

Boston University Medical Campus Boston, Massachusetts

2021-2031 Institutional Master Plan

October 26, 2021

submitted to the Boston Planning & Development Agency

submitted by Trustees of Boston University

prepared by Fort Point Associates, Inc.

in association with AECOM



TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION AND OVERVIEW

1.1	INTRODUCTION1-1
1.2	BOSTON UNIVERSITY MEDICAL CAMPUS
1.3	RELATIONSHIP WITH BOSTON MEDICAL CENTER
1.4	PUBLIC PARTICIPATION IN THE PLANNING PROCESS
1.5	PROJECT TEAM
CHAPTE	ER 2: MISSION AND OBJECTIVES
2.1	INTRODUCTION
2.2	BOSTON UNIVERSITY SCHOOL OF MEDICINE
2.3	HENRY M. GOLDMAN SCHOOL OF DENTAL MEDICINE
2.4	SCHOOL OF PUBLIC HEALTH
2.5	ENROLLMENT
2.6	EMPLOYMENT
CHAPTE	R 3: PROGRESS ON THE 2010 INSTITUTIONAL MASTER PLAN
3.1	INTRODUCTION
3.2	PROGRESS ON PROPOSED BU MEDICAL CAMPUS INSTITUTIONAL PROJECTS 3-1
3.3	FUTURE PROJECTS
CHAPTE	R 4: EXISTING PROPERTY AND USES
4.1	OWNERSHIP, LEASED SPACE, AND USES
4.2	OPEN SPACE
4.3	CAMPUS IMPROVEMENT PROJECTS
4.4	SIGNAGE AND WAYFINDING
4.5	ZONING
CHAPTE	R 5: TRANSPORTATION AND PARKING
5.1	INTRODUCTION
5.2	PEDESTRIAN ACCOMMODATIONS
5.3	BICYCLE ACCOMMODATIONS
5.4	BICYCLE, MOTORCYCLE, AND MOTOR SCOOTER PARKING
5.5	PUBLIC TRANSPORTATION
5.6	BIKE SHARING SERVICES

5.7	PARKING	
5.8	TRANSPORTATION DEMAND	MANAGEMENT 5-6
CHAPTI	ER 6: ENVIRONMENT AND S	JSTAINABILITY
6.1	INTRODUCTION	
6.2	SUSTAINABILITY AT THE BU N	EDICAL CAMPUS
6.3	LEED GOLD CERTIFICATION	
6.4	BU WIND	
6.5	SOLAR INITIATIVE	
6.6	ZERO WASTE INITIATIVE	
6.7	GROUNDWATER RECHARGE	
6.8	CITY OF BOSTON PROGRAMS	
CHAPT	ER 7: COMMUNITY BENEFITS	
7.1	INTRODUCTION TO COMMU	NITY BENEFITS
7.2	A TRADITION OF COMMUNIT	Y SERVICE
7.3	COMMUNITY PROGRAMS	
7.4	ANNUAL PROPERTY TAXES/PI	-OT
7.5	ADDITIONAL ECONOMIC BEN	IEFITS
7.6	COMMUNITY BENEFITS PROC	RAM ADDENDUM

LIST OF TABLES

Table 2-1	BU Medical Campus Employment (2020)
Table 4-1	BU Medical Campus Properties
Table 4-2	University Properties in the Biosquare Research Park PDA
Table 5-1	MBTA Bus Service and Silver Line Bus Rapid Transit
Table 5-2	Parking Facilities
Table 5-3	BU Medical Campus Mode Shares
Table 7-1	Real Estate Tax and PILOT Payments

LIST OF FIGURES

Figure 1-1	Locus Map
Figure 1-2	BU Medical Campus Properties

Figure 3-1	Proposed Institutional Projects
Figure 4-1	BU Medical Campus Properties
Figure 5-1 Figure 5-2	On-Street Parking Supply Off-Street Parking Supply

ATTACHMENTS

Attachment 1	Signage and Wayfinding Master Plan
Attachment 2	BU Medical Campus Community Benefits Programs Addendum

INTRODUCTION AND OVERVIEW

Chapter 1

CHAPTER 1: INTRODUCTION AND OVERVIEW

1.1 INTRODUCTION

Boston University Medical Campus ("BU Medical Campus") is comprised of three of Boston University's health science schools – the School of Medicine ("BUSM"), the Henry M. Goldman School of Dental Medicine ("GSDM"), and the School of Public Health ("BUSPH"). Located in Boston's South End neighborhood, the BU Medical Campus is renowned for the quality of teaching, research, and service to the community demonstrated at each school.

The Trustees of Boston University (the "University") is pleased to submit this Institutional Master Plan ("IMP") in accordance with the Boston Planning & Development Agency ("BPDA") Article 80 Institutional Master Plan review process.

Together with Boston Medical Center ("BMC"), the BU Medical Campus was previously guided by the Boston University Medical Center IMP (the "BUMC IMP"), approved by the Boston Redevelopment Authority ("BRA"), now BPDA, in May of 2000. A renewal was submitted at the end of this term in 2010 and approved in June of that year. With the 2010 IMP set to expire in 2020, the University submitted an Institutional Master Plan Notification Form ("IMPNF") in March 2020, thereby initiating the BPDA Article 80 Institutional Master Plan review process for the BU Medical Campus 2021-2031 Institutional Master Plan (the "BU Medical Campus IMP"). The review of this IMPNF was delayed because of the substantial impact of COVID-19 on the City's public and agency review processes. As a result of this delay, the University resubmitted the IMPNF in November 2020. The BPDA issued a Scoping Determination on January 19, 2021.

1.2 BOSTON UNIVERSITY MEDICAL CAMPUS

One of Boston University's three campuses, the BU Medical Campus is located in Boston's South End and is comprised of the BUSM, the GSDM, and the BUSPH. See Figure 1-1, Locus Map. Through these institutions, more than 1,700 faculty members provide 3,500 full-time and part-time students education and training with a focus on underserved and indigent populations.

The BU Medical Campus has a longstanding tradition of high-quality research and service to the public. With \$270 million awarded for research projects in Fiscal Year 2020, the BU Medical Campus is at the forefront of developing innovative solutions to today's medical challenges. The BU Medical Campus is now home to one of the largest and most rapidly

growing research programs in the United States in the areas of basic science, clinical investigation, and public health and health services.

1.3 RELATIONSHIP WITH BOSTON MEDICAL CENTER

Boston Medical Center is the primary teaching affiliate of the BUSM and historically, Boston University and BMC jointly filed Institutional Master Plans under the umbrella of the "Boston University Medical Center" ("BUMC"). The following sections provide a history of the joint BUMC Institutional Master Plan and describe shared services between the University and BMC.

1.3.1 INSTITUTIONAL MASTER PLAN HISTORY

In 2000, Boston University and BMC together filed an Institutional Master Plan (the "2000 IMP") that described the institutions' shared objectives, existing property, and future development plans over a ten-year duration. The 2000 IMP was approved by the BRA, now BPDA, in May 2000.

In July 2009, the 2000 IMP was renewed for a two-year term. In January 2010, the BRA approved an amendment to the IMP to include a 1.7-acre site (the "Albany Fellows Site") and the construction of a proposed project known as the Graduate Student Housing Project. The subsequent 2010 Institutional Master Plan Renewal (the "2010 IMP"), approved by the BRA on June 22, 2010, documented joint programmatic and facility improvements to support the ongoing goals of BMC and BU Medical Campus. The University did not identify Proposed Institutional Projects (PIPs) in the 2010 IMP, although it did incorporate further build-out of the approved Albany Fellows Site as an anticipated future project. During the 2010 IMP term, the University advanced a new renovation and expansion project at the GSDM, which was approved in the Second IMP Amendment in 2017 (the "2017 Amendment").

The 2010 IMP does not include the area known as BioSquare, which is comprised of property owned or leased by the University and BMC and is subject to a separate Planned Development Area Master Plan. See Figure 1-2, BU Medical Campus Properties.

1.3.2 SEPARATION OF INSTITUTIONAL MASTER PLANS

In a Letter of Intent ("LOI") submitted to the BPDA by the University and BMC, the two institutions proposed to separately create two individual 2020-2030 IMPs. After submitting the LOI, the University worked with the BPDA to develop a framework for the bifurcation and submittal of the BU Medical Campus IMPNF.

The creation of two separate and distinct IMPs and Community Task Forces will provide for more focused public review and discussion of each institution's master plans and proposed projects.

1.3.3 SHARED SERVICES AT BOSTON UNIVERSITY MEDICAL CAMPUS

While the University and BMC are no longer filing joint IMPs, the two institutions will continue to work collaboratively and participate in several coordinated activities that are common to their respective communities. The following services are currently shared between the BU Medical Campus and BMC.

1.3.3.1 TRANSPORTATION DEMAND MANAGEMENT AND PARKING

In support of the joint efforts to manage transportation demand, the University and BMC share responsibility for and use of certain services and facilities through A Better City TMA, a transportation management association. The University and BMC will continue to work closely with one another and with the City, community, and neighboring stakeholders on advancing transportation planning goals. Transportation-related efforts are further described in Chapter 5.

1.3.3.2 SIGNAGE AND WAYFINDING

The BUMC Campus was historically guided by a comprehensive signage and wayfinding plan. Adopted prior to the 2010 IMP, the goals of the plan were to strengthen existing signage programs in coordination with Federal, State, and City authorities; to implement a program of gateway, direction, and street name signing; and to coordinate and strengthen private signing to clarify the identity of each member institution. Building identifiers currently distinguish between BMC and BU Medical Campus buildings with blue and silver leaf signage and red and gold leaf signage, respectively.

Parking area identification is standardized with a "P" parking symbol, as BMC, BU Medical Campus, and BioSquare share the same parking facilities. The name of the institution served by the parking facility is listed at the entrance of each facility. For pedestrians, map retainer displays are located at key points on the BUMC Campus. The maps identify each institution and display information regarding roadways, transportation routes, landmarks, public transportation, parking, and other public amenities.

The University recently drafted a new signage and wayfinding plan for the BU Medical Campus that includes updated standards and specifications

for signage, detailed in Chapter 4.4 and included as Attachment 1. This signage plan will be used as a blueprint for signage and wayfinding on the BU Medical Campus in the future. The University will continue to coordinate with BMC on vehicular signage in the area to maintain visual consistency and clarity in messaging.

1.4 PUBLIC PARTICIPATION IN THE PLANNING PROCESS

The University is filing this IMP in accordance with the BPDA's Article 80D Institutional Master Plan review process. The Proponent has met with members of the BPDA and the BU Medical Campus Task Force in advance of this filing. The BU Medical Campus Task Force will continue to meet following submission of this IMP. The University is committed to an open and inclusive public process and will continue to seek input from community representatives, neighbors, and stakeholders, as well as public and elected officials.

1.4.1 PUBLIC REVIEW PROCESS

During the public comment period of the IMPNF and prior to the BPDA's issuance of a Scoping Determination, a scoping session and a community meeting were both held on December 10, 2020. Another scoping session and community meeting are expected to occur during the public comment period of the IMP. The University looks forward to continued collaboration with the BPDA, the community, and the City of Boston on this document.

1.4.2 BOSTON UNIVERSITY MEDICAL CAMPUS TASK FORCE

The BU Medical Campus Task Force (the "Task Force") was established prior to the submission of the BU Medical Campus IMPNF to represent the area community and participate in the public review of the BU Medical Campus IMP. The Task Force advises the City and University on the implementation of the IMP. Representing an array of neighboring organizations, associations, and institutions, members of the Task Force include:

- > Jerome Branch
- Michael Crowley
- Caroline Foscato
- Stephen Fox
- Jeffrey Gates
- Matthew LeFrancois

- Desmond Murphy
- > L. Fernando Requena

The Task Force met on December 3, 2020, following the resubmission of the BU Medical Campus IMPNF in November 2020. Future Task Force meetings will be scheduled following the filing of this IMP. All Task Force meetings are open to the public and attended by a representative of the BPDA.

1.5 **PROJECT TEAM**

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Boston, Massachusetts

Boston University Medical Campus



Institutional Master Plan

Figure 1-2 BU Medical Campus Properties Source: Fort Point Associates, Inc., 2020

Chapter 2

MISSION AND OBJECTIVES

CHAPTER 2: MISSION AND OBJECTIVES

2.1 INTRODUCTION

The BU Medical Campus has a rich history dating back to 1848, when its School of Medicine began as the New England Female Medical College, the first institution in the world to offer medical education to women and the first to graduate a black woman physician. In 1873, the medical college merged with Boston University, becoming the first coeducational medical school in the nation. This development of a medical school in the area was complemented by the opening of Boston City Hospital in 1864, which was the first municipal hospital in the U.S., and the relocation to the area of the Massachusetts Homeopathic Hospital in 1874. Early partnerships with these hospitals set the foundation for the School of Medicine's strong commitment to community health care.

In addition to the School of Medicine, the BU Medical Campus is also comprised of the Henry M. Goldman School of Dental Medicine and the School of Public Health. Together, the schools train a diverse group of 3,500 students and employ 1,700 full-time and part-time faculty members, many of whom are leading experts in their fields.

Renowned for the quality of their teaching and research, these three schools provide education and training in the most current techniques and approaches within their disciplines. Service to the community is a hallmark throughout the programs located at the BU Medical Campus, with a particular focus on serving disadvantaged, underserved, and indigent populations.

2.2 BOSTON UNIVERSITY SCHOOL OF MEDICINE

The BUSM is dedicated to the educational, professional, and personal development of a diverse group of exceptional students, trainees, and faculty who are deeply committed to the study and practice of medicine. BUSM places great value on excellence, integrity, service, social justice, collegiality, equality of opportunity, and interdisciplinary collaboration. Many faculty members exemplify these values through their membership in the Boston University Medical Group, an integrated and multi-disciplinary faculty practice that focuses on clinical care, research, and teaching through its affiliation with BMC.

The BUSM is committed to serving a diverse population of patients in Boston and to providing quality medical care in international communities. Together with colleagues at BMC and the other 20 institutions with which they partner, BUSM students work in interdisciplinary research teams at the forefront of scientific and medical knowledge to discover new ways to diagnose and treat the most devastating human diseases through far-ranging clinical experiences.

Among the many research programs that hold a leading role in their field is the Alzheimer's Disease Center. It is one of only 31 centers across the country funded by the National Institutes of Health to advance research on Alzheimer's disease and related conditions. The Center was established in 1996 and played a leading role in recognizing the growing prominence of long-term brain injuries in the early 2000s. Since 2008, the Center's investigation of the relationship of Chronic Traumatic Encephalopathy (CTE) to repetitive brain trauma in athletes and military personnel has been able to foster and support high-impact and innovative research in the field. Continuing research in this area is leading to advances in early diagnoses of CTE, as well as several neurodegenerative diseases including Alzheimer's.

2.3 HENRY M. GOLDMAN SCHOOL OF DENTAL MEDICINE

The University established the School of Graduate Dentistry in 1963 from a department in the BUSM, making it the country's only program devoted solely to specialty education in dentistry. The program focused on post-doctoral education and provided dynamic teaching activities, enrollment, and research. In 1972, the pre-doctoral program was established to train future leaders in the pursuit of a Doctor of Dental Medicine degree.

The GSDM prides itself on its patient-oriented care. The on-site clinic serves some 33,000 patients through 147,000 patient visits. The addition and renovation of the building, approved in the 2017 IMP Amendment and completed in October 2021, will improve the patient experience and services received. This expansion, further described in Chapter 3.2.2, allows the GSDM to continue to provide patients who are often among the most underserved populations in Boston with the best oral healthcare possible and ensure the GSDM's students are graduating with the appropriate skills and knowledge to be leading practitioners in the digital dental era.

The GSDM has a vibrant research program, including its Department of Health Policy and Health Services Research, which offers a multifaceted program of research, teaching, population-based care, and community service focused on evidence-based practice. The GSDM has taken a leadership role in the burgeoning area of translational dental medicine. This effort promotes the translation of research findings to the patient's treatment center. Early initiatives include the Head and Neck Cancer Program and the Oral Cancer Atlas, undertaken in collaboration with Brigham & Women's Hospital.

2.4 SCHOOL OF PUBLIC HEALTH

The BUSPH was founded in 1976 as a department within the School of Medicine. Today, it is regarded as one of the top 10 schools in the nation for the study of public health. BUSPH confers master and doctoral degrees in interdisciplinary programs of study that bring together law, ethics, statistics, and others.

In 2015, BUSPH revitalized its core purpose to elevate its three roles: generating research and scholarship, teaching it to students, and translating this scholarship into meaningful action that protects and improves the health of all populations. These goals are captured within the school's core purpose, "Think. Teach. Do. For the health of all."

Through longstanding collaborations with such institutions as the Massachusetts Department of Public Health, the Boston Public Health Commission, and the Veterans Affairs Administration, and international alliances with the Red Cross, the Peace Corps, and foreign governments, the students, faculty, and alumni draw on their own diverse backgrounds to carry out the BUSPH's mission in a variety of settings.

The Framingham Heart Study is an interdisciplinary research project jointly managed by the National Heart, Lung, and Blood Institute; the BUSM; and the BUSPH. The study began in 1948 and is the country's oldest cohort study on cardiovascular disease.

2.5 ENROLLMENT

Overall enrollment on the BU Medical Campus in fall 2009 was 3,254 students, of which 2,663 were full-time students and 591 students were part-time. Since then, overall enrollment increased to 3,539 students in fall 2020. Approximately 2,945 students attended full time and 594 students attended part time. This represents an increase of 287 students over an 11-year period. Significant changes to the current enrollment numbers are not expected.

2.6 EMPLOYMENT

In addition to educating future healthcare professionals, the schools of the BU Medical Campus extend employment and professional development opportunities to residents of Boston and the surrounding communities and help to fuel the local economy by purchasing goods and services.

The University employs approximately 2,857 full-time employees and 417 part-time employees at the BU Medical Campus. Of these, 762 total employees are Boston residents. Approximately 8.1% (232 employees) reside in the core neighborhoods.

	Full-Time		Part-Time		Total	
	Faculty	Staff	Faculty	Staff	Faculty	Staff
Total	1423	1434	320	97	1743	1531
Residents of Boston	297	391	57	17	354	408
Core Neighborhoods*	133	80	14	5	147	85

Table 2-1, BU Medical Campus Employment (2020) (as of 12/31/20)
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*Zip codes: 02110, 02111, 02118, 02119, 02120, 02121

The University offers a variety of workforce development and educational opportunities for BU Medical Campus employees. The University's Office of Human Resources offers frequent

professional development seminars to BU Medical Campus employees from September through June. The seminars offer a wide array of workshops to improve current skills and give employees the opportunity to develop new skills.

BU Medical Campus employees additionally have access to a variety of mentorship and leadership programs. Through the Early Career and Mid-Career Faculty Leadership programs, faculty participate in peer and senior networking and mentorship, interdisciplinary collaboration, and strategic leadership skills to enhance their career trajectories. A range of programs are offered specifically based on needs identified by women faculty and under-represented racial and ethnic groups in medicine (URG) at BU Medical Campus through the Women's Leadership Program and the URG Leadership Program. Individual career consultations and CV reviews are available to all BU Medical Campus faculty regardless of rank.

The University conducts employment presentations and workshops at social services agencies and attends other similar career events addressing and presenting job search-related topics such as resume writing and interviewing skills. As a participant in the Year Up internship program, Boston University hired seven local high school students in 2019 and four students in 2020.

In 2019, Boston University employment professionals attended the following area job fairs:

- Latino Career Expo 2019 at the Marriott Courtyard Boston, sponsored by El Mundo on March 28, 2019.
- Office of Federal Contract Compliance Programs/Massachusetts Rehabilitation Commission Hiring Event at the State Transportation Building at 10 Park Plaza, sponsored by OFCCP – MRC on April 30, 2019.
- Hiring our Heroes Fenway Park Military Hiring Event at 400 on the Fenway, sponsored by Hiring our Heroes on May 14, 2019.
- Jobs Rebuild Boston Community Conference and Career Fair at the Reggie Lewis Track & Field Center, sponsored by the Urban League of Eastern Massachusetts on June 6, 2019.
- Asian American Peace Officers Conference in the Seaport, sponsored by Asian American Peace Officers Association on August 20, 2019.
- Salary Negotiation Workshop at Goodwill Roxbury, sponsored by the Boston Women's Workforce Council on September 6, 2019.
- Work Without Limits Raise the Bar Hiring Event at Partners Healthcare in Somerville, sponsored by MRC on September 20, 2019.
- Disability Mentoring Day at the Massachusetts State House, sponsored by MRC on October 16, 2019.

PROGRESS ON THE 2010 INSTITUTIONAL MASTER PLAN

Chapter 3

CHAPTER 3: PROGRESS ON THE 2010 INSTITUTIONAL MASTER PLAN

3.1 INTRODUCTION

Substantial progress has been made to advance the goals identified in the 2010 IMP. However, as described in Chapter 1.3.1, Institutional Master Plan History, the University did not identify Proposed Institutional Projects (PIPs) in the 2010 IMP. While the majority of the PIPs were related to BMC buildings, the University did incorporate the previously approved Albany Fellows site, of which two parcels remain to be developed, as a future project. The current status of the previously approved projects, as well as anticipated future projects, are described in the following sections.

3.2 PROGRESS ON PROPOSED BU MEDICAL CAMPUS INSTITUTIONAL PROJECTS

While the majority of the projects identified as PIPs in the 2010 IMP were primarily related to BMC buildings, the 2017 Amendment identified a new PIP to allow for the expansion and renovation of the GSDM on the BU Medical Campus. Progress on the BU Medical Campus Institutional Projects included in the 2010 IMP as amended are described below.

3.2.1 ALBANY FELLOWS

The Albany Fellows site is approximately 1.7 acres consisting of three parcels: Parcel 1 contains approximately 15,324 sf; Parcel 2A contains approximately 38,920 sf; and Parcel 2B contains approximately 20,766 sf. The total approved development program includes 442,800 sf of gross floor area.

In 2012, the University completed a nine-story, 102,126 sf building on Parcel 2A, providing 104 housing units for 208 BU Medical Campus graduate students. The building additionally features approximately 12,000 sf of landscaped open space and includes approximately 5,000 sf of ground floor retail space, now occupied by a childcare (daycare) provider.

3.2.2 HENRY M. GOLDMAN SCHOOL OF DENTAL MEDICINE

Through careful consideration, it became evident during the term of the 2010 IMP that only by increasing the size and improving the condition of the existing facility would the School of Dental Medicine be able to achieve the vision outlined in its strategic plan. The 2017 Amendment was submitted to the BPDA in August 2017 to

create a 41,900 gross floor area (GFA) addition and a 53,100 GFA renovation to the existing 84,200 GFA building. The project was approved by the BPDA in October 2017. Construction began in February 2018 and was completed in October 2021.

The project provides quality spaces for the GSDM's educational and clinical needs. Instructional space, both classrooms and labs, increased by 40%. The Simulation Learning Center was brought into the building from another location and equipped with state-of-the-art simulators and top-end technologies for teaching and learning.

For patients, the new space bolsters the GSDM's efforts to offer care and an experience on par with the best dental practices. While there is only a minor increase in the number of chairs, from 169 to 175, the clinical area increased by more than 60%, making treatment environments more comfortable and flexible. Specialized services are now available in the clinic, rather than distributed on other floors of the building, and are equipped with the latest digital-dentistry technology.

Finally, the project supports the entire GSDM community by providing more collaborative spaces for students and residents to gather, reflect, and relax. Faculty and staff benefit from improved spaces for teaching and administrative support, along with a layout designed to make interactions with students and patients both easier and more frequent.

3.3 FUTURE PROJECTS

The University has no current plans to advance specific future projects on the BU Medical Campus. Should the desire or need for new PIPs arise, such projects will be addressed in future IMP Amendments.

3.3.1 ALBANY FELLOWS

As described in Section 3.2.1, the University has utilized approximately 23% of the approved development capacity on the Albany Fellows site by constructing the 102,106 sf graduate student housing facility. The University does not currently have plans to further develop the Albany Fellows site within the term of this IMP. See Figure 3-1, Proposed Institutional Projects.

Boston University Medical Campus



Institutional Master Plan

Figure 3-1 Proposed Institutional Projects Source: Fort Point Associates, Inc., 2020

EXISTING PROPERTY AND USES

Chapter 4

CHAPTER 4: EXISTING PROPERTY AND USES

4.1 OWNERSHIP, LEASED SPACE, AND USES

Land and buildings owned or leased by the University on the BU Medical Campus are listed below in Table 4-1, BU Medical Campus Properties.

Facility	Principal Uses	Stories	Building Area (GSF)	Land Area (SF)	Own/Lease
815 Albany Street, (Albany Fellows Parcel 2A)	Student Residences/ Commercial	b +9 + p	102,126	38,920	Own
18-20 Fellows Street (Albany Fellows Parcel 1)	Land	0	0	15,324	Own
16 Fellows Street (Albany Fellows Parcel 2B)	Land	0	0	20,766	Own
609 Albany Street, Dermatology ("J") Building	Academic/ Administrative/ Research	b + 7	35,033	6,567	Own
615 Albany Street, Naval Blood ("N") Building	Academic/ Administrative/ Research	b + 5	20,124	7,350	Jointly Owned with BMC
72 East Concord Street, Medical School Instructional ("L") Building	Academic/ Administrative/ Research	b +14	228,845	50,012	Own
80 East Concord Street, Medical School ("A") Building	Academic/ Administrative/ Research	b +5	26,526	40,000	Own
715 Albany Street, Talbot ("T") Building	Administrative/ Academic/Research	b + 5	83,097	41,624	Own
85 East Newton Street, Solomon Carter Fuller Mental Health ("M") Building	Academic/ Administrative/ Research	N/A	43,589	N/A	Lease
75 East Newton Street, Evans ("E") Building	Academic/ Administrative/ Research	b + 8 + p	180,380	25,224	Own
635 Albany Street, Goldman Dental School ("G") Building	Academic/ Administrative/ Clinical/Research	b + 7	144,380 post- renovation	25,490	Own
560 Harrison Ave	Administrative/ Research	N/A	15,144	N/A	Lease

 Table 4-1, BU Medical Campus Properties

Facility	Principal Uses	Stories	Building Area (GSF)	Land Area (SF)	Own/Lease
750 Harrison Ave, Robinson ("B") Building	Academic/ Administrative/ Research	b + 7	57,486	15,462	Own
780 Harrison Ave, Housman ("R") Building	Academic/ Administrative/ Research	b +10	123,072	10,103	Own
71 East Concord St, Conte ("K") Building	Academic/ Administrative/ Research	b + 7	83,196	16,649	Own
801 Mass Ave, Crosstown Center	Academic/ Administrative/ Research	N/A	101,114	N/A	Lease
Crosstown Parking	Parking	N/A	N/A*	N/A	Lease

b = basement, p = penthouse

*Boston University leases parking spaces at Crosstown Parking, rather than square footage.

The Naval Blood Building at 615 Albany Street is jointly owned by the University and BMC. The five-story brick building was constructed in 1865. The property is not in use by the University or BMC and currently is not suitable for clinical, research or administrative use. The University will continue to work with BMC to assess future options and possibilities for this property. Presently, there are no plans to demolish the building.

University-owned properties listed in Table 4-1 above are deemed to be in compliance with this IMP. Occasionally, properties may be repositioned to meet different University 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 this IMP.

In addition to the properties listed in Table 4-1, students, faculty, and researchers at BU Medical Campus utilize research, academic, and administrative space at the state-of-the-art BioSquare research park. These properties, listed in Table 4-2, University Properties in the BioSquare Research Park PDA, are subject to a separate Planned Development Area ("PDA") Master Plan. These properties have been included in this chapter for the purpose of describing the full scope of properties in use by the University on the BU Medical Campus. See Figure 1-2, BU Medical Campus Properties.

Facility	Principal Uses	Stories	Building Area (GSF)	Land Area (SF)	Own/Lease
620 Albany Street, NEIDL Building	Research	7	174,706	-	Own
620 Albany Street, NEIDL Building	Research	0	-	150,741	Jointly Owned with BMC

Table 4-2, University Properties in the BioSquare Research Park PDA

Facility	Principal Uses	Stories	Building Area (GSF)	Land Area (SF)	Own/Lease
700 Albany Street, Center for Advanced Biomedical Research ("W") Building	Academic/ Administrative/ Commercial/ Research	9 + p	206,756	35,178	Own
650 Albany Street, Evans Biomedical Research Center ("X") Building	Academic/ Administrative/ Research	b + 8 + p	196,459	31,872	Jointly Owned with BMC
670 Albany Street	Academic/ Administrative/ Research	8 + p	180,787	33,070	Leased
610 Albany Street	Parking Garage	9	497,342	210,500	Jointly Owned with BMC
710 Albany Street	Parking Garage	6	315,865	81,075	Jointly Owned with BMC
630 Albany Street ("E") Parcel	Land	0	0	39,970	Jointly Owned with BMC
600 Albany Street ("G") Parcel	Land	0	0	43,069	Jointly Owned with BMC

4.2 OPEN SPACE

BU Medical Campus offers a network of open spaces featuring various nodes where the campus and community come together. The primary open spaces used by the BU Medical Campus are concentrated in the block between East Newton Street and East Concord Street between Albany Street and Harrison Avenue. In particular, the lawn between the Talbot Building and the BUSM enables multi-purpose programming for campus events and accommodates pedestrians, bicycles, and vehicles. A recreational field is also available at the Medical Student Residence at 815 Albany Street, and improved landscaping is a feature of the renovated GSDM building.

The BU Medical Campus is bordered by Harrison and Albany Avenues, which are in the process of a City-led redesign to generate streetscape and public realm improvements. Landscaped areas are additionally present in the BioSquare area.

4.3 CAMPUS IMPROVEMENT PROJECTS

At the time of the 2017 Amendment approval, the University made streetscape and lighting improvements to East Newton Street and Albany Street, with a \$60,000 contribution provided to the City to support improvements to the Albany Street corridor, including a protected bicycle lane.

The University seeks to align its PIPs with the vision and goals established in the Final Harrison Albany Corridor Strategic Plan (HACSP). Released by the BRA in 2012 to guide future growth within the area, the HACSP prioritizes improvements to the public realm, roadway network changes to improve multimodal access and circulation, and zoning changes to establish redevelopment standards for building height and density. The University will continue to collaborate with the City of Boston to support projects along Albany Street that align with the HACSP vision for pedestrian realm improvements, thereby contributing to a unified streetscape that will enhance the character of the street.

4.4 SIGNAGE AND WAYFINDING

In tandem with the development of this IMP, the University has drafted a signage and wayfinding master plan to be used as a blueprint for signage and wayfinding on the campus. The plan intends to provide predictability in the signage design review process for the University and the BPDA. This signage is expected to be implemented on the Medical Campus over a span of many years as new projects and major renovations are undertaken.

The plan provides an inventory of existing signage as well as standards, specifications, and locations for several types of signs. The proposed signage is consistent with previously approved signage implemented at the Graduate School of Dental Medicine and on the University's Charles River and Fenway campuses. The scope of the signage and wayfinding master plan does not include the BioSquare area, which has signage distinct from the BU Medical Campus signage and is subject to a Planned Development Area Master Plan. See Attachment 1, Signage and Wayfinding Master Plan.

4.5 ZONING

The BU Medical Campus is located within the South End Neighborhood and Roxbury Neighborhood zoning districts. Other zoning districts that cover BU Medical Campus properties include the Groundwater Conservation Overlay District, Restricted Parking Overlay District, and Coastal Flood Resilience Overlay District. The section below addresses the relationship between this IMP and these zoning overlay districts.

4.5.1 GROUNDWATER CONSERVATION OVERLAY DISTRICT

The Groundwater Conservation Overlay District (GCOD) was established under Article 32 of 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 covers BU Medical Campus properties located east of Massachusetts Avenue. 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 will have a groundwater recharge system capable of capturing one inch of precipitation over the impervious area of the lot.

While there are no new PIPs included in this IMP, for any future PIPs on the BU Medical Campus, the University will document compliance with GCOD standards by obtaining a letter from the Boston Water and Sewer Commission confirming compliance with Article 32 of the Zoning Code. The University shall provide a copy of this letter to the BPDA and Boston Groundwater Trust prior to the issuance of any Certification of Consistency. As such, the PIP shall be deemed to be in compliance with Article 32 of the Zoning Code and shall not need a conditional use permit from the Board of Appeal.

4.5.2 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 obtain a conditional use permit. All BU Medical Campus properties are covered by the RPOD.

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 BU Medical Campus is well-managed both for ordinary campus needs and for special event situations. Chapter 5 describes the supply and demand for parking on campus and the measures taken to promote alternative transportation modes. Through its transportation demand management plan, the University will properly manage the parking supply and will document the compliance with the RPOD standards through the BPDA Certificate of Consistency on the Institutional Master Plan.

4.5.3 COASTAL FLOOD RESILIENCE OVERLAY DISTRICT

The Coastal Flood Resilience Overlay District (CFROD) was recently adopted by the Zoning Commission as Article 25A of the Zoning Code. The goal of the CFROD is to promote sustainable planning and development by subjecting projects in areas vulnerable to flooding to additional standards and review. The CFROD applies to areas in Boston that could be inundated by a 1% chance flood event with 40 inches of sea level rise, which is expected between 2070 and 2100. Projects within the CFROD and subject to Article 80B and Article 80E are subject to Resilience Review

by BPDA staff and must respond to the BPDA's Coastal Flood Risk Design Guidelines, which include best practices for flood-resilient design. Article 25A also establishes sea level rise design flood elevations for new construction and retrofits and defines new use and dimensional regulations. Several areas of the BU Medical Campus are within the CFROD. While there are no new PIPs included in this IMP, for any future PIPs on the BU Medical Campus within the CFROD, the University will document compliance with Article 25A through the BPDA Certificate of Consistency on the Institutional Master Plan.

Chapter 5

TRANSPORTATION AND PARKING

CHAPTER 5: TRANSPORTATION AND PARKING

5.1 INTRODUCTION

BU Medical Campus is located in the South End neighborhood of Boston, with regional vehicular access to the campus via the north and south provided directly from the Massachusetts Avenue Connector (the "Connector"). At Massachusetts Avenue, the Connector joins Melnea Cass Boulevard, which provides a direct connection to the Longwood Medical and Academic Area. Local vehicular access is primarily from Harrison Avenue, Massachusetts Avenue, and Albany Street. East Concord Street and East Newton Street provide connections from the primary campus parking facilities (the 710 Albany Street and 610 Albany Street garages) to other facilities within the campus.

5.2 PEDESTRIAN ACCOMMODATIONS

With its clinical and academic functions, BU Medical Campus generates a significant number of pedestrian trips throughout the area, including trips along and across many City streets and campus paths. In general, sidewalks are provided along all roadways throughout the BU Medical Campus and are in good condition. Most sidewalks are 8–10 feet wide. Crosswalks are provided at all intersections. Pedestrian signal equipment is provided at the signalized study area intersections. The University will continue to work with the City to improve pedestrian conditions in the area, specifically along Albany Street.

5.3 **BICYCLE ACCOMMODATIONS**

The existing pathways along Melnea Cass Boulevard (South Bay Harbor Trail) and the Southwest Corridor Park provide bicycle access to and from the medical area. The City of Boston has created marked bike lanes and marked shared-travel bike lanes on Massachusetts Avenue and Albany Street. Albany Street, Massachusetts Avenue, Harrison Avenue, and East Newton Street are generally considered on-street bicycle routes in this area. As part of the Transportation Access Plan Agreement (TAPA) between the University and BTD for the GSDM, the University has committed to contribute \$60,000 toward future improvements of the Albany Street corridor to include protected bike lanes. In addition, the South Bay Harbor Trail connects from Albany Street to the South Boston Waterfront and provides an off-road route to and from the north of the medical area.

The University provides a secure bicycle cage with ID access, bicycle racks throughout the campus, a Bicycle Commuter Reimbursement Benefit, subsidized Bluebikes memberships, discounted bike helmets, free bike lights, and other promotional activities for bicycling. The

local transportation management association (TMA), A Better City TMA, provides bicycling workshops, bicycle safety checks, a bicycle reimbursement benefit, and a guaranteed ride home program.

5.4 BICYCLE, MOTORCYCLE, AND MOTOR SCOOTER PARKING

Bicycles must be parked in a bicycle rack or cage and are not allowed in any buildings on the BU Medical Campus. The University and BMC offer sheltered and secured bicycle parking in one bike cage at no charge. The 240-space bike cage is located behind the 710 Albany Street Garage. Currently, 250 cyclists are registered to use this bike cage.

Motorcycles and motor scooters must be registered with the BU Parking and Transportation Services (PTS). Electric-powered scooters can be parked in the bike cage located behind the 710 Albany Street garage.

5.5 PUBLIC TRANSPORTATION

Several public transportation services are offered through the BU Medical Campus area, including MBTA bus service, Silver Line, and Commuter Rail Service, as well as private shuttle services provided by Boston University, BMC, and the VA Boston Healthcare System.

5.5.1 MBTA SERVICES

Five MBTA bus routes currently provide public transit service to the BU Medical Campus area. Major bus stops with shelters are located on East Newton Street, East Concord Street, Albany Street, Massachusetts Avenue, and Harrison Avenue.

Boston's first Bus Rapid Transit service, the Silver Line, has two routes within a quarter-mile walk from the campus on Washington Street at East Newton Street: SL4 and SL5. Both routes have a terminal at Dudley Square, with the SL4 continuing to South Station and the SL5 to Downtown Crossing.

The closest existing MBTA Commuter Rail stations are found at Back Bay Station and Newmarket Station, both approximately one mile from the BU Medical Campus area. South Station and Ruggles Station, which also offer commuter rail services, are located approximately 1.5 miles from the area. Back Bay, Ruggles, and South stations offer other services in addition to the commuter rail: Back Bay and Ruggles stations have access to the Subway Orange Line, and South Station allows access to the Subway Red Line and bus services. The closest subway stops are Andrew and Broadway (Red Line) and Massachusetts Avenue (Orange Line). Each is approximately one mile from the BU Medical Campus.

MBTA services located at the Medical Campus are summarized in Table 5-1.

Bus Route	Origin-Destination	Rush-hour Frequency (min)	
CT2	Beth Israel Hospital or BU Medical	20	
CT3	Campus–Andrew Station	20	
1	Harvard Square - Dudley	9-10	
8	Harbor Point/UMass–Kenmore	15–30	
10	City Point–Copley Square	20-30	
Central Square (Cambridge)–Broadway		10.15	
47	Station	10-15	
SL4	Dudley Station–South Station	9-12	
SL5	Dudley Station–Downtown Crossing	8	

Table 5-1, MBTA Bus Service and Silver Line Bus Rapid Transit

Sources: www.mbta.com, 2019 System Map

5.5.2 PRIVATE SHUTTLE SERVICES

PTS provides frequent and accessible shuttle transportation to the BU Medical Campus community and provides information on transportation services in the area. Schedules are readily available at: <u>bumc.bu.edu/parking</u>. The BU Medical Campus community has access to the following shuttles free of charge:

- VA Shuttles for employees and students traveling from Boston Veterans Administration Hospital in Jamaica Plain to BU Medical Campus and BMC,
- Evening Transit "T" Shuttle operates Monday through Friday on request from a central stop at 710 Albany Street to MBTA subway stations at Broadway, Ruggles, Back Bay, and Copley stations, nearby South End neighborhood locations within a mile radius,
- 610 710 Albany Street Shuttle, which makes a loop between the two employee parking garages during peak hours and,
- The Boston University Shuttle (BUS) operates a free shuttle service that connects the Charles River Campus to the BU Medical Campus and provides service to the BU students and faculties of both campuses. The BUS offers frequent service between 33 Harry Agganis Way and 710 Albany Street, Monday-Saturday.

The University and BMC are in the process of developing a memorandum of understanding (MOU) with the Newmarket Business Improvement District (BID) to sign onto the Newmarket Shuttle Service, provided by the Newmarket BID. The proposed five-year agreement would consolidate existing shuttle service by discontinuing two shuttles currently offered by the University, the Evening Transit "T"

Shuttle and the 610 – 710 Albany Street Shuttle. The Newmarket Shuttle Service is planned as a 24-hour shuttle service that runs on 15-minute intervals 365 days per year, connecting all areas of Newmarket to Andrew Station (Red Line), Ruggles Station (Orange Line), and Newmarket Station (Commuter Rail Fairmount Line). The Newmarket BID is awaiting City Council approval, but potential implementation of the Newmarket Shuttle Service could begin in Fall 2021 or Winter 2022.

5.6 BIKE SHARING SERVICES

BU Medical Campus is located in close proximity to bicycle sharing locations. Bluebikes, formerly known as Hubway, is Metro Boston's public bike share program. Hubway was launched in 2011, and the name was changed to Bluebikes in the Spring of 2018. Bluebikes now consists of more than 3,000 bikes at over 350 stations across Boston, Brookline, Cambridge, Somerville, Everett, and six other municipalities.

Three Bluebikes stations are located within the BU Medical Campus area. The location of the Bluebikes stations are listed below.

- Boston Medical Center E. Concord St. at Harrison Ave (19 docks);
- > Albany St. at E. Brookline St. (13 docks); and
- > Washington St. at Rutland St. (21 docks).

As a "Bronze Sponsor" of Bluebikes, the University provides discounted and subsidized Bluebikes memberships for all BU Medical Campus employees and students. With the discount/subsidy, an annual membership is \$60 (normally \$109) and entitles members to unlimited Bluebikes trips up to 45 minutes in duration.

5.7 PARKING

BU Medical Campus is served by approximately 2,742 spaces in three garages and three surface lots. Approximately 24 of these spaces are owned by the University, 2,516 spaces are owned in partnership with BMC, and 202 spaces are leased. Most parking (2,638 spaces) is provided in on-site garages.

On-street parking in the quarter-mile surrounding BU Medical Campus consists primarily of metered and resident permit parking only (See Figure 5-1, On-Street Parking Supply). Several areas around the campus are restricted to MBTA bus stops and loading zones. Table 5-2, Parking Facilities, and Figure 5-2, Off-Street Parking Supply, provide an overview of the ownership of off-street parking facilities. No changes to the existing supply of parking spaces are anticipated over the term of this IMP.

Table 5-2, Parking Facilities

Address	Number of Parking Spaces	Ownership
610 Albany Street (Biosquare)	1,400	Jointly Owned with BMC
650 Albany Street (Biosquare)	80	Jointly Owned with BMC
710 Albany Street (Biosquare)	1,019	Jointly Owned with BMC
72 East Concord Street	22	Own
1 Evans Way	2	Own
801 Massachusetts Avenue	202	Lease
TOTAL	2,725	

Sources: BU Parking and Transportation Services (PTS)

The University's history of strong transportation demand management, in addition to a citywide decline in parking availability and rise in parking fees, has contributed to a steady decrease in parking demand. By encouraging employees and students to change their commuting habits and incorporate alternative modes of transportation, the University has been able to preserve its most convenient parking spaces at the BU Medical Campus for patients and visitors. The University will work to strategically manage parking stock and address efforts to decrease demand through measures such as:

- Increasing fees to single-occupant, employee parkers;
- Coordinating with City and State agencies to implement pedestrian improvements and bicycle connections;
- Continuing incentives for use of non-single occupancy vehicle (SOV) transportation modes; and
- Continuing to provide alternative mode choices to users of BU Medical Campus facilities.

5.7.1 BOSTON UNIVERSITY RECIPROCAL PARKING

Boston University's Charles River Campus (CRC) and Medical Campus have a reciprocal parking arrangement that allows faculty and staff based on one campus to park their vehicles in designated areas on the opposite (non-home-based) campus, provided they hold one of the applicable permit types provided by BU. The reciprocal parking agreement does not allow unlimited parking or overnight parking on the opposite campus and limits use to a maximum of three times per week per user. BU Medical Campus permit holders can use reciprocal parking benefits at four CRC parking facilities, and CRC permit holders can use the benefit at the 710 Albany Street Garage.

5.7.2 CAR SHARING SERVICES

Nearby car sharing services at the BU Medical Campus enable easy access to shortterm vehicular transportation and reduce the need for private vehicle ownership. Vehicles are rented on an hourly or daily basis, and all vehicle costs (gas, maintenance, insurance, and parking) are included in the rental fee. Vehicles are given a designated location for pick-up and drop-off, which are typically located in existing parking lots or other parking areas throughout neighborhoods as a convenience to users of the services. There are currently four Zipcar locations on or near the BU Medical Campus. Two to three cars are available at each location.

5.8 TRANSPORTATION DEMAND MANAGEMENT

Due to transportation demand management (TDM) efforts, existing employees and students at BU Medical Campus have an SOV mode use rate of 23%. This is notably lower than the BTD SOV mode share rate of 28% for the South End and reflects the strong transportation demand management program in effect. Considering no new additions to the BU Medical Campus are proposed and no new trips are expected to be generated during the term of the IMP, the TDM program is expected to successfully reduce demand going forward. The potential for increased telework in the future is also anticipated to further minimize demand. The remaining BU Medical Campus mode splits emphasize the TDM program's effectiveness at promoting alternatives to SOV use and are summarized in Table 5-3.

Primary Travel Mode	Percent by Mode
Drive Alone (SOV)	23%
Commuter Rail	12%
Subway	21%
Bus (MBTA)	14%
Bus (Private)	1%
Carpool	3%
Walk	8%
Bike	9%
Other	9%
TOTAL	100%

 Table 5-3, BU Medical Campus Mode Shares

Source: 2018 DEP Rideshare Reporting for BU Medical Campus

Boston University is a member of A Better City TMA, which services several neighborhoods throughout Boston. TranSComm, the previous TMA serving the campus and surrounding area, merged with A Better City TMA in May 2021 expanding their service area to include the South End. The University and TranSComm won several awards in recent years for efforts to sustainably manage transportation demand, including the 2016 Mayor's Silver Award for
Bike Friendly Business, a Bicycle Friendly University Award from The League of American Bicyclists, and the "Pinnacle Award" for the Massachusetts Excellence in Commuter Options (ECO Awards).

Through PTS, the University will continue to work with BTD and encourage and assist its employees and students, as well as patients and visitors, to use many of the demand management and trip reduction programs offered at the BU Medical Campus:

- Boston University students can enroll in the 11% discounted MBTA's semester pass program.
- Full-time University employees who work at the BU Medical Campus and do not currently have parking permits may sign up for a monthly MBTA pass pre-tax and a 50% transit subsidy program through payroll deduction. BU Medical Campus employees who order an MBTA pass through BU Medical Campus are eligible for pre-tax parking benefits when parking at MBTA transit stations. Employees can set aside up to \$135 pre-tax dollars per month from their paycheck and the University will match the employee election dollar-for-dollar.
- On-line transit and rideshare information is provided on the BUMC-BMC PTS Website: <u>http://bumc.bu.edu/parking</u>
- Terrier Transit, PTS' trip-planning app, was launched in 2020 and is available to all BU community members free of charge. The app provides users with real-time information from the BU Shuttle, MBTA vehicles, Bluebikes and Zipcar as well as turn-by-turn directions and estimated travel times for walking, bicycling, bike share, and mass transit trips. As of September 2021, the app has 14,800 installs and approximately 4,300 weekly users.
- Staff and students at the BU Medical Campus have access to four free shuttle services. Two of these shuttles, the Evening Shuttle to T station and neighborhoods within one mile and the 610 – 710 Albany Street Shuttle, are anticipated to be discontinued and replaced by the Newmarket Shuttle Service when it is implemented. The four existing free shuttle services include:
 - o VA/Medical Center Shuttle;
 - Evening Shuttle to T stations and neighborhoods within one mile;
 - Boston University Shuttle (the BUS), a ten-minute weekday service and thirtyminute Saturday service; and
 - 610 710 Albany Street Shuttle, which makes a loop between the two employee parking garages for 4 hours in AM (5-9 AM) and PM (4-8 PM).

- Since June 2007, preferential parking has been provided for Vanpool, Carpool, and Hybrid/Electric Vehicle program participants on the first level of the 610 Albany Garage.
- Electric-powered scooters can be parked in the bike cages located behind the 710 Albany Street garage.
- PTS provides free bike helmets, lights, bells and reflectors at its office to promote bicycle safety.
- PTS offers free sheltered and secured bicycle parking at a secured bike cage. There are approximately 250 cyclists registered to use this cage.
- The University offers a bicycle commuter reimbursement benefit to University employees. Eligible faculty and staff may claim a \$25 reimbursement each "qualified bicycle-commuting month" (up to \$300 per calendar year) for expenses related to commuting by bicycle to and from BU Medical Campus.
- The University provides a discount for an on-site car-sharing service (Zipcar) with two dedicated parking spaces for shared-use vehicles on the BU Medical Campus. Additional shared-use vehicles are available at four locations within two blocks of the BU Medical Campus.
- The University has eleven dual 240-volt electric vehicle (EV) charging stations four on the ground floor of the 710 Albany Street garage (completed 2016) and seven on the ground floor of the 610 Albany Street garage (completed 2017 and 2021). Each station can accommodate two vehicles for a total of 22 between the two locations. In both locations, the BMC/BU Medical Campus community can charge vehicles for up to four hours at \$0.25 per hour. The stations are also used by patients and visitors who have paid to park at the 710 Albany Garage.
- In 2014, PTS joined the Bluebikes (formerly known as Hubway) Corporate Partner program as a Bronze Sponsor and now offers a discounted rate at \$60 (regular rate \$109) per year for employees and students who sign up for Bluebikes Corporate Membership.
- The University holds events to encourage its BU Medical Campus employees and students to use active transportation.
- As a charter member of A Better City TMA, the University supports a number of transportation demand management initiatives and programs. Specifically, A Better City TMA:

- Offers a Guaranteed Ride Home program to ensure that those who do not drive alone to campus will have a ride home in case of emergency.
- Participates in and helps organize the Annual MassCommute Bike Challenge Week and free Bike Safety Checkups and Workshops.
- Provides members with the GoMassCommute platform, a tool designed to reward travelers for taking "green" trips i.e. walk, bike, telecommute, carpool, vanpool, subway, train, bus, or ferry trips, or even working a compressed week. Travelers log their transit, bus, or walk trips to work on the website and are rewarded with discounts to stores, restaurants, entertainment, etc. GoMassCommute also serves as the Boston Metro Area's rideshare database for finding carpool partners.
- Works with the MBTA and BTD to improve bus service, wayfinding, and pedestrian safety around the South End.
- Works with Vision Zero Boston to improve traffic safety.





Chapter 6

ENVIRONMENT AND SUSTAINABILITY

CHAPTER 6: ENVIRONMENT AND SUSTAINABILITY

6.1 INTRODUCTION

Approved by the Boston University Board of Trustees in December 2017, Boston University's Climate Action Plan (the "CAP"), which applies to both the Charles River and Medical Campuses, has five major commitments:

- Prepare the University for the impacts from climate change that can no longer be avoided,
- Reduce greenhouse gas emissions to operate the University to net zero by 2040,
- > Develop a plan to reduce indirect emissions,
- > Integrate climate change into the University's education and research mission and,
- > Integrate the CAP with the University's Strategic Plan.

While the CAP is specific to Boston University, it was developed in the context that climate change is a global problem that extends beyond the University's campuses. Implementing the CAP will elevate the University's position as a leader by addressing the challenges of climate change in its educational programs, research, operations, finance, and community engagement. Specific goals include:

- Reduce building energy use 31% by 2032, including growth,
- Match 100% of electrical demand with renewables beginning in 2020 through a power purchase agreement for wind power in South Dakota (production began December 1, 2020) and,
- > Shift to fossil fuel free heating and cooling.

Calendar Year 2018 was a pivotal year for the University's sustainability efforts, kicking off the implementation of the University's CAP. The year's work provided the foundation to position the University as a leader in climate action and sustainability by building capacity to implement, manage, engage, and communicate around the CAP.

Boston University's Sustainability Program comprises a broad range of stakeholder groups throughout the University's campuses to provide a diversity of representation and opinion. The program is administered by BU Sustainability, whose mission is to support the

transformation of Boston University's planning, operations, and culture toward a sustainable and equitable future. Through this effort, the University will reduce its use of natural resources, strategically manage operating costs, and improve environmental and social impacts. Engagement efforts include a long-standing monthly communications campaign, a robust student internship program, staff and faculty Sustainability Liaisons, student organizations, Green Office Certification, Move In waste diversion program, Goodwill Not Landfill Move Out donation program, the Sustainability Festival, Earth Week+, and the *sustainability@BU* mobile app. As detailed in the CAP, the University has already made significant progress in reducing CO₂ emissions and energy use, as well as reductions in water use and wastewater generation, an overall reduction in waste generation coupled with an increased recycling rate, and almost 100% use of green cleaning products.

Operational efforts are primarily focused on seven key areas: Energy Conservation, Climate Action Planning and Implementation, Green Building Design, Zero Waste Planning and Implementation, Community Engagement, Communications, Food, and Transportation. Specific sustainability efforts as they relate to the Medical Campus are described in Section 6.2.

6.2 SUSTAINABILITY AT THE BU MEDICAL CAMPUS

At the BU Medical Campus, BU Sustainability implements the above programming as well as a polystyrene recycling program to address the volume of foam coolers generated by the labs. Even before BU Sustainability existed, the Medical Campus had coalesced a Sustainability Committee (the "Committee") that was tasked with identifying, communicating, and promoting best practices in energy reduction measures, waste management, and sustainability at BU Medical Campus.

Sustainability Liaisons represent every school and college. They meet quarterly with BU Sustainability to improve communication on campus sustainability issues, discuss potential projects within individual schools, and share challenges, solutions, and successes. They also facilitate the main outreach and education effort with faculty and staff, known as the Green Office Certification program.

The Climate Action Plan Task Force established for the 2017 Climate Action Plan was broken into working groups that presented the University's priorities and challenges in early 2017 at public forums on both the Charles River and the Medical Campuses. BU Sustainability oversees the direction, development, and implementation of sustainable programs and policies throughout both campuses as one Boston University program.

6.2.1 SUSTAINABLE TRANSPORTATION

The University has worked both as an individual institution and through A Better City TMA to reduce the number of drive-alone trips to the medical area and to promote

sustainable transportation at the BU Medical Campus. As described in Chapter 5, these efforts have resulted in significant reductions in drive-alone rates. Through A Better City TMA and its own efforts, the University will continue programs (described in Chapter 5.8) to manage transportation demand and reduce transportation-related carbon emissions.

Throughout the term of this IMP, the University, through the Article 80 Large Project Review process, will carefully evaluate the impact of any new buildings on the existing transportation network and seek to mitigate any undue impacts at BU Medical Campus. The University will continue to coordinate with the City of Boston on the Harrison-Albany Corridor Strategic Plan to carefully guide future growth and improve roadway network conditions.

6.3 LEED GOLD CERTIFICATION

The University began Leadership in Energy and Environmental Design (LEED) certification for major projects in 2008 and has over 1.1 million square feet of LEED certified space to date, 89% of which has achieved LEED Gold. LEED certification provides a process and system that integrates sustainable design strategies to support the CAP's objectives and bring the CAP to fruition. The CAP established the following LEED criteria:

- LEED Gold minimum (while striving for Platinum) for new construction and major building renovations over 5,000 sf or \$10 million;
- > LEED Gold for renovations and interior projects over 5,000 sf or \$2.5 million;
- Seek design firms and construction companies with deep experience in green building certification and measured energy performance showing a successful track record of meeting or exceeding the Architecture 2030 Challenge;
- Provide staff training and occupant education on building systems to enable high performance buildings to operate at their potential; and
- > Explore and pilot Zero Net Energy certification by 2025.

Designed before the CAP was approved, the GSDM Renovation and Expansion, recently completed, achieved LEED Gold certification. The project involves materials specifically chosen for their high solar reflectance index, reduction of indoor and outdoor water use, and relocation of critical power equipment to the roof penthouse in anticipation of future flood events. Although a number of challenges exist for the energy-intensive uses of the building and the renovation of a cast in place concrete structure, the University seeks to reduce energy use to the extent possible.

6.4 BU WIND

In 2018, the University executed a Power Purchase Agreement (PPA) for a wind project in South Dakota to match 100% of the University's electricity demand. The project is designed to generate an average of 205,000 MWh of electricity each year from 48.6 MWs of generation capacity. This represents approximately 20 wind turbines and provides a 53% reduction in Boston University's carbon footprint for campus operations. The U.S. Environmental Protection Agency honored Boston University with a 2021 Green Power Leadership Award for the project as one of five recipients. BU's PPA is the largest single active PPA by any of the colleges and universities in EPA's Green Power Partnership.

The University has additionally hosted several workshops on large-scale renewable energy purchasing to enable other institutions and organizations to accelerate their own procurement processes. These workshops have been conducted in collaboration with the Boston Green Ribbon Commission and the Association for the Advancement of Sustainability in Higher Education (AASHE).

6.5 SOLAR INITIATIVE

The University engaged solar energy and structural engineers to conduct a campus-wide solar feasibility study, which was completed in 2020. The study explored over 80 buildings and sites across all the University's three campuses. With a maximum potential installed generation capacity of approximately 2.4 MW, it is the University's intention to aggregate these projects into PPAs phased in over five years. A request for proposals is currently underway for five buildings totaling nearly 1.2 MW of generation capacity.

6.6 ZERO WASTE INTIATIVE

The CAP established a Zero Waste Sustainable goal that would divert 90% of operations and construction waste from landfills and incineration. Through system design, operational improvements, student programs, recycling education, Dining Services practices, and material reductions, the University achieved a diversion rate of 42% in 2019, up from 3% in 2006.

The Zero Waste Task Force, made up of diverse University stakeholders, developed 21 initiatives in the Zero Waste Plan. The University launched the Zero Waste Plan in March 2021 and is now implementing the plan.

6.7 GROUNDWATER RECHARGE

As mentioned in Chapter 4, portions of the University's campus sit within the Groundwater Conservation Overlay District. The University has worked with the City to ensure that groundwater levels are maintained where its properties are protected by the district. Groundwater recharge is also incorporated in all new major construction projects through environmentally sensitive site design and best practices in stormwater management.

6.8 CITY OF BOSTON PROGRAMS

The University participates in several programs that are advanced by the City. These include:

- Green Ribbon Commission: Boston University has been a member and supporter of the City of Boston's Green Ribbon Commission since its inception. President Brown sits on the Green Ribbon Commission and the Carbon Free Boston Working Group. The University's AVP for Sustainability co-chairs the Commission's Higher Ed Working Group, a collaborative body of Boston area academic institutions convening around emerging and best practices on energy efficiency, large scale renewables procurement, climate preparedness, green labs, etc.
- Carbon Free Boston: Boston University's Institute for Sustainable Energy developed the process and implemented the analysis and reporting for Carbon Free Boston to help the City understand the policies and programs that need to be put in place if the City is going to meet its goal to be carbon free by 2050.
- Building Emissions Performance Standard: Boston University participated on the City of Boston's Technical Advisory Group for the new performance standard and supported its approval by the City Council in September 2021. This new ordinance was signed into law by Mayor Janey in October.
- Zero Net Carbon Buildings: Boston University participated on the Boston Planning and Development Agency's Renewable Energy Procurement and Embodied Carbon Technical Advisory Groups.
- Zero Waste Advisory Committee: The University participated in the City of Boston's Zero Waste Advisory Committee to make recommendations for nineteen Zero Waste options for implementation in the short-, medium- and long-term.

Chapter 7

COMMUNITY BENEFITS

CHAPTER 7: COMMUNITY BENEFITS

7.1 INTRODUCTION TO COMMUNITY BENEFITS

While renowned for its quality of teaching and research, and for providing education and training aligned with the most current thinking and techniques in the field, the BU Medical Campus prides itself on a legacy of service to the community, particularly service to the most disadvantaged, underserved, and indigent populations.

Utilizing resources provided by BU Medical Campus administration, each of its three schools offers a wide variety of community programs, resources, and services related to their respective concentrations and specialties. In addition to these University-sponsored community programs, BU Medical Campus plays an important role in the economic vitality of both the city and the state, attracting and training a diverse group of more than 3,500 students, and employing more than 1,400 full-time equivalent faculty members, many of whom are leading experts in their fields. Beyond its direct employment impact, BU Medical Campus creates and supports more than 6,400 jobs and generates approximately \$700 million in economic impact in Massachusetts each year.

7.2 A TRADITION OF COMMUNITY SERVICE

Over a hundred years ago, Boston University's third president described the University as an institution "in the heart of the city, in the service of the city." This description rings truer today than ever, and it serves as the basis for Boston University's extensive and ever-growing array of community benefits and services.

In addition to the University's status as the long-standing leader in PILOT (payment in lieu of taxes) contributions to the City of Boston each year – totaling \$6.3 in FY20 – the University's signature community benefit is its Boston Scholars Program. A multi-faceted scholarship program benefitting graduates of Boston Public Schools (BPS), it includes the Thomas M. Menino Scholarship Program and the Community Service Scholarship Program and is the largest and longest-running program of its kind in the country.

7.2.1 THOMAS M. MENINO SCHOLARSHIP PROGRAM

The University's signature program, the Thomas M. Menino Scholarship Program was previously known as the Boston High School Scholarship Program and was renamed for Mayor Tom Menino in June 2013 to celebrate the late Mayor's involvement in the program and his passion for education. The Menino Scholarship Program is the longest-running and largest scholarship program of its kind. Each year, 25 or more exceptional BPS high school seniors are awarded four-year, full-tuition merit scholarships to Boston University. Since the program's inception in 1973, over 2,000 students have received nearly \$190 million in full-tuition scholarship funding.

7.2.2 BOSTON UNIVERSITY COMMUNITY SERVICE SCHOLARSHIP PROGRAM

In 2009, to further expand scholarship opportunities for local students, the University committed to meeting the full financial need (without loans) of any BPS graduate admitted to Boston University through the creation of the Community Service Scholarship. The Boston University Community Service Scholars constitute the only cohort of students anywhere for which the University makes this uncapped, no-loan commitment of financial aid. Since the program's inception in 2009, over 500 BPS students have received more than \$60 million in scholarship funding.

7.2.3 SCHOLARSHIP PROGRAM EXPANSION – BPS TRANSFER STUDENTS

In December 2017, the University announced the expansion of the Community Service Scholarship program, which had previously been limited to incoming freshmen, to include incoming transfer students who are BPS high school graduates. All transfer students who graduated from a BPS high school are eligible, including those who have attended a two-year community college program and are looking to transfer to a four-year institution. This expansion builds on the University's commitment to expanding higher education opportunities for all BPS graduates.

The recipients of these awards represent the talented and diverse population of the City, and many students who participate in the University's Scholarship Programs are the first in their family to attend college. These awards provide BPS students the opportunity to graduate from college with a world-class education and with little or no debt without ever having to leave their hometown.

7.3 COMMUNITY PROGRAMS

Beyond these signature institutional community benefits programs, the BU Medical Campus' longstanding tradition of community service has led to the development of programs and services that are now fixtures within the community. These programs, which continue to thrive under BU Medical Campus' long-term support and investment, have become dependable sources of care and information for community members.

7.3.1 SMART SMILES IN BOSTON PUBLIC SCHOOLS

Since 2004, the Boston University Goldman School of Dental Medicine (GSDM), through its Smart Smiles in Boston Public Schools (BPS) program,

provides oral health education, and preventive dental services including dental screenings or exams, dental sealants, fluoride varnish applications, referrals for treatment as well as some restorations to thousands of children in approximately 30 Boston public schools. Over 13,000 BPS students receive care annually from over 200 GSDM students, for a total annual investment of over \$200,000. GSDM also participates in school-sponsored open houses, parents' nights, and health fairs.

7.3.2 ALZHEIMER'S DISEASE CENTER

The Alzheimer's Disease Research Center is one of approximately 31 federally funded Alzheimer's Disease Research Centers nationwide. Its goal is to help reduce the human and economic costs associated with Alzheimer's disease and related disorders including chronic traumatic encephalopathy through the advancement of knowledge. The Center provides educational resources to patients, healthy aging individuals, caregivers, healthcare professionals, and researchers while charting the course of the disease and age-related changes in the research participants followed by the Center. In addition, the Center provides participants, data, and a collection of well-prepared brain material appropriate for the research requirements of local and national research efforts.

7.3.3 BOSTON UNIVERSITY ARTHRITIS AND AUTOIMMUNE DISEASES CENTER

Boston University Arthritis and Autoimmune Diseases Center is an internationally recognized center in research, patient care, and education. The Center was established in 1983 to advance basic, clinical, and epidemiological research in rheumatology and to translate laboratory findings into new therapeutic strategies. The Center unifies extensive basic, translational, and clinical research; medical education; and patient care. Arthritis Center faculty include those in general rheumatology and within focused programs in scleroderma, vasculitis, and clinical epidemiology. The University's multidisciplinary programs in scleroderma and vasculitis are highly integrated with experts in many specialties, including those in pulmonary and cardiology. Clinical care is provided in state-of-the art out- and in-patient facilities. The Center's clinical research teams have been at the forefront of developing new approaches to study and test new treatments for scleroderma, osteoarthritis, vasculitis and other autoimmune disorders.

7.3.4 BOSTON UNIVERSITY AREA HEALTH EDUCATION CENTER

The Boston Area Health Education Center (BAHEC) provides youth, most of whom are from underserved areas, with a pathway to health and public health careers. BAHEC inspires Boston high school students to pursue health careers

by providing hands-on learning and exposure through year-long and summer programming with the goal to increase racial, ethnic, and linguistic diversity among Boston's healthcare workforce. BAHEC is supported by the Boston Public Health Commission's Child and Adolescent Health Division.

BAHEC Youth to Health Summer Enrichment Program connects 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 the GSDM 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.

7.3.5 BOSTON UNIVERSITY GERIATRIC SERVICES

Sponsored jointly by BUSM and BMC, this program is the oldest continuously operating home-medical service in the United States. Boston University Geriatric Services provides an array of health services for Boston's elderly, including medical care for patients who cannot leave their homes for treatment. The program makes approximately 3,700 home visits to 600 elders each year, thus enabling many patients who would otherwise require placement in nursing homes to remain in their homes. Since 1875, physicians and BU medical students (under the supervision of an MD) have been delivering healthcare to patients in their homes, where they feel most comfortable.

7.3.6 BOSTON UNIVERSITY HEALTH IMMERSION EXPERIENCE WITH BOSTON HEALTHCARE FOR THE HOMELESS

This program aims to educate a generation of future doctors in the unique challenges of medical care for the homeless population using a hands-on learning opportunity. During clinical monthly interviews with homeless patients at the Barbara McInnis Respite House and outpatient care center of Boston Healthcare for the Homeless building, medical students will learn and delve deeply into the social history, barriers to health care and socioeconomic determinants of health for the homeless.

7.3.7 BOSTON CENTER FOR REFUGEE HEALTH & HUMAN RIGHTS

The Boston Center for Refugee Health & Human Rights is a member of the National Consortium of Torture Treatment Programs and operates as an interdisciplinary collaboration among clinicians and experts from Boston Medical Center, BU School of Medicine, Global Lawyers and Physicians, and the National Center for Post-Traumatic Stress Disorder. The Center has actively

cared for the medical, psychological, legal, and social needs of asylum seekers, refugees, survivors of torture and their families by providing primary health care, mental health services, referrals for medical specialties, consultation for legal services as well as social services. The program also offers a clothing bank, access to the BMC Food Pantry, and ethnic community support groups.

7.3.8 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. Undertaken in 1948, the study has produced important discoveries related to the major risk factors associated with cardiovascular disease, which is the leading cause of death and serious illness in the United States.

7.3.9 BLACK WOMEN'S HEALTH STUDY

The Black Women's Health Study (BWHS) is the largest follow-up study on the health of African American women. In 1995, 59,000 Black women from all regions of the U.S. enrolled in the BWHS by completing lengthy questionnaires; follow-up information on health and exposures is collected every two years and over 50% of participants have provided either a blood or saliva sample. The study's main aim is to identify factors (social, behavioral, genetic, and geospatial) that contribute to the disproportionately high incidence of cancer and other illnesses (e.g., hypertension, diabetes, stroke, and lupus) experienced by Black women.

7.3.10 BOSTON UNIVERSITY SCHOOL OF PUBLIC HEALTH CAREER AND PRACTICE OFFICE

The BU School of Public Health (BUSPH) Career and Practice Office facilitates connections between BUSPH, local practice partners, and the national and international public health community by providing tools, programs, and advice in order to promote sound public health practice. BUSPH students participate in a practicum, which allows them to integrate and apply classroom learning in a public health work environment. Students devote time and knowledge by working at public health agencies contributing to solutions to public health problems and developing practical skills and personal confidence as public health professionals. These partnerships foster collaboration between Boston University and the greater community and provide students with important opportunities for professional growth.

7.3.11 NATIONAL EMERGING INFECTIOUS DISEASES LAB (NEIDL) SPEAKER SERIES

The NEIDL Speaker Series is a virtual career exploration program that allows for High School students to directly engage with BU/NEIDL professionals around college preparedness, job skills, and their personal pathway to their respective career. Past guests include scientists, engineers, IT and Environmental health and Safety professionals. Government & Community Affairs has developed partnerships with several area schools including Madison Park Technical Vocational High School & MATCH High School to hold the Speaker Series on a monthly basis during the school year. The series has also been held with other student groups whom belong to organizations supported by the University and is available to interested Boston Public Schools partners.

7.3.12 SCHOOL OF MEDICINE SCIENCE TEACHING ENRICHMENT PROGRAM (STEP)

A service-learning elective, BU School of Medicine Science Teaching Enrichment Program (BUSM STEP) promotes a partnership between the BUSM community and high-school students from the Greater Boston Area. Medical students meet with a group of high school students, once a week on campus, providing them with an early exposure to the medical profession. Meetings involve one-on-one mentoring, as well as programming focused on knowledge of health careers, health disparities, and disease processes. Medical students also work with residents of the Primary Care Residency Program to organize clinical skills sessions for the high school participants, as well with the Boston Area Health Education Center (BAHEC) to help the students develop a community engagement project.

7.3.13 OUTREACH VAN PROJECT

The Outreach Van Project is a student-run community service staffed by volunteers from Boston University's School of Medicine under the supervision of a licensed physician to provide health care, food, clothing, toiletries and other basic necessities to the medically underserved and homeless communities of East Boston. The Outreach Van Project is currently the only outreach agency supporting the underserved community in East Boston.

Faculty and students go out one evening per week, usually Thursdays. Many of the clients suffer addiction and mental illness. Clients are referred for treatment as well as provided information on obtaining housing. The Henry M.

Goldman School of Dental Medicine provides dental supplies for distribution to the many people served through this very beneficial outreach program.

7.3.14 GOLDMAN SCHOOL OF DENTAL MEDICINE HORIZONS FOR HOMELESS CHILDREN ORAL HEALTH PROGRAM

Boston University's Goldman School of Dental Medicine faculty and students offer oral health education, screenings, and fluoride varnish treatments to all children ages six weeks to three years old enrolled in the Early Headstart Programs 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. This program is run in conjunction with ABCD Headstart.

7.3.15 ANATOMY ACADEMY

Anatomy Academy is a seven-week educational outreach program that helps combat childhood obesity by inspiring children to develop good health habits and health self-efficacy. The program is an opportunity for pre-health professional students (mentors) to teach health and nutrition concepts together to elementary school children (students). Mentors prepare and deliver lessons on anatomy, physiology and nutrition that help students understand the importance of establishing and maintaining a healthy lifestyle, teach groups of students in didactic and active learning environments, serve as role models for pursuing higher education, and become exposed to an experiential learning environment that results in immediate, quantifiable behavioral change in students. Topics of teaching include musculoskeletal system, cardiovascular system, pulmonary system, upper gastrointestinal system, oral cavity and nutrition, lower gastrointestinal system, senses, and brain. Students are primarily elementary school students or high school special needs students.

7.3.16 BOSTON UNIVERSITY SCHOOL OF MEDICINE MED-SCI PROGRAM

The BU MedSci Program is a five-week summer high-school program that offers exposure to various fields of medicine and basic science research in combination with experiential learning activities in a virtual format. The program is taught by BU School of Medicine instructors, medical students, masters and PhD students. This program is open to all high school students in the Boston Public Schools, in grades 9 through 12 who would like to explore careers in medicine and science.

7.3.17 SCHOOL OF PUBLIC HEALTH MASTER ACADEMY IN POPULATION HEALTH & POPHEALTH EXPERIENCE

The Master Academy in Population Health (10th – 12th graders) and the PopHealth Experience (7th-9th-graders) provides students an engaging and intensive exposure to a wide range of public health experiences. Students learn from BU School of Public Health faculty and graduate students and are immersed in a range of public health topics, participate in hands-on research activities, discover career choices, and develop leadership skills.

7.3.18 BU FITWELL

Boston University, in partnership with the Boston Centers for Youth and Families (BCYF) and the Boston Public Health Commission (BPHC), created the BU Health, Fitness, and Wellness Pilot Program in 2012. The five-year, \$1.25 million pilot program provided increased access to numerous free and low-cost physical activities while promoting healthy lifestyle choices for Boston youth and their families. The cornerstone of this pilot program was the creation of the Boston University Fitness and Wellness Center (BU FitWell) at the Blackstone Community Center in Boston's South End. Opened in February 2013, BU FitWell is a 2,000 sf fitness space with fitness equipment including treadmills, ellipticals, stationary bikes, power cages, dumbbells, and lockers. BU FitWell is staffed and supervised by the University's Department of Physical Education, Recreation & Dance and offers programming directed and guided by experts from the University's College of Health & Rehabilitation Sciences, Schools of Medicine, Public Health, and Social Work. Through wellness programming and fitness instruction, BU FitWell strives to provide youth and families with the skills needed to make physical exercise and healthy choices an enduring part of their lifestyles. BU continues to fund and operate the Fitwell at the Blackstone Community Center past its initial five-year term.

7.4 ANNUAL PROPERTY TAXES/PILOT

Although much of the BU Medical Campus property is tax-exempt, the University contributes annually to the City of Boston's Payment in Lieu of Taxes (PILOT) Program. Since 2013, Boston University has paid more than \$40 million in real estate property taxes and linkage payments to the City of Boston and nearly \$50 million in lieu of taxes for its three campuses.

Year	Real Estate Tax	Payment in Lieu of Taxes	Linkage Payments	Total
FY20	\$3,430,541	\$6,300,000	\$3,213,582*	\$12,944,123
FY19	\$3,885,084	\$6,300,000	\$0	\$10,185,084
FY18	\$4,485,485	\$6,100,000	\$202,521	\$10,788,006
FY17	\$4,802,364	\$6,100,000	\$0	\$10,902,364
FY16	\$4,190,441	\$6,100,000	\$1,067,489	\$11,357,930
FY15	\$3,933,972	\$6,043,376	\$1,150,931	\$11,128,279
FY14	\$4,003,865	\$6,043,376	\$206,706	\$10,253,947
FY13	\$5,048,113	\$6,043,373	\$1,584,472	\$12,675,958
Total	\$33,779,865	\$49,030,125	\$7,425,701	\$90,235,691

Table 7-1	, Real Estate	Tax and	PILOT	Payments
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*FY2020 Linkage Payments comprise a payment of \$531,612 for the balance due for the renovation and expansion of the Goldman School of Dental Medicine, and a payment of \$2,681,970, which is the total due for the construction of the Center for Computing and Data Sciences.

7.5 ADDITIONAL ECONOMIC BENEFITS

Boston University is the fourth-largest private research university in the nation and the third largest private employer in the City of Boston. With over 35,000 students and 10,000 faculty and staff, the University generates approximately \$3 billion annually in economic activity by spending dollars in the region; supplying jobs to individuals in research, teaching, and staff capacities; spending by visitors to the area; and, at the BU Medical Campus in particular, the groundbreaking academic medical research that is translated into practice by researchers, physicians, and students.

7.6 COMMUNITY BENEFITS PROGRAM ADDENDUM

In addition to the descriptions above, students, faculty and staff across the Medical Campus are engaged in numerous community-based programs and partnerships. Attachment 2, BU Medical Campus Community Benefits Programs Addendum includes brief descriptions of many of these additional programs and partnerships. Where listings do not have an associated website, please contact Government & Community Affairs for more information at: gca@bu.edu.

Attachment 1

SIGNAGE AND WAYFINDING MASTER PLAN



Boston University Medical Campus

SIGNAGE & WAYFINDING INSTITUTIONAL MASTER PLAN

August 19, 2021

ANNA FARRINGTON graphic arts & design

Introduction:

This signage master plan describes the purpose of campus signage on the Boston University Medical Campus (BUMC). It is intended as a general guide, to be suitably applied to address the range of particular and/or evolving needs as they arise.

Our Goals:

The Medical Campus signage program goals are: to enhance the University's image, identify University buildings, and provide pedestrian wayfinding information. BUMC signage will provide a sense of arrival and welcome; and illustrate academic and cultural experiences at the University.

About BUMC:

Boston University Medical Campus, located in the historic South End of Boston, comprises the School of Medicine, School of Public Health, and Henry M. Goldman School of Dental Medicine. The campus is adjacent to Boston Medical Center (the primary teaching affiliate of the School of Medicine), the Solomon Carter Fuller Mental Health Center, and the BioSquare research park. The existing signage is a mixture of red-and-gold signs (the University's former standard) and newly installed red-and-white signage.

About the Plan:

The BUMC signage plan aligns with the comprehensive strategic signage program in place on BU's Charles River and Fenway Campuses. The implementation of consistent signage on BUMC will present a unified identity for Boston University's campuses and distinguish it, even within Boston's busy urban landscape. The program—mostly comprising exterior on-building signage and freestanding directional signage—will welcome and guide pedestrians with clear, concise wayfinding throughout BUMC, enhancing school recognition and providing easily identifiable street addresses. Consistent exterior signage demarcates the campus for visitors, including patients of the dental school clinic and nearby residents.

BUMC will continue to coordinate with Boston Medical Center on vehicular signage in the area to maintain visual consistency and clarity in messaging, particularly that which pertains to emergency services.

BUMC signage will continue to include banners, which are consistent in design with the Commonwealth Avenue banners on our Charles River Campus. Campus banners affixed to BUMC building exteriors illustrate and illuminate what is happening inside, to bring the University to life for visitors and passersby.

The University leases space in buildings in the area around BUMC. Signage standards for those properties take precedence over Boston University signage standards.

In 2019, Boston University began a major renovation of the Henry M. Goldman School of Dental Medicine. Building signage was based on the style implemented on the Charles River and Fenway Campuses, for consistent visual identity. Our signage program goals extended to this location. The sign types in the program remained largely the same but with a slightly modified design to scale more appropriately to the building's densely developed, urban surroundings. (Please see the included Henry M. Goldman School of Dental Medicine package PDF.)



Not to Scale

Boston University Medical Campus Institutional master plan buildings shown in red. Not to scale

PRIMARY DESTINATIONS

BU School of Medicine (BUSM) 72 East Concord St.

School of Public Health / Talbot Building 715 Albany St.

Henry M. Goldman School of Dental Medicine 635 Albany St./100 East Newton St.

• Department of Dermatology 609 Albany St.

CAMPUS BUILDINGS

Conte Medical Research Building 71 East Concord St.

Evans Building 75 East Newton St.

Housman Medical Research Center 778 Albany St.

Robinson Building 750 Harrison Ave.

School of Medicine Student Residence 815 Albany St.

VEHICULAR APPROACH - PARKING GARAGE - 710 Albany Street



Not to Scale

Vehicular approaches to the Medical Campus primarily lead to the public parking garage at 710 Albany Street.

BUMC and Boston Medical Center co-branded signage facilitates vehicular wayfinding to the district's primary parking facility.



Eastbound: Co-branded Vehicular Wayfinding



Westbound: University Identification

EXISTING CONDITIONS - PEDESTRIAN APPROACH - SCHOOL OF MEDICINE - 72 East Concord Street



The primary pedestrian approach from the 710 Albany Street Garage leads through the 715 Albany Street courtyard to the Campus Green and the main Campus reception point at 72 East Concord Street.

first time visitors.

Not to Scale

Pedestrian level gateway signage, orientation map kiosks, freestanding and wall-mounted pedestrian wayfinding signage, and building identification signs provide a comprehensive wayfinding experience for

EXISTING CONDITIONS - PEDESTRIAN APPROACH - SCHOOL OF MEDICINE - 72 East Concord Street



Location 01: Campus Map

Location 02: Campus Map

Location 03: Pedestrian Gateway



Location 04: Wall-mounted Pedestrian Wayfinding

EXISTING CONDITIONS - PEDESTRIAN APPROACH - SCHOOL OF MEDICINE - 72 East Concord Street



Location 05 & 06

Location 05: Freestanding Pedestrian Wayfinding

Location 06: Campus Map



Location 07: Building Identification

Location 08: Building Identification

Location 09: Building Identification

EXISTING CONDITIONS - PEDESTRIAN APPROACH - SCHOOL OF PUBLIC HEALTH - 715 Albany Street



The primary pedestrian 715 Albany Street.

Signage includes wall-mounted pedestrian wayfinding signage and building identification signs.

Not to Scale

The primary pedestrian approach to the School of Public Health at

EXISTING CONDITIONS - PEDESTRIAN APPROACH - SCHOOL OF PUBLIC HEALTH - 715 Albany Street



Locations 10, 11 & 12

Location 10: Wall-mounted Pedestrian Wayfinding

Location 11: Building Identification



Location 13: Building Identification & Entry Information

EXISTING CONDITIONS - PEDESTRIAN APPROACH - HENRY M. GOLDMAN SCHOOL OF DENTAL MEDICINE - 635 Albany Street



Not to Scale

The signage at the Henry M. Goldman School of Dental Medicine was updated in conjunction with the building renovation project in

The newly installed signage at the School is intended to serve as the standard baseline for sign updates campus-wide.

EXISTING CONDITIONS - PEDESTRIAN APPROACH - HENRY M. GOLDMAN SCHOOL OF DENTAL MEDICINE - 635 Albany Street



Location 15: Building Identification

Location 16: Building Identification



Location 18: Building Identification

Location 19: Pedestrian Wayfinding & Information

Location 17: Accessibility Directional

EXISTING CONDITIONS - BUILDING IDENTIFICATION - DEPARTMENT OF DERMATOLOGY - 609 Albany Street



The primary entrance at the Department of Dermatology, 609 Albany Street.

Not to Scale



Location 20 & 21: Building Identification



EXISTING CONDITIONS - BUILDING IDENTIFICATION - SILVIO O. CONTE MEDICAL RESEARCH BUILDING - 71 East Concord Street



Visitors enter via the main School of Medicine lobby at 72 East Concord Street.



Location 25 & 26: Building Identification



Location 27: Building Identification & Entry Information
EXISTING CONDITIONS - BUILDING IDENTIFICATION - EVANS BUILDING - 75 East Newton Street



Visitors enter via the main School of Medicine lobby at 72 East Concord Street.



Location 28: Building Identification



Location 29: Building Identification & Entry Information

EXISTING CONDITIONS - BUILDING IDENTIFICATION - HOUSMAN MEDICAL RESEARCH BUILDING - 778 Harrison Avenue



The Housman Medical Research Building is card access only. Visitors enter via the main School of Medicine lobby at 72 East Concord Street.



Location 30: Building Identification

Location 31: Building Identification



Location 32: Entry Information

EXISTING CONDITIONS - BUILDING IDENTIFICATION - ROBINSON BUILDING - 750 Harrison Avenue



Receiving and Loading Dock access is restricted.

Not to Scale



Locations 34 & 35: Regulatory Signage



Location 36: Building Identification

EXISTING CONDITIONS - BUILDING IDENTIFICATION - SCHOOL OF MEDICINE STUDENT RESIDENCE - 815 Albany Street





Not to Scale



Location 40: Building Identification

Location 41: Building Identification

EXISTING CONDITIONS - PARKING IDENTIFICATION - Additional Signage Considerations



The parking lot adjacent to 780 Harrison Avenue is restricted and not open to public or visitors.



Vehicular regulatory and informational signage at restricted campus parking.

EXISTING CONDITIONS - MEDICAL CAMPUS - Additional Signage Considerations



Pedestrian wayfinding signage at key campus decision points.

Pedestrian wayfinding signage at key campus decision points.

Pedestrian wayfinding signage and building entry information at card access points and building egress.

Evaluation of co-branded pedestrian wayfinding signage.

SIGNAGE AND WAYFINDING MASTER PLAN PROGRAM - Location Plan



NOTE:

The following proposed program of signs is for design intent only,

and is intended to be further developed as areas for updates are identified.

Not to Scale

Sign Type 16 Campus Gateway

Single sided gateway sign with aluminum bar detailing, granite posts, and aluminum sign panel with masked and sprayed graphics..

Overall Size	Materials	Colors
Height: 5'-4 1/2"	Alum. Bar Stock	Black
Width: 7'-8 "	Granite - "Texas Rose" with Flamed Finish	Red
	Aluminum Panel	White
	Cut Metal Letters	Light Gray









Sign Type 22A Campus Map

Fabricated aluminum kiosk with digital map print and granite base.

Overall Size	Materials	Colors
Height: 3'-10"	Aluminum plate and tube structure	Red
Width: 5'-1"	Granite Base - "Texas Rose" with Flamed Finish	



Location 01



Location 02



Location 06



A: Top View

1/2" = 1' - 0"





22

Colors

Red Background White Lettering

Sign Type 21C BU Information Display - Small

Fully enclosed, four (4) sided, internally illuminated information display with back-lit graphics and granite base.

Granite Base - "Texas Rose" with Flamed Finish Concrete Footing	Overall Size Height: 7'-2" Width: 1'- 9" sq.	
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A: Directional Panel B: College/School ID C: Directional Panel D: Image Panel 1/2'' = 1' - 0''

Sign Type 23A Freestanding College / School ID

Double sided pylon sign with digital print graphics and granite base.

	lors
Height: 5'-9" Aluminum plate and tube structure Red	d Sign Panel
Width: 1'-4" Granite Base - "Texas Rose" with Flamed Finish Wh	hite Lettering
Depth: 6" Digital Print	



A: Elevation 3/4" = 1' - 0"







Sign Type 23B Freestanding Directional Sign

Double sided pylon sign with digital print graphics and granite base.

Overall Size Height: 5'-9" Width: 1'-4" Depth: 6"

Materials Aluminum plate and tube structure Granite Base - "Texas Rose" with Flamed Finish **Colors** Red Sign Panel White Lettering







B: Side View 3/4" = 1' - 0" Location 23



Sign Type 24 Building Mounted College / School ID - Dbl. Panel

Fabricated aluminum frame and panel sign with cut vinyl lettering. Sign mounts to building facade.

Overall Size Height: 3'-6 1/4" Width: 1'-7 **Materials** Aluminum Panel Alum. Bar Frame **Colors** Red Sign Frame and Panel White Lettering











Sign Type 25 Building Mounted College / School ID - Single Panel

Fabricated aluminum frame and panel sign with cut vinyl lettering. Sign mounts to building facade.

Overall Size Height: 2'-1/8" Width: 1'-7

Materials Aluminum Panel Alum. Bar Frame Colors Red Sign Frame and Panel White Lettering



Location 11















Location 20

ANNA FARRINGTON graphic arts & design



Location 26



Sign Type 26 Building Mounted Residence ID - Large

Fabricated aluminum frame and panel sign with cut vinyl lettering. Sign mounts to building facade.

Overall Size Height: 1'-7" Width: 1'-7" **Materials** Aluminum Panel Alum. Bar Frame **Colors** Red Sign Frame and Panel White Lettering











Sign Type 26B Building Mounted Directional - Large

Materials

Fabricated aluminum frame and panel sign with cut vinyl lettering. Sign mounts to building facade.

Overall Size

Height: 1'-7" Width: 1'-7"

Aluminum Panel Aluminum Bar Frame Colors Red Panel and Frame White Lettering



Location 04A & z





Location 10 & 12





Sign Type 34 Permit Parking ID Sign - Post & Panel

Double sided post and panel sign with white cut reflective sheeting lettering and graphics.







Sign Type 42 Dimensional Letters/Numerals - Stainless Steel

Fabricated stainless steel letters with horizontal satin finished faces and returns. Letters mount to existing building facade, field verification of all mounting conditions is required prior to commencement of any work. Removal of existing signage may be required, refer to location elevation drawings and message schedule for details.

Overall Size

Varies by location

Materials

11/2" thick stainless steel channel letters Hardware and adhesives as required, varies by location **Typeface** Varies by location: Bembo Semibold or Whitney Semibold





A: Typical Elevation College of General Studies 1/4" = 1' - 0"

NOTE: Messages and mounting conditions vary by location.



Location 28

Sign Type 46 Building Entrance Graphics

Matte white cut vinyl building address, building identification, and entry direction graphics mounted to first, or second surface of glass.

Locations:

It is intended that Sign Type 46 Building Entrance Graphics will be applied at every building entrance on the BUMC campus.

Graphics will provide building address numbering, building identification, entry direction if entry is restricted, and accessible entry direction if entry conditions are non-accessible.

Additional details by location will be developed as areas for updating are identified.











C: Typical Elevation Detail 11/2" = 1' - 0"

BOSTON UNIVERSITY

Henry M. Goldman School of Dental Medicine

×

EXTERIOR SIGNAGE & WAYFINDING Final Design February, 2019

ANNA FARRINGTON graphic arts & design

Sign Location Plan



COMPREHENSIVE SIGN APPROVAL BOSTON ZONING CODE. ART. 11, AS AMENDED

URBAN DESIGN DEPT. BOSTON REDEVELOPMENT AUTHORITY DATE 2.8.19 APPROVED BY

~ 60



University master plate logo inset flat cut letters finished to match architectural fascade panels - Sign is illuminated with architectural up lights





LOCATION 01 APPROVED BY DATE 2.8.19 LOCATION 01 ALL EXTERIOR ULGHTING TO BE PROVIDED W/DIMMERS. BPDA UD STAFF TO REVIEW BRIGHTNESS. 2

University master plate logo inset flat cut letters finished to match architectural fascade panels - Sign is illuminated with architectural up lights





LOCATION 01



Rendering Detail Rendering shown for design intent 1/2" = 1'-0"

LOCATIONS 01 & 02

COMPREHENSIVE SIGN APPROVAL BOSTON ZONING CODE, ART. 11, AS AMENDEL

URBAN DESIGN DEPT. BOSTON REDEVELORMENT AUTHORITY APPROVED DATE 2.8.19

SEVENTH LEVEL EL +94' - 0"



Elevation Detail 1/2″ = 1′-0″

LOCATIONS 01 & 02

COMPREHENSIVE SIGN APPROVAL BOSTON ZONING CODE, ART, 11, AS AMENDED

URBAN DESIGN DEPT. BOSTON REDEVELOPMENT AUTHORITY

_DATE___





Architectural Lighting Detail 3" = 1'-0"

LOCATIONS 01 & 02

EMBEDDED PAINTED STEEL PLATE LETTERS

PHENOLIC PANEL ON 3/4" FRT
PLYWOOD BACKERBOARD, ROUT
OUT PHENOLIC PANEL AT
EMBEDDED LETTERS

LINEAR LED LIGHT FIXTURE

ALUMINUM SHIELD, PAINTED TO MATCH TRIM

<u>SEVENTH LEVEL</u> EL +94' - 0"

COMPREHENSIVE SIGN APPROVAL BOSTON ZONING CODE, ART. 11, AS AMENDEL

URBAN DESIGN DEPT. BOSTON KEDAVENOPMENT AUTHORITY 2.8.19 **NPPROVIED BY** D/12

COMPREHENSIVE SIGN APPROVAL BOSTON ZONING CODE, ART. 11, AS AMENDEL

Identification Signs





LOCATIONS 03, 04 & 10

COMPREHENSIVE SIGN APPROVAL BOSTON ZONING CODE, ART. 11, AS AMENDED

URBAN DESIGN DEPT. BOSTON REDEVELOPMENT AUTHORITY DATE 2.8.19 APPROVED

Identification Signs



LOCATIONS 03, 04 & 10

GOLDMAN Dental Medicine

COMPREHENSIVE SIGN APPROVAL BOSTON ZONING CODE. ART. 11, AS AMENDED

URBAN DESIGN DEPT. I REDEVEDOPMENT AUTHORITY BOSTON RE DATE 2.8.19 APPROVE

Identification Signs



LOCATIONS 03, 04 & 10

Identification Sign

Fabricated stainless steel monument sign with freestanding and cut-out letters Freestanding letters are back lit, cut-out letters are internally illuminated



Sign Section 1/2'' = 1'-0''

Sign Elevation 1/4" = 1'-0"

LOCATION 03

COMPTENENSIVE SIGN APPROVAL EGSTON ZONING CODE, ART, 11, AS AMENDED

Identificaiton Signs

Fabricated stainless steel monument sign with freestanding and cut-out letters Freestanding letters are back lit, cut-out letters are internally illuminated





LOCATIONS 04 & 10



Albany Street Elevation 3/8" = 1'-0"

LOCATIONS 04 & 10



Typical Section Full Scale

COMPREMENSIVE SIGN APPROVAL EOSTON ZONING CODE, ART. 11, AS AMENDED

URBAN DESIGN DEPT. BOSTON REDEVELOPMENT AUTHORITY DATE 2.8.19 APPROVED

Identification Signs

Internally illuminated, four sided, freestanding fabricated monument sign Non-Illuminated overhead hanging building identification sign



LOCATIONS 05, 06 & 13

COMPREHENSIVE SIGN APPROVAL EOSTON ZONING CODE, ART, 11, AS AMENDED

URBAN DESIGN DEPT. BOSTON REFERENCE AUTHORITY 7 DATE 2.8.19 APPROVED

Identification Signs



LOCATIONS 05, 06 & 13

COMPREHENSIVE SIGN APPROVAL BOSTON ZONING CODE, ART. 11, AS AMENDED

Identification Signs

Internally illuminated, four sided, freestanding fabricated monument sign

URBAN DESIGN DEPT. N BEDEVELOPMENT AUTHORITY EOSTON APPROVED DATE 2.8.19



A: Directional Panel

B: College/School ID (Street Facing)

C: Directional Panel

D: Image Panel

Sign Location 05 Sign Elevations 1/2" = 1'-0"

LOCATION 05


COMPREHENSIVE SIGN APPROVAL BOSTON ZONING CODE, ART, 11, AS AMENDED

URBAN DESIGN DEPT. PMENTAUTHORITY **BOSTON RE** DATE 2.8.19 APPROVE

Identification Signs



LOCATIONS 06 & 13

COMPREMEMBINE CITH APPROVAL BOSTON ZONING CODE. ART. 11, AS AMENDED

URBAN DESIGN DEPT. BOSTON REDEKEDOPMENT AUTHORITY DATE 2.8.19 APPROVED

Identification Signs

Non-Illuminated overhead hanging building identification sign

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 – 1" D. FABRICATED ST. STEEL LETTERS NON-ILLUMINATED, NO. 4 SATIN FINISH LETTERS WELDED TO 1/8" MIN. METAL FLAT PLATE & 1/2" THK MIN PAINTED STEEL FRAME. FRAME COLOR TBD. FASTEN TO & SUSPEND FROM OVERHEAD BLDG SURFACE WITH 1/2" ROD OR BRACKET TYPESTYLE: WHITNEY SEMIBOLD

HENRY M. GOLDMAN SCHOOL OF DENTAL MEDICINE

THE LAWRENCE J. AND ANNE CABLE RUBENSTEIN BUILDING

4" H. LTRS





~1/8" THK. METAL PLATE MATCH FRAME FINISH

Sign Location 06 Sign Details Not to Scale

LOCATION 06

5" H. LTRS



East Newton Street Elevation 1/2'' = 1'-0''

11 MF

LOCATIONS 06 & 13



Sign Location 13 Typical Section Full Scale



LOCATIONS 07, 08 & 09

- .080" THK. ALUM. SIGN PANEL, ALL SURFACES, PAINTED.

FACE PANEL MOUNTED WITH VHB TAPE, FLUSH TO FRAMING. BACK PANEL MOUNTED WITH COUNTERSUNK FASTENER, FLUSH TO FRAMING. INTERNAL ALUM. ANGLE OR TUBE FRAMING STRUCTURE THREADED FASTENER TO

CONCRETE FOOTING IN GRADE

Attachment 2

BU MEDICAL CAMPUS COMMUNITY BENEFITS PROGRAMS ADDENDUM

BU Medical Campus Community Benefits Programs Addendum

<u>BU School / Department</u>	<u>Program Name</u>	Program Description	<u>Website</u>
Goldman School of Dental Medicine (GSDM)	Applied Professional Experience Program (APEX)	The Applied Professional Experience (APEX) Program at the GSDM was established in 1989 to provide students with an opportunity to experience dentistry in a true dental practice environment. By working alongside a practicing dentist, students enhance their skills in such areas as communication, preventive dentistry, diagnosis, treatment planning, emergency care, patient management, and comprehensive care. Students learn important concepts in practice management, including the application of business systems in a dental office and working closely with auxiliaries. Students participate in APEX, an eight-week internship in a private dental office or public health clinic, at the end of their first year.	<u>http://www.bu.</u> edu/dental/admissions/dmd/ap ex/
Goldman School of Dental Medicine (GSDM), Global and Population Health	Dental Health Career Exploration	The GSDM provides opportunities for high school students to explore dental health careers. A few examples include: - Dental Health Career session for high school students enrolled in Academic Immersion Medicine (AIM) - Dental Career Elective, dental health career session for Boston high school students enrolled in Boston Area Health Education Center (BAHEC) - Dental Health Career Expo for Boston high school students enrolled in BAHEC - Introduction to Dental Medicine six-week dental health career course for Boston high school students enrolled in BAHEC	

Goldman School of Dental Medicine (GSDM), Global and Population Health	Oral Health Promotion Discussions, Dental Screenings and Preventative Services for Local Partners	The GSDM provides annual oral health promotion discussions, dental screenings and preventative services to numerous organizations including, but not limited to: - Boston Public Elementary Schools service learning - Boston Public Health Commission (BPHC) annual Healthy Baby, Healthy Child (HBHC) picnic for mothers and children under age five enrolled in HBHC - Rosie's Place annual Health & Resource Fair - Bay Cove Center Club at their event for adults with psychiatric disabilities - Christmas in the City event for 5000 homeless children/families from Greater Boston, MetroWest and Lawrence area - Countdown to Kindergarten at the Boston Children's Museum event for 1500 Boston children's Center in Dorchester - Victory Programs, Boston Living Center annual oral health promotion presentation on HIV and oral health to clients of Boston Living Center - Yawkey Boys & Girls Club/Passport to Healthy Smile, where GSDM students participate in an annual hands-on, interactive oral health promotion event for children ages 7-12 years old	
Goldman School of Dental Medicine (GSDM), Global and Population Health	Oral Health Promotion, Dental Screenings and Preventative Services at Local Community and Cultural Events	 The GSDM provides annual oral health promotion discussions, dental screenings and preventative services at local community and cultural events including: Brazilian Independence Day with Massachusetts Alliance of Portuguese Speakers (MAPS) at their cultural event India Day, sponsored by the India Association of Greater Boston, open to the public Islamic Society of Boston Cultural Center (ISBCC) annual event for members Mattapan Health Revival cultural event for the Mattapan community Mid-Autumn Moon Festival in Dorchester, geared toward Vietnamese community Multi-Consulates Health and Resource Fair for several Central and South American Consulates 	
Goldman School of Dental Medicine (GSDM), Global and Population Health	Blackstone Elementary 3rd Grade School Field Trip	Third-grade children at Blackstone Elementary School in the South End make an annual visit to the GSDM for a 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.	
Goldman School of Dental Medicine (GSDM), Global and Population Health	Dental School Externship Program	During their fourth year, Dental students participate in a ten week rotation. This extramural experience exposes students to alternative clinical settings and different modes of treatment, instruction and to the needs of a variety of patients. Comprehensive oral health care has been provided at local community health centers, military installations, Veterans Administration hospitals, and major medical centers located throughout the United States.	

Goldman School of Dental Medicine (GSDM), Global and Population Health	Volunteer Efforts by Students, Faculty and Staff	Students, faculty, and staff from the GSDM volunteer their time at organizations and events throughout Boston. Examples include: - Boston University Medical Campus (BUMC) blood drives: volunteer at check in, check out and snack tables - Boston Cares letter writing: student and staff volunteers write encouraging messages to residents of homeless shelters - Jimmy Fund Walk Miles and Smiles Team: student volunteer walkers support the work of the Jimmy Fund by participating in this event - Pine Street Inn: volunteers assist with in-person meal preparation and serving	
Goldman School of Dental Medicine (GSDM), Global and Population Health	BU Dental Orientation Day of Service with Cradles to Crayons BACKPACK-A-THON	This is an all day event with hundreds of student volunteers assembling 4000-5000 backpacks in August. Throughout the year, in-person volunteering takes place at the Cradles to Crayons Giving Center and collections for needed items are organized.	
Goldman School of Dental Medicine (GSDM), Global and Population Health	Victory Programs Harm Reduction Kits	The GSDM provides Victory Programs with collections and donation and volunteers with meal preparation and serving. Victory Programs serves people in recovery, with HIV/AIDS and/or homeless by serving meals, distributing Harm Reduction kits, and providing household goods and clothing.	
Goldman School of Dental Medicine (GSDM), Global and Population Health	City of Boston Engagement Center - Dental Screenings	A monthly program that offers oral health promotion and dental screenings to the guests of the Engagement Center, a sanctuary for adults experiencing substance use disorder, recovery and/or housing insecurity.	
Goldman School of Dental Medicine (GSDM), Global and Population Health	Ethos: Residential Centers for Senior Citizens	Oral health promotion discussion on oral health and aging throughout the year at congregate meal gatherings at five senior citizen housing centers and community centers in Boston. Occurs every other month.	
Goldman School of Dental Medicine (GSDM), Global and Population Health	Greater Boston Operation Stand Down	Each September, Massachusetts Stand Down is an annual multi-service, veteran-sponsored intervention in Boston designed to address the problems of homelessness and substance use disorder among at risk military veterans. Each year GSDM faculty, staff, and students provide oral health education and dental screenings for the veterans in attendance.	
Goldman School of Dental Medicine (GSDM), Global and Population Health	Healing Our Community Collaborative (HOCC)	GSDM students participate in annual Dental Health Day where they provide oral health promotion and dental screenings at HOCC, for women living with, affected by or at risk for HIV. They also participate in the annual HOCC Health & Wellness Resource Fair.	
Goldman School of Dental Medicine (GSDM), Global and Population Health	Nurtury Childcare Centers	GSDM students participate in annual oral health promotion, dental screenings and fluoride varnish application for children enrolled in five Nurtury Childcare Centers in Jamaica Plain, Roxbury, Dorchester and Cambridge. They occur year round as needed.	
Goldman School of Dental Medicine (GSDM), Global and Population Health	Rosie's Place: "Women to Women" Program	The GSDM launched a monthly community service initiative named "Women to Women," aimed at improving the oral health of the women of Rosie's Place, a sanctuary for homeless and displaced women. The main goal of the monthly event 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. Students and staff also collect and provide donations to Rosie's Place.	

Goldman School of Dental Medicine (GSDM), Global and Population Health	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. GSDM 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
Goldman School of Dental Medicine (GSDM), Global and Population Health	Wang YMCA Holiday Party	At the annual holiday party at the Wang YMCA in Chinatown in December, GSDM students provide oral health education and hand out free mouth guards, toothbrushes, toothpaste, and educational materials to attendees.	
Goldman School of Dental Medicine (GSDM), Global and Population Health	Yankee Dental Congress/Ryan White Dental Program	GSDM students participate in oral health awareness as related to people living with HIV/AIDS and recruitment of providers at annual Yankee Dental Congress every January.	
National Emerging Infectious Diseases Laboratories (NEIDL) and Government & Community Affairs	Identifying Infectious Diseases (ID2)	ID2 is a public health education program developed in partnership with researchers at the NEIDL and School of Education staff to deliver a fun, hands on, participatory class to middle and high school students in the Boston Public Schools. It is focused on infectious diseases and answers a variety of different questions: what do infectious diseases look like? How are they identified? How are they transmitted?	
National Emerging Infectious Diseases Laboratories (NEIDL) and Government & Community Affairs	Project Place	Through a grant provided by the NEIDL mitigation fund, in coordination with the Boston Planning & Development Agency (BPDA), Project Place supports the work of the Clean Corners Bright Hopes team for the clean up and beautification of Massachusetts Avenue and Melnea Cass Boulevard Area near the Boston Medical Center. In addition, BU makes annual contributions to Project Place.	
School of Medicine (BUSM)	Academic Immersion (AIM)	The Academic Immersion Program (AIM) provides an opportunity for rising high school juniors and seniors to focus intensively on one academic topic for three weeks. Focus tracks of AIM include: Introduction to Medicine (in partnership with the Department of Medical Sciences & Education at the Boston University School of Medicine); Introduction to Experimental Psychology; Creative Writing; and Global Studies: Security, Statecraft, & Spycraft (in partnership with the Pardee School of Global Studies). Each track combines classroom work in the subject area with project-based learning activities. Students also participate in fun social activities designed for remote participants, with students from all over the country and around the world.	
School of Medicine (BUSM)	Boston University Coalition for Adult Immunizations	The Boston University Coalition for Adult Immunization (BUCAI) provides annual free flu vaccinations and distributes information on immunizations in numerous languages to underserved (or potentially underserved) populations in and around Boston. BUCAI gives medical students immediate experience early in their careers in giving immunizations, working with other medical professionals as well as diverse populations.	

School of Medicine (BUSM)	BU Homeless Health Immersion Experience- Partnered with Boston Healthcare for the Homeless	This program aims to educate a generation of future doctors in the unique challenges of medical care for the homeless population using a hands on learning opportunity. During clinical monthly interviews with homeless patients at the Barbara McInnis Respite House and outpatient care center of Boston Healthcare for the Homeless building, medical students learn and delve deeply into the social history, barriers to health care and socioeconomic determinants of health for the homeless.	http://www.bumc.bu. edu/busm/student- affairs/student-life/service- learning/busm-homeless- health-immersion-experience/
School of Medicine (BUSM)	BU 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.	https://www.bumc.bu. edu/cancercenter/
School of Medicine (BUSM)	BU Cancer Center - 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.	<u>www.bumc.bu.</u> edu/cancercenter
School of Medicine (BUSM)	Health Profession Recruitment & Exposure Program (HPREP)	HPrep is a nationwide high school enrichment program aimed at recruiting underrepresented minorities into the science & health professions. BU School of Medicine (BUSM) HPrep student leaders provide sessions catered to college preparatory and skills for success as well as introductions into the health professions	http://www.bumc.bu. edu/busm/student- affairs/student-life/service- learning/busm-health- professional-recruitment-and- exposure-program-hprep/

School of Medicine (BUSM)	Summerlab	The CityLab Biotechnology SummerLab provides students with a hands-on experience and the freedom to design and plan their own experiments, while providing the support to help them learn from their mistakes. Students work cooperatively with the guidance of CityLab educators to learn concepts and skills associated with biotechnology and to think scientifically and creatively in the context of authentic laboratory challenges. Boston University underwrites approximately 6 free annual scholarships for City of Boston students. The Office of Government and Community Affairs works with teachers at Boston Public Schools and other locals schools to identify the students for the placements in this program. Past recipients have been attendees of Madison Park Technical Vocational High School, Boston Latin Academy, Cathedral High School, City on a Hill, O'Bryant School of Math & Science and Excel Academy.	<u>https://www.bumc.bu.</u> edu/citylab/summerlab/
School of Medicine, Graduate Medical Sciences (GMS)	Summer Training as Research Scholars (STaRS)	STaRS promotes access to graduate education for traditionally underrepresented students in science and medicine. STaRS provides scholars with an opportunity to participate in research and enhances skills required for successful entrance and completion of a graduate program or an MD or PhD in the biological sciences. STaRS is a grant funded through the National Heart, Lung, and Blood Institute of the NIH.	https://www.bumc.bu. edu/gms/dei/undergraduate- summer-and-youth- programs/stars/
School of Public Health (SPH)	Activist Lab at BU School of Public Health Activist Fellowships	The Activist Lab helps students apply the knowledge and experience gained in the classroom by supporting their passion in order to create meaningful engagements in communities near and far. The Activist Lab sponsors the Activist Fellowship Program, an opportunity for two public health students to engage in advocacy-related activities on a public health topic for the duration of an academic year. Fellows are placed with a local/regional public health agencies, nonprofits, and/or advocacy campaign.	https://www.bu. edu/sph/practice/activist- lab/get-involved/activist- fellowships/
School of Public Health (SPH)	Boston Healthcare for the Homeless Program	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 (BUSPH). The BUSPH, along with Boston Medical Center (BMC), assist the Boston Health Care for the Homeless Program in the development of methods to improve strategic planning, especially for funding. Department faculty assist with developing data on the use of sub-acute medical care provided to Boston's homeless population at the program's two respite centers in Boston. The School of Public Health assists by gathering data and demonstrating how the utilization of these respite centers reduces hospital admissions, readmissions, and emergency utilization, thereby impacting the costs of care.	
School of Public Health (SPH)	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 methods of achieving affordable health care for all.	<u>http://www.</u> <u>healthreformprogram.org/</u>

School of Public Health (SPH)	Mini-Master of Public Health (MPH)	BU School of Public Health in partnership with Population Health Exchange now offers a free, online Mini-MPH. This program provides foundational knowledge in public health to all interested learners. The program includes six hours of engaging, online content that covers key concepts of public health with expert faculty. Each component of the Mini-MPH is free, online and asynchronous. The Mini-MPH is open to the public but does not lead to a certificate or degree.	<u>https:</u> //populationhealthexchange. org/learning- opportunities/mini-mph/
School of Public Health (SPH)	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.	https://www.bu. edu/sph/students/student- services/student-signature- events/public-health-week/
School of Public Health (SPH)	Public Health Conversations (SPH)	Public Health Conversations bring speakers to our campus to engage in thoughtful conversations about the pressing issues of public health. Many of these programs are offered online and open to the public.	https://www.bu. edu/sph/conversations/
School of Public Health (SPH)	The Partners in Health and Housing Prevention Research Center (PHH-PRC)	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 2020 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 and promoting COVID vaccination.	<u>https://www.bu.</u> <u>edu/creedd/partners/partnersin</u> <u>healthandhousing/</u>
School of Public Health (SPH), Activist Lab	Activist Lab Impact Grants	The purpose of the Impact Grants program is to help students establish and nurture a robust public health practice while making a meaningful contribution to the public's health. The goal is that students will carry these skills into their careers and relationships for decades to come Impact Grants is a micro-grant program to support student projects. This program has focused primarily in the local communities around the Boston University Medical Campus.	https://www.bu. edu/sph/practice/activist- lab/be-a-change-agent/impact- grants/
School of Public Health (SPH), Activist Lab	Barkley Holiday Party	The SPH Activist Lab hosts an annual Holiday Party for the children of the Ruth Lillian Barkley Housing Development in the South End just a few blocks from campus. This party includes gifts and/or gift cards for all of the children 14 years and younger, approximately 200 children.	https://www.bu. edu/sph/practice/activist- lab/activist-lab-events/barkley- holiday-party/