boston Water and Sewer Commission to install groundwater-monitoring wells and to identify and mitigate potential causes of lowered groundwater levels. As a result of these measures, Boston Groundwater Trust records show that groundwater levels in the Charles River Campus are maintained at safe levels; Boston University will continue to work with the trust to monitor future levels. For projects within GCOD, the University will document compliance with GCOD standards through the Boston Redevelopment Authority Certificate of Consistency with the Institutional Master Plan.

5.7.2 RESTRICTED PARKING OVERLAY DISTRICT

The Restricted Parking Overlay District (RPOD) is a Special Purpose Overlay District established under the provisions of Section 3-1A of the Zoning Code. The RPOD requires that off-street parking facilities, including parking lots, parking garages, and ancillary or accessory parking for nonresidential uses to obtain a conditional use permit. The portions of the Charles River Campus east of the BU Bridge are within the RPOD.

The University manages its parking supply on a campus-wide basis and frequently needs to shift and reallocate parking spaces based on changes in academic programs and as a result of the development of new facilities. Through transportation demand management, the University's success has been outstanding in managing the transportation needs of students, faculty, and staff, while reducing the use of single occupancy vehicles as a mode of transportation. The parking supply on the Charles River Campus is well managed both for ordinary campus needs and for special event situations.

Chapter 8, Transportation, describes in detail the supply and demand for parking on campus and the measures taken to promote alternative transportation modes. In fact, the redevelopment of existing surface parking lots outlined in this Institutional Master Plan may well lead to a reduction in overall parking supply. Through the campus-wide transportation demand management plan, the University will properly manage the parking supply and will document the compliance with the RPOD standards through the BRA Certificate of Consistency on the Institutional Master Plan.

5.7.3 ARTICLE 37 GREEN BUILDINGS

Article 37 Green Buildings ensures that major building projects are planned, designed, constructed, and managed to minimize adverse environmental impacts, conserve natural

resources, and promote sustainable development. Article 37 applies to projects subject to Article 80B Large Project Review and requires documentation that the project will be Leadership in Energy and Environmental Design (LEED) certifiable under the most appropriate LEED Building rating system, including the use of Boston Green Building Credits.

As described in Chapter 9, Sustainability, Boston University is committed to designing, building, and operating its physical facilities in a sustainable manner. As part of this commitment, the University will design and construct all of its new buildings and major rehabilitation projects to comply with the requirements of Article 37. Documentation of compliance with the provisions of Article 37 Green Building will be achieved through the BRA Certificate of Consistency with the Institutional Master Plan.

5.7.4 GREENBELT PROTECTION OVERLAY DISTRICT

Article 29 of the Boston Zoning Code establishes Greenbelt Protection Overlay Districts (GPOD) for the purpose of protecting scenic and natural resources, preventing congestion, and protecting the safety of the city's greenbelt roadways. The GPOD applies generally to rehabilitation or new construction projects of more than 5,000 square feet and requires review of project plans by the Boston Parks Commission. The area of the Charles River Campus within 200 feet of the centerline of Commonwealth Avenue and west of the Boston University Bridge is within GPOD, as established under Article 51. There are no Proposed Institutional Projects in this Institutional Master Plan that come within GPOD.

Standards for approval under GPOD include preservation of the natural and scenic quality through proper landscape treatment, compatible architectural design, and adequate vehicular access and parking. GPOD review by the Boston Parks Commission will be coordinated with the BRA for projects also subject to BRA design review. Documentation of compliance with the provisions of Article 29 GPOD will be achieved through the BRA Certificate of Consistency with the Institutional Master Plan.

5.7.5 NEIGHBORHOOD DESIGN OVERLAY DISTRICT

Article 61 Audubon Circle Neighborhood District establishes a Neighborhood Design Overlay District (NDOD) within a portion of the University's South Campus. This NDOD establishes specific design guidelines for projects within the district that are subject to Article 80B Large Project Review and Article 80D Small Project Review. The detailed design guidelines seek to ensure that proposed projects would be consistent with the character of the neighborhood and respect the existing development patterns. Approvals under NDOD are implemented through Article 80 review and any University projects subject to Large or Small Project Review would be subject to the NDOD design guidelines.

5.7.6 BAY STATE ROAD/BACK BAY WEST ARCHITECTURAL CONSERVATION DISTRICT

In January 1980 the Bay State Road/Back Bay West Architectural Conservation District (ACD) was established by vote of the Boston Landmarks Commission and approved by the city council and mayor. The goal of ACD is to preserve and protect the unique architectural and historic characteristics of the Bay State Road area. Boston University is the largest property owner in the district and has diligently preserved and protected its buildings. The University has spent millions of dollars rehabilitating and restoring the brownstones along Bay State Road, and it has found productive office and housing uses for these properties.

The University has recently completed one new project within the district, the East Campus Student Services Center at 100 Bay State Road, and is commencing a second project, the Admissions Reception Center at 233 Bay State Road. These projects underwent extensive architectural design review with the Bay State Road/Back Bay West Architectural Conservation District.

One additional new building project (an academic/administrative building on Site FF) and one major rehabilitation project (Myles Standish Hall and Annex on Site GG) are listed as Proposed Institutional Projects within this master plan and lie within the conservation district. It is anticipated that the ongoing renovation of existing buildings along Bay State Road will continue throughout the master plan time frame. All of these projects will be subject to ACD design review and approval. For Proposed Institutional Projects that are also subject to Article 80B Large Project Review, the design review will be closely coordinated between ACD staff and BRA Urban Design staff to ensure complementary objectives are achieved in the building designs.

The Bay State Road/Back Bay West ACD is not a zoning overlay district, but a city ordinance. Its inclusion in this section is simply to recognize the importance of this district to campus development; the master plan does not alter or supersede ACD.

5.8 POTENTIAL DEVELOPMENT SITES

In addition to the list of Proposed Institutional Projects, Boston University has identified potential development sites for future projects. These sites include parcels that the University

currently owns and parcels that may become available for lease, acquisition, or development in the future.

The sites are shown in Figure 5-3, Potential Development Sites. These parcels have simply been identified as potential sites for development; there are no specific projects proposed for these sites in this master plan. The list of sites has been updated since the 2003–2010 Institutional Master Plan and includes new sites that the University believes offer some potential for future acquisition and/or development. In addition, sites that have already been developed or that are listed as Proposed Institutional Projects have been removed.

Over the course of the next 10 years, it is likely that additional properties will become available for lease, acquisition, and/or development. Boston University will carefully analyze each property to determine its appropriateness in relation to the University's objectives. Such properties, both inside and outside the City of Boston, could conceivably provide alternative development sites. As is often the case, properties surrounding the Charles River Campus may become available for acquisition and, with no particular use in mind, the University might purchase them to maintain the campus environment.

The University has a strong interest in the future development of air rights over the Massachusetts Turnpike. Parcels 1–6, as identified in the City of Boston's "Civic Vision for Turnpike Air Rights in Boston" in June 2000, provide a special opportunity to knit back together the city's neighborhoods, open spaces, and streets, while serving to support institutional development projects.

Site A

Location	76 Ashford Street, Boston
Lot Area	35,841 sq. ft.
Ownership	Barnstead Properties, Inc.
Existing Use	Industrial: Consolidated Sterilizer Systems
Adjacent Use	University athletic/recreation facilities, administrative offices, rail yards Multi-family residential neighborhood
Potential Use	Support facility related to athletic and/or administrative offices

Site **B**

Location	120 Ashford Street, Boston
	300 Babcock Street, Boston

Lot Area	137,824 sq. ft.
Building Area	172,079 sq. ft.
Ownership	Boston University
Existing Use	University mail services, facilities management and planning, storage, gymnasium, office, distribution, and athletic training facility
Adjacent Use	Freight car storage, rail yard, parking, University athletic fields, Case Athletic Center, New Balance Field (under construction)
Potential Use	Potential athletic/recreation facilities
Site C	
Location	CSX Freight Yards, Boston
Lot Area	Entire lot area is 1,844,766 sq. ft.
Ownership	Harvard University
Existing Use	CSX Beacon Park Rail Yard
Adjacent Use	Massachusetts Turnpike, University athletic and administrative facilities.
Potential Use	University athletic fields, recreational and other suitable academic uses such as research facilities
	Site D
Location	Corner of Malvern and Ashford Street, Boston
Lot Area	73,500 sq. ft.
Ownership	Boston University
Existing Use	Boston University Athletic Field
Adjacent Use	Residential apartments, single-family homes, mixed-use residential, University athletic center, supermarket, parking lot
Potential Use	Continue current athletic uses. Structured parking combined with athletic field is a potential long-term use.

Site E

Location	Ashford, Alcorn, and Gardner Streets, Boston
Lot Area	71,913 square feet
Ownership	Boston BLT LLC
Existing Use	Parking Lot
Adjacent Use	University athletic field, athletic complex and administrative operations, supermarket, parking lot
Potential Use	Structured Parking
Site F	
Location	1055, 1047, 1039, 1035, 1027 Commonwealth Avenue, Boston
Lot Area	133,688 sq. ft.
Ownership	1055 Comm. Ave – League of Planned Parenthood 1047 Comm. Ave – Ten47 Realty Ventures, LLC 1039 Comm. Ave – Sanieoff Sieon 1027 Comm. Ave – Sanieoff Sieon
Existing Use	Residential/Commercial Nonprofit/medical
Adjacent Use	Residential/Commercial University athletic field, parking, apartment building (Babcock Tower)
Potential Use	Commercial/Retail, upper floor residential, administrative, academic
Site G	
Location	949–1005 Commonwealth Avenue, Boston
Lot Area	113,900 sq. ft.
Ownership	 1001 Commonwealth Avenue – Match School Foundation, Inc. 989 Commonwealth Avenue – City of Boston 985 Commonwealth Avenue – Boston University 983 Commonwealth Avenue – Boston University

	971 Commonwealth Avenue – Gerald J Realty Co, Inc. 963 Commonwealth Avenue – HDR Realty, LLC 961 Commonwealth Avenue – Bradford A. Spencer (961) 957 Commonwealth Avenue – J & M Realty, Inc. Mass Corp 949 Commonwealth Avenue – Boston University
Existing Use	Match Charter School City-owned Family Justice Center University-owned administrative, academic, commercial space Commercial/Retail/Restaurant Parking lot
Adjacent Use	University dormitories, Nickerson Field, Student Village, commercial and multi-family housing
Potential Use	Commercial/Retail on ground floor, housing above
Site H	
Location	910 Commonwealth Avenue, Brookline 115 Dummer Street, Brookline
Lot Area	27,063 sq. ft.
Ownership	910 Commonwealth Avenue – United Christian Evangelistic Association 115 Dummer Street – National Studios, LLC
Existing Use	Religious institution Media studio
Adjacent Use	University-owned retail, commercial and academic Project housing on south side of Dummer Street
Potential Use	Retail/Commercial, University academic, administrative space
Site I	
Location	860–872 Commonwealth Avenue, Brookline 874–880 Commonwealth Avenue, Brookline
Lot Area	75,856 sq. ft.
Ownership	860–872 Commonwealth Avenue – Grossman, Bernard D & Morton S c/o The Grossman Companies 874–880 Commonwealth Avenue – Helman Family LP, et al.

Existing Use	Retail/Commercial along Commonwealth Avenue frontage Automobile service garage in rear
Adjacent Use	Commercial/Restaurant University academic
Potential Use	Commercial/Retail
	Site J
Location	808-846 Commonwealth Avenue, Brookline 850 Commonwealth Avenue, Brookline 163-179 Amory Street, Brookline
Lot Area	193,465 sq. ft.
Ownership	Boston University owns entire block except for the parcel at 850 Commonwealth Avenue, owned by Emile Heraiki
Existing Use	850 Commonwealth Avenue – Gas & Service Station 834-846 Commonwealth Avenue – Retail/Commercial 808 Commonwealth Avenue – Boston University Art Gallery, academic and administrative space and parking 163-179 Amory Street – Retail/Commercial, University administrative space
Adjacent Use	Single Family Residential
Potential Use	College of Fine Arts and Performance Center and other academic or administrative uses. Structured parking would likely be a part of any development.
	Site K
Location	Boston University Bridge/Soldiers Field Road, Boston
Lot Area	36,813 sq. ft.
Ownership	Boston University
Existing Use	Vacant land
Adjacent Use	Storrow Drive/Soldiers Field Road Massachusetts Turnpike Grand Junction Railroad

Potential Use	Future academic/research building	
	Site L	
Location	785 Commonwealth Avenue, Boston	
Lot Area	86,318 sq. ft.	
Building Area	B+3 Floors/54,767 sq. ft.	
Ownership	Boston University B+3 Floors	
Existing Use	BU Academy, University student activity and office space, parking	
Adjacent Use	BU Bridge, Commonwealth Avenue, Storrow Drive, University Student Activities Center (George Sherman Union), Charles River/Esplanade	
Potential Use	Short term: minor renovation and expansion of BU Academy for ADA compliance Long term: Integrate use of the site into a redesigned campus center in connection with transportation improvements	
	Site M	
Location	771–775 Commonwealth Avenue, Boston	
Lot Area	Part of larger parcel	
Ownership	Boston University	
Existing Use	George Sherman Student Union and Mugar Library	
Adjacent Use	Academic	
Potential Use	Continue existing uses	
Site N		
Location	730–766 Commonwealth Ave, Brookline	
Lot Area	Part of larger parcel	
Ownership	Harley Realty Co. c/o the Druker Co. LTD (listed in Brookline assessors)	
Existing Use	University academic, research, administrative offices and labs, parking	

lot, retail

Adjacent Use	Massachusetts Turnpike University academic, retail	
Potential Use	Short term: continue existing use Long term: this site is a logical extension of the campus academic core	
Site O		
Location	50 St. Mary's Street, Boston	
Lot Area	28,316 sq. ft.	
Ownership	City of Boston	
Existing Use	McKinley Middle School	
Adjacent Use	Residential Building (120 Mountfort Street) University-owned student housing on north side of Buswell Street Privately owned commercial space at 506 Park Drive	
Potential Use	Development would be related to student life, possibly to include student housing, dining, and study facilities	
Site P		
Location	708, 710, 712, 714 Commonwealth Avenue, Boston	
Lot Area	11,040 sq. ft.	
Building Area	21,600 sq. ft.	
Ownership	708, 710, and 714 owned by Boston University 712 Commonwealth Avenue privately owned	
Existing Use	Retail, residential, restaurant, academic, student housing	
Adjacent Use	704 and 718 Commonwealth Avenue – University academic and administrative 708–714 Commonwealth Avenue – Retail, student housing	
Potential Use	Retail, residential, restaurant, academic, and student housing	

Site Q

Location	264–270 Bay State Road (and adjacent land), Boston					
Lot Area	Part of larger parcel					
Ownership	Boston University					
Existing Use	School of Social Work, open space, parking					
Adjacent Use	Academic, open space (BU Beach), parking					
Potential Use	New academic building, open space					
	Site R					
Location	80, 100 Cummington Mall, Boston					
Lot Area	13,838 sq. ft.					
Ownership	Boston University					
Existing Use	Academic (Sociology, Metropolitan College)					
Adjacent Use	Park/Open Space, University academic Massachusetts Turnpike					
Potential Use	Academic					
Site S						
Location	700 Beacon Street, Boston 698 Beacon Street, Boston					
Lot Area	13,441 sq. ft.					
Ownership	700 Beacon Street – Art Institute of Boston (Lesley University) 698 Beacon Street – Marist Fathers of Boston					
Existing Use	Art Institute of Boston/ Institutional Religious/Nonprofit					
Adjacent Use	12-story residential BU Metcalf Science Center Public passageway					

Potential Use	Academic					
Site T						
Location	574 Commonwealth Avenue, Boston					
Lot Area	5,957 sq. ft.					
Ownership	US Trust					
Existing Use	Citizens Bank					
Adjacent Use	12-story residential					
Potential Use	Retail/Commercial					
Site U						
Location	10 Deerfield Street and 565, 585 Commonwealth Avenue, Boston					
Lot Area	Approximately 73,500 sq. ft.					
Ownership	Boston University					
Existing Use	10 Deerfield Street – Parking lot 565 Commonwealth Avenue - Academic 585 Commonwealth Avenue – Student housing					
Adjacent Use	University-owned academic, residential, parking, administrative, commercial					
Potential Use	Academic/commercial complex, residential and parking					
Sites 1–6						
Location	Massachusetts Turnpike air rights parcels					
Lot Area	433,504 sq. ft.					
Ownership	Massachusetts Department of Transportation, MBTA					
Existing Use	Mass Turnpike and Commuter Rail line					
Adjacent Use	Student housing, academic, administrative, and parking Residential (on South side of Mountfort Street)					

Potential UseAir rights development for academic, commercial, residential, and
parking facilities

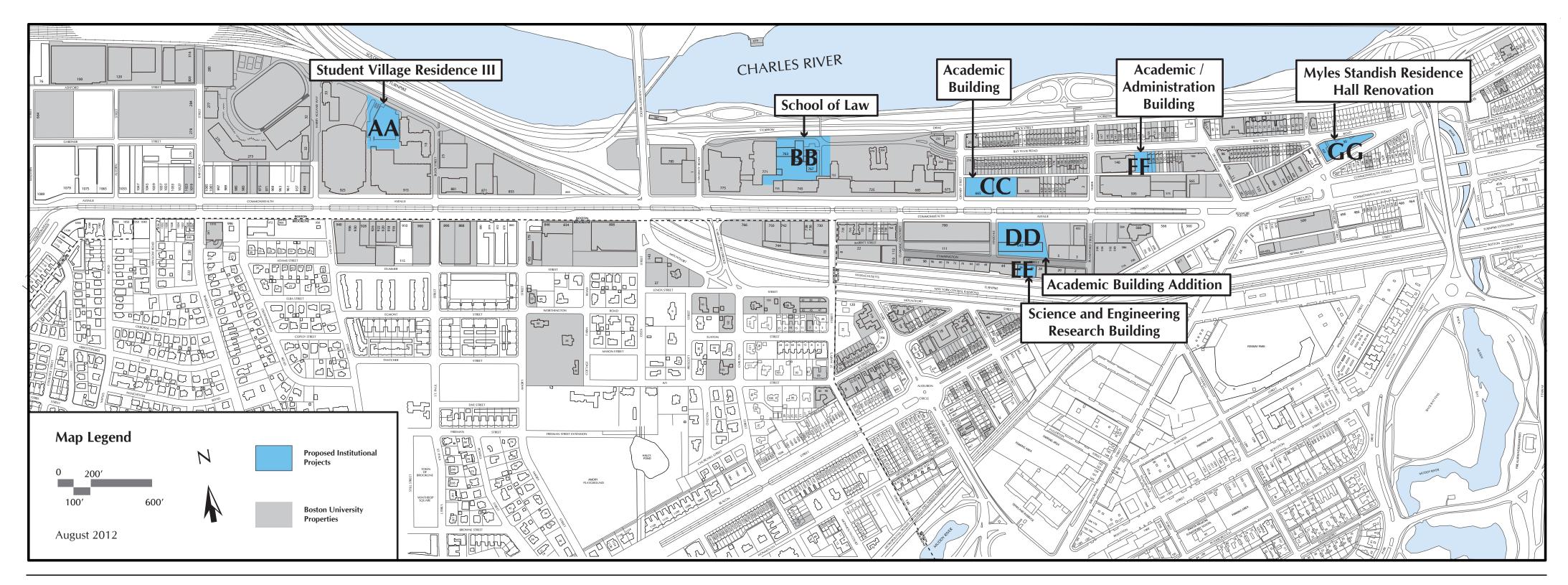


Figure 5-1, Proposed Institutional Projects

2012–2022 Institutional Master Plan Boston University Charles River Campus

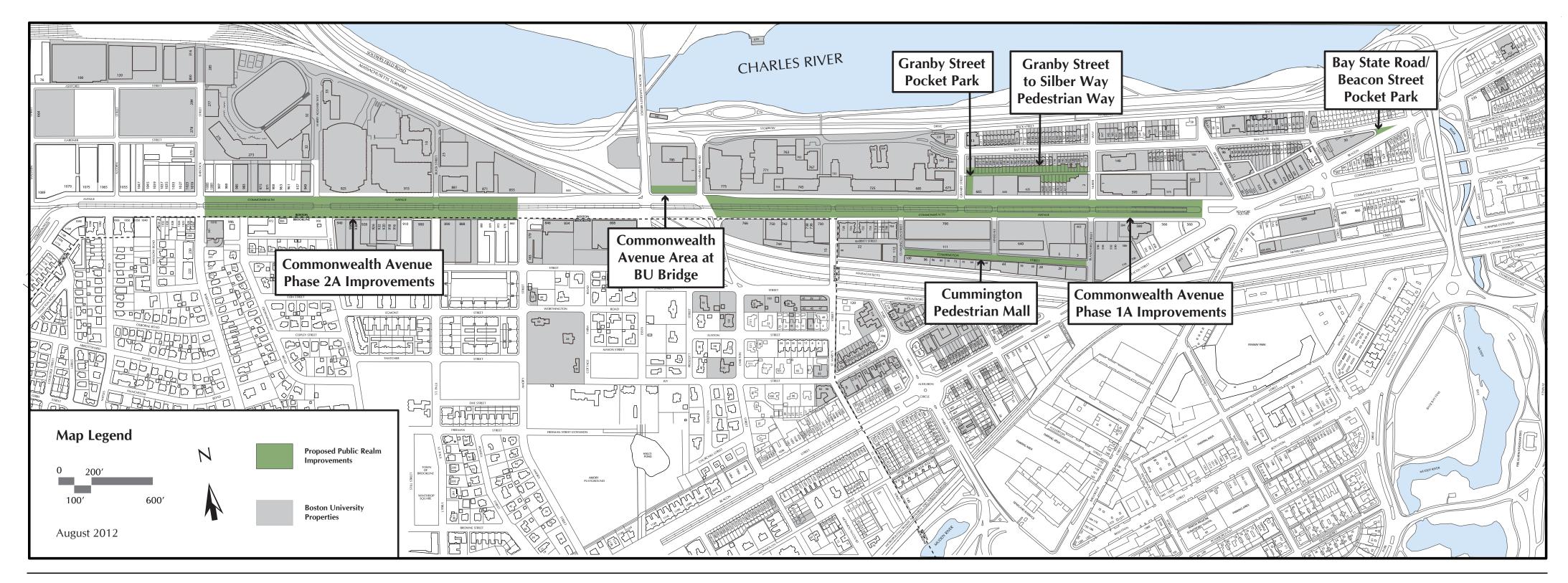


Figure 5-2, Public Realm Improvements

2012–2022 Institutional Master Plan Boston University Charles River Campus

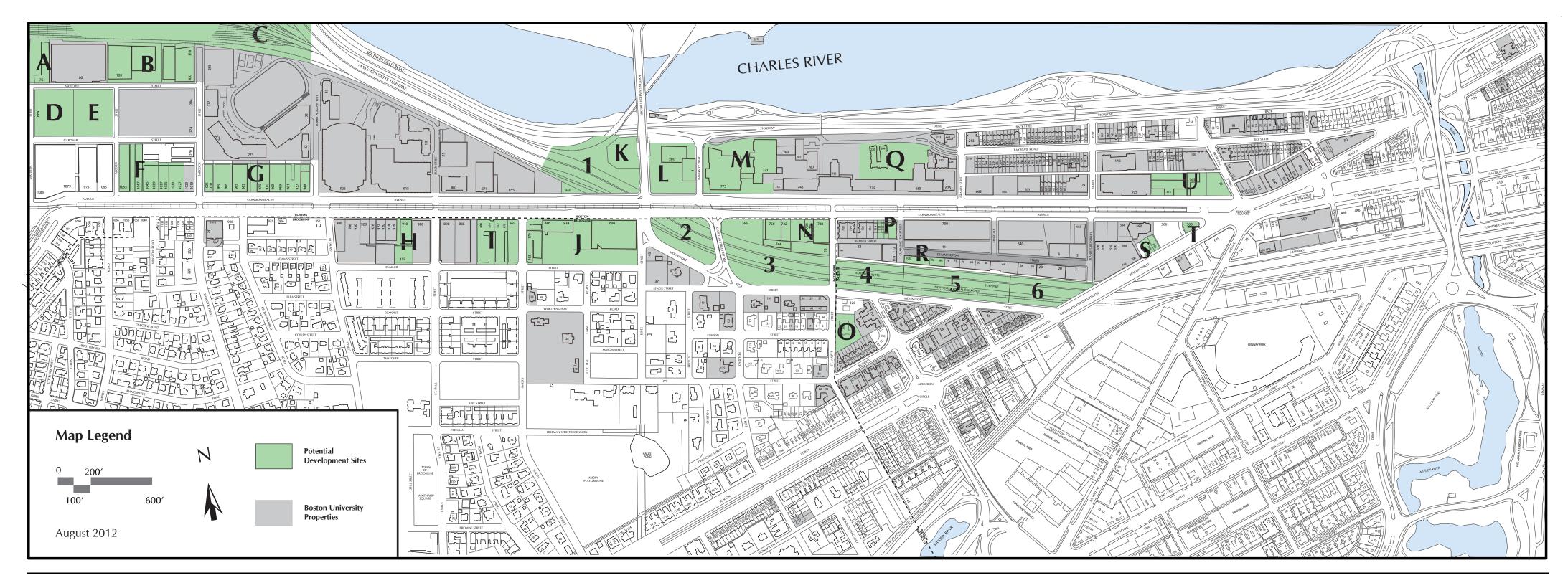


Figure 5-3, Potential Development Sites

2012–2022 Institutional Master Plan Boston University Charles River Campus

Chapter 6

STUDENT HOUSING PLAN

CHAPTER 6: STUDENT HOUSING PLAN

6.1 MISSION

Boston University Housing's mission is to support the University's strategic goal of enhancing the residential campus and student life experience. In response to the concerns of its neighbors, the University has provided, and will continue to provide, a steady supply of quality on-campus housing for undergraduate students, including options that are attractive to upperclassmen, the group most likely to reside off campus. Toward this end, Boston University Housing works with departments throughout the University to provide and maintain:

- Clean and functional spaces for living, studying, and recreation within the residences
- Residences that are safe, quiet, smoke-free, drug-free, and free from all other illegal activities, and where civility and respect for others are the norms for community living
- An environment within each floor or residence where students can develop and participate meaningfully in communities

This section describes some of the programs and policies currently in place for achieving this mission, as well as an introduction to the 10-year undergraduate housing plan, which will be released in the fall of 2012.

6.2 UNDERGRADUATES LIVING ON CAMPUS

As of Fall 2011, 11,109 undergraduate students lived in properties owned and operated by the University on the Charles River Campus (see Table 6-1, Student Residence By Location). These on-campus student residences are located primarily in the City of Boston. Of the full-time and part-time students living off campus, only 22 percent reside in Boston neighborhoods.

			Total
	Full-Time	Part-Time	Undergraduates
Total Enrollment	17,209	1,436	18,645
Total Residing On Campus	11,267	0	11,267
Total Residing Off Campus	5,942	1,436	7,378
Total Residing in Boston	12,351	384	12,735
Residing in Boston On Campus	11,172	0	11,172
Residing in Boston Off Campus	1,179	384	1,563
Total Residing outside Boston	4,858	1,052	5,910
Residing outside Boston On Campus	95	0	95
Residing outside Boston Off Campus	4,763	1,052	5,815

Table 6-1, Student Residence By Location¹

The University has made significant efforts to attract junior and senior students back to campus through the creation of attractive housing options, including apartment-style units. As a result, 77 percent of the students needing housing are accommodated on campus (see Table 6-2, Students Housed On Campus).

				-	
Year (Fall)	Enrollment	Undergraduate Occupancy	Students Needing Housing	Percent Housed	Freshman Class Size
2002	15,064	10,978	14,308	77%	4,560
2003	14,976	10,650	14,059	76%	3,961
2004	15,186	10,746	14,397	75%	4,352
2005	15,690	10,860	14,774	74%	4,209
2006	15,681	10,879	14,678	74%	4,124
2007	15,771	10,675	14,723	73%	4,163
2008	15,540	10,629	14,486	73%	4,131
2009	15,386	10,825	14,288	76%	4,130
2010	15,573	11,128	14,635	76%	4,409
2011	15,540	11,109	14,465	77%	4,022

Table 6-2, Students Housed On Campus

¹ From Student Accountability Ordinance Report, Fall 2011

6.3 UNDERGRADUATES LIVING OFF CAMPUS

The University maintains detailed records on the residence locations of its entire student body. Consistent with the city's Student Accountability Ordinance, the University provides information on the number of students living in each of Boston's zip codes and those residing outside of the city. Consistent with its mission to enhance the undergraduate residential experience and satisfy the preferences of the surrounding community, the University has successfully reduced the total number of students living off campus in Boston, as shown in Table 6-3, Full-Time Undergraduates Living Off Campus

In total, 1,179 full-time undergraduate students live off campus in Boston. The majority of those students live in the neighborhoods closest to campus, including Allston (43 percent), Kenmore (30 percent), and Brighton (7 percent). The remaining 20 percent of full-time undergraduates in Boston are dispersed in small concentrations in other neighborhoods in the city.

Neighborhood	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Percent of Total (2011)
Allston (02134)	1,074	850	632	512	43%
Brighton (02135)	142	84	110	88	7%
Kenmore (02215)	649	538	393	355	30%
Other Boston	254	241	267	224	19%
Total In Boston	2,119	1,713	1,402	1,179	

Table 6-3, Full-Time Undergraduates Living Off Campus

6.4 STUDENT HOUSING POLICIES

6.4.1 RESIDENCY REQUIREMENTS

Entering Freshmen

The University requires all entering freshmen to live on campus. Freshmen may request an exception to the freshman year residency requirement if they reside locally with a parent (whose principal place of domicile is within a 20-mile radius of Boston University's Charles River Campus and has been for at least 12 consecutive months immediately preceding registration as an entering freshman), child, or spouse; or if they are 21 years of age or older by October 1 of their entering year. The freshman residency requirement is extremely important to the University. Living on campus, within the University community, is an integral component of a Boston University education. Interacting with other students outside of the classroom provides invaluable and significant opportunities for learning, growth, and personal development. In addition, freshmen benefit from living in close proximity to classes, faculty offices, laboratories, libraries, dining rooms, and student activity centers.

Continuing Students

On-campus housing is guaranteed to undergraduate students as long as they remain within the housing system. Students who take a leave of absence or who had previously moved off campus are offered on-campus accommodations on a space-available basis. Every effort is made to offer housing to the maximum possible number of continuing students.

Full-Tuition Scholarships

Students who receive merit-based scholarships equal to or greater than full tuition are required to live on campus as a condition of the scholarship.

6.4.2 ASSIGNMENT PROCESS

Entering Freshmen and Transfer Students

Entering freshmen and transfer students are assigned to campus housing by University staff. New students complete an online housing interest form indicating their housing preferences. Most freshmen are assigned to the larger dormitory-style residences, which offer the greatest opportunities for social interaction and ease transition into the academic rigors of Boston University life.

Continuing Students

Each February, continuing students are invited to apply for on-campus housing. Once continuing students complete the online fall housing reservation process, they are able to select their own room for the upcoming academic year. Continuing students typically select rooms in suite-style residences, small brownstone dormitory-style residences, small apartment residences, or the new Student Village. In an effort to keep upper-division students on campus, the Student Village apartments are open only to juniors and seniors.

6.4.3 SPECIAL RESIDENCY PROGRAMS

The University maintains an active special interest housing program. The specialty community residence program offers a broad range of floors and houses in which students with similar interests can live, study, and socialize together; residences cover a range of interests, from language to medicine to the arts. The program provides unique living environments to students who enjoy sharing intellectual, cultural, and social affinities. Specialty houses and floors are communities created and continued by students with the support and involvement of faculty and staff.

6.5 STUDENT HOUSING PLAN OVERVIEW

The 2007 Boston University strategic plan, *Choosing to be Great*, defined a commitment to expanding and enriching the residential campus and programmatic experiences for students. The Institutional Master Plan aims to support that commitment by providing outstanding residential facilities, as well as formal and informal community spaces, for undergraduate students. The University believes that a cohesive residential community deepens the student learning experience, allows it to provide more guidance for its undergraduates, and promotes a stronger sense of community. These attributes foster a more satisfying experience for undergraduates and are key in attracting the best students, improving the University's rankings, and encouraging alumni loyalty and involvement.

Out of concern for its neighbors, the University would like to continue its successful efforts to keep undergraduate students living on campus. As illustrated in Table 6-4, Projected Student Enrollment, the University intends to slightly reduce and stabilize the size of its undergraduate student population through 2017. With a decrease in the size of the freshman class and an increase in the number of transfer students, it will maintain housing for 75 percent of its undergraduates during this period. This is a challenging goal, particularly given Boston University's growing overseas reputation: international students often have a strong preference for non-dormitory housing. Similarly, upperclassmen are known to prefer apartment-style and independent living environments. The construction and maintenance of apartment-style units is costly, and it remains a challenge for the University to make them available to students at rates competitive with the rental market in surrounding neighborhoods.

The University's strategy must account for this, and Student Village III in West Campus will furnish the campus with an additional 523 beds for its undergraduates. This building's apartment-style configurations, views of the Charles River, and proximity to recreational facilities and public transit will attract and retain upperclassmen. In the tradition of the existing Student Village buildings, there will be ample communal spaces where students can come together to exchange ideas and relax.

The rehabilitation of Myles Standish Hall and Myles Standish Annex is planned for completion in the latter stages of the IMP term. Though there will be a net reduction in the number of beds, the thorough upgrade of these units will dramatically improve the condition of one of the largest dormitories on campus. It is anticipated that by improving these units, the University will raise the perceived quality of its housing stock, encouraging more students to stay on campus, even if not in Myles Standish.

The Public Realm Improvements detailed in Chapter 5 will serve the Student Housing Plan by providing informal and formal gathering spaces. Successful campuses include an array of spaces that improve the general aesthetic and in which students may gather with friends or retreat for contemplation.

Fall	Enrollment	Undergraduate Occupancy	Students Needing Housing	Percent Housed	Class Size
2011 (actual)	15,540	11,109	14,465	77%	4,022
2012	15,572	10,927	14,547	75%	3,900
2013	15,674	10,940	14,643	75%	3,800
2014	15,575	10,900	14,550	75%	3,800
2015	15,577	10,900	14,552	75%	3,800
2016	15,488	10,800	14,469	75%	3,800
2017	15,488	10,800	14,469	75%	3,800

Table 6-4, Projected Student Enrollment

Chapter 7

UTILITIES AND INFRASTRUCTURE

CHAPTER 7: UTILITIES AND INFRASTRUCTURE

7.1 INTRODUCTION

Boston University is committed to the improvement of its infrastructure and utility use; recent initiatives have reduced fossil fuel demand, the burden on local utility providers, and pollution of nearby waterways. They have also contributed to a cleaner, greener community by preserving natural resources and cutting the Charles River Campus's carbon footprint, and have brought financial savings for the University.

7.2 SANITARY SEWER SYSTEM

Boston University has made a number of improvements to the condition and capacity of the sanitary system around its campus. For example, many sections of sewer pipe have been replaced to enhance the condition and functionality of the sanitary sewer system, while sewer discharge quantities have been reduced and storm water inflow removed, allowing for greater capacity in the sewers and less demand for wastewater treatment at the Deer Island Treatment Plant.

7.2.1 SYSTEM-WIDE PLANNING WITH BWSC

The Boston Water and Sewer Commission (BWSC) provides sanitary sewer services for the majority of Boston University properties. The University has a long-standing and productive collaborative relationship with BWSC for coordinating campus improvements and proposed institutional projects, making emergency repairs, and implementing long- and short-term planning efforts consistent with applicable regulations.

In 1998, Boston University replaced approximately 1,000 feet of 10" sewer line in Harry Agganis Way and along the CSX property line to Buick Street as part of the development of its Student Village. More recently, the University has replaced most of the sewer services in the area of Cummington Mall and along Bay State Road.

7.2.2 SEWER FLOW REDUCTION

For two decades, Boston University has been taking steps to reduce water consumption in existing and new buildings by upgrading to low-flow water fixtures, a move that has

also reduced sewer flows into the BWSC system. In 2005, the University initiated a new water consumption reduction program that considerably curtailed water consumption at many buildings. Since then, while the campus's building square footage has grown by 12 percent, overall water consumption has been reduced by 5 percent, with a commensurate reduction in sewer flow.

INFLOW/INFILTRATION REMOVAL 7.2.3

During periods of heavy rainfall, storm water entering the sanitary sewers can overburden the system and result in the flooding of streets and homes and increase the potential for overflow of sewage into local waterways. Over the past five years, Boston University has conducted a campus-wide review of potential locations where storm water or groundwater may enter the sanitary sewer system. The goal of the study was to identify problem locations so measures could be taken to prevent as much storm water as possible from entering the sanitary system, counter potential overflow problems, and protect local waterways.

The campus review included inspecting drains from rooftops, basements, parking lots, and landscape areas. The University identified a number of opportunities to remove storm water from the sanitary system and has implemented measures to prevent the inflow of storm water. The University plans to continue with such projects and collaborate with BWSC as needed.

Many historic brownstone properties on Bay State Road and near Audubon Circle had roof drains that discharged into sanitary sewers. Many of these drains have since been rerouted to discharge into infiltration basins installed in the backyards of affected properties. For other similar properties, roof drains now simply discharge into the ground or connect into a storm water system. These improvements have disconnected and diverted discharges away from the sanitary sewers in order to relieve unwanted burdens on the sanitary system.

A new initiative to remove storm water from the sanitary system in the area of the College of Arts & Sciences Parking Lot is being carried out. The existing catch basins in the parking lot and some of the roof drains on the Tsai Performance Center are discharging storm water into the local sanitary line. The project will construct drainage infiltration structures to direct much of the storm water into the ground and discharge the excess storm water to the existing storm drain system. This reconstruction work is planned for completion by 2013.

A similar infiltration and inflow improvement project is also included in the renovation of 233 Bay State Road. A dye test of the property's existing roof drains revealed storm water discharge into the sanitary system. The roof drain will now be rerouted to the existing storm drain system; the building renovation project has an expected completion date of 2013.

These initiatives and project-related improvements reflect the University's longstanding commitment to preventing storm water from entering the sanitary system. The successful partnership between Boston University and BWSC will continue to ensure further progress is made on this important environmental issue, which has local and regional significance.

7.3 WATER SUPPLY SYSTEM

BWSC supplies clean drinking water to buildings on campus. It owns and maintains the water distribution system in public streets and public right-of-ways. Boston University coordinates closely with BWSC for all of its planned improvements and emergency repairs.

7.3.1 SYSTEM-WIDE PLANNING WITH BWSC

Boston University has a record of productive and successful collaboration with BWSC on the completion of specific projects and emergency repairs as well as short- and long-term planning.

Over the past 10 years, BWSC has successfully collaborated with the University, the City of Boston, the Massachusetts Bay Transport Authority (MBTA), and the Massachusetts Department of Transportation (MassDOT) to upgrade water mains and service connections along the Commonwealth Avenue corridor, from Kenmore Square to the BU Bridge, as part of the completed Commonwealth Avenue Phase 1 project. Similar improvements have been made from the area west of the BU Bridge as a part of the construction of the new John Hancock Student Village, which includes the Agganis Arena, the Fitness & Recreation Center, and the two new student residences at 10 Buick Street and 33 Harry Agganis Way. As a result of these recent improvements, the majority of water mains within the Boston University campus are in excellent condition.

In addition, an extensive project to replace the water main in Bay State Road from Kenmore Square to the Law School was completed in the fall of 2011. Water lines on the Charles River Campus's smaller side streets are upgraded when needed, and each building renovation or new construction project is reviewed to ensure satisfactory service will be provided for many years.

Boston University also maintains affiliations with licensed construction management firms that specialize in water infrastructure design, repair, and installation as approved by BWSC. These relationships have enabled the University to manage scheduled and emergency water service repairs on a timely and effective basis.

7.3.2 WATER CONSERVATION

During the past two decades, Boston University has taken steps to reduce and limit the consumption of water in existing and new buildings. The University has implemented an aggressive water conservation program, including the installation of dual-flush and sensor toilets and low-flow sensor sink faucets, and the use of drip irrigation and rain sensor technology in landscape areas.

Operational changes in dining services have also significantly reduced water consumption; a tray-less dining program, which eliminated the need for the washing of trays, has saved approximately 35,000 gallons of water per week. In early 2012, the George Sherman Student Union Food Court became a Certified Green Restaurant[®]; it is the only food court in the United States to be a Certified Green Restaurant[®]. This certification was given in recognition of the University's efforts in and commitment to dining sustainability, including its water conservation programs.

Since 1991, overall water consumption on campus has been reduced by 27 percent; between 2005 and 2010, water consumption was reduced by 2 percent despite a 7 percent increase in the campus's building square footage during the same period. In 2011, the Charles River Campus consumed nearly 319 million gallons of water.

Boston University remains committed to reducing its water consumption by employing a variety of strategies and approaches. It plans to continue replacing old fixtures with low-flow water fixtures wherever practical. The University will also include low-flow fixtures and water conservation measures in future building projects on campus. Further details on Boston University's water conservation and reduction programs and methods are detailed in Chapter 9, Sustainability

7.4 STORM DRAINAGE SYSTEM

Boston University has improved the quality and reduced the quantity of storm water runoff from its campus before it is discharged into local waterways. Efforts have focused on providing additional groundwater recharge where appropriate and preventing storm water from entering sanitary sewer systems. Many of these improvements have been implemented as a part of a University-wide large building renovation and new construction strategy. Beyond their ecological benefits, these measures have been intended to improve the quality of the environment for pedestrians on campus and infrastructure systems as a whole.

7.4.1 SYSTEM-WIDE PLANNING

In collaboration with BWSC, Boston University looks for opportunities to provide upgrades to the storm water drainage system during renovations and new construction projects. Through opportunistic planning, many projects have included the consideration of infiltration and water quality improvement strategies and reviews of the condition of existing underground pipe networks.

In recent years, Boston University has replaced the storm drain line leading to the Charles River in the vicinity of Buick Street and installed a new storm drain line in the alley behind many of its Bay State Road properties. These measures have improved drainage potential from each property adjacent to the storm line.

Currently, the University is working with BWSC to replace two sections of storm water culvert on campus. The first is a long section of 6' x 6' culvert from Gardner Street to Ashford Street. Upon completion, the new length of storm water culvert will provide improved services and require minimal future maintenance from BWSC. A second major project was recently completed in coordination with the BWSC to replace the length of culvert that extended from Brookline Avenue in Kenmore Square through Deerfield Street before eventually discharging into the Charles River.

7.4.2 GROUNDWATER RECHARGE

Boston University works closely with BWSC during major new construction and renovation projects to provide increased groundwater recharge where feasible. The University has also been installing infiltration basins in the backyards of many University-owned brownstone properties to facilitate infiltration of storm water runoff from various roof drains. Environmental benefits have included improved surface water runoff quality, a reduction of peak discharge flow rates in storm water systems, and a reduction of potential flood conditions in nearby waterways. These recharge efforts are also helping to maintain sufficient groundwater levels in areas where buildings are built on wooden pilings. In areas where groundwater is lower than historic levels, wooden structural support pilings are being exposed to air, which accelerates their deterioration. As many of the properties in question have historic significance, these recharge strategies have played a critical role in Boston University's historic preservation efforts. Storm water infiltration systems have been installed in numerous locations on campus, including at the Agganis Arena; the John Hancock Student Village; the new Center for Student Services at 100 Bay State Road; and University properties in Kenmore Square, along Bay State Road, and in the Audubon Circle area. New infiltration systems are expected to be installed as part of the following upcoming University projects: the Admissions Reception Center at 233 Bay State Road, the College of Arts & Sciences Parking Lot, the New Balance Field, and the renovation of the Boston University Law School.

7.4.3 WATER QUALITY

Where feasible, Boston University uses best practices to help improve the quality of storm water runoff before it reaches local waterways. A significant benefit of providing storm water infiltration systems is the ability capture the first flush of storm water at the start of each rainfall event. The first flush of water carries sediment, debris, oils, and other substances that lay dormant on roadways, walkways, rooftops, lawns, and other ground surfaces; capturing that helps prevent potential pollutants from entering local waterways.

7.4.4 CSO REMOVAL

Boston University, in collaboration with BWSC, Massachusetts Water Resources Authority (MWRA), and Brookline Water and Sewer Divisions, is helping to reduce the volume and frequency of combined sewer overflows (CSO) into the Charles River from the large underground culvert in St. Mary's Street. Since 2009, more than 12,000 linear feet of new sewer lines and more than 18,000 linear feet of storm drainage lines have been installed. MWRA is currently planning to issue a second contract for sewer separation in Brookline in 2013.

7.5 ELECTRIC SERVICE DISTRIBUTION

Boston University has implemented many energy conservation initiatives—with many more expected in future. Over the past seven years, the University lowered energy use on campus by 6 percent.

Each large building on campus has a dedicated electric transformer, which greatly improves the efficiency of power delivery. These transformers have been discreetly located, within the constraints of each building's location, while providing proper access and venting and meeting safety requirements. Smaller buildings have independent circuit panels to minimize potential service disruptions and maintain safety.

In order to maintain the University's electric service infrastructure, the University has a fulltime staff of 25 electricians.

7.5.1 NSTAR

NSTAR is the service provider for electric power throughout the Charles River Campus, and Boston University coordinates closely with it to maintain the power network on campus. Whenever the University plans new buildings or renovations, NSTAR is consulted early in the design process to ascertain the capacity of the power grid in the immediate vicinity. Boston University and NSTAR are currently coordinating services for the Admissions Reception Center at 233 Bay State Road, the New Balance Field, and other smaller construction projects.

7.5.2 CONSERVATION

Each building on the Charles River Campus is independently metered to help monitor the energy consumption and efficiency of each building. Boston University has installed many power-saving devices in campus buildings, including light emitting diodes (LED) and more efficient fluorescent lights, motion/occupancy sensors, and daylight responsive lighting controls; it has also removed unnecessary and redundant lighting. The University intends to continue to make efficiency-related upgrades and to look for ways to improve performance in all future buildings beyond the minimum code requirements.

Along with the environmental benefits, energy cost savings have been substantial. Future energy assessments and audits are planned to further refine the efficiency of campus buildings. The next round of energy audits will benefit from the participation of students, faculty, and staff based at the University's 1 Silber Way and 24 Cummington Mall properties.

7.5.3 THE CASE CENTER

The Case Center, which contains athletic facilities, offices, and an ice rink, benefited from an impressive array of energy efficiency upgrades in 2010 and 2011. Lighting and mechanical renovations are saving the university approximately two million kWh of electricity and 846 metric tons of CO_2 annually. Improvements included the replacement of 1,000-watt mercury vapor lamps over the rink surface with 500-watt custom-designed fluorescent fixtures that accommodate maintenance from the attic instead of requiring a lift from the rink surface. Lighting upgrades were also made to offices, locker rooms, lounges, restrooms, hallways, stairwells, and the swimming pool

and spectator areas. Temperature monitoring of the ice surface was installed to help optimize the performance of the cooling equipment. Monitoring of CO_2 in the building has reduced the need to induce fresh air from outside and, with the addition of a dehumidification system, this has substantially reduced demand on building heating and cooling systems.

7.5.4 FLUORESCENT RETROFITS

The parking garages located at 730 and 750 Commonwealth Avenue and the Warren Tower Garage have been retrofitted to remove metal halide, high-pressure sodium, and older styles of fluorescent lighting fixtures with new Super T8 fluorescent lights with electric ballasts. To further improve the energy efficiency of these properties, new wiring and controls were added to include occupancy sensors on each level and photocell controls to reduce energy consumption when ambient daylight is sufficient. Incandescent exit signs were replaced with LED units. Select lighting fixtures will remain hardwired and illuminated throughout the day and night in the garages as a precautionary safety measure.

7.6 NATURAL GAS DISTRIBUTION

During the past decade, Boston University has converted many buildings from oil to natural gas where economically practical. The two steam generation facilities on campus are now both powered by natural gas as the primary fuel source. Many buildings on campus use natural gas to fuel their primary heating systems, and natural gas is also piped to dining facilities, residential kitchens, and laboratories.

7.6.1 SYSTEM-WIDE PLANNING IN COORDINATION WITH NATIONAL GRID

Boston University coordinates closely with National Grid to maintain safe and efficient gas services at each location on campus and to ensure the maintenance of safe gas distribution during and after improvement projects.

Boston University and National Grid are currently collaborating on the Admissions Reception Center at 233 Bay State Road. The University and National Grid have also collaborated on the installation of major gas line extensions to serve the steam generation facility at 10 Buick Street and the central plant at 767 Commonwealth Avenue. In 2000, the University worked with National Grid's predecessor to extend the major natural gas line that now serves as the primary fuel source for the steam generation facility at 10 Buick Street. The University plans to coordinate upcoming improvements, including the Boston University Law School renovation and New Balance Field development, with National Grid.

7.6.2 CENTRAL PLANT: 767 COMMONWEALTH AVENUE

The Central Plant steam generation facility located at 767 Commonwealth Avenue is responsible for approximately 25 percent of the Charles River Campus's heating and cooling needs, providing service to many University buildings, including the Mugar Library, the College of Arts & Sciences, Warren Towers, and the George Sherman Union. Between 2008 and 2010, the University upgraded the facility's five boilers and converted it from oil-fueled to dual gas- and oil-fueled. During the retrofit, high-level efficiency systems were added, including an auto flame combustion management system, an exhaust gas analyzer with three parameter trim (O_2 , CO_2 , and CO), steam flow metering, and continuous emission monitoring software. This system is one of the most accurate and efficient systems on the market and controls the combustion process using microprocessor technology to reduce energy consumption and harmful emissions.

The facility now operates primarily on natural gas, reducing the University's emissions by approximately 3,800 metric tons of CO_2 annually. The Central Plant had consumed 1.3 million gallons of number 4 heating oil annually. The conversion has resulted in cleaner emissions with reductions in sulfur, carbon, and nitrogen emissions and ash particulate matter.

7.6.3 STEAM GENERATION FACILITY: 10 BUICK STREET

The steam generation facility at 10 Buick Street is powered primarily by natural gas. It generates steam to provide a heat source for all University buildings west of the Boston University Bridge to Babcock Street and north of Commonwealth Avenue. The facility also maintains the capability to operate on oil fuel during emergencies.

7.6.4 610 BEACON STREET, 640 AND 730 COMMONWEALTH AVENUE

These three locations each have boilers that have undergone oil to dual-fuel conversions, improving burner efficiency, providing financial savings, and reducing carbon emission by 1,032 tons annually, a 34 percent reduction in CO_2 over the course of 10 years.

7.7 STEAM DISTRIBUTION

Boston University owns and maintains two steam generation facilities on the Charles River Campus. The steam generation facility at 767 Commonwealth Avenue heats approximately 25 percent of the Charles River Campus, providing service to many of the surrounding buildings, including the Mugar Library, the College of Arts & Sciences, Warren Towers, and the George Sherman Union. A second facility was constructed at 10 Buick Street to supply steam to most of the buildings on the campus west of the Boston University Bridge. These steam generating facilities, and the associated distribution system, are maintained in good working order by the University.

7.8 WIRED AND WIRELESS NETWORKS

Boston University Information Services & Technology (IS&T) maintains an extensive computing and communications network. This infrastructure includes network outlets, wiring, the campus core network, data center networks, and dedicated access to various external networks, such as the Internet and Internet2. IS&T designs and installs all network infrastructure associated with renovations and new construction, including network jacks, copper wiring, fiber cabling, switch infrastructure, and connections to the network backbone. Through this infrastructure, members of the University community can directly access network-based resources using wired jacks that support data rates ranging from 10 Mbps through 10 Gbps.

The Boston University campus network provides high-speed access to the Internet, various research networks (including Internet2), and email services. Tens of thousands of ports supporting communication rates of up to a billion bits per second are interconnected via optical fiber and high-speed routers and switches. Direct access to the network is available throughout campus, including in faculty and staff offices, personal computer labs, study areas, colleges and schools, residence halls, and in most classrooms. Secure remote access to the campus network is also available through the University's VPN service.

The Boston University wireless network conforms to current 802.11 standards, operating at speeds up to 54 Mbps. IS&T maintains an extensive wireless network throughout the Charles River, Medical, and certain remote campuses. The University continues to extend its secure wireless network, which now includes libraries, large residence hall study lounges, campus dining facilities, the University's athletic facilities, and many departments, classrooms, and research labs throughout the institution. All wireless transmissions are secured and encrypted.

Boston University is a participant in the Internet2 project, a collaboration of over 200 research universities engaged in the development of next generation network applications to meet emerging requirements for information technology in research and education. In support of this effort, the University is a founding member of Northern Crossroads (NoX), an affiliation of nearly two dozen New England institutions with a shared need for advanced networking. NoX operates a high-performance communications exchange, and the University is connected to this facility at one billion bits per second. NoX interconnects regional participants to each other and to the Internet2 Abilene network, providing Boston University with access to hundreds of institutions, agencies, and corporations connected to advanced networks worldwide. For more information about NoX and Internet2, please visit www.nox.org.

Centralizing design, installation, management, and maintenance for the entire University network infrastructure under IS&T ensures homogeneity. All the subnets and components work together in a predictable and reliable manner, providing simplicity, consistency, transparency, and security for the University community, regardless of where they connect to the Boston University network.

7.9 TELECOMMUNICATIONS

The Boston University telephone system includes more than 10,000 lines serving the Charles River Campus. University departments are provided with a wide range of business telephone services, including office phones, voicemail, long distance calling options, headsets, toll-free numbers, conference phones, repairs, advanced call routing, automated attendant systems, online bill access, and office telephone system design.

Key features of the telecommunications system include:

- Lines and equipment, including desk phones, headsets, speakerphone rental, and toll-free numbers
- 5-digit internal dialing
- Detailed instructions on phone functionality, long distance calls, and switchboard usage
- Robust voicemail that allows retrieval and management of messages from office phones or remotely from any phone, at any time of day
- Expert telephone system design services to help improve workflow and reduce costs
- UCD and ACD to balance incoming calls among call center agents and ensure that each caller receives prompt and professional service
- Automated attendant to streamline high volumes of redundant calls or calls that need to be transferred to maximize departmental resources
- Prompt, onsite, free repair services for faculty and staff

• Online billing access for individuals and departmental administrators, including information about phone lines, equipment, voicemail, calling cards, cellular service, and work order-related charges through the Pinnacle telemanagement system

Chapter 8

TRANSPORTATION

CHAPTER 8: TRANSPORTATION

8.1 INTRODUCTION

Boston University remains committed to making the transportation system associated with its campus safer and more efficient for all users. This chapter of the Institutional Master Plan describes the University's transportation policies, programs, and goals for the next decade, while evaluating the topics outlined by the Boston Transportation Department, the Boston Environmental Department, and the Boston Redevelopment Authority in the comment letters and scoping documents related to Boston University's IMP Notification Form (IMPNF). This chapter also gives an overview of the current transportation system serving the campus, the basic characteristics of the Charles River Campus and their influence on transportation, and an analysis of how proposed institutional projects could impact the transport infrastructure in the future.

8.2 TRANSPORTATION GOALS

During the course of its past two Institutional Master Plans, Boston University has implemented changes to its own infrastructure and policies and has been a leading supporter and financial partner with the city and state to improve the safety and efficiency of the area's public transportation infrastructure. The University's role in projects such as the Kenmore Square improvements and the Commonwealth Avenue Phase 1 and Phase 2 improvements is strong evidence of its commitment to enhancing the area's transportation system. These projects benefited both the University and its neighbors in Boston, Brookline, and Cambridge.

The University has identified three transportation goals for the forthcoming decade that will shape its policies and programs. These goals and the actions or strategies that the University may employ to achieve each of them are summarized below. Specific areas of focus or concern that the University intends to address are also identified.

8.2.1 TRANSPORTATION GOAL #1: IMPROVE SAFETY AND EFFICIENCY FOR ALL MODES WITH PARTICULAR EMPHASIS ON PEDESTRIAN AND BICYCLE SAFETY.

Actions or Strategies:

- Provide separate pedestrian or bicycle facilities within the campus where feasible (i.e., pedestrian ways, bike lanes)
- Provide financial and technical support for the Commonwealth Avenue Phase 2A and 2B projects
- Provide financial and technical support for the Commonwealth Avenue Phase 1A project
- Incorporate the principles of the Boston Transportation Department's Complete Streets initiative into the design of institutional projects where feasible
- Continue to provide incoming freshmen with pedestrian and bicycle safety training
- Shorten pedestrian crossing distances and/or construct other features to enhance pedestrian safety in crosswalks

Areas of Focus:

- Intersection of Commonwealth Avenue and the BU Bridge
- Intersection of Commonwealth Avenue and University Road
- Cummington Mall, Hinsdale Mall, Blandford Mall area
- Private alley from Granby Street to Silber Way
- Bay State Road/George Hart Way in the vicinity of the Boston University Admissions Reception Center
- Babcock Street adjacent to New Balance Field

8.2.2 TRANSPORTATION GOAL #2: INCREASE THE USE OF SUSTAINABLE MODES BY EMPLOYEES AND STUDENTS CURRENTLY COMMUTING TO THE CHARLES RIVER CAMPUS IN SINGLE-OCCUPANCY VEHICLES.

Actions or Strategies:

- Maintain or increase the proportion of undergraduates living on campus
- Restrict the availability of parking permits issued to undergraduate students
- Maintain appropriate parking fees for employees to discourage them from driving alone to campus

- Provide incentives, such as permit fee discounts or preferential parking spaces, for employees to join existing car/van pool programs
- Promote use of public transportation through pre-tax, payroll purchasing of MBTA passes

Areas of Focus:

- John Hancock Student Village Phase III residence hall
- Parking availability and management in the Central Campus area
- Leveraging improvements to the Yawkey Commuter Rail Station

8.2.3 TRANSPORTATION GOAL #3: MINIMIZE THE UNIVERSITY'S TRAFFIC AND PARKING IMPACTS ON ADJACENT COMMUNITIES.

Actions or Strategies:

- Continue to refine existing traffic and parking management plans for special events at the campus, as needed
- Develop traffic and parking management plans for new facilities as they come online
- Develop parking management plans during construction of institutional projects to ensure parking demands are met on campus
- Ensure that an appropriate amount of parking is provided on campus to accommodate typical daily demands

Areas of Focus:

- Harry Agganis Arena events
- Commencement, move-in/move-out periods, etc.
- New Balance Field events
- New Balance Field site (during construction)
- Campus-wide parking management plan

8.3 CAMPUS DEMOGRAPHIC CHARACTERISTICS

Enrollment. Boston University has approximately 15,600 undergraduate students; the most recent incoming freshman class (2011) included 4,025 students. The University projects that enrollment will stabilize at an estimated 15,500 students with incoming freshman classes of approximately 3,800 students.

Housing. Some 76 percent of undergraduates are housed on campus. The University's projections indicate that 75 percent of students will reside on campus in the future.

Employment. The University employs approximately 5,400 full-time faculty, professional staff, and tradespeople at the Charles River Campus. An additional 1,225 people (primarily faculty) are employed on a part-time basis. Future employment at the campus is not expected to change significantly in the future (i.e., employment levels will be stable or have a modest amount of growth).

8.4 CAMPUS COMMUTING CHARACTERISTICS

Travel Modes. The most recent statistics collected by the University (December 2010) indicate that around 44 percent of those who commute to and from the Charles River Campus (employees and students) do so in single-occupancy vehicles, while 31.5 percent travel by public transportation. Other modes used by commuters to the campus include walking (13.5 percent), cycling (6 percent), car or van pools (2.3 percent), and other miscellaneous modes (2.5 percent).

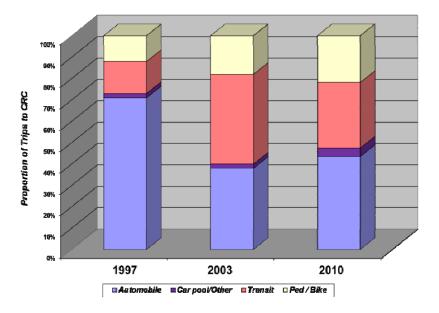


Figure 8-1, Historical Trends of Modal Splits at the Charles River Campus

Traffic Distribution. Based on a review of existing traffic data in relation to the local roadway network, it is estimated that about 37 percent of the campus's traffic is oriented to/from the east of campus, 26 percent to/from the north/northwest, 19 percent to/from the west, and 18 percent to/from the south.

8.5 EXISTING TRANSPORTATION SYSTEM

The transportation system serving the Charles River Campus is comprised of several components: the local roadway network (with Commonwealth Avenue as the primary urban artery serving the entire length of the campus); the pedestrian network of sidewalks and walkways; bicycle lanes on Commonwealth Avenue and Beacon Street; the Massachusetts Bay Transportation Authority (MBTA); and the University-operated shuttle bus service (the BUS). Other important elements include Boston University-owned and-operated parking facilities (and the parking policies administered by the University to regulate the use of its facilities), on-street public parking in the area, and on-campus bicycle storage installed and maintained by the University.

8.5.1 TRAFFIC VOLUMES

The long-term traffic volume trend along Commonwealth Avenue and adjacent streets has been downward since 1987. Daily volumes west of the BU Bridge are approximately 17 to 18 percent lower in 2012 than in 1987. East of the BU Bridge, 2012 daily traffic volumes are lower than 2001 volumes by 18 to 32 percent, depending upon the location. On Bay State Road, daily volumes are down nearly 23 percent during this same time period. Peak-hour traffic is also down throughout the campus: since the 2003 Master Plan (2002 data), peakhour traffic has decreased between 9 percent and 25 percent.

8.5.2 TRAFFIC OPERATIONS

During peak periods on a typical weekday, the roadway network in the vicinity of the Boston University campus functions reasonably well. Most of the intersections with traffic signals along Commonwealth Avenue function at LOS D (overall) or better during both the morning and afternoon peaks. The exception is the intersection at Kenmore Square, which functions at LOS E (at capacity) during the afternoon peak. (Level of service [LOS] is a measure used by traffic engineers to determine the effectiveness of elements of transportation infrastructure. LOS standards use the letters A through F, with A being the best and F being the worst.)

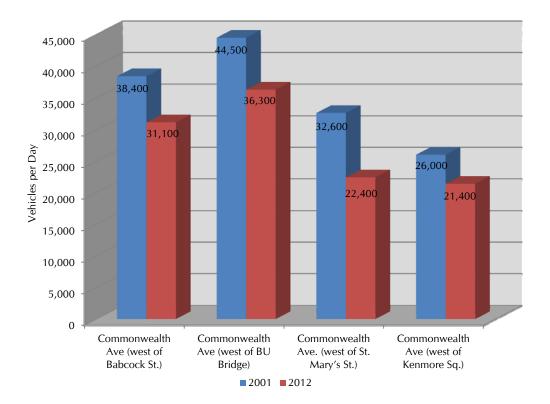


Figure 8-2, Daily Traffic Volume Trends on Commonwealth Avenue

8.5.3 SAFETY

Crash data from the Massachusetts Department of Transportation (MassDOT) indicate that none of the intersections in the area of the campus have crash rates that exceed the statewide or district average rates. However, a limited review of available Boston Police Department (BPD) crash data show that the MassDOT data underreport the actual number of crashes; it is therefore likely that intersections such as Commonwealth Avenue/BU Bridge and Kenmore Square would exceed the average rates if BPD data were considered.

8.5.4 PEDESTRIAN VOLUMES

Safe pedestrian circulation is critically important for an urban campus, and walking is the most popular mode of transportation on the Charles River Campus. Pedestrian volumes are extremely high along Commonwealth Avenue and have continued to grow steadily since pedestrian volumes were first measured in 1987. Since 2001/2002, pedestrian volumes have increased by as much as 80 percent at the BU Bridge intersection (afternoon peak). This is a result of the increased travel between West Campus and Central Campus; more students now live in West Campus and travel to classes in Central Campus. Conversely, with the construction of the Fitness & Recreation Center in 2005, many students who live in Central or East Campus now walk to West Campus for recreation opportunities.

8.5.5 PEDESTRIAN FACILITIES

Sidewalks are available along all public and private ways in the campus area. An inventory of sidewalk conditions indicates that the sidewalks are of sufficient width to accommodate the pedestrian demands in most areas. The physical conditions of the sidewalks are generally good throughout the campus, with only a few areas where the conditions were observed to be fair or poor.

8.5.6 BICYCLE VOLUMES

Bicycling is the second-most important mode of travel for students within the campus, and use on campus is growing faster than any other mode. Bicycle use along Commonwealth Avenue has grown by 47 percent in the morning peak and by 135 percent in the afternoon peak since 2007 (the first year bicycle use was measured on Commonwealth Avenue). Currently, between 500 and 600 bicyclists per hour use the bicycle lanes on Commonwealth Avenue during the peak commuting periods.

8.5.7 BICYCLE STORAGE

The increase in bicycle use has required the University to dramatically increase bicycle storage on campus (bike racks and bike rooms). Since 2003, on-campus bike storage capacity has been increased from 1,295 bikes to 3,930 bikes, a 205 percent increase.

8.5.8 PUBLIC TRANSPORTATION

The MBTA has three service modes with stops or stations within or near the University's Charles River Campus. Those service modes are:

- Green Line Trolley Service
- Bus Service
- Commuter Rail Service

Although the two service lines that run along Commonwealth Avenue (Green Line B Branch and Route 57 bus) are crowded during peak periods, review of MBTA data indicates there is still available capacity during the morning and afternoon peak periods. The University views the MBTA's proposed improvements at the Yawkey Commuter Rail Station as having the potential to reduce vehicle travel to the campus.

8.5.9 BOSTON UNIVERSITY SHUTTLE

Boston University operates Boston University Shuttle (BUS), a service that connects the Charles River Campus and the Boston University Medical Campus to facilitate travel and collaboration for students and faculty at both campuses. The BUS service was instituted in 2004. Because of its popularity with students, the BUS service has expanded to operate six buses on 10-minute headways during peak periods Monday through Friday. To satisfy the peak period demands, the University increased the hourly carrying capacity of the service in 2011 by using larger articulated buses instead of standard city bus-type vehicles during the those periods. Passenger data for the BUS collected in the fall of 2011 indicate that it provides service to over 5,800 passengers per day, which translates to approximately 1.6 million passenger trips per year.

8.5.10 ON-CAMPUS PARKING FACILITIES

Boston University owns and operates nine major off-street surface parking lots and four parking garages. In addition, the University regulates on-street parking along several private alleyways and a variety of small miscellaneous off-street parking areas located throughout the campus. In total, the University manages 3,709 parking spaces.

8.5.11 PARKING REGULATIONS AND POLICIES

University-owned parking facilities are regulated by the University through a parking permit program administered by Boston University Parking & Transportation Services. The University issues two sets of permits, one to Boston University faculty and staff and the other to students. The number of student permits is severely limited, and students are strongly discouraged from bringing cars onto campus. In the 2011 Fall Semester, the University issued only 205 permits to students for overnight parking and only 216 parking permits for daytime commuters.

The University charges fees for the parking permits issued to employees or students. For the 2011–2012 academic year, the annual fee for daily employee commuters is \$1,155. For the few students who are allowed to bring a car onto campus and park overnight, permits are sold on a semester basis and the fee for both the fall and spring semesters is \$1,206.

8.5.12 TRAFFIC MANAGEMENT FOR SPECIAL EVENTS

The University has developed traffic and parking management plans for a number of special events at the Charles River Campus. Some events are annual occurrences such as "move-in/move-out periods" or Commencement; others occur more frequently, such as spring and fall open houses, athletic events at the Track & Tennis Center, or events at Agganis Arena. A special events logistics plan was developed for Agganis Arena with input from the Boston Transportation Department (BTD) and BPD prior to the opening of the venue in early 2005. Since then, the procedures have been refined through hands-on experience to handle the various transportation issues associated with events as efficiently as possible. The current version of the management plan works well, and the impact on adjacent neighborhoods has been minimal.

FUTURE TRANSPORTATION SYSTEM 8.6

The evaluation of how the University's proposed institutional projects may affect the future transportation system at the Charles River Campus examined conditions at the end of the 10year Master Plan period (2022). The future analysis also considered the impact of public infrastructure projects that are expected to be completed by 2022.

INSTITUTIONAL/PUBLIC REALM PROJECTS 8.6.1

A total of seven institutional development projects and six public realm projects were included in the Institutional Master Plan analysis of the year 2022. The seven include four previously approved projects that have not yet been constructed or on which construction has not been completed. The institutional and public realm projects considered in the future transportation analysis are illustrated in Figure 5-1, Proposed Institutional Projects, and Figure 5-2, Public Realm Improvements. As the precise academic programming is not known for many of the institutional projects for which planning has not started, or is very preliminary, a campus-wide growth assumption was made to account for potential "new" commuting trips to the Charles River Campus. For strictly analytical purposes, a 2.5 percent increase in employment was assumed, although the University does expect employment levels to remain relatively stable over the next 10 years.

8.6.2 **ROADWAY NETWORK**

The transportation infrastructure network in the vicinity of the Charles River Campus is expected to undergo several changes over the period covered by this master plan. The most dramatic changes are anticipated along Commonwealth Avenue, both west of the

BU Bridge (Commonwealth Avenue Phase 2A project) and at the BU Bridge/Essex Street/Carlton Street/Mountfort Street/University Road nexus (Commonwealth Avenue Phase 2B). In total, six major public infrastructure projects are expected to occur in the next 10 years, and the impact of these projects was taken into account in the Institutional Master Plan analysis. The proposed improvements associated with the Commonwealth Avenue Phase 2A project are illustrated in Figures 8-3A, 8-3B, and 8-3C, Commonwealth Avenue Streetscape Plan. Proposed improvements in the vicinity of the BU Bridge and Mountfort Street (Commonwealth Avenue Phase 2B), are shown in Figure 8-4, BU Bridge Conceptual Traffic Plan.

8.6.3 TRAFFIC OPERATIONS

Future traffic operations (in the year 2022) are forecast to be similar to conditions in 2012. The University's institutional projects will not add an appreciable number of vehicles to the area's roadways, even when using the current campus mode split to project future traffic associated with the University. Congestion is expected to improve at the BU Bridge area because of the Commonwealth Avenue Phase 2B project. Traffic safety is expected to be enhanced along Commonwealth Avenue due to the Phase 2A improvements, particularly in the westbound direction. Congestion is expected at Kenmore Square in the afternoon peak hour (not unlike current conditions), but this congestion has as much to do with other developments in the area as it does with Boston University. The University's Transportation Demand Management (TDM) programs, which are expected to be expanded/enhanced over the life of this master plan, are projected to reduce vehicle trips to the campus and congestion at Kenmore Square and along the Commonwealth Avenue corridor.

8.6.4 PEDESTRIANS

Boston University has made, and will continue to make, improvement of pedestrian circulation and safety its foremost transportation priority. Indeed, the primary focus of several Institutional Master Plan public realm projects is the improvement of the future pedestrian environment. These projects include the Cummington Pedestrian Mall, Granby Street to Silber Way pedestrian way, and sidewalk improvements on the north side of Commonwealth Avenue between University Road and the BU Bridge.

The University is also committed to enhancing pedestrian circulation and safety at proposed institutional development projects, such as New Balance Field and the Admissions Reception Center, where pedestrian roadway crossings will be shortened and physical features incorporated into the designs of the crosswalk areas to improve pedestrian visibility and provide drivers with visual alerts.

Finally, Boston University has partnered with BTD and MassDOT for the advancement of public infrastructure projects, including the Commonwealth Avenue Phase 2A and 2B projects, which will vastly improve pedestrian safety in the crosswalks at the BU Bridge and University Road intersections (Phase 2B), as well as at each of the intersections between the BU Bridge and Alcorn Street (Phase 2A).

8.6.5 BICYCLES

The University has a strong appreciation of the importance of safe and convenient bicycle facilities and is committed to working with the City of Boston and its own community to ensure the continued improvement of the cycling environment. For its part, Boston University will continue to incorporate an appropriate amount of bicycle storage into the design of each of its proposed facilities, just as it has in the past decade. In addition, the University will work with the BTD to identify opportunities to improve bicycle safety and circulation in the areas adjacent to institutional project sites in a manner consistent with the city's Complete Streets approach to enhancing Boston's transportation network. A good example of this cooperative effort is the bicycle accommodations that will be implemented along Babcock Street as part of the mitigation for the New Balance Field project.

8.6.6 PUBLIC TRANSPORTATION

Use of public transportation as a means of commuting is critical to the sustainability of the Charles River Campus over the life of this master plan. The most recent data show that nearly one in three commuters travel to the campus via the MBTA, and boosting this proportion over the next 10 years is one of Boston University's three primary transportation goals. Converting auto trips to public transit trips helps to improve the environment and relieve pressure on the future traffic infrastructure in the city and region.

The MBTA's plan to expand the nearby Yawkey Commuter Rail Station to a full-service station provides an excellent opportunity to increase the use of commuter rail services by those living west of Boston. Taking advantage of the new Yawkey Station is an important element in the University's overall program to reduce vehicle trips to the Charles River Campus.

8.6.7 BOSTON UNIVERSITY SHUTTLE

The University anticipates that the BUS will continue to be an important part of its overall transportation strategy over the life of this Institutional Master Plan, as it has been since 2004. It is difficult to predict ridership levels over the period covered by this

master plan, but ridership has historically increased during each year of operation and the University does not expect this trend to change, although the rates of increase may not be as high as in previous years. In the past, the University has added capacity to the service in order to satisfy passenger demand and BUS usage will continue to be monitored and operational refinements made if necessary. Potential enhancements include adding more capacity to the service, modifying hours of operation, and changing routes or stop locations.

8.6.8 PARKING

It is anticipated that the on-campus parking supply owned and operated by the University will remain at approximately the same levels as today, and that these facilities will continue to be regulated by a parking permit program administered by Parking & Transportation Services. Boston University has determined that several of the proposed institutional projects will impact the on-campus parking supply; three examples are the Admissions Reception Center and the School of Law projects (-24 spaces combined) and the Granby Street to Silber Way Pedestrian Way (-74 spaces).

In the short term, the vehicles that were using these spaces will need to shift to another on-campus parking facility. There is available capacity within the University's parking system, although users will likely find themselves parked at a less convenient location. In the longer term, the potential reduction in the parking supply underscores the importance of reducing commuter vehicle trips to campus.

The potential loss of parking will also require Transportation & Parking Services to be more efficient and forceful in its management of the University's parking facilities. This may require changes to the parking permit program to ensure that surrounding communities are not affected; measures could include more aggressive permit fee increases, further limiting the ability of students to bring vehicles on campus, or restricting the ability of employees to purchase parking permits.

The most recent institutional projects developed by the University include little or no parking as part of the project (e.g., the Center for Student Services and the John Hancock Student Village Phase II residence hall at 33 Harry Agganis Way). In general, this development philosophy is expected to continue throughout this master plan period. However, at sites where significant existing parking could be lost, the University may include replacement parking in the project design. An example is the development site located at 645–665 Commonwealth Avenue, where potential future academic buildings could displace 126 existing parking spaces. The final determination on whether parking is included at a site will be made as the building programs are

advanced to a higher level of design and through consultation with the city and the BU Task Force.

In addition to anticipated permanent impacts on parking, the University has identified temporary impacts that will occur during project construction. The New Balance Field project is the best example of this: During much of the project's construction period, the existing 361 parking spaces at the site will not be available. Parking & Transportation Services has developed a mitigation plan that will accommodate that parking demand elsewhere in the University's system, minimizing impacts on the adjacent communities. A parking mitigation plan will be developed for each institutional project, if applicable, and that plan would be reviewed with the city and the BU Task Force.

8.6.9 **BUILDING SERVICES**

Consistent with city requirements, the designs of recently constructed institutional projects have incorporated off-street service bays and loading docks. Institutional projects constructed during the term of this master plan will also provide for off-street servicing. Details of how loading and servicing will be accommodated at the proposed facilities will be provided to the city and BU Task Force for review as the design of each proposed project is advanced.

8.7 MITIGATION/MEASURES TO ACHIEVE TRANSPORTATION GOALS

Boston University has developed three transportation objectives that seek to: (1) improve pedestrian and bicycle safety and circulation on campus, (2) reduce the number of vehicle trips to campus, and (3) minimize impacts on adjacent residential neighborhoods. The strategies developed by the University to achieve transportation goals two and three serve as the basis for the University's campus transportation mitigation program for the 2012–2022 Institutional Master Plan. The mitigation program for the Charles River Campus has two basic components:

- Transportation Demand Management (TDM) measures/sustainability initiatives
- Traffic and parking management for special events

8.7.1 TRANSPORTATION DEMAND MANAGEMENT/SUSTAINABILITY

Boston University Parking & Transportation Services has established a set of initiatives and programs with the goal of reducing the number of vehicles on campus and increasing use of sustainable modes of transportation. Many of these were instituted during the last master plan period and include:

- Ride matching program for University employees (web-based car or van pool matching service)
- MBTA pass program for University employees (pre-tax, payroll purchasing of MBTA passes)
- Student MBTA semester pass program (discounted purchasing of MBTA passes)
- Boston University Shuttle (BUS)
- Bicycle facilities (safe and secure bike storage provided at all major BU facilities)
- Bicycle safety programs (cosponsored by Boston University Police Department and Parking & Transportation Services)
- Car-sharing (seven Zipcar vehicles are located on campus and 15 more within short walking distance)
- On-campus housing for undergraduates (approximately 75 percent of undergraduates are expected to be housed on campus)

In addition, there are several strategies employed by the University to manage parking supply and demand on the Charles River Campus, including:

- Parking permit program fees for employees and students who bring vehicles to campus
- Restrict the availability of parking permits issued to undergraduate students
- Limits on the construction of new parking spaces

8.7.2 NEW TDM/PARKING STRATEGIES

The University is considering a number of additional measures to meet its goal of reducing the number of single-occupancy vehicle commuters. These will also assist in the management of future parking demand in light of expected supply reductions resulting from institutional and public realm projects during the life of this master plan. The strategies being considered include:

- Deterring single-occupancy vehicle commuting through employee parking fees
- Provision of a parking permit discount for employees who are in a current car/van pool or who either join an existing car pool or form a new car pool
- Set aside spaces for car/van pools at highly desirable parking locations; this preferential parking initiative will likely have the most influence on driver behavior if implemented in the Central Campus area
- Provide preferential parking for drivers who drive to campus in hybrid or electric vehicles
- Develop a tiered system for daily parking permits with higher charges for Central Campus lots and garages than those in West Campus

- Institute a policy that makes employees living within a certain radius of the campus (one mile, for example) ineligible for parking permits
- Start a "Try the T" program giving single-occupancy vehicle commuters a free 30-day MBTA pass

8.8 SPECIAL EVENT MANAGEMENT

8.8.1 AGGANIS ARENA EVENTS

When the Agganis Arena facility was opened in early 2005, a comprehensive traffic and parking management plan was developed by Boston University and reviewed and approved by the Boston Transportation Department and Boston Police Department. The Agganis Arena Special Events Logistics Plan (AASELP) underwent some initial refinements, but has functioned very well over the past seven years and minimized impacts on adjacent neighborhoods. The University does not expect significant departures from the current event management procedures during the life of this master plan.

However, there will be adjustments to the parking management plan for Agganis Arena during the construction of New Balance Athletic Field. When New Balance Field is under construction (summer 2012 through summer 2013), the existing Babcock Street surface parking lot located at that site will be offline. The Babcock Street and University-owned 808 Commonwealth Avenue surface lots offer parking overflow for events at Agganis Arena when event parking demand exceeds the capacity at the garage and surface lots at the John Hancock Student Village site. During construction of New Balance Field, event attendees who would normally have been directed to the Babcock Street lot will be directed to the parking lot at 808 Commonwealth Avenue. When construction of New Balance Field is complete, parking operations associated with events at the Arena will return to the current system.

8.8.2 NEW BALANCE FIELD EVENTS

The University has developed a traffic and parking management plan for events that will be held at the New Balance Field facility. A plan has also been established for the construction period, portions of which have been described in the management of events at Agganis Arena (above). The traffic and parking management plans developed by the University for the construction and post-construction periods include the following.

Construction Period

- Overflow parking from the Agganis area (when needed) will be directed to the University-owned surface lot at 808 Commonwealth Avenue
- Buses parking for events at the Track & Tennis Center that currently use the Babcock Street lot will be directed to park at the following locations instead (in order of preference):
 - 1. The loading dock area at Agganis Arena
 - 2. Curbside along Harry Agganis Way adjacent to the Nickerson Field fence (private portion of the street owned by Boston University)
 - 3. Rented parking meters along Ashford Street
 - 4. Leased spaces at an off-site location

Post-Construction

- Vehicle (automobile) parking will be accommodated on site by a total of 348 parking spaces; additional parking will be available at the Agganis Arena garage
- Buses arriving for events at New Balance Field will be directed to park at the following locations (in order of preference):
 - On site in the surface parking area located at the western end of the site adjacent to Alcorn Street; an area has been designed to accommodate 8 to 10 buses for events and the parking spaces will be cordoned off early on event days to ensure automobiles are not parked in the spaces when the buses arrive
 - 2. The portion of Babcock Street north of Ashford Street (owned by Boston University)
 - 3. The loading dock area at Agganis Arena
 - 4. Curbside along Harry Agganis Way adjacent to the Nickerson Field fence (private portion of the street owned by Boston University)
 - 5. Rented parking meters along Ashford Street
 - 6. Leased spaces at an off-site location
- Traffic (attendee and bus) approaching the site on Babcock Street from Commonwealth Avenue will be directed west onto Gardner Street to access the

on-site parking, reducing the pedestrian/vehicular conflicts along Babcock Street adjacent to the field

Because of the proposed limited spectator capacity at New Balance Field, the University does not anticipate that police details will be needed to handle traffic before or after events. However, if issues do arise and it is determined through experience that details are needed to manage traffic flows, the BU Police Department will coordinate with the Boston Police Department. If police details are required, they would likely be limited to the intersection of Commonwealth Avenue and Babcock Street and the intersection of Babcock Street and Gardner Street.

8.8.3 OTHER CHARLES RIVER CAMPUS EVENTS

Boston University Parking & Transportation Services has developed operating procedures for other events and venues on the Charles River Campus. These procedures have been refined over the years to minimize impacts on local neighborhoods. Examples of events that have to be managed by the University from a transportation perspective include:

- Commencement
- Orientation
- Move-in and move-out periods
- Athletic events at the Track & Tennis Center
- Athletic events at Nickerson Field
- Spring and fall open houses
- Snow emergencies

Information pertaining to the procedures for these events is conveyed through the Parking & Transportation Services website.

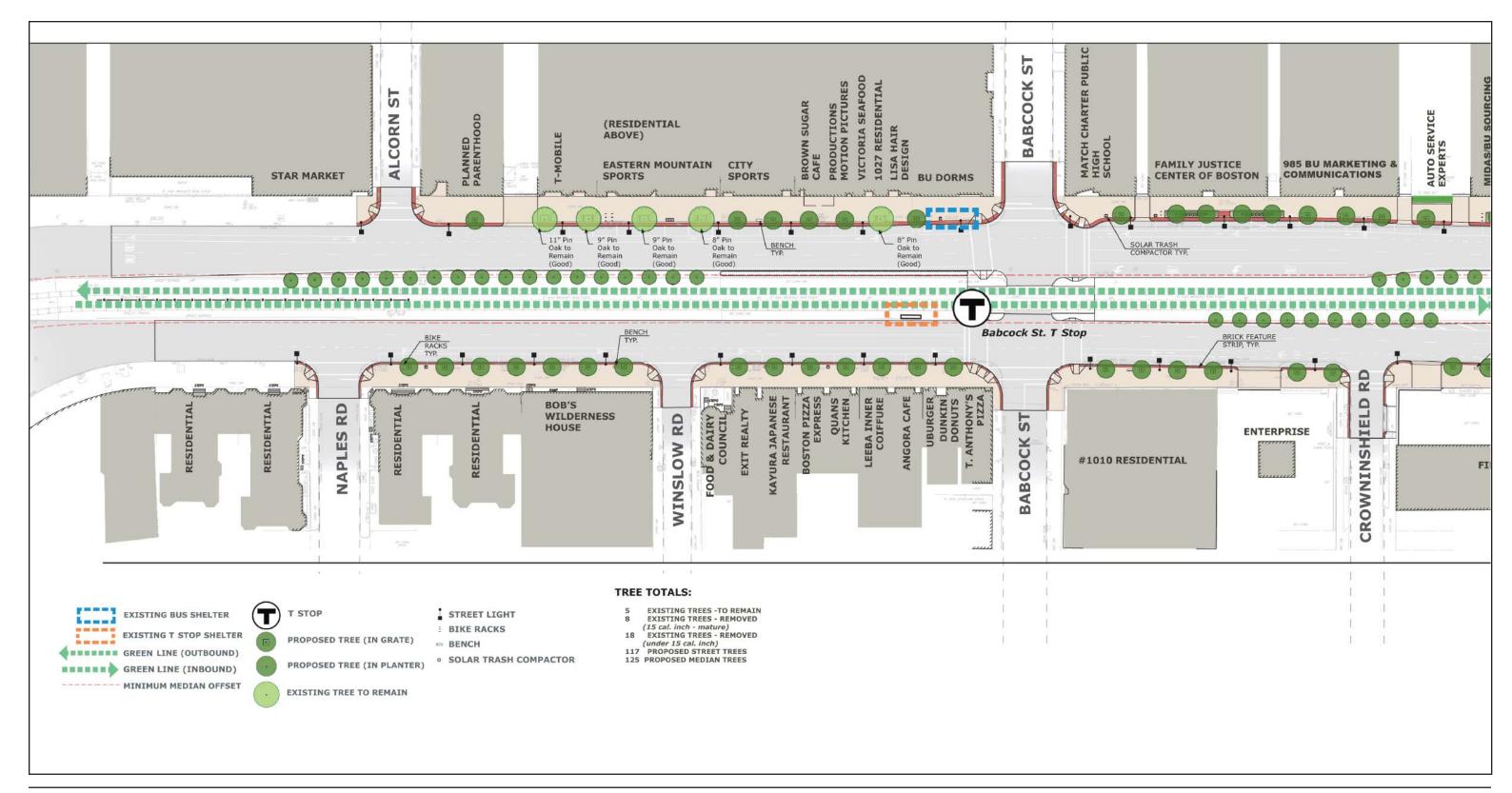


Figure 8-3A, Commonwealth Avenue Streetscape Plan Boston University Charles River Campus 2012–2022 Institutional Master Plan Source: Tetra Tech

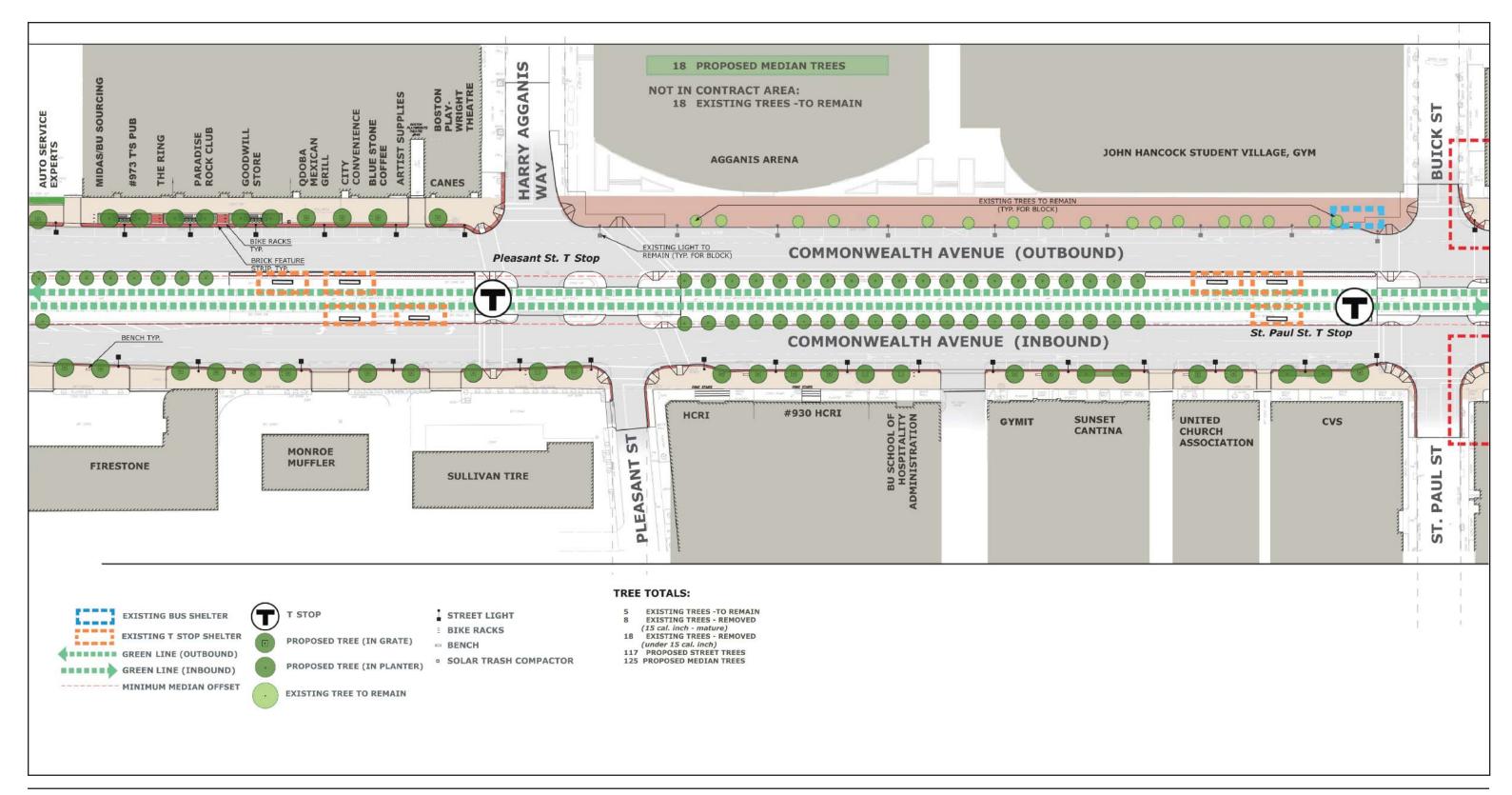


Figure 8-3B, Commonwealth Avenue Streetscape Plan **Boston University Charles River Campus** 2012-2022 Institutional Master Plan Source: Tetra Tech

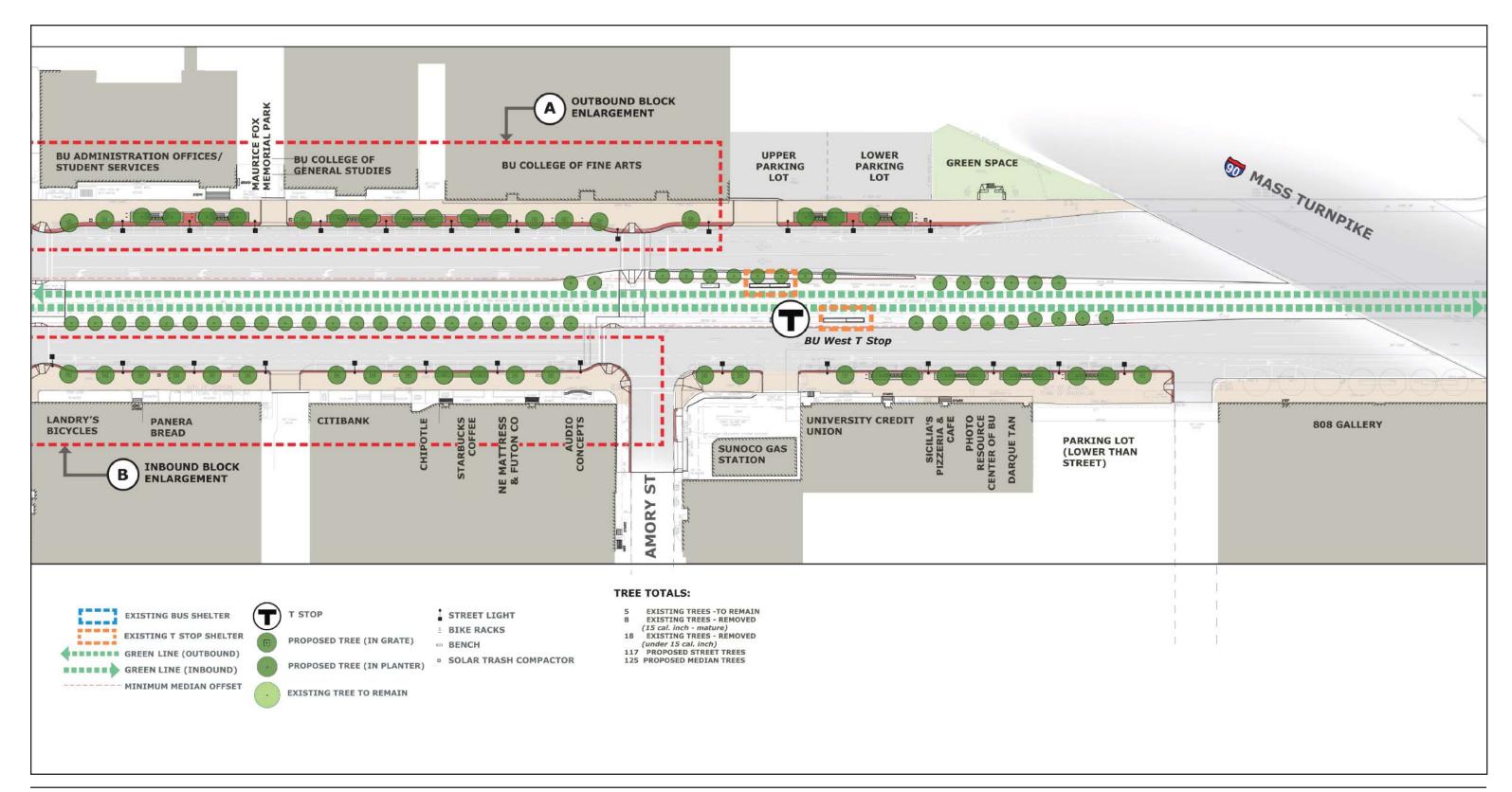


Figure 8-3C, Commonwealth Avenue Streetscape Plan Boston University Charles River Campus 2012–2022 Institutional Master Plan Source: Tetra Tech

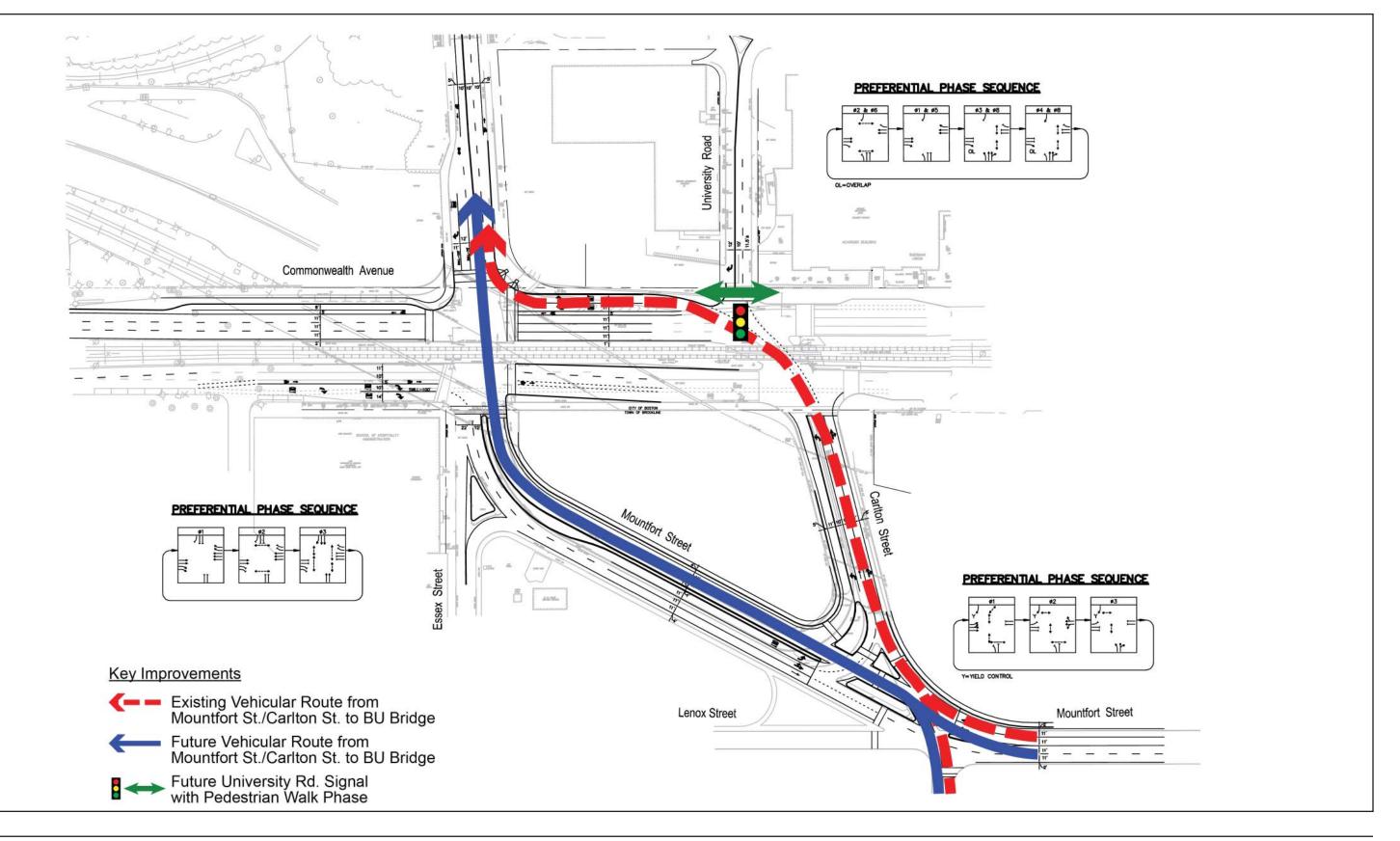


Figure 8-4, Boston University Bridge Conceptual Traffic Plan **Boston University Charles River Campus** 2012-2022 Institutional Master Plan

Source: Tetra Tech

Chapter 9

SUSTAINABILITY

CHAPTER 9: SUSTAINABILITY

9.1 INTRODUCTION

Boston University's commitment to sustainability has made it a leader among peer institutions. Innovations and activities in education, research, and energy conservation have included waste management projects, sustainable construction, environmentally conscious planning, and ongoing programs for public engagement. Since the launch of its 2007 strategic plan, *Choosing to be Great*, the University has pursued the goal of minimizing its carbon footprint through infrastructure renovation, energy conservation, and greenhouse gas emissions reduction. President Robert Brown's Matriculation speech in 2008 established the Sustainability Committee and earmarked a \$1-million revolving loan fund committed to energy conservation. This catalyzed the launch of the sustainability@BU program and the appointment of a full-time director to oversee its operations. With this leadership and expertise, the University has developed a highly effective monitoring and mitigation system, and launched an effective campaign to make sustainability a part of the campus culture that enriches the student experience. The director and his staff also collaborate with the University's planning, design, construction, and operations staff, and consultants to determine the feasibility and implementation of sustainable design, construction, and operational strategies on projects.

9.2 LEADERSHIP

Boston University is an active member of many national and international organizations that aim to develop best practices and policies for sustainable development, including the Association for the Advancement of Sustainability in Higher Education, the Northeast Campus Sustainability Consortium, the U.S. Green Building Council, the Urban Land Institute, the Society of College and University Planning, and Massachusetts Schools Sustainability Coordinators Roundtable. BU staff take their role in these organizations very seriously, sharing their expertise for the benefit of others. In addition, Boston University collaborates frequently with nearby universities.

With its \$1 million sustainability revolving loan fund, Boston University has the distinction of being a member of the Founding Circle of the Sustainable Endowments Institute's Billion Dollar Green Challenge. This challenge encourages colleges, universities, and other nonprofit institutions to invest a combined total of \$1 billion, within two years, in self-managed green revolving funds that finance energy efficiency improvements. Boston University is one of the largest universities in New England at the forefront of this energy-saving revolving funds

challenge. Thirty-five institutions across the country have committed a total of \$83 million to this innovative financing strategy, leading to reduced operating costs on campuses and creating green jobs in their communities.

9.2.1 PUBLIC OUTREACH AND COORDINATION WITH CITY AGENCIES

Boston University recognizes that its sustainability initiatives are only effective with the collaboration and participation of the City of Boston and neighboring communities, with which it shares many objectives and goals. The University has spearheaded its nationally recognized program through various cooperative partnerships and service projects, and has worked to create a culture of sustainable behavior in surrounding residential, business, and academic communities. Recognizing the City's exemplary leadership in sustainability, Boston University is pleased to offer its diverse human and capital resources toward the following initiatives:

- Mayor's Green Ribbon Commission: Boston University President Robert Brown sits on this volunteer advisory group, which comprises a diverse set of business and civic leaders in support of the city's Climate Action Plan.
- Grow Boston Greener: Boston University has planted 344 new trees at the Charles River Campus since 2005. BU's landscaping endeavors help combat the heat island effect and provide stormwater control.
- Sustainable Neighborhood Lab: Boston University's partnership with the city and local residents and business leaders provides a strategic platform to influence policy and develop innovative solutions through science, technology, business, and policy.
- Boston Tree Party: BU's Center for Energy & Environmental Studies is a participating delegation in this local urban agriculture project that coordinates the planting of pairs of heirloom apple trees in greater Boston.
- Community Supported Agriculture (CSA): Locally grown produce from Ward's Berry Farm is available for weekly pickup at the George Sherman Union plaza June through November.
- Community Service Center at Boston University: Compassion and stewardship have a long history at Boston University. One example is the student-initiated and student-run Community Service Center launched in 1986. In 2010, 4,000 students donated over 170,000 hours of service to their local and national communities through various projects, including the Student Food Rescue (SFR) program, which salvages nearly 150,000 pounds of food annually from such locations as Whole Foods, Panera Bread, and Starbucks and takes the food to locations including the Boston Rescue Mission, Safe Haven for Women, and the New England Shelter for Homeless Veterans.

Community Events Co-organized by Boston University:

- Boston Carbon Day: This international event focuses on reducing carbon footprints from the individual to global levels. The University coordinates this event in partnership with the Electric Vehicle Urban Infrastructure Study and the Neighborhood Association of the Back Bay.
- PARK(ing) Day: Boston University hosts one of nearly one thousand demonstrations worldwide as part of this international event that re-imagines forgotten urban spaces, such as parking lots, as active public spaces.
- Boston University Farmers' Market: Boston University provides a weekly destination for the entire University community from September through November, offering fresh local food as well as live music and special events to connect consumers to their food sources.

9.2.2 EDUCATION AND RESEARCH

Consistent with its commitment to fostering student engagement and service to the community, the University has invested heavily in academic and research programs that prepare students to address the challenges of a sustainable future. The sustainability curriculum encompasses a wide range of issues pertaining to sustainability. In total there are 389 sustainability-related courses, offered through 42 academic departments, such as Sustainable Development, Environmental Law and Sustainability, and Energy, Society, and the Environment. Graduate and undergraduate degree programs and certificate programs are available, as well as several study abroad opportunities.

Boston University is pioneering research on the essential question of sustainability: how to sustain human existence on the planet. In 2010, nearly \$8 million was invested in research on sustainability across 15 research centers, 13 departments, and 46 faculty members. In 2011, 68 faculty conducted sustainability-related research in 24 research departments. The College of Engineering has become a leader in specific areas of energy materials, most notably fuel cells, energy efficient solid-state lighting, energy storage systems, coatings for improving energy efficiency, and integration of alternate energy systems. The College of Arts & Sciences has a long history and tradition of doing pioneering work at the interface of energy and environmental science as well as energy policy. The School of Management has world-class expertise in designing and implementing economic management models for energy enterprises, and energy distribution and use. The University's interdisciplinary Clean Energy & Environmental Sustainability Initiative (CEESI) has successfully fostered collaborative research at the intersection of technology, policy, climate science, market economics, and systems integration.

Both undergraduate and graduate students are vital to faculty research. The Undergraduate Research Opportunities Program (UROP) facilitates participation by undergraduates in faculty-mentored research projects across disciplines such as ecology, earth science, environmental health, and environmental economics. Innovative research, such as on the impacts of pollutants on human health and the global carbon cycle, supports some of the nation's preeminent environmental education programs that prepare students for graduate school or employment in the private, public, and nonprofit sectors.

9.3 **OPERATIONS**

9.3.1 CLIMATE & ENERGY

Energy efficiency is the most important issue within the University's sustainability program because efficiency reduces operating costs and CO_2 emissions, which contribute to climate change. Despite campus growth of 7 percent between 2005 and 2010, the University has reduced greenhouse gas emissions by more than 7 percent on the Charles River Campus through energy efficiency and fuel conversion projects. See Figure 9-1, Energy Consumption.

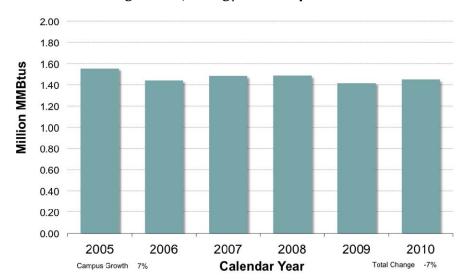


Figure 9-1, Energy Consumption

Boston University's Facilities Management & Planning is responsible for the development and implementation of conservation and management programs that reduce carbon emissions and operating costs for the University, including the following:

Daylight Responsive Lighting Controls

Daylight responsive lighting controls are photosensors that assess the amount and quality of natural daylight in a particular space. When natural light is sufficient, artificial lighting can then be reduced. This energy-saving technology is being used in a number of buildings on campus, such as the Mugar Library and the Makechnie Study Center. The Makechnie Study Center was renovated in 2009 and certified Silver under LEED-CI (Leadership in Energy and Environmental Design, Commercial Interiors).

Delamping

Delamping is one fairly simple way to reduce energy. As the name suggests, it's done by removing unnecessary light bulbs/fixtures in areas that are producing greater-thanneeded illumination. First, a lighting assessment must be made, and then calculations are performed in order to meet the Illuminating Engineering Society requirements.

Among some of the locations on campus that have benefited from delamping are the Mugar Library and the Life Science & Engineering Building at 24 Cummington Mall. In a collaborative effort, Professor Michael Gevelber's spring 2008 Energy Audit Class teamed up with Facilities Management & Planning (FM&P) to complete a pilot project sponsored by Ed Loechler from the Department of Biology on the seventh floor of 24 Cummington Mall. Lamps in the main hallway were removed, yet adequate lighting levels were still maintained in accordance with IESNA (Illuminating Engineering Society of North America) guidelines. A follow-up interview with building tenants two months after the project was completed revealed that the lighting change went unnoticed. The project has been expanded to include delamping the remaining hallways on the second, sixth, eighth, and tenth floors of the building.

Fluorescent Retrofits

Fluorescent retrofits at the 700 and 730/750 Commonwealth Avenue Parking Garages primarily consisted of retrofitting existing HID (High Intensity Discharge) lamps to a more energy efficient T8 fluorescent system with occupancy controls. The existing lighting system in this area contained predominantly metal halide and a few high-pressure sodium lamps. Existing lighting, which had previously stayed on 24/7, was replaced with super T8 fluorescent, cold temperature ballasts and Vapor-Tight lenses, which help to reduce moisture buildup inside the fixture.

Occupancy Sensors

Occupancy sensors turn off systems when they detect that the space is unoccupied, amounting to substantial savings in lighting, heating, ventilation, and air conditioning systems. On the Charles River Campus, sensors are being used at 33 Harry Agganis Way; in the Fitness & Recreation Center, the Agganis Arena Parking Garage, and Mugar Library; in the garages at both 700 Commonwealth Avenue and 730/750 Commonwealth Avenue; and at the College of Arts & Sciences, School of Management, School of Hospitality, and many other locations on campus.

CO₂ Level Monitors

 CO_2 level monitors in the Fitness & Recreation Center and Agganis Arena allow the buildings' energy management systems to determine precisely how much fresh air is required. Since fresh air must be either heated or cooled, adjusting the amount of air delivered can improve energy efficiency. In the past, fresh air levels were controlled with prescriptive measures, not real-time needs.

Variable Speed Drive System

Variable speed drives have been provided in many campus buildings for the chilled water and heated water coils that manage air temperature. On an 80-degree day, for example, a building equipped with a variable speed drive system can optimize horsepower by running chilled water pumps more slowly than would be needed on a 90-degree day. Humidity control can be optimized with dual path air handling systems before mixing it with a building's return air.

Boiler Efficiency Upgrades and Oil to Gas Conversion

An important element of the University's strategy to reduce greenhouse gas emissions is fuel conversion. Natural gas emits approximately 26 percent less CO_2e than number 2 heating oil. In 2006, as part of a Central Plant upgrade, five boilers that supply steam to 13 buildings (from the George Sherman Union to 111 Cummington Mall) underwent an oil to dual fuel conversion that saved the University 12 percent in number 4 heating oil costs and 13 percent in electrical fees during its first year of operation. Since 2009, 26 projects across campus have been implemented in the University's transition from heating oil to natural gas. In addition to moving to cleaner-burning fuel, these conversions improve burner efficiency, provide financial savings, and reduce carbon emissions.

Central Gas Line

In the summer of 2010, Facilities Management & Planning undertook one of its most ambitious carbon footprint reduction projects to date. It extended an underground natural gas pipeline 2,900 feet, bringing it to the Central Plant, which is responsible for 25 percent of the Charles River Campus's heating and cooling and provides services to buildings such as the Mugar Library, the College of Arts & Sciences, Warren Towers, and the George Sherman Union. The pipeline stretches down Commonwealth Avenue from Buick Street to University Road, behind the George Sherman Union and Mugar Library, to the Central Plant. The new installation allows the University boilers, which formerly used approximately 1.3 million gallons of number 4 heating oil annually, to run on natural gas, the cleanest of all fossil fuels.

Compared to number 4 heating oil, natural gas has less sulfur, carbon, and nitrogen, and when burned, leaves almost no ash particles, which mitigates greenhouse gas emissions and improves air quality. This project will reduce the University's CO_2 emissions on campus by 3,800 metric tons annually and eliminate Boston University's reliance on heating oil at the Central Plant location. This is equivalent to more than a 2.5 percent greenhouse gas reduction for Boston University. In addition, substantial electric and boiler maintenance savings are expected as a result of the conversion, as natural gas is a cleaner-burning fuel.

Home Energy Audits

To benefit the community and the environment, Boston University collaborates with Next Step Living to encourage interested members of the Boston University community to participate in a Mass Save[®] Home Energy Assessment. This complimentary service to National Grid and NSTAR customers offers recommendations for energy efficiency improvements provided by a Mass Save energy specialist and installation of no-cost immediate savings measures, such as compact fluorescent light bulbs (CFLs), programmable thermostats, and water-efficient fixtures.

9.3.2 WATER CONSERVATION

Water efficiency is an important element of Boston University's sustainability program. On the Charles River Campus, water consumption has dropped 27 percent in total volume and 38 percent per capita since 1991. Despite campus growth of 7 percent between 2005 and 2010, the University has reduced water consumption by more than 2 percent on the Charles River Campus. This is due to the introduction of several new water-saving technologies and practices, including rain sensors, water-efficient fixtures, trayless dining, drip irrigation, and leak detection. See Figure 9-2, Water Conservation.

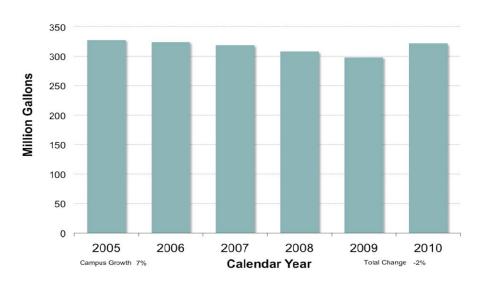


Figure 9-2, Water Conservation

Installation of rain sensors

Rain sensors have been installed on irrigation systems to help reduce water consumption by interrupting automatically scheduled watering cycles when enough precipitation has occurred. This saves money and ensures that the grounds are not overwatered.

Installation of water-efficient fixtures

Dual-flush toilets have been used in Europe for decades to conserve water and are quickly gaining popularity in the United States. Unlike traditional toilets that use 3.5 gallons of water per flush, dual-flush toilets use 1.6 gallons per flush (GPF) for solids and 1.1 gallons for liquids. Dual-flush toilets can be found in 25 locations on campus and throughout all floors of the two towers at 33 Harry Agganis Way (Student Village II), which is also using 0.5 gallon per minute (GPM) lavatories and 1.5 GPM showers. The University is testing the most water-efficient toilets available on the market at 1.28/0.8 GPF and testing 0.5 and 0.25 GPF urinals.

Self-charging, hands-free faucets are one more way that Boston University is reducing its water use. The EcoPower hydro turbine is powered by the motion of the water running through it; this motion creates an electrical current, which is then stored in rechargeable cells that power the Smart Sensor Systems. EcoPower replenishes its charge with as few as five uses a day and is optimized at 10 uses per day. The EcoPower faucets are designed so the controls and components are "below deck" and out of the way of potential damage.

Drip Irrigation

The University's irrigation program utilizes over 140 systems on the Charles River Campus, including approximately 50 percent with drip irrigation. All of these systems incorporate localized rain sensors to reduce water waste.

Groundwater Recharge

The University employs groundwater recharge technologies in new construction projects to reduce stormwater runoff into the watershed and to recharge the water table in the Back Bay. Boston University's joint efforts with the Boston Water and Sewer Commission and the Boston Groundwater Trust to improve groundwater recharge can be found in Chapter 7, Utilities and Infrastructure.

9.3.3 SOLID WASTE REDUCTION AND RECYCLING

To reduce solid waste production in both construction and operations of its buildings, the University performed a waste audit on the Charles River Campus in 2006 that laid the groundwork for a recycling program. Since 2006, the University has increased its recycling rate on the Charles River Campus from 4 percent to 31 percent. It has also reduced its total waste volume (incinerated, recycled, composted, and donated) by 10 percent. The University continues to work with a construction waste-recycling provider to improve waste diversion on small construction and renovation projects. The dramatic improvement in waste diversion is due to a new recycling infrastructure provided by the University and the pioneering efforts of concerned faculty, staff, and students across campus.

Beginning in November 2009, Facilities Management & Planning and a representative of Save That Stuff reviewed each floor of every building on campus to design an optimal recycling and waste stream system. As of 2011, Boston University's total annual waste stream (excluding construction projects) was 9,907 tons, of which 69 percent was incinerated at a waste-to-energy facility. Thirty-one percent of the total waste was diverted with 16 percent recycled, 13 percent composted, and 3 percent donated. See Figure 9-3, Total Waste and Diversion at the CRC.

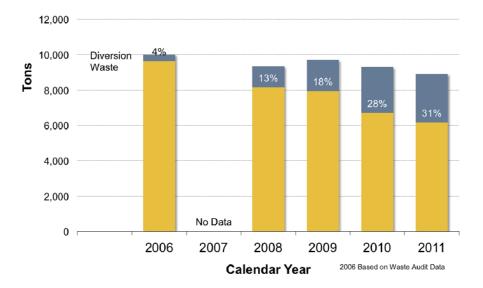


Figure 9-3, Total Waste and Diversion at the CRC

Boston University currently recycles many materials, including aluminum, cardboard, glass, paper, coffee cups, plastics, and clean milk and juice containers. In addition to these traditional materials, the University recycles batteries, cell phones, computers and other electronic waste, fluorescent light bulbs and ballasts, ink and toner cartridges, appliances, metals, and construction materials.

Boston University's partnership with Morgan Memorial Goodwill Industries has contributed to waste reduction during the end of semester move-out. During the pilot year, 6.75 tons of reclaimable goods left behind by students were diverted from the waste stream. The program has continued to grow in 2010, 2011, and 2012 with 35.2 tons, 41.2 tons, and 61.2 tons of goods diverted, respectively. In 2011, "Goodwill, not Landfill" won a third-place Excellence Award from NASPA (Student Affairs Administrators in Higher Education), an advocacy and development group of administrators from 1,400 campuses worldwide. Goodwill is now collaborating with five other large institutions locally and nationally to develop similar programs.

Boston University has installed BigBelly Solar Compactors on the Charles River Campus. These compacting trash receptacles are self-powered, harnessing the sun's rays for 100 percent of their energy needs. While approximate in size to a conventional trash receptacle, their capacity is five times greater, reducing collection trips and, by extension, fuel consumption and greenhouse gas emissions, by 80 percent. Facilities Management & Planning staff are alerted wirelessly when BigBelly receptacles are full. Many locations on campus feature BigBelly dual-stream recycling, which are now being equipped with sensors which provide alerts for pick-ups. The University launched a pilot in the fall of 2009 that has more than doubled BigBelly coverage to serve about 95 percent of the campus. BigBelly trash compactors have reduced on-campus trash collection from twice daily (14 times/week) to an average 1.6 times per week, improved cleanliness, and provided recycling in public outdoor spaces.

Other successful Boston University waste-reduction projects include:

- Construction projects completed in 2011 diverted 351 tons of waste.
- A total of 54 tons of furniture was donated for reuse overseas in May 2009.
- Balers, now installed in all dining facilities, accommodate cardboard recycling.
- "Zero Waste" Commencement efforts have led to 86.6 tons of material diverted since May 2009.
- Annual reusable mug distribution provided a sustainable alternative to the use of paper cups and single-use plastic bottles.
- Every coffee-serving location on campus offered a \$0.25 reusable mug discount.
- The "We Bagged the Box" program, a collaboration with Office Depot, replaced cardboard boxes with paper bags for deliveries under 20 lbs.
- Paperless payroll was instituted.
- Recycling surplus electronics was implemented through the Institutional Recycling Network (IRN).
- Ink cartridge and battery recycling was extended to Resident Life Offices.
- There is an online chemical reuse inventory for laboratories on campus.
- Limits are set for printing for all students; there is a fee for exceeding allocation.
- Double-sided printing is available at all on-campus print center locations.
- All course catalogs, student schedules, and directories are available online.
- The Green Team, a volunteer student group focused on paper recycling, and the Scarlet Squad, volunteers who welcome new students to campus, will work together for 2012 move-in.
- 100 percent of yard waste is composted.
- The University is piloting a Trash Buddy program to replace conventional deskside waste receptacles with smaller trash receptacles that sit inside of a standard desk-side recycling receptacle.
- The installation of hand dryers in the George Sherman Union restrooms is estimated to reduce 5 tons of waste from paper towels annually.
- The "Take Out the Trash" program—pioneered by students, faculty, and staff at the College of General Studies—aims to raise awareness of the volume of an individual's waste by removing desk-side trash cans and having staff bring their trash to a central location on the floor.

• Waste audits were instituted for a systematic evaluation of the University's recycling program, building-by-building.

9.3.4 TRANSPORTATION

Boston University is cognizant of the potential environmental impact of the thousands of students, staff, and faculty that commute to the Charles River Campus and has been proactive in encouraging sustainable modes of transportation. Several projects have contributed to a net reduction in trip generation levels at the Charles River Campus, which in turn have yielded improvements in air quality, fuel consumption, and pedestrian health and safety. Successful Transportation Demand Management (TDM) strategies include increasing the supply of on-campus student housing, reducing the number of parking spaces per new development, promoting discounted public transit passes, and investing in the development of new alternatives to single-passenger vehicles, such as the Boston University Shuttle (BUS), bicycle infrastructure, Zipcars, and ride matching.

Boston University won a Bike Friendly Business Award for the Charles River Campus in 2009.

Details on transportation initiatives at the Charles River Campus can be found in Chapter 8 and the 2012–2022 Transportation Master Plan.

9.3.5 DINING SERVICES

Dining Services has several programs to reduce or recycle waste from its facilities. Dining Services composts at 19 of its 22 facilities on campus, and for the past four years has composted food scraps at all campus dining halls. Post-consumer composting was most recently implemented at the George Sherman Union Food Court, while simultaneously introducing reusable and compostable tableware. These changes have caused the diversion rate at the Food Court to increase from 32 percent in 2009 to 73 percent in 2011. The majority of post-consumer food waste is generated in Boston University's residential dining facilities (five in total), where waste is collected for composting. The collected food waste is brought to local industrial composting facilities and resold as a soil amendment. During the academic year, leftover bagels, pastries, and other baked goods are picked up by the BU Community Service Center and distributed to area meal programs, food pantries, and shelters.

In addition, Dining Services offers a \$.25 discount for using refillable coffee mugs at all of its retail locations. Reusable to-go containers are available at the George Sherman Union Food Court as an alternative to disposable to-go containers. Dining Services has eliminated all non-compostable disposables from its operations, including Polystyrene. All catering and George Sherman Union Food Court tableware is reusable or compostable. All Late Nite Café to-go tableware is compostable. Compostable singleserving condiments, cookie packets, and potato chip bags are not yet available.

In an effort to reduce energy usage, Dining Services is working with both National Grid and NSTAR on conducting energy audits of the large kitchens on campus, and purchases ENERGY STAR-rated kitchen equipment when replacements are due.

In 2012, the George Sherman Union Food Court became a Certified Green Restaurant[®] by the Green Restaurant Association, with the most Green PointsTM in all of New England. In addition, it is the only food court in the United States to be a Certified Green Restaurant[®].

In 2012, Boston University Dining Services was a Mayor's Green Award Winner as a Sustainable Food Leader. The award noted that Boston University has focused on providing sustainable food through buying locally grown/processed items from 45 farms and 130 producers within a 250-mile radius, totaling 23 percent of the University's annual food budget.

9.3.6 MAINTENANCE

Window Replacement

The University is engaged in an extensive window replacement program that removes the old steel and glass window systems, replacing them with "thermally broken" aluminum frames with low-emittance (Low-E) insulated glass panels. These have been installed at the 575 Commonwealth Avenue dormitory to allow in the maximum amount of light, while keeping unwanted heat out in the summer. Window replacements have been completed in the following locations:

- 610 Beacon Street
- 140 Bay State Road
- 575 Commonwealth Avenue
- 855 Commonwealth Avenue
- 273, 275, and 277 Babcock Street (West Campus dorms)

The energy savings for the West Campus project are being evaluated. Before the project was implemented, the water temperature circulated to heat the buildings was set at 180 degrees in the winter months and struggled to keep up with demand. Now, water

temperature settings have been reduced to 110–140 degrees and are able to keep up with demand.

Additional window replacement programs are currently underway and the University will phase in more over the next four years, including at the historic Cram & Ferguson College of Arts & Sciences buildings and Warren Towers. Window projects in progress and planned over the next four years include:

- 675 Commonwealth Avenue
- 685 Commonwealth Avenue (north elevation from center to Tsai addition)
- 725 Commonwealth Avenue
- 745-55 Commonwealth Avenue
- 700 Commonwealth Avenue

Windows at many of the smaller dorms and brownstones on Bay State Road and South Campus, including 264–270, 226, and 232 Bay State Road are also being replaced.

Green Cleaning

Boston University has exemplary Green Cleaning Procedures in place that call for cleaning products certified by Green Seal and EcoLogo. Custodial Services is centrally managed on each campus, ensuring the University's Green Cleaning Procedures are followed. The University's green cleaning program includes a number of important actions to improve indoor environmental quality and safety, such as:

- Installed campus-wide entry mats to reduce the amount of pollutants tracked into buildings each day.
- Developed a custodial product and equipment committee to eliminate duplicate products; reduce costs; build team morale; improve understanding of chemicals, equipment, and processes; and improve awareness of green cleaning initiatives.
- Installed new chemical dispensing systems campus-wide to reduce waste (including plastic by 90 percent), increase safety and efficiency, and streamline training.
- Created a standardized hand soap dispensing program to reduce the labor needed to refill dispensers, plastic waste, and costs.
- Introduced the use of HEPA backpack vacuums for improved indoor air quality and ergonomics.
- Introduced the use of Euroclean canister vacuums with HEPA filters.

9.3.7 GREEN PURCHASING ACTIONS AND GUIDELINES

The University is developing purchasing processes that are more mindful of sustainability by actively seeking increased recycled content and sourcing of products and materials within the region. Through the University's green cleaning program, 74 percent of the cleaning products used on the Charles River Campus are Green Seal or EcoLogo certified. Today, 95 percent of cleaning equipment purchased for use on the Charles River Campus meets the standards for LEED Existing Buildings Operations + Maintenance credit IEQc3.4 for Green Cleaning. The University has also initiated the following:

- Boston University's computer purchases are made from preferred vendors who offer EPEAT-certified products. The procurement system ensures that policy and guidelines are followed.
- The University lists standard systems to be purchased by departments. This list is maintained by Boston University's Sourcing & Procurement and the Support & Infrastructure Governance Committee. Currently all Apple and Lenovo systems on the list are rated EPEAT Gold and loaded in catalogs for ease of ordering. Purchasing standard systems are required for all administrative departments and highly recommended for all academic departments.
- Increased environmental awareness on the part of Boston University faculty, staff, and students regarding purchasing and supply chain management is a key driver toward achieving the University's sustainability goals. This calls for continued employee education, enhanced supplier partnerships, and publicizing demonstrated successes.
- While there is no formal purchasing policy at this time, Boston University purchases ENERGY STAR copiers, kitchen equipment, and computers. In addition, 90 percent of BU purchases are qualified for certification under Green Seal or the Environmental Choice Program, or are biorenewable cleaning products.

9.4 NEW CONSTRUCTION

Boston University is committed to best practices in green buildings and has an entire staff dedicated to exploring best practices for design, construction, operations, and maintenance of new and existing buildings. To this end, the University aims for all of its buildings to achieve LEED certifiability as defined by the U.S. Green Building Council. The system is categorized in five basic areas: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. Four LEED certification systems apply to the BU

campus, including Building Design and Construction (BD+C), Core and Shell, Interior Design and Construction (ID+C), and Existing Buildings Operations and Maintenance (EB O+M).

Building Name	Program	Year	Status
Makechnie Study Ctr.	ID+C	2009	Silver — achieved
85 Saint Mary's St.	Homes	2012	Gold — achieved
87 Saint Mary's St.	Homes	2012	Gold — achieved
100 Bay State Road	BD+C	2012	Gold — anticipated
122 Bay State Road	BD+C	2012	Silver — anticipated
233 Bay State Road	BD+C	2013	Registered
750 Comm. Ave. Ren.	ID+C	2013	Registered
Law School Add./Ren.	BD+C	TBD	Registered
Sargent College	EBO+M	TBD	Registered

Table 9-1, LEED Certifiable Buildings on Campus

9.5 METRICS

Boston University is in the process of developing a comprehensive Sustainability Strategic Plan to address 17 issue areas from curriculum and research to operations, engagement, co-curricular activities, and behavioral change. The plan will contain appropriate targets and metrics related to climate action, energy, water, waste, dining, and transportation. The following section describes the broader goals currently under development at the University.

9.5.1 CLIMATE & ENERGY

As stated earlier, energy use is the most important issue within the University's sustainability program because efficiency reduces operating costs and CO_2 emissions, which contribute to climate change. In order to address cost and emissions most effectively, Boston University must first reduce energy consumption.

Boston University is in the process of developing a seven-part Climate Action Plan, which includes the following:

- Greenhouse gas (GHG) inventory (complete)
- Benchmark peer institutions' targets and timelines (complete)
- Identify and prioritize GHG mitigation opportunities (in progress)
- Propose GHG targets and timelines (in progress)
- Identify and prioritize financing strategies
- Track and report on progress and course correct to meet targets

During the summer of 2010, Boston University began working on the first step, developing a GHG inventory process through the Metrics Focus Group, a subcommittee of the Energy Conservation Working Group. The results of the inventory include Scope 1 and 2 emissions and are summarized on the sustainability website: www.bu.edu/sustainability/what-were-doing/climate-action/. The University is in the process of identifying the boundaries for its Scope 3 inventory and developing the framework for tracking future emissions. The categorization system for emissions is as follows:

Scope 1: Direct emissions produced through campus activities

- Emissions from heating and cooling campus buildings
- Emissions from process activities such as labs
- Emissions from campus fleet vehicles

Scope 2: Indirect emissions from purchased energy

- For purchased electricity
- For purchased steam

Scope 3: Other Indirect emissions

- Energy transmission
- Waste
- Commuting
- Institution-funded air travel
- Purchasing

9.5.2 WATER

The University is continuously working to identify and implement opportunities, using approaches that range from innovative technologies to behavior change, to conserve water throughout the campus.

9.5.3 WASTE REDUCTION AND RECYCLING

Opportunities Under Consideration:

- Increase effectiveness of waste audits
- Improve recycling infrastructure
- Reduce supply chain packaging
- Increase participation

9.5.4 **DINING SERVICES**

Opportunities Under Consideration:

- Convert the rest of poly-lined packaging to compostable materials
- Extract water from food waste to reduce weight and volume of compost as is being demonstrated at 100 Bay State Road
- Increase cardboard recycling
- Reduce packaging

9.5.5 TRANSPORTATION

The University has established the following three transportation goals for the term of this Institutional Master Plan:

- Transportation Goal #1: Improve safety and efficiency for all modes, with particular emphasis on pedestrian and bicycle safety
- Transportation Goal #2: Increase the use of sustainable modes for those employees and students who are currently commuting to the Charles River Campus in single occupancy vehicles.
- Transportation Goal #3: Minimize the University's traffic and parking impacts on the adjacent communities.

These goals, as detailed in the Institutional Master Plan Chapter 8, Transportation, and the 2012–2022 Charles River Campus Transportation Master Plan, have been developed with sustainable transportation demand management principles in mind.

9.5.6 GREEN BUILDINGS

Opportunities Under Consideration:

- LEED Green Building criteria for new construction
- LEED Green Building criteria for major renovations
- LEED Green Building criteria for interior design and construction
- LEED Green Building criteria for existing buildings operations and maintenance
- Building energy efficiency criteria
- Building water efficiency criteria

9.5.7 PURCHASING

Opportunities Under Consideration:

- Recycled content
- Reduced packaging
- Consolidated deliveries

Chapter 10

ECONOMIC IMPACT

CHAPTER 10: ECONOMIC IMPACT

10.1 INTRODUCTION

Boston University has an annual budget of more than \$2.1 billion and enrolls nearly 33,500 students in its 16 schools and colleges. Faculty members generate nearly \$549 million annually in research and training grants and contracts. In a recent survey of North American universities, the Boston University ranked 74th in the nation for the number of start-up companies formed, and 66th in the nation for patents received as a result of faculty research.

The University is a robust resource to the City of Boston, the cities and towns in the Boston Metropolitan Area, and the Commonwealth of Massachusetts. Local citizens and businesses benefit from Boston University's spending, the employment opportunities University spending generates, and the many cultural, educational, and social services University faculty, staff, and students offer the community.

This chapter describes the economic impact of Boston University on each of three geographical regions: the City of Boston, the Boston Metropolitan Area (all cities and towns in Suffolk, Norfolk, Middlesex, Essex, and Plymouth Counties), and the Commonwealth of Massachusetts.

Chapter 11 describes many University-sponsored and University-related programs and services that affect both the economy and the quality of life in these regions.

10.1.1 ECONOMIC IMPACT CALCULATIONS

An institution's economic impact on a region results from direct spending attributable to the institution and indirect spending arising from the institution's direct spending. The direct spending attributable to Boston University consists of its salary and benefit expenses, money spent on purchases of goods and services, University students' living expenses, and the local expenditures of students' out-of-state visitors. These funds flow directly into the regional economy.

Indirect spending then flows from the expenditures of the individuals and organizations who have received Boston University's direct spending dollars. For example, Boston University employees use their salaries to purchase goods and services. The businesses from which these purchases are made hire employees, pay salaries, and purchase the goods and services needed for their operation. Therefore, Boston University's direct corporate spending results in a combination of new corporate spending and new consumer spending. As a result, Boston University has a much greater economic impact on the region than the sum of its direct expenditures.

Recognizing that an organization's economic impact on a region results from a complex combination of inter-industry relationships driven by corporate and consumer spending, the U.S. Department of Commerce has developed "regional input-output multipliers" to compute the economic impact resulting from corporate and consumer spending. These multipliers take into account the specific inter-industry relationships and consumer spending patterns that contribute to a region's economy. Appendix B presents a detailed explanation of corporate spending, consumer spending, and the multiplier effect. It also describes the sources of data used in the analysis.

For the purposes of this report, out-of-state expenditures by Boston University are considered to have no economic impact within Massachusetts. This report also excludes local purchases by the tens of thousands of visitors the University attracts to Boston each year for events such as Alumni Weekend, Commencement, athletic events, concerts, cultural and social programs, and class reunions (although it does include spending by certain categories of visitors to our students).

Finally, the economic impact of the Huntington Theatre Company, a professional company in residence at Boston University, is excluded from this economic impact study. While independent, this organization is closely tied to Boston University and receives financial support from the University.

10.1.2 OTHER CONSIDERATIONS

Boston University's impact on the region is only partially measured by its direct and indirect spending. For example, the University has a substantial impact on the region's employment. In FY2011, the University employed a total of 27,019 individuals (including full-time, part-time, and student employees) who lived in Massachusetts, while another 15,634 jobs in the state resulted from the University's direct spending.

Boston University's direct spending includes services that local communities would otherwise have to fund on their own. This is illustrated by Boston University's police force, which provides around-the-clock University-wide protection and serves as a deterrent to crime in the neighborhoods surrounding both the Charles River and Medical Campuses.

The University also makes substantial direct payments to local communities. For example, although most of its property is legally exempt from real estate property taxes,

the University paid nearly \$5 million in property taxes to the City of Boston in FY2011, and more than \$5.1 million in voluntary payments in lieu of taxes. The University also paid close to \$1.3 million to Boston for fees, permits, and licenses (e.g., building permits, inspection services, parking, and entertainment licenses). Payments to the Town of Brookline included almost \$2.2 million in property taxes and other fees.

Boston University brings substantial funds into the Commonwealth. In FY2011, federal sources provided more than \$305 million to the University for research and student financial aid. In addition, Boston University's private voluntary support (donations) from alumni, friends, corporations, and foundations from beyond the Commonwealth totaled nearly \$54.8 million.

Furthermore, a wide range of socioeconomic benefits accrue to the region through the presence of an internationally recognized center of higher education and research, including scores of programs and services provided by the University locally and throughout the state. These programs and services improve the quality of life for countless citizens. In addition, private and public funding is made available for other uses by University-funded programs such as: free business services provided by Boston University students; medical and dental services and programs offered free for the elderly; free training programs for teachers and school administrators; free legal defense for indigents who would otherwise require a court-appointed attorney; and numerous services provided by University volunteers. Many of the services the University provides to the community are highlighted in Chapter 11 Community Benefits, and Appendix A, Social Programs and Services, contains a comprehensive list of public programs.

10.2 THE BOSTON UNIVERSITY COMMUNITY IN MASSACHUSETTS

The Boston University community in Massachusetts comprises more than 146,000 people. That number would increase severalfold if the spouses and dependents of employees, the parents and siblings of students, and the families of alumni were included. The University community is presented in Table 10-1, The Boston University Community in Massachusetts.

		Boston	Commonwealth of
	City of Boston	Metropolitan Area	Massachusetts
Employees**	4,448	14,157	14,888
Students***	21,934	31,052	31,642
Alumni	15,082	84,648	99,580
Total	41,464	129,857	146,110

Table 10-1, The Boston University Community in Massachusetts*

*Based on home addresses of employees and alumni, and local addresses of students.

**Employee counts exclude 12,131 student employees in FY2011.

***Official enrollment for FY2011 was 33,480. This includes 1,927 students enrolled in Study Abroad programs or with out-of-state addresses. This number excludes 89 Boston University Academy students not enrolled in college-level Boston University courses.

10.2.1 BOSTON UNIVERSITY EMPLOYEES

The employees of Boston University include the faculty and staff on the Charles River and Medical Campuses and at the Boston University Academy, as well as those based at other sites, including Tanglewood, Woods Hole, and numerous area hospitals. In accordance with accepted reporting practices, this number also includes the employees of Boston University's subsidiary corporations, 660 Corporation, Hotel Commonwealth, and the employees hired by two management firms that provide the University's food (ARAMARK) and parking services (Standard Parking). The 660 Corporation, a for-profit entity that is subject to federal, state, and local taxes, operates the University's convenience stores. University Inn and Lure Restaurant Group are also for-profit entities subject to federal, state, and local taxes, and operate the Hotel Commonwealth and its restaurants. Table 10-8 contains the details on University employees in Massachusetts.

As shown in Table 10-1, Boston University employed 14,888 Massachusetts residents in FY2011. This figure excludes the University's 12,131 student employees, and includes all full-time, part-time, and casual employees.

The faculty and staff of Boston University provide strength, vitality, and continuity to the institution and are well-educated constituents of local communities. More than 80 percent of the full-time faculty on the Charles River Campus, 93 percent of the full-time faculty at the School of Public Health, 92 percent of the full-time faculty at the Goldman School of Dental Medicine, and 92 percent at the School of Medicine hold doctorate degrees. In FY2011, the University faculty included two MacArthur award winners, the University's first Howard Hughes Medical Investigator, two Nobel Laureates, and the former three-time Poet Laureate of the United States. Boston University's full-time faculty average 12 years of service at the University, and the full-time staff average 9 years of service. Additionally, Boston University was ranked among the top 10 institutions in 13 disciplines within PhD programs according to the 2009 Faculty Scholarly Productivity Index, a product of Academic Analytics, which ranks research universities by publications, grants, and awards.

10.2.2 BOSTON UNIVERSITY STUDENTS

With 33,480 students enrolled in the fall of 2011, Boston University was the fourthlargest independent nonprofit institution of higher education in the United States, and the largest in Massachusetts. Eighty percent of the students enrolled full time, and 42 percent were in graduate or professional programs. Table 10-2, Boston University Student Residences shows that 31,642 students resided in Massachusetts during the academic year. The remaining students either commuted from nearby states or were enrolled in University programs located overseas or out of state. In FY2011, a total of 11,558 students lived in University residences. Boston University houses 76.1 percent of its full-time undergraduate students.

		Boston	Commonwealth
	City of	Metropolitan	of
	Boston	Area	Massachusetts
Dormitory Residents	9,053	9,143	9,143
University Apartment Residents	2,412	2,415	2,415
Off-Campus Undergraduates	2,455	4,703	4,824
Off-Campus Graduate & Non- Degree Students	7,997	14,626	15,093
Boston University Academy Students (off-campus)	17	165	167
Total Students	21,934	31,052	31,642

Table 10-2, Boston University Student Residences

Official enrollment for FY2011 was 33,480. This includes 1,927 students enrolled in Study Abroad programs or with out-of-state addresses. This number excludes 89 Boston University Academy students not enrolled in college-level Boston University courses.

The student body is rich in diversity and academic ability. Since 1971, eight outstanding students have been chosen as Rhodes Scholars and five students have been named Marshall Scholars. Four students received Fulbright grants in FY2011. The freshman class that entered in the fall of 2010 had SAT scores that were 405 points above the national average of the combined score for critical reading, mathematics, and writing. More than 80 percent of the entering freshman class came from outside of the

state. Overall, nearly 66 percent of Boston University's enrolled students are from out of state. Also, with 5,464 students from 139 foreign countries, Boston University ranks 12th in the nation for the number of international students enrolled.

10.2.3 BOSTON UNIVERSITY ALUMNI

Nearly 93,000 Boston University alumni reside in the Commonwealth of Massachusetts. Their contributions to the Massachusetts economy cannot be quantified because their income levels are not known. It is clear, however, that a Boston University degree is valuable to both the degree holder and the community where he or she lives and works. Boston University alumni have earnings and earning potential that generate substantial economic activity in communities across the Commonwealth.

It is also worth noting that a significant percentage of the University's out-of-state students become Massachusetts residents upon graduation. A recent study showed that nearly 15 percent of the out-of-state freshmen who came to Boston University from fall 2002 to fall 2006 still reside in the Commonwealth, and close to 7 percent still live within the City of Boston. Boston University alumni represent a well-educated and highly skilled component of the labor force in the Commonwealth.

Boston University's employees, students, and alumni consistently demonstrate their willingness to contribute their talents and energies to the community. In 1986, Boston University established the Community Service Center to provide faculty, staff, and alumni with volunteer opportunities in the community. Opportunities include programs in youth tutoring, youth recreation, food collection for shelters, meals delivery for homebound people with AIDS, and recycling. In FY2011, an estimated 4,500 volunteers spent 130,000 hours in volunteer community service programs offered through the Community Service Center.

Volunteer work extends beyond the Boston community as well: More than 70 Boston University alumni serve around the world for the Peace Corps. A recent Peace Corps report ranked Boston University 17th among large U.S. colleges and universities for producing undergraduate Peace Corps volunteers, and 7th for graduate student volunteers. Other examples of community involvement are reported extensively in Chapter 11 and Appendix A.

10.3 ECONOMIC IMPACT

The economic impact of Boston University on the Commonwealth of Massachusetts totaled more than \$3.8 billion for FY2011 (the fiscal year ending June 30, 2011). As summarized in Table 10-3, this consists of direct spending by Boston University (\$1.4 billion), Boston University students (\$372.2 million), and the students' out-of-state visitors (\$44.4 million). It also includes the indirect spending (\$2 billion) generated by the University's direct spending. The remainder of this section contains three additional tables that further define the levels of direct and indirect spending summarized in Table 10-3, Summary of Boston University Economic Impact.

		Boston	Commonwealth of
	City of Boston	Metropolitan Area	Massachusetts
Direct Boston University Sp	pending		
Salaries and Benefits	\$248,475,290	\$979,381,484	\$1,013,875,965
Purchased Goods and			
Services	\$180,186,631	\$330,719,192	\$370,702,314
Total Salaries, Benefits, and			
Purchases	\$428,661,921	\$1,310,100,676	\$1,384,578,279
Direct Student and Visitor S	Spending		
Essential Living	, penang		
Expenses	\$198,444,628	\$311,012,155	\$317,269,826
Non-Essential Purchases	\$39,298,144	\$54,988,847	\$54,988,847
Total Student Spending	\$237,742,772	\$366,001,002	\$372,258,673
Out-of-State Visitor			
Spending	\$31,798,007	\$44,399,875	\$44,399,875
Total Student and Visitor			
Spending	\$269,540,779	\$410,400,877	\$416,658,548
Total Direct Spending	\$698,202,700	\$1,720,501,553	\$1,801,236,827
Indirect Spending	\$422,503,869	\$1,802,507,372	\$2,065,876,719
Total Economic Impact	\$1.12 B	\$3.52 B	\$3.87 B

Table 10-3, Summary of Boston University Economic Impact

10.3.1 BOSTON UNIVERSITY SPENDING

Boston University's direct spending consists of expenditures for employee salaries, employee benefits, and the purchase of goods and services. These direct expenditures are used in conjunction with the appropriate economic multipliers from the U.S. Department of Commerce to compute the resulting levels of indirect spending. Table 10-4 shows Boston University's expenditures for salaries and benefits as well as the economic impact of the expenditures. Similarly, Table 10-5, Boston University Purchases of Goods and Services, shows the University's expenditures for the purchase of goods and services and the resulting economic impact.

As shown in Table 10-4, Total Wages and Benefits the economic impact of Boston University's expenditures for salaries and benefits totals more than \$2.2 billion in the Commonwealth. The impact on the City of Boston is more than \$418 million, and the total for the Boston Metropolitan Area is more than \$2 billion. These figures do not include additional income earned by University faculty and staff for professional consulting, publishing, or lectures.

In FY2011, Boston University spent a total of \$1 billion on salaries and benefits for employees living in Massachusetts (\$809.7 million on salaries and \$204.2 million on benefits). Of these amounts, \$248.5 million went to employees living in the City of Boston and \$979.4 million to employees living in the Boston Metropolitan Area.

		Boston	Commonwealth of
	City of Boston	Metropolitan Area	Massachusetts
Salaries	\$198,285,316	\$782,115,638	\$809,708,260
Benefits			
FICA	\$12,802,686	\$49,228,052	\$50,971,149
Pensions	\$13,260,679	\$53,956,396	\$55, 738,773
Health Insurance	\$15,029,577	\$59,038,285	\$61,112,296
Tuition Remission	\$5,099,013	\$20,796,208	\$21,480,706
Workers' Compensation	\$1,140,763	\$4,014,307	\$4,196,565
Unemployment Compensation	\$868,287	\$2,394,538	\$2,566,265
Life Insurance	\$228,757	\$900,383	\$931,206
Disability Insurance	\$1,185,871	\$4,828,894	\$4,988,580
Other	\$574,341	\$2,108,783	\$2,182,165
Total Benefits	\$50,189,974	\$197,265,846	\$204,167,705
Total Salaries and Benefits	\$248,475,290	\$979,381,484	\$1,013,875,965
Economic Impact	\$418,581,472	\$2,050,922,764	\$2,226,877,170

Table 10-4, Total Wages and Benefits

10.3.2 PURCHASES OF GOODS, SERVICES, AND CAPITAL EXPENDITURES

In FY2011, Boston University purchased a wide variety of goods and services from more than 9,300 Massachusetts companies, including nearly 4,300 in the City of Boston and an additional 4,189 in the remainder of the Boston Metropolitan Area (detailed in Table 10-5, Boston University Purchases of Goods and Services). These purchases ranged from

	City of Boston	Boston Metropolitan Area	Commonwealth of Massachusetts
Number of Vendors and			
Contractors	4,299	8,488	9,384
Purchases of Goods,			
Services, and Capital			
Expenditures	\$180,186,631	\$330,719,192	\$370,702,314
Economic Impact	\$248,056,700	\$612,665,684	\$725,087,540

paper clips and pens to trucks, sophisticated computer equipment, architectural designs, and construction contracts.

Services, and CapitalExpenditures\$180,186,631\$330,719,192\$370,702,314Economic Impact\$248,056,700\$612,665,684\$725,087,540The economic impact of Boston University's purchases totaled nearly\$725.1 million inthe Commonwealth. This consisted of more than \$248 million to vendors located in theCity of Boston and nearly\$612.7 million to vendors located in the Boston MetropolitanArea. The purchases included millions of expenditures made to Massachusettscontractors for large-scale construction and renovation projects designed to improve

 Table 10-5, Boston University Purchases of Goods and Services

University's continuing commitment to enhancing student life on campus. Boston University has made major investments in improving the student experience through enriched academic and athletic facilities, student services, new housing options, and dining facilities. Significant improvements at the Metcalf Science Center included renovations to the auditorium, classrooms, and organic chemistry laboratories. Laboratories were also improved at the Conte Building on the Medical Campus. Noteworthy enhancements to housing and dining included the renovation of Sleeper Hall on West Campus and substantial updates at the George Sherman Union.

Boston University's physical facilities. These expenditures have supported the

Major construction and renovation projects currently include the Medical Student Residence at 815 Albany Street and the Center for Student Services on the corner of Bay State Road and Deerfield Street, both scheduled for completion in the summer of 2012.

Additionally, the surface at the Track & Tennis Center was completely renovated.

Boston University continues to make progress on campus sustainability. The most visible continuing sustainability project is the window replacement for the School of Theology, Metropolitan College, and the College of Arts & Sciences. Additionally, the University is converting its energy system from oil to natural gas, resulting in substantial budgetary savings and significant reductions in CO_2 emissions. These

sustainability efforts earned the University a place in *The Princeton Review*'s 2011 *Guide to 311 Green Colleges*.

10.3.3 STUDENT AND OUT-OF-STATE VISITOR SPENDING

The economic impact of the spending by Boston University students and their out-ofstate visitors totals more than \$915.1 million. This consists of \$454.1 million in the City of Boston and \$859.4 million in the Boston Metropolitan Area. The details, presented in Table 10-6, are discussed below.

Boston University students spend an estimated \$372.3 million in the Commonwealth beyond payments to the University for tuition and room and board. This consists of nearly \$317.3 million for basic or essential living expenses (such as books, transportation, other incidentals, and off-campus housing) and another estimated \$55 million on non-essential expenses (including entertainment, private music and dance lessons, cable television, etc.).

In addition to student spending, Table 10-6, Spending by Students and Their Out-of-State Visitors shows that spending by the out-of-state visitors to Boston University students totals more than \$44.4 million in the Boston Metropolitan Area. Of that amount, \$31.8 million is spent in the City of Boston. As a point of reference, more than 80 percent of the University's fall 2010 entering freshmen came from outside the state, and nearly 66 percent of the total student body was from out of state.

		Boston	
	City of	Metropolitan	Commonwealth
	Boston	Area	of Massachusetts
Student Spending			
Spending on Essentials/Basics			
Academic Year	\$192,786,380	\$303,475,578	\$309,610,121
Summer Term	\$5,658,248	\$7,536,577	\$7,659,705
Total	\$198,444,628	\$311,012,155	\$317,269,826
Spending on Non-Essentials			
Academic Year	\$36,163,050	\$50,963,550	\$50,963,550
Summer Term	\$3,135,094	\$4,025,297	\$4,025,297
Total	\$39,298,144	\$54,988,847	\$54,988,847
Total Student Spending	\$237,742,772	\$366,001,002	\$372,258,673
Number of Students	21,934	31,052	31,642
Spending by Out-of-State Visitors to BU Students	\$31,798,007	\$44,399,875	\$44,399,875
Total Student and Visitor Spending	\$269,540,779	\$410,400,877	\$416,658,548
Economic Impact	\$454,068,395	\$859,420,477	\$915,148,835

Table 10-6, Spending by Students and Their Out-of-State Visitors

*Student spending excludes tuition, fees, and other expenses paid directly to Boston University.

10.3.4 REGIONAL ECONOMIC DEVELOPMENT

Boston University's outstanding reputation as an educational and research institution attracts substantial financial resources to the local area. These include tuition income from out-of-state and international students; federal and private funding for research and financial aid; financial gifts from out-of-state alumni; and spending by out-of-state visitors. Specific examples from FY2011 are outlined below.

• Nearly \$700 million of tuition-and-fee income was brought into the Commonwealth by Boston University's out-of-state students, who constitute nearly 66 percent of the University's enrolled students. A portion of that money is from the University's 5,464 international students.

- Boston University received more than \$279 million of federal funding through grants and contracts for research and training.
- Boston University received more than \$26 million in federal student aid funds.
- \$272.6 million came to the University from foundations, private corporations, and other non-federal sources for research, training, and student aid.
- Boston University alumni, friends, corporations, and foundations donated more than \$89 million to the University, nearly \$55 million of which came from sources outside the Commonwealth.
- Nearly \$44.4 million was spent locally by out-of-state visitors to Boston University students.
- Millions of additional dollars were spent locally by the tens of thousands of people who came to Boston to attend University events, including Alumni Weekend, athletic events, cultural and social events, reunion programs, colloquia, and professional development programs.

10.3.5 DIRECT PAYMENTS AND SERVICES TO LOCAL COMMUNITIES

Boston University makes significant contributions to local communities through a combination of direct payments and services. The direct payments include payments in lieu of taxes; real estate property taxes; linkage payments; and payments for permits and license renewals. Boston University also performs many municipal services that otherwise would have to be funded by the community. Specific examples from FY2011 are outlined below.

- Boston University paid nearly \$5 million in real estate property taxes to the City of Boston. Since FY2003, the University has paid more than \$41.7 million in real estate property taxes and linkage payments to the City of Boston.
- In addition to the above payments to the City of Boston, the University paid to the Town of Brookline more than \$1.6 million in real estate property taxes, nearly \$389,000 in voluntary payments in lieu of taxes, and close to \$202,000 for permits, licenses, and other town fees in FY2011. The University also pays real estate property taxes and fees to other cities and towns in the Commonwealth where it owns property.
- Boston University paid more than \$5.1 million to the City of Boston for voluntary payments in lieu of taxes. Since FY2003, these payments total nearly \$38.5 million.
- Boston University employs its own police department and residential security staff, consisting of 56 police officers and 94 security guards who provide protection to the University community, including neighboring properties, 24

hours a day, seven days each week. The police force is a deterrent to crime in the neighborhoods close to the Charles River Campus, and officers patrol the Medical Campus in the South End, helping to reduce crime in that area. University police also provide backup assistance to the Boston, Brookline, Cambridge, and Massachusetts state police when needed.

- As part of the Ride-Along Program, the University's Director of Community Relations accompanies Boston and Brookline police patrols that respond to offcampus party and noise complaints. The Director notifies the Dean of Judicial Affairs regarding issues involving off-campus student violations of the University's student conduct code.
- As part of their campus patrol, Boston University police officers issue parking tickets on behalf of the City of Boston. Nearly 1,000 such tickets with an aggregate value of \$13,225 were issued in FY2011.
- Boston University provides daily maintenance of sidewalks, MBTA tracks, and streets around the campus. The University removes snow and trash. It also plants and repairs trees and implements pest control. In FY2011, the cost of these activities totaled nearly \$3 million.
- From FY2007 to FY2011, Boston University contributed more than \$4 million to the Commonwealth Avenue improvement and beautification project in collaboration with city, state, and federal agencies.
- Boston University manages its own rubbish removal program. In FY2011, the University paid private contractors more than \$120,000 for rubbish removal services on the Charles River Campus.
- Boston University pays City of Boston police details for work at construction projects and high-attendance events. In FY2011, these payments totaled more than \$107,000.

10.3.6 EMPLOYMENT IMPACT

In FY2011, nearly 43,000 jobs in the Commonwealth were attributable to Boston University. The University and its subsidiary corporations directly employed 27,019 individuals residing in the Commonwealth, and an additional 15,634 jobs were required to support the more than \$3.8 billion of direct and indirect spending attributable to Boston University. The additional or indirect jobs were computed using employment multipliers provided by the U.S. Department of Commerce (see Appendix B, Economic Impact Report Methodology). Boston University's employment impact is summarized in Table 10-7, Boston University Employment Impact.

		Boston	Commonwealth of
	City of Boston	Metropolitan Area	Massachusetts
Direct Jobs	13,978*	26,288**	27,019**
Indirect Jobs	1,443	12,917	15,634
Total Jobs	15,421*	39,205**	42,653**

Table 10-7, Boston University Employment Impact

*Includes 9,530 student jobs.

**Includes 12,131 student jobs.

As shown above, Boston University's employment impact on the City of Boston totals 15,421 jobs consisting of 13,978 direct jobs and 1,443 indirect jobs. In the Boston Metropolitan Area, the University's employment impact totals 39,205 jobs consisting of 26,288 direct jobs and 12,917 indirect jobs.

According to the *Boston Business Journal*'s *Book of Lists*, Boston University is the 13thlargest employer in Massachusetts. The University is also the third-largest employer in the City of Boston, as reported by the Boston Redevelopment Authority. The University is recognized as a significant creator of employment opportunities in the Commonwealth (see Table 10-8, Employment Statistics for Employees Living in Massachusetts). Information on how these statistics are derived can be found in Appendix B, Economic Research Methodology.

	City of Boston	Boston Metropolitan Area	Commonwealth of Massachusetts
Employees			
Faculty and Staff	3,058	10,917	11,359
Casual Employees	697	2,024	2,175
Total	3,755	12,941	13,534
Student Employees	9,530	12,131	12,131
Total	13,285	25,072	25,665
660 Corporation	115	229	238
Hotel Commonwealth	150	246	265
Parking: Charles River Campus	16	48	53
Parking: Medical Campus	28	50	51
Food Services: ARAMARK	266	464	565
Food Services: Sport Services	118	179	182
Total	693	1,216	1,354
Total All Direct Employment,			
Excluding Students	4,448	14,157	14,888
Total Direct Employment	13,978	26,288	27,019
Indirect Employment	1,443	12,917	15,634
Total Employment	15,421	39,205	42,653

Table 10-8, Employment Statistics for Employees Living in Massachusetts

Chapter 11

COMMUNITY BENEFITS

CHAPTER 11: COMMUNITY BENEFITS

11.1 INTRODUCTION

From its founding in 1839 through its growth into the largest university in Boston and the fourth-largest private not-for-profit university in the country, Boston University has stayed true to its commitment to conduct research, scholarship, artistic creation, and professional practice in the service of the surrounding community.

Boston University expresses the great value of its dynamic relationships with the City of Boston and the Town of Brookline through the wide range of educational, cultural, social, legal, and medical community programs and services it provides.

The University also makes direct financial contributions to the City of Boston and the Town of Brookline in the form of real estate taxes, payment in lieu of taxes, and linkage payments. The University has a substantial impact on the local and regional economies through direct employment, purchased services, and student, faculty, and staff spending.

This chapter provides an overview of Boston University's community contributions in terms of:

- Economic impact, direct payments, and payment in lieu of taxes
- Transportation improvements
- Educational partnerships and scholarship aid
- Community partnerships
- Sports and recreational programs
- Volunteer service programs
- Cultural resources

11.2 NEW AND ENHANCED COMMUNITY PROGRAMMING

In response to a community needs assessment conducted by the Boston Centers for Youth & Families (BCYF) and the Boston Public Health Commission and in conjunction with community discussions and objectives outlined in the University's 2012–2022 Institutional Master Plan, Boston University is proud to announce the implementation of three new community programs aimed at combating obesity and promoting a healthy lifestyle for Boston's youth and their families.

11.2.1 THE BOSTON UNIVERSITY HEALTH, FITNESS, AND WELLNESS PILOT PROGRAM

Boston University will launch the Boston University Health, Fitness, and Wellness Pilot Program in early 2013. The unique program aims to combat teenage obesity in the City of Boston, and will support Boston Moves for Health, an ambitious initiative launched by Mayor Thomas M. Menino to increase access to free and low-cost physical activities and health living resources.

The Boston University Health, Fitness, and Wellness Pilot Program will provide access to quality fitness training, nutrition counseling, and wellness programming to children, youth, and families in at-risk communities. The program's location at the BCYF Blackstone Community Center was chosen for its potential to maximize outreach to atrisk youth and families, as well as for its proximity to additional health resources available at the Boston University Medical Center, the South End Health Center, and other neighboring community-based agencies. Boston University will renovate the space to suit the program's needs and objectives.

The program will be directed and guided by experts from the University's College of Health & Rehabilitation Sciences: Sargent College, and the Schools of Medicine, Public Health, and Social Work, and will be staffed and supervised by members of the University's Department of Physical Education, Recreation & Dance (PERD). Through wellness programming and fitness instruction, University staff will strive to provide youths and families with the skills needed to make physical exercise and healthy choices an enduring part of their lifestyles.

The program, which will be a 36-hour-per-week commitment, will be open to BCYF Blackstone Community Center members and youth ages 14 and older.

11.2.2 YOUTH ATHLETIC CAMP SCHOLARSHIPS

In further support of the city's initiative to increase youth access to free and low-cost physical activities, beginning in summer 2012, Boston University will annually donate 100 summer athletic camp scholarships to City of Boston youth. Camps are run by the Boston University athletic department and athletic coaches, and are dedicated to training youth in the skills needed to compete in basketball, hockey, wrestling, softball, lacrosse, and rowing.

11.2.3 EXPANDED ICE TIME FOR ALLSTON BRIGHTON YOUTH HOCKEY

The University will also dedicate two donated hours of prime ice time on Sundays from noon to 2 p.m. to the Allston Brighton Youth Hockey league.

11.3 ECONOMIC IMPACT

With more than 33,000 graduate and undergraduate students, Boston University is the city's largest higher-education institution. The University employs over 10,000 faculty and staff, making it the third-largest private employer in Boston and twelfth-largest in the Commonwealth.

In FY2011, the University, its employees, students, and their visitors to the city spent more than \$1.8 billion, with an impact of \$3.87 billion statewide. A detailed summary of Boston University's economic impact in the city and region is in Table 10-3, Summary of Boston University Economic Impact.

The economic impact of the University within the City of Boston is substantial. During FY2011, the University purchased more than \$180 million in goods and services from vendors within the city. The spending by students and their out-of-state visitors totaled nearly \$270 million. Salaries and benefits for employees living in the city exceed \$248 million.

In addition to direct and indirect economic benefits to the city's economy, Boston University actively seeks ways to reduce the demand on city services. Through its own police department, the University brings added security to the entire campus area. It also maintains the sidewalks, MBTA tracks, and streets around the campus, provides snow removal during winter months, plants and maintains street trees, and conducts pest control.

11.3.1 PAYMENT IN LIEU OF TAXES (PILOT) PROGRAM

As a nonprofit educational institution, Boston University is exempt from paying taxes. However, motivated by a sense of responsibility as one of Boston's largest employers and landowners, and by its commitment to giving back to the community, in the 1980s Boston University began to make payments to the City of Boston in lieu of the taxes from which it was exempt. These "PILOT" (payment-in-lieu-of-taxes) funds help the city cover the cost of providing essential services, such as police, fire, and snow removal.

Boston University was the first educational institution in the City of Boston to make such voluntary contributions, and continues to make substantial PILOT payments.

Since the last master plan was adopted in 2003, the University has paid more than \$41.7 million in real estate property taxes and linkage payments to the City of Boston and nearly \$38.5 million in lieu of taxes payments.

		Payment in Lieu		
	Real Estate Tax ¹	of Taxes	Linkage Payments	Subtotal
FY2003	\$4,141,809	\$3,228,999	\$142,389	\$7,319,622
FY2004	\$4,601,011	\$3,359,910	\$142,389	\$7,814,614
FY2005	\$4,061,010	\$3,698,006	\$142,389	\$7,434,271
FY2006	\$3,882,466	\$4,125,296	\$2,071,135	\$9,576,739
FY2007	\$4,137,097	\$4,377,644	\$694,500	\$9,184,621
FY2008	\$4,367,361	\$4,640,108	\$242,389	\$8,919,901
FY2009	\$4,953,531	\$4,923,889	\$150,014	\$9,847,501
FY2010	\$5,056,313	\$5,004,473	\$100,000	\$10,046,352
FY2011	\$5,067,678	\$5,106,986	\$0	\$10,024,551
FY2003-2011	\$40,268,276	\$38,465,311	\$3,685,205	\$80,168,172

Table 11-1, Real Estate Tax and PILOT Payments

¹ Real estate tax reported is net of any abatement checks received.

Boston University has a separate PILOT agreement with the Town of Brookline and is currently Brookline's largest taxpayer.

11.3.2 TRANSPORTATION IMPROVEMENTS

Boston University contributes directly to projects that improve the regional transportation network by providing matching dollars to city, state, and federal sources. The Commonwealth Avenue Improvement Project is a prime example of the many public-private partnerships in which the University has participated.

Motivated by a desire to improve pedestrian safety and vehicle circulation along the Commonwealth Avenue corridor, the University has worked aggressively to develop a plan for the redesign and funding of improvements to Commonwealth Avenue over the past two decades.

Boston University has committed more than \$13 million to three major improvement projects: Commonwealth Avenue Phase 1, Commonwealth Avenue Phase 2, and Kenmore Square. Construction and design costs for these projects totaled over \$44 million. All three projects fulfilled the three fundamental and interrelated transportation objectives presented and defined in the University's 2003 Transportation Master Plan:

- Enhance pedestrian circulation along Commonwealth Avenue and within the Charles River Campus.
- Limit or reduce trip-generation levels at the Charles River Campus.
- Improve traffic operations along the Commonwealth Avenue corridor.

Throughout this improvement process, Boston University has worked in close partnership with the City of Boston, the Commonwealth of Massachusetts, and the federal government. The city and state have worked closely with the University, local businesses, and community members in order to improve pedestrian and vehicular circulation and to enhance the streetscape along the Commonwealth Avenue corridor.

11.3.3 SCHOLARSHIP AID

The University's longstanding commitment to education extends well beyond its campus boundaries, as is evident in its scholarship programs. In FY2011, the University committed a total of \$13.2 million in scholarship money to more than 440 students, as shown in Table 11-2, Scholarship Aid.

Scholarship Program	Amount Offered in FY2011	Number of Recipients
Boston Scholars Program	\$11 million	320
Community Service Award*	\$6.6 million	207
Boston High School Scholarships*	\$4.4 million	113
Cardinal Medeiros Scholarships	\$1.6 million	42
Boston City Employees Scholarships	\$372,000	50
SPH Health Care Scholarships	\$129,000	14
CityLab Academy	\$72,000	15
Roxbury Community College	\$20,000	1
*Components of Boston Scholars Program	n	

Table 11-2, Scholarship Aid

Boston Scholars Program

Since 1973, the Boston Scholars Program has helped secure a higher education for students from the City of Boston. This program, the longest-running and largest of its kind in the country, now awards 25 four-year, full-tuition scholarships to Boston public high school seniors selected not only for academic achievement, but for a determining quality not measured by SAT scores: motivation. In the fall of 2009, Boston University expanded the opportunities for Boston Public Schools high school students by creating a Community Service Award as part of the Boston Scholars Program.

The recipients of these awards represent the diverse population of our host city. Many students who participate in the Boston Scholars Program are the first in their families to attend college.

Since the program's inception, the Boston Scholars Program has awarded more than \$139 million in scholarships to 1,800 students. In FY2011 alone, the University committed \$10.8 million to 320 Boston residents.

Community Service Award

Boston University is committed to meet, without loans, the full calculated financial eligibility of any admitted Boston Public Schools high school graduate. For full consideration, applicants must be admitted to the University and submit all necessary financial aid application materials. This award is offered with a few unique requirements and features, including a community service requisite, established to enhance the quality of students' learning experience and maximize their chances for success at the University. Recipients are assigned a mentor—a Boston University faculty or staff member—to serve as a resource and support to the student throughout his or her four-year undergraduate enrollment.

These awards provide Boston Public Schools high school students the opportunity to graduate from Boston University with a world-class education and little or no debt. In FY2011, Boston University committed more than \$6.5 million to this program, which benefited 207 students.

Boston High School Scholars

Having been nominated by their high school principal or guidance counselors, and selected by a three-person committee comprised of representatives from the University, Boston Public Schools, and the mayor's office, approximately 25 seniors graduating from Boston public high schools receive this prestigious full-tuition scholarship award annually. In FY2011, Boston University committed approximately \$4.3 million to these students.

Cardinal Medeiros Scholarship Program

Since 1986, the University's Cardinal Medeiros Scholarship Program has annually recognized a select number of outstanding seniors graduating from the Archdiocese of

Boston's parochial high schools. These students are chosen for their academic achievement, leadership skills, and contributions to their schools and communities, and are often recruited by colleges from across the country. Boston University awards approximately 45 full-tuition scholarships annually, as part of the University's commitment to keep these talented students in Boston. Since the program's inception, 338 students have received more than \$35 million in scholarship funding. Many of these students remain in the Boston area after graduation and contribute to a well-educated labor force.

Boston City Employees Scholarship

In addition to the Boston Scholars Program, Boston University offers annual special scholarship programs for City of Boston employees, Boston teachers, and children of Boston firefighters killed in the line of duty. In FY2011, the University offered more than \$371,000 in scholarship funding to 50 recipients.

11.3.4 EDUCATIONAL PARTNERSHIPS

The University sponsors many academic enrichment and remedial programs through the Boston Public Schools Collaborative, an administrative organization that oversees more than a dozen programs created in support of the Boston Public Schools. Boston University has been and continues to be an active participant in this initiative. University resources contribute to the support of programs such as:

Step UP

Boston University is part of a five-university coalition partnered with the City of Boston and the Boston Public Schools in order to share institutional resources with 10 Boston public schools. Working with two partner schools—the William M. Trotter Elementary School in Dorchester and the Boston English High School in Jamaica Plain—as well as all 10 schools involved in the initiative, Boston University provides specific programs and initiatives in response to needs identified by each partner school, ensuring that all support is aligned with the curricular goals of the Boston Public Schools and the Massachusetts Department of Education. Step UP's multifaceted approach, which includes academic support for schools, extended learning opportunities, health and wellness programs, and parent and community engagement, has helped these public schools to effectively deal with the complex issues they face.

In FY2011, Boston University contributed over \$630,000 to the Step UP initiative.

BUILD (BU Initiative for Literacy Development)

Formed in 1997, BUILD is a collaborative effort between Boston University's School of Education, Boston Public Schools Collaborative, Student Employment Office, Financial Assistance, and Athletics Department. With federal Work-Study funds made available by the University in support of the federal America Reads and the local ReadBoston programs, 130 literacy tutors provide assistance at seven after-school programs, six inschool programs, and one community-based program, serving elementary schoolchildren in Boston and Chelsea.

Upward Bound & Upward Bound Math Science

Upward Bound and Upward Bound Math Science are programs provided through the School of Education's Boston Public Schools Collaborative office. The program, free for students, provides academic enrichment and remedial help to potential first-generation college and low-income Boston public high school students. Upward Bound services include intensive classroom work during the academic year and a six-week residential tutorial and enrichment program during the summer on the Boston University campus. Boston University contributes more than \$81,000 to federally funded Upward Bound each summer to cover a portion of housing and meal costs. Approximately 125 Boston and Chelsea public high school students participate each year.

A+ Academy

Since 2002, the A+ Academy, delivered in partnership with the Boston Public Schools, serves students from selected middle and high schools. The two-week intensive academic program focuses on mathematics and English language instruction, specifically in literature and writing. Working daily with Boston University tutors, students also engage in college awareness activities. The instruction conducted by Boston Public Schools teachers draws upon the techniques of the Advancement Via Individual Determination (AVID) curriculum. The grant-funded program serves approximately 200 Boston Public Schools students, spanning grades 7–12, each summer.

CityLab

In 1992, Boston University School of Medicine (BUSM) pioneered an innovative science education outreach program that has been disseminated across the country. CityLab is a biotechnology learning laboratory at BUSM serving students and teachers in grades 7–12. CityLab's mission is to provide access to state-of-the-art biotechnology laboratory facilities and curricula—unavailable to most school systems. Teachers from

Massachusetts and neighboring states bring students to CityLab to solve problems by applying the same techniques and concepts of genetics and molecular biology used in research laboratories today. Each topic is presented in a mystery format.

CityLab facilities include two laboratories for students at BUSM and a MobileLab that brings the laboratory directly to schools. Since 1992, more than 70,000 students have participated in hands-on, discovery-oriented investigations. Two thousand teachers have attended workshops at CityLab or aboard the MobileLab, while CityLab curriculum supplements have been adopted for use by museums, schools, and enrichment programs nationwide.

CityLab maintains its continued support of teachers and students in the Boston Public Schools by providing access to laboratory-based learning experiences in biotechnology, molecular biology, and clinical sciences. Through the use of its mobile laboratory and on-site laboratories at the School of Medicine, CityLab plans to continue its many class visits to the Boston Public Schools each year.

11.4 COMMUNITY PROGRAMS AND SERVICES PROVIDED BY BOSTON UNIVERSITY'S SCHOOLS AND COLLEGES

In addition to University-supported programs (described in the previous section), individual schools and colleges within Boston University offer a wide array of community programs, resources, and services related to their respective concentrations and specialties. Select community programs are summarized below. Comprehensive descriptions of all community programs offered through the University can be found in Appendix A, Social Programs and Services.

11.4.1 SCHOOL OF MANAGEMENT

Sustainable Neighborhood Lab (SNL)

The Sustainable Neighborhood Lab (SNL), started at Boston University, is an initiative to improve the sustainability and quality of life in urban environments. The SNL seeks to generate knowledge that influences policy and advances science and new technologies; reduce energy consumption and the carbon footprint; educate students as "global citizens"; and develop and deploy innovative solutions. SNL collaborates with partners from academia, government—including the City of Boston, the private sector, and nonprofits on issues related to urban sustainability. The SNL offers its partners resources for research, data analysis, measurement, and modeling, as well as start-up proof of concept, test, evaluation, product development, and grant partnership.

11.4.2 GOLDMAN SCHOOL OF DENTAL MEDICINE

Action for Boston Community Development (ABCD) Head Start & Early Head Start

Henry M. Goldman School of Dental Medicine (GSDM) faculty members conduct Early Head Start oral health screenings and referrals for children enrolled in ABCD Early Head Start Centers located in Dorchester, East Boston, the South End, and Madison Park High School in Boston. The GSDM also provides oral health education for children at Gertrude Townsend Head Start in Dorchester and parent workshops at four Head Start sites in South Boston.

11.4.3 SCHOOL OF LAW

Civil Litigation Program

Since 1968, the Civil Litigation Program, provided through the Boston University School of Law, provides free legal services to low-income clients in the Boston area in civil cases, such as domestic relations, employment, disability, housing, and immigration. Second- and third-year law students represent their clients under the supervision of a clinical law teacher in all aspects of the cases. The Civil Litigation Program operates out of the offices of Greater Boston Legal Services (GBLS), taking all cases exclusively through GBLS. Students and faculty represent over 200 clients each year.

Shelter Legal Services

Boston University School of Law's Shelter Legal Services is a student group that supplements the work of its parent group, Shelter Legal Services Foundation, Inc. Shelter Legal Services Foundation, Inc. increases access to quality, pro bono legal services for low-income clients. Since 1991, Shelter Legal Services Foundation, Inc. has combined the volunteer efforts of law students and attorneys to represent and advise more than 3,800 low-income people and people who are homeless. The foundation now includes student volunteers from Boston University School of Law, Boston College Law School, New England School of Law, and Suffolk Law School. Boston University's Shelter Legal Services holds weekly legal clinics at two Boston shelters and three Cambridge locations. Student volunteers, with the assistance of attorneys, staff the weekly legal clinics, advise clients, and advocate in courts and administrative agencies throughout the Commonwealth.

11.4.4 SCHOOL OF MEDICINE

Boston Medical Center (BMC)

This hospital, the largest safety-net hospital in New England, provides care for Boston residents, particularly those from inner-city neighborhoods. Its clinical staff is composed exclusively of Boston University School of Medicine faculty members and physicians-in-training.

Boston Coalition for Adult Immunization (BCAI)

The Boston Coalition for Adult Immunization (BCAI) delivers free flu vaccinations to underserved (or potentially underserved) populations in and around Boston. This program critically depends on the work of Boston University medical students who volunteer in conjunction with Tufts and Harvard medical students.

Boston University Area Health Education Center

Founded in 1978 at Boston City Hospital, the Health Education Center is part of the Boston Public Health Commission and provides academic enrichment activities, health education, and health-related internships for inner-city adolescents interested in pursuing health careers and professions on the Boston University Medical Campus. Special initiatives include a college/career information resource library, computer education classes, and an adult education exchange program.

11.4.5 COLLEGE OF ENGINEERING

Technology Innovation Scholars Program

The Technology Innovation Scholars are a select group of undergraduate engineers who reach out to K–12 students in Boston and across the country to provide interactive presentations and hands-on design challenges connected to Boston University research expertise and technologies. The Technology Innovation Scholars Program partners with educators, school districts, FIRST Robotics, and after-school programs to deliver fun and engaging technologies for students to design and test, with the intent to inspire them to appreciate science, technology, engineering, and mathematics subjects and to pursue related careers.

11.4.6 COLLEGE OF COMMUNICATION

AdLab

In 1974, College of Communication students created this award-winning student-run advertising agency. Today, AdLab is a full-service agency with capabilities ranging from traditional to interactive, brand planning to guerrilla marketing. Students in AdLab develop and implement advertising campaigns for about 60 clients every year. These clients range from public service and nonprofit organizations to entrepreneurial start-ups and special projects with nationally recognized brands. Clients hire AdLab as they would hire any professional agency, and must have a budget capable of implementing the plan. AdLab charges a nominal fee of \$100 for its services.

11.4.7 SCHOOL OF EDUCATION

Tuesday & Thursday Physical Education Program

For the past 37 years, students from the Boston Public Schools have taken part in the School of Education's Tuesday & Thursday Physical Education Program. Founded in 1972 by John Cheffers, a School of Education professor emeritus, the program is recognized internationally for its unconventional teaching and learning environment. It also is one of the University's longest-running community service initiatives involving the City of Boston. When a school district needs to cut its budget, one of the first programs targeted is often physical education. Yet, with high obesity rates among elementary schoolchildren, it is more important than ever to get children active and moving. In the Tuesday & Thursday program, graduate students from the Physical Education program go twice a week to teach three 45-minute classes to children in kindergarten through fifth grade. Rather than play traditional gym class games like soccer or basketball, children learn movement skills to promote lifelong activity and wellness.

Improving the Teaching of Physics (ITOP)

Improving the Teaching of Physics (ITOP) is a collaborative effort between the School of Education and the Physics Department at Boston University. Started in 2004, ITOP was created to give high school teachers the opportunity to become proficient in physics concepts and teaching strategies, and to prepare for the Massachusetts Test for Educator Licensure (MTEL) in Physics. ITOP participants also earn graduate credits for professional advancement. Each semester, 10–15 teachers participate in ITOP's courses, which are offered through the School of Education at a significantly discounted tuition rate.

Early Learning Center

Boston University provides the instructional staff for the afternoon hours at the Early Learning Center, a public preschool program that offers children ages three to seven instruction and afternoon enrichment activities. The Early Learning Center opened in 1987 with the assistance of faculty from Boston University, Wheelock College, and Simmons College, and with personnel from the Boston Public Schools system. It has become a national model for early education programs. The program has its own facility located in the Baldwin School in Brighton.

11.4.8 SCHOOL OF PUBLIC HEALTH

Refugee and Immigrant Health Program

Since 1996, the Refugee and Immigrant Health Program, a joint project of Boston Medical Center, the Department of Medicine at Boston University's School of Medicine, Global Lawyers and Physicians, and the Department of Health Law, Bioethics & Human Rights at Boston University's School of Public Health, has actively cared for the medical, psychological, legal, and social needs of more than 500 clients each year. Clients hail from 57 countries and live in and around Boston. It is a multidisciplinary center that provides services for refugees and survivors of torture and related trauma. The program provides primary health care, mental health services, referrals for medical specialties, neuro-psychiatric evaluation, dental evaluations of persons in detention, physical therapy, referral and consultation for legal services, social services, English classes, creative therapies, and vocational rehabilitation. The program also offers a clothing bank, access to the BMC Food Pantry, and ethnic community support groups.

Public Health Education Week

During Public Health Education Week, School of Public Health (SPH) students, with support from faculty and staff, conduct high school education programs in Boston public schools. SPH students speak with high school students about the relevance of public health in their everyday lives, health promotion, disease prevention, and health protection.

11.4.9 METROPOLITAN COLLEGE

Evergreen Program

Boston University sponsors this year-round program that, for a nominal fee, provides persons age 58 and over with courses and lectures covering politics, foreign languages, literature, art, art history, music, and physical activities. In addition, through the Evergreen Program, senior citizens may audit any regular University course for a \$150 fee whenever space is available and with the instructor's consent. More than 1,400 lifelong learners attend the Evergreen lecture series and audit classes each year.

Prison Education Program

Since 1972, the Prison Education Program (PEP) has provided college-credit courses leading to degrees for qualified prisoners at Massachusetts medium- and minimumsecurity prisons. Boston University subsidizes tuition, student books and supplies, and faculty salaries. Since the program's inception, the University has awarded more than 300 bachelor's degrees to program participants, and hundreds of others have enrolled in PEP classes. In 2012, 19 men and 8 women will receive degrees. Admission to the program is based on a competitive examination process. At any given time there are 150 participants in the program, 100 at MCI/Norfolk men's medium-security state prison and 50 at MCI/Framingham women's maximum-security state prison.

11.4.10 COLLEGE OF ARTS & SCIENCES

Center for Transportation Studies

The Center for Transportation Studies aims to advance scholarship in transportation studies by promoting and facilitating multidisciplinary research and by providing programs of education, communication, and service. The center's objectives include: serving as a catalyst for the development of expertise in transportation studies in the Boston University community and beyond; conducting multidisciplinary research supported by external funds; transferring results and methods of scholarly research to policy makers; and disseminating transportation-related knowledge to a broad audience.

11.4.11 COLLEGE OF FINE ARTS

Drawing in the Galleries

Drawing in the Galleries is a free program offered through the College of Fine Arts open to elementary school students from the City of Boston and the greater Boston area. Classes are offered on Saturdays during the Fall Semester. Students pursuing degrees in art and museum education develop and teach lesson plans related to current exhibitions in Boston University galleries.

11.4.12 SCHOOL OF HOSPITALITY ADMINISTRATION

Hospitality Services for Local Nonprofits

Student, faculty, and staff volunteers from the School of Hospitality Administration provide hospitality services to various food pantries throughout Boston, including Rosie's Place, and other organizations, such as the Special Olympics.

11.4.13 COLLEGE OF GENERAL STUDIES

Belle of the Ball

Volunteers from the Community Service Club at the College of General Studies collect prom dresses, shoes, jewelry, and accessories to be provided free of charge to high school students from low-income families.

11.5 COMMUNITY PARTNERSHIPS

One of Boston University's top priorities is its active role in local organizations devoted to strengthening the physical, social, and economic conditions of neighboring communities. The University's Government & Community Affairs office maintains a community presence through participation in community events in addition to membership and annual contributions to various local community groups and organizations. The Government & Community Affairs office strives to ensure that the University is fully aware of and responsive to the needs of its neighbors.

The Government & Community Affairs office is a member and/or active participant in the following community and trade organizations:

- A Better City
- Allston Board of Trade
- Associated Industries of Massachusetts
- Association of Independent Colleges and Universities in Massachusetts (AICUM)
- Allston Brighton Community Development Corp.
- Allston-Brighton Substance Abuse Task Force
- Blackstone/Franklin Square Neighborhood Association
- Brighton Allston Historical Society
- Brighton Board of Trade
- Brookline Chamber of Commerce
- Charles River Conservancy
- Charles River Watershed Association
- Greater Boston Chamber of Commerce
- Greater Boston Convention & Visitors Bureau
- Inquilinos Boricuas
- Massachusetts Association of Nonprofit Schools and Colleges (MANS&C)
- Massachusetts Biotechnology Council (MassBio)
- Massachusetts High Technology Council
- Newmarket Business Association
- Urban League of Eastern Massachusetts

The Government & Community Affairs office also provides financial contributions to the following organizations in support of their community development activities and programs:

- Action for Boston Community Development
- Allston-Brighton Parade
- Allston Village Main Streets
- Allston Village Main Streets
- Brian J. Honan Charitable Fund
- Brighton Main Streets
- Brighton Sisters of St. Joseph
- Boys & Girls Clubs of Dorchester
- Fishing Academy (Brighton)
- Jackson Mann Community School & Council
- Kiwanis Club of Allston Brighton
- Nature's Classroom, Summer Camp (Boston)
- Presentation School Foundation (Allston-Brighton)

- St. Anthony Parish (Allston)
- Teen Challenge (Roxbury)
- Vocational Advancement Center (Allston)
- West End House Boys & Girls Club
- Yawkey Club of Roxbury, Boys & Girls Clubs of Boston

Project Place

The Government & Community Affairs office was instrumental in Boston University's ongoing participation in Project Place. Hotel Commonwealth, in partnership with the University, works with Project Place to provide services to the Kenmore community. Project Place is a local nonprofit organization that promotes opportunities for homeless and low-income individuals by providing the skills, education, and resources needed to obtain stable employment and housing. Hotel Commonwealth utilizes the business services provided by Project Place's social enterprise program, which offers paid employment to individuals striving to overcome homelessness.

11.5.1 BOSTON UNIVERSITY COMMUNITY GRANTS PROGRAM

In late 2011, responding to drastic budget cuts undertaken by community organizations across the city, Boston University's Government & Community Affairs office implemented a community grants program. The \$2,500 community grants are awarded to programs and services that benefit residents of Boston University's host community, with special consideration for programs and services that benefit local youth. Funding is intended to supplement the existing budgets of established organizations and agencies.

Allston-Brighton

The Allston-Brighton Substance Abuse Task Force was awarded \$2,500 to provide educational performances addressing the topic of substance abuse education at four Allston-Brighton middle schools as part of the organization's Healthy Lifestyle Choices initiative.

South End/Roxbury

The Boys & Girls Clubs of Boston Yawkey Club of Roxbury received \$2,500 in support of their Young Leaders summer program, a seven-week program offering 13- and 14year-olds a realistic work environment experience in a summer camp setting, the opportunity to be a role model for young children, and the chance to acquire new skills and develop leadership abilities. The Young Leaders program encourages students to experience personal growth and develop meaningful relationships with peers and caring adults through travel and exploring the New England region.

11.6 SPORTS AND RECREATIONAL PROGRAMS

Donated Use of Athletic and Recreational Facilities

In FY2011, Boston University donated a combination of ice time and use of athletic fields, track, tennis courts, and gymnasium facilities to the City of Boston representing more than \$120,000 in value, including over \$37,000 in donated athletic and recreational event tickets. In 2012, the University announced the donation of two hours of prime ice time on Sundays dedicated for the Allston Brighton Youth Hockey league.

Summer Athletic Camp Scholarships

Beginning in summer 2012, Boston University will annually donate 100 summer athletic camp scholarships to City of Boston youth. Camps are run by the Boston University athletic department and athletic coaches, and are dedicated to training youth in the skills needed to compete in basketball, hockey, wrestling, softball, lacrosse, and rowing.

Student Athlete Community Service

In addition to the donation of athletic camp slots and the use of the University's athletic and recreational facilities, Boston University student-athletes contributed an estimated 4,081 hours of community service in FY2011, including running sports clinics, hosting a Special Olympics swim meet, mentoring middle school students, reading to elementary school children, helping at soup kitchens, and assisting at fundraising events for charitable organizations.

Athletic and Recreational Classes

A variety of noncredit classes, such as yoga, dance, climbing, and swimming, are available for a fee to members of the public through Boston University's Fitness & Recreation Center (FitRec). Class offerings also include boating and sailing classes.

Charles River Sailing and Boating Programs

The University is also an active member of the Charles River community, providing recreational opportunities and services at both the Sailing Pavilion and the DeWolfe Boathouse that maintain the health and vitality of the river and contribute to the community's enjoyment of it.

Boston University Sailing Pavilion programs have been open to the public for a nominal fee since the mid-1970s. Summer- and academic-term recreational programs and noncredit classes, including a high school sailing program and summer children's programs, are available to the public. Similar boating programs at Boston University's DeWolfe Boathouse are also available to the public through the University's FitRec non-credit class offerings.

Each year the Sailing Pavilion hosts approximately 20 sailing regattas involving roughly 850 participants, including youth sailing regattas and workshops. Visiting high schools, colleges, and junior sailing teams may use the pavilion for scrimmages.

The Sailing Pavilion is also available to the community as a weather shelter and first-aid dock for emergencies, providing access to qualified pavilion staff for CPR, emergency phone use, and the use of repair tools for bikes and skates.

The University maintains the Sailing Pavilion building and adjacent areas, including the docks, which are accessible and open to the public when the sailing program is inactive. All necessary maintenance, painting, repairs, and trash collection are attended to by the University.

Sailing and Boating Scholarships

In 2013, Boston University plans to expand its opportunities for community participation in sailing and rowing programs through the establishment of 10 rowing and boating scholarships. Beginning in 2013, each spring, the City of Boston will identify 10 scholarship winners for beginner sailing and rowing classes offered over the summer. Five rowing and five sailing scholarships will be awarded for students ages 16 and older.

11.7 VOLUNTEER SERVICE PROGRAMS

Boston University encourages its students to broaden the scope of their educational experience through engagement with and service to neighboring communities and to the City of Boston. In addition to the dozens upon dozens of community programs affiliated with various schools and departments throughout the University (see Appendix A for a complete descriptive list), for more than 25 years, the University's community has benefited from the resources its Community Service Center (CSC) offers.

Originally called "The League," the CSC was founded by a group of Boston University students in 1986. The students started several volunteer programs to address critical issues facing the City of Boston. Today, the CSC has 25 staff members, who coordinate 13 programs requiring a 1–4 hour weekly commitment. During the 2010–2011 academic year, more than 4,500 BU volunteers contributed nearly 130,000 hours of service to the community. CSC staple programs include:

Afterschool

Volunteers for this program tutor students, offer one-on-one homework assistance, make arts and crafts, tell stories, and lead educational games at a variety of local school programs.

Alternative Spring Breaks

Boston University students travel to different parts of the country during the spring recess period to volunteer for service projects such as home construction, disaster relief, environmental conservation, disabilities services, and education.

Children's Theatre (CT)

Volunteers create original variety shows that they perform for young children in hospitals, shelters, and after-school programs. Shows range from storybook adaptations to improvisation and feature lessons and morals relevant to today's youth.

First-Year Student Outreach Project (FYSOP)

First-year students come to campus one week prior to the start of the Fall Semester to volunteer in one of nine issue areas: children, disabilities, elders, environment, gender equality, HIV/AIDS awareness, homelessness and housing, human rights, and hunger. In fall 2012 alone, more than 1,200 first-year students participated in FYSOP and devoted approximately 25,000 hours of service to the community.

Joining Hands

Students volunteering with this program work with elders and people living with disabilities in a variety of settings in greater Boston. Volunteers serve at a variety of organizations, including the LGBT Aging Project and Outside the Lines Studio.

Making Music

Boston University student volunteers give dance, instrument, or voice lessons to children who do not have access to a formal music education program at school. Both students and volunteers have the opportunity to perform on campus at the annual "Making Music" recital.

Multicultural Advancement Partnership Program (MAPP)

MAPP volunteers work with refugees, immigrants, and international students to enhance their understanding of English and their experience in the United States. Special emphasis is placed on literacy and English as a second language.

Project Hope

Project Hope seeks to show compassion, gain understanding, and educate others about HIV/AIDS. Volunteers may work with organizations such as Community Servings and the Boston Living Center.

Siblings

The University's student volunteers are paired with Boston's youth in one-on-one mentoring relationships. Sibling pairs meet regularly and participate in activities around Boston and the University, such as skating at Frog Pond, watching movies, going to sporting events, and visiting museums.

Student Food Rescue (SFR)

Volunteers salvage food from local restaurants, supermarkets, and bakeries and distribute it to meal programs, goods pantries, and shelters. SFR is one of the largest student food-salvage programs in the Northeast.

Student Studio

Student Studio seeks to bring visual arts education to area students whose schools currently lack art programs. Volunteers create weekly lesson plans based on an artist, movement, or technique. Student participants create art inspired by each week's lesson.

Voices from the Middle (VFM)

Volunteers work with middle school students to write and perform their own plays. This creative outlet gives the students an opportunity to voice their concerns through a productive medium in a positive environment.

Wizards

Volunteers travel to Boston-area schools to introduce students to the wonders of science through weekly experiments. Participants are encouraged to make connections between scientific principles and the world around them.

11.8 CULTURAL RESOURCES

Boston University contributes to the quality and diversity of Boston's cultural offerings through cultural resources and events open to the public and its partnerships with local cultural institutions.

11.8.1 THE HUNTINGTON THEATRE COMPANY

Since the Huntington Theatre Company was founded by Boston University in 1982, and separately incorporated in 1986, Boston University has been the theatre's leading partner and patron. The Huntington has been the recipient of awards from the National Endowment for the Arts, the President's Committee on the Arts and the Humanities, the Massachusetts House of Representatives and Senate, and the City of Boston's City Council.

Not only does the Huntington offer world-class theatre, it also strives to be an active participant in the Boston community. The Huntington's Education Department, one of the most extensive and admired programs in the country, serves more than 10,000 students, teachers, and community organizations each year with student matinees, a statewide poetry event, a monologue competition, and an original touring production. The theatre also provides \$15 discounted performance tickets to community members and special performance dates for the deaf and the blind communities.

11.8.2 BOSTON YOUTH SYMPHONY ORCHESTRAS

The Boston Youth Symphony Orchestras (BYSO), formerly known as the Great Boston Youth Symphony Orchestras, has been in residence at Boston University's College of Fine Arts since its establishment in 1958. From the beginning, the University has been a major sponsor of the BYSO, which has expanded beyond its original single orchestra and launched many new initiatives. Today the BYSO serves more than 400 young musicians from throughout New England, and is recognized as one of the finest youth orchestras in the country.

BYSO students rehearse in full orchestras, small ensembles, and in individualized coaching sessions—many of which are led by members of the college's music community—on Sundays at the College of Fine Arts. Boston University also provides the use of many musical instruments as well as rehearsal and office space at no charge to the BYSO.

Boston University shares the orchestra's commitment to encouraging artistic excellence through the provision of the highest-quality orchestral training and performance opportunities to young musicians while making these programs accessible to underrepresented youth through financial aid and outreach.

11.8.3 BOSTON UNIVERSITY CAMPUS CULTURAL EVENTS

In any given month, Boston University's vibrant and diverse community hosts hundreds of cultural events on its campus. Whether an art exhibit, music recital, academic lecture, or religious service, many of the various cultural events taking place across the University are free and open to the public.

During the 2010–2011 academic year alone, Boston University hosted nearly 1,200 free events open to the public. A sampling of these events is provided below:

- Multicultural Food Night
- World Music Night
- Café con Leche with College of Fine Arts Dean Benjamín Juárez
- African Soirée
- BU Korean Students Association Showcase
- South Africa: Artist, Prints, Community, an art exhibition
- Holi, The Festival of Colors
- The Debut: A Celebration of Cultural Excellence
- Arts of the Americas—Arts, Culture, and Idea Series
- Boston Youth Moves "A Spark Ignites"
- American Chinese Art Society's 25th Annual Traditional Chinese Dance Festival
- Fall 2011 Geddes Japanese Movie Series
- Taste and Beat of Latin America

- Faces of Israel
- Bollywood Nights

Information about Boston University's past and upcoming cultural events is always available to the public through the online calendar: http://www.bu.edu/calendar.

11.8.4 CHARLES RIVER CAMPUS ART GALLERIES

Boston University's Charles River Campus is home to five art galleries, all of which are free and open to the public. These art galleries frequently host events to showcase the work of alumni, current students, and visiting exhibitions.

Boston University Art Gallery (BUAG)

The Boston University Art Gallery (BUAG) is a nonprofit art gallery geared toward an interdisciplinary interpretation of art and culture, dedicated to serving the public of New England as well as the University community.

Since 1958, the BUAG has maintained an ongoing exhibition schedule in its current location on Commonwealth Avenue. Featured exhibitions focus on international, national, and regional art developments, chiefly in the twentieth century. BUAG presents four to five exhibitions annually, which are either curated internally—often incorporating the rich talent and resources found on campus and in the Boston area—or borrowed from other institutions. Through its exhibitions and educational programs, BUAG seeks to present the cultural and historical context of art and to acknowledge the artistic contributions of under-recognized sectors of the population. Each spring season closes with the MFA Graphic Design and Senior Thesis exhibitions, highlighting the achievements of School of Visual Arts students.

Gallery lectures, panel discussions, and symposia (often co-sponsored with other regional institutions and University departments), as well as quality scholarly catalogs, regularly accompany the exhibitions.

Sherman Gallery

The Sherman Gallery is dedicated to showcasing the work of talented alumni as well as current faculty members and students of the School of Visual Arts. The gallery also presents solo and group exhibitions featuring the work of outside artists to support and expand the school's curriculum. Located on the second floor of the George Sherman Union building at 775 Commonwealth Avenue, the Sherman Gallery is highly visible to both the BU community and visitors to the campus.

808 Gallery

At 808 Gallery each spring, the School of Visual Arts displays work by painting students in the graduate (MFA) painting thesis exhibition. Other exhibitions, featuring contemporary artists working in a variety of media, are on view in the gallery throughout the academic year.

Commonwealth Gallery

Boston University's Commonwealth Gallery is dedicated to providing current School of Visual Arts graduate and undergraduate students the opportunity to show their work in a professional exhibition space. Located on the first floor of the College of Fine Arts building, the gallery showcases solo and group exhibitions on a rotating—usually weekly—basis throughout each academic year.

Gallery 5

Located on the fifth floor of the College of Fine Arts, Gallery 5 offers professional exhibition space for undergraduate students in the School of Visual Arts, providing students with experience planning, proposing, and installing their own exhibitions. Students are responsible for all aspects of their curated exhibitions, including selection, display, and advertising. Exhibitions rotate on a monthly basis during the regular academic year.

11.9 GOVERNMENT & COMMUNITY AFFAIRS

Boston University is committed to being a good neighbor and a trustworthy partner with the City of Boston and Town of Brookline. To that end, the University's Government & Community Affairs office is the main contact with Boston and Brookline residents and elected leaders, informing the public of community interest projects and efforts undertaken by the University through media outlets and the office's website: http://www.bu.edu/community.

Boston University expects its students to respect their neighbors and obey city and state laws and regulations. Government & Community Affairs investigates off-campus complaints against the University or its students and forwards all credible complaints to the dean of students or the appropriate University department for action. The University also receives residential concerns and complaints through its Community Relations office.

Appendix A

SOCIAL PROGRAMS AND SERVICES

APPENDIX A: SOCIAL PROGRAMS AND SERVICES

(As of May 20, 2012)

In addition to the monetary impact Boston University has on the Commonwealth of Massachusetts, numerous community programs and services are funded directly by the University or indirectly through research grants and support from various foundations. These programs include neighborhood health centers; Boston and Brookline Scholarships; academic enrichment and remedial help programs; free or discounted concerts and lectures; the University-owned and -supported radio stations; the use of recreational facilities for high school competitions; and the many community volunteer programs that are coordinated by the University's Community Service Center (CSC). The CSC provides volunteers with opportunities to address community concerns in a meaningful and mutually beneficial way. More than 5,000 student and employee volunteers serve annually through the CSC and other Boston University programs and services at more than 200 agencies. A representative listing of programs and services with brief descriptions follows.

A.1 EDUCATIONAL PROGRAMS AND SERVICES

African Presidential Archives & Research Center

The African Presidential Archives & Research Center (APARC), an interdisciplinary center at Boston University, is an unprecedented and unique approach to studying democratization and free market reform in Africa. Through a visiting program for former democratically elected African leaders, as well as connections to present democratically elected leaders, the center provides a forum for discussion and a venue for others to benefit from these leaders' insights and expertise. The center offers an opportunity to see the present phase of Africa's development through the eyes of the "architects of that change" and serves as a setting for policy debates and deliberations on democratization and free market reform in Africa. In addition to documenting the present phase of Africa's development, the center functions as a venue to examine, debate, and contribute to the development of current policy regarding Africa. Former heads of state in residence, scholars, and students, among others, actively participate in policy discussions. The center regularly offers symposia, and conferences are an integral part of the Center's activities, and the center also publishes books, academic and policy-oriented articles, conference proceedings, and the annual African Leaders State of Africa Report.

www.bu.edu/aparc 617-353-5452

A + Academy

The A+ Academy, a partnership between Boston University and the Boston Public Schools, has served students from selected middle and high schools since 2001. Conducted at Boston University's School of Education as part of its Boston Public Schools Collaborative, the two-week intensive academic summer program focuses on mathematics and English language instruction, specifically in literature study and writing. Working daily with Boston University tutors, students also engage in college awareness activities. The instruction conducted by Boston Public School teachers draws upon the techniques of the AVID curriculum. Each summer, the grant-funded program serves approximately 200 Boston Public School students, spanning grades 7–12.

www.bu.edu/sed/community-outreach/collaborative/ 617-353-3551

Additional Scholarship Assistance to Boston Residents

Boston University annually provides a continuing investment in the educational future of the City of Boston, its young people, and other members of the community. In addition to the Boston Scholars Program, the University offers annual special scholarship programs for Boston City employees, Boston teachers, and children of Boston and Brookline firefighters killed in the line of duty.

www.bu.edu/finaid 617-353-2965

Additional Scholarship Assistance to Greater Boston Area Residents

Boston University annually provides a continuing investment in the educational future of graduates of Brookline and Chelsea High Schools.

www.bu.edu/finaid 617-353-2965

Annual Poetry Institute

The Annual Poetry Institute for K–12 educators at Boston University is the product of a unique collaboration between the Boston University School of Education and the Favorite Poem Project. The institute encourages a dialogue among teachers about past successes, difficulties, and insights they've had in bringing poetry to students in their various communities. Teachers work in groups throughout the week to develop lessons inspired by the institute's presenters. The purpose of the institute is to demonstrate poetry's power as a learning tool by offering participants an energizing approach to poems, invaluable materials for teaching, and refreshed skills to invigorate their instructional habits and practices. Participants will be awarded 30 professional development points. The tuition is \$275. On-campus housing and/or parking are available. In the ten years of the institute to date, nearly 450 teachers have participated.

www.bu.edu/sed/centers-institutes/the-annual-poetry-institute/ 617-353-3267

Artemis Project

The Artemis Project is a five-week summer program directed by undergraduate women at Boston University and hosted on the Boston University Charles River Campus as part of BU's Learning Resources Network. Artemis introduces rising 9th grade girls to computer science, targeting them at the critical age when the disparity between males and females in the sciences becomes most pronounced. Participants receive a rigorous introduction to many different applications of computer science and technology, and to the creative way of thinking and problem solving that is prominent in the field of computer science. Artemis participants develop both the practical skills and the conceptual background that will help students pursue their interests. Participants are asked to pay a \$100 registration fee. Student lunches are provided.

www.bu.edu/lernet/artemis/ 617-528-0985

Boston High School Scholars Program

Since its inception in 1973, the Boston High School Scholarship Program at Boston University has awarded more than \$139 million in full-tuition scholarships to some 1,800 students. These awards are renewable for up to eight semesters (four years) of undergraduate study when the student maintains academic requirements. The scholars are selected by a three-person committee comprised of representatives from Boston University, the Boston Public Schools, and the Mayor's office. Boston University Undergraduate Admissions hosts an annual informational breakfast for Boston's guidance counselors to discuss these programs.

www.bu.edu/admissions/scholarships 617-353-2320

Boston Medical Center Employee Scholarship

The Boston Medical Center Employee Scholarship provides a 50 percent reduction on tuition, and can be applied to Boston University Metropolitan College's wide variety of programs in areas such as information technology, administrative studies, management studies, biomedical laboratory and clinical sciences, bachelor's degree completion, and many others.

www.bu.edu/met/admissions/financial-aid-scholarships/scholarships/boston-medical-centeremployee-scholarship/ 617-353-6000

Boston Public Schools Parent University

Boston Public Schools (BPS) hosts Parent University, which is designed to help parents increase their understanding of how children learn and develop. The program offers workshops in parent advocacy, family health and wellness, and much more. Boston University's Henry M. Goldman School of Dental Medicine provides families with information (in English and Spanish) on the importance of children's oral health and gives out toothbrushes, toothpaste, and educational brochures.

www.bostonpublicschools.org/parentuniveersity 617-635-9661

Boston Scholars Academic Orientation & Retention Support

Boston University offers a one-week academic orientation to the Boston High School Scholars in advance of their freshman year. Through a program of interdisciplinary study, which is taught by University faculty, students experience college-level lectures, practice college-level writing, and participate in discussion groups. Retention support for enrolled Boston Scholars is provided through extensive advising services.

www.bu.edu/admissions/scholarships 617-226-4618

Boston University/Boston Public Schools Collaborative

The Boston University/Boston Public Schools Collaborative, located within Boston University's School of Education, oversees more than a dozen programs created in support of the Boston Public Schools, and provides a variety of services and access to University resources for selected Boston Public Schools. Services include technical assistance and professional development activities for teachers and school administrators, as well as a variety of higher education awareness and academic support programs for students.

www.bu.edu/sed/community-outreach/collaborative/ 617-353-3551

Boston University Community Service Scholarships

Boston University is committed to rewarding academic achievement and ensuring that a BU education is available to as many qualified students as possible from the Boston Public High Schools. Beginning with the freshmen enrolling in Fall 2009, the Boston University Community Service Scholarships program has awarded need-based grants sufficient to meet students' eligibility for need-based assistance without an expected loan commitment to all admissible students. As an aspect of this program, these students will complete a community service requirement each year. These awards are renewable for up to eight semesters (four years) of undergraduate study when the student maintains academic, financial need, and community service requirements. In the freshman class that entered in September 2011, \$6.5 million was awarded in Boston University Community Service Awards to graduates of the Boston Public Schools.

www.bu.edu/admissions/scholarships 617-353-2320

Boston University Initiative for Literacy Development (BUILD)

Boston University School of Education cooperates in a program, formed in 1997, with the Boston University/Boston Public Schools Collaborative, the Student Employment Office, and the Financial Assistance Office at Boston University. With federal Work-Study funds made available by the University in support of the federal America Reads and the local Read Boston programs, 130 literacy tutors provide assistance at seven afterschool programs, six in-school programs, and one community-based program, serving elementary school children in Boston and Chelsea.

www.bu.edu/sed/community-outreach/collaborative/ 617-353-5192

Boston University Literacy Enrichment Programs

Graduate students in speech-language pathology at Boston University's College of Health & Rehabilitation Sciences: Sargent College provide small-group instruction to children identified as at-risk for reading difficulty. Additionally, senior undergraduate students carry out course-related internships through the literacy programs.

www.bu.edu/sargent/centers/clinical/speech/ 617-353-2713

Cardinal Medeiros Scholars

The Cardinal Medeiros Scholarship Program at Boston University awards scholarships annually to graduating seniors from Catholic high schools in the Archdiocese of Boston. The recipients of the four-year, full-tuition awards are nominated by their schools and are chosen for their academic achievement, leadership ability, and contributions to their schools and communities. Scholarships are awarded by a committee of representatives from Boston University Undergraduate Admissions and the Archdiocese of Boston. Since its inception in 1986, the University has offered scholarships worth more than \$35 million to 338 scholars.

www.bu.edu/admissions/scholarships 617-353-3230

Center for African Studies

Boston University's Center for African Studies' Outreach Program disseminates information on Africa and African-related issues to the public and professionals, such as elementary and secondary school teachers, journalists, and museum specialists.

www.bu.edu/africa 617-353-7303

CityLab

CityLab is a science education outreach program that provides hands-on modern biology experiences for teachers and their students. Founded in 1992 at Boston University School of Medicine, the biotechnology learning laboratory is also supported by the National Institutes of Health, the National Center for Research Resources, the Science Education Partnership Award, and the Howard Hughes Medical Institute. The Boston University School of Medicine has set aside modern facilities to carry out the program, and CityLab has developed a tried and true curriculum to accompany these experiences. More than 40,000 students and their teachers have participated in CityLab at the medical school. The first mobile science laboratory for grades 7–12 was placed into service in 1998, and it has been an overwhelming success. It is a 40-foot modern facility that goes to the school instead of students and teachers coming to CityLab. Approximately 5,000 students are able to participate in MobileLab activities annually. The Boston University MobileLab has also been replicated throughout the country. North Carolina, Connecticut, Maryland, and South Dakota are now operating mobile science laboratory programs while similar programs are being developed in Minnesota, Pennsylvania, and Texas. All are modeled on the MobileLab program pioneered at Boston University School of Medicine.

www.bumc.bu.edu/citylab/ 617-638-5623

Early Learning Center

A public preschool program serving children between the ages of three and seven, the Early Learning Center operates on weekdays from 8 a.m. to 5 p.m., and offers both instruction and afternoon enrichment activities. Boston University School of Education, through the Boston Public Schools Collaborative, provides the instructional staff for the afternoon hours. The center opened in 1987 with the assistance of faculty from Boston University, Wheelock College, and Simmons College, and with personnel from the Boston Public Schools system. It has become a national model for early education programs. The program has its own facility located in the Baldwin School in Brighton.

www.bu.edu/sed/community-outreach/collaborative/ 617-353-3551

Field Placements of School of Education Students

All students pursuing licensure programs at the Boston University School of Education must complete field placements in an appropriate school or community agency. The School has been linked with local public schools since 1918, and has placed thousands of Boston University students in classrooms. Students assist teachers and social service agencies in the Boston area and throughout the world.

www.bu.edu/dbin/infocenter/content/index.php?pageid=1121 617-353-3239

Intergenerational Literacy Program

The Intergenerational Literacy Program encourages language and literacy development in families who speak languages other than English, in order for parents to better help their children take advantage of educational opportunities. A collaboration between Boston University and Chelsea Public Schools begun in 1989, the project provides literacy education to adults who are recent immigrants learning English. Helping the parents to become better readers and writers helps their children achieve success in school. Approximately 75 families participate in the program each semester, with both children and their parents attending classes.

www.bu.edu/sed/community-outreach/programs/intergenerational-literacy/ 617-466-5154

Learning Resource Network

The Learning Resource Network (LERNet) is a center at Boston University that is dedicated to promoting science, mathematics, and engineering among the pre-college population by offering programs that expose K-12 students to current scientific research and stimulate their interest in STEM disciplines. The center has developed a large number of contacts with teachers at all grade levels and at schools with large minority and low-income student populations.

www.bu.edu/lernet 617-353-7021

Martin Luther King, Jr. Scholars After-School Program

Boston University volunteers provide an after-school program for inner-city middle schools. The program encourages the middle school students to be healthy in all aspects of life by giving them new and exciting ways to promote being healthy.

www.bu.edu/thurman 617-353-4745

Massachusetts Department of Correction Academic Scholarship Program

Boston University's Metropolitan College offers a scholarship program specifically designed to benefit employees of the Massachusetts Department of Correction (DOC). Each year scholarships are awarded to 10 current DOC employees who demonstrate potential for academic excellence. The DOC Academic Scholarship covers 100 percent of tuition, exclusive of fees, for up to 12 undergraduate-level credits or 11.5 graduate-level credits per semester at BU's Metropolitan College. In academic year 2011/2012 and during summer 2011, \$73,160 in scholarship funding was awarded to 14 recipients.

www.bu.edu/met/admissions/financial-aid-scholarships/scholarships/massachusettsdepartment-of-correction-academic-scholarship-program/ 617-353-6000

Prison Education Program

Boston University's Metropolitan College, through the Prison Education Program (PEP), has provided college credit courses leading to degrees for qualified prisoners at Massachusetts state medium- and minimum-security prisons since 1972. The University subsidizes tuition, student books and supplies, and faculty salaries. Since the program's inception, Boston University has awarded over 300 bachelor's degrees to program participants, and hundreds of others have enrolled in the PEP classes. In May 2012, 19 men and 8 women received degrees. Admission to the program is based on a competitive examination process. At any given time the program serves 150 participants, 100 at MCI/Norfolk men's medium security state prison and 50 at MCI/Framingham women's maximum security state prison.

www.bu.edu/pep 617-243-2196

Program in Mathematics for Young Scientists

The Program in Mathematics for Young Scientists (PROMYS) is a six-week summer program at Boston University designed to encourage motivated high school students to explore the creative world of mathematics in a supportive community of peers, counselors, research mathematicians, and visiting scientists. Enrollment is supported with need-based financial assistance.

www.promys.org 617-353-2563

Reach Out & Read

Reach Out and Read (ROR) is an evidence-based nonprofit organization that promotes early literacy and school readiness in pediatric exam rooms nationwide by giving new books to children and advice to parents about the importance of reading aloud. ROR builds on the unique relationship between parents and medical providers to develop critical early reading skills in children, beginning at 6 months of age. At the Boston Medical Center clinic, over 8,000 books a year are given to children ages six months to five years by ROR-trained doctors and nurses. The program's three-part literacy promotion model was developed in 1989 by pediatricians Barry Zuckerman (chief and chair of pediatrics at Boston Medical Center and Boston University School of Medicine) and Robert Needlman, and early childhood educators Jean Nigro, Kathleen MacLean, and Kathleen Fitzgerald-Rice, who together introduced the first ROR program at Boston City Hospital (now Boston Medical Center).

www.reachoutandread.org 617-455-0600

Space Science Information Requests

The Boston University Observatory receives numerous requests from the public and others via the phone, email, and post for information about astronomy and space science research topics and current discoveries, advice about telescopes and optics, educational equipment, and teaching materials. The Boston University Department of Astronomy also hosts Public Open Nights at the Observatory, open to everyone, giving Boston-area residents a chance to observe the night sky through telescopes and binoculars and see things they otherwise might not get to see, and learn some astronomy as well. The Open Nights are held most Wednesday evenings throughout the year, weather permitting.

www.bu.edu/astronomy/ 617-353-5700

Space Science School Visits

Faculty, staff, and students at the Boston University Department of Astronomy frequently volunteer to visit area schools and other interested organizations to speak about astronomy and space science. Boston University researchers in these disciplines provide equipment and assist with telescopic observing sessions. These school visits may last from an hour to a full day.

www.bu.edu/astronomy/ 617-353-5700

Stepp Lab for Sensorimotor Rehabilitation Engineering and K-12 Outreach Program

The Stepp Lab, located at Boston University's Department of Speech, Language & Hearing Sciences in the College of Health & Rehabilitation Sciences: Sargent College, studies normal and disordered speech and voice, and uses engineering approaches to investigate sensorimotor disorders, with the goal of rehabilitating disordered movement. At the intersection of health sciences and engineering, the lab promotes multidisciplinary research and education on quantitative aspects of rehabilitation and biomedical engineering through outreach to local schools and community centers. The lab has an ongoing outreach program to K-12 children to encourage them to study science and engineering.

www.people.bu.edu/cstepp/ 617-358-1395

Step UP

Boston University is part of a five-university collaboration with the City of Boston and the Boston Public Schools. Working with two partner schools—the William M. Trotter Elementary School in Dorchester and the Boston English High School in Jamaica Plain—as well as all ten schools involved in the initiative, the Boston University School of Education faculty and students provide specific programs and initiatives that respond to needs identified by the partner schools. Coordinated services offer academic support for schools, quality extended learning opportunities, health and wellness programs, and opportunities for parent engagement.

www.bu.edu/sed/stepup.htm 617-353-3551

Upward Bound & Upward Bound Math/Science

Two programs at the Boston University School of Education provide academic enrichment and remedial help, on an annual basis, to 125 Boston and Chelsea Public High School students through intensive classroom work during the academic year and a six-week residential tutorial and enrichment program in the summer. Boston University contributes a portion of the housing and meal costs for participants, totaling more than \$112,000.

www.bu.edu/ub 617-353-3551

A.2 BUSINESS AND PROFESSIONAL PROGRAMS AND SERVICES

AdLab

Boston University's College of Communication created an award-winning student-run advertising agency in 1974. Today, AdLab is a full-service agency with capabilities ranging from traditional to interactive to brand planning to guerrilla marketing. Students in AdLab develop and implement advertising campaigns for about 60 clients every year. These clients range from public service and nonprofit organizations to entrepreneurial start-ups and special projects with nationally recognized brands. Clients hire AdLab as they would hire any professional agency, and they must have a budget capable of implementing the plan. AdLab charges a very nominal \$100 fee.

www.bu.edu/adlab 617-353-3450

Executive Development Roundtable

The Executive Development Roundtable (EDRT) in the Boston University School of Management is dedicated to executive and leadership development and the principle that continuous individual and organizational improvement is a firm's most important strategic advantage. The EDRT conducts fundamental research in executive development and works to improve the implementation of management, executive-development policies, and education to meet emerging leadership needs. The EDRT also creates a partnership between the corporate and academic communities that explores best-practice approaches to improving the development of managers throughout their careers, and the EDRT serves as a networking and professional development resource for upper-level professionals.

www.bu.edu/edrt/ 617-353-2031

Fraunhofer Center for Manufacturing Innovation

The Fraunhofer Center is a partnership between Boston University and Fraunhofer Gesellschaft of Germany, the largest nonprofit applied research organization in Europe. More than 12,000 scientists and engineers work at 55 research institutes worldwide to solve problems for government and industry. The Fraunhofer Center for Manufacturing Innovation, located on the Boston University campus, specializes in the development of instruments, high-precision optoelectronics, automation systems, and devices for the semiconductor, and biotechnology/biomedical industries. Together with Boston University's College of Engineering, the center works closely with its clients and provides engineering R&D services, at a subsidized rate, to local and international companies focusing on instrument development and nextgeneration automation solutions.

www.bu.edu/fhcmi 617-353-1888

Hothouse Productions

Hothouse Productions is a student-run, client-driven production company at the Boston University College of Communication's Department of Film & Television. Each semester, students produce videos for nonprofits or for small companies who wish to have professional productions but cannot afford high-priced productions. For many local organizations, this is a rare and remarkable opportunity to get a quality production for minimal cost. Clients pay only \$1,000 for state-of-the-art digital equipment for shooting and editing, and the students' work is provided gratis. Clients generally pick up any travel expenses and miscellaneous costs.

www.bu.edu/com/ft/hothouse 617-353-5807

Human Resources Policy Institute

The Human Resources Policy Institute (HRPI) was founded in 1981 as a partnership between Boston University's School of Management faculty and top-level human resources executives. HRPI holds semi-annual meetings during which members participate in sessions on leading-edge human resources topics as well as member roundtable discussions. The institute also sponsors faculty- and doctoral-level research, develops case studies, conducts executive development programs, and acts as an information resource for members through surveys and a newsletter.

www.bu.edu/hrpi/ 617-353-3304

Institute for Global Work

The Institute for Global Work was established at the Boston University School of Management to spearhead a systematic understanding of the complex realities of global relations. The institute's principles are three-fold: to co-create ideas of global business processes through partnerships between academia, industry, and governmental agencies; to shape leading-edge practice through systematic research and thought-leadership; and to link research findings to education using multiple modes at different levels. Member firms meet twice yearly and have access to executive education offerings.

www.management.bu.edu/faculty-research/centers/igw/ 617-353-4601

Link Day

Boston University's MBA Link Day is an annual event offering an opportunity for small- to medium-sized nonprofit organizations to access cutting-edge managerial expertise. Launched in April 2001 by students in the Boston University School of Management's MBA Public & Nonprofit Management concentration, this one-day consulting experience brings together nonprofits, MBA students, academics, and local professionals to analyze a specific problem facing an organization and provide practical strategic solutions.

www.management.bu.edu/linkday/ 617-358-2768

Photonics Center

Over the past fifteen years, the Boston University Photonics Center (BUPC) has become a worldrenowned pioneer in the field of photonics—the science and engineering of light. The center has created a unique national resource for development of advanced photonic device prototypes for commercial and military applications. In addition to its laboratory and classroom space, the BUPC houses a full-service business incubator. The incubator is capable of supporting up to 14 start-up companies.

www.bu.edu/photonics 617-353-8899

PRLab

This student-run public relations agency in the Boston University College of Communication has offered free public relations assistance to nonprofit organizations for more than two decades. In some cases, particularly with "for profit" clients, PRLab may charge a small annual fee for their services to help offset the expenses of PRLab. An average of 30 students each semester spend 7 to 14 hours a week working on-site, devising publicity campaigns, developing public relations programs, arranging fundraising events, creating websites, and establishing media contacts. In an average semester, PRLab students provide 5,000 hours of free services to greater Boston organizations.

www.bu.edu/prlab 617-358-0066

Student Internships from the School of Social Work

Every year, approximately 300 student interns work two or three days a week in nonprofit and social service settings representing health, mental health, child welfare, aging, substance abuse, and community service agencies throughout New England. Boston University interns offer direct clinical services and work in community organizations, systems management, and program planning. Student interns have been serving the community since the 1920s.

www.bu.edu/ssw/academic/msw/field/index.shtml 617-353-3754

Tuesday & Thursday Physical Education Program

For the past 40 years, students from Boston Public Schools have taken part in the Boston University School of Education's Tuesday & Thursday Physical Education Program. Founded in 1972, the program is recognized internationally for its unconventional teaching and learning environment. It also is one of the University's longest-running community service initiatives involving the city of Boston. When a school district needs to cut its budget, one of the first programs targeted is often physical education. And yet, with the high obesity rates among elementary school children, it is more important than ever to get children active and moving. Twice a week every semester, graduate students from the Physical Education Program teach three 45-minute classes to children in kindergarten through fifth grade. The children don't play traditional games, but learn movement skills that they will need to be healthy and active for life.

www.bu.edu/sed/tuesdaythursday.htm 617-353-3300

A.3 COMMUNITY AND GOVERNMENT PROGRAMS AND SERVICES

Allston/Brighton Alcohol Patrols

The Boston University Police Department coordinates with special Boston Police patrols to enforce public order, prevent illegal alcohol activity, and reduce disturbances in the Allston Brighton neighborhood adjacent to Boston University.

www.bu.edu/police/ 617-353-2110

Commonwealth Avenue Improvements

Beginning in 1994, Boston University, in conjunction with City of Boston, state, and federal agencies, began working on a plan to revitalize and improve Commonwealth Avenue. In 2007, this project came to fruition, reaching from Kenmore Square to the Boston University Bridge. At an overall cost of \$13 million, the project includes wider sidewalks, additional trees and streetlights, articulated crosswalks, park benches, and the reduction of three lanes of through

traffic to two lanes on either side of the MBTA trolley tracks. The cost to Boston University was more than \$4 million. The University maintains the landscaping on both sides of Commonwealth Avenue and along the MBTA tracks. Planning is under way to assess the feasibility of continuing improvements from the Boston University Bridge to Packard's Corner in Allston.

www.bu.edu/cap/ 617-353-9095

Community Task Force

Since 1984, University and local representatives from neighbor organizations have used the Boston University Community Task Force as a public forum to discuss community issues. University administrators, planners, and consultants also meet regularly with representatives of neighboring community organizations.

www.bu.edu/community/ 617-353-9095

Government & Community Affairs Office

As the primary link to the community, Boston University's Government & Community Affairs office strives to ensure that the University is fully aware of and responsive to the needs of its neighbors. The office maintains frequent contact with area residents and with state and local leaders and officials in order to keep them informed about Boston University's development plans, evolving programs, and academic and cultural events available to the community. With offices on both the Charles River Campus and the Medical Campus, Boston University Government & Community Affairs has grown its presence in neighboring communities over the past several years and has recently expanded its community offerings to now include a community grant to eligible neighborhood nonprofit groups.

Government & Community Affairs works in collaboration with the Boston University Community Task Force to review large projects proposed by the University and to ensure that the neighborhoods surrounding the University have a say in the continual development of the Charles River Campus. Similarly, the office also works with the Citizen Advisory Committee of the National Emerging Infectious Diseases Laboratory (NEIDL) on the University's Medical Campus to maintain neighborhood engagement in the conduct and practices of this vital laboratory.

Working with the City of Boston, Government & Community Affairs ensures that Boston University continues to be a positive influence in the community through such efforts as the creation of new scholarship opportunities to attend summer sports camps and the volunteered use of the University's athletic and recreational facilities by local youth athletic groups, including neighborhood youth hockey leagues.

www.bu.edu/community/ 617-353-9095

Martin Luther King Jr. Annual Celebration

Boston University's Martin Luther King Jr. annual ceremony is one of the largest and oldest in the City of Boston. Routinely drawing over 1,000 attendees from throughout the community, the University's commemoration of the life and legacy of Dr. King-—a Boston University alumnus—dates back to the years before the holiday was officially recognized by federal and state governments.

www.bu.edu/dos/martin-luther-king-jr-day-commemoration/ 617-353-4745

Master Plan

Boston University, in cooperation with Community Task Force representatives and city agencies, was the first area institution to develop a Master Plan approved by the Boston Redevelopment Authority. The first Master Plan covered the years 1986 to 1996 and analyzed the University's needs (housing, enrollment, parking, academics, and recreation) and studied potential sites to accommodate the University's changing needs. Two subsequent Master Plans were submitted and approved in 1997 and 2003, each following a process which included multiple meetings of the Community Task Force and comment from the City of Boston. The fourth Master Plan is currently being prepared for submission to the City in 2012.

www.bu.edu/community/ 617-353-9095

Ride-Along Program

Through the Ride-Along Program, Boston University's Director of Community Relations rides with the Boston Police and the Brookline Police on designated weekends to ensure prompt response to neighborhood concerns involving students' off-campus behavior. Boston University students found to be in violation of the Code of Student Responsibilities, after a disciplinary hearing, are sanctioned by the Dean of Students.

www.bu.edu/community/ 617-353-2078

TranSComm

TranSComm (Transportation Solutions for Commuters, Inc.) is a transportation management association (TMA) that coordinates the transportation needs of the Boston University Medical Center community in the Albany Street neighborhood of Boston's lower South End. TranSComm represents an innovative way to solve transportation problems. The members develop employee programs that promote alternatives to driving alone, reducing traffic congestion and air pollution, and enhancing accessibility in the Albany Street Corridor. Current members of the TranSComm Transportation Management Association (TMA) include Boston Medical Center; Boston University Medical Campus, which is comprised of Boston University Schools of Medicine, Dental Medicine, Graduate Medical Sciences, and Public Health; the Boston Public Health Commission; and the Boston Healthcare for the Homeless Program.

www.bumc.bu.edu/transcomm/ 617-638-7473

A.4 PROGRAMS AND SERVICES FOR PEOPLE WITH DISABILITIES

Best Buddies

Best Buddies promotes one-to-one friendships between college students and people affected by an intellectual or developmental disability. The organization is one of the many community service volunteer opportunities offered through the Boston University Student Activities Office.

www.bu.collegiatelink.net/organization/bestbuddies 617-353-3635

Center for the Study of Communication & the Deaf

The Center for the Study of Communication & the Deaf (CSCD) at the Boston University School of Education is devoted to both applied and theoretical research that is focused on enhancing educational programming and opportunities for Deaf people and their families. The CSCD provides a variety of services focusing on projects, workshops, and consultation with local, regional, and national entities whose services include working with Deaf people. Current projects include the development of assessment instruments to determine ASL proficiencies in Deaf children. Additional research interests of the Center relate to the relationship between American Sign Language (ASL) and English, the role of culture and language in the family structure, bilingual (ASL and English) educational systems, and the role of social service networks in the lives of Deaf children and adults.

www.bu.edu/cscd/ 617-353-3205

Joining Hands

Volunteers from Boston University's Community Service Center assist elders and people with disabilities in experiencing outdoor activities, facilitate art activities, learn to swim, and enjoy companionship. Volunteers gain an awareness of these important segments of the population and become a positive force in the Boston community.

www.bu.edu/csc/programs/joining-hands 617-353-4710

Occupational Therapy Volunteer Programs

Occupational therapy students at Boston University's College of Health & Rehabilitation Sciences: Sargent College are involved with many volunteer activities, through scheduled fieldwork placements and other program-specific opportunities. These include volunteering in Boston, Cambridge, Brookline, and Malden Public Schools and many community programs such as Adult Day Health Programs in Dorchester, Roxbury, Brookline, and Cambridge, and afterschool programs for children in Dorchester and Allston. They also volunteer with adolescents with developmental delays in Hyde Park, and Cradles 2 Crayons, a community organization located in Quincy that carefully organizes large quantities of donations for local children in need. In addition, clinical affiliations include a number of community mental health centers, including the Boston University Center for Psychiatric Rehabilitation. During their junior year, occupational therapy students volunteer in many different programs, such as the Perkins School for the Blind in Watertown, Ellis Memorial Pre-School in the South End, Project Adventure, where each student is paired with a child with a disability, through the Boston YMCA, and ice skating with children who have a disability in Cambridge, among others. As part of a Boston University course, Analysis & Adaptation of Occupation, first-year graduate occupational therapy students conduct home evaluations at the Covenant House in Brighton. The course, entitled Professional Service Management, holds Occupational Therapy Day at the Massachusetts State House.

www.bu.edu/sargent/academics/ot/ 617-638-2729

Pike Prize for Service to People with Disabilities

The Boston University School of Law awards the annual Pike Prize either to a person with a disability or to someone who has worked on behalf of promoting greater understanding of disability law, and whose accomplishments have been especially noteworthy.

www.bu.edu/law 617-353-3097

A.5 PROGRAMS AND SERVICES FOR ELDERS

Boston University Geriatric Services

Sponsored jointly by the Boston University School of Medicine and the Boston Medical Center, the Boston University Geriatric Services program is the oldest continuously operating homemedical service in the United States. Using an integrated model of care and case management, the program provides an array of health services for Boston's elderly, including medical care for patients in their own homes. The program makes approximately 4,500 home visits to 525 elders each year, thus enabling many patients who would otherwise require placement in nursing homes to remain independent. No patient is ever denied service for lack of ability to pay. Since 1875, physicians and medical students have been delivering health care to patients in their homes, where they feel most comfortable.

www.bmc.org/geriatrics/services.htm 617-638-6100

Elders Living at Home Program

The Elders Living at Home Program (ELAHP) at Boston Medical Center, established in 1986, serves low-to-moderate-income elders, age 60 or older, who are homeless or face the loss of their apartments, or who live in a life-threatening situation. ELAHP provides clients with temporary shelter leased from the Boston Housing Authority (BHA) while permanent housing is located. Over the years, ELAHP's temporary housing has expanded to its current capacity of 28 units at four different sites, and has served as a model for collaborations between the BHA and other providers of services to the homeless. This program also provides or arranges for social services, health services, and legal counsel. ELAHP also coordinates nursing and social-work staffing at the Cardinal Medeiros Center, a nutrition site in Boston that serves some 150 homeless people daily.

www.bmc.org/eldersathome/mission.html 617-414-1642

Evergreen Program

Boston University sponsors a year-round program that, for a nominal fee, provides persons age 58 and over with courses and lectures covering politics, foreign languages, literature, art, art history, music, and physical activities. In addition, through the Evergreen Program, for a \$150 fee, senior citizens may audit any regular Boston University course, whenever space is available and with the instructor's consent. More than 1,400 life-long learners attend the Evergreen lecture series and audit classes each year.

www.bu.edu/evergreen 617-353-9852

Geriatric Assessment Center

This Boston Medical Center (BMC) consultation program provides comprehensive interdisciplinary team assessments of individuals age 65 or older. The Geriatric Assessment Center, formed in 1986, is dedicated to identifying problems that reduce the independence of older people and to making practical recommendations to enable individuals to function to their fullest capacity. The Geriatric Assessment Center (GAC) is part of BMC's Section of Geriatrics, which offers primary care through its ambulatory practice. The GAC is located in the Yawkey Ambulatory Care Center at Boston Medical Center. The Geriatrics Assessment Center provides a comprehensive consultation and detailed written report and recommendations for patients, their families and primary care providers.

www.bmc.org/geriatrics/services/geriatricsassessmentcenter.htm 617-414-4639

Institute for Geriatric Social Work

Established in 2002 with a five-year grant from The Atlantic Philanthropies, the Institute for Geriatric Social Work (IGSW) has become a leader in the effort to build a stronger social work workforce for an aging society. With 36,000 IGSW-trained practitioners currently working in the field and IGSW training now available in all 50 states and overseas, the mission of IGSW is to strengthen the quality of the geriatric workforce through educational innovation, assessment, and policy-relevant research. Located at the Boston University School of Social Work, one of the nation's preeminent social work programs, IGSW brings together expertise in instructional technology, educational design, testing, and evaluation to improve the preparedness and quality of practice of social workers and other social service practitioners who work with older adults and their families.

www.bu.edu/igsw 617-358-2626

Vaccines & Screenings Programs

Through the Boston Medical Center, free vaccinations and health screenings are provided to the Greater Boston community. These include annual influenza vaccinations as well as screenings for skin cancer, prostate cancer, glaucoma, and osteoporosis. An example of a specific program is the Boston Coalition for Adult Immunization (BCAI), which delivers free flu vaccinations to underserved (or potentially underserved) populations in and around Boston. Boston University School of Medicine students volunteer in conjunction with Tufts and Harvard medical students and give flu vaccinations; visit neighborhood clinics, nursing homes, homeless shelters, and other patient settings in the Boston area.

www.bmc.org 617-638-8922

A.6 HEALTH CARE AND RELATED PROGRAMS AND SERVICES

The Boston University Medical Campus in the South End of Boston includes the School of Medicine and the Division of Graduate Medical Sciences, the School of Public Health, the Henry M. Goldman School of Dental Medicine, and Boston Medical Center (BMC). Boston Medical Center, the hospital located on the Boston University Medical Campus, was formed by the 1996 merger of Boston University's University Hospital and Boston City Hospital. The BMC is the principal teaching affiliate of the Boston University School of Medicine. With its mission to provide consistently accessible health services to all, Boston Medical Center is the largest safetynet hospital in New England. This rich concentration of medical educators, researchers, and health care professionals represents a major resource for residents of the many Boston communities that receive direct services, especially the South End, South Boston, Roxbury, and Dorchester. The Boston Medical Center provides free care to patients unable to pay. Many projects run by the Medical Center are described below, but there are dozens of other contributions to health care delivery, preventative medicine, and education carried out by individuals throughout the Boston University Medical Campus. The College of Health & Rehabilitation Sciences: Sargent College and the School of Social Work on the University's Charles River Campus also offer a wide variety of physical and mental health care services to the community.

Action for Boston Community Development (ABCD) Head Start & Early Head Start

The Henry M. Goldman School of Dental Medicine (GSDM) faculty conduct Early Head Start oral health screenings and referrals for children enrolled in ABCD Early Head Start Centers located in Dorchester, East Boston, the South End, and Madison-Park High School in Boston. Additionally, the GSDM provides oral health education for children at Gertrude Townsend Head Start in Dorchester and parent workshops at four Head Start sites in South Boston.

www.bostonabcd.org 617-574-8750

Albert & Jessie Danielsen Institute

The mission of Boston University's Danielsen Institute is to alleviate suffering and to promote healing, growth, and change in the persons, communities, and institutions they serve. The institute seeks to accomplish this mission through service, training, teaching, and research that emphasize depth psychotherapy and are informed by spiritual, religious, and existential perspectives. The institute includes an out-patient mental health clinic; clinical training program for graduate-level and post-graduate psychology and social work students, including an APA approved psychology internship program; psychiatry residency rotation; and a research center focused on religion, spirituality, and psychotherapy. Serving more than 600 people each year, the Danielsen Clinic, which is licensed by the State of Massachusetts, provides therapy, psychological assessment, and psychiatric consultation to individuals, couples, groups, and

families in the Greater Boston area. Fees are covered by many health insurance plans, and the institute also offers sliding scale fees for self-pay cases. The institute works with several area theological seminaries and religious institutions to provide psychological and neuropsychological assessments for those seeking to enter religious life, and also performs assessments for clergy experiencing difficulty with a particular assignment or in their religious life as a whole.

www.bu.edu/danielsen 617-353-3047

Alzheimer's Disease Center

The Boston University Alzheimer's Disease Center was established in 1996 and is funded primarily by an Alzheimer's Disease Core Center (ADCC) grant from the National Institute on Aging. The center is one of 31 federally funded Alzheimer's Disease Centers nationwide. Its goal is to help reduce the human and economic costs associated with Alzheimer's disease through the advancement of knowledge. The center provides educational and clinical resources to patients, aging control subjects, and caregivers, while charting the course of the disease and age-related changes in the research groups followed by the center. In addition, the center provides state-ofthe-art diagnostic services and a collection of well-prepared brain material appropriate for the research requirements of local and national research efforts, including within and across Core Centers.

www.bu.edu/alzresearch 617-638-5426

Applied Professional Experience Program

The Applied Professional Experience (APEX) Program at the Boston University Goldman School of Dental Medicine was established in 1989 to provide first-year dental students the educational opportunity to work in a variety of community-based dental health centers in the Boston area. Dental students provide needed auxiliary services to the community health centers while gaining valuable experience in caring for the underserved population.

www.bu.edu/dental/about/offices/extramural/apex/ 617-638-8523

Associated Early Care & Education

Associated Early Care & Education provides affordable childcare for infants, toddlers, and preschool children of working families in the Greater Boston area. Each year Boston University's Goldman School of Dental Medicine conducts an oral health program offering dental health education, oral screenings, and fluoride varnish applications to children, as well as staff and parent training at the Jamaica Plain, Sunnyside, Ruggles/Gilday, and Castle Square sites.

www.associatedearlycareandeducation.org/ 617-695-0700

BAHEC Youth to Health Careers Summer Enrichment Program

The purpose of the Boston Area Health Education Center (BAHEC) Youth to Health Summer Enrichment Program is to connect Boston adolescents who are interested in exploring health careers with a variety of health professionals, representing a broad range of career fields. Students in the Dental Public Health program at Boston University's Goldman School of Dental Medicine provide BAHEC students with an understanding of the range of oral health careers, their education and fiscal requirements, and the roles and function of each profession in providing and supporting health care.

www.bphc.org/programs/cafh/cah/cahdevandhealthpromotion/bahec/pages/home.aspx

617-534-5258

Blackstone Elementary School Field Trip

Third-grade children at Blackstone Elementary School in the South End make an annual visit to Boston University's Goldman School of Dental Medicine for a full day of oral health activities, including presentations on oral health and nutrition, a lesson on teeth and gums, and interactive activities in the Simulation Learning Center in which they learn about sealants and dental impressions. The young students are "dental students for a day" on this field trip which provides both interactive health education for children and an opportunity for Boston University dental students to inspire young children to pursue higher education and possibly careers in dentistry.

www.bu.edu/dental/community/ 617-638-5222

Book Bag Giveaway and Resource Fair

Organized and sponsored by the Boston Public Health Commission each year to help students get ready for school, the Book Bag Giveaway event provides school supplies to over 900 children living in Boston's low income communities. The Boston University Goldman School of Dental Medicine promotes oral health by offering oral screenings and education to school-aged children and their families in Dorchester.

www.bphc.org/ 617-638-8510

Boston Center for Refugee Health & Human Rights

The Boston Center for Refugee Health & Human Rights, a joint project of the Boston Medical Center, the Department of Medicine of the Boston University School of Medicine, Global Lawyers and Physicians, and the Department of Health Law, Bioethics & Human Rights at the Boston University School of Public Health, has actively cared for the medical, psychological, legal, and social needs of over 500 clients from 57 countries annually who live in and around Boston. It is a multidisciplinary center that provides services for refugees and survivors of torture and related trauma. The program provides primary health care, mental health services, referrals for medical specialties and neuro-psychiatric evaluation, dental evaluations of persons in detention, physical therapy, referral and consultation for legal services, social services, English classes, creative therapies, and vocational rehabilitation. The program also offers a clothing bank, access to the BMC Food Pantry, and ethnic community support groups.

www.bu.edu/bcrhhr/refugee/about/about_index.html 617-414-4794

Boston Coalition for Adult Immunization

The Boston Coalition for Adult Immunization (BCAI) delivers free flu vaccinations to underserved (or potentially underserved) populations in and around Boston. Every year, medical faculty and students from Boston University School of Medicine, Tufts, and Harvard visit neighborhood clinics, nursing homes, homeless shelters, and other patient settings in the Boston area to participate in an immunization campaign for Boston's vulnerable residents. At BCAI flu clinics, medical students distribute immunization information in numerous languages, assist with informed consent processes, manage the flow and activities, assist residents who have questions, and provide clinic management.

www.bumc.bu.edu/bcai 617-638-4194

Boston Healthcare for the Homeless Project

Numerous local institutions participate in the Boston Health Care for the Homeless Program, including the Boston University Schools of Medicine, Dental Medicine, and Public Health. The Boston Medical Center assists in developing methods to improve the program's strategic planning, especially for funding. Medical faculty assist with developing a data set regarding the use of sub-acute medical care provided to Boston's homeless population at the Barbara M. McInnis House and Betty Snead House, the program's two respite centers in Boston. The Boston University School of Public Health assists by demonstrating how utilization of these respite centers reduces hospital admissions, readmissions, and emergency utilization, thereby impacting the costs of care.

www.bhchp.org 617-414-1321

Boston Medical Center

Boston Medical Center (BMC), the hospital located on the Boston University Medical Campus, was formed by the 1996 merger of Boston University's University Hospital and Boston City Hospital. The BMC is the principal teaching affiliate of the Boston University School of Medicine. With its mission to provide consistently accessible health services to all, Boston Medical Center is the largest safety-net hospital in New England, and it provides care for Boston residents, particularly those from inner-city neighborhoods. The clinical staff is composed exclusively of Boston University School of Medicine faculty members and physicians-in-training.

www.bmc.org 617-638-6800

Boston Medical Center Adolescent Center

Since 1977, Boston Medical Center on the Boston University Medical Campus has provided a teen-tot program for adolescent parents in the Boston area. The hospital also provides medical support to high school-based health centers and the Boston Public Schools. The Adolescent Center offers contraceptive counseling and care, HIV testing and counseling, and comprehensive medical care for adolescents.

www.bmc.org/pediatrics/services/adolescent/ 617-414-4086

Boston Medical Center Emergency Department

Located at the Boston Medical Center on the Boston University Medical Campus, this emergency medical center is the largest 24-hour level-1 trauma center in New England, with more than 150,000 visits last year. The Boston University School of Medicine plays a key role in training emergency medical personnel in the treatment of trauma victims.

www.ed.bmc.org 617-414-4929

Boston University Area Health Education Center

The central goals of the Boston University Area Health Education Center (BU AHEC) are to foster an interest in primary care careers for medical students and residents, and to support the practice and teaching of primary care medicine in the community. Since its establishment in 1978, the center has worked to increase the training of medical students in community-based practices, developed many office practices of family physicians as teaching sites, established the Tufts Family Medicine Residency Program, and built the framework for the new Department of Family Medicine at Boston University School of Medicine. The BU AHEC is one of 8 Regional AHECs around Massachusetts which support the entry of minority youth into health careers and interpreter training, and offer continuing education programs for health professionals. The BU AHEC is the center whose specific charge is the development of primary care training opportunities for medical students and residents. Programs include the Cooperative Mentorship Program, the Summer Externship Program, offering health career courses, and the development of primary care teaching sites.

www.bumc.bu.edu/busm-ahec/boston-university-area-health-education-center/

617-638-5110

Boston University School of Public Health Practice Office

The Boston University School of Public Health (BUSPH) serves as a convener and host for initiatives that focus on critical issues for the local public health community. Combining service, education, and research, the Practice Office has taken on a range of issues, including emergency preparedness, workforce training & credentialing, practice-based research and disparities in public health services. Building bridges between the communities and neighborhoods that surround the Boston University Medical Campus, the School's goal is to join with community organizations to identify and address public health issues that are of concern to its neighbors.

www.sph.bu.edu/index.php/Practice 617-638-4656

Cancer Center

The mission of the Boston University School of Medicine's Cancer Center is to serve as a preeminent regional and national leader in cancer control and treatment by forging creative, transdisciplinary pathways from the research bench, to the patient bedside, and into the diverse communities affected by cancer. The center sponsors educational programs, and its staff conducts patient-care activities at the Boston Medical Center and other hospitals affiliated with the School of Medicine. The Boston Medical Center provides patient cancer care through the Departments of Surgical Oncology, Radiation Oncology, Surgery, Medicine, the Section of Hematology/Oncology, Clinical Trials Office, and Boston Medical Center Support Groups.

www.bumc.bu.edu/cancercenter 617-638-4173

Cancer Research

The cancer research activities of the Boston University Cancer Center are organized into three programs: two programs are translationally based (the Translational Cancer Research Program and the Hormone-Responsive Cancers Research Program) and one program is population-based (Cancer Prevention and Control in Diverse Populations). Investigators in different research programs collaborate extensively, allowing greater opportunity for interdisciplinary and translational research. The goals of the Cancer Prevention and Control in Diverse Populations Program are to improve the scientific bases of cancer control, especially in understudied

populations; study methods of promoting equity of access, treatment, and outcomes of health care for people with cancer and people at risk for cancer; and develop and evaluate strategies to reduce disparities in the incidence, prevalence, and burden of cancer and related adverse health conditions that exist among specific population groups. In keeping with the mission of the National Cancer Institute, the program seeks to improve the health of disadvantaged, underserved, and vulnerable populations, both locally and globally, through collaborative cancer research efforts that bridge the molecular/microscopic view and the person/population view. Investigators in the program present expertise in epidemiology, biostatistics, statistical genetics, gerontology, sociology, and psychology.

www.bumc.bu.edu/cancercenter 617-638-4173

Center for Addictions Research & Services

The Boston University Center for Addictions Research & Services, based in the School of Social Work, addresses a broad range of addiction issues affecting individuals, families, and communities struggling with substance abuse, HIV/AIDS, and the problems of access to substance abuse treatment.

www.bu.edu/ars/ 617-353-7222

Center for Community Health Education Research & Service

The Center for Community Health Education Research & Service (CCHERS) was founded in 1991 with a grant from the W. K. Kellogg Foundation. Its goal is to increase access to and improve the quality of health care for Boston's multi-cultural and multi-lingual communities by developing partnerships between academia and Boston's neighborhood health centers. The partnership is comprised of Boston Medical Center, the Boston Public Health Commission, Boston University School of Medicine, Northeastern University Bouvé College of Health Science, and an established network of fifteen community health centers serving the racially and ethnically diverse populations of Boston. The center also established the Community Advocacy Program, an integrated and coordinated community health center response to domestic violence in the Boston neighborhood of Dorchester in collaboration with the Boston Medical Center, Boston Public Health Commission, and Northeastern University School of Law.

www.bumc.bu.edu/busm-ome/cchers-program 617-638-5110

Center for Neurorehabilitation

The Center for Neurorehabilitation at Boston University's College of Health & Rehabilitation Sciences: Sargent College offers physical therapy, educational programs for health care professionals and the community, and expert advice regarding rehabilitation and exercise for those living with Parkinson's disease (PD) and their families. With support from the American Parkinson's Disease Association, Inc., the center houses the only National Rehabilitation Center for People with PD in the country and serves the professional and patient community through education at support groups, conferences, and local hospitals. The center also has a toll-free helpline with an "Ask the Expert" format for questions regarding community resources and information regarding exercise.

www.bu.edu/neurorehab 617-353-7525

Chelsea Head Start (CAPIC) Oral Health Program

Through the Boston University Goldman School of Dental Medicine's Preschool-Based Oral Health Programs, dental education, screenings, and fluoride applications are provided twice each year for 250 Head Start children three to five years of age enrolled in the CAPIC Head Start (Chelsea, Revere, Winthrop) Program. An oral health workshop is offered to CAPIC parents that includes a description of the Goldman School of Dental Medicine oral health services to CAPIC, the availability of dental services at the Chelsea School Dental Center, and information on a variety of dental and nutrition topics pertinent to parents of young children. A representative of the dental school is an active member of the CAPIC Head Start Health Advisory Committee.

www.bu.edu/dental/community/health-programs/preschool/ 617-638-5222

Chelsea School Dental Center

Since opening in April of 2003, the Chelsea School Dental Center (CSDC), managed by Boston University's Goldman School of Dental Medicine and located in the Williams Middle School, has provided preventive and restorative services for thousands of children. Four bilingual dentists treat patients in this full-service clinic. The CSDC gives care to Chelsea public school students regardless of their grade level or ability to pay for services. Many of the patients, who range in age from preschoolers to high school seniors, have never been to the dentist and would have no other source of dental care if it were not for the CSDC.

www.bu.edu/dental/community/health-programs/school-based/ 617-638-5222

Child and Adolescent Fear and Anxiety Treatment Program

Anxiety disorders are one of the primary mental health problems affecting children and adolescents today. The Child and Adolescent Fear and Anxiety Treatment Program at the Boston University Center for Anxiety & Related Disorders offers clinical services to young people experiencing difficulty with fears, anxiety, or shyness. The program provides comprehensive evaluations and cognitive-behavioral treatment for children and adolescents between the ages of 3 and 17. For certain child populations and disorders, the program provides behavioral parent training as well as online services delivered directly to the home of families struggling with

difficult preschoolers. The center offers a one-week Intensive Treatment Program for Adolescents with Panic Disorder with Agoraphobia.

www.bu.edu/card/clinical-services/child-programs/ 617-353-9610

Child Witness to Violence Project

Under the auspices of the Department of Developmental & Behavioral Pediatrics at the Boston Medical Center on the Boston University Medical Campus, this project provides services to young children and their families who have witnessed community or domestic violence, and offers training for professionals who treat victims. The goals of this service are to provide direct counseling intervention to children and families who are referred to the program and to provide training and consultation to caregivers of children affected by trauma and domestic violence.

www.childwitnesstoviolence.org 617-414-4244

Comprehensive Care Program

This pediatric care and services program at Boston Medical Center enhances the quality of health services and social support for children with complex medical conditions. It is a primary-care program for children from birth to 18 years old, offering medical, case management, and home-visiting services.

www.bmc.org/pediatricscomprehensivecare.htm 617-414-5506

Countdown to Kindergarten Celebration

Thousands of children and parents attend this annual celebration held at the Boston Children's Museum to help prepare preschool children for entry into kindergarten. Throughout the school year leading up to the celebration, smaller school readiness events are held in various Boston neighborhoods. At both the annual celebration and school readiness events, the Boston University Goldman School of Dental Medicine provides oral screenings for children, hosts tooth brushing and dental arts and crafts stations, and distributes oral health information and oral hygiene materials.

www.countdowntokindergarten.org 617-635-6816

Crispus Attucks Children's Center

Dental screenings and oral health education are offered by faculty and students of the Boston University Goldman School of Dental Medicine each year to the children enrolled in Crispus Attucks Children's Center in Dorchester. The center with 15 classrooms serves children between the ages of six weeks to six years. www.crispus-attucks.org/ 617-445-1420

Entre Familia

Entre Familia is a 6-12 month residential substance abuse treatment program under the auspices of the Boston Public Health Commission that provides bilingual/bicultural, gender-specific, substance abuse treatment to pregnant and postpartum Latina women and their children.

www.addictions@bphc.org 617-534-2922

Framingham Heart Study

The renowned Framingham Heart Study, the longest-running study of cardiovascular disease, is funded by the National Heart, Lung and Blood Institute and is run in partnership with the Boston University School of Public Health and the Boston University School of Medicine. The Statistics & Consulting Unit of Boston University's Department of Mathematics & Statistics also participates.

www.framinghamheartstudy.org 508-935-3418

Good Grief Program

For more than twenty years, the Good Grief Program at Boston Medical Center's Pediatrics Services has offered clinical, training, and consultative services to families, educators, and health providers and communities to help adults help children facing traumatic situations. When children and families face any of life's stressors, they can feel overwhelmed, whether it's acute or on-going, due to illness, a disruption in the family, a death or a divorce, or a difficult diagnosis. The Good Grief Program's mission is to train adult professionals, support families, and teach children to be resilient in the face of loss. This program of the Boston Medical Center trains teachers and child-care professionals nationwide to help children who are facing loss by helping these kids master coping skills. The program is open to health-care and mental health professionals as well as educators. The program also works closely with doctors, nurses, and social workers who treat children and their families facing a life-challenging illness.

www.bmc.org/pediatrics-goodgrief.htm 617-414-4005

Grow Clinic

The Grow Clinic for Children is an outpatient subspecialty clinic at Boston Medical Center's Department of Pediatrics to provide comprehensive specialty medical, nutritional, developmental, and social services and dietary assistance to children from the Greater Boston area referred with Failure To Thrive (FTT) by their primary care physician. Since the clinic was founded in 1984, more than 1,650 FTT children have graduated from the program.

www.bmc.org/pediatrics/services/Specialty/Development/GrowClinic/Index.html

617-414-5251

Head Start/Early Head Start Health and Resource Fair

At this Action for Boston Community Development (ABCD) health and resource fair held in Dorchester, Boston University Goldman School of Dental Medicine faculty and students set up a table to promote oral health, education, and age-appropriate hands-on activities relevant to the parents whose children qualify for Head Start and Early Head Start.

www.bostonabcd.org 617-574-8750

Health Care Affiliates

There are 25 New England hospitals, 15 neighborhood health centers, and numerous health care agencies affiliated with the Boston University School of Medicine. The Boston Medical Center and the Boston Veterans' Administration Medical Center are the School's principal affiliates in addition to many community hospitals. Students and faculty from the School of Medicine treat thousands of patients annually in these facilities.

www.bmc.org/about/affiliates/BostonHealthnet.htm 800-841-4325

Health Connection

This free health information and referral service is provided by Boston Medical Center and is staffed by registered nurses. Callers have access to a medical professional who determines the caller's needs, assesses the immediacy of care or services needed, and answers medical questions. Additionally, nurses have access to a broad array of cancer information support services listings. Nurses are especially helpful to those callers who are uninsured and are having difficulty accessing appropriate health services. Health literature is provided upon request.

www.bmc.org/patients/healthconnection.htm 800-841-4325

Health Reform Program

With a commitment to advance affordable financial coverage and accessible health care for all residents of the Commonwealth, the Health Reform Program at the Boston University School of Public Health performs research and policy analysis on health care costs, ways to control cost, and ways to improve both coverage and caregiver configuration.

www.healthreformprogram.org 617-638-5042

Healthy Athletes[®] Special Smiles[®] Initiative

Boston University's Goldman School of Dental Medicine faculty, staff, and students come together with other dental schools, hygiene schools, and dental practitioners at the Special Olympics Massachusetts games each year. At the games, volunteers provide free dental screenings to the Olympians as part of the Healthy Athletes[®] Special Smiles[®] Initiative.

www.specialolympicsma.org/ 508-485-0986

Healthy Baby Healthy Child (HB/HC) Oral Health Promotion Program

Boston University's Goldman School of Dental Medicine (GSDM) has developed an oral health promotion model aimed at preventing early childhood caries which targets high-risk pregnant women and their children. Of particular importance are those living in communities that are disproportionately impacted by infant mortality and other health disparities. As part of the intervention, GSDM faculty train public health nurses from the Boston Public Health Commission's HB/HC home visitation program to carry out basic oral health assessments and provide oral health education to their clients. The dental school also participates annually in the Boston Health Commission's HB/HC summer camp picnic activities.

www.bu.edu/dental/community/ 617-638-5222

HIV Dental Care / Ryan White

Through support from the Ryan White Care Act, Boston University's Goldman School of Dental Medicine provides treatment, which is mostly uncompensated, to patients with HIV and AIDS throughout New England. A network for education referral has been established and includes Cambridge Cares about AIDS, Boston University Medical Center, the AIDS Support Group of Cape Cod, and others.

www.bu.edu/dental/patients/ryanwhite 617-638-5499

HIV Mobile Prevention and Clinical Care for Latino Injection Drug Users/La Voz

The Boston University School of Social Work's Center for Addictions Research & Services team are conducting a comprehensive outcome evaluation of this research effort, and trained La Voz staff on using evidence-based practices over the five-year study. This five-year longitudinal research effort (2006–2011) examines whether mobile HIV outreach, education, testing, and mental health counseling services reduce HIV risk behaviors (e.g., sharing needles) among the target population of Latino injection drug users. The intervention services are provided by Tapestry Health, a leading community-based health care center in western Massachusetts. This region has one of the highest HIV incidence rates related to injection drug use in the nation, with the Latino population disproportionately affected. Through this new effort, La Voz has acquired and adapted a van to serve as a mobile facility in which outreach workers, a nurse practitioner, and a mental health counselor will provide a wide range of physical and mental health screenings, services, and referrals.

www.bu.edu/ssw/research/curr_proj/proj/la_voz_mobile/ 617-353-7222

Horizons for Homeless Children

Boston University's Goldman School of Dental Medicine's faculty and students offered oral health education, screenings, and fluoride varnish treatments to all children ages 6 weeks to 6 years enrolled at Horizons for Homeless Children in Dorchester, Jamaica Plain, and Roxbury. Horizons for Homeless Children is an independent, nonprofit organization dedicated exclusively to serving young homeless children and their families.

www.horizonsforhomelesschildren.org/ 617-553-5455

IBA Educational Fair

Inquilinos Boricuas En Acion (IBA) is an organization established to support the development and empowerment of the Villa Victoria community in Boston's South End. Faculty and Spanishspeaking students from Boston University's Goldman School of Dental Medicine present oral health workshops at this family health fair, providing oral health education and hands-on activities for young children and their parents in attendance. The fair is held in the Boston University Medical Campus neighborhood and attended by many people with Spanish as their first language.

www.iba-etc.org/ 617-927-1707

Lawrence Dental Sealant Program (SEAL Lawrence)

Boston University's Henry M. Goldman School of Dental Medicine faculty provide second- and third-grade children in 10 elementary schools in the City of Lawrence with oral health education,

dental screenings, fluoride varnish, and sealant placement. Each year hundreds of children benefit from this school-based service program.

www.bu.edu/dental/community/ 617-638-5222

Massachusetts Center for SIDS

Boston Medical Center's Department of Pediatrics houses the Massachusetts Center for Sudden Infant Death Syndrome (SIDS) and the Massachusetts Infant and Child Death Bereavement Program. These services provide counseling and information to families throughout Massachusetts whose infants and young children, ages 0-3, die suddenly and unexpectedly of sudden infant death syndrome and other causes. The SIDS center, established in 1975, provides an integrated, comprehensive, professional and compassionate response to bereaved families. The center also provides 24-hour crisis counseling, counseling provided by community-based bereavement counselors, and parent support group meetings.

www.bmc.org/pediatrics-MA-SIDS.htm 617-414-7437

Massachusetts Operation Stand Down for Homeless Veterans

Massachusetts Stand Down is an annual two-day, multi-service, veteran-sponsored intervention in Boston designed to address the problems of homelessness among military veterans. Hundreds of homeless veterans have access to free food, clothing, and health care, as well as psychiatric and social work services, at this event. Each year Boston University's Goldman School of Dental Medicine faculty, staff, and students provide oral health education and dental screenings for the veterans in attendance.

www.voamass.org/Services/Veterans-Services/Operation-Stand-Down-2 617-390-0236

Mattapan Community Health Center's Health Care Revival

An annual health fair in Mattapan provides information on various health topics and community resources. Boston University's Goldman School of Dental Medicine faculty and students share a dental tent with dental staff from the Mattapan Community Health Center, working to promote dental health by offering dental screenings and interactive activities related to dental and overall health.

www.mattapanchc.org/ 617-296-0061

MetroWest School-Based Sealant Programs

With generous support from the MetroWest Community Health Care Foundation, Boston University's Henry M. Goldman School of Dental Medicine provides an oral health education,

screening, and sealant placement program for second graders in all eight public elementary schools in Framingham and all five public elementary schools in Natick.

www.bu.edu/dental/community/ 617-638-5222

MGH Chelsea Summer Safety Fair

The MGH Chelsea Health Center's Summer Safety Fair is an annual summer kick-off celebration that focuses on keeping children safe during the summer months. Children bring their bicycles for safety checks and receive free bike helmets. Each year Boston University's Goldman School of Dental Medicine offers information about the use of mouth guards and the importance of dental visits, and children are invited to make an appointment to receive dental services at the Chelsea School Dental Center.

www.massgeneral.org/chelsea/ 617-884-8300

Mother Caroline Academy

A day of health and wellness called "You Go Girl" is held at Mother Caroline Academy, an allgirls' school in Roxbury. Boston University's Goldman School of Dental Medicine faculty and students present lessons on oral health using interactive activities and discuss dental careers with the student participants.

www.mcaec.org/ 617-427-1177

MS Wellness Center

In conjunction with the New England Chapter of the National Multiple Sclerosis Society, Boston University's College of Health & Rehabilitation Sciences: Sargent College offers different wellness programs for individuals with MS. Some programs have included CogniFit brain training, Proud Parenting, Free From Falls prevention program, Fatigue: Take Control energy management program, and more. The programs are evidence-based and assisted by occupational therapy students from Boston University.

www.nationalmssociety.org/chapters/mam/index.aspx 617-358-1064

National Emerging Infectious Diseases Laboratories

The National Emerging Infectious Diseases Laboratories (NEIDL) is part of a national network of secure facilities that will study infectious diseases that are or have the potential to become major public health concerns. The facility is located within BioSquare, a biomedical research and business park adjacent to the Boston University Medical Campus. The laboratories are dedicated to the development of diagnostics, vaccines, and treatments to combat emerging and re-emerging infectious diseases. The NEIDL adds to the growing life sciences industry in the region, throughout the Commonwealth of Massachusetts, and across the country. The NEIDL uses state-of-the-art technologies designed to conduct research in safe and secure environments; the facility was designed and constructed with the highest attention to community and laboratory safety and security. The NEIDL represents a major step forward in advancing public health and solidifying the New England area's reputation as the biomedical research hub of the nation. Supported by all local research institutions, the 192,000 square-foot, 7-story building serves as a venue and resource for training researchers in infectious diseases.

www.bu.edu/neidl 617-353-9095

National Public Health Week

During National Public Health Week, Boston University School of Public Health (SPH) students, with support from faculty and staff, conduct high school education programs in Boston Public Schools. SPH students speak with high school students about the relevance of public health in their everyday lives, health promotion, disease prevention, and health protection.

www.nphw.org 617-414-1402

Outreach Van Project

The Outreach Van Project is a student-run community service staffed by volunteers from Boston University's School of Medicine and School of Public Health to provide health care to the medically underserved and homeless communities. Faculty and students go out one evening per week to East Boston to conduct free screenings and distribute clothing and other basic necessities to approximately 20 to 30 people weekly during the colder months and 65 to 75 people weekly when the weather is warmer. The Henry M. Goldman School of Dental Medicine provides dental supplies for distribution to the many people served through this very beneficial outreach program.

www.people.bu.edu/outreach 617-872-7782

PAIRS Program

The PAIRS program (Partnering in Alzheimer's Instruction Research Study) is an educational program of the Boston University Alzheimer's Disease Center for students at the School of Medicine and patients with early stage Alzheimer's disease and other cognitive impairment. The program provides first-year medical students with the opportunity to informally interact with patients in order to increase their knowledge of Alzheimer's and improve their attitudes about Alzheimer's. The PAIRS program is generously funded in part by the Kenneth B. Schwartz Center and the Arnold P. Gold Foundation. The Alzheimer's Disease Center is jointly based at the Boston University Medical Campus and Bedford VA Medical Center in Massachusetts.

www.bu.edu/alzresearch/education-resources/education/pairs/ 617-414-1077

Parkinson's Disease & Movement Disorders Center

The Parkinson's Disease & Movement Disorders Center at Boston University School of Medicine/Boston Medical Center, established in 1978, offers comprehensive programs of clinical care, research, education, and support for individuals and families with Parkinson's disease and movement disorders. The center conducts basic and clinical research in collaboration with other disciplines to determine the cause, and study new treatments in movement disorders; and trains medical students, residents, and fellows to deliver comprehensive neurological care and advance new knowledge in the clinical neurosciences. The program administers an information and referral center that responds to more than 3,000 telephone inquiries every year.

www.bumc.bu.edu/parkinsondisease 617-638-7737

Partnership for Effective Emergency Response

The Partnership for Effective Emergency Response (PEER) is a collaborative effort to enhance the communication capacity in the greater Boston metropolitan area during response to health and medical emergencies and disasters. PEER is coordinated by the Public Health Practice Office at the Boston University School of Public Health. PEER includes the five discipline areas of hospitals, local health departments, long-term care facilities, ambulance services, and community health centers that serve 2.2 million people and 62 cities and towns in Preparedness Regions 4A, 4B, and 4C.

sph.bu.edu/otlt/peer/ 617-638-4665

Patient Treatment Center, Medical Campus Location

Working under the close supervision of dental faculty, Boston University's Henry M. Goldman School of Dental Medicine students provide affordable dental treatment at the Patient Treatment Center located at 100 East Newton Street, Boston, MA 02118. New patient reception is located on the first floor.

www.bu.edu/dental/patients/treatment-center/ 617-638-4672

Physical Therapy Practicum

As part of a two-semester practicum academic course at the Boston University College of Health & Rehabilitation Sciences: Sargent College, graduate physical therapy students develop health promotion and educational programs for Boston and greater Boston community sites. Programs include the development of exercise classes at Rosie's Place, an inclusion dance program at the Dorchester Boys and Girls Club, designing an intercollegiate adapted sports program to be held in Boston, development of a physical activity and wellness program for adolescents with disabilities at the Boston Ability Center, working with the Boston University Special Olympics to help prepare teams, and developing physical activities for children with autism through the Children's Hospital Adventure Challenge Program.

www.bu.edu/sargent/academics/departments/programs-in-physical-therapy-athletic-training/

617-353-2713

Prevention Research Center

The Partners in Health and Housing Prevention Research Center (PHH-PRC) is one of 35 centers nationally, funded by the Centers for Disease Control (CDC). It is an equitable partnership among Boston University School of Public Health, the Boston Housing Authority, the Boston Public Health Commission, and the Community Committee, which is comprised of public housing residents and community advocates. Through these partnerships, the center works to improve the health and well-being of the residents of public housing by engaging them in community-centered research programs and activities, as well as addressing the U.S. Department of Health and Human Services Healthy People 2010 national goals of improving health status and reducing health disparities. Specific activities of the PHH-PRC include resident health screenings followed by clinical referrals, training of resident community health advocates, and conducting smoking cessation projects.

www.phhprc.com 617-638-5036

Project Welcome: Survivors of Torture Oral Health Program

In collaboration with the Boston Center for Refugee Health and Human Rights (BCRHHR), since 1999 the Boston University Goldman School of Dental Medicine has assessed the oral health needs of torture survivors through the Project Welcome: Survivors of Torture Oral Health Program. Refugees participating in this program benefit greatly from the oral health education, dental screenings and referrals, and free dental home-care products they receive.

www.bu.edu/bcrhhr/ 617-414-4794

Psychopharmacology Special Programs

The Clinical Studies Unit of the Department of Psychiatry at Boston Medical Center provides research-based treatment and support for individuals who qualify for one of the alcohol and/or substance abuse programs. No health insurance is needed. Those who are eligible will receive study medication and outpatient study-related medical care including physical exam, lab work, and follow-up visits at no cost.

www.bumc.bu.edu/psychiatry/research/clinical-studies-unit/ 617-414-1995

Rosie's Place: Childworks Program, Dental Health Fair

Each year Boston University's Goldman School of Dental Medicine faculty and students from its chapter of the American Association of Women Dentists (AAWD) set up an interactive dental health fair for children at Rosie's Place, a sanctuary for poor and homeless women located in Boston's South End. Children are taught about the importance of good dental hygiene and how to properly care for their teeth by use of a dental passport to guide them through each of the fair's six dental-themed stations. At the end of the tour the children receive goodie bags full of prizes along with a toothbrush and toothpaste.

www.bu.edu/dental/about/offices/extramural/apex/ 617-638-8510

Rosie's Place: "Women to Women" Program

In March 2011, the Boston University Goldman School of Dental Medicine's faculty and the student chapter of the American Association of Women Dentists (AAWD) launched a monthly community service initiative named "Women to Women," aimed at improving the oral health of the women of Rosie's Place. The main goal of the monthly events is to improve the oral health of the women by providing screenings and educational information, and answering any medically related questions. The dental school has a long-standing program that enables the women associated with Rosie's Place to get free basic dental care.

www.bu.edu/dental/about/offices/extramural/apex/ 617-638-8510

Sargent Choice Nutrition Center

The Sargent Choice Nutrition Center at Boston University's College of Health & Rehabilitation Sciences: Sargent College provides a variety of nutrition services and health promotion

programs addressing health risk factors such as weight, cholesterol, blood pressure, and diabetes. Popular topics also include vegetarian and sports nutrition. The center was established in 2004 to expand a successful pilot nutrition & physical activity program developed for Boston University faculty and staff. In 2005, the Sargent Choice Nutrition Center began collaborating with BU Dining Services, the Fitness & Recreation Center, BU Residence Life, Student Health Services, and Occupational Health to increase health and wellness opportunities across the Charles River Campus. Currently the Sargent Choice Nutrition Center is staffed by five full-time, licensed registered dietitians and provides a variety of services to the BU community and the general public.

www.bu.edu/nfc/ 617-353-2721

Smart Smiles in Boston Public Schools

The Boston University Goldman School of Dental Medicine, through its Smart Smiles in Boston Public Schools program, provides dental health education, oral screenings, fluoride applications, and dental sealants to thousands of children in 30 Boston public elementary schools. Highlighting Boston University's commitment to Mayor Menino's Step UP initiative, Smart Smiles operates in two Step UP schools, the William Monroe Trotter School and English High School.

www.bu.edu/dental/community/ 617-638-5222

Speech, Language & Hearing Center

The Speech, Language & Hearing Center is located within the Boston University College of Health & Rehabilitation Sciences: Sargent College. This academic center provides a low-cost alternative for speech and language evaluations and therapy in the Boston community. Clients from toddlers to adults may be seen for comprehensive communication evaluations and/or therapy services. Services are provided by graduate students who are closely supervised by Boston University faculty, who are licensed, certified speech-language pathologists.

www.bu.edu/sargent/clinical-practice/clinical-centers/speech-language-hearing-center/

617-353-3271

Stepping Forward—Staying Informed Consumer Education Program

The Stepping Forward—Staying Informed Consumer Education Program is an innovative educational program designed to inform individuals living with spinal cord injury, their family members, and health care professionals working in the field of spinal cord injury. The program offers this educational opportunity in an environment where researchers and clinicians from around the country present their work in terms easily understood by those without a medical or scientific background.

www.bmc.org/sciedu 617-638-7389

Tet in Boston Festival

The Tet in Boston Festival is dedicated to encouraging community involvement and preserving Vietnamese culture through the celebration of Tet, the Vietnamese Lunar New Year. Tet in Boston festivities are held each year in January or February at various locations in the greater Boston area. Boston University's Goldman School of Dental Medicine faculty and student volunteers from its chapter of the Vietnamese Student Dental Association contribute to the achievement of Tet in Boston's education, social, and economic goals by offering oral health information, dental screenings, and dental arts and crafts for children. Additionally, oral screenings are offered and free oral hygiene supplies and materials are given out.

www.bu.edu/dental/community/health-programs/community-based/ 617-638-1131

Wang YMCA Holiday Party

At the annual holiday party at the Wang YMCA in Chinatown in December, Boston University's Goldman School of Dental Medicine students provide oral health education and hand out free mouth guards, toothbrushes, toothpaste, and educational materials to attendees.

www.ymcaboston.org/wang 617-426-2237

A.7 SOCIAL ACTION OUTREACH PROGRAMS AND SERVICES

Afterschool

Volunteers from Boston University's Community Service Center travel to various schools and community centers in greater Boston to offer tutoring, one-on-one homework assistance, and creative activities for students in pre-K to 12th grade. The program allows Boston University volunteers to interact with the community, create lasting friendships with fellow volunteers, and mentor the children they work with.

www.bu.edu/csc/programs/afterschool 617-353-4710

Alpha Phi Omega

Alpha Phi Omega is a co-ed service fraternity organized to provide community service, leadership development, and social opportunities. The Boston University chapter keeps a strong relationship with the University's Community Service Center and other community service groups on and off campus. Volunteers have served organizations and events such as Rosie's Place, Student Food Run, Dance Marathon, Relay for Life, Special Olympics, Boston MSPCA, BARCC Walk for Change, Habitat for Humanity Sleep Out, and the Boston Marathon.

www.bu.collegiatelink.net/organization/alphaphiomegazetaupsilon 617-353-4710

Alternative Spring Break

Alternative Spring Breaks (ASB) provides students with a substitute for the conventional college spring break experience while simultaneously encouraging the student body's passion for service. ASB seeks to provide Boston University students and faculty/staff volunteers with opportunities to address the critical concerns of the nation in a meaningful and mutually beneficial way. Last year, ASB had 300 volunteers, 72 coordinators, 36 chaperones, 5 committee chairs, and program managers traveling to 36 places throughout the U.S. and Puerto Rico.

www.bu.edu/csc/programs/asb 617-353-4710

Belle of the Ball

Volunteers from Boston University's College of General Studies Community Service Club collect prom dresses, shoes, jewelry, and accessories to be provided free of charge to needy high school students. The volunteers also help the high school girls pick out their dresses, shoes, makeup, and accessories for their proms.

www.bu.edu/cgs/students/cgs-community-service-club-2/ 617-353-4710

Bicycle Safety Days

The Boston University Police Department Bicycle Unit joins with the Boston Police Bicycle Unit to provide an information table at events for bicycle users in the Boston University area at which cyclers are provided safety helmets and information on bike safety. The Boston University Transportation & Parking Services Bike Safety Committee hosts bike safety days and administers an online bicycle registration program to support, promote, and increase awareness about this important transportation option.

www.bu.edu/bikesafety/ 617-353-2160

Boston Chinatown Neighborhood Center Youth Program Thanksgiving Dinner

Students of the Boston University Goldman School of Dental Medicine help celebrate Thanksgiving with youth members of the Boston Chinatown Neighborhood Center (BCNC). The students pitch in to help take photos for the BCNC youth group bulletin board, assist with a scavenger hunt activity, and serve Thanksgiving dinner.

www.bcnc.net/ 617-635-5129

Children's Theatre

Student volunteers from Boston University's Community Service Center write, rehearse, and perform their own original skits and sketches centered on virtues including the power of family, imagination, and self-esteem for kids in need. Performances are offered free of charge. Volunteers have traveled to Shriner's Burn Hospital, the Home for Little Wanderers, and various Head Start programs across Boston.

www.bu.edu/csc/programs/ct 617-353-4710

China Care Fund

The Boston University China Care Fund (BUCCF) is a student-run organization empowering youth to create growing opportunities for Chinese orphans and provide cultural experiences for adopted Chinese children in the local Boston community. In 2011, the China Care Fund launched the "Dumplings Playgroup" for adopted Chinese children to increase the children's awareness of and appreciation for their Chinese language and cultural heritage and to provide a venue where adoptive families can meet and network.

www.buccf.weebly.com/ 617-353-3635

Civil Litigation Program

The Civil Litigation Program at the Boston University School of Law, provides free legal services to low-income clients in the Boston area in civil cases, such as domestic relations, employment, disability, housing, and immigration. Second- and third-year law students represent their clients under the supervision of a clinical law teacher in all aspects of the cases. The Civil Litigation Program, which began in 1968, operates out of the offices of Greater Boston Legal Services (GBLS) and takes cases through GBLS only. Students and faculty represent over 200 clients a year.

www.bu.edu/law/central/jd/programs/clinics/civil 617-353-3148

Crafts for Charity

Crafts for Charity, a student organization under the auspices of the Boston University Student Activities Office, creates and distributes handmade crafts to hospitals, elderly homes, and homeless shelters in the greater Boston area.

www.bu.collegiatelink.net/organization/craftsforcharity 617-353-3635

Criminal Law Clinics

For more than 45 years, second- and third-year law students have served the Boston area through participation in the Criminal Law Clinics program at the Boston University School of Law. Students in the Defense Program are responsible for the defense in about 200 criminal cases annually in the Boston Municipal Court and the Boston Juvenile Court, representing indigents who would otherwise require a court-appointed attorney. Students in the Prosecution Program represent the Norfolk County District Attorney's Office in cases in the Quincy District Court, prosecuting about 100 cases annually. All cases are closely supervised by faculty members who are practicing attorneys.

www.bu.edu/law/central/jd/programs/clinics/criminal/ 617-353-3131

Dumbledore's Army

Dumbledore's Army is the Boston University chapter of the Harry Potter Alliance, a nonprofit national organization that uses students' enthusiasm for *Harry Potter* to inspire a similar passion for volunteer work within the University and local community. The student group operates under the auspices of the Boston University Student Activities Office.

www.bu.collegiatelink.net/organization/buda 617-353-3635

Holiday Reading Program

This past year marked the 15th annual Boston University Holiday Reading program in conjunction with the Boston University Government & Community Affairs office. As in past years, varsity student-athletes from Boston University visited elementary schools in the city of Boston and read to young students. Each child was given a book and each classroom received a special book, all donated by Barnes & Noble @ Boston University. In 2012, over 230 student-athletes signed up to take part before their finals got under way, helping to persuade hundreds of grade school youth that reading is cool.

www. GoTerriers.com 617-353-2078

Human Trafficking Clinic

The Human Trafficking Clinic at the Boston University School of Law offers a unique opportunity for students to work on legal cases of human trafficking, a widespread and serious human rights violation. Clinic students provide a variety of legal services, including direct representation of non-citizens trafficked into the United States, advocacy for trafficking survivors, and community education and training.

www.bu.edu/law/central/jd/programs/clinics/human-trafficking/ 617-353-3148

Hunger Relief

Hunger Relief is a campus-wide organization at Boston University dedicated to fighting hunger in the greater Boston area by volunteering every weekend at homeless shelters and food banks as well as conducting food drives for local shelters and pantries each semester.

www.people.bu.edu/hunger 617-353-4710

Immigration Detention Clinic

The Immigration Detention Clinic at the Boston University School of Law covers issues of detention in the immigration context, including federal detention standards and release from detention through bond and parole. Law students visit local detention facilities to provide intake and assistance to individuals in immigration custody. They may also provide limited representation in bond proceedings before the immigration court.

www.bu.edu/law/central/jd/programs/clinics/immigration-detention/ 617-353-3148

Life Skills Lab

The Life Skills Lab at the Department of Occupational Therapy at Boston University's College of Health & Rehabilitation Sciences: Sargent College offers ongoing classes in money management,

food and nutrition, home safety and self-care, and safe community participation to individuals with disabilities who are homeless or at risk for repeated homelessness in the Boston area. Goals are focused on improving individuals' abilities to maintain housing and on encouraging community involvement. The curriculum is also used in projects with the VA in Seattle, WA and the Division of Mental Health in Massachusetts. Students from the entry-level occupational therapy program have the opportunity to complete a thesis or fieldwork with the project, exposing them to both research and community practice.

www.bu.edu/sargent/academics/departments/programs-in-occupational-therapy/

617-353-8947

Making Music

The Making Music program brings music education to Boston public schools, under the auspices of the Boston University Community Service Center. Boston University volunteers offer instrumental, vocal, or dance lessons to elementary school students at three Boston schools: Farragut Elementary, Thomas A. Edison School, and JP Manning Elementary. The year ends with a recital at which students and volunteers perform pieces they've learned. Volunteers introduce children to music or dance and form a bond with students.

www.bu.edu/csc/programs/makingmusic 617-353-4710

Multicultural Advancement Partnership Program

The Multicultural Advancement Partnership Program (MAPP) is coordinated by the Boston University Community Service Center. Volunteers work with immigrants, refugees, international students, and other foreign residents to assist them in their understanding of the English language, enhance their experience in America, and work toward a greater understanding of human rights in Boston. Volunteers work in community centers throughout the Boston area and are paired with conversation partners through the Center for English Language & Orientation Programs (CELOP).

www.bu.edu/csc/programs/mapp 617-353-4710

Mural Club

Mural Club, a volunteer group under the auspices of the Boston University Student Activities Office, designs and paints murals around Boston on walls that are covered in obscene or inappropriate graffiti, seeking to beautify school grounds and parks that have been defaced.

www.bu.collegiatelink.net/organization/muralclub 617-353-4710

Oxfam Fast for a World Harvest

This student-run fast program that raises funds to help alleviate global poverty and hunger was first implemented at Boston University in 1988. Boston University consistently raises more money for this program than any other college or university in the Boston area. All money raised goes to Oxfam, a nonprofit organization focused on spreading social justice and economic equality across impoverished regions of the world.

www.bu.edu/csc 617-353-4710

Project Hope

Project Hope is a program within the Boston University Community Service Center that seeks to show compassion for, gain understanding of, and educate others about HIV/AIDS. Project Hope offers students an opportunity to become more involved in HIV/AIDS awareness, prevention, and care. The program works with various organizations in the greater Boston area that provide essential services to those who are at risk or HIV positive, including Cambridge Cares About AIDS, SPARK, AIDS Action Committee, and Community Servings.

www.bu.edu/csc/programs/project-hope 617-353-4710

Shelter Legal Services

Boston University School of Law's Shelter Legal Services is a student group that supplements the work of its parent group, Shelter Legal Services Foundation, Inc. This organization increases access to quality, pro bono legal services for the poor. Since 1991, Shelter Legal Services Foundation, Inc. has combined the volunteer efforts of law students and attorneys to represent and advise more than 3,800 homeless and poor people. Shelter Legal Services Foundation, Inc. now includes student volunteers from Boston College Law School, Boston University School of Law, New England School of Law, and Suffolk Law School. Weekly legal clinics are held at two Boston shelters and three Cambridge locations. Student volunteers, with the assistance of attorneys, staff the weekly legal clinics, advise clients, and advocate in courts and administrative agencies throughout the Commonwealth.

www.bu.edu/law/central/jd/organizations/index.html#sls 617-358-1800

Siblings

Siblings is a one-on-one mentoring program that matches Boston University students (Big Sibs) with children between the ages of 6 and 12 (Little Sibs), and is one of the Boston University Community Service Center's longest-running programs. The program gives children the opportunity to spend time with college students, who serve as positive role models and good friends.

www.bu.edu/csc/programs/siblings 617-353-4710

Student Athlete Volunteer Events

Student athletes at Boston University spend over 3,000 volunteer hours annually in the community. Events have included: Making Strides Against Breast Cancer; Walk Now for Autism Speaks; A Day in the Life; Teddy Bear Toss to benefit Children's Hospital; Thanksgiving and Christmas Distribution for Salvation Army; Susan G. Komen Breast Cancer games; Holiday Reading program; Special Olympics; and working at local soup kitchens and others.

www. GoTerriers.com 617-353-2078

Student Food Rescue

Volunteers from Student Food Rescue (SFR) salvage and then transport more than 150,000 pounds of surplus food annually to area food programs in this program coordinated by the Boston University Community Service Center. The food is donated by local restaurants, supermarkets, and bakeries and is provided to area meal programs, food pantries, and shelters. In June 2005, SFR was named the "most successful student-run food salvage program in the nation" by the National Student Campaign Against Hunger and Homelessness.

www.bu.edu/csc/programs/sfr 617-353-4710

Student Studio

Volunteers working through the Boston University Community Service Center provide afterschool programs that bring art education to nine Boston Public Schools and community centers, especially to those who would not otherwise have access. Through fun and entertaining art lessons, they hope to encourage and promote the importance of art in today's world. This program provides University volunteers the opportunity to form mentoring relationships with their students while learning about art history and developing creative thinking and artistic skills. It also gives student volunteers the chance to truly get involved with the Boston community and take a step outside the classroom to learn about the people, places, and culture of our city.

www.bu.edu/csc/programs/student-studio 617-353-4710

Toys for Tots

The Boston University School of Medicine community donates gifts to Toys for Tots for distribution throughout Boston to children in need during the holiday season.

www.toysfortots.org/ 617-737-0500

United Way

In addition to serving on advisory boards and volunteering with many United Way agencies, the employees of Boston University generously support the United Way of Massachusetts Bay. In the 2011 campaign, faculty and staff contributed more than \$167,000 to the United Way annual campaign.

http://supportunitedway.org/category/free-tag/bu 617-358-UWAY

Violence Intervention Advocacy Program

Doctors and public health practitioners from Boston University and Boston Medical Center have joined to create a model program of advocacy for victims of violence and have taken it statewide to include six hospitals and their communities where the highest levels of gunshot and stab wounds have been documented. Leadership for this program comes from a collaboration of the Boston Medical Center's Department of Emergency Medicine with the BNI-ART Institute at the School of Public Health. The Violence Intervention Advocacy Program (VIAP) at the Boston Medical Center is a joint effort with the Massachusetts Department of Public Health and the Boston Public Health Commission. The intensive case management model for this program, adapted from a Robert Wood Johnson Foundation successful project on the West Coast, links victims with community resources, identifies risks, builds resilience, and helps young people and their families and neighborhoods turn their lives around after a catastrophic event. The program works closely with grassroots organizations, and aims at a seamless integration of prevention efforts on the streets with care provided in the institution and aftercare arranged by VIAP. The program is funded by state and city monies and a grant from the Boston Foundation.

http://www.bu.edu/bniart/ 617-414-8455

Wrongful Convictions Clinic

Students in the Boston University School of Law's Wrongful Convictions Clinic engage in screening applications from prisoners claiming innocence who have requested help from the New England Innocence Project. Participation may involve reading prisoner questionnaires, pleadings, and court opinions in the case, legal research and analysis of the requirements for obtaining a new trial, review of attorney files, and search for forensic evidence in the case.

www.bu.edu/law/courses/jd828.shtml 617-353-3115

Appendix **B**

ECONOMIC RESEARCH METHODOLOGY

APPENDIX B: ECONOMIC RESEARCH METHODOLOGY

B.1 INTRODUCTION

As described by the U.S. Department of Commerce, an organization's economic impact on a region results from a complex combination of inter-industry relationships involving both corporate and consumer spending. Contributing to the total economic impact are the salaries that an organization pays to its employees and the dollars it spends to purchase goods and services from local vendors. For academic institutions such as Boston University, the economic impact also includes expenditures made by its students and their out-of-state visitors.

As described below, an organization's direct expenditures generate two types of additional indirect spending: corporate spending by the vendors who supply (sell) goods and services to the organization and consumer spending by the organization's employees and the employees of its suppliers. This additional indirect spending, in turn, also generates jobs and employment opportunities in the region.

This appendix describes the components of Boston University's direct spending, how the expenditure data were collected, and how the expenditures were allocated by region. It also describes the U.S. Department of Commerce's corporate and consumer spending model and how the Department's regional input-output multipliers are used to compute both indirect spending and additional employment opportunities that result from an institution's direct spending.

B.2 DIRECT SPENDING

The spending and employment data used in this report reflect the University's subsidiary corporations, 660 Corporation, Hotel Commonwealth, and the employees hired by management firms to provide the University's food services (ARAMARK) and parking services (Standard Parking). The 660 Corporation operates various retail stores, such as Campus Convenience.

Direct spending is structured into the five major categories described below.

B.2.1 NUMBER OF EMPLOYEES AND EMPLOYEE SALARIES

Boston University's employee and salary statistics are provided by Human Resources and are generated from the University's payroll system. Anyone who was employed in December of the fiscal year is included. The corresponding data for the subsidiary corporations and management firms (hereafter referred to as the "affiliated organizations") are provided by each organization. The University's employee and salary statistics are computed by region, based on the home address of each employee. External professional, consulting, publishing, and lecture fees earned by faculty and staff are not included.

B.2.2 EMPLOYEE BENEFITS

Total University expenditures for each employee benefit program are provided by the General Accounting Office and by the affiliated organizations. These costs are allocated by region based on employees' home addresses. In accordance with the Department of Commerce's consumer spending model, employer-provided benefits are treated as employee compensation. If employees had to pay the total cost of their benefits, their ability to purchase other goods and services would be reduced. The benefit programs included in this report are:

- Federal Insurance Contributions Act (FICA) tax (Social Security and Medicare)
- Pensions
- Health and Dental Insurance
- Tuition Remission
- Workers' Compensation
- Unemployment Compensation
- Life Insurance
- Disability Insurance
- Other (Accidental Death Benefit Plan, Supplemental Death Benefit Plan, Short-Term Disability Plan, Retirement Death Benefit, Supplemental Retirement & Savings Plan, employee counseling and referral services, bookstore discounts, and miscellaneous)

B.2.3 PURCHASED GOODS AND SERVICES

University expenditures for goods and services derive from reports produced by the University's accounts payable and general ledger systems. The reports are divided into geographic regions based on vendor ZIP codes and show the total dollars expensed in each object code to each vendor. Separate reports are provided for current funds (operating expenses) and for plant funds (capital expenditures). These reports show the Boston University materials codes (commodity codes) assigned by Purchasing Services to appropriate purchases. The University's affiliated organizations provide total-dollar expenditures by region and industry.

B.2.4 NUMBER OF STUDENTS AND STUDENT SPENDING

Institutional Research at Boston University generates a report, based on official Fall Semester student enrollment, that shows the number of students by type of housing (dormitory-style residences, University-owned apartments, or off-campus housing) within each region. Regions are determined from the students' local addresses as recorded on the Registrar's Personal Data File. When a student's local address is not provided, the student's record is reviewed and the student is allocated to the appropriate region. The number of students reported by type of housing and region include undergraduate, graduate, and non-degree students as well as Boston University Academy students.

Boston University publishes a table titled "Estimated Academic and Living Expenses" to illustrate the expenses that students are likely to incur, depending on the type of housing that they select (dormitory-style residences, University-owned apartments, or off-campus housing). The estimated expenses for incidentals (books, transportation, and basic personal expenses), room and board (for students who live off campus), and health insurance (for graduate and non-degree students who live off campus) are applied to the above student counts to estimate what students typically spend for essential goods and services that are not provided by the University. A survey conducted in the spring of 1997 by Institutional Research showed that student spending on entertainment and other non-essential items, for example, health clubs, pets, cable television, and private dance and music lessons, averaged \$50 per student for each week that classes are offered (33 weeks during the academic year, 12 weeks during the summer). This amount is used to calculate discretionary spending by our students.

B.2.5 VISITOR SPENDING

Spending by out-of-state family members and friends who visit Boston University students is estimated using data provided by the Association of Independent Colleges and Universities in Massachusetts in a report titled "The Economic Impact of Massachusetts Independent Higher Education, 1989–90 Academic Year." The spending data in that report (adjusted for inflation) are used to compute an average annual visitor

expenditure per full-time equivalent (FTE) student. Spending is allocated by region based on the students' local addresses.

This report does not estimate spending by out-of-state visitors who come to Boston University each year to attend professional and academic programs; athletic, cultural and social events; and class reunions. These visitors make considerable purchases, which include lodging, food, gasoline, parking, entertainment, and consumer goods.

B.3 INDIRECT SPENDING

The total economic impact of an organization is much greater than the sum of its direct expenditures. Using Boston University materials codes as a guide, direct expenditures are aggregated into 60 industry codes as defined in the Regional Input-Output Modeling System (RIMS II) developed by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce. The total for each of the industry types is multiplied by the regional input-output multipliers in the model to obtain the level of indirect spending produced by direct spending. The multipliers take into account specific inter-industry relationships and the University's impact on corporate and consumer spending patterns in the region.

Indirect corporate spending includes:

- 1. The dollars which the University's suppliers spend in Massachusetts (including payroll) to produce the goods and services which the University purchases from them;
- 2. The dollars which our suppliers' suppliers spend in Massachusetts (including payroll) to produce the goods and services that our suppliers purchase from them;
- 3. The dollars which the suppliers of our suppliers' suppliers spend in Massachusetts (including payroll) to produce the goods and services that our suppliers' suppliers purchase from them;
- 4. This process continues back to the acquisition of raw materials used for the production of goods and services ultimately acquired by the University.

Consumer spending consists of the dollars that are spent in Massachusetts by University employees and the employees of all of the suppliers described above.

The multipliers used in this report were obtained from the U.S. Department of Commerce for three geographic regions: (1) Suffolk County (used for the City of Boston), (2) the Boston Metropolitan Area (all of the cities and towns in Suffolk, Norfolk, Middlesex, Essex, and Plymouth counties), and (3) the Commonwealth of Massachusetts. The multipliers for each region (and the resulting calculations of indirect spending and employment) are cumulative, i.e., the Boston Metropolitan Area includes the City of Boston, and the Commonwealth of

Massachusetts includes the Boston Metropolitan Area. The more encompassing the region, the larger the multiplier because the spending of suppliers, and the suppliers of suppliers, and their suppliers, etc., has a cumulative effect.

Expenditures made outside of the region (i.e., to out-of-state employees and vendors) are considered to have no impact in Massachusetts and are excluded from this report.

B.4 EMPLOYMENT IMPACT

The U.S. Department of Commerce's model also provides employment multipliers for each of the 60 RIMS II aggregate industries. These multipliers estimate the number of jobs required to produce \$1 million of each product. Employment multipliers are applied to total direct expenditures in each industry to determine the total number of jobs created by Boston University's spending in the region. A more detailed description of RIMS II follows.

REGIONAL INPUT-OUTPUT MODELING SYSTEM OF THE U.S. DEPARTMENT **B.4.1 OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS**

Calculation of the total economic impact of direct expenditures must take into account specific inter-industry relationships within a region. These relationships largely determine how the regional economy responds to expenditures and changes in expenditures. Inter-industry relationships are factored into the calculation of total economic impact by using regional input and output multipliers provided by RIMS II.

RIMS II is widely used by public and private sectors throughout the United States. For example, the Department of Defense uses RIMS II to estimate the regional impacts of changes in defense expenditures, and the Florida Department of Transportation uses RIMS II to estimate the regional impacts of constructing and operating transportation facilities.

Following is an overview of how these multipliers are derived. Additional information is available from the U.S. Department of Commerce, Bureau of Economic Analysis (BEA), BE-61, Washington, DC 20230, 202-606-5343. The Bureau's website is located at www.bea.gov.

- 1. The BEA categorizes all national production into 471 detailed industries and summarizes these details into 60 aggregate industries.
- 2. National surveys are conducted to determine how much of the output (i.e., product) of each industry is used in the production of each industry. For example, a survey of industry X would ask, "How much (in \$) of the output of

industries A, B, C, D, etc. is used to produce a dollar's worth of the product of industry X?" These input amounts are the direct requirements for the production of \$1 of output by industry X. The data from these surveys are compiled on national input-output tables maintained by the BEA.

- 3. The BEA determines how much the demand for each product is caused by the earnings paid to workers in each industry. The total requirements coefficients for the production of \$1 of product X include estimates of the increase in demand for product X caused by earnings paid to employees of industry X as well as each of its supplying industries. Because these coefficients are dollar multiples of the initial dollar spent to produce a product, they are referred to as output multipliers.
- 4. The BEA also compiles wage and salary data for every U.S. county, including the ratio of jobs to earnings in each region. This database is used to adjust the BEA's national input-output table to reflect each region's industrial structure and trading patterns. It is also used to determine employment multipliers.
- 5. Employment multipliers estimate the number of jobs required in each industry that contributes to the production of \$1 million of each product. For example, for the production of \$1 million of product X, how many jobs are required in industry X as well as in each of its supplier industries?