

1.0 IMP AMENDMENT

1.1 Introduction

Boston University Medical Center is comprised of Boston Medical Center Corporation (“BMC”) and Boston University Medical Campus (“BU Medical Campus”) which includes three of Boston University’s health science schools – the School of Medicine, the Henry M. Goldman School of Dental Medicine, and the School of Public Health. On June 7, 2013 Boston Medical Center Corporation and the Trustees of Boston University (collectively known as the “Proponents”) submitted an Institutional Master Plan Amendment Notification Form / Project Notification Form to initiate the Boston Redevelopment Authority (“BRA”) Article 80 Institutional Master Plan Review and Large Project Review Process for the BMC IMP project modifications. The proposed IMP Amendment includes modifications to projects previously approved in the 2010 Institutional Master Plan (“IMP”) and the addition of approximately 21,336 square feet for Boston Medical Center. These modifications will allow for critical campus alignment and growth, the reduction of ambulance traffic and materials deliveries along Albany Street, and the replacement of the existing yellow utility tube spanning Albany Street with a simple bridge to handle patient transfer and materials handling.

On June 22, 2010, the BRA approved the Boston University Medical Center Institutional Master Plan Renewal. As outlined in the approved 2010 IMP, BMC recognizes an immediate need to address space and physical constraints of its existing campus and respond to clinical trends through new construction, demolition and renovation. BMC seeks to amend the approved 2010 Institutional Master Plan to incorporate minor modifications consisting of:

- ◆ An addition to the existing Moakley Cancer Center (to facilitate the relocation and expansion of outpatient services);
- ◆ Minor footprint, massing, and phasing revisions to the 2010 IMP New Inpatient Building (to include the expansion of the Emergency Department and Trauma Center);
- ◆ Replacement of the existing yellow utility tube across Albany Street with a new Bridge (to service patient transport and materials handling);
- ◆ Relocation of the 2010 IMP Energy Facility; and
- ◆ Inclusion of the acquisition of the Perkin Elmer site.

The proposed IMP project modifications are consistent with BMC’s previously stated planning assumptions in the approved 2010 IMP. These modifications are necessary to consolidate and right-size clinical services to support new trends in health care delivery and patient volume, upgrade and expand the Emergency Department and Trauma Center, and move the core of the clinical campus to the west. The benefits of these modifications include:

- ◆ Elevated quality of care as a result of new and upgraded facilities and technology;
- ◆ Increased organizational efficiencies due to centralized services and improved operational adjacencies;
- ◆ Refined pedestrian experience along Albany Street through site improvements, reduction of curb cuts, and the replacement of the yellow utility tube with a new bridge;

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- ◆ Improved delivery of patient care and reduced operational costs through significantly decreasing patient transfers by ambulance and construction of a new patient transport bridge; and
- ◆ Improved energy infrastructure that increases energy efficiency and reliability, reduces environmental impact, and lowers operating costs.

The modifications as presented in the IMP/PNF have been carefully studied to incorporate design elements that minimize and mitigate potential impacts. Over the past several months, the project team met with the BUMC Task Force as well as Public Agencies of the City and members of the public to discuss the proposed IMP modifications.

Figures 1-1 and 1-2 illustrate the general location of the Boston University Medical Center Campus (“BUMC Campus”).

Figure 1-3 illustrates the Boston University Medical Center Campus (“BUMC Campus”) approved 2010 IMP.

1.2 Summary of Proposed IMP Modifications

1.2.1 Moakley Cancer Center Addition

The Moakley Cancer Center Addition is the enabling project for all proposed IMP projects. This project will house departments displaced from the expanded Emergency Department and Trauma Center, and the Centralized Surgical Department, and will accommodate increased volume in outpatient care. The addition will contain approximately 27,800 square feet.

1.2.2 New Inpatient Building

The New Inpatient Building, as discussed in the 2010 IMP, will address the need to meet current clinical care standards, improve the patient care environment by modernizing critical care areas, and allow for the consolidation of multiple departments, including the Emergency Department and Trauma Center, Main Radiology Department, Surgical Department and Interventional Procedures, and additional Intensive Care Unit beds, and provide vital connections to adjacent campus buildings and the helipad. BMC is currently proposing to move forward with Phase 1 of the project. The New Inpatient Building Phase 1 will contain approximately 82,300 square feet. Phase 1 will necessitate demolition of a portion of the Dowling Building. Improvements to the existing Menino Pavilion entry facing Harrison Avenue will be undertaken as part of this project of approximately 2,900 square feet included above.

The second phase of the New Inpatient Building containing approximately 323,000 square feet is proposed on the site of the Dowling Tower, directly adjacent to the Phase 1 of the New Inpatient Building. This will necessitate the demolition of the Dowling Tower (the remaining portion of the Dowling Building located at the corner of Massachusetts Avenue and Albany Street).

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Phase 2 of the New Inpatient Building will provide appropriately sized modern inpatient spaces that meet modern clinical standards and expansion space to accommodate future critical care and imaging functions. Together with Phase 1 and the Shapiro Ambulatory Care Center, this new building will enhance medical functions to meet programmatic needs and reinforce the Albany Street campus image.

1.2.3 New Patient Transport Bridge

BMC proposes to replace the existing yellow utility tube spanning Albany Street with a new Bridge to provide patient transport from the existing helipad to the emergency room and accommodate the transfer of clean materials. Patient transfer by ambulance between the helipad and the Emergency Department will be eliminated, thereby diminishing vehicular traffic along Albany Street. This, in turn, enables more efficient and direct patient transport to the Emergency Department thus improving the delivery of patient care. Currently, Med Flight patients arrive by helicopter at the south side of the existing Power Plant. Patients are transferred from the helipad via ambulance to the Emergency Department in the Menino Pavilion located on the north side of Albany Street. Upon completion of the Administration / Clinical building the bridge will provide a connection for patients, staff and visitors from the south side to the north side of Albany Street.

BMC explored other options to improve patient transport while also decreasing ambulance traffic on Albany Street. Options explored involved the re-use of existing below grade tunnels. Two existing tunnels are located beneath Albany Street. The first tunnel located between the existing Power Plant and the Shapiro Ambulatory Care Center is used solely as a utility tunnel and houses the high pressure steam lines serving the north side of Albany Street. The tunnel is too narrow to support the transfer of patients and further, transferring patients alongside utilities presents unsafe conditions. The second tunnel located at the basement of the Menino Pavilion below the Emergency Department entrance is constrained by low ceiling heights and has a steep slope which makes for hazardous conditions in transferring patients. Additionally, the tunnel is circuitous from the helipad necessitating additional time to travel to the Emergency Department. Finally, the tunnel would require traveling through non-patient transport corridors flanked by the Morgue and the Central Processing Department, and support departments.

1.2.4 Centralized Loading and Materials Handling

The current loading dock for the West Campus will be relocated away from hospital entrances to an interim central location utilizing existing loading docks within the Power Plant. The relocated loading docks will separate service areas from patient care areas and provide for a reduction in curb cuts along Albany Street which will contribute to an improved pedestrian experience, one of the Proponents' long term planning objectives. During the interim condition, BMC will continue to use one of the existing below grade tunnels for transporting soiled materials, including medical waste and trash, while clean materials will be transported through the new Bridge providing for improved safety in material handling operations.

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When the Administration / Clinical building is developed, the loading dock will move to its final location at the rear of the building and a new below grade tunnel will be constructed beneath Albany Street to transport materials between the Menino Pavilion and the south side of Albany Street. Options for the Administration / Clinical building site access and drop-off will be analyzed when the building moves forward.

1.2.5 Boston Medical Center Energy Facility

A 48,000 square foot state-of-the-art combined heat and power facility was approved by the BRA on June 22, 2010. The new Energy Facility was proposed to be located to the east of the existing Power Plant. Since that time, BMC has reevaluated the location and other project data of the approved Energy Facility and now proposes to relocate it to the west side of the existing Power Plant to take advantage of existing utility connections. The Energy Facility is proposed to be slightly smaller at approximately 38,500 square feet.

1.2.6 Albany Fellows

On January 12, 2010 the BRA approved an IMP Amendment to incorporate the Albany Fellows site which is approximately 1.7 acres consisting of 3 parcels: Parcel 1 contains approximately 15,324 square feet; Parcel 2A contains approximately 38,920 square feet, and Parcel 2B contains approximately 20,766 square feet. The total development includes 442,800 square feet of gross floor area.

Boston University completed the nine story 84,033 square foot building providing 104 housing units for 208 graduate students of the Boston University Medical Campus with approximately 12,000 square feet of landscaped open space and approximately 5,000 square feet of ground floor retail space, now occupied by a child-care (daycare) provider. The building opened in June 2012.

The future development of Parcels 1 and 2B (including the remainder of Parcel 2A not used for the open space or the graduate student housing) will be limited to approximately 358,500 square feet of above grade building space and up to 322 parking spaces. Potential uses for the future facilities may include: housing (either student housing or housing for faculty and staff of Boston University or Boston Medical Center), ground level retail, office, backstreets, research & development, and academic space.

For purposes of ensuring that the remaining parcels of the approved Albany Fellow Site continue to be included in the IMP the projects have been included in the IMP Amendment but do not require zoning approval under this amendment.

1.2.7 Clarification of Ownership

In addition to the IMP project modifications, the Proponents request to incorporate the acquisition of the Perkin Elmer site located at 100 East Canton Street, 123 East Dedham Street, and 575 Albany Street for a total of 129,461 square feet. 100 East Canton Street is a 3 story brick building of approximately 64,203 square feet of which the second floor is vacant. 123 East Dedham Street is a 1 story masonry building of approximately 9,258

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square feet and is currently vacant. 575 Albany Street is made up of the North and South buildings. The North building is a 6 story brick building of approximately 12,000 square feet. The South building is a 5 story brick building of approximately 44,000 square feet. Both are currently vacant. Included with the site is a surface parking lot. Please see Section 1.6.5 for discussion on future planning for this site.

1.2.8 Update in Use

Newton Pavilion

The Newton Pavilion is classified as “Inpatient” in the 2010 IMP. With the consolidation of clinical services to the West Campus, the potential future use of the Newton Pavilion may also include Administration/Research/Instruction.

1.2.9 Removal of Leased Space

Since the filing of the 2010 IMP, the Proponents are no longer leasing space that has been approved for institutional use.

BMC wishes to remove the following buildings from the Boston University Medical Center IMP as institutional use:

- ◆ Removal of the Northampton Street lease of 10,000 square feet.

BU Medical Campus wishes to remove the following buildings from the Boston University Medical Center IMP as institutional use:

- ◆ Removal of 761 Harrison Avenue, Harrison Court Apartments/Offices lease (effective September 30, 2013) of 122,922 square feet.

Table 1-1 Summary of IMP Project Modifications

Project	2010 Approved IMP (in square feet)	2013 IMP Amendment (in square feet)	Change (in square feet)
Moakley Cancer Center Addition	0	27,800	27,800
New Inpatient Building Phase 1	0	82,300	82,300
New Inpatient Building Phase 2	405,000	323,000	-82,000
Energy Facility	48,000	38,500	-9,500
New Patient Transport Bridge	0	7,800	7,800
Administration / Clinical Building	160,000	219,000	59,000
Demolition of Power Plant	0	-64,064	-64,064
Totals	613,000	634,336	21,336

Figure 1-4 illustrates the Boston University Medical Center Campus (“BUMC Campus”) proposed IMP Amendment projects (both Article 80D for IMP Review and Article 80B for Large Project Review).

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Ultimately these projects will enhance BMC's mission "to consistently provide excellent and accessible health services to all in need of care, regardless of status or ability to pay."

The improvements are consistent with BMC's guiding principles and planning assumptions outlined in the 2010 IMP:

- ◆ Accommodate changes in patient volume;
- ◆ Consolidate clinical services;
- ◆ Upgrade and expand the Emergency Department and Trauma Center; and
- ◆ Move the core of the clinical campus to the west.

BMC has initiated Large Project Review for the following projects:

- ◆ Moakley Cancer Center Addition
- ◆ New Inpatient Building Phase 1
- ◆ New Patient Transport Bridge

and

- ◆ Energy Facility

The Moakley Cancer Center Addition, New Inpatient Building Phase 1, and the New Patient Transport Bridge are interdependent. Therefore, a combined Draft Project Impact Report will be filed. Together these projects will help BMC achieve multiple master planning goals (outlined in the approved 2010 IMP) within the next five years.

Due to new regulatory requirements associated with the Energy Facility there is the need for additional design and analysis, therefore the Energy Facility will file a separate Draft Project Impact Report at a later date.

The sequence of the proposed projects begins with the construction of the Moakley Cancer Center Addition. Once this project is complete, departments to be displaced by the planned expansion and consolidation of multiple departments, which include the Emergency Department and Trauma Center, Main Radiology Department, Surgical Department and Interventional Procedures, and Intensive Care Unit, will be moved to this facility enabling the construction of the New Inpatient Building Phase 1. The existing yellow utility tube can be replaced with the new Bridge. Materials handling will move to an interim location in the existing Power Plant. The new Energy Facility will be constructed upon completion of the aforementioned projects.

Once this five year plan is complete, BMC may then construct Phase 2 of the New Inpatient Building and the new Administration / Clinical Building. See Section 2 for more information on the Large Project Review Projects.

This IMP Amendment and Large Project Review will allow BMC to begin the construction of campus upgrades necessary to address immediate needs for improved and expanded

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facilities. These upgrades are necessitated by changes in health care service delivery and volume trends.

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Figure 1-1 Boston University Medical Center Locus Plan



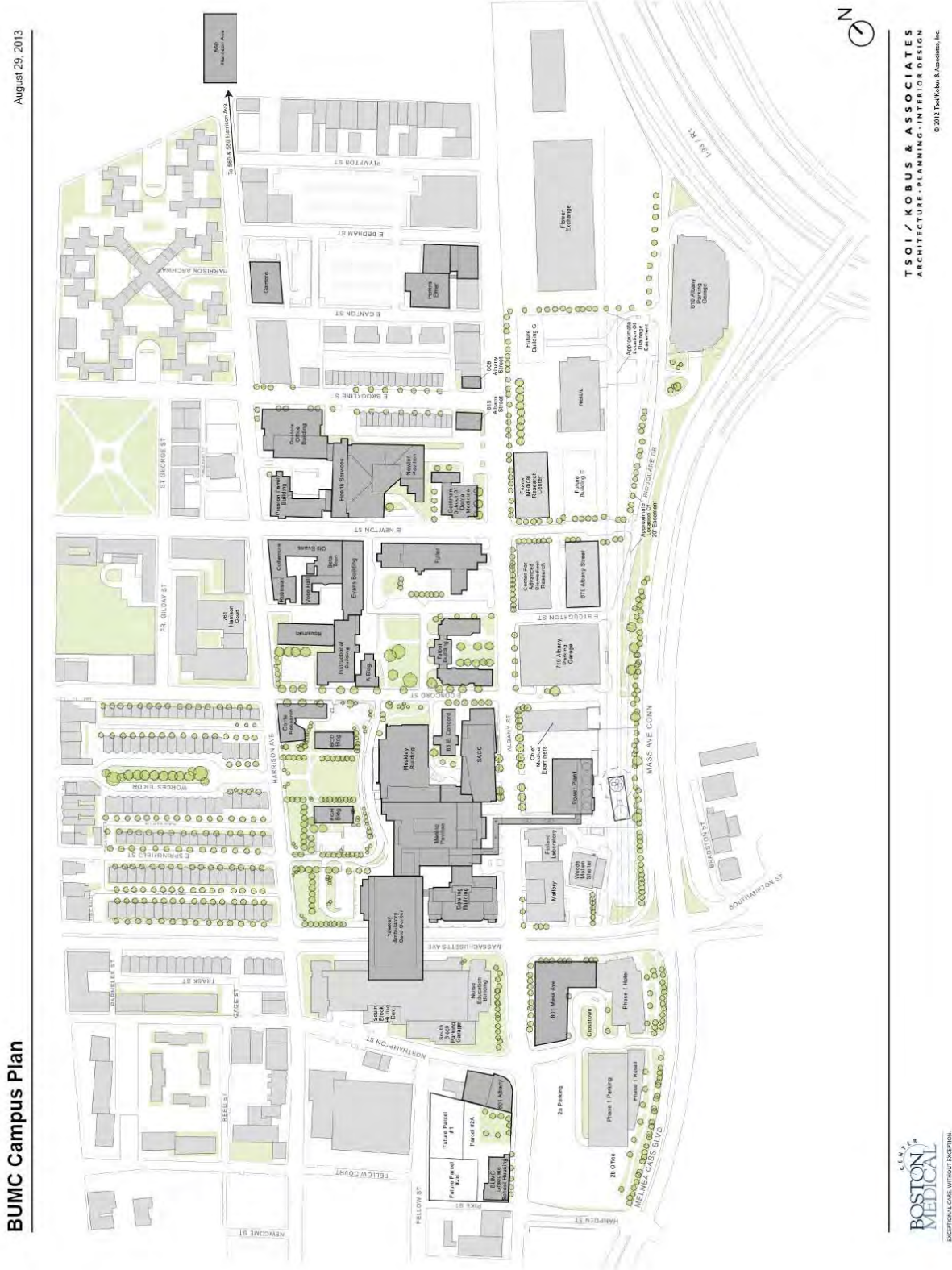
Boston University Medical Campus (BUMC) Boston, MA



Figure 1
Aerial Locus Map

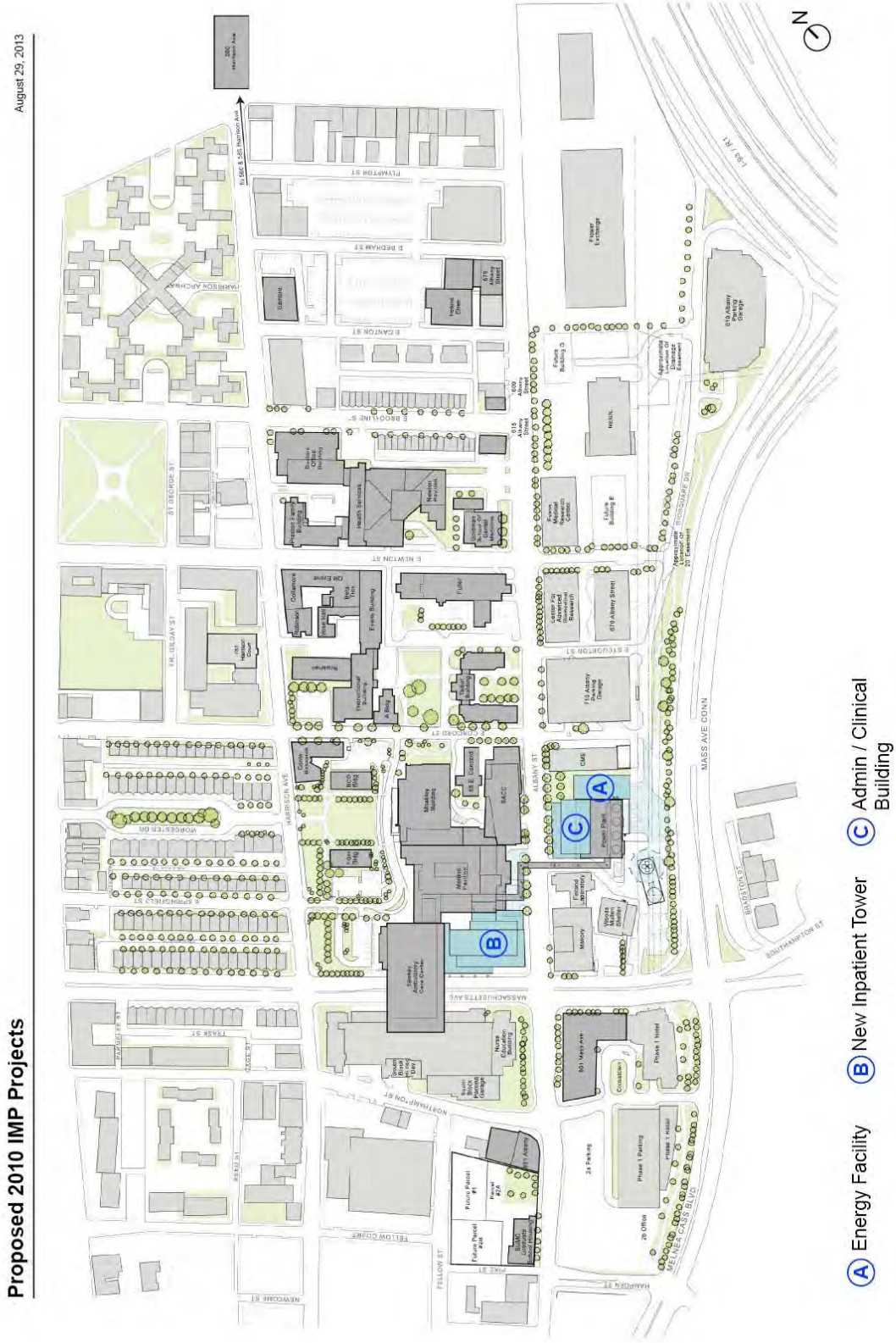
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Figure 1-2 BUMC Campus Plan



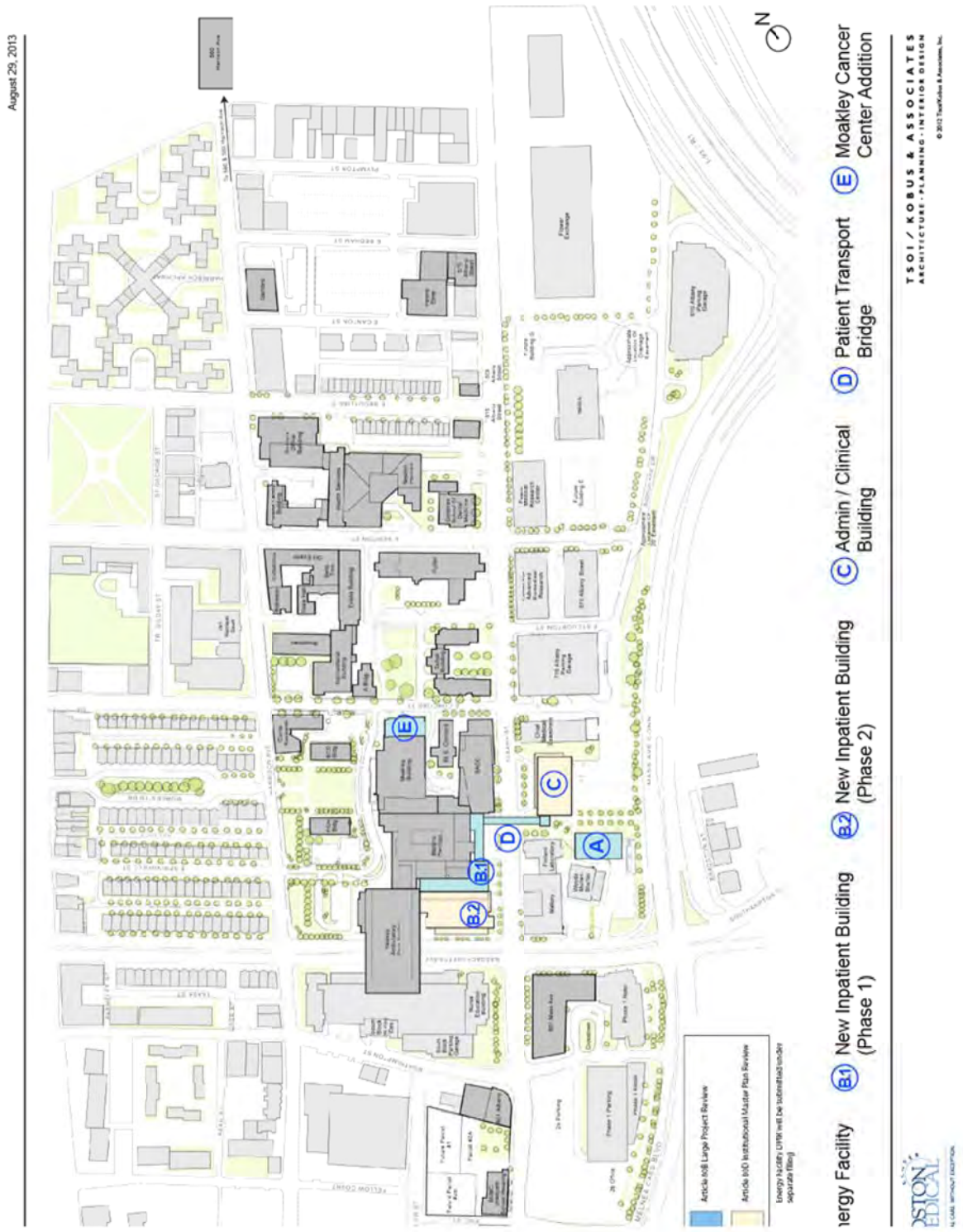
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Figure 1-3 BUMC Campus Approved 2010 IMP Projects



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Figure 1-4 BUMC Campus Proposed 2013 IMP Amendment Projects



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1.3 Project Identification

Project Name: Boston University Medical Center IMPNF Amendment/PNF

Address / Location: The BUMC Campus is located in Boston's South End. The campus is comprised of approximately 20 acres including 33 BUMC Campus-owned or controlled buildings, a helipad, and development parcels. BMC and BU Medical Campus also lease space in 8 buildings located on and/or proximate to campus.

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1.4 Boston Medical Center Mission and Objectives

Boston University Medical Center is dedicated to serving the needs of the community. Comprised of BMC and BU Medical Campus, the synergy among these institutions and the incorporation of teaching and research with the clinical programs is essential to improving health for the general public.

1.4.1 *Boston Medical Center*

BMC was incorporated as a Massachusetts charitable corporation July 1, 1996 with the merger of Boston City Hospital, Boston Specialty and Rehabilitation Hospital, and the Boston University Medical Center Hospital, referred to as University Hospital. BMC is a private, not-for-profit, 496-licensed bed, academic medical center located in Boston's historic South End. The hospital is the primary teaching affiliate for Boston University School of Medicine. Boston Medical Center emphasizes community based care, with its mission to provide consistently accessible health services to all. The largest safety net hospital in New England, Boston Medical Center provides a full spectrum of pediatric and adult care services, from primary

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care and family medicine to advanced specialty care. BMC is the largest and busiest provider of trauma and emergency services in New England. The Emergency Department had 129,714 visits in 2012.

With more than 26,132 discharges and 1,025,202 total outpatient visits in 2012, BMC provides a comprehensive range of inpatient, clinical and diagnostic services in more than 70 areas of medical specialties and subspecialties, including cardiac care and surgery, hypertension, neurological care, orthopedics, geriatrics, and women's health.

Unwavering in its commitment to serve the community, BMC is dedicated to providing accessible health care. Approximately 73% of BMC patients come from underserved populations, the low-income and the elderly, and 30% do not speak English as a primary language.

With its strong focus on urban health, in 1995 BMC was a founding partner in Boston HealthNet, an integrated service delivery network that includes BMC, Boston University School of Medicine, and 14 community health centers throughout the greater Boston area. In FY 2012, Boston HealthNet patients comprised 32% of all inpatient admissions to BMC.

Boston Medical Center HealthNet Plan, Inc. (BMCHP) is a not-for-profit health maintenance organization founded by Boston Medical Center in 1997. BMCHP's Massachusetts business, BMC HealthNet Plan, serves nearly 260,000 members across the state through three product lines: MassHealth (Medicaid), Commonwealth Care and a commercial product for small businesses and individuals. It is the largest MassHealth health plan in Massachusetts. BMC HealthNet Plan was recognized for its ongoing commitment to quality when it was named one of the top ten Medicaid health plans in the country according to the National Committee for Quality Assurance (NCQA) Medicaid Health Insurance Plan Rankings 2012-2013. In addition, it has maintained Excellent Accreditation from NCQA for its Massachusetts Medicaid plan since its initial accreditation in 2009.

BMC is a recognized leader in groundbreaking medical research. BMC received more than \$132 million in sponsored research funding in 2012, and oversees 540 research and service projects separate from research activities at Boston University School of Medicine.

BMC is a major employer in the City of Boston and is committed to promoting employment opportunities for Boston residents. See Section 1.9.1.2 - Employment, Workforce Development, and Educational Opportunities for more information.

The mission of BMC is "to consistently provide excellent and accessible health services to all in need of care, regardless of status or ability to pay." The objective of BMC is to meet the health needs of the people of Boston and its surrounding communities by providing high quality, comprehensive care to all, particularly mindful of the needs of the vulnerable populations through an integrated delivery system in an ethically and financially responsible manner. The goals of the integrated system of care are to promote health and well-being, meet the medical and public health needs of all served, and educate future physicians and caregivers.

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In compliance with the mission statement above and in an effort to create a community-based system of services in collaboration with Boston HealthNet BMC has committed itself to seven equally important values. BMC will:

- ◆ Serve patients and their families, physicians, staff and communities with dignity;
- ◆ Integrate public health, preventative, emergency and rehabilitative programs with a full range of primary to tertiary medical service;
- ◆ Serve the ever-changing need of urban and suburban populations, while honoring their ethnic, religious and cultural differences;
- ◆ Apply a high degree of medical, nursing and technical management in a professional and accountable manner;
- ◆ Collaborate with Boston University, its schools and other institutions to support a premier learning environment for all members of the community;
- ◆ Conduct research that will lead to major improvements in health care and health status for all people, and further scientific advances in medicine; and
- ◆ Develop and participate in community-based and managed care programs that promote affordable, responsible and high-quality health care.

1.4.2 *Boston University Medical Campus*

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 graduated the first black woman physician. In 1873, the medical college merged with Boston University, becoming the first coeducational medical school in the nation. In addition to the School of Medicine (“BUSM”, with its Division of Graduate Medical Sciences), the BU Medical Campus is also comprised of the Goldman School of Dental Medicine (“SDM”) and the School of Public Health (“SPH”).

Renowned for the quality of teaching and research and for service to the community, these schools provide education and training in the most current thinking and techniques in their fields, with a particular focus on serving the disadvantaged, underserved and indigent populations. Together the schools employ a total of 3,100 faculty members (including full-time, part-time and adjunct), many who are leading experts in their fields, and train a diverse group of approximately 3,500 students.

1.4.3 *Boston University School of Medicine*

The mission of the Boston University School of Medicine is to educate physicians who will have the knowledge, skills, and dedication needed to provide the best care to every patient from all communities in a diverse society, within an ever-changing health care environment. Other specific objectives are:

- ◆ The Vision – Patients, peers, and mentors will recognize the BUSM graduate as an exemplary clinician who maintains the highest standards of medical care and professional conduct and who is fully prepared for postgraduate training;

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- ◆ Clinical Arts - The graduate will: possess excellent diagnostic skills, a broad foundation of medical knowledge, and the clinical experience needed to deliver effective and efficient medical care; demonstrate excellence in communicating with and educating patients from diverse cultures, races, and ethnicities; work effectively and collaboratively within interdisciplinary teams; use information technology effectively to find and evaluate the best clinical evidence to guide patient care; be dedicated to preventing illness and improving the health of the community in which he or she practices while responsive to the family, psychosocial, cultural, and spiritual/religious determinants of health and illness; and
- ◆ Professionalism – The graduate will treat all patients in a caring, compassionate, and altruistic manner; adhere to the highest ethical standards of medical practice; possess the attitudes, abilities, and self-knowledge necessary for leading a life-long pattern of learning; support improvements in access to health care for all populations, a reduction in racial and ethnic disparities in health status, and improvements in the social conditions of disadvantaged populations; and contribute to the advancement of scientific knowledge.

BUSM promotes these qualities via: establishment of a supportive, respectful, and nurturing educational environment; maintenance of the highest standards of student performance; commitment to achieving and supporting a diverse student body; engagement of students in curricular evaluation; maintenance of a curriculum inclusive of evidence-based educational methods and through leadership in developing, applying, and evaluating innovative methods of medical education.

To achieve a dynamic curriculum responsive to rapid social and biomedical changes, and to insure that student and curricular goals are met and the highest educational standards of excellence are maintained, BUSM continuously evaluates its learners, faculty, programs, and its mission and goals.

1.4.4 Goldman School of Dental Medicine

The mission of the Henry M. Goldman School of Dental Medicine is to provide excellent education to dental medicine professionals throughout their careers; to shape the future of dental medicine and dental education through research; to offer excellent health care services to the community; to participate in community activities; and to foster a respectful and supportive environment. Other specific objectives include:

- ◆ Educate DMD and postdoctoral candidates to pursue basic science and clinical science research on the academic level; and
- ◆ Support faculty development, thereby improving the quality of dental education, research and clinical care; and
- ◆ Contribute to advances in oral biology and dental medicine by pursuing basic, applied and clinical research and disseminating important findings to the dental community; and

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- ◆ Provide high quality cost-effective, accessible dental care for children and adults, with an emphasis on prevention.

1.4.5 *School of Public Health*

The mission of the School of Public Health is to improve the health of local, national and international populations, particularly the disadvantaged, underserved and vulnerable, through excellence and innovation in education, research and service. In keeping with the SPH's service-oriented philosophy, each department combines research and academics with a practicum requirement, resulting in a rigorous, well-rounded curriculum enhanced by work experience in the public health environment. Strategic themes of the SPH include:

- ◆ Involved: Emphasize real-world involvement and meaningful partnerships
- ◆ Interconnected: Emphasize interdisciplinary efforts and integrated programs
- ◆ Global: Emphasize global health issues and perspectives.

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 SPH's mission in a variety of settings.

1.5 Existing Campus and Facilities

The BUMC Campus is located in Boston's historic South End. The main campus includes 33 Boston University Medical Center owned or controlled buildings, a helipad and development parcels that are individually-owned or controlled and shared facilities associated with each or both of the institutions. In addition to the property owned or controlled by the Proponents, each institution also leases office, instructional, and/or clinical space in 8 buildings located on and/or proximate to the campus. Total Boston University Medical Center owned or controlled and leased space is approximately 3,316,500 square feet of usable space. Buildings range from 2 to 14 stories in height above ground. The buildings were built between 1864 (BCD/FGH), 2011 (Carl J. and Ruth Shapiro Ambulatory Care Center), and 2012 (Albany Fellows Phase 1 BU Medical Campus Graduate Student Housing). The Dr. Solomon Carter Fuller Mental Health Center, a state mental health facility, is also located on the BUMC Campus.

There are currently 2,940 structured parking spaces in garages and 482 surface parking spaces (3,422 total on-campus and offsite parking spaces).

See Table 1-2 and Figure 1-5 for Ownership and Leases.

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Table 1-2 Boston University Medical Center Building and Land Ownership / Leases

Facility	Year Built	Principal Uses	Floors Above / Below Grade	Building SF*	Own/ Lease**
<u>Boston Medical Center</u>					
Newton Pavilion	1986	Inpatient/Administration/Research/Instruction	B+8	257,019	Owned
Yawkey Ambulatory Care	1972	Outpatient	B+5	218,477	Owned
BCD	1864	Administration	B+5	28,174	Owned
Betatron	NA	Administration	NA	5,912	Owned
Dowling	1937	Administration/Outpatient	B+9	157,376	Owned
Doctors Office Building	1969	Administration/Outpatient	B+12	91,783	Owned
Preston	1967	Outpatient	5	65,967	Owned
FGH	1864	Administration	B+5	29,435	Owned
Health Services	1973	Inpatient Support/Outpatient	B+6	73,651	Owned
Carl J. & Ruth Shapiro Ambulatory Care Center	2011	Outpatient	B+9	245,000	Owned
Menino Pavilion	1994	Inpatient	B+8	337,340	Owned
Power Plant	1972	Mechanical	B+4	64,064	Owned
85 East Concord Street	1928	Administration	B+8	66,952	Owned
125 East Concord Street, Solomon Carter Fuller Mental Health Center	1975	Administration	B+9	11,000	Leased
Vose Hall	1898	Administration	5	22,695	Owned
Old Evans	1942	Administration	9	60,070	Owned
Collamore	1936	Administration	7	41,970	Owned
Gambro (660 Harrison)	1990	Administration/Outpatient	3	35,000	Owned
Helipad	NA	Helipad	NA	NA	Owned
560 Harrison Avenue	NA	Administration	G	19,000	Leased
Perkin Elmer (North – 575 Albany)	NA	Administration	6	12,000	Owned
Perkin Elmer (South – 575 Albany)	NA	Administration	5	44,000	Owned
Perkin Elmer (123 E. Dedham St.)	NA	Administration	NA	9,258	Owned

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Perkin Elmer (100 E. Canton St.)	NA	Administration	B, 1 st , 3 rd	64,203	Owned
801 Massachusetts Avenue, Crosstown Center	2006	Administration	1 st	12,197	Leased
Moakley Building	2006	Outpatient	B+3	133,217	Owned
<u>Boston University Medical Campus</u>					
Albany Fellows, Parcel 1	2012	Administration/Research/Instruction/Residential/Retail	15,234 s.f. (Land)	***	Owned
Albany Fellows, Parcel 2B	2012	Administration/Research/Instruction/Residential/Retail	20,766 s.f. (Land)	***	Owned
609 Albany Street, Dermatology ("J") Building	1990	Administration/Research/Instruction	B+6	34,692	Owned
615 Albany Street, Naval Blood ("N") Building (jointly owned w/BMC)	ca. 1865	Administration/Research/Instruction	B+5	19,710	Owned
801 Albany Street, Gilmore/Nine Building	1989	Administration/Research/Instruction	B+4	41,198	Leased
815 Albany Street, Medical Student Residence	2012	Residential/Retail	B+10	102,283	Owned
70 East Concord Street, Medical School Instructional ("L") Building	1968	Administration/Research/Instruction	B+14	215,002	Owned
80 East Concord Street, Medical School ("A") Building	1912	Administration/Research/Instruction	B+5	25,931	Owned
82 East Concord Street, Talbot ("T") Building	1876/1884/1891	Administration/Research/Instruction	B+4	87,080	Owned
125 East Concord Street, Solomon Carter Fuller Mental Health Center	1975	Administration/Research/Instruction	B, 4, 8, 9, 10	43,589	Leased
75 East Newton Street, Evans ("E") Building	1972	Administration/Research/Instruction	B+9	180,099	Owned
100 East Newton Street, Goldman Dental School ("G") Building	1969	Administration/Research/Instruction	B+7	89,406	Owned
76 Harrison Avenue, Collamore Building	1936	Administration	7 th	1,500	Leased
560 Harrison Avenue	1894	Administration/Research/Instruction	3 rd	14,786	Leased
680 Harrison Avenue, Robinson ("B") Building	1915	Administration/Research/Instruction	B+6	56,487	Owned
778 Harrison Avenue, Housman ("R") Building	1959	Administration/Research/Instruction	B+10	119,987	Owned
790 Harrison Avenue, Conte ("K") Building	1905 / ca.1922-1928	Administration/Research/Instruction	B+7	77,886	Owned
801 Massachusetts Avenue, Crosstown Center	2006	Administration/Research/Instruction	2 nd , 3 rd , 4 th	101,114	Leased

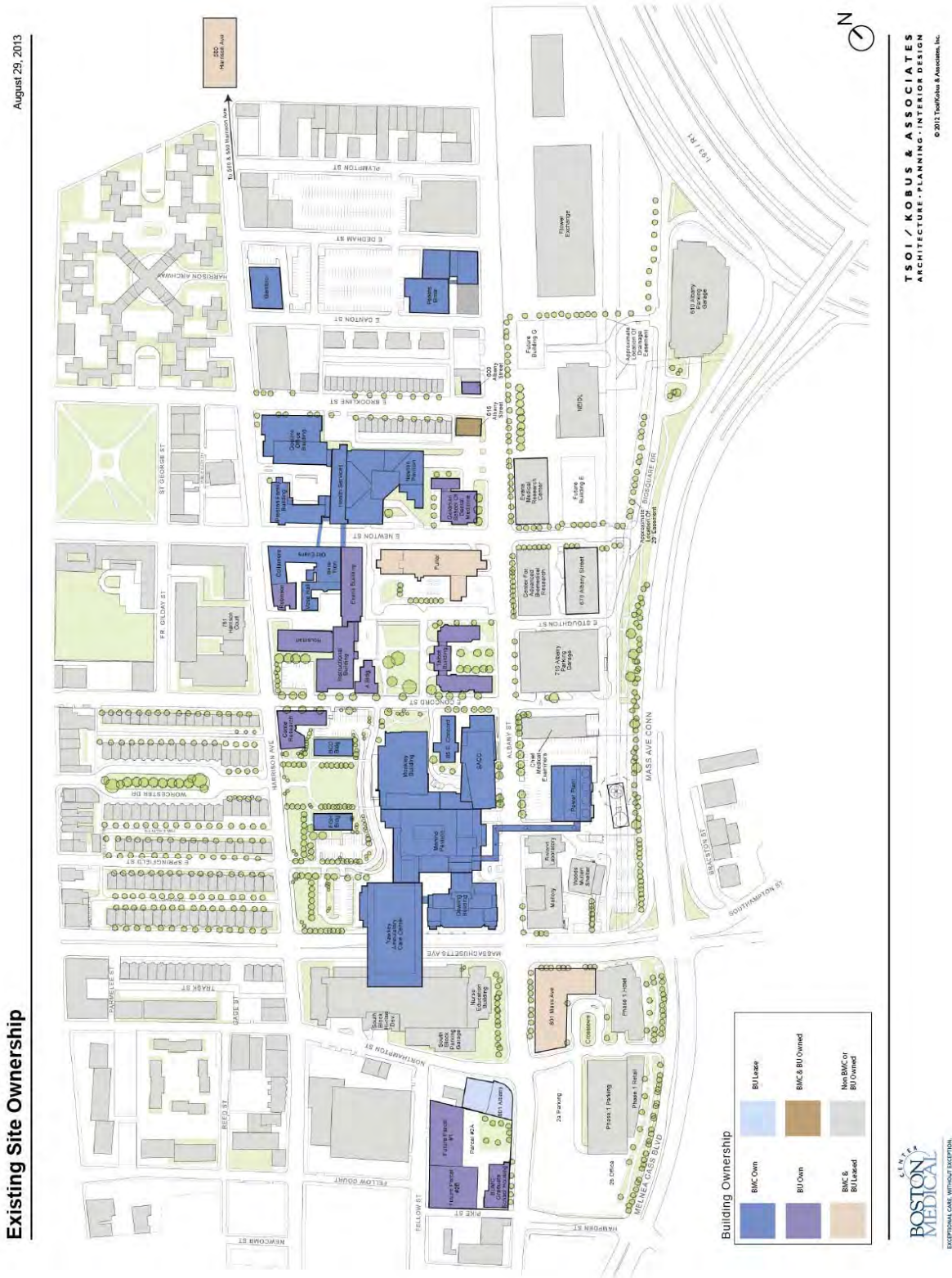
* Owned buildings are expressed as approximate Gross Square Feet (without exclusions). Leased buildings (where the Proponents are the Lessee) are expressed as Rentable Square Feet (without exclusions).

** The designation "Own/Lease" is included to differentiate between BUMC Campus buildings which are controlled or owned by the Proponents and buildings which are leased for a term of years by the Proponents.

*** The Albany Fellows Site was the subject of an IMP Amendment approved by the BRA on January 12, 2010 and the Zoning Commission on February 10, 2010.

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Figure 1-5 Building and Land Ownership and Leases



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1.6 Guiding Principles and Planning Assumptions

The approved 2010 Institutional Master Plan allows the Proponents to create a campus supportive not only of the institutions' common goals, but also of their unique needs and individual missions now and in the future. BMC endeavors to sustain the highest expected standard of patient care while BU Medical Campus strives to maintain an exceptional environment for students interested in basic science, clinical investigation, or public health and health services oriented research, and medical educational programs. Aging buildings, deficient infrastructure components, and inefficient operational adjacencies create challenges for each institution to keep up with current advancements in health care and academic trends. As a result, campus modifications will be necessary over the next 10 years, including but not limited to, constructing new facilities, demolishing obsolete buildings, renovating existing structures, and improving infrastructure.

1.6.1 *Shared Planning Assumptions and Objectives*

The following challenges play a role in addressing the Proponents' program needs:

- ◆ Building age (and obsolescence);
- ◆ Traffic demands;
- ◆ Parking needs;
- ◆ Open space preservation; and
- ◆ Utilities, power plant, and other energy infrastructure upgrades.

The Proponents acknowledge the following planning design drivers as elements critical to the successful realization of their objectives:

- ◆ Planning for long-term future growth and transformation;
- ◆ Transformation of the Albany Street campus image;
- ◆ Sensitivity to context through massing, scale and materials;
- ◆ Creation of a clear and welcoming sense of arrival;
- ◆ Implementation of unified site signage and enhanced wayfinding;
- ◆ Development of pedestrian-friendly street edges; and
- ◆ Enhance accessibility to parking and existing buildings.

1.6.2 *BMC Planning Assumptions and Objectives*

Like all academic medical centers and health system providers, BMC is responding to dramatic changes in health care delivery. BMC recently completed an in-depth strategic plan that articulated a vision to transform the care delivery model to thrive in the new environment. There are many factors that will contribute to the successful implementation of the model but chief among them is aligning resources in the most efficient and effective manner to deliver quality care. While relocation of all clinical services to the west end of the BUMC Campus is the ultimate goal, consolidation of all inpatient services, emergency/trauma care, radiology, and interventional procedures (surgery and other invasive procedures) on one site is critical to the delivery of care model. BMC has also continued to experience changing trends in patient

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volume. This necessitates the need to upgrade its facilities to right-size patient care spaces and to meet modern day clinical care standards.

Table 1-3 Inpatient Admissions and Outpatient Visits at BMC

	2008	2009	2010	2011	2012
Inpatient	29,411	30,250	30,215	29,070	26,132
Outpatient	953,510	882,911	976,532	981,574	1,025,202

To address these clinical trends and achieve the primary goal of providing quality health care to the neediest individuals, BMC objectives include:

- ◆ Accommodate changing trends in patient volume;
- ◆ Consolidate clinical services;
- ◆ Upgrade and expand the Emergency Department and Trauma Center;
- ◆ Right size space for current clinical standards;
- ◆ Accommodate new technology;
- ◆ Upgrade materials handling/receiving/distribution and waste removal facilities;
- ◆ Implement an efficient and sustainable energy infrastructure program to ensure reliability and redundancy of services and support future growth;
- ◆ Integrate sustainable design principles and operations;
- ◆ Facilitate access to the campus and improve campus image;
- ◆ Consolidate Medical Administrative functions in proximity to clinical services;
- ◆ Locate General Administrative functions on the campus perimeter; and
- ◆ Move the core of the clinical campus to the west.

1.6.3 BU Medical Campus Planning Assumptions and Objectives

The BU Medical Campus outlines three areas of concern regarding their current instructional facilities:

1. Quantity – BU Medical Campus currently struggles to meet space needs within their existing buildings as academic programs in medical and research studies and enrollment grow. In addition to the current demand limitations, the American Association of Medical Colleges is calling on medical schools to increase their class size by 30% over the next decade. Additionally, the current method of scheduling instructional space places limitations on the utilization of space and affects the overall quantity and type of space required.
2. Quality – Certain types of academic spaces need to be planned specifically to meet the requirements of the curriculum. These spaces can be more traditional classroom settings or creative solutions driven by instructional technology and strategy. Rooms retrofitted into existing structures are often limited by size, layout, technical infrastructure, and available resources and subsequently do not adequately meet the

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needs of the university. Of particular importance is the need to enable increasing levels of student interaction in all instructional spaces.

3. Proximity – It is imperative that new instructional spaces designed to meet growth needs are located in an area considered core to current instructional facilities. Developing instructional space in BU Medical Campus-owned or rented buildings that are not proximate to the current core has a detrimental effect on the operational and didactic aspects of the academic effort. Moving students around for breakout classes for large lectures (as is required for the medical school curriculum) or between classes (as is typical for other curricula) contributes to a loss of instructional time. The issue of proximity also creates issues for ancillary services in supporting rooms for the delivery of instruction. Offering and maintaining support services over a wider geographic area deteriorates the quality of that service. Distance creates limitations in availability of the staff to clean, set up and maintain rooms, provide initial and ongoing audiovisual support, respond to technology/systems troubleshooting requests or other needs and services sought by the instructor in support of their class.

These areas of concern are also relevant for current research facilities needed to support the long term needs of the medical and educational institutions.

In order to support the primary goal of educating future health care professionals, BU Medical Campus objectives include:

- ◆ Planning for long-term future growth and transformation;
- ◆ Provide student housing consistent with City's desire to reduce demand on off-campus rental housing stock;
- ◆ Expand academic programs;
- ◆ Foster opportunities for Interprofessional Education;
- ◆ Upgrade student services, including increased student gathering, group study and student wellness facilities;
- ◆ Consolidate and upgrade research facilities;
- ◆ Increase inter-disciplinary opportunities and synergies between research programs; and
- ◆ Consolidate administrative support functions.

1.6.4 *Campus Adjacencies*

The existing BUMC Campus uses are generally zoned with educational functions centrally located, flanked by clinical uses to the east and west. This relationship is primarily a function of the remnants of the pre-merger of the original two campuses. Other major zones include a Support Zone (Power Plant and Parking) and Research (BioSquare) south of Albany Street, and Administration (Crosstown) west of Massachusetts Avenue. See Figure 1-6.

Campus design goals and objectives are specifically associated with enhancing institutional functions, primarily through the establishment of ideal adjacencies between complementary uses. This is particularly important for a campus that delivers medical services, where efficiency is not simply desirable, but may be critical to delivery of patient care in a timely

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manner. At the same time, it is also advantageous to create synergies between the delivery of medical services and academic instruction in health sciences.

Boston University Medical Center's master planning objectives of shifting administrative functions away from the inner clinical core location is ideal for inpatient clinical expansion to be situated proximate to other key clinical programs as well as situating academic spaces proximate to the instructional core.

The proposed modifications and IMP projects support and enhance these concepts. The Moakley Cancer Center Addition, New Inpatient Building, Energy Facility, patient transport Bridge, and new Administrative / Clinical Building together will shift the clinical campus core to the west, consolidate clinical services, accommodate changing trends in patient volume, enable more efficient and cost-effective transfer of patients and materials, and upgrade and expand the Emergency Department and Trauma Center.

1.6.5 Future Planning for the East Campus Clinical Zone

As discussed above, the current east and west clinical zones are the result of the merger of Boston City Hospital, Boston Specialty and Rehabilitation Hospital, and the Boston University Medical Center Hospital, referred to as University Hospital. Having two clinical zones creates many challenges including keeping up with current advances in health care trends as well as creating inefficient operational adjacencies. The campus consolidation will relocate general administrative space such as accounting functions and IT away from the inner clinical core to allow for clinical consolidation, complementary use adjacencies and supporting clinical administrative space in the west clinical zone.

The initial step in the clinical consolidation was the construction of the Shapiro Ambulatory Care Center completed in 2011. This project allowed for the first round of clinical service relocations by moving the majority of clinical services from the Doctor's Office Building to the new Shapiro Ambulatory Care Center. In 2010, Boston Medical Center consolidated its two Emergency Departments merging emergency services of the Newton Pavilion Emergency Department into the Menino Pavilion Emergency Department.

The proposed Moakley Cancer Center Addition, New Inpatient Building Phase 1 and the New Patient Transport Bridge Projects are the next step in addressing campus consolidation. The proposed projects include expanding the Emergency Department and Trauma Center and additional consolidation of clinical services including operating rooms and inpatient beds from the Newton Pavilion to the west clinical campus. Additionally, general administration space currently located in the west clinical zone will be relocated away from the clinical core freeing up existing space to accommodate clinical services and clinical administration space currently located in the Doctor's Office Building and Newton Pavilion. Potential locations for the general administrative and back of house space may include the Doctor's Office Building or Perkin Elmer site. Upon completion of the proposed projects, the consolidation of the east clinical zone and the west clinical zone will be substantially complete.

Boston Medical Center is currently conducting detailed planning studies for the programming and use of the buildings located in the east zone. The planning effort will help identify campus

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administrative, academic and clinical needs to aid in the programming of the buildings. As part of the planning, Boston Medical Center is currently seeking proposals from interested third parties for the future use of the Newton Pavilion. An update on the planning effort and future use of the Doctor's Office Building, Newton Pavilion and Perkin Elmer site will be provided upon completion of the studies and included in the next IMP 2 year update.

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Figure 1-6 Campus Adjacencies

August 29, 2013

Campus Adjacencies



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1.7 Summary of Program Needs

Since the filing and approval of the 2010 IMP, there have been recent changes in health care delivery trends as well as advances in patient care, technology, and health sciences which necessitate specific revisions to program needs. The proposed modifications to the IMP still align with the previous guiding principles and planning assumptions of the Proponents.

1.7.1 Clinical Services

Consolidation of all inpatient, emergency/trauma care, radiology and interventional procedures to the west side of the campus necessitate that new space be obtained. Due to very specific requirements for hospital and clinical functions driven by today's code and clinical space standards, it is impractical to rehabilitate certain buildings. BMC strives to consolidate its clinical programs in proximity to core medical services and operational support functions. This is a particularly important consideration in locating medical facilities to allow for time and continuity of care as well as efficiency for staff and convenience for visitors. The proposed Moakley Cancer Center Addition, New Inpatient Building, and Administration / Clinical Building directly address these needs.

1.7.2 Administrative

A major objective of Boston University Medical Center is to consolidate campus functions while shifting administrative uses away from the clinical and instructional cores. Administrative uses are scattered through the campus creating inefficiencies and occupying space that is ideal for clinical expansion and academic programming. Clinical administrative space such as doctor's offices, medical administration, nursing, residence spaces and workrooms need to be located in direct proximity to clinical services. General administrative space such as accounting and IT and general support do not need to be located near clinical services. The future Administration / Clinical Building will help consolidate these functions and improve campus adjacencies.

1.7.3 Support Operations and Infrastructure

Boston University Medical Center includes many older structures and has expanded over the years. As BMC's clinical programs have expanded, the infrastructure that supports day-to-day operations for loading and receiving and materials handling and trash removal has remained unchanged. Servicing these buildings and projected future programming requires new and upgraded facilities to support BMC's operations. The proposed new Bridge and future proposed new below grade tunnel connecting to the final loading dock and materials handling area (in the proposed Administration / Clinical Building) will support these goals by facilitating the transfer of patients and materials, centralizing truck traffic, and reducing vehicular congestion and curb cuts along Albany Street.

1.7.4 Energy Service

The BUMC Campus relies on many utilities that are approaching operating capacity. In order to support the growth of the campus, keep up with advancements in technology, and deliver

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clinical services 24/7, Boston University Medical Center is faced with the challenge of managing the availability and reliability of energy service which is critical to a major medical center. The goal is to reduce Boston University Medical Center's demand on existing taxed infrastructure, create redundancy, and to install more energy-efficient equipment that will set the foundation for supporting greener campus growth. The new BMC Energy Facility will address infrastructure and energy service needs for the BUMC Campus as well as the adjacent BioSquare. Upon further review of the selected site and program described in the 2010 IMP, BMC now proposes a smaller Energy Facility and to move the location to the west side of the existing Power Plant to be closer to utility connections thusly increasing overall efficiencies.

1.8 Urban Design Objectives

Section 1.7 provides details regarding the shared planning assumptions, the consolidation of campus functions, and the optimization of operational adjacencies. This section outlines the broader urban design goals that benefit neighbors and visitors, as well as students, patients, faculty, and staff, and describes how all users engage and experience the campus.

The primary urban design objective of Boston University Medical Center is to create a cohesive medical campus thoughtfully integrated into the surrounding urban fabric and neighborhoods. Since the merger of Boston City Hospital and University Hospital in 1996, sensitive design, careful open space planning, and conscientious site and streetscape enhancements along the campus periphery have supported this objective.

Various improvement projects, implemented under the previous Institutional Master Plan, refined the presence and aesthetic of the BUMC Campus, specifically along Harrison Avenue and Albany Street. (See Figure 1-7 Campus Improvement Projects.)

Additional master planning design goals to support future development on the BUMC Campus include:

- ◆ Transform the Albany Street campus image.
- ◆ Complement the existing context massing, scale, and materials.
- ◆ Create a clear and welcoming sense of arrival.
- ◆ Enhance open spaces on the campus, both short and long-term.
- ◆ Develop pedestrian friendly street edges.
- ◆ Enable connectivity between parking and existing buildings.
- ◆ Integrate sustainable design principles and operations.
- ◆ Plan proactively for future growth and transformation.

These new master plan goals, combined with the previously applied design principles, will enrich the physical image of the BUMC Campus, improve the integration with the surrounding neighborhood, and elevate the perceptions of the Boston University Medical Center by its users, particularly on Albany Street.

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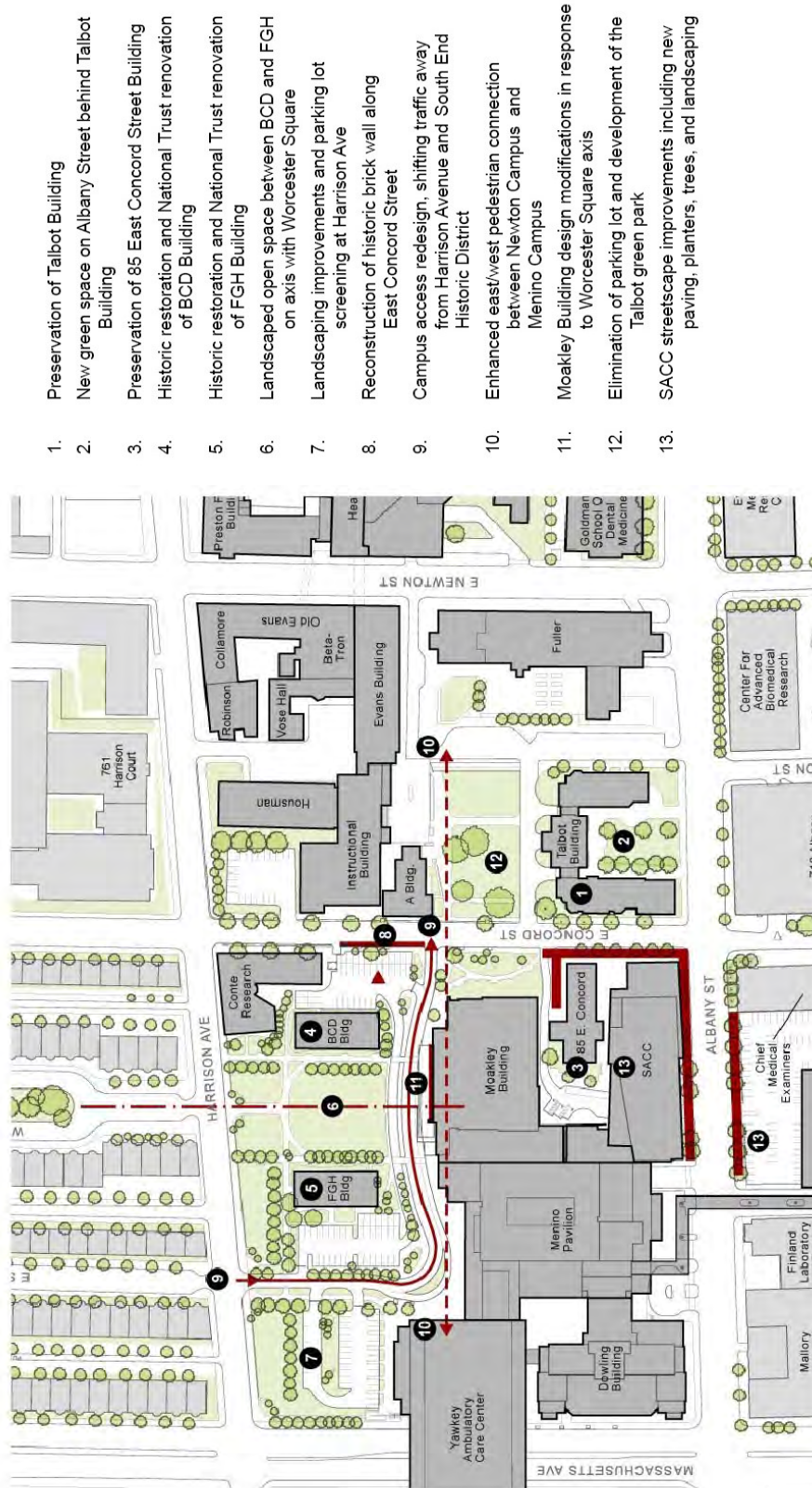
Ultimately, the institution strives for consistency, compatibility, and connectivity in the design and location of its buildings, open spaces, streetscapes, pedestrian access, and overall campus circulation.

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Figure 1-7 Campus Plan Improvements

May 09, 2013

Campus Plan Improvements



1. Preservation of Talbot Building
2. New green space on Albany Street behind Talbot Building
3. Preservation of 85 East Concord Street Building
4. Historic restoration and National Trust renovation of BCD Building
5. Historic restoration and National Trust renovation of FGH Building
6. Landscaped open space between BCD and FGH on axis with Worcester Square
7. Landscaping improvements and parking lot screening at Harrison Ave
8. Reconstruction of historic brick wall along East Concord Street
9. Campus access redesign, shifting traffic away from Harrison Avenue and South End Historic District
10. Enhanced east/west pedestrian connection between Newton Campus and Menino Campus
11. Moakley Building design modifications in response to Worcester Square axis
12. Elimination of parking lot and development of the Talbot green park
13. SACC streetscape improvements including new paving, planters, trees, and landscaping

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1.8.1 Consistency with the Harrison Albany Corridor Strategic Plan

The Institutional Master Plan aligns with the vision and goals established in the Harrison Albany Corridor Strategic Plan (HACSP) and the IMP has been developed to enhance Boston University Medical Center's public service and economic development role in the community. Under earlier master plans, Boston University Medical Center has accomplished preserving and enhancing open space. The proposed projects under the current master plan will continue this. The design of the proposed buildings will blend with the historic and modern BUMC Campus as well as the adjacent neighborhood. The proposed buildings along Albany Street will be designed to align with the HACSP vision for pedestrian realm improvements including paving, lighting and wayfinding. Proposed building setbacks and architectural features such as glass facades at the ground level and canopies are intended amenities for the general public. The proposed buildings will be designed as an integral component of a streetscape that will form and enhance the character of the street. To that end, HACSP streetscape guide lines will be explored along with other criteria. Curb cuts on both sides of Albany Street will be reduced to reinforce the pedestrian circulation and improve the experience. Additionally, the existing loading dock and associated traffic will be relocated from the north side of Albany Street to an interim location at the existing Power Plant on the south side thereby diminishing the congestion and conflicting traffic patterns. The design of the New Inpatient Building at the intersection of Massachusetts Avenue and Albany Street will capitalize on the opportunity to improve the pedestrian experience at this pivotal intersection as so appropriately cited by the HACSP.

1.8.2 Existing Urban Fabric

The BUMC Campus is bound by a residential neighborhood to the north along Harrison Avenue, support and research and development uses to the south along Albany Street, and light industrial and commercial uses to the east and west. The existing campus is also bordered by major roadways, most notably Massachusetts Avenue. This prominent artery forms an important gateway to the BUMC Campus and links the institution to the City of Boston. Significant pedestrian routes, such as the East Concord Street corridor, weave through the campus.

The existing architectural context is comprised of a variety of scales, styles, and periods. Building heights range from two to 14 stories. Traditional historic buildings, such as the Talbot, BCD, and FGH Buildings, were constructed in the late 1800's. The recently completed Moakley Building and the Shapiro Ambulatory Care Center portray the current, modern campus aesthetic. These diverse buildings represent Boston University Medical Center's sensitivity to historic context through preservation and its commitment to delivering state-of-the-art health care.

See Figure 1-2 BUMC Campus Plan for more information.

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1.8.3 *Public Realm*

1.8.3.1 **Campus Development, Past and Present: A Balanced Approach**

As clinical care trends have evolved over the years, so have the physical parameters necessary to support them. Buildings with larger footprints and uninterrupted floor plates are often required. These large-scale designs sometimes result in unfortunate impacts on the urban fabric, such as the elimination of roadways and open spaces. While addressing the ever-changing aspects of clinical care, the BUMC Campus utilizes a balanced master planning approach with minimal collateral loss to existing infrastructure through its commitment to historical precedents and open space strategies.

Recent planning initiatives sensitively maintain the integrity of the urban fabric and the surrounding neighborhoods while continuing to define a sense of campus and meet the institution's primary mission of healing and education. As a result, many of the original streets of the historic urban fabric have been retained and enhanced to better integrate the campus with the neighborhood.

The Moakley Building is a recent example of careful campus planning. This structure was strategically located and oriented to reinforce the significant pedestrian connection between the east and west campuses and the centrally positioned medical school. Moakley Green, located north of the Moakley Building, strengthens the urban axis of Worcester Square and provides a landscaped transition between the campus edge and the residential neighborhood. Moakley Green is accessible to the public and provides pedestrian access to the campus from the north.

1.8.3.2 **Campus Access and Connectivity**

An individual's experience with the BUMC Campus begins with their approach. The arrival sequence must be clear and the architecture and open spaces should impart an immediate and welcoming sense of arrival and place. The arrival experience should also convey the image and identity of the institution as a leader in healthcare, education, and research.

The BUMC Campus is well connected to regional and district roadways while several MBTA bus and rapid transit routes service the area. The intersections of Massachusetts and Harrison Avenues and Massachusetts Avenue and Albany Street form key entry points to Boston University Medical Center. About half of the visitors arriving at the BUMC Campus by car will go directly to the parking garage located on Albany Street.

Currently the arrival experience along Albany Street consists of a ragged edge of buildings of varying styles, ages, and conditions. This is also the primary Trauma Center access route for both East and West campuses. As previously stated, transforming and refining the Albany Street edge is essential to the future development of the BUMC Campus.

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Once on the campus, users encounter a range of choices for navigating to their destinations. wayfinding must be clarified through the careful design and manipulation of building massing and materials, tree planting, sidewalk improvements, and a unified signage system

Massachusetts Avenue, East Concord Street, East Newton Street, and East Brookline Street are the major north/south vehicular and pedestrian throughways that connect the campus to the neighborhood. East Concord Street is the most important north/south pedestrian connection due to its axial relationship with the public parking garage at 710 Albany Street and its central location to the east and west medical campuses and the medical school.

Harrison Avenue and Albany Street are the major east/west vehicular and pedestrian throughways that connect the campus to Massachusetts Avenue (and I-93) and the neighborhood. Albany Street will provide connectivity to the BU Albany Fellows Graduate Student Housing and link future developments and medical and bio-tech clusters to the east and west as envisioned in the Harrison/Albany Study.

See Figure 1-8 Major Vehicular Access and Major Entry Points.

On the southern perimeter of the BUMC Campus, pedestrian pathways facilitate staff movement between the 610 Albany Street parking garage, BioSquare, and the main medical center. The South Bay Harbor Trail also joins the network of BUMC connections where it intersects with Massachusetts Avenue.

See Figure 1-9 Neighborhood Connectivity and Open Space Network.

There are several pedestrian pass-through connections on the BUMC Campus. These include access corridors at the Menino Pavilion, Moakley Building, and Talbot Building. The public corridor through the Menino Pavilion links the walk-in Emergency Department entry with the Menino Lobby. This pass-through connection will occur through the Moakley Cancer Center via Shapiro Drive when the location for the walk-in Emergency Department entry is relocated as part of the New Inpatient Building Phase 1.

There is a limited-access corridor for wheelchair/stretchers through the Moakley Building that unites the Moakley/Shapiro Ambulatory Care Center south entry court with the Moakley Lobby. All users (public and institutional) access Talbot Green from Albany Street through the Talbot Building's two underpasses. Security has played an increasing role at institutions in recent years, and the BUMC Campus is no exception. As such, some public access through buildings that would connect Harrison Avenue to Albany Street is limited.

Consolidation of clinical services from the East Campus to the West Campus as part of the master plan will improve the experience for patients, staff and visitors by simplifying movement and connectivity because users will now navigate one campus instead of two.

See Figure 1-10 Pedestrian Connectivity.

Additionally, Boston University Medical Center has a very active bicycle program that further promotes movement and connectivity throughout the medical center.

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See Transportation Section 4.2.8 for more information. See also Figure 4-11 for BUMC Campus Bicycle Facilities.

1.8.3.3 Campus Open Space

Open spaces play a pivotal role in clarifying wayfinding and enhancing the user's experience. They furnish visual cues for circulation and effective linkages between city streets and campus pathways. One of the unique characteristics of Boston University Medical Center is the amount and quality of its open spaces, virtually unprecedented on urban hospital campuses.

While examining equivalent medical institutions within the City of Boston, it is evident that the amount of green space on the BUMC Campus is comparable and in some cases much greater than what is being provided elsewhere. Over recent years the completion of Master Plan improvements have significantly expanded the green space throughout the campus further defining and enhancing the pedestrian experience

The existing network of open spaces features various nodes where the campus and community come together. Examples include the Moakley Green and landscaped public street edges along the Talbot Building, BioSquare, and Harrison Avenue. The open spaces also provide gathering areas for students, faculty, and staff. In particular, the lawn between the Talbot Building and the BU School of Medicine enables multi-purpose programming for campus events and accommodates pedestrians, bicycles, and vehicles.

With the completion of the Moakley Building and renovations to the BCD and FGH buildings in 2006 and 2007, an enhanced arrival sequence and landscaped open spaces improved the north edge of the West Campus. These modifications benefit both the campus and surrounding neighborhoods through better design, welcoming aesthetics, and greater connectivity. The location of the new Moakley Building, with its three-story atrium facing the green to the north, also reinforces an existing east/west pedestrian link. This further unifies the campus both physically and symbolically. (See Figure 1-9 Neighborhood Connectivity and Open Space Network).

As per the institutional design goals and objectives, the Boston University Medical Center will continue to complement and animate its open space network through additional streetscape refinements and landscaped areas along the Albany Street corridor.

1.8.3.4 BUMC Campus Streets and Campus Edges

As the BUMC Campus has evolved, shifting inpatient and clinical functions to the west campus, it is important to define the role each major street will play in connecting to adjacent sub-areas and districts.

Harrison Avenue

Harrison Avenue has historically been, and will remain the hospital's primary public face. As such, it has an obligation to create visual as well as physical links between the campus and neighboring South End. Over the past decade BUMC has worked to revitalize this campus

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edge through extensive landscape, material and architectural improvements. The Moakley building, green space and repurposed historical buildings adjacent to Worcester Square provide a formal gesture back to the residential neighborhood, while maintaining an appropriate buffer to the larger scale buildings on the BUMC campus. Future planning will include exploring landscaping buffers that form pedestrian-friendly street edges, place-making opportunities at key intersections and ground-level public amenities to establish destination points along this key corridor in order to sponsor district interconnectivity.

Massachusetts Avenue

As a major campus arrival point, Massachusetts Avenue is the functional artery tying the BUMC campus into the broader city and regional context. It is a connecting street traversing many neighborhoods, maintaining continuous walking, cycling and vehicular connections to the BUMC Campus. Buildings along this street tend to vary in scale, growing larger as they reach the Massachusetts Avenue Connector. Future development along this corridor should relate to this larger scale and be conscious of the smaller pedestrian scale along the street edge. Future planning will explore pedestrian realm improvements which promote connection to the surrounding context and wayfinding opportunities at major street intersections to improve the user quality at this key juncture.

Albany Street

Street clarity and pedestrian safety are critical in achieving a heightened urban experience. Traditionally Albany Street has lacked a clear unifying identity and has been the functional "back door" to the campus. A myriad of curb cuts, varying building scales and segmented facades create a condition of confusion and an overall unsafe pedestrian experience along the street corridor. As the west campus advances, this street becomes a major access point and entry into the campus. Boston Medical Center has highlighted the need to elevate the image of Albany Street in order to further unite the campus and provide a better patient environment. Establishing a more unified institutional identity along Albany Street will enhance the overall cohesiveness and organization of the corridor, simplifying wayfinding and site orientation.

Future planning along this corridor will promote a simplified urban understanding through visual and material clarity. Continuous façade alignments will provide spaces that are critical to the creation of public realm improvements. Future projects will continue to support the development of this "secondary green path" (established in HACSP) through appropriately placed "pocket" green spaces, street planters and existing tree improvements. Strategically placed campus signage and pedestrian-friendly walking links will maintain relationships to buildings that are outside of the immediate campus core.

Future planning goals will be to invite and bolster pedestrian connectivity throughout the Albany Street, Harrison Avenue and Massachusetts Avenue corridors. The proposed and future IMP projects will be designed to align with the HACSP vision for the enhancement of pedestrian circulation, creation of place-making and continual green space expansion to further strengthen the campus' connection to its surrounding context.

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1.8.3.5 BUMC Campus Public Realm Guidelines

Reinvigorate Campus Connectivity and Streetscapes - Provide visual cues and design features that physically and symbolically connect the different streetscapes of the campus.

- ◆ Public sidewalks should provide a direct and continuous pedestrian network connecting blocks and buildings to each other with a clear, unobstructed pedestrian pathway that is designed to accommodate the needs of a broad range of users, including the elderly, those with disabilities, and young children.
- ◆ Areas encouraging rest, respite and campus/community collaboration should be planned for and provided where possible, through the use of appropriate green space, xeriscaping and other opportunities to optimize open space.

Respect Campus Context - Buildings should continue to complement existing context mass, scale and materiality, while reinforcing the public realm.

- ◆ New buildings should be clearly defined and engage the streetscape to provide a consistent urban street edge.
- ◆ Appropriate setbacks where possible should be provided to allow for proper public realm enhancements.

Maximize Definition of Campus Gateways - Create well-defined gateways that announce arrival and improve wayfinding at key points.

- ◆ Aesthetically pleasing and informative signage shall be provided throughout the campus to help in wayfinding and encourage safe and efficient travel.
- ◆ Public signage should be used to announce entry into the campus at key intersections.
- ◆ Employ public signage for vehicular, pedestrian and cyclist wayfinding that is consistent in color, shape and graphic image.

Encourage Community Engagement - Enliven the streetscape, invite connectivity, and provide green respite to the public

- ◆ Wherever possible promote positive street activity, both day and night, through after-hour program functions.
- ◆ In addition to accommodating pedestrian circulation, public sidewalks should provide spaces for more passive activities, where people can remain to observe or participate in public outdoor activities. Seating can be either formal (e.g., chairs and benches, such as that found at a café or a transit stop) or informal.
- ◆ Integrate the pedestrian experiences of students, faculty, staff, visitors, residents, and patients.

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Promote Safety and Comfort - Provide a safe and pleasant environment for all users

- ◆ Limit conflicts between pedestrian and motor vehicles through reduction of curb cuts (where possible) and by creating clearly marked service zones to limit unsafe pedestrian conditions.
- ◆ Universal accessibility principles should be applied to all proposed and future projects in accordance with ADA guidelines.
- ◆ Adequate street lighting to maintain safe environment at night.
- ◆ Sidewalk upgrades, planting, and other improvements that make the streetscape comfortable for pedestrians.
- ◆ Landscape areas along the street edge for tree and planter improvements to add visual interest, soften urban edges and provide pedestrians with buffer from traffic.

1.8.3.6 Public Realm Improvements with the IMP Projects

Moakley Cancer Center Addition

Architecturally, the Moakley Cancer Center Addition is of the same scale and is materially consistent with the adjacent structures along East Concord Street. By engaging the streetscape the proposed east façade helps to further define the prominent north/south pedestrian corridor, connecting the campus with the surrounding residential neighborhood to the north. The proposed integrated bus stop and canopy provides a clear arrival point for students, faculty, staff and visitors accessing the campus via public transportation. Maintaining an appropriate setback, similar to the adjacent Talbot building, has allowed for the introduction of a planting zone along the edge of the building, providing a landscaped buffer for passing pedestrians. At the northeast corner of the building, where two main pedestrian movement corridors intersect, benches have been designed to generate places of interaction.

The pedestrian experience at East Concord Street will be enhanced by widening the accessible sidewalk from +/- 6' to 8', and adding a wider 5' furnishing zone along the curb edge. Because the building will be appropriately set back, the new 8' sidewalk dimension will exceed the 5' pedestrian zone requirement as stated in the Harrison Albany Corridor Strategic Plan. The existing staggered jointing pattern within the concrete sidewalk will be replaced with straight saw cut joints perpendicular to the path of travel to create the smoothest surface possible for maximum accessibility and longevity. The 5' furnishing zone will extend the brick paver accent band from the south and contain new street trees in tree grates, fire hydrants, and City of Boston acorn style street lights. The existing raised crossing at the Shapiro Drive exit drive will be maintained but will be repaved and widened with the 8' concrete sidewalk.

See Section 3.1.2 and Figure 3-13 for Moakley Addition Streetscape Improvements.

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New Inpatient Building Phase 1

As part of the New Inpatient Building Phase 1 and New Patient Transport Bridge projects, immediate improvements will be made to the north side of Albany Street creating a simplified pedestrian experience that will promote activity and connectivity.

The repositioning of two major vehicular functions will facilitate a simplified streetscape condition by eliminating two existing curb cuts. The existing West Campus loading dock will be relocated to an interim central location within the existing Power Plant, separating operational service zones from public circulation areas. The relocation will also allow for the removal of the existing West Campus loading dock curb cut. Concurrently, the Emergency Department patient drive and drop-off will be moved to the south side of the Moakley Building to be accessed via Shapiro Drive. These actions will instantly contribute to an improved pedestrian experience through the reduction of pedestrian/vehicular conflicts along the north side of Albany Street.

The New Inpatient Phase 1 building will infill current gaps in the Albany Street face and better define circulation paths by engaging the public street zone. The scale and materiality of the proposed architecture both relate directly to existing campus and neighborhood context. By maintaining a sensible setback along Albany Street, space along the building façade will be allocated to a new planter area and a modest path lined with trees to provide a moment of relief from busy street activity.

Shade trees will be placed in raised planter curbs and be flanked by a field of special paving that compliments the adjacent pedestrian paving to the east along the Shapiro Ambulatory Care Center. An 8'-10" wide concrete sidewalk with saw cut joints will provide the accessible route, and will exceed the 8' requirement set forth by the Harrison Albany Corridor Strategic Plan. The 7'-6" furnishing zone at the curb edge will contain street trees in raised planters that align with the angular planters at the Shapiro Ambulatory Care Center to the east. The furnishing zone will also contain City of Boston double acorn style street lights, hydrants, and other surface utilities.

These improvements will create a visual link promoting a unified campus image, establishing a much-needed visual order to the street edge. This order will contribute to a heightened experience through easier patient wayfinding and an enhanced entry image as viewed from Massachusetts Avenue.

See Figure 1-14 for Albany Street Streetscape Improvements and Section 3.1.3 for more information.

New Patient Transport Bridge

Replacing the existing utility tube with the new patient transport Bridge along the Albany Street corridor will provide further visual comprehension to a congested and confusing street corridor. The proposed glass expression and strait form are a departure from the opaque, zig zag appearance of the existing "yellow tube." The new Bridge along with the New Inpatient

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Building Phase 1 will include improvements along Albany Street that will create a pedestrian friendly environment that cultivates campus circulation.

See Figure 1-14 for Albany Street Streetscape Improvements and Section 3.1.4 for more information.

Harrison Avenue Streetscape Improvements

Streetscape improvements between East Newton Street and East Brookline Street will include the selective thinning and removal of existing plant material along the southern edge of the Preston Family Building and Doctors Office Buildings to improve the planting conditions. These planted buffers will be revitalized with new native and adapted trees, shrubs, and groundcover and will be positioned to shield the existing mechanical equipment from the adjacent neighborhood and act as a buffer for pedestrians.

Opportunities are being investigated to potentially create public amenity space at the ground level of the existing Preston Family Building along Harrison Avenue. In the future, this space could provide a prime location for off-hour functions aimed at drawing in residents and providing further connection to the surrounding context.

See Figure 1-15 for Harrison Avenue Streetscape Improvements.

1.8.3.7 Campus Circulation Improvements with IMP Projects

The relocation of the Emergency Department entrance for pedestrians and passenger vehicles will change local circulation patterns. Passenger vehicles headed for the Emergency Department are proposed to use the Shapiro Drive. At the new entrance, drivers will be met by a valet who will transfer their vehicle via East Concord Street and across Albany Street to a valet-only parking lot proposed to the east side adjacent to the existing Power Plant, or will drop-off the patient and via East Concord Street will head to the 710 Albany Street garage to park.

The relocation of the passenger vehicle pick-up and drop-off along with relocation of the existing loading dock on the north side of Albany Street to an interim location in front of the existing Power Plant to the south side will enable closure of three curb cuts in front of the existing Emergency Department entrance. On the south side of Albany Street, the existing curb cut located between the existing Power Plant and Finland Building will be reduced to one lane. The curb cut in front of the Power Plant for truck access will be relocated to better align with existing loading docks. The curb cut consolidation in conjunction with proposed sidewalk improvements similar to those associated with the Shapiro Ambulatory Care Center will foster a more unified, continuous, and pedestrian friendly streetscape.

With the construction of the new Bridge and Energy Facility, the shuttle bus access to the Woods-Mullen Shelter from the driveway between the Power Plant and Finland Building will be eliminated. The shuttle buses will instead use the proposed new one-way entrance and exit driveways on Massachusetts Avenue with right-in/right-out only curb cuts. The proposed new shuttle bus drop-off will be more efficient than the existing condition and will reduce traffic

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on Albany Street. Currently, the shuttle bus arrives at Woods-Mullen Shelter by traveling north on Massachusetts Avenue and turning east on Albany Street and then south on the driveway in between the existing Finland Building and Power Plant Building.

See Figures 1-11, 1-12, and 1-13 for Improvements to Albany Street, Circulation and Entries.

1.8.3.8 Campus Accessibility Improvements

Concurrently with the development of the IMP, BMC has been coordinating with the Boston Center for Independent Living (BCIL) and Ms. Kristen McCosh, Commissioner of the Mayor's Commission for Persons with Disabilities, to address existing areas within and around the perimeter of the campus to remove barriers and create universal accessibility. BMC will integrate accessibility planning early in the design process for proposed IMP projects. BMC has consulted with the Institute for Human Centered Design to review streetscape improvements proposed as part of the IMP.

BMC's vision is to implement and manage initiatives that promote and maintain accessibility. The following are the strategic objectives of that vision:

- ◆ Continuously evaluate and improve existing conditions.
- ◆ Enhance organizational understanding of physical and visual barriers.
- ◆ Partner with key stakeholders to drive enhanced experience and promote functionality or renovated and new projects.
- ◆ Ensure structured and methodical approach is in place to incorporate human centered design.
- ◆ Streamline process from identification of barriers to resolution.
- ◆ When feasible, address new regulatory requirements.

In coordination with BCIL, BMC has identified a list of barrier removal priorities. To date, over 200 barriers have been resolved which include:

- ◆ Removal of chairs in waiting rooms to allow for adequate space for wheelchairs.
- ◆ Improving accessibility of fixtures in bathrooms.
- ◆ Removal of clutter from exam rooms, changing rooms, hallways, and paths of travel.
- ◆ Providing clear access to medical equipment.
- ◆ Fixing door closers, doorknobs, and automatic openers.
- ◆ Implementing new standards for mounting signage, i.e. larger print, height that is viewable for persons in wheelchairs.
- ◆ Implementing wayfinding initiatives to improve locations of signage outside and within facilities for travel.
- ◆ Working with the city on sidewalk surrounding the medical center to make repairs and improve the accessible route.
- ◆ Commitment for improved snow removal program this winter.

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The proposed Albany Street improvements will provide for improved access and pedestrian experience. A clear concrete path of travel will be provided and the selection of other planting and materials will comply with accessibility requirements. See Figure 1-14.

1.8.3.9 Campus Wayfinding and Signage Plan

Boston University Medical Center developed a comprehensive signage and wayfinding plan several years ago. The goals of the BUMC Campus signage plan were to strengthen existing signing programs beyond the site in coordination with Federal, State and City authorities, to implement a program of gateway, directional, and street name signing, and coordinate and strengthen private signing to clarify the identity of each member institution. Boston University Medical Center signage efforts were coordinated with its neighbors including representatives of Crosstown, Newmarket Business Association, and the BRA.

The architectural variation and intensive vehicular traffic in the general area of the BUMC Campus can present navigational difficulties for a visitor who is unfamiliar with the medical center. To address this issue, Boston University Medical Center implemented a program focused on four primary elements: off-site signing, on-site signing, area identification, and inner and outer loop campus signing. The program includes:

- ◆ Installation of trailblazer signage, in coordination with regulatory authorities, which displays the “H” hospital symbol reinforced by the BUMC Campus logos;
- ◆ Installation of a Gateway Pylon which serves as a directional sign, as well as a landmark, to indicate the point of entry into the BUMC Campus at the intersection of Massachusetts Avenue and Harrison Avenue;
- ◆ Installation of channel letters on the main hospital pavilions for area identification; and
- ◆ Installation of directional signage for the inner campus loop that links all the individual medical institutions within the inner campus, and outer loop signage that identifies BMC, BU Medical Campus, and BioSquare.

Building identifiers were also placed near entrances to each campus building. BMC buildings are distinguished with blue and silver leaf signage and BU Medical Campus buildings are distinguished with red and gold leaf signage. Parking area identification is standardized since BMC, BU Medical Campus, and BioSquare share the same parking facilities. A “P” parking symbol consistent with the City of Boston standard is located at the entrance of each parking facility. In addition, the name of the institution served by the parking facility is listed below the parking symbol.

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.

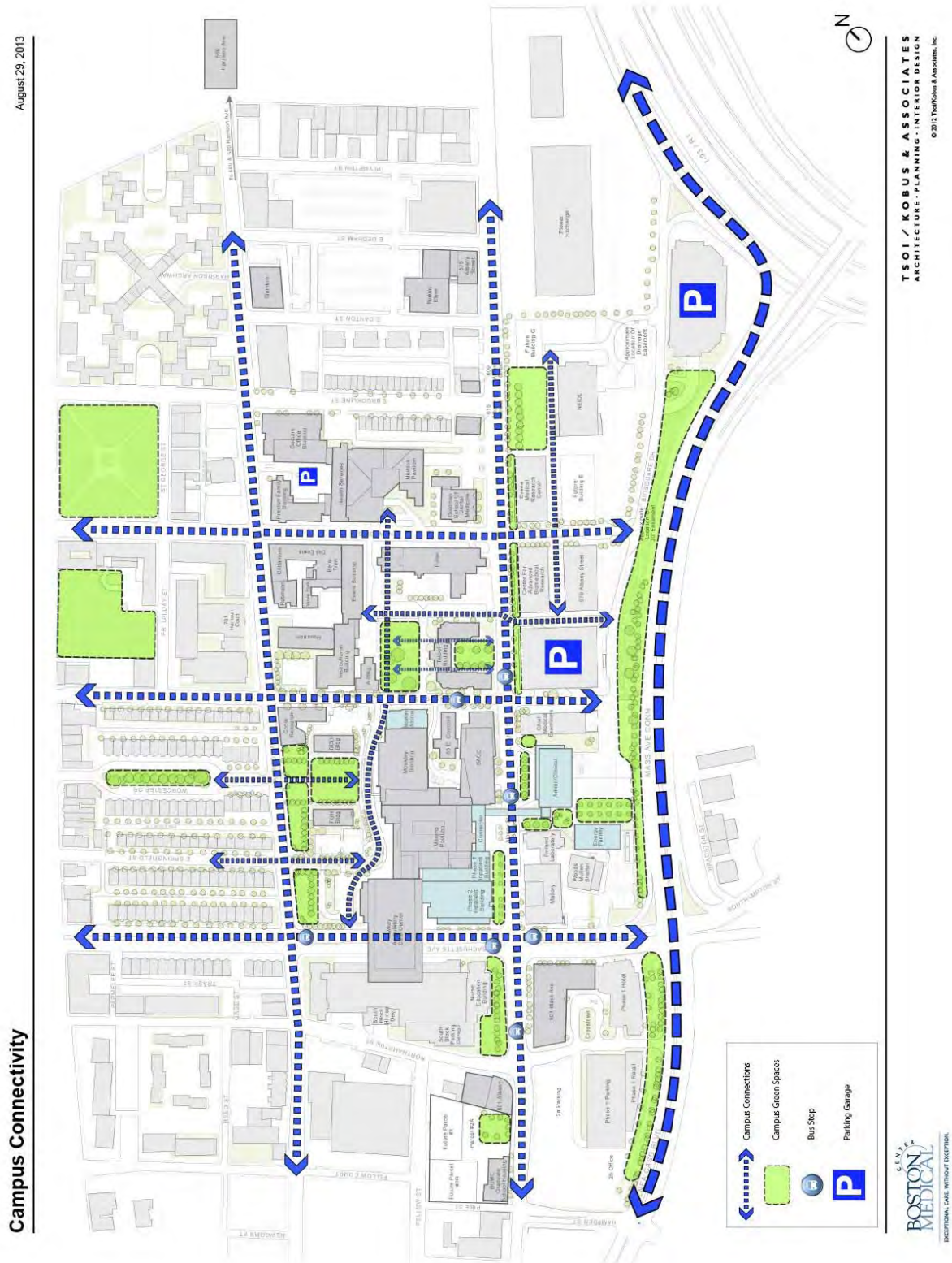
The most recent expansion of the signage program was the inclusion of BioSquare Drive. The signage plan allows for future implementation and independent facility updates for each member institution.

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As IMP projects are implemented, the campus wayfinding and signage plan will be updated including changes to pedestrian and vehicular circulation patterns and cyclist wayfinding. See Figure 1-16 BUMC Campus Signage Plan.

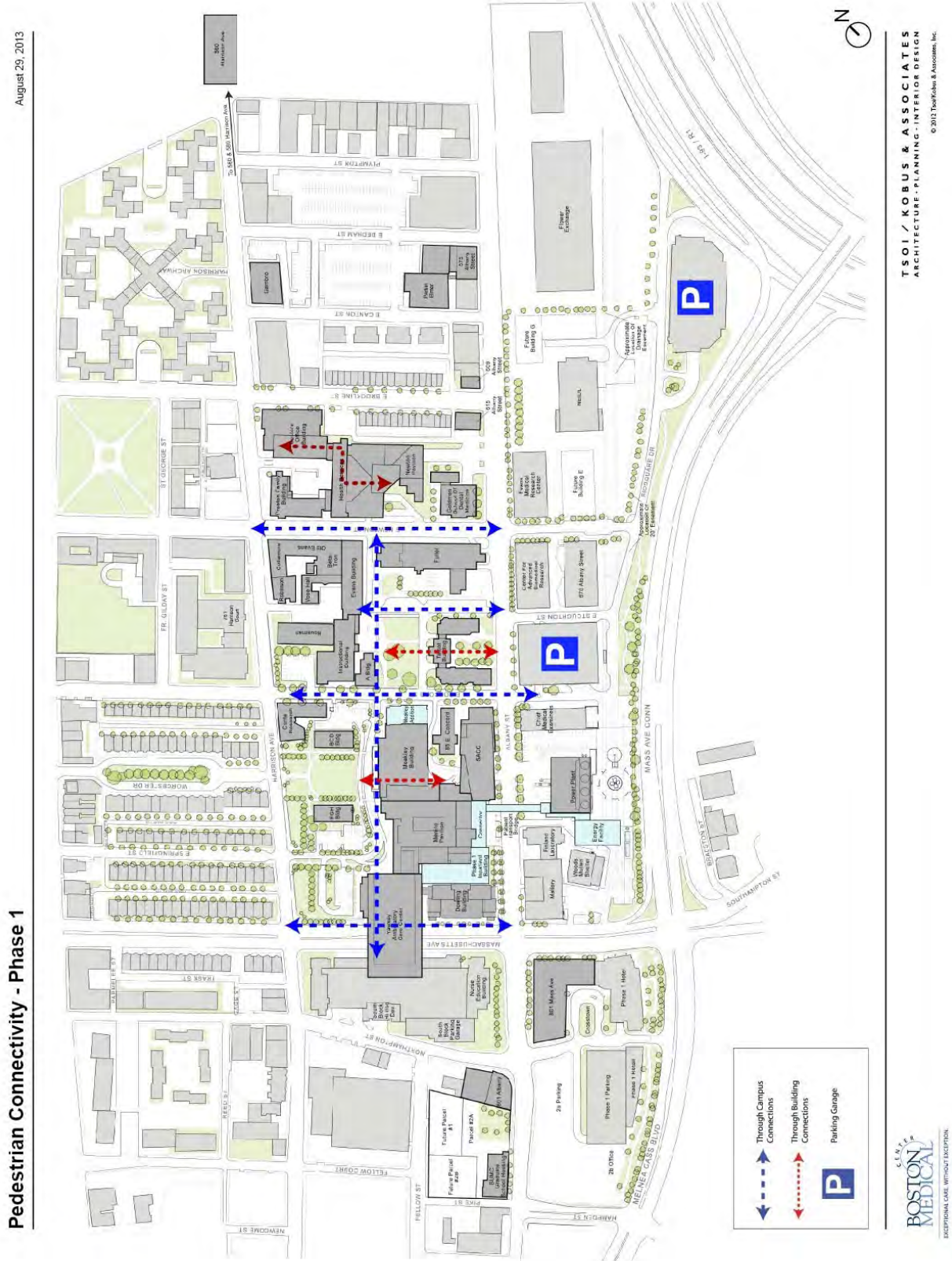
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Figure 1-9 Neighborhood Connectivity and Open Space Network



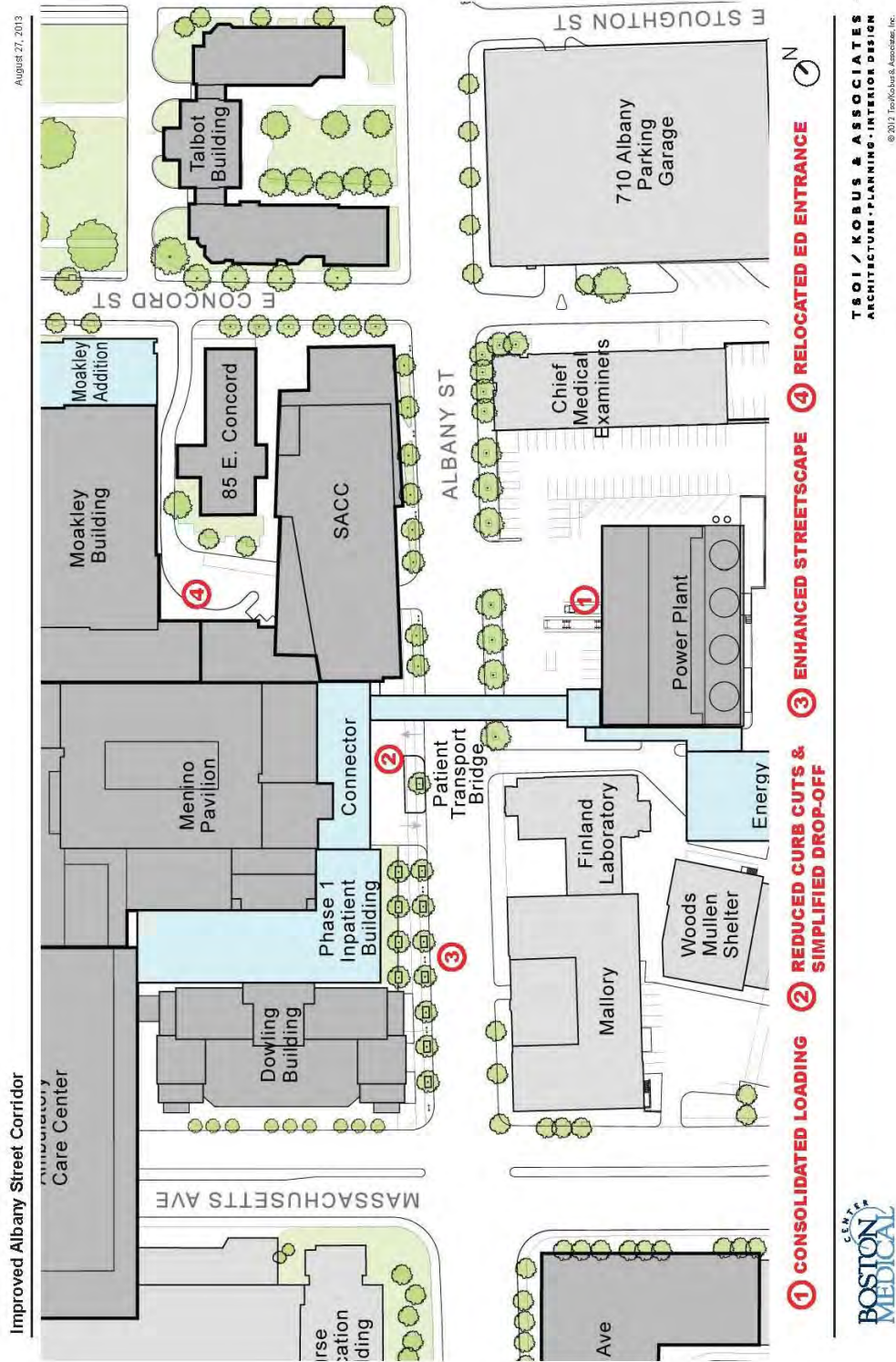
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Figure 1-10 Pedestrian Connectivity



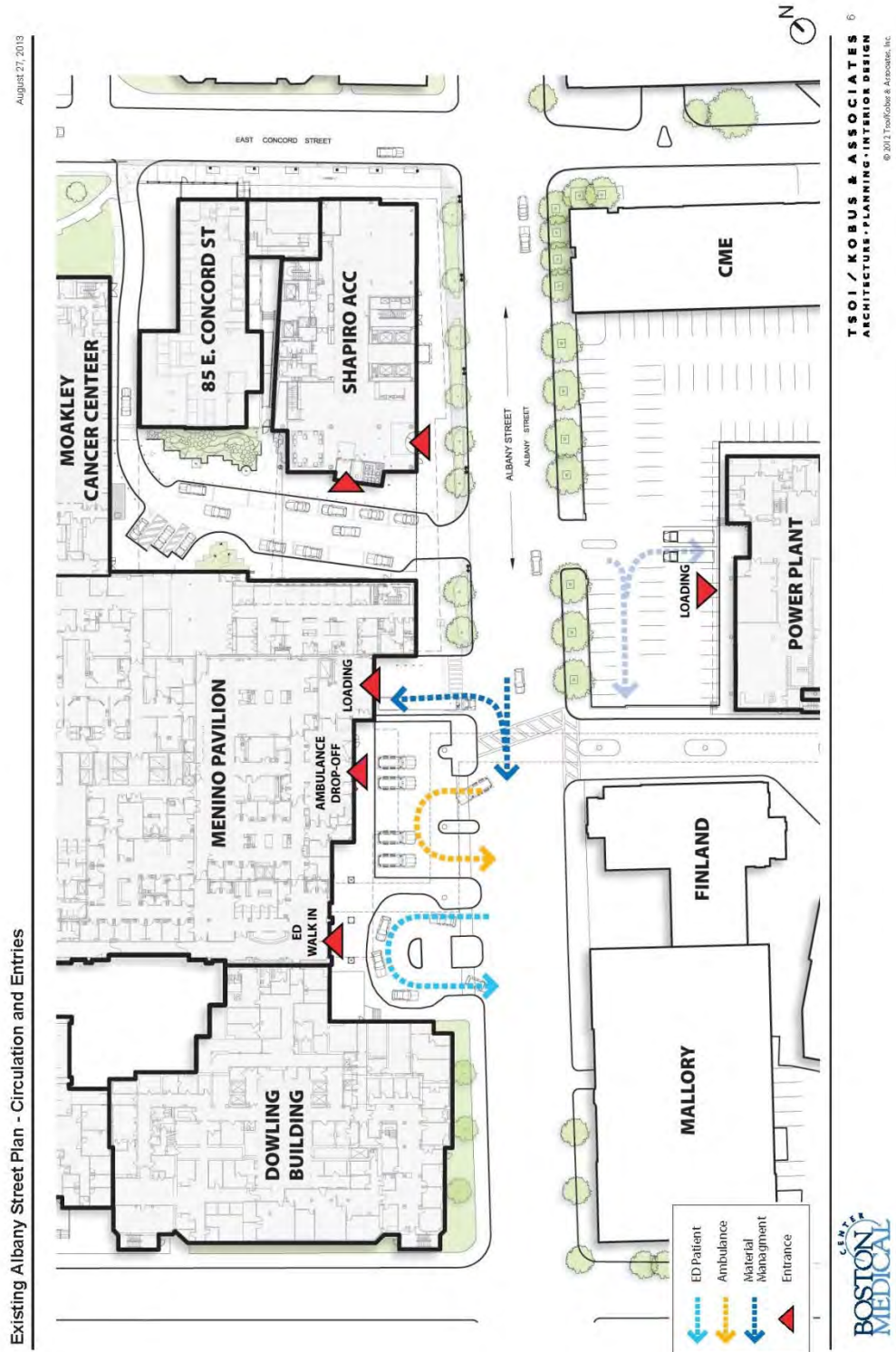
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Figure 1-11 Proposed Improvements to Albany Street Corridor



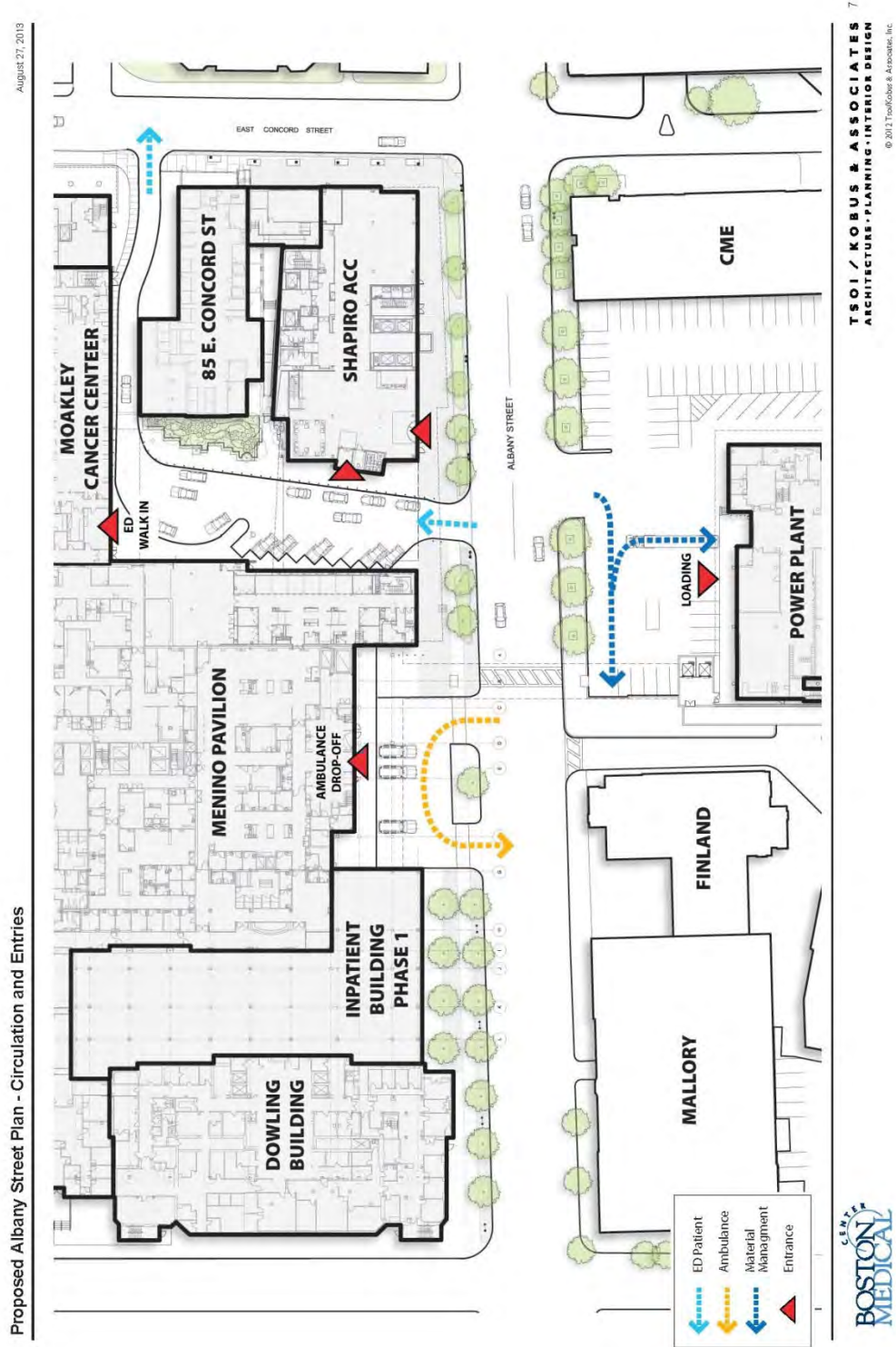
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Figure 1-12 Existing Circulation and Entries



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Figure 1-13 Proposed Circulation and Entries



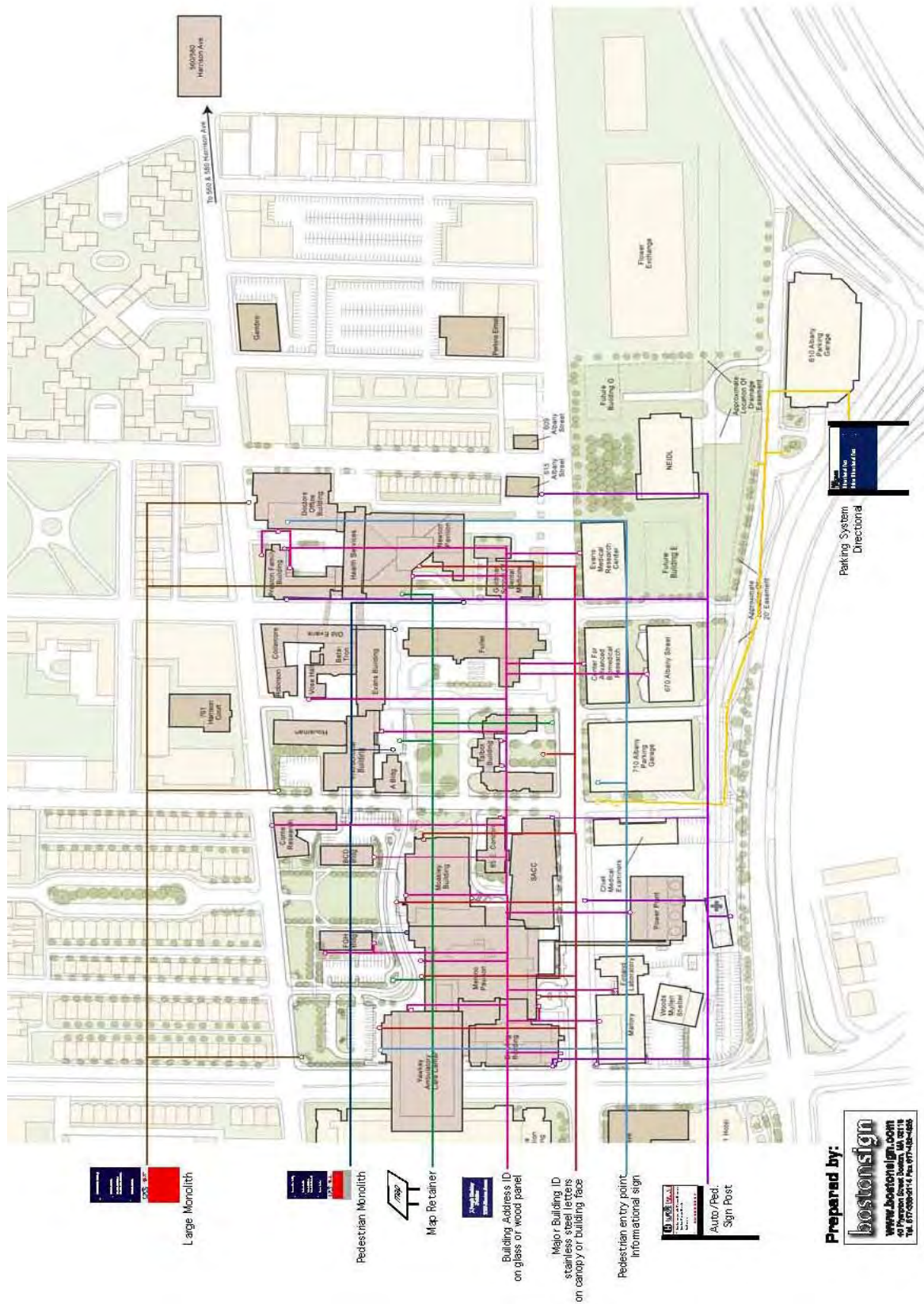
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Figure 1-15 Harrison Avenue Streetscape Improvements



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Figure 1-16 BUMC Existing Campus Signage Plan



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1.8.4 *Massing and Height*

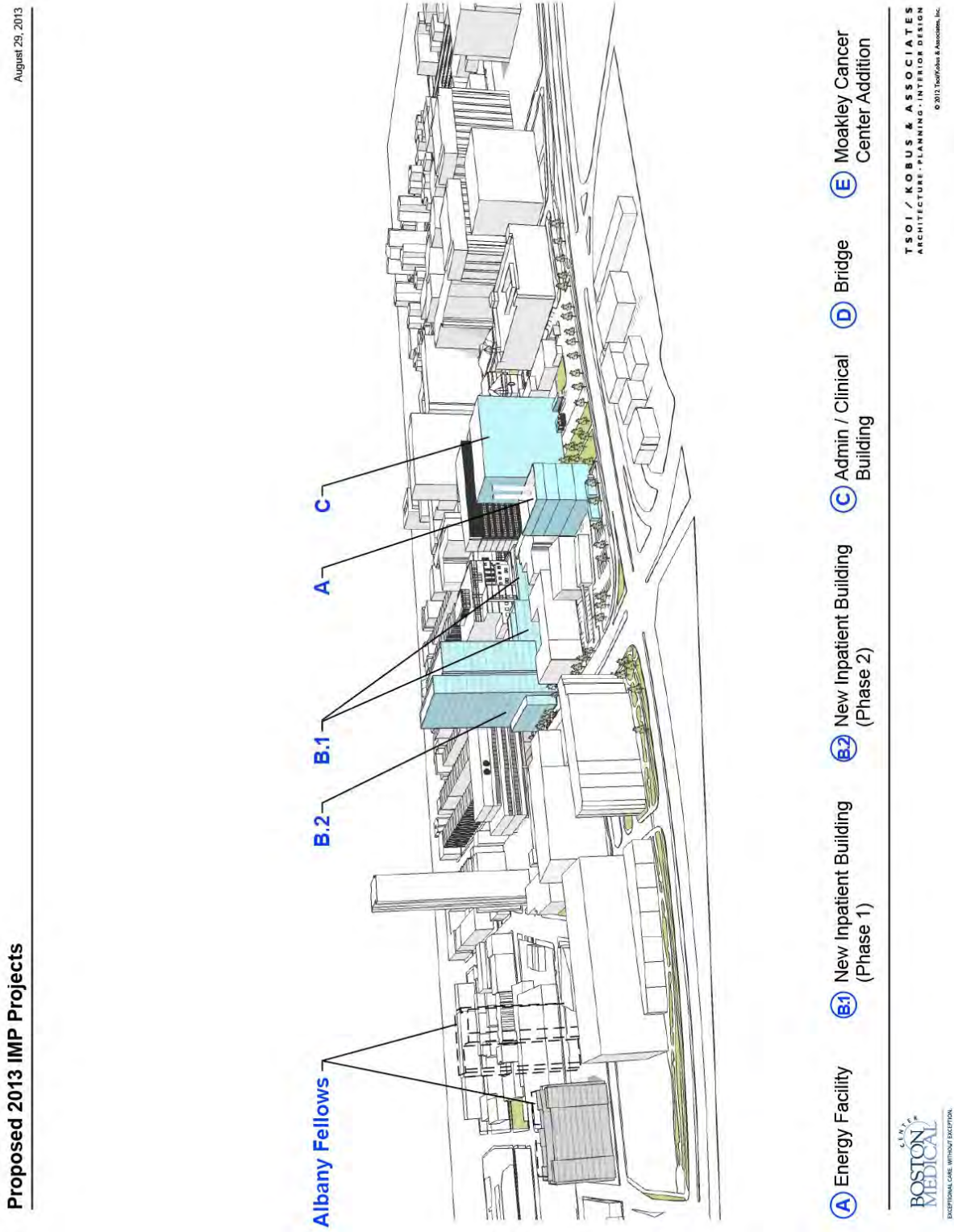
Several key factors drive the proposed massing, height, and location of the three master plan projects. The key factors include programmatic needs, optimization of existing real estate, architectural context, and previously established urban planning principles. These elements balance the needs of the institutions while continuing to strengthen and enhance the relationship between the BUMC Campus and the neighborhood.

Each project will respond appropriately, both individually and collectively, to the established institutional scale and aesthetic. They will also sensitively acknowledge the character of the South End with appropriate materials, massing, and scale. All of the proposed facilities will enrich the overall campus experience as well as enhance the Albany Street Urban Corridor.

See Figures 1-17 to 1-21 Aerial Massing Views.

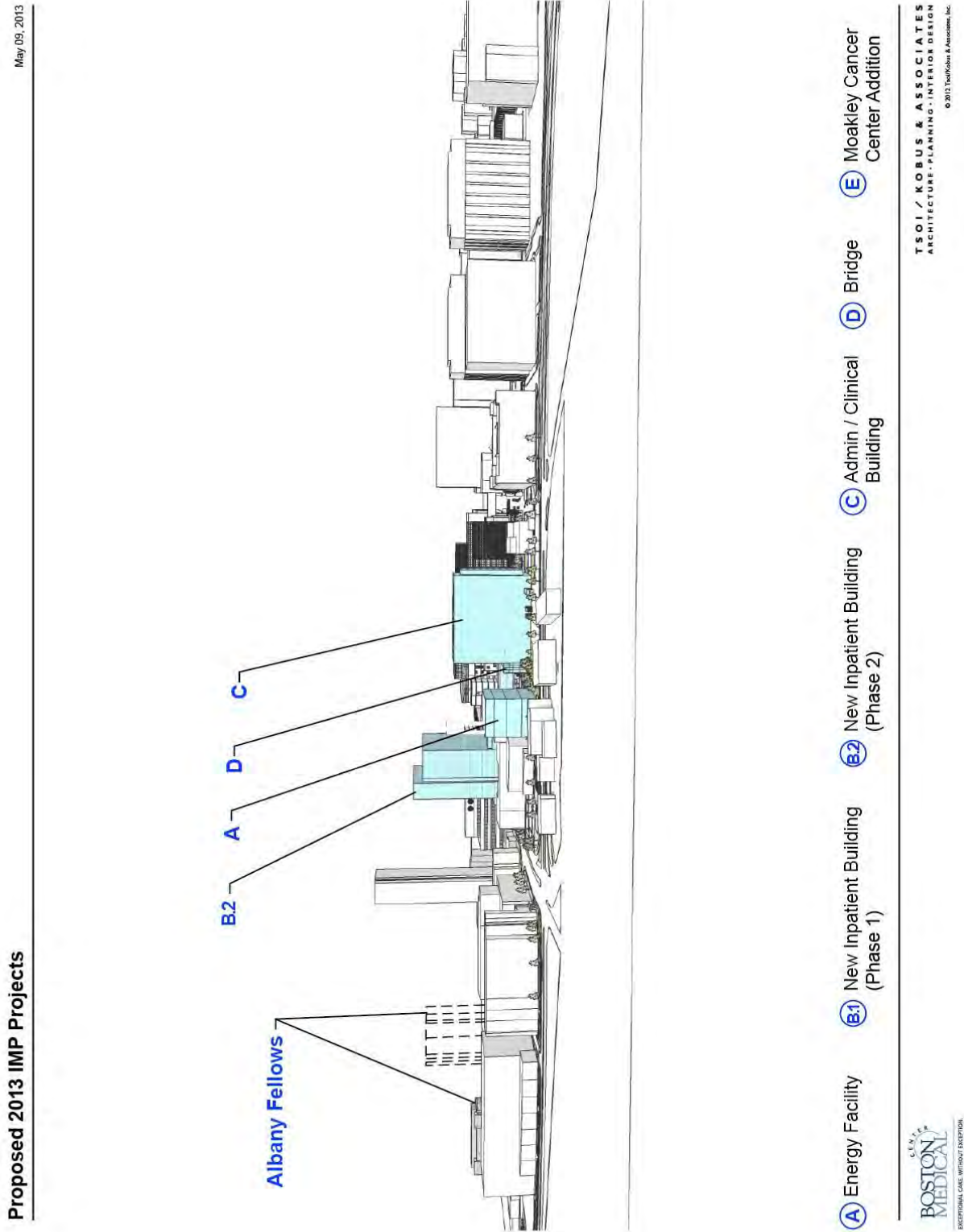
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Figure 1-17 Proposed IMP Projects Aerial Looking North



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Figure 1-18 Proposed IMP Projects Aerial Looking Northwest

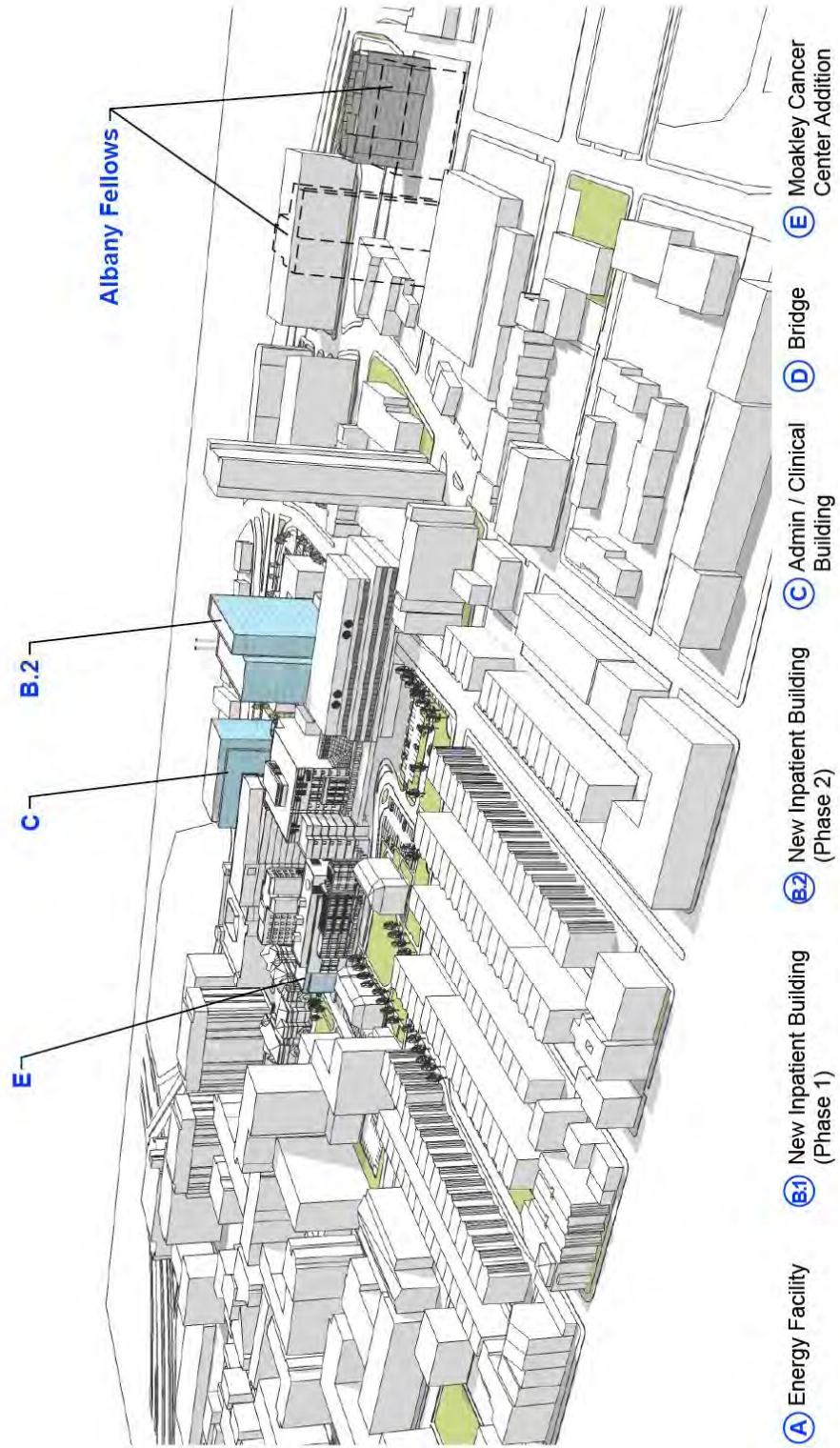


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Figure 1-19 Proposed IMP Projects Aerial Looking Southeast

August 29, 2013

Proposed 2013 IMP Projects

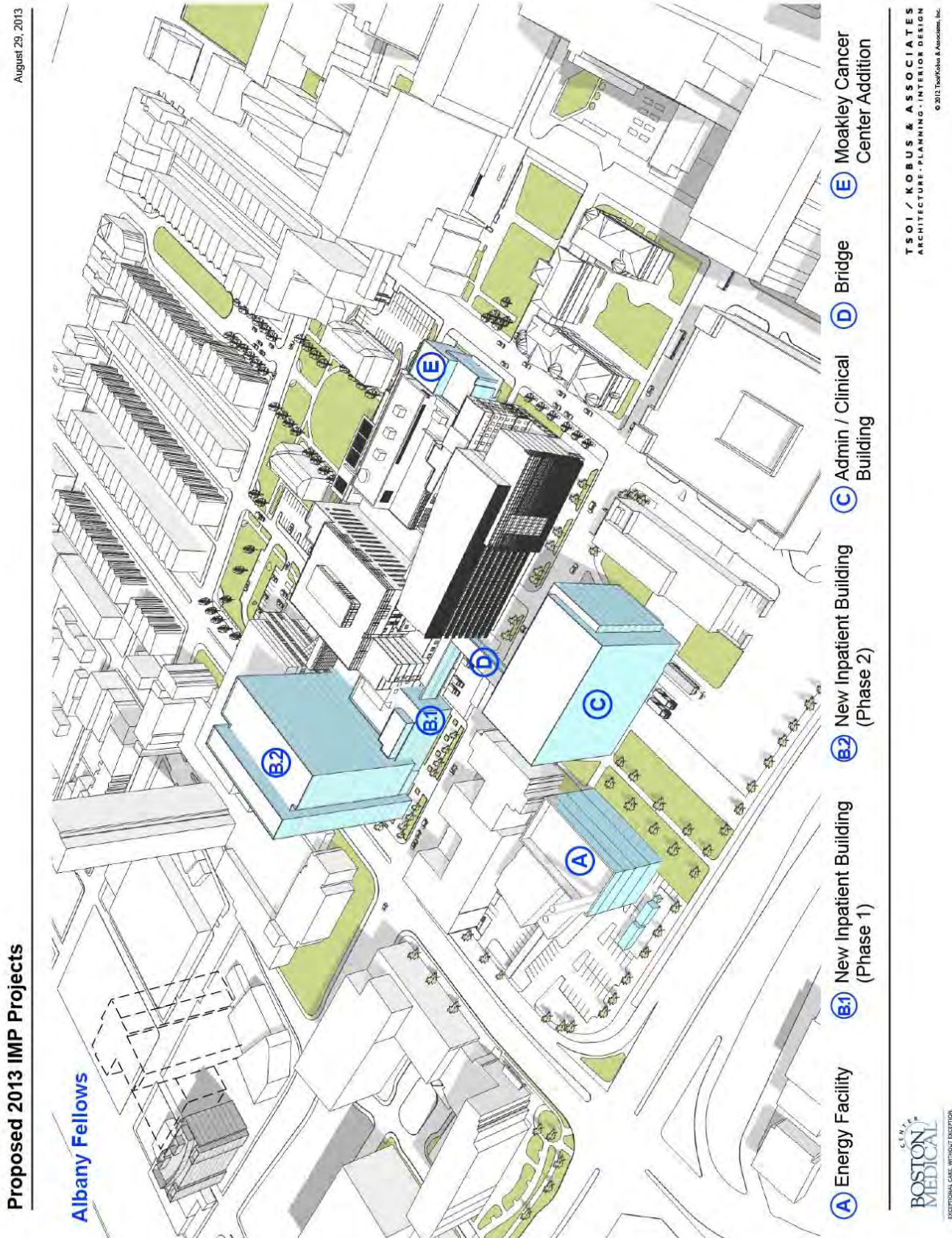


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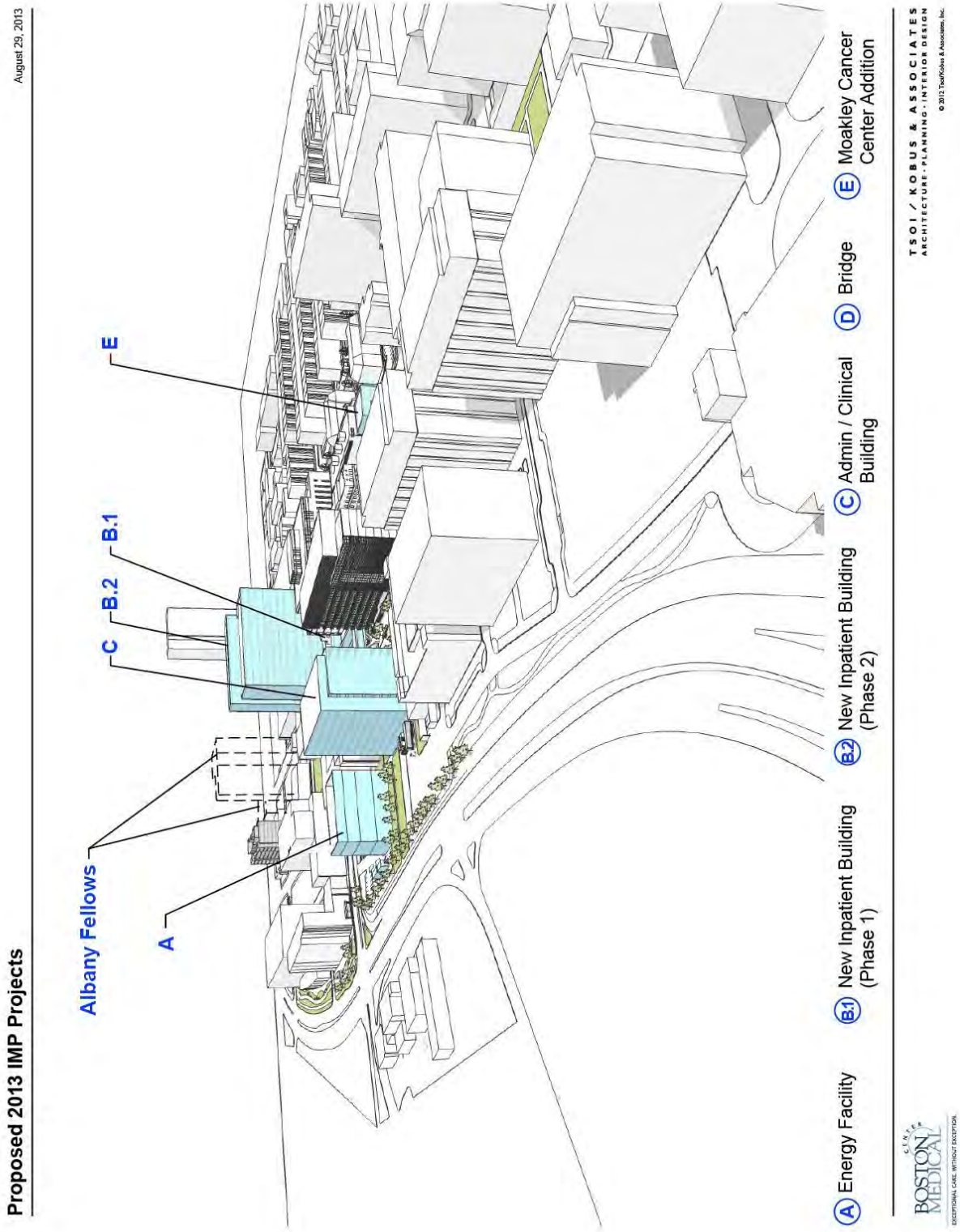
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Figure 1-20 Proposed IMP Projects Aerial Looking West



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Figure 1-21 Proposed IMP Projects Aerial Looking West Massachusetts Ave Connector



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1.9 Public Benefits

Boston University Medical Center provides numerous public benefits to the City of Boston. The IMP projects will directly enhance the Proponents' abilities to administer the services that support their missions within the community.

1.9.1 *Boston Medical Center*

1.9.1.1 Community Benefits Introduction

As previously noted, BMC's mission is to "consistently provide excellent and accessible health services to all in need of care, regardless of status or ability to pay." Approximately 70 percent of BMC's patients come from underserved populations, including low-income families, elders, people with disabilities, and immigrants. Seventy percent of all patients are from racial and ethnic minority populations, and 30 percent do not speak English as a primary language. To address the health needs of its diverse patient population, BMC provides a wide range of services beyond the traditional medical model. These programs, including but are not limited to patient navigation, interpreter services, and a food pantry, help reduce barriers to accessing health services and eliminate disparities in health care among the various populations BMC serves.

BMC values its diverse patient population and is committed to honoring their ethnic, religious and cultural differences. The Interpreter Services program at BMC is the most extensive in New England and one of the largest in the country. In addition to providing person-to-person interpreters on-site in more than 21 languages, 24 hours a day, the program uses the latest advances in technology, such as telephonic and video interpreting. BMC interpreters help break language barriers as well as serve as cultural brokers to patients and staff. In 2012, BMC handled approximately 205,839 requests for interpreter services.

BMC is committed to addressing health disparities, an issue for the Boston health care community that has been brought to the fore by several reports and government commissions in recent years. This commitment is reflected in investment in new facilities, technology and equipment to ensure that patients have access to state-of-the-art care; in cultural competency training for clinical and non-clinical staff and managers; and in specific projects reaching into the community or addressing disparities within disease areas.

In addition to health care services, BMC provides a wide range of social services to meet the basic needs of the many vulnerable people it serves. Leveling the health care playing field for patients goes beyond commitment to providing exceptional health care without exception: BMC realizes that it must work in a multidisciplinary fashion and at multiple levels of patients' needs to help secure its patients' health. BMC services have evolved over many years, including at its predecessor institutions, to provide benefits and services in line with its public health mission. Many programs that started at BMC – like the Reach Out and Read program and the Medical Legal Partnership I Boston – are now nationally replicated models to improve the health and development of vulnerable populations.

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BMC's Community Benefits program is not formalized in a specific annual Community Benefits Plan. The BMC Board of Trustees, BMC senior management, the Boston HealthNet Board of Directors, and individual department leaders annually prioritize programs and services for the vulnerable populations they serve. BMC categorizes Community Benefits programs by the themes of ensuring access to health care for underserved populations and securing the fundamentals of health in key areas of public health concern. These programs receive significant, dedicated budgetary support from the hospital, Boston HealthNet health centers, or BMC departments in addition to philanthropic or grant funds. There are numerous other community services provided at BMC and in the community by BMC employees and medical staff to foster community health. Many of these programs are supported at the departmental level or through grants, philanthropy, or volunteerism.

Some of the community benefits programs offered at BMC included the following:

Needs Assessment

BMC's assessment of the health care needs of the communities it serves is based on demonstrated need. The Medical Legal Partnership I Boston (MLP) is one of many examples of how demonstrated need informs BMC (BMC) community health improvement activities and services.

In 1993, clinicians within the Department of Pediatrics understood that nutrition and home energy were root causes of poor health and development among their predominantly low-income pediatric patients. In response, MLP initiated the "Energy Clinic" in 2006 to provide targeted advocacy around issues of nutrition and home energy.

Today, MLP is a national leader in medical-legal collaboration to address the root causes of pediatric poor health and development. MLP seeks to improve the health and wellbeing of people in poverty by addressing the non-medical barriers to health faced by low-income individuals. MLP allies lawyers and health professionals and creates access to legal services in the clinical setting to ensure that low-income patients' basic needs—for food, housing, education, health care, and safety/stability—are met. The national MLP network now extends to more than 80 sites across the country, spanning both urban and rural communities.

Promotion of Community Health

Special Support for Children and Families

- ◆ Child Life Program (CLP): The CLP helps children and families manage the stresses associated with hospitalization and illness. The Child Life Team is trained to help children and families understand the hospital experience and related feelings. The goals of the CLP are to: help children express their feelings in a safe and supportive environment; help children manage pain effectively; offer children choices that increase feelings of independence, self-esteem and trust; and assist with implementation of coping techniques during stressful situations.
- ◆ Children's Health Watch (CHW): CHW is a non-partisan pediatric research center that monitors the impact of economic conditions and public policies on the health and

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well-being of very young children. CHW interviews families with young children in five hospitals across the nation, including BMC (4,500 patient interviews in FY11), that serve the poorest families. The database of more than 44,000 children, 80 percent of whom are minorities, is the largest clinical database in the nation on very young children living in poverty. Data are collected on a wide variety of issues, including demographics, food security, public benefits, housing, home energy, and children's health status and developmental risk. We seek to provide policy makers and advocacy groups with the evidence they need to shape policies that prevent child hunger and promote children's health.

- ◆ Pediatric Assessment of Communication Clinic (the Autism Clinic): Since 2003, the Autism Clinic has provided evaluations and ongoing care for children of all ages when there is a pediatrician concern about autism spectrum disorder (ASD) and related conditions, or when they have a previous diagnosis of ASD. The primary service provided by the Autism Clinic staff is educational advocacy. The Autism Clinic's Educational Specialist provides direct support services to primarily low-income and/or immigrant families who have limited English proficiency and are most challenged by the complex regulations governing the special education system. As needed, she travels to classrooms to observe young patients with ASD and to help families access the proper special education placement for their children, much faster than these families could manage on their own. Approximately 600 new patients and 1,000 families are served annually.
- ◆ Birth Sisters and Perinatal Care: BMC has developed two programs, Birth Sisters and Centering Pregnancy, to improve health outcomes of childbearing women at risk for poor maternal and infant outcomes. Birth Sisters are women who are trained to provide social support and education to mothers from their own communities during pregnancy, labor, and the postpartum period. The Birth Sisters program has been linked to significantly higher breastfeeding rates and fewer cesarean deliveries. Centering Pregnancy is an innovative and proven model of care that offers prenatal care in 10 two-hour group sessions using a BMC-developed curriculum. At these sessions beginning early in the second trimester, patients receive health visits, prenatal and parenting education and peer group support all in one visit. The programs support 334 patients.
- ◆ Supporting Parents and Resilient Kids Center (SPARK): SPARK is a therapeutic day program for Boston's most vulnerable children, including those living with HIV/AIDS; those born very prematurely; those who have suffered psychological trauma due to abuse/neglect; and those with complex medical and emotional needs. SPARK staff provide medical, educational, nutritional, and mental health services to vulnerable children from birth to age 22. SPARK operates an Early Childhood Day Program, a School-Age After-School Program, a young adult Job Training Program and a Summer Camp Program, serving approximately 100 children annually who live throughout Eastern Massachusetts. SPARK helps children to build positive social

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networks, positive self-regard and community belonging. Additionally, the program provides parenting education and support.

- ◆ Medical Legal Partnership Boston (MLP| Boston): MLP| Boston seeks to improve the health and wellbeing of people living in poverty by addressing the non-medical barriers to health that low-income individuals so often face. MLP| Boston allies lawyers and health professionals and creates access to legal services in the clinical setting to ensure that low-income patients' basic needs—for food, housing, education, health care, and safety/stability—are met. In FY11, MLP| Boston served 1,000 individuals.
- ◆ Margaret M. Shea RN Adult Day Health Program: This program offers families peace of mind and a support system to help them with decisions involving the care of their loved ones. It is a holistic medical intervention program that provides services in an ambulatory, home-like setting for adults who do not require 24-hour institutional care, but because of physical and/or mental impairment, are not completely able to live independently. All participants are referred to the program and are screened before entering the program. Services offered by the program include nursing, social services, activities and transportation.

Responding to the Needs of Patients Affected by Violence

- ◆ Child Protection Team (CPT): A special services division of the Department of Pediatrics, CPT serves all of BMC's maltreated pediatric patients. The CPT has three major areas of responsibility: 1) supporting BMC providers to ensure that maltreated children treated at BMC are protected; 2) improving the effective identification and response to maltreatment through innovative research and program development at BMC and nationally; and 3) providing training and education to pediatric health and other professionals in the recognition and management of child maltreatment. CPT collaborates with community and state agencies, law enforcement personnel and the judiciary system to ensure the best possible outcome for children and families.
- ◆ Child Witness to Violence Project (CWVP): CWVP is a nationally-recognized and award-winning counseling, outreach, and consultation program that focuses on young children under the age of eight who are exposed to domestic or community violence. The CWVP offers a flexible combination of services to children and their families, including: intensive trauma-focused counseling that is developmentally tailored to very young children and their parents; access to legal advocacy; and assistance with linking to other necessary services including health care, child care, housing, and after-school programs. In 2011, the CWVP provided trauma-focused counseling services to 90 children, and brief consultation/advocacy for an additional 200 families. The training/clinical consultation component of the program delivered 100 trainings across Massachusetts and 12 states.

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- ◆ Domestic Violence Program (DVP): The DVP provides training and education for staff, assistance with hospital policy and protocol development, consultation on a variety of clinical and research initiatives, as well as direct advocacy/support services for survivors of domestic and dating abuse. In 2009, a Safety and Support Advocate position was created to provide a range of advocacy and support services to patients referred from a range of adult and adolescent settings and providers. The DVP served 200 individuals in FY11 by providing services such as crisis intervention/counseling; risk assessment and safety planning; assistance with accessing protective orders, victim compensation; accompaniment to court, legal, medical, housing and other appointments; referral to community-based DV advocacy/rape crisis counseling, medical/mental health services and other support as needed.
- ◆ Violence Intervention Advocate Program (VIAP): In April 2006, BMC piloted VIAP to provide specialized services to victims of violence, using two community health workers, Violence Intervention Advocates, to provide individual counseling, triage and referral services for victims of violence brought to the BMC Emergency Department. VIAP staff collaborate with public and private agencies to offer a broad spectrum of concrete services to patients recovering from violent injury. Each VIAP site has hired a peer Violence Intervention Advocate VIA with strong community knowledge. In FY11, VIAP provided services to a total of 415 victims: 178 gunshot victims and 237 stabbing victims. Of these victims, 34 were female. VIAP provided the following direct services and referrals to services to victims and 34 families: crisis intervention and stabilization; housing and transportation; legal; educational; vocational and life skills development; mental health; employment; and health and wellness.

Community Outreach

- ◆ Cancer Screenings: BMC offers an annual free cancer screening event to vulnerable, underserved individuals in order to promote the early detection of cancer. Because BMC serves a predominantly minority and low-income population, including many non-English-speaking citizens and immigrants, the delivery of exceptional care requires a keen sensitivity to the challenges for our patient population. The Saturday cancer screenings effectively reach our target population because they create a convenient time for people who work to access screenings, and allow husbands and wives to support each other as they both are screened. A total of 240 people from Boston and surrounding areas attended the 2011 screening event.
- ◆ Flu Vaccine Day: BMC began its 2010-2011 influenza vaccination campaign in September of 2010 making influenza vaccine available to all patients in both the inpatient and ambulatory care settings. To date, BMC has administered more than 31,348 doses of vaccine.

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A Safety Net for Special At-Risk Populations

- ◆ The Metro Boston Jail Diversion Program (JDP): Since 2006, the JDP has worked with 529 individuals with mental health and/or co-occurring mental health and substance dependence whose associated behavior brings them to the attention of law enforcement and courts. The JDP collaborates with the police and courts to both identify individuals with these risk factors and connect them with appropriate services and treatment as alternatives to arrest and incarceration. The JDP is training Boston Police Department and Massachusetts Bay Transit Authority officers to identify individuals with mental illness and how to refer individuals to services instead of arresting them. At the court level, 56 JDP participants have successfully completed probation rather than being incarcerated.
- ◆ Boston Center for Refugee Health and Human Rights (BCRHHR): The mission of the BCRHHR is to provide comprehensive health care for refugees and survivors of torture and related trauma, coordinated with legal aid and social services; educate and train agencies and professionals who serve these communities; advocate for the promotion of health and human rights in the United States and worldwide; and conduct clinical, epidemiological, and legal research for the better understanding and promotion of health and quality of life for survivors of torture and related trauma. In FY11, the BCRHHR served more than 500 patients.
- ◆ Elders Living at Home Program (ELAHP): In FY11, ELAHP provided housing search and placement to 14 homeless older adults, and housing stabilization services to an additional 60 formerly homeless individuals. None of the vulnerable clients served during the year relapsed into homelessness, although two individuals did require nursing home placement due to significant declines in their cognitive abilities. The goal of ELAHP is to help older adults locate and maintain a permanent residence and allow them to live as independently as possible.

Healthy Nutrition and Exercise

- ◆ Food Pantry: The Preventive Food Pantry and Demonstration Kitchen address hunger-related illness and malnutrition among a low-income, largely underserved and vulnerable patient population of Greater Boston. Individuals at risk of malnutrition are referred to the program by BMC or Boston HealthNet physicians or nutritionists who provide “prescriptions” for supplemental food that best promotes physical health, prevents future illness, and facilitates recovery. The Food Pantry now provides nutritional food prescriptions to approximately 7,000 people each month. Over the past five years the Pantry has seen an 87% increase in demand for its services. In 2011, the Pantry provided 252,228-worth of food to an estimated 13,902 people. This number is expected to rise by 5% in 2012. Approximately 10,000 pounds of food supplies are required weekly to stock the Pantry shelves at BMC. The Demonstration Kitchen complements the work of the Pantry by educating

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patients about nutrition through cooking methods that are compatible with their medical and dietary needs, as prescribed by their physicians.

- ◆ **Grow Clinic:** As part of BMC's Pediatrics Department, the primary goal of the Grow Clinic is to provide comprehensive multidisciplinary medical, nutritional, social services and dietary assistance to children from the Greater Boston area diagnosed with Failure to Thrive (FTT). Children with FTT have significant difficulty growing because of malnutrition associated with poverty, illness and family stress. The effects of FTT include shortened attention spans, emotional problems, delayed cognitive development, lasting growth failure, and frequent and serious illness, which can result in hospitalization. In 2011, the Grow Clinic provided medical treatment, nutritional assessment, home health education, family advocacy, access to a therapeutic food pantry and other services, children's clothes, diapers, books and educational toys to a total of 225 patients/families.
- ◆ **Adult Weight Management:** The Nutrition and Weight Management Center offers several programs, such as weekly support groups for weight management and a cancer survivor's weight management group, for the community aimed at supporting healthy lifestyles and nutrition. More than 500 patients benefited from these services in FY11.
- ◆ **Nutrition and Fitness for Life Program (NFL):** The Department of Pediatrics works to prevent the onset of adult diabetes in young, underserved, and overweight and obese patients through its NFL, which provides clinical and community-based services to children and their families. The NFL model features three primary components: 1) clinical services targeting children with >95 percentile of body mass index; 2) the FANTastic Kids after school program which provides teen-mentored nutrition education and fitness activities for overweight and obese youth who are referred to the program by their physicians; and 3) continuing medical education for clinicians to increase their capacity to treat pediatric overweight patients in the primary care setting. These programs fill a large gap in services to populations most strongly impacted by the pediatric obesity epidemic.

Basic Needs

- ◆ **Clothing Bank:** BMC's social workers access the clothing bank in real time when a provider contacts Social Work about a basic clothing need (sweat pants, shirts, underwear, socks, shoes, and winter coats) for a low-income patient.
- ◆ **Social Work Emergency Fund (SWEF):** The SWEF provided short-term, immediate assistance to approximately 550 patients who faced crises in FY11 and had nowhere else to turn. The Fund enables BMC to cover the costs of emergency expenses while its social workers help individuals and families find the resources and services they need to stabilize their lives after personal crises. We provide cab vouchers for those unable to access public transportation to get to BMC, and car seats and clothing to

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young families. SWEF has the flexibility to provide for a range of needs and the judicious use of funds helps in a number of unique situations when, too often, individuals and families have no alternative.

Removing Barriers to Accessing Care

- ◆ New England Flight: BMC is a Boston MedFlight (BMF) partner. BMF is a Commission on Accreditation of Medical Transport Services (CAMTS) accredited Critical Care Transport service. Boston MedFlight commits to excellence in critical care transport by providing the highest quality regional critical care transport system. As a non-profit organization, Boston MedFlight transports emergent patients regardless of their ability to pay and is financially supported in part by a consortium of Boston hospitals including BMC. For over 25 years, Boston MedFlight has played an integral role as part of the Massachusetts EMS system and the community hospitals of New England.
- ◆ Patient Navigation: The Patient Navigation program is designed for patients with cancer and chronic illnesses, such as diabetes, who need special assistance in navigating the health care system. Patient Navigators are individuals from the communities served by BMC and who have special language skills, training in scheduling, and refined compassion/communication skills. Peer Navigators contact our most vulnerable patients and help them to access the doctor visits and treatment that they need in the most efficient manner possible, arranging transportation for patients, reminding patients about appointments that they helped the patients to schedule, and connecting patients to community resources such as the BMC food pantry.
- ◆ Shuttle Buses/Taxis: Community Access to BMC is enhanced through a free shuttle bus service. Four buses circulate throughout the system on established routes, from 7am-7pm, Monday through Friday, bringing patients to BMC. In FY11, these shuttle buses transported 199,936 patients and their families between BMC and the Boston HealthNet CHCs. There is also a direct taxi and van hospital-to-home service for specific cases.
- ◆ Interpreter Services: BMC values its diverse patient population and is committed to honoring their ethnic, religious and cultural differences. The Interpreter Services Department is the most extensive in New England. In addition to providing person-to-person interpreters on-site in more than 30 languages, 24-hours-a day, the department utilizes the latest advances in technology such as telephonic and video interpreting. Interpreter Services goes above and beyond what is mandated by law to provide video interpreting, non-essential document translation (such as appointment reminder letters, bereavement letters), translation and recording of clinic phone menus, and 24/7 on-call face-to-face coverage for our top four languages. Our interpreters help to break language barriers as well as serve as cultural brokers to

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patients and staff. Last year, they assisted in 190,647 interactions with patients and visitors.

Addressing Significant Public Health Problems

- ◆ Diabetes: The BMC Diabetes Center provides innovative and up-to-date diabetes education and care to help patients better understand and manage their diabetes. Located in the Endocrinology Clinic, the Diabetes Center provides culturally and literacy-appropriate education about nutrition, menu planning, exercise and medication management to the most chronically ill patients with diabetes. Care providers also train patients to better manage their insulin regimens. A patient navigator on the team assists patients in appointment scheduling and transportation needs, for patients with challenges in retaining their appointments (see patient navigation).
- ◆ Smoking Cessation: BMC's Division of Psychiatry offers a medically supervised Smoking Cessation Program. The program is an eight week, one hour per week classroom model with a curriculum that includes pharmacotherapy, nicotine replacement (gum and patches), stress reduction training, cognitive restructuring, social support, and relapse prevention counseling. This clinical resource for BMC patients also serves as a center for training and research in tobacco control available to the entire BMC community.

Improving Quality of Life

- ◆ Acupuncture: Acupuncture services at BMC are provided free of charge to more than 600 patients annually who do not have affordable access to complementary alternative medicine (CAM).
- ◆ Cancer Support Groups: In 2006, BMC established the Cancer Patient Support Services Fund to provide crucial services and programs to complement patients' clinical care. The fund is used for survivorship programs such as support groups and celebrations, assistance with transportation costs to and from the hospital, patient navigation, and the provision of complementary therapies such as yoga and massage. In FY11, there were 15 cancer support groups that met regularly and as many as 650 patients who participated in the survivorship programs.
- ◆ Integrative Medicine: The mission of the Initiative for Integrative Medicine and Health Disparities within the Department of Family Medicine, which served approximately 250 patients on a rotating basis in FY11, is to substantially impact the quality of life for the urban underserved through providing access to integrative medicine clinical services, research and education. Services provided, primarily free of charge, include yoga classes, integrative cancer care, acupuncture clinics, chi gung class, music therapy, and integrative medicine consults.

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Empowering Individuals with Disabilities

- ◆ *Stepping Forward-Staying Informed* Consumer Education Program: *Stepping Forward-Staying Informed* is a two-pronged consumer education program consisting of an annual one-day research conference tailored to consumers and a bi-monthly evening lecture series. *Stepping Forward-Staying Informed* presents topics that directly relate to living with Spinal Cord Injury (SCI), such as current research findings and emerging effective treatment techniques, in easily understood, lay terminology. Individuals living with SCI and their families seek current information about spinal cord injury research and emerging treatments because it enables them to advocate on their behalf, make informed decisions about care, and share information with other individuals. The *Stepping Forward-Staying Informed* conference has become a relied upon source of information for consumers and healthcare professionals.

Affiliated Health Care System: Boston HealthNet Health Care System

Established in 1995, Boston HealthNet (BHN) is an integrated health care delivery system comprised of BMC, the Boston University School of Medicine, and 14 community health centers (CHCs). Physicians who practice at HealthNet locations provide a wide range of comprehensive health care services to adult and pediatric patients, with a focus on disease prevention and health education. Patients receiving primary care at HealthNet sites have access to highly trained specialists and cutting-edge technology at BMC while maintaining individualized and culturally sensitive care in their neighborhoods. Now in its 17th year, BHN and its CHC partners have extended BMC's presence into Boston-area neighborhoods, significantly impacting the health of their residents.

The accomplishments of the network are evidenced by: the growth of CHC admissions to BMC; the establishment of an inpatient Rounder System for CHC patients; the collaborative development of quality improvement initiatives, clinical protocols, and standards of practice; increased access to specialty services; a successful public health outreach campaign; and the significant development and coordination of BHN's information technology programs and services.

In 1997, Boston HealthNet established a Community Physician Group Inpatient Rounder System at BMC. The Rounder System brings together physicians from the CHCs and the BMC Department of Family Medicine to care for patients from these centers while they are in the hospital, thereby coordinating and enhancing the quality and continuity of care. Today, 12 CHCs and BMC's Department of Family Medicine participate in the Rounder System. The System was reconfigured in 2008 into three teams, comprised of BMC and CHC attending physicians assisted by three nurse partners and four physician assistants. In 2008 the Rounder System was extended to evenings and seven day coverage. The Average Length of Stay for the Rounder System was 4.39 days, which compares favorably with other national and local indices.

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Boston HealthNet CHC partners are active collaborators on a number of projects and programs described in this report, including the Prostate Cancer Screening Initiative, patient navigation research, the FANTastic Kids program to address pediatric overweight, and Medical-Legal Partnership. Additional examples of projects on which BMC and Boston HealthNet have collaborated include:

Information Technology

- ◆ Significant strides have been made in the area of information technology across the network. All of Boston HealthNet's primary CHC partners are connected to BMC over high-speed T-1 lines that put BMC's clinical systems at the fingertips of CHC providers and other staff. In 2001, the partnership between BMC and the CHCs, coupled with a substantial grant from an anonymous foundation, supported the implementation of the Centricity electronic medical record (EMR) at eight of the primary partner CHCs. In 2008 implementation was completed at one secondary partner CHC. Additionally, electronic prescribing was implemented at the nine Centricity sites. A Working Group meets monthly to address developmental issues and to evaluate and prioritize future projects.
- ◆ A three year, \$746,246 HRSA award to Boston HealthNet in FY07 supported the vertical integration of electronic medical records at eight CHCs with that of BMC. This integration took place via implementation of a Clinical Information Exchange (CIE) that now allows CHC providers to view information in both BMC and other CHC systems through the local patient record. The CIE also allows physicians in the CHCs to better track patients receiving care at BMC.
- ◆ In 2008, the network was a recipient of a one-year, \$543,000 high impact health information technology grant from HRSA that allows staff to implement an electronic referral management system between the 10 BHN primary partner CHCs and specialists in the BMC Department of Medicine. By leveraging the technology of the CIE, the eReferral system also makes it possible for the CHCs to schedule appointments, electronically submit required clinical information to specialists, receive electronic information about referrals, track patients' no-show rates, and receive return specialist reports through the local EMR or by opening a web-based practice portal.
- ◆ In 2010, Boston HealthNet received a two-year, \$2,986,872 grant from HRSA to help complete the transformation of current Health Information Technology capabilities into a truly integrated, high-performance health information exchange with the capacity to handle all necessary clinical, administrative and financial functions. To this end, project funds are being used to install the Centricity Practice Solution at five CHCs; to implement immunization and diabetes registries for the entire BHN network, including BMC; to fully automate laboratory order entry and results retrieval for 12 of the CHCs; to automate reporting of Uniform Data System measures and HRSA Clinical Performance Measures in all 15 CHCs; and to create a data warehouse for the CHCs.

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- ◆ In 2011, the Yankee Alliance, Inc. awarded BMC \$454,967 for the Balanced Scorecard/Safe Sign-outs project, to begin retroactively on October 1, 2011 and finish September 30, 2012. BMC Balanced Scorecard is a continuation project to move to the next level in developing a computer dashboard system to drill down on patient safety and quality. This project will focus on the provider level metrics development and testing. Safe Sign-Outs is a new systems development project to create a software system and protocol for resident safe sign-outs to prevent patient adverse events.
- ◆ Also in 2011, Boston HealthNet received a two-year HRSA grant to implement a series of Health Information Technology initiatives that integrate databases and electronic alerts in standardized systems in order to improve the quality, effectiveness and efficiency of primary care. The project will implement clinical and financial practice management software that is fully integrated with the electronic health records at five CHCs, reducing the number of customized interfaces and licenses needed and providing crucial business intelligence; create system-wide childhood immunization and diabetes registries; automate reporting of Uniform Data System data, HRSA clinical performance measures and selected practice management metrics; and create a data warehouse for the CHCs. The project will benefit the more than 334,000 Boston HealthNet patients and the clinical impact of the proposed will include significant increases in the number of children fully immunized by age two years and adherence to the standards of the National Committee on Quality Assurance for diabetes care, and a significant decrease in the percent of patients with uncontrolled diabetes (HbA1c > 9).

Increasing Patient Access

- ◆ Community Access to BMC is enhanced through a free shuttle bus service. Four buses circulate throughout the system on established routes, from 7am-7pm, Monday through Friday, bringing patients to BMC. Last year, these shuttle buses transported 199,936 patients and their families between BMC and the Boston HealthNet CHCs.

Advancing Medical Education

- ◆ A number of HealthNet CHCs also serve as the primary community-based training sites for Boston University School of Medicine pediatric, family medicine, and general medicine residents.

1.9.1.2 Employment, Workforce Development, and Educational Opportunities

BMC is a major employer in the City of Boston and is committed to promoting employment opportunities for Boston residents, particularly individuals living in adjacent neighborhoods. BMC employs a diverse workforce, with, 5,244 full-time equivalent employees (FTEs), who work to provide the highest quality, patient-focused care. (See Table 1-4 below.) 39% percent of BMC's employees live within the city of Boston and 16% live in six core workforce neighborhoods (Mattapan, North Dorchester, Roxbury, South Dorchester, South Boston and

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the South End). BMC offers employees competitive wages and benefits, educational assistance and tuition reimbursement, and skill-based training seminars including cultural diversity forums.

Table 1-4 BMC Employment (FY13)

BMC Employment FY13			
Total BMC Employees*:	6,089		
*Includes full and part-time employees including per diems and temporary staff			
Full Time Equivalents:	5,244		
	Full-time	Part-time	Total
Total Employees	4,642	1,447	6,089
Residents of Boston	1,995	375	2,370
Core Neighborhoods*	813	166	979
*Zip Codes 02219, 02111, 02118, 02119, 02120, and 02121			

BMC provides a wide range of workforce development and educational opportunities for its current employees and people wishing to gain the skills necessary to become BMC employees. BMC's workforce development program results compare favorably to benchmarks established by the Massachusetts Department of Education and the US Department of Labor.

BMC supports its employees' career and educational goals by providing access to tuition reduction programs at partnering school, which can then be combined with BMC's tuition reimbursement programs.

- ◆ Drexel University - In 2011, BMC established a partnership with Drexel University Online to offer educational opportunities to staff and their family members. BMC staff can earn a top-ranked degree or certificate and receive special tuition rates when they enroll in one of Drexel's distinguished online programs. Employees may also be eligible for tuition assistance for job-related programs through BMC's benefits policy and deferred tuition payment plans through Drexel.
- ◆ Boston University Metropolitan College - In 2006, BMC and Boston University's Metropolitan College established a preferred educational partnership. This relationship has allowed BMC professionals to refine their skills and enhance their careers at one of the nation's most prestigious academic institutions. Metropolitan College offers a wide range of on-campus courses to BMC employees at a 50 percent tuition reduction.

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- ◆ Tuition Reimbursement - BMC offers tuition reimbursement to eligible employees. Depending on their status, employees may receive up to \$2,500 per academic year for college studies related to a BMC career.

Both represented and non-represented employees can use tuition reimbursement benefits to attend the accredited college or university program of their choosing. Benefits can be applied to participation in a certificate- or degree-granting program, or can be used for individual classes that enhance an employee's skills or provide career or educational exploration.

Table 1-5 on the following page shows utilization of these benefits.

Table 1-5 Tuition Reimbursement Utilization

FY 10	Associate	Baccalaureate and above
Nursing Union	2	71
Non-Union	9	35
Total	11	106
FY 11	Associate	Baccalaureate and above
Nursing Union	0	67
Non Union	4	28
Total	4	95
FY 12	Associate	Baccalaureate and above
Nursing Union	0	72
Non Union	5	41
Total	5	113

BMC Employees who are represented by 1199SEIU-Service or AFSCME are eligible for tuition reimbursement and other educational costs through the Training and Upgrading Fund.

The Training and Upgrading Fund is a fund supported by both the service unions and BMC funds to provide education and training for BMC employees who are in service unions. This includes most entry level employees (general cleaner, unit coordinator, and patient access rep, for example).

Table 1-6 Training and Upgrading Fund Utilization

	Career Advising	Cohort classes *	Associate	Baccalaureate and above
FY 10	33	4	120	75
FY 11	36	55	52	50
FY12	78	58	98	73
Total	147	117	270	198

*Cohort classes include: ESOL, Basic Computer Skills, College Prep

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In addition to Tuition Vouchers and Tuition Reimbursement, the Training and Upgrading Fund provides a variety of educational and career-enhancing opportunities for its members. These opportunities include career advising to help employees explore their career goals while also providing information on healthcare careers with projected growth; College Prep courses which include topics such as time management, test-taking, and developmental math and English; English for Speakers of Other Languages; Basic Computer Skills; and classes for allied health professionals (Medical Terminology, Spanish for Healthcare Providers, CPR/First Aid).

As a leading partner in the community, Boston Medical Center continues to foster relationships with community organizations, professional organizations, schools, and community centers to ensure that the hospital is a respected and integral part of the Boston community and to encourage the support and education of Boston's youth.

Boston Medical Center demonstrates its commitment in the following ways:

- ◆ Exercising corporate social responsibility by promoting and providing training opportunities to youth who live in and attend schools within city neighborhoods so they may gain a better understanding of the business of healthcare and help to influence their career choices and their futures.
- ◆ Supporting community events and activities.
- ◆ Engaging in a variety of outreach activities that bring value to the community and promote BMC's reputation as an attractive employer and as an "Exceptional" healthcare provider.

Boston Medical Center has established relationships with schools, school programs, community organizations, and professional organizations. Below are some examples of programs that BMC participates in:

Youth Programs and School Partnerships

- ◆ Christo Rey Boston Corporate Work Study Program where students provide services for the organization while gaining valuable work skills and exposure to working in a business environment. Most (65%) of the students live in Boston and are from diverse backgrounds.
- ◆ STEP Program's mission is to introduce Boston Public School students to a multitude of career opportunities, to help inner city student identify the relevance of continuing their education and to engage Corporate Partners in providing students access to real world work environments. BMC, the only hospital that was invited to participate in the STEP Program, has hosted four student tours per year since 2010 in departments such as Interpreter Services, Respiratory Therapy, Rehabilitation Therapies, Cardiology, Otolaryngology, and Radiation Oncology.
- ◆ YMCA Youth Achievers Summer Institute is an innovative summer learning experience for middle school and high school students. Through this unique career

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exploration program, students are introduced to various careers in the arts, government and health. In July 2010, BMC's Department of Nutrition and Healthy Living staff held a workshop for approximately 20 students on "Nutrition & Fitness for Life Program" and shared information about careers in the Food Services field.

Community Partnerships/Organizations

- ◆ Morgan Memorial Goodwill Industries provides exemplary job training and related services to help individuals with disabilities and other barriers to self-sufficiency to achieve independence and dignity through work. BMC staff members serve on the general board of trustees, advisory board, and attend career workshops.
- ◆ Patient and Family Advisory Council (PFAC) was established to meet BMC's mission of providing "Exceptional Care. Without Exception" through enhanced partnership between patients, families, caregivers and staff. Members of the PFAC are members of the community BMC serves, employees, patients and their families.
- ◆ YMCA Training, Inc. provides adults with job skills training to help them obtain living-wage employment. 50% of Training, Inc.'s participants are Boston residents. Of the Boston residents, 82% are people of color. BMC and YMCA Training, Inc. have enjoyed a mutually beneficial partnership for over 12 years by participating in customer service training, for interns, offering internship opportunities, and providing a BMC representative to serve on the Partners Council. BMC hired 65 graduates of YMCA Training, Inc. since 1999, and hosted over 33 interns in the past 5 years. BMC has been Training Inc.'s Employer of the Year for 6 consecutive years.

Professional Organizations/Partnerships

- ◆ Asian American Civic Association (AACV), operating since 1967, provides limited English speaking and economically disadvantaged people with education, occupational training and social services enabling them to realize lasting economic self-sufficiency.
- ◆ Association of Latino Professionals in Finance and Accounting (ALPFA) provides a venue for outreach to Latino professional and managers. BMC is a corporate member of the Boston Chapter and participates in networking events throughout the year.
- ◆ Commonwealth Compact is an initiative embraced by several companies and organizations to make Massachusetts a location of choice for people of color by (1) increasing the representation of people of color and women throughout organizations, especially in management, senior management, and board governance positions; (2) retaining and promoting people of color and women; and (3) encouraging organizations to reflect, and connect with, the diversity of the communities and customers we serve. BMC is one of the 111 original signers of 2007, and maintains an active presence at meetings and events sponsored by the Commonwealth Compact.

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- ◆ National Association of Health Services Executives (NAHSE) is a non-profit association of Black health care executives that promotes the advancement and development of Black health care leaders, and elevates the quality of health care services rendered to minority and underserved communities. BMC is a corporate member and has been a supporter of NAHSE on a national and local level by hosting and attending programs and local chapter meetings, recruiting and placing student interns and fellows, and hiring them as employees.
- ◆ New England Regional Black Nurses Association, Inc. is a part of the national effort to unify, educate and increase the number of African American Nurses in this country. NERBNA is dedicated to investigating, defining and determining the health care needs of African Americans throughout New England. BMC participates in the annual “Excellence in Nursing-Black Nurses Day” recognition award program and recruits at the annual conference.
- ◆ YMCA Achiever Award is presented each year to a select group of diverse individuals who are nominated by their employer for their career accomplishments in their profession and in their service to the community. This award recognizes employees, with an emphasis on African Americans, Hispanics/Latinos and South Asians, who, in partnership with their employers, commit time and talents to the development of young people. BMC has participated in this program since 1996.

1.9.1.3 Annual Property Taxes / PILOT - Boston Medical Center

Although much of BMC’s property is tax-exempt, BMC contributes annually to the City of Boston’s Payment in Lieu of Taxes (PILOT) program.

1.9.1.4 Other Economic Benefits - Boston Medical Center

BMC’s community goals are to continue to provide effective and accessible services to vulnerable populations in the Boston community and to continue to expand efforts that deepen relationships with the communities they serve. In fiscal year 2011, BMC invested \$17,419,446 in Community Benefits Programs (as reported to the IRS on Form 990 Schedule H, Part I, Line 7e, column e, *net community benefit expense*).

BMC contributes to the local economy through employment of Boston residents and the purchase of goods and services from Boston businesses. BMC spent approximately \$127,000,000 in fiscal year 2012.

The BMC HealthNet Plan, founded in 1997, is the largest MassHealth and Commonwealth Care managed care organization in Massachusetts providing health insurance to 260,000 members who are served by participating providers in Greater Boston and in Southeastern and Western Massachusetts. The Plan offers comprehensive coverage, interpreter services, membership cards, and personal physicians providing care for the whole family. It furnishes other member benefits (beyond the mandated benefits) including free car seats, bike helmets, manual breast pumps for nursing mothers, and a member/provider hotline.

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1.9.2 Boston University Medical Campus

1.9.2.1 Introduction

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

The Boston University Medical Campus (BU Medical Campus) is composed of the Boston University School of Medicine, the School of Public Health, and the Henry M. Goldman School of Dental Medicine. Utilizing resources provided by BU Medical Campus administration, each school offers a wide array of community programs, resources, and services related to their respective concentrations and specialties. In addition to these University-sponsored community programs, BUMC plays an important role in the economic vitality of both the city and the state, employing nearly 2,800 full-time employees, attracting more than 3,000 students, and making a significant PILOT (payment-in-lieu-of-taxes) contribution to the City of Boston each year.

1.9.2.1.a A Tradition of Community Service

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. Such programs include:

Smart Smiles in Boston Public Schools

Since 2004, the Boston University Goldman School of Dental Medicine, through its Smart Smiles in Boston Public Schools program, provides dental health education, oral screenings, fluoride varnish applications, and dental sealants to thousands of second grade children in 29 Boston public elementary schools, including: Beethoven, Boston Teachers Union, Clap, Conley, Dever, Edison, English High, Everett, Gardner, Grew, Haley, Henderson, Higginson/Lewis, Holland, Hurley, Kenny, Kilmer, Lyndon, Mason, McKay, Mission Hill, Mozart, Orchard Gardens K-8, Perkins, Roosevelt, Sumner, Trotter, Winthrop and Young Achievers.

As part of Boston University's commitment to Mayor Menino's Step UP initiative, GSDM also offered oral health services to four schools—English High School, Orchard Gardens K-8 School, John Winthrop, and the William Monroe Trotter School. Oral health education was provided to 618 students in these schools, and 195 students received dental screenings, fluoride varnish treatments, and/or dental sealants through this program.

CityLab

In 1992, Boston University School of Medicine (BUSM) pioneered an innovative science education outreach program that has been replicated across the country. CityLab provides

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Boston Public Schools students and teachers in grades 7-12 with access to state-of-the-art biotechnology laboratory facilities and curricula, which are unavailable in most schools, through the use of its mobile laboratory and on-site laboratories at the School of Medicine.

Framingham Heart Study

Undertaken in 1948, the renowned Framingham Heart Study is the longest-running prospective epidemiological study in history. 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. The study is run in partnership with the Boston University School of Public Health and the Boston University School of Medicine.

Blackstone Elementary School Annual Field Trip to the Goldman School for Dental Medicine (GSDM)

Third grade children at Blackstone Elementary School make an annual visit to GSDM for a full day of oral health activities, including presentations on oral health and nutrition, a lesson on teeth and gums, and interactive activities in the Simulation Learning Center in which they learn about sealants and dental impressions. One of GSDM's most successful outreach programs, it provides both interactive health education for children and an opportunity for Boston University dental students to inspire a young child to pursue a higher education and possibly a career in dentistry.

Outreach Van Project

Founded in 1997, the Outreach Van Project is a student-run community service staffed by volunteers from Boston University's School of Medicine and School of Public Health to provide health care to the medically underserved and homeless communities. Faculty and students go out one evening per week to East Boston to conduct free health screenings and distribute clothing and other basics necessities to approximately 20 to 30 people weekly during the colder months and 65 to 75 people weekly when the weather is warmer.

Preschool and Kindergarten Dental Health Education

Preschool and/or kindergarten classroom dental health education is conducted each year by GSDM faculty and students, and goodie bags with toothbrush, toothpaste, and stickers are given out at the end of each session. Sites served include:

- ◆ Allston Brighton Area Planning Action Council (APAC)
- ◆ Ashmont Nursery School, Dorchester, MA
- ◆ Roger Wellington Elementary School, Belmont, MA
- ◆ St. Agnes School, Arlington, MA
- ◆ St. Brendan School, Dorchester, MA
- ◆ Temple Emeth Nursery School, Chestnut Hill, MA

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1.9.2.1.b New and Enhanced Community Programming

In addition to BU Medical Campus's well-established catalog of community programs and services, BU Medical Campus recently added two new programs to its roster of community benefits: the Boston University Health, Fitness, and Wellness Pilot Program and the BioScience Academy. In response to a community needs assessment conducted by the Boston Centers for Youth & Families (BCYF) and the Boston Public Health Commission and in conjunction with community discussions, Boston University is proud to announce the implementation of the Boston University Health, Fitness, and Wellness Pilot Program, an initiative aimed at combating obesity and promoting a healthy lifestyle for Boston's youth and their families. Additionally, BU Medical Campus was also recently selected by the City of Boston as one of three local partners to implement a biotechnology workforce training program known as the BioScience Academy.

Boston University Health, Fitness, and Wellness Pilot Program

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

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

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

The program is open to BCYF Blackstone Community Center members and youth ages 14 and older, and accounts for a 36-hour-per-week commitment from Boston University.

BioScience Academy

Launched in fall 2012, the BioScience Academy is a workforce development program that provides biotechnology training to unemployed and underemployed Boston area residents. Program funding stems from the Metro Boston Skilled Careers in Life Sciences (SCILS) initiative, a four-year \$5 million grant that the City of Boston received from the U.S. Department of Labor to grow and maintain the area's life sciences workforce. Boston

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University was selected as one of three training partners to implement the biotechnology training program, for which Boston University contributes half of participants' tuition. Students receive professional development training and a Certificate in Applied Biotechnology upon completion of twelve course credits through the School of Medicine and Metropolitan College.

1.9.2.2 Economic Impact

19.2.2.a Employment

In addition to educating future health care professionals focused on community, the schools of the BU Medical Campus extend employment and professional development opportunities to the people of Boston and the surrounding communities, as well.

BU Medical Campus employs approximately 2,047 full-time equivalent employees and 351 part-time employees. Of these, 509 are Boston residents.

Employment at the BU Medical Campus is expected to increase in proportion to moderate increases in student enrollment and the development of research programs.

Table 1-7 BU Medical Campus Employment (FY13)

			BU Medical Campus Employment (2013)
	Full-time	Part-time	Total
Total Employees	2,047	351	2,398
Boston Residents	475	34	509

			BU Medical Campus Employment (2013) [Including Temporary Employees]
	Full-time	Part-time	Total
Total Employees	2,107	688	2,795
Boston Residents	495	137	632

19.2.2.b PILOT (Payment-in-lieu-of-taxes) Program & Linkage Payments

As a nonprofit educational institution, Boston University is tax exempt; however, motivated by a sense of responsibility as one of Boston's largest employers and landowners, and by its commitment to giving back to the community, in the 1980's Boston University began to make

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payments to the City of Boston in lieu of the taxes from which it was exempt. These “PILOT” (payment-in-lieu-of-taxes) funds help the city cover the cost of providing essential services, such as police, fire, and snow removal. These payments account for the University’s properties and activities on both the BU Medical Campus and the Charles River Campus.

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

In FY2012, Boston University contributed \$5.3 million in PILOT payments to the City of Boston.

Since FY2006, Boston University has also paid more than \$1 million in linkage payments for new developments on the BU Medical Campus.

1.9.2.3 Local Infrastructure Improvements and Beautification Initiatives

In addition to operating 5 free shuttle services within the South End area and between the BU Medical and Charles River Campuses at an approximate cost of \$1.75 million a year, the BU Medical Campus also makes significant contributions to local urban beautification efforts. In the early 2000s, the University committed \$246,000 to the construction of a “pocket” park on Albany Street, and also installed and maintains planting beds along the median islands stretching from Albany Street to Shawmut Avenue along Massachusetts Avenue.

BU Medical Campus is also a proud participant in Mayor Menino’s year-round neighborhood clean-up and community service program, Boston Shines 365, through which volunteers plant flowers, sweep, rake, and pick up trash to keep Boston’s neighborhoods clean and beautiful.

1.9.2.4 Scholarships

Community Scholars Program

For full-time working professionals interested in pursuing a Masters in Public Health part-time, the Community Scholars Program encourages experienced health professionals to pursue advanced study for an MPH while continuing their full-time employment. Up to ten half-tuition scholarships are awarded annually to MPH degree candidates depending on the competitiveness of the applicant pool. Eligible applicants have at least two years of experience and are currently employed full-time in public health related nonprofit or government agencies.

In FY2011, Boston University awarded nearly \$129,000 in scholarship aid for local full-time working professionals pursuing an MPH degree.

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Table 1-8 Boston University Scholarship Aid

Scholarship Aid		
Scholarship Program	Amount Offered in FY2012	Number of Recipients
SPH Health Care Scholarship	\$129,000	14
CityLab Academy	\$72,000	15
Roxbury Community College	\$20,000	1

CityLab Academy

In FY2011, Boston University contributed \$72,360 to the operation of CityLab Academy, a program based on the Boston University Medical Campus. The program is a free, two-semester, college-level program in biotechnology and biomedical science. CityLab Academy prepares students for laboratory jobs in a biotechnology company, medical center, or hospital, and serves as a transition year for students wishing to pursue a bachelor's degree in science while providing the foundation and hands-on experience necessary to join the research workforce. After successful completion of four courses and a two-week internship, students receive a Certificate in Biomedical Laboratory Science and twelve undergraduate college credits from Metropolitan College.

As of September 2012, the CityLab Academy program is currently suspended for four years, as the University concentrates its resources on its BioScience Academy workforce development initiative, which is described in greater detail in the New and Enhanced Community Programming section.

Roxbury Community College

Boston University awards a full-tuition, renewable Roxbury Community College Scholarship for four semesters to selected transfer students from Roxbury Community College. Selected students have been nominated by the Roxbury Community College Scholarship Committee, and must have a minimum grade point average of 3.5 at Roxbury Community College, and transfer at least 60 credits from Roxbury Community College.

In FY2011, Boston University contributed nearly \$20,000 in scholarship funding to transfer students from Roxbury Community College.

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1.9.2.5 Education Partnerships

CityLab

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

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

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

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

SummerLab

In 2013, Boston University plans to award 6 full-scholarships to students from the South End, Roxbury, Dorchester, and South Boston for SummerLab, a one-week program open to students in grade 10 through freshman year of college. Students gain hands on lab experience with biotechnology, acting as a members of a research team and using state-of-the-art equipment to perform experiments of their own design. At SummerLab, scholarship recipients will learn about biotechnology techniques associated with recombinant DNA, protein purification, cell lysis, and gel electrophoresis.

1.9.2.6 Community Partnerships and Community Relations

In support of one of Boston University Medical Campus’ top priorities, to serve the local community, the University’s office of Government & Community Relations established a full-time Community Relations division on the BU Medical Campus. Community Relations is tasked with planning, implementing, and overseeing community relations activities between BUMC and neighboring residents, business owners, and neighborhood associations. In addition to serving as the primary point of contact for any inquiries lodged by community stakeholders, the Community Relations team maintains a strong community presence through regular attendance and participation at local business and community meetings and events.

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Community Relations on the BU Medical Campus strives to ensure that the University is fully aware of and responsive to the needs of its neighbors. Members of the Community Relations team serve as active members of various community organizations and provide annual contributions to many local community groups and organizations in the South End and neighboring Roxbury, Dorchester, and South Boston. Since 2003, Community Relations staff has proudly participated in well over 500 community meetings and events at local organizations. Additional information regarding Community Relations outreach efforts can be found at <http://www.bu.edu/community>, and a comprehensive list of the community organizations with which Community Relations on the BU Medical Campus is involved is provided below. It should be noted that this list is solely representative of BU Medical Campus Community Relations' outreach efforts, and does not account for community relations activities on the Charles River Campus.

The BU Medical Campus' Community Relations office, a division of the University's office of Government & Community Affairs, is a member and/or active participant in the following community and trade organizations:

- ◆ A Better City
- ◆ Associated Industries of Massachusetts
- ◆ Association of Independent Colleges and Universities in Massachusetts (AICUM)
- ◆ Blackstone/Franklin Square Neighborhood Association
- ◆ Boston Police Department
- ◆ DREAM Program
- ◆ Dudley Corridor Safety Task Force
- ◆ Dudley Vision Advisory Task Force
- ◆ Egleston Square Community Task Force
- ◆ Greater Boston Chamber of Commerce
- ◆ Greater Boston Convention & Visitors Bureau
- ◆ Massachusetts Association of Nonprofit Schools and Colleges (MANS&C)
- ◆ Massachusetts Biotechnology Council (MassBio)
- ◆ Massachusetts High Technology Council
- ◆ Morgan Memorial / Goodwill Industries
- ◆ Newmarket Business Association

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- ◆ Private Industry Council
- ◆ Roxbury Community Alliance for Health
- ◆ Roxbury Strategic Master Plan Oversight Committee
- ◆ South End / Lower Roxbury Safety Task Force
- ◆ Worcester Square Neighborhood Association
- ◆ Washington Gateway Main Streets

The BU Medical Campus' Community Relations office, a division of the University's office of Government & Community Affairs, also provides financial contributions to the following organizations in support of their community development activities and programs:

- ◆ 826 Boston
- ◆ Action for Boston Community Development
- ◆ Boston City Lights
- ◆ Boys & Girls Clubs of Dorchester
- ◆ Boys & Girls Club of Roxbury
- ◆ Discover Roxbury
- ◆ Dorchester House
- ◆ Dorchester YMCA
- ◆ Grant Manor Housing Development
- ◆ Huntington Avenue YMCA
- ◆ Inquilinos Boricuas en Accion
- ◆ Jamaica Plain YMCA
- ◆ Mandela Residents Cooperative Association
- ◆ Nature's Classroom, Summer Camp (Boston)
- ◆ Orchard Gardens Housing Development
- ◆ Roxbury YMCA
- ◆ South End Community Builders
- ◆ St. Stephens

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- ◆ Teen Challenge (Roxbury)
- ◆ Teen Empowerment
- ◆ Twelfth Baptist Church
- ◆ Urban League of Eastern Massachusetts
- ◆ Vietaid
- ◆ West End House Boys & Girls Club
- ◆ Whittier Street Housing Development
- ◆ Yawkey Club of Roxbury, Boys & Girls Clubs of Boston
- ◆ Youthbuild
- ◆ Youth Options Unlimited

1.9.2.6.a Boston University Community Grants Program

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

In 2012, Boston University doubled its commitment to the communities of Roxbury and South End, awarding not one but two \$2,500 grants in support of the extraordinary efforts undertaken by local community organizations working to make a difference in the lives of the young people of Boston.

Community Grant - 2011:

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

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Community Grants - 2012:

Boston City Lights, located in the South End, is a free performing arts and training program designed to develop the artistic abilities of inner city kids. Committed volunteers and past students teach dance, singing, acting, video production, set design and sound engineering. Boston City Lights received a \$2,500 in support of the organization's on-going efforts to use the arts to empower youth.

Mandela Resident Cooperative Association (MCRA) received a \$2,500 grant in support of its 2013 Annual Get Connected Youth Fair. The Annual Get Connected Youth Fair allows local community agencies to connect and provide information to youth, ages 14-24, on a variety of different topics, including educational opportunities, job skills readiness training and employment openings.

1.9.2.6.b Community Programs & Services Provided by Boston University Schools & Colleges

BU Medical Campus offers a wide array of community programs, resources, and services related to their respective concentrations and specialties. These programs are part of the Boston University Medical Campus' long-standing commitment to community service, public health, and social advocacy through student service-learning and faculty service. Select community programs are summarized below.

Boston University School of Medicine offers medical students a unique service-learning experience through community based medicine and social advocacy programs. The programs include:

Outreach Van Project - Founded in 1997 by School of Medicine and School of Public Health students, students under the supervision of a licensed physician provide food, clothing, and reliable, consistent medical care to the underserved, predominately Hispanic community of East Boston where 25 percent of children live below the poverty line. The Outreach Van Project is currently the only outreach agency supporting the underserved community in East Boston.

Project MED HEALTH (Helping Educate Adolescents to Live Tomorrow Health) – School of Medicine students lead interactive, technology based educational workshops for Boston Public School children on key health issues such as nutrition, fitness, safety, puberty, and sex education.

Codman Square Fiscal Health Survey & Intervention – A partnership of School of Medicine students and leaders of Codman Square community based organizations working together to explore the links between community economics, community health, effective listening, effective advocacy, and racism.

The Henry M. Goldman School of Dental Medicine has an unwavering commitment to improving oral health and quality of life in communities through strategic partnering, health education and promotion, and implementation of public health initiatives. Goldman School of

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Dental Medicine programs serve as national models for training dental students and non-dental health professionals to provide oral health services for disadvantaged populations. The Goldman School of Dental Medicine's work includes:

City-wide Dental Health Programs – These city-wide dental health programs operate in public schools in Boston, Chelsea, Framingham, and Lawrence. The programs provide oral screenings, sealant placement, fluoride applications, and oral health education. Similar services are provided at Early Head Start, Head Start, and other preschool programs in the greater Boston metropolitan area.

Chelsea School Dental Center – Since opening in April of 2003, the Chelsea School Dental Center (CSDC), which is managed by GSDM and located in the Williams Middle School, has provided preventive and restorative services for thousands of children. The CSDC gives care to Chelsea public school students regardless of their grade level or ability to pay for services. Many of the patients, who range in age from preschoolers to high school seniors, have never been to the dentist and would have no other source of dental care if it were not for the CSDC. Five bilingual dentists devote time to treating patients in the clinic.

Health Promotion for the Underserved - Over 50 other oral health promotion programs for underserved populations with programs targeted to serve the homeless, financially disadvantaged, uninsured and underinsured, elders, survivors of torture, refugees, and individuals with HIV.

The Boston University School of Public Health has a long standing, service-oriented philosophy evidenced by the combination research and academics with a practicum requirement involving work experience in a public health environment. Through longstanding collaborations with 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, School of Public Health students, faculty, and alumni draw on their own diverse backgrounds to carry out the School's mission in a variety of settings. Some examples of programming include:

Refugee and Immigrant Health Program

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

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Public Health Education Week

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

1.10 Project Benefits

The proposed BMC projects will:

Elevate Quality of Care

- ◆ Consolidation and modernization of clinical care areas within the campus core allows for improved patient care and operational efficiency.
- ◆ Provide right-sized patient care space to accommodate the single expanded emergency department and the consolidated clinical programs to the Menino Pavilion and provide more single patient rooms, therefore improving quality and delivery of patient care.
- ◆ Relocate the Emergency Department Entrance and drop-off to the rear of the Moakley Cancer Care Center and relocate the loading dock to the south side of Albany Street. This will allow separation of service areas from patient care areas and reduction in vehicular and truck traffic on Albany Street.
- ◆ Improves patient transport from the helipad and directly connects to the Emergency Department on the north side of Albany Street to provide more efficient patient care.

Improve the Pedestrian Environment

- ◆ Create a defined pedestrian experience along East Concord Street by engaging the east face of the building with the sidewalk.
- ◆ Provide sidewalk and landscape improvements along the perimeter of the buildings to enhance the pedestrian experience.
- ◆ Relocate the MBTA bus stop on East Concord Street from the street edge closer to the building to provide users as well as traversing pedestrians with protection from the elements.
- ◆ Eliminate three of the existing curb cuts on the north side of Albany Street and consolidate the remaining curb cuts to eliminate vehicular and pedestrian conflicts and enhance the overall pedestrian experience.
- ◆ Facilitate the demolition of the existing yellow utility tube which will continue to the transformation of the Albany Street image.
- ◆ Allow for closure of one of the two existing lanes underneath the existing yellow utility tube minimizing and reducing the width of the curb cut and contributing to an improved pedestrian experience.

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Improve Access to and through Boston University Medical Center

- ◆ Create a more optimal intersection configuration at Shapiro Drive and East Concord Street to provide visual clarity for vehicular traffic turning right onto East Concord Street.
- ◆ Provide improved circulation and vital connections to adjacent campus buildings improving operational efficiency.
- ◆ Better define the north edge of Albany Street and improve the image of Albany Street and the BUMC Campus as its major arrival point.

Advance Sustainable Design, Green Building and Technology Goals

- ◆ Shrink Boston University Medical Center's carbon footprint through lesser greenhouse gas emissions and lower its impact on the local environment.
- ◆ Decrease Boston University Medical Center's impact on the locally taxed energy infrastructure by generating 75% of its electricity and 95% of its steam.
- ◆ Producing steam and electricity through cogeneration will decrease Boston University Medical Center's energy costs.

Job Creation

- ◆ Create approximately 250 construction jobs.

Provide Linkage Funds

- ◆ Contribution to the housing and jobs linkage fund.

1.11 Linkage

Upon approval of the Boston University Medical Center IMP in 2000, Boston University Medical Center entered into a Development Impact Project ("DIP") Agreement with the BRA for its institutional projects which exceeded the threshold requirements of Article 80B of the Code. With the adoption of the IMP renewal for a new 10-year term commencing in 2010, Boston University Medical Center and the BRA entered into a new DIP Agreement which will govern all new projects which exceed the thresholds set forth in Article 80B of the Code.

1.12 Areas of Interest for Future Campus Expansion

As the proponents look into the future and as trends continue to change for patient care and academic needs, they will continue to evaluate opportunities for future expansion. The proponents recognize the following sites, if available, as ideal locations for future expansion due to proximity to the existing BUMC Campus:

- ◆ Solomon Carter Fuller Building
- ◆ Chief Medical Examiner's Office Building
- ◆ Finland Building
- ◆ Flower Exchange

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- ◆ Jacobson Floral
- ◆ Immaculate Conception Church and the attached Link Building
- ◆ Northampton Square Complex – Medical Office Building and storefronts

1.13 Institutional Master Plan Background / History

Overview

The original Boston University Medical Center Institutional Master Plan was approved by the Boston Redevelopment Authority on May 18, 2000 and the Boston Zoning Commission on June 28, 2000, effective July 13, 2000. From 2001 through early 2010, the Proponents filed multiple IMP Amendments, Notices of Project Change, Project Notification Forms, and Notices of Exemption. In March 2010, the Proponents submitted their Institutional Master Plan Renewal Form. The IMP Renewal was approved by the BRA on June 22, 2010. Three new construction projects were included in the 2010 IMP: a 48,000 square foot Energy Facility located to the east of the existing Power Plant, a 160,000 square foot Administration/Clinical Building located on the surface parking lot on the north side of the Power Plant (along Albany Street), and a 405,000 square foot New Inpatient Building located on the current Dowling Building site. See Appendix A for the complete IMP Background and History.