

## Tufts Medical Center

## Institutional Master Plan

### 2012 - 2022

Submitted to: Boston Redevelopment Authority One City Hall Square Boston, MA 02201

Submitted Pursuant to Article 80 Development Review and Approval of the Boston Zoning Code

Submitted by:

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### 21 March 2012

### **Table of Contents**

1.0	Intr	oduction/Mission and Objectives	1-1
	1.1	Introduction/Project Background	1-1
	1.2	Tufts Medical Center and Floating Hospital for Children Background 1.2.1 Hospital Background	1-3
		1.2.2 Hospital Today	1-3
	1.3	Mission and Objectives	1-4
		1.3.1 Mission	1-4 1-5
		1.3.2 Patient Care, Teaching and Training 1.3.3 Research	1-5
	1.4	Community Benefits Summary	1-6
	1.5	Institutional Master Plan Background	1-6
	1.6	Term of the Institutional Master Plan	1-7
	1.7	Public Participation	1-7
2.0	Exis	ting Campus Context and Physical Needs/Objectives	2-1
	2.1	Existing Campus and Surrounding Area	2-2
	2.2	Facilities	2-3
		2.2.1 Owned Facilities 2.2.2 Facility Ownership, Aerial View	2-3 2-4
		2.2.3 Facility Ownership Plan	2-5
		2.2.4 Owned facilities and Uses	2-6
	<u></u>	2.2.5 Leased facilities and Uses	2-7
	2.3	Building Uses and Heights 2.3.1 Building Heights	2-8 2-11
	2.4	Campus Access Points	2-12
3.0	Prog	gram Needs and Master Plan/Urban Design Goals	3-1
	3.1	Overview	3-1
	3.2	Long Term Planning Goals	3-1
	3.3	Planning Process	3-2
	3.4	Master Plan Guiding Principles and "Rules" for the Master Planning Process	3-2
		3.4.1 Guiding Principles	3-3
		3.4.2 Rules for the Master Plan	3-4
	3.5	Program Needs and Program Changes	3-5
		3.5.1 Overview	3-5
		3.5.2 Key Drivers 3.5.3 Program and Project Requirements	3-7 3-7
	3.6	Addressing Aging Buildings	3-10

### **Table of Contents**

4.0	Inst	itutional Master Plan and Proposed Future Projects	4-1	
	4.1	Overview	4-1	
	4.2	Guiding Principles for Positive Development	4-2	
	4.3	Proposed Institutional Project	4-3	
		4.3.1 Atrium level food service renovation	4-3	
	4.4	General Direction for Future Planning	4-6	
	4.5	Relationships within the Campus: Integration of Research,	4-8	
		Patient Care and Teaching		
	4.6	Tufts Medical Center Impact on Surrounding Area	4-9	
		4.6.1 Transportation Summary	4-9	
		4.6.2 Environmental Protection Summary	4-9	
		4.6.3 Fire Prevention Code Compliance	4-10	
		4.6.4 Urban Design Summary	4-10	
		4.6.5 Historic Resources Summary	4-10	
		4.6.6 Infrastructure Systems Summary	4-11	
		4.6.7 Development Impact Summary	4-11	
		4.6.8 Zoning	4-11	
		4.6.8.1 Groundwater Conservation	4-11	
5.0	Inst	itutional Transportation and Parking Management Plan	5-1	
	5.1	Overview	5-1	
	5.2	Parking Summary	5-1	
		5.2.1 Patient and Visitor Parking	5-2	
		5.2.2 Employee Parking and Transportation	5-2	
6.0	Serv	vice Goals and Community Benefits	6-1	
	6.1	Service Goals	6-1	
		6.1.1 Relationship to Community	6-1	
		6.1.2 Service Population	6-2	
		6.1.3 Primary Service Area Communities	6-2	
		6.1.3.1 Chinatown and the Asian Community	6-2	
		6.1.3.2 Dorchester	6-3	
	6.0	6.1.3.3 South Boston	6-3	
	6.2	Care to Boston Residents and Surrounding Communities	6-3	
		6.2.1 Improving Access to Healthcare	6-4	
		6.2.2 Community Benefits Mission	6-5	
		6.2.3 Community Benefits Programs	6-5	
		6.2.3.1 Tufts Medical Center's Parent-to-Parent (P2P) Initiative	6-5	
		6.2.3.2 Tufts Medical Center's Asian Health Initiative	6-6	
		6.2.3.3 Tufts Medical Center's Dorchester Health Initiative	6-8	
		6.2.4 Other Community Benefits Programs	6-9	

## **Table of Contents**

	6.2.4.1 Community Health Centers	6-9
	6.2.4.2 South Boston Behavioral Health Clinic	6-9
	6.2.4.3 The Cushing House	6-9
	6.2.4.4 The Mayor's Summer Jobs Program	6-9
6.3	PILOT Payments	6-10
6.4	Workforce Development and Training	6-10
	6.4.1 The Workplace Education Program	6-10
	6.4.2 The Career Exploration Event	6-11
	6.4.3 Tufts Medical Center Externship Program	6-11
	6.4.4 Other Workforce Development Activities	6-11

## List of Figures

Figure 1.1.1	IMP Overlay Area Aerial view: Tufts Medical Center
Figure 2.0	IMP Area and Medical Center Buildings
Figure 2.1.1	Location Plan
Figure 2.1.2	Context Plan
Figure 2.2.1	Aerial View: Tufts Medical Center Campus & Surrounding
	Neighborhood
Figure 2.2.3	Facility Ownership Plan
Table 2.2.4	Owned Campus Buildings
Table 2.2.5	Leased Campus Buildings
Figure 2.3.1	Existing Stacking Diagram – Owned
Figure 2.3.2	Existing Stacking Diagram – Leased
Figure 2.3.3	Campus Building Elevations
Figure 2.4.1	Existing Campus Plan with Circulation, Access Points, Use Zones
Figure 3.6.1	Building Age Timeline
Figure 4.3.1	Proposed food service renovation
Figure 4.3.2	Project B Proposed Enclosed Dining Pavilion exterior
Figure 4.3.3	Project B Proposed Enclosed Dining Pavilion interior
Figure 4.4.1	Proposed site organization
Figure 4.4.2	Proposed Stacking Diagram
Table 5.2.1	Owned and Leased Parking Garages and Lots
Figure 5.2.2	Area Site Plan

## Appendices

Appendix A	Tufts Medical Center Community Benefits Report Fiscal Year 2010
Appendix B	Scoping Determination

## **1.0 OVERVIEW**

# **Section 1**

### **1.0 OVERVIEW**

### 1.1 Introduction/Project Background

Tufts Medical Center is comprised of Tufts Medical Center, a not-for-profit, full service tertiary and quaternary referral, teaching and research hospital and the Floating Hospital for Children, a full service pediatric hospital, located in Boston's Chinatown District. Tufts Medical Center and Floating Hospital for Children (known as the "Proponents" or the "Medical Center") are pleased to submit this new Institutional Master Plan to initiate the Boston Redevelopment Authority ("BRA" or the "Auhtority") Article 80 Institutional Master Plan review process for this new Tufts Medical Center Institutional Master Plan ("IMP"), pursuant to Article 80D of the Boston Zoning Code ("Code").

Tufts Medical Center proposes no immediate changes to the main campus and facilities of the institution, but is reflecting a recently adopted master plan which includes an inventory and direction for future development of campus facilities designed to meet the Medical Center's tripartite mission of providing outstanding patient care, training the next generation of care givers, and performing ground breaking research. Tufts Medical Center proposes facility updates and expansion in inpatient and outpatient settings as well as updated research facilities in the coming 15 to 20 years.

This Institutional Master Plan further advances the goals and mission of Tufts Medical Center and Floating Hospital for Children by documenting the current status of the campus and reaffirming the commitment of the institution to its fundamental mission and goals, as well as to the community. This IMP also presents a vision for future development which will promote the ability of the Medical Center to meet its tripartite mission by creating state of the art facilities, enhancing and streamlining patient services, research and training. This IMP does not represent an extraction of any services out of the community or the heart of downtown Boston, but further reaffirms the institution's commitment by recognizing the needs of the community and delivering focused services and programs, as well as recognizing the land and space needs of the community by committing to a future development plan within the existing footprint of the campus.

Project Name:	Tufts Medical Center Institutional Master Plan
Address/Location:	The Tufts Medical Center and Floating Hospital for Children campus is located Boston's in the Chinatown District. The campus encompasses approximately 189,400 square feet of land area and includes 12 Tufts Medical Center-owned buildings and five building in which Tufts Medical Center leases space.
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	Steven W. Van Ness, Principal

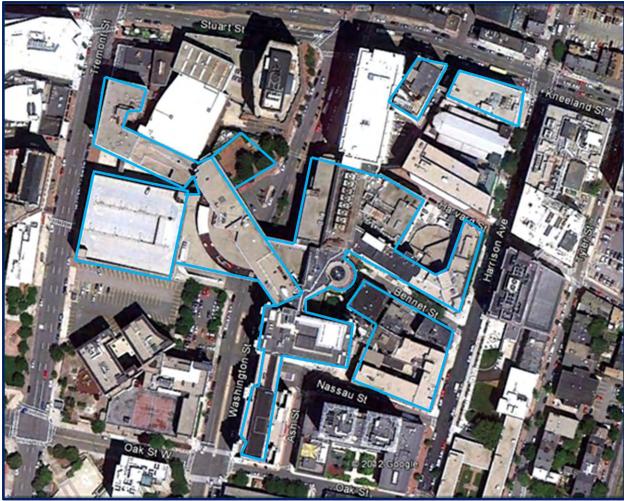


Figure 1.1.1 – IMP Overlay Area Aerial view: Tufts Medical Center and Floating Hospital for Children Campus and surrounding neighborhood

### **1.2** Tufts Medical Center and Floating Hospital for Children Background

### 1.2.1 Hospital Background

Tufts Medical Center was established over 200 years ago by compassionate Bostonians, including Samuel Adams and Paul Revere and it embodies the spirit of its founders today through the delivery compassionate care, embarking on cutting edge research and teaching the next generation of caregivers.

Founded in 1796 as the Boston Dispensary with some of its original benefactors including people like Paul Revere and Sam Adams, it was the first permanent medical facility in New England and one of the oldest in the country. Part of its original mission was to guarantee that the poor people of Boston had access to high quality medical care. That goal remains intact today. Over the past two centuries, numerous developments in health care delivery as well as advances in biomedical research have been based at what is now called Tufts Medical Center. The institution continues to be dedicated to its mission of maintaining its tradition of health care innovation, leadership, education, charity and high quality care and service to its patient population.

The Floating Hospital for Children began as a floating ship, Boston Floating Hospital for Children, sailing in Boston Harbor in 1894. The mission of the ship was to bring ill urban children out onto the harbor to experience the healing qualities of the fresh sea air and sunshine. During its 31 years at sea, the Boston Floating Hospital for Children was the site of many important medical advances, including the development of baby formula and the human milk bank. The Floating Hospital began providing care on land in 1927, where it continued its pioneering mission by establishing the concept of caring for the "whole child" rather than simply treating a child's illness. Today the Floating Hospital is formally known as the Floating Hospital for Children at Tufts Medical Center. It has grown to become a world-class pediatric institution offering a comprehensive range of services from prevention and primary care to the most sophisticated treatment of rare and unusual conditions.

In 1965 the Boston Dispensary, the Floating Hospital for Children and the Pratt Clinic/New England Center Hospital merged to form the New England Medical Center Hospitals. In 1971 the institution changed its name to Tufts - New England Medical Center. Tufts Medical Center became the official name of the Medical Center in 2008, as the institution sought a change to reflect its role as the principal teaching hospital for the Tufts University School of Medicine.

### 1.2.2 Hospital Today

Today, Tufts Medical Center is a 439-bed robust organization, providing comprehensive care from routine medical care to treating the most complex diseases affecting adults and children. Tufts Medical Center is also home to Floating Hospital for Children, a full-service children's hospital dedicated exclusively to all levels of pediatric care from the tiniest of newborns to maturing adolescents.

Tufts Medical Center's focus is tertiary and quaternary care, providing the most advance treatments for the most complex and serious illnesses and injuries. The Medical Center provides heart, kidney and bone marrow transplants, serves as a level I Trauma Center, provides comprehensive neurological and neurosurgical care, and offers cutting-edge cancer treatments.

Tufts Medical Center serves an incredibly diverse population of patients; approximately 70% of the population is White, 10% is Black, 10% is Asian and 9% is Hispanic. Along with serving an ethnically diverse population, Tufts Medical Center provides care to the second highest concentration of Medicaid patients (25 percent of the hospital's patient population) of all academic medical centers in the city of Boston. The hospital also serves a large Medicare population, which makes up almost 32 percent of the patient population.

Tufts Medical Center provides a multidisciplinary approach to the care of its patients. Due to its intimate size, physicians from one department easily communicate with members of other departments and divisions to bring in perspectives from all groups to determine the right treatment plan for each patient. Referring physicians, the patient and family members are vital members of the multidisciplinary team at Tufts Medical Center and are instrumental in the decision-making process. The Hospital's focus and mission every day is to improve the lives of children and their families.

### **1.3** Mission and Objectives

Tufts Medical Center and Floating Hospital for Children carry out a tripartite mission every day, pursuing excellence in **care** for adult and pediatric patients, **teaching** the next generations of care givers and pursuing groundbreaking **research**. Compassionate, patient-centered care is one of the Medical Center's hallmarks. The Medical Center offers a full range of services from primary care to some of the most complex treatments, including surgeries, cancer care, orthopedics, obstetrics and gynecology, full cardiovascular care, neurology and neurosurgery, ophthalmology, transplant surgery, weight and wellness services. A multidisciplinary approach ensures both complete and thorough consideration of treatment options for our patients. Tufts Medical Center also provides emergency care and is an American College of Surgeons certified Level 1 adult and Level 1 pediatric trauma center.

### 1.3.1 Mission Statement

Tufts Medical Center and Floating Hospital for Children's mission is as follows:

"We strive to heal, to comfort, to teach, to learn and to seek the knowledge to promote health and prevent disease. Our patients and their families are at the center of everything we do. We dedicate ourselves to furthering our rich tradition of health care innovation, leadership, charity and the highest standard of care and service to all in our community."

### 1.3.2 Patient Care, Teaching and Training

Tufts Medical Center grows future generations of medical professionals by providing outstanding clinical training and experience to medical students and the residents. As the principal teaching hospital of Tufts University School of Medicine, Tufts Medical Center works collaboratively with the Medical School by sharing staff, providing physician time for teaching and curriculum development, and sharing oversight of department leadership among both institutions. All full-time physicians at Tufts Medical Center and Floating Hospital for Children hold faculty appointments at Tufts University School of Medicine. Tufts Medical Center and Floating Hospital for Children hold faculty appointments at Tufts University School of Medical Education program, recruiting approximately 450 Residents and Fellows from around the world. Teaching at Tufts Medical Center is integrated into the care experience and as an academic medical center this also means we provide and maintain a number of acute care services that are not provided by all hospitals. Some of these vital community services include inpatient and outpatient adult psychiatric services, outpatient pediatric psychiatric services and consultations, emergency and trauma care, as well as neonatal intensive care.

### 1.3.3 Research

Tufts Medical Center and Floating Hospital for Children are pioneers in groundbreaking research including numerous clinical trials taking place in Boston. It ranks among the top 10 percent of the nation's independent hospitals that receive federal research funds and has pioneered groundbreaking research involving clinical trials funded by the National Institutes of Health, private foundations, industry, and private individuals. Our research mission is not only to advance knowledge but to train physicians and non-clinicians to become the investigators of the future.

Tufts Medical Center research has led to the discovery of drugs that prevent the body's rejection of transplanted organs, coining the term "immunosuppression," and also brought to light the link between obesity and heart disease. One newly funded project led by the Tufts Clinical and Translational Science Institute (CTSI) will help build the capacity of community-based, non-health care providers to identify constituent needs and document the benefits of initiatives to address those needs. This capacity building effort will support and complement the ongoing efforts to work with local healthcare organizations, as well as community and industry groups to turn groundbreaking laboratory research into widely-used treatments for patients in a faster, more productive manner. This effort continues to foster collaboration between the general lay community, community-based organizations, the clinical practitioners and academia to train physicians for work in under-served communities.

Tufts Medical Center's Cancer Center continues its efforts to increase the representation of linguistic and ethnic minorities in clinical trials. The Cancer Center has been

attempting to translate information from surveys into outreach and educational efforts to foster a greater awareness about clinical trials, their availability and the benefits of participating in clinical trials.

### **1.4 Community Benefits Summary**

Tufts Medical Center serves as a major safety net hospital in the Commonwealth of Massachusetts, particularly to the surrounding neighborhoods in the primary service area, such as Chinatown, the South End, South Boston and Dorchester. Tufts Medical Center treats all patients who need care, regardless of their ability to pay. Tufts Medical Center and Floating Hospital for Children serve the second highest percentage of Medicaid patients of all of the full service academic medical institutions on the city, with a 25 percent Medicaid volume and 32 percent Medicare volume. In Fiscal Year 2010, Tufts Medical Center provided almost \$92 million worth of charity care to patients.

Tufts Medical Center believes strongly that care goes beyond the walls of our institution and has consistently worked with the surrounding communities to address specific health needs within the neighborhoods of the primary service area, as well as constructing programs which address state-wide public health issues, such as smoking cessation and obesity.

### 1.5 Institutional Master Plan Background

Although separate institutions today, in previous years the Medical Center and Tufts University practiced joint planning and therefore some of the history and evolution of the Medical Center is intertwined with the University. The first master plan for the area was developed in 1965, which included a mega-structure for Tufts University and New England Medical Center. In 1972 the master plan assumed the elimination of the Music Hall and the Wilbur Theater in order to accommodate new development of the area to include various university schools, housing for students and a 1,000 bed hospital with its associated support facilities. However, this development was never completed as envisioned in the 1972 master plan.

Projects approved as part of the 1972 master plan included: project 1A, the Proger building, built in 1973; and project 1B, the Floating Hospital building, built in 1982. All of the previous master plans were based on agreements as described in the 1965 South Cove Urban Renewal Plan, which affirmed the development rights for the area.

The previous IMP for Tufts Medical Center was approved in March of 1990 and presented a 10 - 15 year development plan for the institution. The 1990 Tufts Medical Center IMP included projects to:

- Achieve a total bed capacity of 750
- Construct two new buildings: 1-C North and 1-C South to house a new emergency room, additional medical/surgical beds, intensive care beds, new operating rooms, research space and community based ambulatory health services. Construction of 1-C North and South was completed in 1995.

• Replacement of the Ziskind, Pratt and Farnsworth for the construction of a new research space. This phase of the development plan was not carried out.

Several amendments to the 1990 IMP were subsequently approved and include a two story addition to the Pratt building in 1992, and Project 1C in 1993, for the development of the North and South buildings, which were constructed in 1994. Throughout 1992-1994 the Medical Center was involved with the BRA and its surrounding community in the development of Parcel C as part of an overall Community Benefits Package. In addition to building development the Medical Center has proposed to the BRA several parking expansion plans, but no development has occurred.

Tufts Medical Center submitted an Institutional Master Plan Notification Form ("IM{NF") on April 7, 2010 to provide an updated overview of the Medical Center's facilities and development and planning goals over the next 15-20 years. The Boston Redevelopment Authority issued a Scoping Determination on June 3, 2010 (see Appendix B.)

### **1.6** Term of the Institutional Master Plan

This IMP covers a term of ten years (2012-2022), from the date of Zoning Commission Approval, and will be updated biannually, in accordance with Article 80 Section 80D-7 of the Boston Zoning Code. Tufts Medical Center does not anticipate any significant changes in the mission of the institution within the next 10-15 years. Tufts Medical Center will focus its business model on creating affiliations with community hospitals and accommodating future state and federal healthcare reform models, such as Accountable Care Organizations and Medical Homes.

At this time, the Medical Center anticipates a small and consistent rise in patient volume of approximately 15-20% over the next 10 to 15 years. Accounting for these anticipated changes, the future development concept presented within this IMP will accommodate for potential growth by creating a small amount of expansion of inpatient beds, and new buildings to better optimize the many tertiary level services for both inpatient and outpatient care. This will help ensure that the highest level of quality care is available, while also helping to deliver a coordinated and comprehensive approach to each patient's care.

### **1.7** Public Participation

Tufts Medical Center has engaged in extensive public outreach throughout this IMP process. Tufts Medical Center is committed to an open and inclusive public process; the Medical Center has and will continue to seek input from community representatives, residential and commercial neighbors and other stakeholders, as well as public and elected officials. Tufts Medical Center sought input from several community members throughout the IMP process; hosting, attending and presenting at many community meetings, such as the Chinatown Safety Committee, Chinatown Residents Association meeting. In addition to community wide open-forums, Tufts Medical Center leadership also met with the Tufts Medical Center IMP Task Force, prior to submission of the IMPNF. Tufts Medical Center provided materials translated in Chinese at all meetings

and conducted many of the public meetings with a Chinese translator to ensure all members of the community could have access to the information in the IMP and provide valuable input to the hospital. The BRA did not receive any public comment in reaction to the IMPNF presented by Tufts Medical Center. A partial list of the subjects presented and the questions addressed during the community meetings include:

- $\circ$   $\,$  Planning and development goals
- Timing of future development
- Phasing and mitigation of disruption of any construction
- Noise during any construction
- $\circ$   $\;$  Growth and future vision of the Medical Center  $\;$
- Design of any future development
- Environmental standards of any new developments
- Access to services
- Recruitment of Asian practitioners to the Medical Center

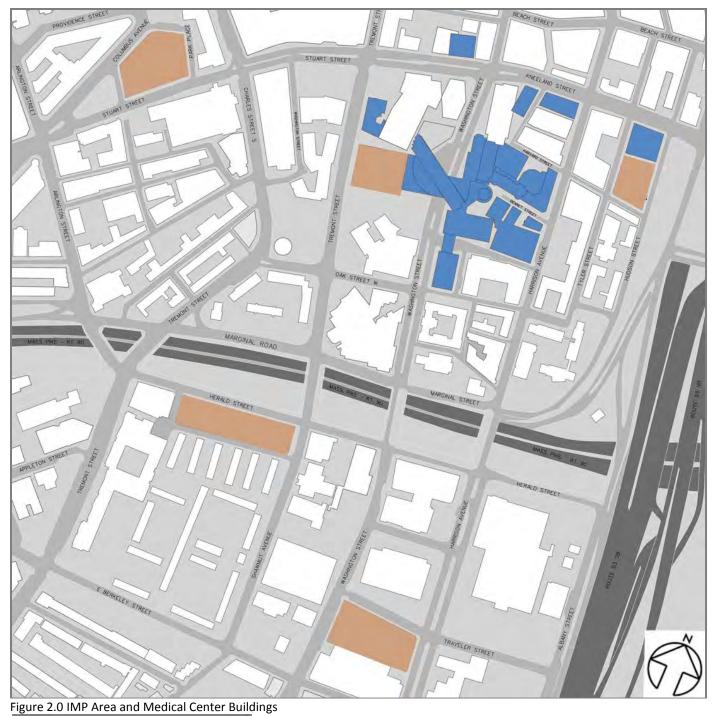
The Medical Center was pleased to receive a great deal of positive feedback from the residents, who often times communicated their understanding that the success of the Medical Center is positive for the overall community and that enhanced facilities will not only help grow jobs at the Medical Center, but also ensure a state of the art healthcare institution at their disposal. Some residents encouraged the Medical Center to pursue some of the future development sooner than the projected time frame.

Many community members expressed interest and gratitude that any proposed development will be maintained within the current footprint of the campus. There were concerns raised over any potential disruptions within the community during any future development construction. The Medical Center will pursue any future development in phases, and will work to minimize any disruptions that may occur as a result of development on campus. During the IMP process and meetings community members also raised concerns about access to healthcare services and the lack of multi-lingual and multi-cultural healthcare practitioners. Tufts Medical Center shares these concerns and continues to put recruitment of Asian practitioners at the top of its priority list; however the small pool of physicians interested in primary care and family medicine continues to be a hurdle on both the local and national fronts. Tufts Medical Center will actively work to collaborate with policy makers and others to shift this paradigm going forward and will actively seek innovative ways to recruit and retain the medical students, residents and fellows in training at the Medical Center in these critical care areas.

Tufts Medical Center will maintain its unwavering dedication and collaborative relationship with our Chinatown neighbors and will continue its work serving the Asian population. The Medical Center will continue to embody the mission established by its founders and, as in the past, will continue to carry out multiple efforts to address the health needs of the residents and enhance the overall health of the community.

## 2.0 EXISTING CAMPUS CONTEXT AND PHYSICAL NEEDS/OBJECTIVES

## **Section 2**



	Tufts Medical Center Buildings
	Tufts Medical Center Parking
	Existing Buildings
1	Interstate Highway
	Street

#### **Existing Campus Context and Physical Needs/Objectives** 2.0

#### 2.1 **Existing Campus and Surrounding Area**

The Tufts Medical Center campus is part of a vibrant and diverse neighborhood in the City of Boston. Its Institutional Subdistrict within the city of Boston's Chinatown District, governed by article 43 of the Code, is adjacent to the Midtown Cultural District, Bay Village and South End. Other established development areas within the Chinatown District include: Tyler Street Special Study Area; the Chinatown Planned Development Area; and the Turnpike Planned Development Area. Refer also to figures 2.1.1 Location Plan and 2.1.2 Context Plan.

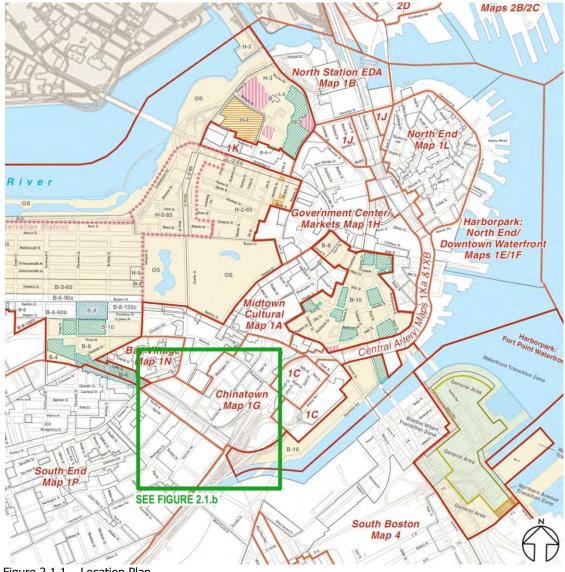


Figure 2.1.1 – Location Plan

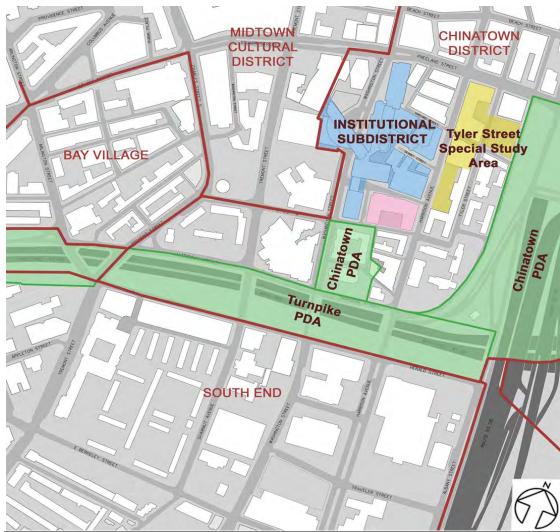


Figure 2.1.2 – Context Plan

The owned properties of the Tufts Medical Center Campus lie within the "Institutional Sub-District", which also includes parts of the Tufts Health Sciences Campus. The Tufts Health Sciences Campus is comprised of buildings owned and leased by Tufts Medical Center and Tufts University School of Medicine; which fall entirely within the "institutional sub- district", which is entirely within the Chinatown District. Certain leased properties, including the Biewend Building, lie within the Midtown Cultural District. Current IMP planning efforts focus on Tufts Medical Center properties located within the Institutional Sub-District.

### 2.2 Facilities

2.2.1 Owned Facilities

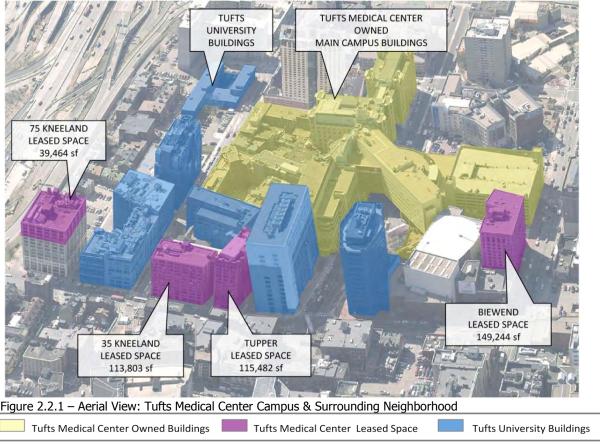
Tufts Medical Center Campus encompasses approximately 189,400 square feet of land area located in Boston's Chinatown District. The campus includes 12 Tufts Medical Center-owned buildings totaling 1,397,400 square feet of building area. The Floor Area Ratio ("FAR") of the combined owned buildings is 7.4.

Adjacent to and North/Northwest of the campus are six additional buildings, portions of which are leased by the Medical Center to support various clinical and administrative activities. A total of 466,760 square feet of building area is leased to support these activities. An additional 303,968 gross square feet Parking Garage contiguous to the Floating Hospital is shared by Tufts Medical Center and Tufts University.

The owned facilities have been developed on parcels Tufts Medical Center has recorded with the Suffolk County Registry of Deeds and filed with the Suffolk Registry District of the Land Court.

### 2.2.2 Facility Ownership, Aerial View

The aerial view of the campus, Figure 2.2.1, shows the actual buildings on the campus, by ownership category, in context with the surrounding neighborhoods.



### 2.2.3 Facility Ownership Plan

The Facility Ownership Plan, Figure 2.2.3, provides a graphic representation of the Tufts Medical Center campus, highlighting the ownership of the various buildings on the campus. The central core of the campus comprises facilities owned by Tufts Medical Center and is ringed by facilities owned by Tufts University or leased from other developers.

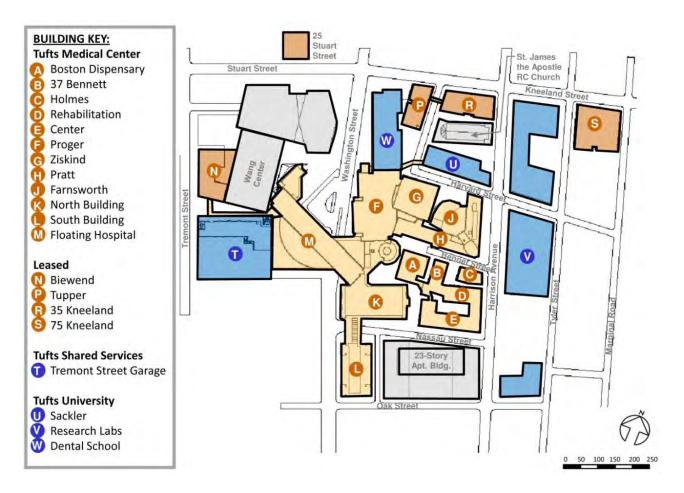


Figure 2.2.3 – Facility Ownership Plan

### 2.2.4 Owned facilities and Uses

Buildings owned by Tufts Medical Center are listed in Table 2.2.4, and buildings in which the Medical Center leases space are listed in Table 2.2.5. Both Tables include building address, current uses, year built, number of floors and building area.

Tabl	Table 2.2.4         Tufts Medical Center Owned Campus Buildings			(Janu	ary 2012)	
	Facility Name	Address	Current Uses	Circa Year Built	Stories Above/ Below Grade	Building Area Sq. Ft.
1	Boston Dispensary	29 Bennett Street	Administration and Medical Offices, Research, Support Services	1883	4/1	43,870
2	Ziskind	25 Harvard Street	Administration and Medical Offices, Research, Animal Labs, Ambulatory Clinics, Support Services	1924	8/1	101,375
3	Holmes	49 Bennett Street	Administration, Ambulatory Clinic, Food Service, Support Services	1925	5/1	16,717
4	Bennett	37 Bennett Street	Research, Administration, Support Services	1929	5/1	14,382
5	Center Building	10-14 Nassau Street	Administration, Support Services	1930	5/1	50,061
6	Pratt	34 Bennett Street	Inpatient Care Units, Administration, Medical Offices, Family Support Services, Support Services	1948	8/1	66,852
7	Farnsworth	171 Harrison Avenue	Administration and Medical Offices, Research, Inpatient Care Unit, Family Support Services, Labs, Clinics, Assembly	1948	6/1	100,030
8	Rehabilitation	185 Harrison Avenue	Administration, Clinics, Day Care, Research, Support Services	1956	6/1	57,538
9	Proger	800 Washington Street	Inpatient Care Units, Clinics, Diagnostic and Interventional Services, Administration and Medical Offices, Research, Food Service, Support Services	1975	9/1	207,620
10	Floating	755 Washington Street	Inpatient Care Units, Clinics, Diagnostic and Interventional Services, Surgical Services, Administration and Medical	1982	9	301,521

 Table 2.2.4 Tufts Medical Center Owned Campus Buildings
 (January 2012)

			Offices, Food Service, Retail, Family Support Services, Support Services			
11	North	830 Washington Street	Inpatient Care Units, Ambulatory Surgery, Emergency Care Unit, Retail, Administration and Medical Offices, Food Service, Assembly, Support Services	1994	9/1	272,204
12	South	860 Washington Street	Ambulatory Care Services, Medical Offices, Clinics, Administration, Ambulatory Surgical Recovery Unit, Support Services	1994	9/1	165,320

### 2.2.5 Leased facilities and Uses

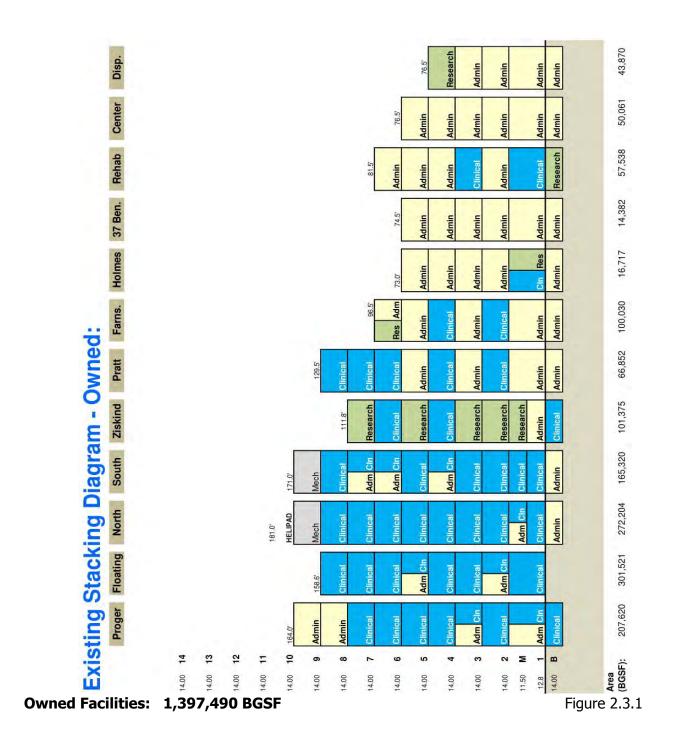
### Table 2.2.5 Tufts Medical Center Leased Buildings

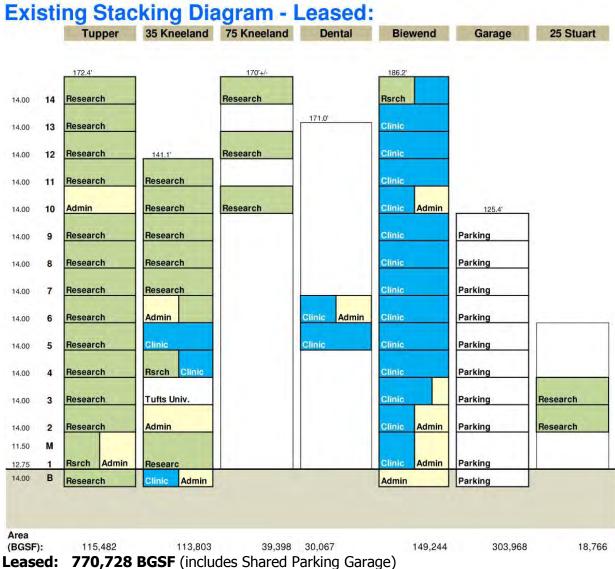
	Facility Name	Address	Current Uses	Circa Year Built	Stories Above/ Below Grade	Building Area Sq. Ft.
1	75 Kneeland	75 Kneeland Street (Tufts MC leases floors 10, 12 and 14)	Administration, Research, Med Offices, Support Services	1922	14/1	39,398
2	Tupper	15 Kneeland Street	Research Labs, Research Administration, Support Services	1924	14/1	115,482
3	Biewend	260 Tremont Street	Ambulatory Care Services, Medical Offices, Clinics, Research, Sub- leased Tenant Space, Support Services	1924	14/1	149,244
4	35 Kneeland	35 Kneeland Street	Ambulatory Clinics, Radiology, Rented Retail Space, Research, Research Administration, Support Services	1925	11/1	113,803
5	TU Dental	1 Kneeland Street (Tufts MC leases a portion of space on floors 5 and 6.)	Inpatient Care Units	1975	2	30,067

### 2.3 Building Use and Height

Owned buildings range from 4 to 10 stories in height above ground; and, were built between 1883 and 1994. Space is leased in six buildings ringing the campus. The buildings with leased space range from 5 to 14 stories in height above ground, and were built between 1922 and 1975.

The Tufts Medical Center Campus Section/Stacking Diagrams shown in Figures 2.3.1 and 2.3.2 graphically depict the number of stories, building age, floor heights, building heights, and current category of use for each building.





Leased: //U,/28 BGSF (Includes Shared Pa

Figure 2.3.2

### 2.3.1 Building heights

Building heights on the Tufts Medical Center campus range from 73.00 feet to 185.92 feet as depicted in Figure 2.3.3 and are compatible with heights of other buildings surrounding the campus. Historically, the Medical Center has worked in tandem with the Boston Redevelopment Authority, and will continue to work with the Authority to ensure the height of all buildings, the FAR, building uses and the boundaries are consistent with the zoning as an Institutional Sub District and respectful of the zoning regulations for the surrounding Chinatown and Midtown Cultural Districts.

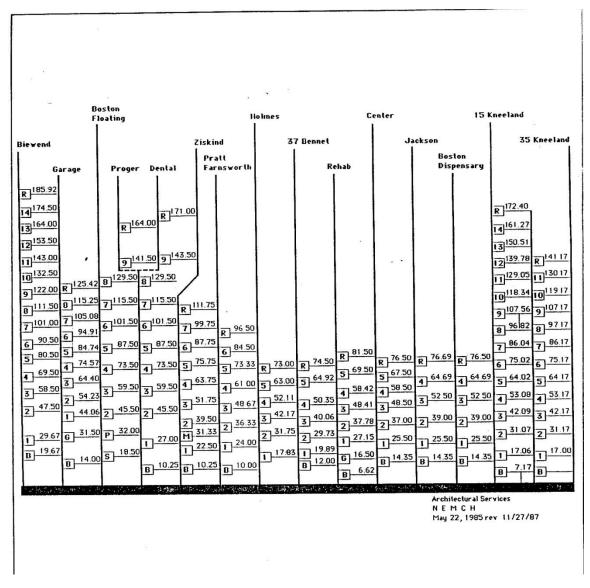


Figure 2.3.3 Campus Building Elevations

### 2.4 Campus Access Points

Access points into the Medical Center today can be somewhat confusing, with no clear, true 'front door' to the Medical Center and no clear separation of public, staff, service, and emergency traffic. Open, green space is at a premium on the campus, although the Medical Center has continued to maintain a pedestrian access path through the campus in compliance with an agreement with the surrounding neighborhood. Pressures to grow over time have resulted in mixed use facilities with no clear zoning of activities on the campus. Refer to Figure 2.4.1 for existing circulation, access and campus use zoning.



## 3.0 PROGRAM NEEDS AND MASTER PLAN/URBAN DESIGN GOALS

# **Section 3**

## **3.0** Program Needs and Master Plan/Urban Design Goals

### 3.1 Overview

Tufts Medical Center senior management recognized that it was appropriate and necessary to develop consensus and direction for future program and facility development and to understand and frame the evolution of the campus over time. This was accomplished through a phased strategic master planning process, going from a high level understanding and appraisal of needs including both objective and subjective data analysis and interviews, to translating those needs to concept and space. Sterling Planning Alliance, Steffian Bradley Architects and HKS Architects collaborated with a Steering Committee comprised of Tufts Medical Center senior leadership, on the development of options and a recommended strategy. These options will serve as a framework for developing business plans and capital budget requests over a 10 -15 year period.

The Master Facility Plan was an in-depth view of clinical program, campus and facility issues, as well as a recommendation on the direction for the campus as clinical program needs and capital resources evolve over time.

The goals of the master plan were to identify a long term framework for growth and development of facilities on this campus and the process was organized in phases to:

- Assess any major facility infrastructure (deferred maintenance needs)
- Assess major functional deficiencies, assess clinical & research capacity
- "Block size" the future major functions on this campus
- Understand vehicular & pedestrian circulation throughout the campus and identify changes in major entry points if necessary
- Identify zones for new development
- Describe phasing alternatives

### **3.2 Long Term Planning Goals**

While Tufts Medical Center proposes no significant changes to the Main Campus within the term of the Institutional Master Plan (10 years), it has developed some longer term concepts to address current deficiencies in its facilities.

The Medical Center proposes to improve all of these conditions over the next 10-20 years and has the following long term goals for campus development:

- 1. Develop 'Best Use' zoning of the campus
  - a. Consolidate/co-locate service lines
  - b. Maximize efficiency & effectiveness
  - c. Maximize flexibility to accommodate future models of care

- d. Reduce dependence on leased facilities
- 2. Create a clear identity and image for Tufts Medical Center
- 3. Enhance TMC presence in the neighborhood
  - a. Improve access and traffic flow
  - b. Reduce congestion on campus
  - c. Develop more open space
- 4. Provide a patient-sensitive and sustainable environment
- 5. Enhance integration of research and clinical practice

### 3.3 Planning Process

The key steps in the process involved:

- Confirmation of strategic clinical and operational priorities
- Interviews: conducted interviews with selected Board, Senior Administrative and Clinical leaders
- Existing conditions: in depth-review of existing plans and documents and walkthrough to confirm existing facility plans; analyzed best use and reuse of facilities and site(s)
- Validated future "need" for all inpatient and ambulatory services, research, administrative, teaching and other uses based on projected growth, future volume and strategic aims
- Reviewed key findings with Steering Committee: established program priorities and capacity requirements for the Medical Center
- Best use zoning concepts: Developed and reviewed location options for key inpatient and ambulatory programs; research and administrative functions; areas for renovation, new construction, parking, circulation, materials, etc.
- Master space program: high level space program
- Refined options and alternatives
- Development of facility scenarios (block departmental plans) that integrate the Medical Center's goals and clinical service plans and provide capacity for current needs and anticipated growth
- Cost analysis of various facility scenarios and a recommended option

### 3.4 Master Plan Guiding Principles and "Rules" for the Master Planning Process

A key step in the process was the development and adoption of Guiding Principles and "Rules" to inform all participants and create a common foundation for collaboration. These principles were adopted by the Steering Committee, used by all Planning Groups.

The "Rules" were also widely distributed at all planning forums including a full-day retreat and numerous "Town Hall Meetings".

- 3.4.1 Guiding Principles
- 1. Tufts Medical Center will be a premier "service" organization with a distinctive brand and image that is:
  - patient-centered
  - disease-focused
  - innovative
  - responsive to market forces and dynamics

Facility Specific: All facilities should promote patient-centered care, which:

- create value for patients and providers
- provide state-of-the-art patient care units that meet the needs of the patient and family
- provide accommodations that respect unique population requirements
- respond to needs of clinical providers, clinical and non-clinical support staff
- promote safety and privacy
- distinguishes Tufts Medical Center as a leader in the provision of exemplary care
- 2. The care that we provide at Tufts Medical Center results from a team effort working on behalf of the patient and family.

Facility Specific

- Integration of multi-disciplinary teams in the provision of care has to be embodied in the facility.
- Space should be designed and developed to accommodate teams, both on unit and off unit, which enables opportunities for both formal and informal team collaboration and exchange with patients and families.
- 3. Newest innovative methods and technologies will be anticipated and incorporated into clinical programs and practices.

Facility Specific

- New technology will be a prime driver and should guide the design of each program and the overall organization of services across facilities.
- Facilities should maximize resources; the design and organization of program units and the overall facility should help avoid duplication by creating spaces which allow for the integration of services and technology.
- Any facilities and programs should support Tufts Medical Center as a leader in the development, adoption and dissemination of technology.
- All facilities should be designed flexibly to allow for strategic technology investment over time to achieve clinical differentiation.

- 4. All programs and facilities should foster Clinical and Translational Research that:
  - is integrated into programs and facilities
  - promotes collaboration in care delivery and research
  - can support TMC to broaden sources of funding for research

Facility Specific

- Certain Clinical Research elements / spaces may need to be integrated into clinical facilities to support recruitment of patients.
- Additional services and program space for clinical research should be co-located to foster collaboration, teaching and interaction, but do not need to be in the clinical patient care facilities.
- 5. Facilities should provide space in support of the educational and training mission of the School of Medicine and the Medical Center.
- 6. The physical environment should encourage flexibility and an adaptive environment:
  - to focus on simplifying work processes
  - that is understandable to staff and patients
  - that promotes non-customization around a particular practice or technology
- 3.4.2 "Rules" for the Master Planning
- 1. The Master Plan is about tomorrow, not about today.
  - It is <u>not</u> about a building, it is about setting a direction
- 2. The patient and family experience is our top priority....not what we, as employees or providers, would prefer.
- 3. We will proactively seek opportunities to develop <u>shared</u>, flexible spaces in order to maximize efficiency and effectiveness of our resources.
  - We will avoid expressing "ownership" of space and will, instead, share and collaborate whenever feasible.
- 4. We will consider the needs of our Chinatown and University neighbors in our planning, design, and construction.
- 5. We will use facts and data, rather than only opinions, to make decisions.

### **3.5 Program Needs and Program Changes**

### 3.5.1. Overview

The Medical Center Steering Committee convened Advisory Groups organized around key strategic clinical areas to:

- Review the external environment and future trends within the clinical field
- Identify programs, equipment and technology needs into the future
- Consider staffing implications
- Discuss the physical facility requirements that derive from these issues.

As the Medical Center has been an active participant in Massachusetts healthcare reform implementation and as the implications of national healthcare reform begin to take shape, any institutional development will reflect new concepts, trends and programmatic directions. At all times, institutional development will be focused on issues of patient access, quality, customer service and the impact on the community.

Each Advisory Group was charged with addressing the following issues:

- 1. Product Line: Current State & Future Vision
  - Describe current model of care and delivery method
  - Capacity
  - Challenges
  - What are some key trends that are pushing accepted paradigms of care (i.e., moving from organ-based care models to disease-based care models)?
  - How might these trends influence your vision of future care and delivery models?
  - What actions / initiatives are underway or planned to move this product/service line toward the future vision?
- 2. Adjacencies and Dependencies
  - To which other departments / functions is this product line dependent to achieve goals and deliver care?
  - What are the necessary and critical adjacencies within, and between departments?
- 3. Other Requirements
  - Patients & Families
  - Staff
  - Academic relationship with Tufts University School of Medicine
  - Research clinical and translational

Some key consensus issues, needs and trends emerged from the Advisory Groups, including:

- 1. Differentiators of Tufts Medical Center:
  - Collegiality
  - Collaboration between Medical Center, Medical School & University
  - Intimacy: size, camaraderie, less formality, less hierarchical
- 2. Collaboration to be exploited: "Excellence is not the enemy of collegiality"
  - Strategic
  - Patient care
  - Quality
- 3. Leadership:
  - Strength & Depth of Team
  - Confidence
- 4. Clinical Areas of Emphasis:
  - Neurosciences Institute: clinical, research, teaching
  - Cardiovascular Institute: clinical, research, teaching
  - Children's: acute through chronic disease; clinically oriented community care
  - Cancer (in certain areas): NCI designation
    - Surgery
    - Ambulatory: create exemplar patient experience
- 5. Education / Teaching
  - Need physical representation of partnership
  - Deliberate areas and spaces for chance encounters
  - Engage more with Tufts University
- 6. Research:
  - Create opportunities for multi-disciplinary, TUSM and Medical Center collaboration
  - Expand opportunities for partnerships with industry
- 7. Process & Operational Improvement:
  - Will inform facility and master plan needs
  - Improvement to precede and inform master plan implementation
- 8. Role of Community:
  - in process
  - framing issues
  - influencing priorities

- 9. Implications for Master Plan
  - Support and enhance neighborhood
  - Address and support Medical School relationship

### 3.5.2 Key Drivers

In turn the process participants then identified the Key Drivers that would become priorities in any master plan scenarios or options, including:

- 1. Ambulatory
  - Off-Site: consider over time, as appropriate
  - On-Site: Components of Cardiovascular, Neurosciences, & Cancer Centers / Institute
- 2. Beds
  - Right location & number
  - Single vs. Multi-bed
  - ICUs
- 3. Centers / Institute
- 4. Operating Rooms/Interventional Platform & Support
- 5. Entrances & Circulation
  - Eliminate confusion of multiple entrances & mixed traffic flows
  - Establish true 'front door'
- 6. Parking
  - Right location and ease of access to clinical care functions
- 7. Research
- 8. Patient Sensitive Environment
- 3.5.3 Program and Project Requirements

As a result of these planning efforts, and after consideration by the Steering Committee, anticipated project changes that will require space, facility realignment and will influence the ultimate design of any new proposed improvement or reconfiguration of the Tufts Medical Center campus, were identified:

• Bed replacement will require both larger floor plate and increased number of floors to accommodate both existing and proposed future number of beds.

- Future bed requirements can be accomplished through a combination of new construction and building renovation.
- Future bed floor requirements exceed existing building geometry.
- Operating Rooms: future space requirements exceed total existing OR space even with proposed reduced number of OR's.
- Entrances: create clear main entry for hospital, distinct from ambulatory services.
- Circulation: separation of public, patient, staff, and service pathways is a critical element to the organization and phasing of the master plan
- Parking: adequate amount and direct accessibility to main entrance, apart from ambulatory entrances
- Research: requires larger floor plate to accommodate critical mass of scientists

Examples of how such needs begin to inform and influence the future direction of the campus and the physical organization and size of space is most evident in the future planning for Beds and Nursing Units, as well as for Operating Rooms and Surgical Support Space.



**BEDS IN SERVICE** 

	# Beds			DGSF/Bed		
	Existing	Proposed Low	Proposed High	Existing	Proposed <sup>1</sup>	
Overall <sup>2</sup>	354	360	386	400-720	700-950	
M/S	162	146	157	450-550	800	
ICU	40	69	74	600	850	
LDR	7	7	7		1,500	
MIU <sup>3</sup>	23	23	23	460	800	
MISCU	11	11	12	460	800	
Nursery <sup>3</sup>	24	24	24		150	
NICU	40	42	45	400	700	
Pediatrics	36	28	30	733	800	
PICU	10	10	11	716	850	
Psych - Adults	20	21	23	717	850	
Psych - Peds	12	10	11	564	850	

<sup>1</sup> Benchmark for "greenfield" hospital

<sup>2</sup> Total count does not include LDR and nursery

<sup>3</sup> Existing 2008 bed count; projected #s currently in discussion

Strategic Planning and Business Development 13



Strategic Planning and Business Development 17

#### **OPERATING ROOMS**

	Existing	Proposed*
# ORs	22	18
SF / OR	380-550	600-800
DGSF / OR	2600	4000

#### \* Assumptions:

- # ORs: based on 5,500 IP procedures @ 213 minutes/procedure; 7,000 OP procedures @ 88 minutes/procedure; operating 10 hrs/day, 250 days/year
- DGSF/OR: includes PreOp/Recovery space
- Central Sterile (400-500 sf/OR) not included

Implicit in any campus development plans that evolve is the recognition that:

- Consolidating procedures (Surgery, Catheterization, Endo, IR) in an Interventional Services Zone would create efficiencies with respect to patient prep and recovery, supplies and staffing.
- Creating universal O.R.s could assist in enhancing throughput and volume.
- Biewend, 35 / 75 Kneeland and Tupper are leased facilities.
- New Research Labs are needed to meet the proposed future agendas and to retain and recruit staff.
- Patient Care Units: at any point in master plan phasing, improvement of patient care units will require all private patient rooms due to 2010 hospital construction guidelines and state Department of Public Health regulations.
- Construction of additional inpatient care space is required to achieve this.
- Existing spaces can be converted.
- Wireless technology must be a part of this effort.

• Consolidation of selected health specialties into modular clinics will enhance efficiency and provide for increased patient volume, from coordinated scheduling.

Taking the key clinical and support elements and the direction and need for growth, the existing organization of services would then be reconfigured and reoriented to create a core adult inpatient facility, a children's hospital within a hospital (both inpatient and ambulatory services), an ambulatory zone, and a research hub, with the sum reflective of an integrated, collaborative medical center environment. (See Part 5: Master Plan)

#### **3.6 Addressing Aging Buildings**

Tufts Medical Center-occupied buildings were built between 1883 and 1994, ranging in age from 16 to 129 years. The average age of all occupied buildings is 65 years, and the average age of buildings used for clinical care activities is 56 years. The buildings vary in condition and upgrade needs, but most have limited capacity and capability for upgrade to accommodate the most advanced technologies and future models of care. Figure 3.6.1 graphically depicts the age of owned and leased buildings over the life of this master plan.

The need to upgrade, replace and reconfigure campus buildings will continue to grow as Tufts Medical Center strives to meet its mission and growth in patient volume and future trends in the healthcare field. Six of the buildings currently occupied by the Medical Center cannot be effectively utilized for clinical care activities. These include: the Boston Dispensary, Tupper, Ziskind, Holmes, 37 Bennett, and the Center building. All but one of these is owned by the Medical Center and are the prime candidates for demolition within the lifespan of this Institutional Master Plan. However, these are not Proposed Institutional Projects at the time, other than one small renovation project and one small construction project. Any other proposed institutional projects shall be the subject of a future IMP Amendment.

Two leased facilities that are contemporaries in age with five of the six previously noted buildings, can continue to be used for ambulatory/outpatient care only with significant recurring investments. None of the existing buildings on campus can be easily or costeffectively upgraded for future growth or to support the latest and ever evolving technology and models of care.

### **Building Age Timeline:**

1880	1900	1920	01	0	-				
	-	19	1940	1960	1980	2000	2010	2020	2030
🔴 Bosto	n Disper	nsary, 1883					127 yrs	137 yrs	147 yrs
- V		. • T	upper, 1924	k			86 yrs	96 yrs	106 yrs
Biewend (leased), 1924						86 yrs	96 yrs	106 yrs	
	and a	🛛 😐 Z	iskind, 1924	é de la compañía de l			86 yrs	96 yrs	106 yrs
A C		. •	Holmes, 192	25			85 yrs	95 yrs	105 yrs
-	1000	•	35 Kneeland	d (leased), 1	925		85 yrs	95 yrs	105 yrs
			75 Kneeland	d (leased), 1	925		85 yrs	95 yrs	105 yrs
😑 37 Bennett, 1929				81 yrs	91 yrs	101 yrs			
😑 Center, 1930				80 yrs	90 yrs	100 yrs			
	-710	3		Pratt, 1948			62 yrs	72 yrs	82 yrs
		A Maria		Farnsworth	n, 1948		62 yrs	72 yrs	82 yrs
	L.			Rehab, 1	956		54 yrs	64 yrs	74 yrs
	~ 2				• Proger, 1	1975	35 yrs	45 yrs	55 yrs
				States .	🔰 💿 Flo	pating, 1982	28 yrs	38 yrs	48 yrs
					💋 💿 Ga	irage, 1982	28 yrs	38 yrs	48 yrs
• North, 1994				16 yrs	26 yrs	36 yrs			
• South, 1994					16 yrs	26 yrs	36 yrs		

Figure 3.6.1

3-11

## 4.0 INSTITUIONAL MASTER PLAN AND PROPOSED FUTURE PROJECTS

# **Section 4**

### 4.0 Institutional Master Plan and Proposed Future Projects

#### 4.1 Overview

Tufts Medical Center's main campus buildings range in age from 16 years to 127 years. In fact, a majority of the main campus building range in age from 54 years to 127 years. The need to upgrade, replace and reconfigure campus buildings will grow as Tufts Medical Center strives to meet its mission and growth in patient volume and future trends in the healthcare field.

Foremost among the future development needs of the Medical Center will be the expansion of inpatient and outpatient settings, as well as surgical and diagnostic settings on the main campus. This will provide flexibility for growth and accommodate future care models, as well as assist in providing a patient sensitive environment and enhancing the integration of research and clinical practice, ensuring more efficient and effective flow of services.

The IMP provides for the continued use of the existing buildings within Tufts Medical Center Campus, and presents the facility initiatives anticipated within the next ten years, as well as provides directional guidance for development in the following 15 - 20 years to meet the growing and evolving program needs described above.

The goal of these initiatives is to enhance the current campus to meet the institution's mission to provide high quality tertiary and quaternary level care, train the next generation of physicians and conduct cutting edge research. The principles of the development outlined in this IMP are to:

- Provide direction to the future development of the campus
- Enhance the patient and family environment to support a more integrated care model
- Consider the needs of our surrounding community, including our Chinatown and Tufts University neighbors
- Seek alignment of services that will lead to efficiencies and more effective delivery of care
- Promote the changing environment of research and translation to clinical practice

The long term goals for the Tufts Medical Center IMP will inform any projects and submissions for review and approval will focus on:

- "Best Use" Zoning of Campus
  - Provide a clear Plan for Interim and Future Development
  - Consolidate/Co-Locate Service Lines to degree possible
  - Maximize Efficiency and Effectiveness
  - Improve Access and Flow
  - Reduce Dependence on Leased Facilities
- Maximizing Flexibility for Growth and Accommodate Future Care Models
- Providing a Patient-Sensitive Environment
- Creating a Clear Identity/Image for Tufts Medical Center

- Enhancing Tufts Medical Center Presence In Neighborhood
- Enhancing Integration of Research and Clinical Practice
- Affordable Over 15-20 Year Time Frame

Many of the needs that will be addressed will reflect:

- new policy directions at the national and state level
- changes in technology
- will link clinical and health policy research to programs and services
- will respond to the public health needs of the community

There are no proposed institutional projects, other than one small renovation project and one small construction project, at this time due to current assumptions about financial capacity and operating needs.

But there are some clear principles and factors that will be applied to any future facility project, including:

- seeking LEED certification
- creating accessible outdoor spaces for patients, families and staff
- creating programs and services that reflect the community and public health needs

#### 4.2 Guiding Principles for Positive Development

In developing the IMP, several challenges must be addressed to fully satisfy program needs, including:

- Building obsolescence
- Infrastructure obsolescence
- Traffic congestion and navigation
- Open space preservation

Ever mindful of the impact on the surrounding community, Tufts Medical Center establishes the following as guiding principles in evaluating and developing projects over the life of the IMP to address mission-critical needs:

- Transformation of the Washington Street 'front door' image and creation of a clear, welcoming sense of arrival
- Separation of traffic patterns and flows around the campus to relieve confusion and congestion
- Improve site signage and enhance wayfinding
- Enhance open space and pedestrian-friendly streetscape
- Enhance accessibility to public transportation, parking and key entry points
- Relieve parking congestion on and surrounding the campus
- Plan for long-term future growth and transformation
- Ensure sensitivity to context for any future development through massing, scale, and materials
- Consolidate activities into zones of compatibility of purpose and function

#### 4.3 Proposed Institutional Project

Tufts Medical Center does not have any proposed institutional projects during the course of this IMP; other than the below described smaller internal renovation and construction projects. These two projects represent the physical changes necessary to complete a plan to better meet the requests of patients, visitors and employees in the area of food service.

4.3.1 Atrium level dining and food service renovation (located at 800 Washington Street)

To better accommodate the round the clock needs of Medical Center patients, visitors and employees it has been determined that enhanced food service and seating areas are needed. Many years ago, Tufts Medical Center maintained a large food service and cafeteria setting for its patients and employees, but that space has since been renovated and utilized for patient care and support services.

The proposed food service renovation plan includes the following:

- A. Café Renovation
  - Renovation within the current gift shop at the main Atrium/street level into a food service area, providing hot and cold meals.
  - Requires renovation of existing 1,678 sq. feet to create an appropriate food service space.
- B. Dining Pavilion Enclosure
  - Enclosure of the existing outdoor courtyard to provide patient, visitor and employee seating year-round during all weather conditions.
  - Requires construction to enclose the existing courtyard, adding approximately 1,820 sq. ft of usable space to provide a seating capacity for approximately 120 people.



Figure 4.3.1 – Proposed food service renovation projects A and B



Figure 4.3.2 – Project B Proposed Enclosed Dining Pavilion exterior



Figure 4.3.3 – Project B Proposed Enclosed Dining Pavilion interior

#### 4.4 General Direction for Future Planning

The general direction for any future development would reflect the following organization of the campus for clinical care, research and overall Medical Center administrative and support functions:

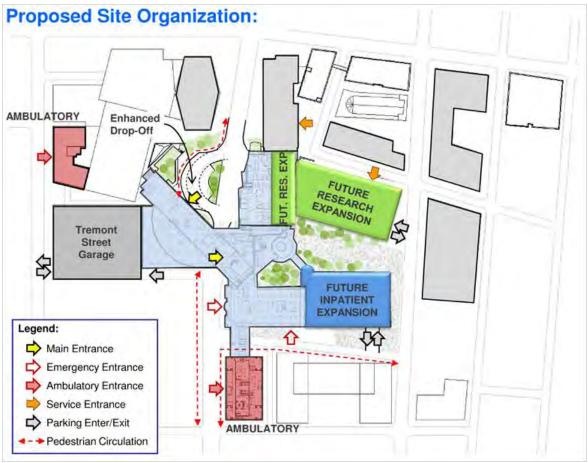


Figure 4.4.1 – Proposed site organization

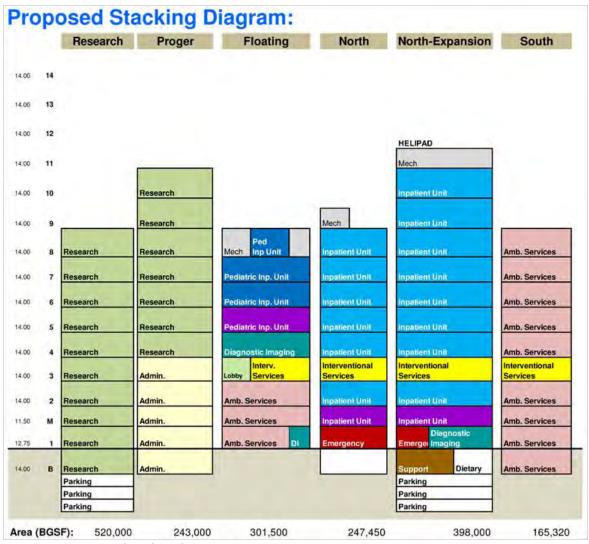


Figure 4.4.2 – Proposed stacking diagram

The diagrams illustrate current projections of the future needs of the campus to expand and replace its clinical and research facilities. While the master plan provides a direction for future development of on campus facilities, specific projects have not yet been defined to a great level of detail, since Tufts Medical Center is not yet ready to proceed with planning of a specific building project.

The Proposed Site Organization shows a potential future campus layout upon completion of all work. The Master Plan proposes enhancement of the vehicular drop off along Washington Street, with a new canopy and signage to welcome patients and visitors, as well as reconfiguring of the drop off relocating the mobile MRI station away from the enhanced entry. Demolition of the older campus buildings is proposed, in order to expand the existing North Building, maximizing medical services in an effective and efficient layout of the hospital. Additional parking and hospital support services are proposed to be included in space below grade. Upon completion of the North Building expansion, demolition of older buildings adjoining the Proger Building is proposed for the development of new research facilities. Also included in any research building is below-grade parking.

As healthcare needs change and care delivery is reconfigured and re-aligned based on many factors ambulatory and outpatient care will play a significant role in future planning. Issues of patient accessibility, convenience to parking and efficient design and coordination of care will become more pressing. Tufts Medical Center will review its ambulatory clinical program needs as currently served in its owned and leased facilities, and consider the best options for consolidating services on and close to the existing campus.

## 4.5 Relationships within the Campus: Integration of Research, Patient Care and Teaching

All three areas of Tufts Medical Center's mission will be carried out on the current campus, which helps maximize the integration of the institutions' tripartite mission of providing the highest level of care to our patients, training the next generation of caregivers and pursuing groundbreaking research. Research is conducted on the Medical Center campus to help foster the integration of care and research and as much as possible, supporting the advancement of bench side discoveries and policy research to impact the care setting. The community plays an integral role in much of our research endeavors in that a great deal of the research conducted at the Medical Center, and in conjunction with Tufts University School of Medicine, is focused on addressing specific public health needs and ensuring that the community has access to the most advanced clinical trials available when considering their healthcare treatment options.

Tufts Medical Center's basic research program applies state-of-the-art molecular methods to understanding mechanisms important in human biology and disease. The ultimate goal of the researchers' work is to translate basic findings into new clinical strategies for diagnosis and therapy. The research program is synergistic with the Medical Center's clinical strengths across a wide spectrum of service areas, including cardiology, infectious disease, pulmonary, endocrinology, oncology and nephrology. Ground-breaking research is conducted in bacterial, HIV, and other viral and parasitic diseases; the renal program is nationally recognized for contributions in the fight against chronic kidney disease. Cardiac researchers investigate ischemic cardiovascular diseases as well as hypertension and congestive heart failure. Pediatric research in the laboratory seeks to better understand how prenatal and early childhood events are intertwined with the risk of developing adult-onset disorders. The Floating Hospital for Children at Tufts Medical Center is one of 16 centers nationally (and the only one in Boston) participating in the NIH-funded Neonatal Research Network. Future directions for basic research programs include a renewed focus on neurosciences research as partners in this area with Tufts University's School of Medicine, we seek to maintain Boston's national leadership position in neurological disorder research.

**Tufts Medical Center is internationally recognized for its work in the field of Comparative Effectiveness Research (CER).** Comparative Effectiveness Research is designed to inform health-care decisions by providing evidence on the effectiveness, benefits and harms of different treatment options. The evidence is generated from research studies that compare drugs, medical devices, tests, surgeries, or ways to deliver health care. The CER programs investigate the genetic, social, behavioral, and biologic factors that can influence patient outcomes and healthcare decisions. Results from studies influence and create national health policy and drive better and more costeffective clinical care. CER represents a major growth opportunity for Tufts Medical Center, and because of its established presence in the field, the Medical Center is wellpositioned to take advantage of the significant new funding being allocated at the national level for this developing line of work.

The research mission of Tufts Medical Center and Floating Hospital for Children is critical to the long-term success as a full-service academic medical center in the heart of Boston's Chinatown. Whether it is the engagement of community members in clinical research trials, collaborating with physicians from Boston's world-renowned teaching hospitals or driving health care policy at the national level, Tufts Medical Center's research program is a critical element of the future Master Plan and Medical Center planning.

#### 4.6 Tufts Medical Center Impact on Surrounding Area

The proposed Institutional Master Plan for Tufts Medical Center would allow the creation of a campus that supports the institution's long-term goals for growth, enhancement, and integration of its' medical, academic, and research missions in a manner that is sensitive and respectful of the surrounding neighborhoods. As obsolete buildings are demolished, critical infrastructure is upgraded, and campus activities are re-aligned into cohesive, complementary zones, the surrounding community will benefit from the resulting clarity of purpose and navigation through and around the campus.

#### 4.6.1 Transportation Summary

In conjunction with all future project planning, a complete transportation review will be developed to evaluate traffic management requirements including construction management traffic mitigation, public transportation, parking and all aspects of vehicular and pedestrian movement on the site in accordance with public agencies and the surrounding residential and business communities.

#### 4.6.2 Environmental Protection Summary

A full Environmental Protection study will be initiated for all future projects, to establish any possible direct or indirect impacts of the proposed development to the immediate environment. If mitigation is deemed necessary by the BRA, controls will be put in place to the extent economically feasible and to minimize damage to the environment reasonably attributable to the proposed development. Tufts Medical Center will incorporate systems into any future amendments of the IMP projects that meet the groundwater conservation standards of Article 32. As with previous projects, Tufts Medical Center will obtain a written determination from the Boston Water and Sewer Commission as to whether said standards are met. Tufts Medical Center will provide a copy of this letter to the BRA and Boston Groundwater Trust prior to the issuance of a Certification of Consistency or Certification of Compliance, as applicable. Accordingly, Tufts Medical Center will not be required to obtain a conditional use permit from the Board of Appeal, and shall be deemed to be in compliance with Article 32.

#### 4.6.3 Fire Prevention Code Compliance

Tufts Medical Center will ensure all phases of construction and final design are analyzed and are in compliance with all applicable City of Boston and Massachusetts state codes and regulations.

#### 4.6.4 Urban Design Summary

Urban design objectives will be established in conjunction with the final assessment of the overall project development. The preliminary goals of the urban design plan are:

- A clear sense of identity and arrival to the Tufts Medical Campus primarily along the length of Washington Street
- Redesign of the existing open space/plaza near the center of Washington Street to create a pedestrian friendly urban heart for the campus.
- Design sidewalks and street crossings to maximize pedestrian safety.
- Incorporate traffic calming measures (rumble strips, textured pedestrian crossings, lighting, etc.) along Washington St. to increase pedestrian safety.
- Clearly defined vehicular and pedestrian entrances for the main entry, ambulatory entry, parking entries and service entries.
- Landscaping, street furniture and a variety of paving and building materials to mitigate the existing hard concrete surfaces and activate the pedestrian realm.
- Use of a variety of color and texture to activate the pedestrian realm.
- Enhance pedestrian safety by traffic calming measures.
- Develop a unique public way finding and signage program in coordination with the overall Tufts Health Science Campus.
- Maintain and strengthen existing community links and pedestrian access to adjacent neighborhoods.

#### 4.6.5 Historic Resources Summary

Although numerous historic resources are located within a quarter-mile radius of the campus, Tufts Medical Center campus does not include any historic resources listed on the National Register.

#### 4.6.6 Infrastructure Systems Summary

Since the Institutional Master Plan will consolidate and reorganize the entire hospital it must take into account anticipated changes in demographics and epidemiology and advances in medical technology. In order to accommodate such unforeseen changes the planned development is designed to be as flexible as possible by including shell space for future expansion, structural systems designed to accommodate additional floors as well as adequate space for expected HVAC systems.

#### 4.6.7 Development Impact Summary

In order to meet the coming demands of Tufts Medical Center and the community, the planned development seeks to eliminate outdated and energy inefficient buildings that lack adequate floor area and floor to floor heights for the current proposed program. As indicated on the accompanying diagrams these obsolete buildings will be phased out and replaced by new structures. The long term development will continue to create high paying skilled construction, medical and health care jobs. Improvements to the Medical Center community will also benefit the adjacent communities by creating safer streets, reducing crime and providing high quality health care to Chinatown and surrounding neighborhoods.

#### 4.6.8 Zoning

The Tufts Medical Center campus covered by this IMP lies within the Institutional Subdistrict within the city of Boston's Chinatown District, and the Mid-Town Cultural District governed by article 43 of the Code. Current IMP planning efforts focus on Tufts Medical Center properties located within the Institutional Sub-District. The owned properties of the Tufts Medical Center Campus lie within the "Institutional Sub-District". Certain leased properties, including the Biewend Building, lie within the Midtown Cultural District.

#### 4.6.8.1 Groundwater Conservation

Tufts Medical Center is located within the Groundwater Conservation Overlay district governed by Article 32 of the Boston Zoning Code. Tufts Medical Center will incorporate systems into its proposed Institutional Projects and any future amendments of the IMP projects that meet the groundwater conservation standards of Article 32. As with previous projects, Tufts Medical Center will obtain a written determination from the Boston Water and Sewer Commission as to whether said standards are met. Tufts Medical Center will provide a copy of this letter to the BRA and Boston Groundwater Trust prior to the issuance of a Certification of Consistency or Certification of Compliance, as applicable. Accordingly, Tufts Medical Center will not be required to obtain a conditional use permit from the Board of Appeal, and shall be deemed to be in compliance with Article 32 of the Code.

#### 5.0 INSTITUTIONAL TRANSPORTATION AND PARKING MANAGEMENT PLAN

## **Section 5**

### 5.0 Institutional Transportation and Parking Management Plan

#### 5.1 Overview

As an urban institution, Tufts Medical Center faces a dynamic transportation and parking situation. Serving patients 24 hours of the day, seven days of the week, means there is a constant demand for access to the institution. Tufts Medical Center works diligently with Tufts University School of Medicine through a jointly owned entity, Tufts Shared Services, to oversee the parking and transportation needs of our patients, visitors employees and students.

A great deal of development has occurred in the Chinatown District and Midtown Cultural District over the past few years, with many other positive developments on the horizon. These developments have, and will continue to build upon the vibrancy of these neighborhoods; however, they have also placed even greater constraints on the existing traffic and parking supply in these areas.

#### 5.2 Parking Summary

Parking is a perennial concern for the Medical Center, one which is addressed by both encouraging staff to maximize use of public transportation, and by partnering with the University to consolidate parking resources and minimize the impact on surrounding neighborhoods as much as possible. Parking for Tufts Medical Center is provided through Tufts Shared Services, an umbrella entity serving both Tufts Medical Center and Tufts University. Tufts Shared Services provides priority parking for patients and visitors, and limited parking for Tufts Medical Center and Tufts Health Sciences Campus staff in its main garage at 274 Tremont Street (930 spaces), adjacent to Floating Hospital for Children.

Garage/Lot	Location	Lease/Own	Spaces
Tremont Street Garage	274 Tremont Street	Own	930
Traveler Street lot	5 Traveler Street	Own	272
Motor Mart Garage	26 Park Plaza	Lease	375
Herald Street Garage	20 Herald Street	Lease	370
Hudson Street Lot	51 Hudson Street	Lease	50
Tyler Street Lot	62 Tyler Street	Lease	22
<b>Total Parking spaces</b>			2019

Table 5.2.1 Owned and Leased	Parking Garages and Lots
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The Area Site Plan at Figure 5.2.2 shows the locations of the various parking facilities in relation to the Tufts Medical center campus.

#### 5.2.1 Patient and Visitor Parking

Tufts Medical Center experiences approximately 360,000 patient clinic visits per year; as patient volume continues to grow, the availability of parking for patients and visitors has reached a critical point. On a nearly daily, basis the Tremont Street Garage reaches capacity and closes to new entrants for a period of time. Valet parking hours have been extended, however there has been no increase in the number of available parking spaces for additional valet vehicles. Tufts Medical Center and the Tufts University have experienced a loss of approximately 300 parking spaces in the past ten years as development has occurred on sites previously used for parking. As patient volume continues to grow, it is expected that additional parking will need to be developed to meet the needs of patients and employees.

#### 5.2.2 Employee Parking and Transportation

Tufts Medical Center is committed to offering a wide array of incentives to reduce the number of employees who drive and to increase the use of alternative forms of transportation to access the Medical Center.

Some of those measures include:

- Membership in A Better City's Transportation Management Association
- Transit pass subsidies taken up by more then 38% of employees
- Encouraging bicycling and walking incentives and amenities
- Screening cars allowed to park in the main garage

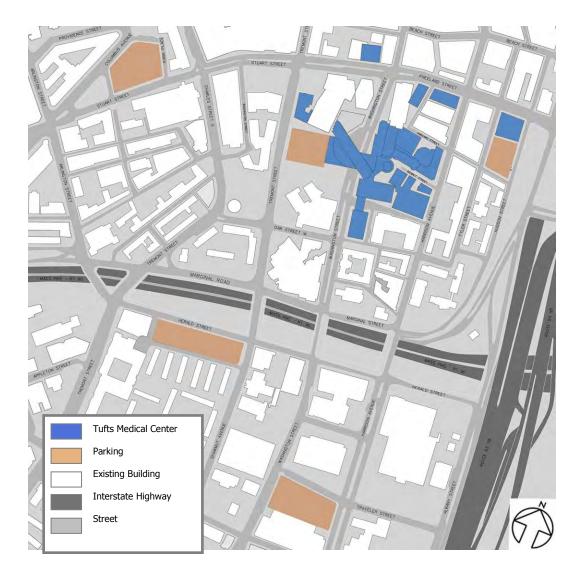


Figure 5.2.2 – Area Site Plan

#### 6.0 SERVICE GOALS AND COMMUNITY BENEFITS

# **Section 6**

### 6.0 Service Goals and Community Benefits

#### 6.1 Service Goals

Tufts Medical Center has remained true to its commitment to public health and serving the community since it was established in 1796 by Paul Revere and Samuel Adams. Tufts Medical Center strives to meet the emerging health needs of an ever increasing and diverse patient population. Tufts Medical Center works continuously to develop, promote and implement strategies to address public health concerns and pursue disease prevention within the Medical Center's service communities. Tufts Medical Center works closely with its respective communities and collegial organizations to maintain and broaden the public health agenda to improve the health of community members and patients. In 1992 the hospital established the Community Health Improvement Programs to carry out this objective.

#### 6.1.1 Relationship to Community

Tufts Medical Center's location in the heart of Boston's Chinatown District plays an integral role in shaping and driving the mission of the Medical Center. Our position as a part of the fabric of the Chinatown community has informed some of the clinical direction of the institution and inspired the Medical Center to pursue responses to meet the specific needs of the community. This can be experienced in the Asian Pediatric Clinic, which was developed in direct response to a community need for an accessible, multi- cultural and multi-lingual primary care practice for the children and families of the Asian American community.

Chinatown is not only home to many Chinese Americans, it is considered a gateway for many new Chinese immigrants arriving in the United States. Recognizing the needs of the Chinatown community and the needs of many new immigrants to this country, Tufts Medical Center established the Asian Access Program. The Asian Access Program serves thousands of clients each year by providing them with assistance to access and navigate the Medical Center, as well as the many other social services offered by the Commonwealth of Massachusetts and the Federal government. The importance of this program to the Asian community and high demand for services prompted the hospital to expand the program in 2011 and provide greater accessibility to the clinic services with a new street side location on Kneeland Street.

Tufts Medical Center pays close attention to the public health needs specific to the Asian American community. Information about the status of the health of the community is gathered through formal and informal channels. Utilizing reports of the Boston Public Health Commission which consistently document the health status of the population, in conjunction with input from community advisory groups, the Medical Center seeks to evaluate and understand the health needs and concerns of the community. The Medical Center has used this method to develop programs and services addressing chronic diseases such as mental health, asthma, smoking cessation and obesity. The Asian Psychiatry Program has been established for many years at the Medical Center to recognize and address the sensitive cultural issues around mental health treatment in the Asian community. The Asthma Prevention and Management Initiative has provided culturally targeted outreach and education materials to help reduce the high rates of childhood asthma within the Asian community. Tufts Medical Center has also developed programs focused on the treatment and prevention of specific diseases prevalent within the community, such as hepatitis B.

#### 6.1.2 Service Population

Tufts Medical Center serves an incredibly diverse population of patients; approximately 70% of the population is White, 10% is Black, 10% is Asian and 9% is Hispanic. Along with serving an ethnically diverse population, Tufts Medical Center provides care to the second highest concentration of Medicaid patient (25 percent of the hospital's patient population) of all academic medical centers in the city of Boston. The hospital also serves a large Medicare population, which makes up almost 32 percent of the patient population.

Medical Center provides its patients with a full spectrum of healthcare services; providing the highest level of tertiary and quaternary care to patients from the smallest of neonates to the most complex geriatric patients with multiple diagnosis.

#### 6.1.3 Primary Service Area Communities

Located in the heart of Chinatown, Tufts Medical Center serves a dynamic population from the entire eastern coast of Massachusetts. A large portion of the hospital's patients come from Boston and surrounding areas, and the Medical Center considers the following neighborhoods to be our core communities: Chinatown (and the greater Asian population), South Boston and Dorchester.

#### 6.1.3.1 Chinatown and the Asian Community

Chinatown is one of the most densely populated neighborhoods in the city of Boston and is a community rich in history with a diverse array of cultures. Chinatown is home to Boston's largest Chinese community, with a unique mix of residences and family owned and operated businesses. Much of the recent data collected demonstrates that Asian immigrants tend to underutilize health care services, and often lack the information necessary to practice preventive health maintenance. This can be attributed in part to cultural differences and linguistic barriers, as well as financial concerns, such as lack of health insurance. In addition, 2010 Census data and a recent report from the Boston Public Health Commission, reinforce the need to focus on health outreach and education efforts within the growing Asian community. Some data points that highlight this are:

- More than 50% of Chinatown residents are non- or limited-English proficient.
- 30% of Chinatown residents live below the federal poverty level, while the median income is \$28,000, compared to the Boston average of \$40,000.
- The rate of tuberculosis for Chinatown residents is three times higher than the Boston average.

- Rates of pre-natal care among Chinatown residents is the second lowest of all Boston neighborhoods.
- Hepatitis B and smoking are prominent health concerns for the Asian population.

Tufts Medical Center identified chronic diseases, obesity and diabetes, as health priorities in the community, which will be the focus of the current funding cycle for the Asian Health Initiative.

#### 6.3.2 Dorchester

Dorchester is one of Boston's oldest neighborhoods, largest and most diverse neighborhood. Dorchester is a predominantly residential community and has also become a destination for immigrants seeking communities similar to home. It is now a large working class community with a high concentration of many Irish American immigrants, African Americans, Caribbean Americans, Latinos, and East and Southeast Asian Americans. The current percentage of minority residents (71 percent vs. only 51 percent for Boston overall) reflects this rich cultural and ethnic diversity. However, linguistic and cultural barriers, healthcare disparities and other socioeconomic factors increase the risk for serious health and social problems in this community.

Health data from the BPHC in 2007 indicated that Dorchester has the highest birth and infant mortality rates in the City, a high incidence of violence related injuries, the second highest homicide rate among Boston neighborhoods, a high asthma hospitalization rate among children under the age of 5, and 50% of the adult population are considered obese or overweight. Tufts Medical Center identified obesity and diabetes prevention, violence prevention, and infant mortality as high priorities for the Medical Center's Dorchester Health Initiative in the current funding cycle.

#### 6.1.3.3 South Boston

South Boston is another of Boston's communities and is a mostly residential neighborhood which has become a beacon for many Irish American immigrants as well as small, vibrant, Polish and Lithuanian communities. "The Health of Boston 2007" found South Boston had among the highest rates of alcohol and drug abuse and the highest mortality rate associated with substance abuse. South Boston's health education and public health issues are addressed through multiple programs established by Tufts Medical Center including substance abuse, specifically opioid dependence treatment and mental health programs that are based in the community.

#### 6.2 Care to Boston Residents and Surrounding Communities

Tufts Medical Center believes that caring for our community happens both within and outside the walls of our institution. A great deal of data has shown that many barriers exist to hinder patient access to high quality healthcare. To increase access of hospital services to all of our communities the Medical Center continues a long-standing commitment to increase cultural competency among our medical providers and to remove language barriers wherever possible. The working definition of cultural competency that helps shape and drive policies and care delivery at the hospital is as follows:

The ability to understand and respect the differences among people, and use our understanding, to influence our interactions with one another. This involves developing the capability to deliver patientcentered services consistent with the needs and expectations of various cultures.

#### 6.2.1 Improving Access to Healthcare

Boston's diverse Asian and minority communities continue to grow and are dispersed throughout the City's many neighborhoods and surrounding communities. To ensure that the Medical Center continues to meet the healthcare needs of the growing populations, hospital-based programs such as Interpreter Services, Asian Access Program, Asian Clinical Services and the Josiah Quincy School Psychiatry Consultation Program were established and continue to thrive today.

To help achieve the goal of being user friendly, culturally and linguistically accessible, the Medical Center has reviewed staff recruitment efforts to reach out to potential new staff and clinicians who reflect the linguistic and cultural backgrounds of the Medical Center's patients. In addition, a set of educational programs have been developed and are offered by the Human Resources Department for new staff and clinicians to introduce them to the cultures of the patient population. Training is available to all employees (which includes board members, physicians, volunteers, and others – including contractors and vendors who have direct patient contact) about cultural differences and preferences, with special training provided to medical residents and other clinical staff.

The Medical Center's commitment to being linguistically and culturally competent is demonstrated through the Interpreter Services Department which can assist patients in 37 different languages and dialects. Not only is there a large in-house staff, there is a corps of on call interpreters and links to 24 hour translational services via a telephone interpreting company.

Tufts Medical Center values community participation in evaluating its services, in the development of programming to ensure that the Medical Center fulfills its mission of providing high quality, patient-focused care and supporting the overall good health of the community. Among its programs, the Medical Center established the Pediatric/Adolescent Primary Care Clinic. This program caters specifically to the Asian American population and boasts a program staffed entirely with bilingual and multi-lingual personnel, from the secretarial level to the clinician level. This program is devoted to breaking down all barriers to healthcare for a family; clinic staff are able to communicate with children and their family members in their native languages, understand the cultural nuances that may inform perspectives and decision making in a care setting and ensure access at all hours of the day through extended evening clinic hours and an off-hours on-call system.

Clinical departments within the Medical Center are constantly monitoring their patients to determine ways to contribute to health maintenance, disease prevention, early diagnosis, and/or chronic disease management. Many of the Medical Center's departments have developed and initiated specific health screenings related to the area of their concern and expertise and work with community groups or with Community Health Improvement Programs staff to support each other's efforts and commitment to the Medical Center's mission. Some health screenings have reflected the needs of specific patient groups, either by age or the prevalence of a particular disease.

#### 6.2.2 Community Benefits Mission

Tufts Medical Center's Community Benefits Plan focuses on three broad areas:

- Identifying opportunities for public health related collaborations within the communities we serve.
- Increasing the Medical Center's capacity to be user friendly to all patients and visitors.
- Creating partnerships with community health centers in a manner that builds capacity within community organizations to help meet the health needs of the community.

#### 6.2.3 Community Benefits Programs

The Medical Center's Office of Community Health Improvement Programs oversees three direct grant initiatives to support community-based programs that address a wide range of health concerns and racial and ethnic disparities: the Parent-to-Parent Program, Asian Health Initiative and Dorchester Health Initiative.

#### 6.2.3.1 Tufts Medical Center's Parent-to-Parent (P2P) Initiative

Infant mortality rates in Boston's poor and minority neighborhoods are disproportionately high. Women and children in these communities often lack access to prenatal care, prevention health services, proper nutrition, community supports, and social services. All of these factors influence health outcomes for infants and young children; the Medical Center's Parent to Parent (P2P) initiative seeks to help address these issues. The Medical Center's P2P Initiative is a competitive grant which enables established P2P providers to integrate efforts within their sites to provide for more comprehensive and integrated approaches to meeting the needs of expectant mothers.

Many barriers exist that can prevent women and mothers from getting the care they need including lack of childcare, distrust or fear of medical professionals, language or cultural differences, and financial issues. P2P strives to remove barriers to health care by improving access to resources women need to care for themselves and their families. P2P also provides training and information on parenting skills, accessing employment, and accessing social services. P2P is a partnership between Tufts Medical Center and program sites in the Dorchester and Chinatown neighborhoods of Boston and Quincy.

The primary goal of P2P is to reduce infant mortality and morbidity by improving access to health care for pregnant women and their children. P2P redefines prenatal care to include social services, education and advocacy. Maternal and child health outreach workers are trained to provide access to social supports and medical services for pregnant women, mothers and their young children.

P2P outreach workers are working in their communities to help pregnant women and new mothers get the care they need. They are from diverse ethnic and cultural backgrounds and many speak English as a second language. Each outreach worker is based at a program site and provides services such as:

- Referrals to social services and pre-and post-natal care
- Parenting skills training and health education
- Interpretation and translation services
- Advocacy on issues related to health care, housing, insurance, transportation, child care, state and federal programs, and community supports
- Coordination of services

#### 6.2.3.2 Tufts Medical Center's Asian Health Initiative

In response to the health needs of the Chinatown community, Tufts Medical Center, in consultation with Chinatown community organizations, established the Asian Health Initiative (AHI) and its advisory committee in 1995. The AHI identifies public health issues of particular prevalence or concern to the local Asian community and seeks to work collaboratively with local community-based organizations to help address those health issues in a culturally and linguistically appropriate setting.

Since its inception, funded programs and projects have addressed health concerns including: tuberculosis, hypertension, hepatitis B, chronic disease prevention, domestic and youth violence, and the importance of primary care and understanding the American health care system. The AHI convenes with the advisory committee as well as grant recipients several times each year to receive program updates, discuss pressing health concerns within the Asian community and consider funding priorities and distribution. It also provides technical assistance to individual organizations as requested and feasible. Because of the diversity of the programs and organizations supported, the AHI has been able to reach a broad segment of the Asian community, from infants to senior citizens.

In 2010 the priorities for Asian Health Initiative were set and guided the emphases and funding for the three-year initiative to chronic disease management, family health, mental health, and violence prevention. Some of the projects funded through the AHI are:

<u>Asian American Civic Association</u>: The Sampan newspaper offers a biweekly bilingual health column and expands its health education efforts with the addition of two special health editions and an interactive dialogue with readers about health issues.

<u>Boston Asian: Youth Essential Service:</u> Helps teens adopt a healthy lifestyle, which includes healthy food choices and regular exercise. Nutrition and wellness workshops and physical activities will be offered for both individuals and groups.

<u>Boston Chinatown Neighborhood Center</u>: Focuses on educational workshops for parents to reduce and/or prevent childhood diabetes and obesity in Boston's growing Asian immigrant community. Other program activities include children's fitness workshops, family counseling, cooking demonstrations, and referral services.

<u>Greater Boston Chinese Golden Age Center</u>: Offers a program for Chinese speaking seniors ages 55 years and older who have been diagnosed as having diabetes or who are at high-risk for developing diabetes to help clients understand the disease, contributing factors, and the consequences of diabetes if not managed properly.

<u>Wang YMCA of Chinatown</u>: Helps area teens to learn about obesity and the health risks and consequences of an unhealthy lifestyle and helps teens develop the knowledge and skills to make healthy choices for a lifetime. The program includes educational workshops, peer coaching, and development of fitness routines.

6.2.3.3 Tufts Medical Center's Dorchester Health Initiative

Tufts Medical Center established the Dorchester Health Initiative (DHI) to address health issues disproportionately affecting residents of the various Dorchester neighborhoods. Through the DHI, Tufts Medical Center provides grant funding to innovative programs addressing the priority health needs of the Dorchester community identified with the assistance of the DHI Advisory Committee. The DHI Advisory Committee is comprised of community stakeholders with experience in serving the needs of Dorchester residents, public health and city officials and hospital representatives.

The Boston Public Health Commission (BPHC) reported in the Health of Boston 2003 report that the minority population in Boston is more likely to be living below the poverty level, more likely to be uninsured, and more likely to have inadequate health care. Additionally, the Health of Boston 2004 report showed that minority residents are disproportionately affected by domestic violence, major health problems like cardiovascular disease and diabetes, and infant mortality. Dorchester specific data supports the findings of the BPHC, and Dorchester, with its high minority population, consistently ranks among the highest for most of the more serious health issues among Boston's residents. Past DHI health priorities have included: violence, asthma, cardiovascular disease, and infant mortality and morbidity. Current projects funded through the DHI include:

<u>Bird Street Community Center</u>: Offers individual case management to court involved youth. Individualized services promote healthy lifestyle choices. Individualized services focus on anger management with youth and monitors behaviors to provide coaching in order for youth to succeed in the court process and interaction with peers. <u>Codman Square Health Center</u>: A diabetes and obesity prevention program which emphasizes one-on-one education and support for individuals experiencing difficulties in managing their health issues. The program also provides for links to group activities offered by the health center.

<u>Kit Clark Senior Services</u>: The Fit-for-Life Project helps seniors improve their health and more effectively manage their chronic illnesses and confidently enjoy a higher quality of life and activities. Program activities include nutritional counseling, personal training programs, strength training, exercise circuits and other activities that promote better nutrition, healthier food choices, increased physical stamina, flexibility, and balance.

<u>Neponset Health Center</u>: Represents a unique effort between a non-profit service provider and a business association to provide youth from the St. Marks neighborhood with leadership and life skills training and summer employment to offer positive experiences and opportunities for civic engagement as alternatives to other more risky behaviors.

<u>Sportsmen's Tennis Club</u>: Offers an array of programming built around tennis which includes tennis lessons, life skills, academic and social enrichment programs to build self-esteem and a positive view of the future for some of the youngest community members.

<u>Vietnamese American Initiative for Development (Viet-AID)</u>: Offers after-school programming for middle school students which includes academic support, cultural and recreational activities and workshops to encourage and support students' to do well in school and to avoid gang involvement.

#### 6.2.4 Other Community Benefits Programs

#### 6.2.4.1 Community Health Centers

Another on-going priority for Tufts Medical Center is building the capacity of community health centers to serve their patients, and more effectively improve the overall health status of their patient populations. Tufts Medical Center continues to support and work with three health centers: South Boston Community Health Center, Manet Community Health Center, and Neponset Health Center, as well as provide programmatic funding to several more health centers in surrounding communities.

The programming that has been developed through the partnerships with community health centers includes increasing access to primary care and preventative medicine, increasing access to prenatal care and reducing infant mortality for the increasingly diverse patient populations served by the health centers.

6.2.4.2 South Boston Behavioral Health Clinic

Tufts Medical Center's South Boston Behavioral Health Clinic is a satellite community psychiatric clinic of Tufts Medical Center serving adults, children, and adolescents. It is located 10 minutes from the hospital and is a training site for both the General Psychiatry and the Child/Adolescent Psychiatry Residency Programs.

Comprehensive services available at the Clinic include: Individual psychotherapy, Group psychotherapy, Family psychotherapy, Psychopharmacology evaluation and management, and Substance abuse services. Services are provided by a multidisciplinary team of adult and child/adolescent psychiatrists, licensed independent clinical social workers, licensed psychologist, licensed mental health counselor, psychiatric clinical nurse specialist, as well as psychiatric residents and social work interns.

The Clinic has the spectrum of services and expertise to diagnose and treat a vast array of psychiatric disorders including mood and anxiety disorders, psychotic disorders, personality disorders, post traumatic stress disorder, and major depressive disorder.

#### 6.2.4.3 The Cushing House

Tufts Medical Center also provides significant support to the Cushing House of South Boston. The Cushing House is operated by the Gavin Foundation, Inc. The mission of the program is to provide a stabilizing transitional care residence for substance abusing young men and women who are unable to be served in a less restrictive facility. The typical client is diagnosed with moderate to severe substance abuse and in need of support. Residents have evidence of difficulty with traditional institutions and/or some experience with the court, social service or youth services system.

The program provides a nurturing, structured and safe environment for youngsters who are living in disorganized, fragmented and dysfunctional circumstances. It promotes selfcare, self-reliance and community responsibility, both through structured activities and the experience of living in this residential environment.

#### 6.2.4.4 Mayor's Summer Jobs Program

Tufts Medical Center participates in the Mayor's Summer Jobs Program, in partnership with the Boston Private Industry Council, last year placing more than 20 high school students in 20 departments. Students came from Boston Public Schools including Josiah Quincy Upper School, Boston Latin School, Charlestown High School, and South Boston High Schools. The program provides Boston high school students with an opportunity to build their skill sets, job experience, offer their cultural and linguistic skills in some cases, and helps to create interest in the next generation of workers to consider healthcare careers.

#### 6.3 PILOT Payments

Much of Tufts Medical Center's property is tax-exempt, however Tufts Medical Center contributes annual payments to the city through a Payment in Lieu of Taxes (PILOT) agreement with the City of Boston. Tufts Medical center has devoted more than \$1.4 million in funding annually to community benefit programming that directly benefits residents of Boston. Tufts Medical Center's PILOT contribution totaled over \$2.2 million in Fiscal Year 2010, an amount that equals 43% of our total margin for that year.

#### 6.4 Workforce Development and Training

Tufts Medical Center is one of the largest employers in the city of Boston and employs almost 5,000 people. Tufts Medical Center employs a diverse workforce to fill positions from ranging from administrative, technical, and hospitality related, such as patient transport, food services, and environmental services to research and direct patient care roles. Approximately 27% of the Medical Center's workforce is derived from residents of the City of Boston, while 40% of the workforce hails from the Greater Boston area.

The Medical Center has consistently put an emphasis on recruiting from the Chinatown community. The educational and linguistic requirements of positions at the Medical Center have often made this difficult to recruit large numbers of local residents into positions in the medical field. The Medical Center has sought to address these issues by working with local community organizations to provide language skills and basic education classes for community members and current employees. Tufts Medical Center conducts and participates in many workforce development and training initiatives to address some of the educational, skill and linguistic issues. To provide career training and promotion opportunities some of the programs Tufts Medical Center has embarked upon are:

#### 6.4.1 The Workplace Education Program

This program provides English for Speakers of Other Languages (ESOL) and GED preparation classes for entry-level employees in Environmental Services and other departments within the hospital who are seeking promotions. It is funded by both the Massachusetts Department of Elementary and Secondary Education and Tufts Medical Center through a partnership with the Asian American Civic Association. The ESOL program has served more than 50 students, the majority of who initially tested into zero through second grade reading levels. Students in both the ESOL and GED programs have shown remarkable growth through their test scores, grade levels, and overall English proficiency. Tufts Medical Center makes additional cash and in-kind contributions and provides students with paid release time to attend classes. Fifty percent of students have managed to study English or prepare for a GED while working two jobs.

#### 6.4.2 The Career Exploration Event

An annual event where employees have the opportunity to meet with department representatives who share their experiences. Educational partners, TERI College Access and the Tufts Medical Center Benefit's Department provide information about our onsite workplace education program for ESOL, the college entrance process, Certificate and Associate Degree programs and educational financing options.

#### 6.4.3 Tufts Medical Center Externship Program

A career training program established to assist inner-city adult students to prepare for the workforce by providing certificate programs that typically teach medical assistant, medical administrative assistant, administrative assistant, coding and billing skills to members of the following community organizations:

- Asian American Civic Association
- Boston Career Institute
- Bunker Hill Community College
- Everest Institute
- Gibbs College
- Health Training Center
- Horizon Learning Center
- Jewish Vocational Services
- LARE Training Center
- Medical Professional Institute
- Salter School
- YMCA Training, Inc.

The students from these programs come to Tufts Medical Center to complete a required internship in preparation for their certification, typically 160 hours, during which time they work in a supervised environment, utilizing the skills from their respective programs with a goal of future employment. These internships will typically lead to job opportunities for administrative assistant, patient services coordinator, unit coordinator, and phlebotomist positions. In fiscal year 2009, approximately 170 students completed the program. Hiring opportunities are possible following the externships.

#### 6.4.4 Other Workforce Development Activities

Participation in the Higher Education/Regional Hospital Working Group sponsored by the Department of Education and the Boston Healthcare Careers Consortium sponsored by the Private Industry Council. These groups include representatives of government agencies, academic institutions, workforce development representatives from local hospitals and community health centers, and other workforce development organizations. These groups focus on addressing higher education, training and employer needs.

Tufts Medical Center is committed to a diverse workforce and to providing equal opportunities to all members of the community and beyond. Through its regular recruitment channels the Medical Center reaches out to the general employment population, as well targeted minority populations, including the local Chinatown Community. These efforts are made through employment posting companies, such as Monster.com and local outlets such as the SamPan Newspaper.

In the next several years the healthcare industry will continue to see significant changes to the industry propelling it forward with advances in medical science, technology, patient demographics and economics, as well as changes to models of care delivery which will challenge even the most prepared and organized workforce. These changes will mean a true dedication to employee recruitment, retention and training; it will mean training in many different settings, from experiential learning in a team environment, web-based instruction and increased simulation-training. The future development proposed in this IMP will help ensure Tufts Medical Center has the facilities to meet the demands of an ever changing industry and workforce.

# **Appendices**

## Appendix A Community Benefits Report Fiscal Year 2010

## **Tufts** Medical Center

## FY 2010 REPORT TO THE ATTORNEY GENERAL

TUFTS MEDICAL CENTER Community Health Improvement Programs 800 Washington Street, Box 116 Boston, MA 02111

# TABLE OF CONTENTS

History
Mission Statement
Leadership
Community Involvement4
Community Health Needs Assessments4
Community Participation5
Neighborhood Profiles and Health Issues6
Neighborhood profile: Chinatown6
Neighborhood profile: Dorchester6
Neighborhood profile: South Boston7
The Community Benefits Plan8
Major Community Benefits Programs9
Research12
Community Services
Informing Community Giving13
Attachment A: Board of Governors' Committee on Community Outreach14
Attachment B: Asian Health Initiative Advisory Committee15
Attachment C: Dorchester Health Initiative Advisory Committee



*History*: Tufts Medical Center traces its history to 1796 when Boston residents, including founding fathers Paul Revere, Samuel Adams and Oliver Wendell Holmes, established the Boston Dispensary to provide the City's needy and poor with quality medical care. Tufts Medical Center and the Floating Hospital for Children continues a 200 plus year tradition of providing quality and accessible medical care to residents of Boston and beyond.

Employees and nationally and internationally recognized adult and pediatric health care providers and researchers work tirelessly each day to build upon the Medical Center's impressive history as one of the region's top academic medical centers. Their efforts resulted in Tufts Medical Center being recognized in 2010 by the University HealthSystem Consortium as one of the top ten academic medical centers in the nation for quality and safety measures.

*Mission statement:* The Medical Center's mission statement reflects its history and continuing commitment to meeting the needs of all its patients:

We strive to heal, to comfort, to teach, to learn, and to seek the knowledge to promote health and to prevent disease. Our patients and their families are at the center of everything we do. We dedicate ourselves to furthering our rich tradition of health care innovation, leadership, charity, and the highest standard of care and service to all in our community.

#### The Medical Center's community health mission is

To define the role and responsibility of Tufts Medical Center in supporting and sustaining the health and well-being of residents in communities that have historic or developing relationships with Tufts Medical Center, and

To provide leadership for academic medical centers in the creation of a model that implements a long term community health agenda.

The implementation of the Medical Center's community health mission reflects a proactive approach, one that moves away from the traditional medical model that responds to illness to a socio-ecological model that strives to prevent disease and health inequities.

*Leadership* for the community health mission is provided by the Medical Center's Board of Trustees, the Board of Governors and its standing Community Outreach Committee, many of whom are community leaders, the Senior Vice-President for Strategic Services and the Director of Community Health Improvement Programs.

The Board of Governors' Community Outreach Committee meets regularly and functions as the Medical Center's community benefits advisory group providing governance for the community

benefits planning process and institutional oversight for the implementation of the community benefits plan.

The Senior Vice President for Strategic Services has oversight responsibilities for the community benefits program and along with the Director of Community Health Improvement Programs works to coordinate the Medical Center's medical providers and resources for the implementation of the community benefits plan. They report to the Medical Center's Chief Executive Officer, the Board of Trustees and the Board of Governors to ensure that all community benefits programming are shared with the Medical Center's senior leadership.

Day-to-day management of the community benefits plan is the responsibility of the office of Community Health Improvement Programs (CHIP). CHIP was established in 1992 by the Board of Governors to help the Medical Center meet the emerging health needs of an ever increasing and diverse patient population and to develop, implement and coordinate strategies to address public health concerns and disease prevention within the Medical Center's service communities. Its Director and the Senior Vice President for Strategic Services comprise the leadership team that establishes relationships and collaborations within the Medical Center and with the respective communities to maintain or improve the health of community members and patients, especially from the communities that the Medical Center has had long standing relationships with or who are unable to effectively access healthcare due to cultural, linguistic, economic, or health reasons.

*Community involvement* is essential in guiding the Medical Center's efforts to not only provide the highest quality of care but to be responsive to patient needs and facilitate care that is linguistically and culturally accessible, appropriate and supportive. Community involvement occurs on multiple levels with community representation on the Board of Trustees, Board of Governors, Board of Governors' Community Outreach Committee, and Advisory Committees for the grant-funded initiatives, and Medical Center representation and participation in community-based planning efforts.

Tufts Medical Center conducts regular **community health needs assessments** to develop appropriate priorities for its community benefits programming. The needs assessments include review of public health data available from the Massachusetts Department of Public Health (DPH) and from the Boston Public Health Commission (BPHC) and its regular reports on the health of the city and the health of individual neighborhoods. These data are reviewed with community members, service providers, and other key informants who serve on Advisory Committees that guide specific community benefits efforts such as the Asian and Dorchester Health Initiatives. The combination of statistical data and data from key informants help to identify priorities that reflect needs in real time as well as community members' assessments and perceptions of issues and needs which guide the targeting of resources and programming that may not be reflected in publicly available sources.

As both the Asian and Dorchester Health Initiatives approached the third and final year of their respective funding cycles in 2010, a more formalized data review began in the spring of 2010 to lay the foundation for establishing priorities for the new three year grant-making cycle.

A review of maternal and infant health data suggested that there were populations within the community who were more vulnerable to problems associated with general health, access to medical care and the physical and social environments that contributed to higher risks for lowbirth weights and infant mortality.

In FY 2010, the Medical Center transitioned its Parent-to-Parent (P2P) Initiative to a competitive grant-making process and identified two new providers for the new program year, one of which focuses on the needs of pregnant women who are homeless. This grant-making process, completed during the latter half of FY 2009, enabled established P2P providers to integrate efforts within their sites to provide for more comprehensive and integrated approaches to meeting the needs of expectant mothers. The review of maternal and infant health data confirmed the on-going need for pre-natal care from vulnerable populations and enabled the Medical Center to extend funding for the 8 P2P into a second year.

Tufts Medical Center is an active member of a number of collaborative efforts where the exchange of information helps to complement data obtained through the other identified sources. Among the major community collaborations that contribute to the community health needs assessments are the Chinatown Coalition (a Healthy Boston Initiative coalition), Chinatown Safety Committee, Boston Alliance for Community Health (Community Health Network Areas 19), and the Boston Health Equity Committee, a committee convened by the Boston Public Health Commission (BPHC) on behalf of the Mayor of Boston. These forums help the Medical Center to be aware of emerging health issues that affect neighborhood residents, in particular the residents of the three neighborhoods with which the Medical Center has had established relationships and prior collaborations. This proactive approach continually informs the community benefits plan by complementing the data collected by the BPHC, DPH and many other agencies.

Tufts Medical Center values **community participation** in evaluating its services, developing programming to ensure that the Medical Center fulfills its mission of providing quality, patient-focused care, and to support the good health of Chinatown, Dorchester and South Boston, and the Boston Asian community, the Medical Center's largest non-English speaking patient population.

Community members, including the Board of Governors' Community Outreach Committee that oversees the Medical Center's community benefits programming, lend their insights, knowledge and advocacy to support the Medical Center's mission and commitment to community collaborations to address community health needs.

Established Advisory Committees are actively engaged in setting the priorities for funding and evaluation of both the Asian and Dorchester Health Initiatives. Community residents and representatives from community-based organizations and advocates represent 70% of the membership of the Asian Health Initiative's Advisory Committee and 64% of the Dorchester Health Initiative's Advisory Committee. The remainder of committee members consists of Medical Center staff, Board of Governors representatives, and government officials, including Boston Public Health Commission and Mayor's Office of Neighborhood Services representatives.

#### **Neighborhood Profiles and Health Issues**

The brief neighborhood profiles illustrate key demographics and health issues that guide the Medical Center's community benefits funding, departmental activities, and outreach, screening and educational efforts:

### Neighborhood profile: Chinatown

Boston's Chinatown is the smallest of the City's neighborhoods, located in Downtown Boston near major transportation nodes for north-south and east-west automotive travel (I-93 and I-90), train and bus travel (MBTA Orange and Silver Lines), and the City's downtown retail, financial and theater districts. Its 42 acres include a robust residential, economic and service hub for Greater Boston's Chinese and Asian community. More than 9,100 people live in Chinatown according to the 2000 U.S. Census, making it one of the most densely populated neighborhoods in the City of Boston. It is a community where many new immigrants settle and where approximately 35% of the residents describe themselves as speaking English "not well" or "not at all", approximately one-fifth of the population is over the age of 65, and one-fifth is disproportionately low-income.

Health data for Chinatown is often integrated with data from the adjoining neighborhoods making it difficult to identify health trends, let alone bring to the surface health disparities specific to its residents. The BPHC has consistently provided citywide health data for Asians in Boston to provide a holistic view of their needs, though data may be limited by not surveying non-English speaking residents. The most recent report from 2004 illustrates that health issues such as cancer, heart disease and stroke, are particular concerns.

All of this data, along with input from advisory committee members, led to the priorities for the Medical Center's Asian Health Initiative in 2007 and guided the emphases and funding for the three-year initiative: chronic disease management, family health, mental health, and violence prevention. This data, and data from the recent review of BPHC data, is being made available to a Chinatown community planning process and will be incorporated into a new section on Environmental Health in the 2010 Chinatown Master Plan.

#### Neighborhood profile: Dorchester

North and South Dorchester are among the largest neighborhoods in Boston and reflect the city's economic, linguistic and cultural diversity. Together they have a population of over 128,000 residents, or approximately 20% of the city's population. Census data indicates that 30% of the population is under the age of 17, and 32% are between the ages of 25 and 44.

Health data from the BPHC in 2007 indicated that Dorchester had the highest birth and infant mortality rates in the City, a high incidence of violence related injuries, the second highest homicide rate among Boston neighborhoods, a high asthma hospitalization rate among children under the age of 5; 50% of the adult population were considered to be obese or overweight. These health issues were identified as high priorities for the Medical Center's Dorchester Health Initiative in 2007 and its three-year funding cycle: obesity and diabetes prevention, violence prevention, and infant mortality.

Four of the Dorchester Health Initiative grantees have reported an increase in mental health issues for youth and young adults that they attribute to the continued violence in the community: trauma from experiencing and/or witnessing violent acts, the loss of friends and family members, and stress from constant threats of violence.

## Neighborhood profile: South Boston

South Boston is a community of approximately 30,000 residents and is a neighborhood in transition. Historically considered a family, working-class community, with a significant number of public housing developments, a flurry of new construction and conversions of multi-family housing to condominiums have been priced beyond the means of many long-time residents.

Health data from the 2006 BPHC report on the "Health of South Boston" and the "The Health of Boston 2007" identified high rates of alcohol and drug abuse and the highest mortality rate associated with substance abuse. The incidence of low-birth rates was 8.5%. South Boston's health education and public health issues are addressed through multiple programs established by Tufts Medical Center including substance abuse, specifically opioid dependence treatment and mental health programs that are based in the community.

Neighborhood	1990 Census	2000 Census	Change
Chinatown	6,434	8,537	32.7%
North Dorchester*	77,348	83,212	7.60%
South Dorchester*	29,433	2 9,938	1.70%
South Boston	43,663	45,291	3.70%
Boston	574. 283	589,141	2.60%
Rest	417,405	421,600	1.00%
All four	156,878	167,541	6.80%
Percentage	27.32%	28.4%	1.08%

Target neighborhoods and comparative data:

\*For its community benefits programming, Tufts Medical Center addresses the needs of Dorchester with a holistic approach that acknowledges that residents are not limited by artificial boundaries when they engage in services or health care. The Medical Center, however, acknowledges the unique differences in the demographics of North and South Dorchester and the health issues affecting the residents of each neighborhood.

Boston's diverse Asian and linguistic minority communities continue to grow and are dispersed throughout the city's many neighborhoods. To ensure that the Medical Center continues to meet the healthcare needs of the growing populations, hospital-based programs such as Interpreter Services, Asian Access Initiative, Asian Clinical Services, Asthma Prevention and Management Initiative, and the Josiah Quincy School Psychiatry Consultation Program were established.

# The Community Benefits Plan

Tufts Medical Center's Community Benefits Plan focuses on three broad areas:

- Identifying opportunities for public health related collaborations within the communities we serve
- Increasing the Medical Center's capacity to be user friendly to all patients and visitors
- Creating partnerships with community health centers for capacity building

Tufts Medical Center has established relationships with a wide range of community-based organizations that serve diverse constituents in order to identify opportunities to not only partner, develop, and implement programming that address the health issues, but to do so in a collaborative way, and in a manner that builds capacity within the community organizations to help meet the health needs of the community.

The Medical Center has three direct grant initiatives that support public health efforts which have been identified through community health needs assessments (Parent-to-Parent Program, Asian Health Initiative and Dorchester Health Initiative). All of the services are implemented by human service agencies and community health centers and advance the goals of sustaining or improving the health of the communities the Medical Center identifies as within its catchment and service area. Whenever appropriate, direct links are established between the programs funded by the initiatives and the Medical Center's clinical work.

To increase access to all hospital services to newcomer communities the Medical Center continues a long-standing commitment to increase cultural competency among our medical providers and to remove language barriers wherever possible. Our working definition of cultural competency is:

the ability to understand and respect the differences among people, and use our understanding to influence our interactions with one another. This involves developing the capability to deliver patient-centered services consistent with the needs and expectations of various cultures.

To help achieve this goal of being patient friendly and culturally and linguistically accessible, the Medical Center has reviewed staff recruitment efforts to reach out to potential new staff and clinicians who reflect the linguistic and cultural backgrounds of patients. In addition, a set of educational programs has been developed and is offered by the Human Resources Department for new staff and clinicians to introduce them to the cultures of the patients we serve. Training is available to all employees (which includes board members, physicians, volunteers, and others – including contractors and vendors who have direct patient contact) on cultural differences, with special training provided to residents and other clinical staff.

The Medical Center's commitment to being linguistically and culturally competent continues to be demonstrated through the Interpreter Services Department which can assist patients in 37 languages, including numerous dialects of Chinese. Twenty-four hour coverage is made possible with on-call interpreters and links to a telephone interpreting company.

Established programs such as the Asian Access Program, Asian Psychiatry and Asian Clinical Services provide linguistically accessible and culturally appropriate health care to members of the Chinatown and Boston Asian community.

Another on-going priority for the Medical Center is building the capacity of community health centers to serve their patients and more effectively improve the overall health status of their patient populations. In addition to support through grant initiatives, the Medical Center continues to provide financial support to South Boston Community Health Center, Manet Community Health Center, and Harbor Health Services' Neponset Health Center. The programming that has been developed through these partnerships include increasing access to primary care and preventative medicine, developing an asthma registry, and increasing access to prenatal care and reducing infant mortality.

# **Major Community Benefits Programs**

Three direct grant initiatives support community-based programs that address a wide range of health concerns and racial and ethnic disparities: Parent-to-Parent Program, Asian Health Initiative and Dorchester Health Initiative.

The Parent-to-Parent Program (P2P) began as a workforce development initiative in 1992 to address the high infant mortality rate and high incidence of low-birth rates in the neighborhood of Dorchester. The program has evolved over 17 years to a competitive grant-funded program that supports outreach workers in 8 community sites to work within their neighborhoods, or special populations, to engage expectant mothers in early pre-natal care and other services to ensure a healthy pregnancy and healthy baby. Outreach workers also provide case management to help patients with the coordination of appointments, accessing workshops on nutrition, early childhood development, safety training, transportation, housing, financial assistance, medical insurance, child care, employment, education and/or job training. Six of the 8 sites are located in Dorchester where the data shows that the infant mortality and low-birth rates continue to be higher than the city-wide average.

In FY 2010 the P2P sites were: Boston Asian: Youth Essential Service, Boston Health Care for the Homeless Program, Codman Square Health Center, Dorchester House Multi-Service Center, La Alianza Hispana, Manet Community Health Center, Neponset Health Center, and Uphams Corner Health Center.

When the Medical Center transitioned the P2P to a grant-funded initiative, two new providers were identified, the Boston Home Care for the Homeless and La Alianza Hispana. The providers focused on new target populations, homeless women, and an increased focus on Latinas.

In FY 2010 the eight P2P sites served a total of 682 new patients with 416 deliveries and 93% of the infants (389) weighing 5 lbs. 8 oz or more.

The Asian Health Initiative (AHI) is the oldest of the grant-funded initiatives and has been designed to provide multi-year funding to community-based organizations which introduce direct

services or health education activities to improve the health of their constituents. The AHI seeks to address health disparities in the Chinatown and Boston Asian community as a result of barriers such as language, culture, lack of insurance and low incomes.

In FY 2010, AHI began the final year of a three-year funding and programming cycle which addressed a wide spectrum of issues to promote healthy lifestyles and wellness. The array of services funded ranged from regularly scheduled health columns in the region's only bilingual Chinese-English newspaper, youth development and violence prevention, family support services, mental illness, and chronic disease management for seniors.

FY 2010 grantees were: Asian American Civic Association/Sampan, Asian Spectrum, Asian Task Force Against Domestic Violence, Boston Asian: Youth Essential Service, Boston Chinatown Neighborhood Center, Greater Boston Chinese Golden Age Center, and the Wang YMCA. Their total impact was:

- ➢ 876 direct service recipients
- > 244 Chinatown residents
- ➢ 504 residents of other Boston neighborhoods
- ▶ 128 non-Boston residents
- > 30% of service participants were White, Black and Latino
- ▶ 6,000 readers of the Sampan's bi-weekly, bi-lingual health column

The Dorchester Health Initiative (DHI) completed the final year of a three-year funding and programming cycle. Four of the five grantees focused on youth development and violence prevention: Bird Street Community Center, Neponset Health Center, Project R.I.G.H.T. and the Vietnamese American Civic Association. These grantees designed and implemented different approaches to reduce youth violence by providing opportunities for alternative and positive activities to build skills and resiliency to avoid being drawn into risky behaviors including violent actions, or build the skills, knowledge, and opportunities to help formulate solutions to the problems that promulgate violence. The approaches include civic engagement, mentoring programs, sports leagues, life skills development and summer employment programs. Together these four grantees served 5,073 youth between the ages of 8 and 24.

The fifth DHI grantee, Kit Clark Senior Services (KKSS) introduced the Fit-4-Life program to help seniors living in the sub-neighborhood of Fields Corner to reduce the incidence of obesity and its consequences. KKSS's partner in the Fit-4-Life program is Tufts University's Human Nutrition and Research Center on Aging which offered a unique opportunity to conduct research into the benefits of exercise and nutritional counseling while addressing the physical and social health of seniors living in the neighborhood.

Service impact of the grant funded initiatives: \* includes the Sampan's bi-weekly circulation of 6,000 issues

Name	Neighborhood(s) Served	Number Impacted
P2P	Dorchester/Chinatown/Quincy	682
AHI	Chinatown/Boston/Beyond	6,876*
DHI	Dorchester	5,250

Financial support for community health centers is another major community benefits program for the Medical Center's service area communities.

In FY 2010 South Boston Community Health Center continued to direct its support to two critical health issues, (1) expansion of a Pediatric Asthma Registry as part of the health center's efforts to reduce the rate of pediatric asthma hospitalizations and the impact that has on the community, and (2) reducing the level of substance abuse among the community's youth.

Manet Community Health Center, located in the City of Quincy, received support from Tufts Medical Center in part because of the significant growth of that City's Asian community and diversity of its patient population. Between the 1990 and 2000 U.S. Censuses, Quincy experienced more than a 300% increase in its Asian population, which has continued to grow for many reasons, including the proximity to Downtown Boston, job opportunities, easy access to public transportation and the availability and affordability of multi-family housing.

Manet has directed its support to four areas of programming designed to improve access to care for its patient population which is increasingly more diverse linguistically, ethnically, and culturally. The four areas are: disease awareness and prevention, immunization and vaccinations, general health education and promotion, and pre-natal care are the efforts designed to promote a better understanding and use of the American preventative health care model.

Neponset Health Center has dedicated the Medical Center's financial support to augment resources and capacity to reduce the incidence of low-birth weights and infant mortality in its sub-neighborhood of Dorchester. Neponset integrates the OB/GYN efforts with its Parent-to-Parent Program to create wrap-around services to help pregnant women obtain the pre-natal care and support services they need to ensure a healthy pregnancy, healthy baby and good post-partum care.

Clinical departments within the Medical Center are constantly monitoring their patients to determine ways to contribute to health maintenance, disease prevention, and early diagnosis and treatment. Many of the Medical Center's departments have developed and initiated specific health screenings related to the area of their concern and expertise and work with community groups or with Community Health Improvement Programs staff to support each other's efforts and commitment to the Medical Center's mission. Some health screenings have reflected the needs of specific patient groups, either by age or the prevalence of a particular disease.

Among the clinical services departments addressing specific health issues for populations and communities of special interest for whom there is a concern about health equity were:

- General Medicine's Patient Home Care Program for Chinese Elderly which provides homebound elderly with physician house calls,
- General Pediatrics, which has implemented a wide array of programs to serve specific target populations with special needs such as the Asthma Prevention and Management Initiative, Asian Clinical Services, Children with Disabilities, Center for Youth Wellness/Obesity Prevention, Substance Abuse Treatment,

- Health screenings hosted by the Medical Center, such as eye screenings on World Eye Health Day and a bone marrow donor recruitment drive,
- Health screenings and/or health and nutrition education conducted at community events such as the City of Quincy's Asian New Year Celebration, Boston Chinatown and Quincy August Moon Festival, Oak Street Fair, National Night Out, and YMCA Healthy Kids Fair,
- Kiwanis Outreach Programs, which work with different communities to promote safety and injury prevention for children and their families,
- Nephrology Kidney Early Evaluation Programs and Education and Screenings for communities known to have high incidences of high blood pressure and related chronic diseases and efforts to encourage organ donation, including Kidney Awareness Day,
- Obstetrics and Gynecology's two programs, Women's Health and Asian Access, enhance the collaboration between the Medical Center and area health centers to reach women atrisk for deferring pre-natal care,
- Otolaryngology's Early Detection of Nasopharyngeal Cancer for the Chinese community and Oral, Head and Neck Cancer Detection for multiple communities in direct response to the high incidence of these cancers in specific communities,
- Psychiatry, which provides School Consultations, clinical services for the South Boston Behavioral Health Clinic, and Asian Psychiatry Program,
- Social Work Services' Asian Access Program, helping patients to navigate their health care and the resources available to support their access to health care,
- A new collaboration between the Department of Pathology, OB/GYN, the Cancer Center, Radiology, Francis Stern Nutrition Center, Breast Health and Infusion Centers and Registration to reduce the barriers to screening, increase early detection and treatment, and increase survival rates for women with breast and cervical cancers in women who are under-served and uninsured. The 2010 focus was on Asian women.

A non-clinical community benefit which reflects the Medical Center's on-going efforts to provide culturally sensitive and linguistically accessible medical care, is the commitment to a strong Interpreter Services program, and its ability to provide limited English proficient patients with assistance in 37 languages. In FY 2010 Interpreter Services received requests from 11,000 unique patients for medical interpreting for over 48,000 patient encounters.

**Research:** Tufts Medical Center is a well-established and well-regarded academic medical institution engaged in many medical research projects. The newly funded project led by the Tufts Clinical and Translational Science Institute (CTSI) helped to build the capacity of community-based, non-health care providers to undertake research to identify the needs of their constituents and document the benefits of initiatives to address those needs. This capacity building effort was designed to will support and complement the on-going efforts to work with healthcare organizations, community and industry groups to "turn groundbreaking laboratory research into widely-used treatments for patients in a faster, more productive manner." This community engagement effort continues to foster collaborations between the general lay community, community-based organizations, the clinical practice community and the academic community to train pediatricians for work in under-served communities.

# **Community Service Program Highlights**

Tufts Medical Center encourages and supports a wide array of **community service** activities, including participation in, or financial support of outreach events, workforce development efforts and corporate sponsorships which also reflect support for community and capacity building.

Medical Center personnel also engage in community service activities that help to maintain the health of its service communities, with health being defined in broad terms to include the physical, economic, cultural and social health of the community, and lend their efforts to community and coalition building to sustain the assets of the community and to address the challenges to the community's overall health and the health of community members. Examples of this commitment include the Medical Center's participation in the Chinatown Coalition, and the advisory roles and contributions of many physicians and nurses in advancing the knowledge and skills of patients, patient caretakers, teachers, counselors and other helping professionals.

Some examples of community service efforts and staff volunteerism include the following:

- Medical providers serving as advisors lending their expertise to build the capacity of parents' groups or coalitions of advocacy organizations,
- City of Boston's annual "Boston Shines",
- Departmental supervisors participating in a workforce development initiative to provide externship opportunities for 130 participants from local job training programs,
- Medical Center partnership with Boston Public Schools to provide paid summer internships to high school students
- Child Psychiatry fellowship, providing weekly mental health consultation with school staff at Josiah Quincy School located in Chinatown,
- Medical Center community parking program providing neighborhood organizations, businesses and faith-based institutions access to parking at no cost on a regular basis.

# **Informing Community Giving**

Tufts Medical Center initiated a needs assessment in the spring of 2010 to guide its grant-making process for both the Asian and Dorchester Health Initiatives. Data, primarily from the BPHC identified key health issues for each of the initiatives' advisors who then recommended priorities based upon the data and their knowledge of the neighborhoods. Both initiatives established diabetes and obesity as two priorities for the new three year funding cycle. Each initiative, however, had a different third priority: for the AHI it is tobacco use (smoking) and its consequences, and for the DHI it is violence prevention programs for youth.

Data also indicated that for both North and South Dorchester, low birth rates remained an issue and the programs previously funded by the Parent-to-Parent Program were to be evaluated for a third year of funding.

The completed needs assessment and community benefits plan help guide the development of new initiatives to address the health issues and/or inequities that affect the Medical Center's priority service community.

#### Attachment A: Board of Governors' Committee on Community Outreach

Margaret Brown, Co-Chair Skadden, Arps, Slate, Meagher & Flom, LLP

> Eileen Casal, Co-Chair Teradyne, Inc.

Ruth Bramson Girls Scouts of Eastern Massachusetts

> Phil Conti, DMD Private Practice

Anthony Froio Robins, Kaplan, Miller, & Ciresi, LLP

> Stanley Goldstein Sleep Health Centers, LLC

> > Cerise Lim Jacobs

Mary Mahony Author

Ruth Moy Greater Boston Chinese Golden Age Center

> Peter Read PCR Consulting

Melissa Cleveland Salame

Tana Tselepis Holland & Co., LLP

Lila Wolff Retired Registered Nurse

Bak Fun Wong Josiah Quincy Upper School

## **Tufts Medical Center Liaisons**

Malisa BrownDirector, Government AffairsSherry DongDirector, Comm. Health Improvement ProgramsSteve PernaDonor Relations Coordinator, DevelopmentCatherine SquiresVice President, Development

# Attachment B: Asian Health Initiative Advisory Committee

Li Chen	Mary Chin	
Administrator	Director of Social Work	
South Cove Nursing Manor	Boston Medical Center	
120 Shawmut Avenue	One Boston Medical Center Place, Dowling 8	
Boston, MA 02118	Boston, MA 02118	
Stanley Goldstein	Meghan Patterson	
Trustee	Boston Public Health Commission	
24 Hobart Terrace	1010 Massachusetts Avenue, 6 <sup>th</sup> Floor	
Newton, MA 02459	Boston, MA 02118	
Marie Moy	Ruth Moy	
Chinatown Resident Association	Executive Director	
c/o BCNC	Greater Boston Chinese Golden Age Center	
885 Washington Street	75 Kneeland Street	
Boston, MA 02111	Boston, MA 02111	
William Moy	Beverly Wing	
So. Cove-Chinatown Neighborhood Council	The Chinatown Coalition	
65 Harrison Avenue, #501	c/o BCNC	
Boston, MA 02111	885 Washington Street	
	Boston, MA 02111	
Nga Vuong Division of Health Com Finance and Balian	Laurel Leslie, MD	
Division of Health Care Finance and Policy	Clinical Care Research	
Commonwealth of Massachusetts	Tufts Medical Center	
2 Boylston Street	800 Washington Street	
Boston, MA 02116	Boston, MA 02111	
Deborah Joelson	-	
Senior Vice President, Strategic Services		
Tuft Medical Center		
800 Washington Street, Box 470		
Boston, MA 02111		

#### <u>Staff:</u>

Sherry Dong, Director Community Health Improvement Programs Tufts Medical Center 800 Washington Street, Box 116 Boston, MA 02111

# Attachment C: Dorchester Health Initiative Advisory Committee

Meghan Patterson, MPH	Nancy Bucken	Mary Mahony
Program Director	Executive Dir. Neponset Health	Board of Governors Community Outreach
Disparities Project	Harbor Health Services, Inc.	Committee Member
Boston Public Health Commission	398 Neponset Avenue	
1010 Massachusetts Avenue, 6th Floor	Dorchester, MA 02122	
Boston, MA 02118		
Lauren Smyth	Linda Shepherd	Ira Schlosser
Mayor's Office of Neighborhood	Department of Public Health	Dorchester House Multi-Service Center
Services	10 Malcom X Blvd – G1	1353 Dorchester Avenue
Room 708 - City Hall	Roxbury, MA 02119	Dorchester, MA 02124
One City Hall Square		
Boston, MA 02201		
Laurel Leslie, MD	Chrassandra Reeves	Deborah Joelson
Clinical Care Research	HRIA	Senior Vice President, Strategic Services
Tufts Medical Center	622 Washington Street	Tufts Medical Center
800 Washington Street	Dorchester MA 02124	800 Washington Street, Box 470
Boston, MA 02111		Boston, MA 02111

#### Staff:

Sherry Dong, Director Community Health Improvement Programs Tufts Medical Center 800 Washington Street, Box 116 Boston, MA 02111

# Boston Redevelopment Authority

Boston's Planning & Economic Development Office Thomas M. Menino, *Mayor* Clarence J. Jones, *Chairman* John F. Palmieri, *Director*  One City Hall Square Boston, MA 02201-1007 Tel 617-722-4300 Fax 617-248-1937

June 3, 2010

Malisa Schuyler Director, Government Relations Tufts Medical Center 800 Washington Street #294 Boston, MA 02111

#### Re: Scoping Determination for the proposed Tufts Medical Center Institutional Master Plan

Dear Ms. Schuyler:

Please find enclosed the Scoping Determination for the proposed Tufts Medical Center Institutional Master Plan ("IMP"). The Scoping Determination describes information required by the Boston Redevelopment Authority in response to the Institutional Master Plan Notification Form, which was submitted under Article 80D of the Boston Zoning Code on April 20, 2010. Additional information may be required during the course of the review of the proposal.

If you have any questions regarding the Scoping Determination or the review process, please contact me at (617) 918-4425.

Sincerely,

Katelyn Sullivan

#### BOSTON REDEVELOPMENT AUTHORITY

#### SCOPING DETERMINATION FOR TUFTS MEDICAL CENTER INSTITUTIONAL MASTER PLAN

#### PREAMBLE

Tufts Medical Center ("Tufts") completed a 10-year Institutional Master Plan ("IMP") in March 1990 which described Tufts' mission and objectives, existing uses, structures, activities and proposed development plans for the campus.

On April 20, 2010 Tufts submitted to the BRA an Institutional Master Plan Notification Form ("IMPNF") for a new 10-year Institutional Master Plan which included an up-to-date inventory and analysis of the current campus, provides for continued use of existing buildings and describes planning initiatives anticipated within the next 10 years. The IMPNF did not contain any new proposed projects however it does contain several visionary elements for the campus over the next 15-20 years. On May 13, 2010, the BRA held a Scoping Session on the IMPNF. The comment period deadline was May 19, 2010. Over the course of the comment period, Tufts and the BRA met with the Tufts Task Force on May 10, 2010 and had a public meeting on May 13, 2010.

Based on the BRA's review of the IMPNF for the IMP, the BRA hereby issues its written Scoping Determination ("Scope") pursuant to Section 80D-5.3 of the Boston Zoning Code (the "Code"). Written comments in response to the IMPNF that were received by the BRA prior to the end of the public comment period are included in the Appendices of this Scoping Determination.

As stated in Section 80D-1 of the Boston Zoning Code ("Code"), "the purpose of Institutional Master Plan Review is to provide for the well-planned development of Institutional Uses in order to enhance their public service and economic development role in the surrounding neighborhoods." Under the Code, an Institutional Master Plan ("IMP") has a dual purpose of meeting the needs of the institution in a positive way. In preparing its IMP, Tufts will need not only to demonstrate an understanding of its future facilities needs but also the context of its campus; identification of all owned, leased and planned space, land uses, physical characteristics, planned changes, resident desires, and applicable public policy.

The BRA also seeks to enhance Tufts' presence in the City of Boston as an important economic development entity and employer. Care should be taken to respond to the concerns outlined below:

- 1. The BRA seeks to understand the long-term plans of its institutions therefore, the BRA requires IMPs of all institutions. Institutions will be required to provide updates to the BRA on the status of their IMP and any projects and commitments therein every 2 years on the anniversary of their approval by the Boston Zoning Commission.
- 2. Attractive residential neighborhoods are viewed by the BRA as being vital to the longterm success of Boston. Tufts sits within the context of the Chinatown neighborhood. Impacts from institutional project construction, operations and expansion must have

minimal negative impacts on the neighborhoods and Tufts should take appropriate steps to ensure this.

3. A Task Force has been appointed to assist and advise the BRA on the Tufts Medical Center IMP and any future proposed projects. Tufts is requested to provide 2 year regular updates to the Task Force members in addition to the BRA.

#### SUBMISSION REQUIREMENTS FOR THE TUFTS MEDICAL CENTER INSTITUTIONAL MASTER PLAN

The Scope requests information required by the BRA for its review of the proposed Institutional Master Plan in connection with the following:

- 1. Approval of the Tufts Medical Center Institutional Master Plan pursuant to Article 80D and other applicable sections of the Code.
- 2. Recommendation to the Boston Zoning Commission for approval of the Tufts Medical Center Institutional Master Plan.

The Tufts Medical Center Institutional Master Plan should be documented in a report of appropriate dimensions and in presentation materials with support the review and discussion of the IMP. Thirty-five (35) copies of the full report should be submitted to the BRA. Additional copies of the document should be available for distribution to the Tufts Task Force, community groups, and other interested parties in support of the public review process. The IMP document should include this Scoping Determination and text, maps, plans, and other graphic materials sufficient to clearly communicate the various elements of the IMP. The IMP should include a response to the comments made in the Scoping Session held on May 13, 2010 and the following elements:

#### I. TUFTS MISSION AND GOALS

The mission of Tufts as it relates to its Campus should be described. In this case, Campus refers to the area in or near the Chinatown neighborhood where Tufts occupies or proposes to occupy buildings, whether owned or leased, that are in such proximity that they share a common impact area and therefore should be the subject of the proposed IMP. The description should articulate the larger, as well as local aspects of the mission. Services to the local community are of particular interest. The population served by Tufts and the major programs conducted need to be described. Changes expected in the type or size of the mission components, particularly as they relate to any Proposed Project, should be highlighted. The longer term goals and the expected growth in the number of patients and research needs, at least ten years into the future, should be described. A statement of how the IMP will advance the mission and goals of Tufts should be included.

#### **II. PROGRAM NEEDS AND OBJECTIVES**

Specific program needs and objectives for the Campus to be addressed in the IMP should be defined in sufficient detail. A description of the analysis which was undertaken to identify the needs and objectives should be summarized. Included in the description should be current and future trends that are impacting Tufts and shaping program objectives. Projection of changes in the patient population, employee population, new or expanded programs, research including National Institute of Health ("NIH") grants, parking, Tufts enterprises and spin-off companies and other activities that require space on the Campus and in and outside of the City of Boston in the next 5 to 10 years should be included.

#### III. PHYSICAL NEEDS AND OBJECTIVES

#### A. Campus

A summary analysis of the Campus should be provided using sufficient text and visual materials. The important physical characteristics and conditions should be mapped and described including buildings, building height and floor area ratio ("FAR"), open space, landscape, pedestrian and vehicular circulation, historic resources, groundwater and other important features. Land use, patterns of use, functional areas, building clusters, landmarks or other historic resources, vistas, open space, view corridors and other environmental features should be delineated and studied. The analysis should identify the existing strengths of the Campus to be enhanced and the need of the Campus to be addressed in the IMP.

#### **B.** Facilities

An inventory and description of the buildings, facilities, and other structures occupied on the Campus and beyond should be provided as required by Section 80D-3.2 of the Code. An updated illustrative Campus plan should be prepared showing the location of each facility. For each building the following information should be provided: total gross floor area, occupancy or use by gross floor area, height in stories and in feet, FAR (for each lot), year built and ownership. Information on parking facilities should include the total number of parking spaces and a breakdown of the number of spaces allocated by used category. Appropriate description of other types of facilities and their use such as infrastructure systems, recreational fields, and places of assembly should be provided.

An analysis of the existing facilities in light of the identified program needs and objectives should be undertaken and documented. Specific facility objectives which are addressed in the IMP should be set out. This section should conclude with a summary of Tufts' need for additional facilities described by use and floor area projected on an annual basis over the ten-year period of the IMP.

#### **IV. CAMPUS CONTEXT**

The immediate area of the Campus around Tufts should be inventoried, analyzed and summarized in the IMP. The analysis should include land use, building height and FARs, historic resources, open space, student and employee population, public facilities and a tenyear projection of future growth. The capacity and condition of the infrastructure system that serves the Campus should be documented. The impact of Tufts and its proposed future expansion on the surrounding area should be discussed. Area residents and businesses should be consulted and their views regarding the IMP should be described. From this analysis, guidelines should be defined that will shape the IMP so that Tufts will relate positively to the area around it.

#### V. MASTER PLAN

#### A. Development Program

A description of all the significant physical changes proposed for the 10 year IMP time period should be provided at the level of definition required by Section 80D-3.4 of the Code. Included here should be information on the renovation of existing facilities, leased space both on and off the Campus, urban design improvements, and any potential future projects identified in the IMP. For those locations which are to gain zoning rights through the IMP, the information required is defined in Section 80D-3.4 of the Code. The impacts of each proposal on the Campus should be discussed at a level of definition appropriate to the IMP and mindful that large projects shall undergo Article 80 Large Project Review when they are implemented. The demolition of any

building over 50 years old is subject to the provision of Article 85 of the Zoning Code (Demolition Delay).

1. Buildings

The information required for each new or recycled building project proposed includes the following:

- (a) site location and approximate building footprint;
- (b) square feet of total gross floor are and principal subuses;
- (c) gross floor feet of space that is demolished or occupancy terminated;
- (d) floor area ration (FAR) for each lot;
- (e) building height in approximate feet and stories;
- (f) number of parking spaces;
- (g) current zoning of site;
- (h) total project cost;
- (i) estimated development impact project payments; and
- (i) estimated month and year of construction start and completion.
- 2. Campus Improvements

Information required for campus improvement projects include the following:

- (a) description;
- (b) location;
- (c) estimated cost; and
- (d) estimated month and year of construction start and completion.
- 3. Campus Expansion

If Tufts has any expansion proposed through lease or purchase, the following information must be provided for each expansion location:

(a) location;

- (b) gross floor area in square feet broken down by uses proposed by Tufts;
- (c) lease period;
- (d) current use;
- (e) current owners;
- (f) current zoning;
- (g) current property assessment and property taxes paid to the city;
- (h) current occupants to be dislocated;
- (i) description of proposed improvements;
- (j) estimated cost; and
- (k) acquisition and improvement schedule.
- 4. Development Program Context

A series of context drawings should be prepared showing phase-by-phase the proposed developments in their larger surroundings for the Campus, including:

(a) building heights map;

(b) an open space plan; and

(c) an isometric (3-D) drawing showing the general building massing of all buildings in the area.

A study model of the larger neighborhood at a scale of 1"=40'-0" showing the proposed phases in context should be provided.

**B.** Community Benefits Plan

1. Training and Employment Initiatives

Provide a detailed description of Tufts' current workforce and project future employment needs concerning the IMP and any other proposals. There is particular interest in learning about that part of the workforce that is drawn from the adjacent neighborhoods and about programs to recruit, train and promote this population.

#### 2. Taxes

In the context of the IMP process, Tufts should meet with the City's Assessing Department.

#### C. Public Notice

Tufts will be responsible for preparing and publishing in one or more newspapers of general circulation in the City of Boston a Public Notice of the submission of the IMP to the BRA as required by Section 80A-2. This Notice shall be published within five (5) days after the receipt of the IMP by the BRA. Public comments shall be transmitted to the BRA within sixty (60) days of the publication of this Notice, unless a time extension has been granted by the BRA in accordance with the provisions of Article 80 or to coordinate the IMP review with any required Large Project Review. Following publication of the Notice, Tufts shall submit to the BRA a copy of the published Notice together with the date of publication.

APPENDIX 1: Comments from Public Agencies

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#### Boston Water and Sewer Commission

980 Harrison Avenue Boston, MA 02119-2540 617-989-7000

May 17, 2010

Ms. Katelyn Sullivan Project Assistant Boston Redevelopment Authority One City Hall Square Boston, MA 02201-1007

Re: Tufts Medical Center Institutional Master Plan Notification Form

Dear Ms. Sullivan:

The Boston Water and Sewer Commission (Commission) has reviewed the Institutional Master Plan Notification Form (IMPNF) for the Tufts Medical Center. The IMPNF provides an up-todate inventory and analysis of the campus, provides for continued use of buildings and describes planning initiatives in the next ten years. There are no specific projects mentioned in the IMPNF.

The Commission has the following comments regarding the IMPNF:

#### General

1. For any proposed projects, for projects that involve modifications to the water, sewer or storm drain services, Tufts Medical Center must submit a General Service Application and a site plan to the Commission for review and approval. Any new or relocated water mains, sewers and storm drains must be designed and constructed at Tufts Medical Center's expense. They must be designed and constructed in conformance with the Commission's design standards, Water Distribution System and Sewer Use Regulations, and Requirements for Site Plans. To assure compliance with the Commission's requirements, Tufts Medical Center, must submit a site plan to the Commission's Engineering Customer Service Department for review and approval when the design of any new water and wastewater systems and the proposed service connections to those systems are 50 percent complete. The site plan should include the locations of any new, relocated and existing water mains, sewers and drains which serve the site, proposed service connections as well as water meter locations.

Prior to demolition of any buildings, all water, sewer and storm drain connections to the buildings must be cut and capped at the main pipe in accordance with the Commission's requirements. The proponent must then complete a Termination Verification Approval Form for a Demolition Permit, available from the Commission and submit the completed



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form to the City of Boston's Inspectional Services Department before a demolition permit will be issued.

3.

The Department of Environmental Protection, in cooperation with the Massachusetts Water Resources Authority and its member communities, are implementing a coordinated approach to flow control in the MWRA regional wastewater system, particularly the removal of extraneous clean water (e.g., infiltration/ inflow (I/I)) in the system. In this regard, DEP has been routinely requiring proponents proposing to add significant new wastewater flow to assist in the I/I reduction effort to ensure that the additional wastewater flows are offset by the removal of I/I. Currently, DEP is typically using a minimum 4:1 ratio for I/I removal to new wastewater flow added. The Commission supports the DEP/MWRA policy, and will require Tufts Medical Center to develop a consistent inflow reduction plan for new wastewater flows discharged by proposed projects.

4. For any proposed masonry repair and cleaning, Tufts Medical Center will be required to obtain from the Boston Air Pollution Control Commission, a permit for Abrasive Blasting or Chemical Cleaning. In accordance with this permit, Tufts Medical Center will be required to provide a detailed description as to how chemical mist and run-off will be contained and either treated before discharge to the sewer or drainage system or collected and disposed of lawfully off site. A copy of the description and any related site plans must be provided to the Commission's Engineering Customer Service Department for review before masonry repair and cleaning commences. Tufts Medical Center is advised that the Commission may impose additional conditions and requirements before permitting the discharge of the treated wash water to enter the sewer or drainage system.

- 5. Tufts Medical Center should be aware that the US Environmental Protection Agency issued a Remediation General Permit (RGP) for Groundwater Remediation, Contaminated Construction Dewatering, and Miscellaneous Surface Water Discharges. If any proposed project involves any subsurface work and groundwater contaminated with petroleum products, for example, is encountered, Tufts Mdical Center will be required to apply for a RGP to cover these discharges.
- 6. Tufts Medical Center should provide separate estimates of peak and continuous maximum water demand for residential, irrigation and air-conditioning make-up water for any proposed project. Estimates should be based on full-site build-out of the proposed project. Tufts Medical Center should also provide the methodology used to estimate water demand for the proposed project.
- 7. A Groundwater Conservation Overlay District has been developed and this institution is within it. This district is intended to promote the restoration of groundwater levels and reduce the impact of surface water runoff. The applicant for a building permit may be required to construct a structure capable of retaining a specific amount of stormwater accumulated on the site. This retention structure would be designed to direct the



stormwater towards the groundwater table for recharge. Tufts Medical Center should contact the Inspectional Services Department for further information.

#### Water

- 1. In addition to the water conservation measures required by the Massachusetts Plumbing Code, Tufts Medical Center should also consider implementing other water saving measures, such as installing low flow toilets and flow-restricting faucets. The Commission suggests that any public restrooms also be equipped with sensor-operated faucets and toilets.
- 2. If a hydrant is to be used during any proposed construction, Tufts Medical Center will be required to obtain a Hydrant Permit for use of any hydrant during the construction phase of this project. The water used from the hydrant must be metered. Tufts Medical Center should contact the Commission's Operations Division for information on and to obtain a Hydrant Permit.
- 3. The Commission is utilizing a Fixed Radio Meter Reading System to obtain water meter readings. For new water meters, the Commission provides a Meter Transmitter Unit (MTU) and connects the device to the meter. For information regarding the installation of MTUs, Tufts Medical Center should contact the Commission's Meter installation Department.
- 4. If potable water is to be used for irrigation of any landscaped areas, the amount should be quantified. If Tufts Medical Center plans to install a sprinkler system, the Commission suggests that timers, tension meters (soil moisture indicators) and rainfall sensors also be installed. The Commission strongly encourages the creation of landscape that requires minimal use of potable water.

#### Sewage / Drainage

- 1. For any proposed projects, the proponent must submit to the Commission's Engineering Customer Service Department a detailed stormwater management plan which:
  - Identifies best management practices for controlling erosion and for preventing the discharge of sediment and contaminated groundwater or stormwater runoff to the Commission's drainage system when the construction is underway.
  - Includes a site map which shows, at a minimum, existing drainage patterns and areas used for storage or treatment of contaminated soils, groundwater or stormwater, and the location of major control or treatment structures to be utilized during the construction.



- Provides a stormwater management plan in compliance with the DEP's standards mentioned above. The plan should include a description of the measures to control pollutants in stormwater after construction is completed.
- 2. Developers of projects involving disturbances of land of one acre or more are required to obtain an NPDES General Permit for Construction from the Environmental Protection Agency and the Massachusetts Department of Environmental Protection. Tufts Medical Center is responsible for determining if such a permit is required and for obtaining the permit. If such a permit is required, it is requested that a copy of the permit and any pollution prevention plan prepared pursuant to the permit be provided to the Commission's Engineering Services Department prior to the commencement of construction. The pollution prevention plan submitted pursuant to a NPDES Permit may be submitted in place of the pollution prevention plan required by the Commission provided the Plan addresses the same components identified in item 1 above.
- 3. Tufts Medical Center must fully investigate methods for retaining stormwater on-site before the Commission will consider a request to discharge stormwater to the Commission's system. The site plan for any proposed projects should indicate how storm drainage from roof drains will be handled and the feasibility of retaining their stormwater discharge on-site. Under no circumstances will stormwater be allowed to discharge to a sanitary sewer.
- 4. The Commission requests that Tufts Medical Center install a permanent casting stating "Don't Dump: Drains to Boston Harbor" next to any catch basin that is created or modified as part of any proposed project. The proponent should contact the Commission's Operations Division for information regarding the purchase of the castings.
- 5. If a cafeteria or food service facility is built as part of any project, grease traps will be required in accordance with the Commission's Sewer Use Regulations. Tufts Medical Center is advised to consult with Mr. Richard Fowler, Deputy Superintendent of Field Operations, with regards to grease traps.
- 6. The Commission requires that existing stormwater and sanitary sewer service connections, which are to be re-used by the proposed project, be dye tested to confirm they are connected to the appropriate system.
- 7. Sanitary sewage must be kept separate from stormwater and separate sanitary sewer and storm drain service connections must be provided.
- 8. If Tufts Medical Center seeks to discharge dewatering drainage to the Commission's sewer system, they will be required to obtain a Drainage Discharge Permit from the Commission's Engineering Customer Service Department prior to discharge.



Thank you for the opportunity to comment on this IMPNF.

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Yours truly, John P. Sullivan, P.E.

John P. Sullivan, P.I Chief Engineer

JPS/afh

c: Tufts Medical Center M. Zlody, BED K. Pedersen P. Larocque, BWSC



Katelyn Sullivan Project Assistant Boston Redevelopment Authority One City Hall Square Boston, MA 02201-1007

April 28, 2010

Dear Ms. Sullivan:

Regarding the Project Notification Form for Tufts Medical Center project submitted to the BRA on April 7, 2010 the Boston Fire Department requires the following issues addressed by a qualified individual.

- 1. Emergency vehicle site access to the new buildings as well as existing buildings that might be affected.
- 2. Impact on availability and accessibility of hydrant locations for new buildings as well as for any existing buildings that might be impacted.
- 3. Impact on availability and accessibility to siamese connection locations for new buildings as well as for any existing buildings that might be impacted.
- 4. Impact that a transformer vault fire or explosion will have on the fire safety of the building. Particularly as it relates to the location of the vault.
- 5. Need for Boston Fire Department permit requirements as outlined in the Boston Fire Prevention Code, the Massachusetts Fire Prevention Regulations (527 CMR), and the Massachusetts Fire Prevention Laws (MGL CH148).
- 6. For projects involving air-supported structures, it is critical that the impact of the design has on fire safety relative to the interaction of the area underneath the structure to the structure as well as to the interaction of the structure to the area underneath the structure.

These items should be analyzed for all phases of the construction as well as the final design stage. This project will need permits from the Boston Fire Department as well as the Inspectional Services Department.

Respectfully,

Frank M. Kodzis Fire Marshal





Thomas M. Menino, Mayor/FIRE DEPARTMENT/115 Southampton Street 02118