Town Gown Report to the City of Cambridge

2012

Massachusetts Institute of Technology

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2011-2012 Term (7/1/11 - 6/30/12)

Submitted December 17, 2012

Contents

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I. Existing Conditions

A. Faculty & Staff

	2008	2009	2010	2011	2012	2022 (projected)
Cambridge-based Staff						
Head Count[1]	9,407	9,778	8,857	8,893	**9,124**	9,000-10,000
FTEs	7,935	8,258	7,461	7,483	**7,707**	
Cambridge-based Faculty						
Head Count	994	996	1,012	1,002	**1,003**	~1,100
FTEs	990	991	1,009	997	**997**	
Number of Cambridge Residents Employed at Cambridge Facilities	2,153	2,267	2,170	2,258	**2,359**	~2,400

1 The establishment and expansion of the Broad Institute, the McGovern Institute for Brain Research, and the Picower Institute for Learning and Memory and more established research centers accounts for much of the staff growth between 2008 and 2009. The decrease in staff in 2010 is due mainly to the separation of the Broad Institute, which was effective July 1, 2009.

B. Student Body

	2008	2009	2010	2011	2012	2022 (projected)
Total Undergraduate Students	4,163	4,138	4,218	4,285	**4,363**	4,500
Day	4,163	4,138	4,218	4,285	**4,363**	
Evening	N/A	N/A	N/A	N/A	**N/A**	
Full Time	4,114	4,105	4,190	4,241	**4,335**	
Part Time	49	33	28	44	28	
Total Graduate Students	5,806	5,916	5,960	6,040	**6,259**	6,400-6,600[2]
Day	5,806	5,916	5,960	6,040	**6,259**	
Evening	N/A	N/A	N/A	N/A	**N/A**	
Full Time	5,731	5,889	5,940	6,017	**6,229**	
Part Time	75	27	20	23	**30**	
Non-Degree Students	148	151	134	153	**173**	
Day	148	151	134	153	**173**	
Evening	N/A	N/A	N/A	N/A	**N/A**	
Total Students Attending Classes in Cambridge	10,117	10,205	10,312	10,478	**10,795**	10,900-11,100
Non-resident students not included	103	151	72	88	**99**	

2 There is not an overall plan to make changes to the graduate student population. Enrollment fluctuates depending on the independent decisions of academic departments. These decisions are governed by a variety of factors including the availability of research funding and the ability of international students to obtain visas. International students account for approximately 38% of the graduate student population.

C. Student Residences

	2008	2009	2010	2011	2012	2022 (projected)
Number of Undergraduate Students residing in Cambridge						
In Institute-approved housing (includes dormitories, fraternities, sororities and independent living groups)	3,228	3,315	3,328	3,410	**3,503**	3,500-3,600
In off-campus housing owned and managed by MIT	6	5	3	14	**22**	
In off-campus non-MIT housing	75	77	101	92	**71**	
Number of Graduate Students residing in Cambridge						
In Institute-approved housing (includes dormitories, fraternities, sororities and independent living groups)	2,178	2,275	2,313	2,286	**2,352**	2,100-2,500
In off-campus housing owned and managed by MIT	183	161	129	96	**111**	
In off-campus non-MIT housing	1,477	1,652	1,690	1,903	**1,736**	
Student Parking						
Number of parking spaces maintained for undergraduate and graduate students (including resident and commuter parking)	1,103	1,103	1,103	1,103	**1,103**	

D. Facilities & Land Owned[3]

	2008	2009	2010	2011	2012	2022 (projected)
Acres						
Tax Exempt	160	160	160[4]	160	**160**	
Taxable	95	95	94	93	**93**	
Number of Buildings (academic)	103	104	107	110	**110**	
Dormitories						
Number of Buildings	25[5]	26	26	28	**28**	
Number of Beds	5,290	5,364	5,524	5,491	**5,940**	
Size of Buildings (gross floor area)						
Institutional/Academic	6,286,578	6,015,884	6,401,422	6,766,465	**6,800,368**	
Student Activities/Athletic/Service	2,208,555	2,245,478	2,443,534	2,462,281	**2,469,050**	
Dormitory/Nontaxable Residential	2,677,669	2,930,504	2,930,215	2,919,890[6]	**2,924,151**	
Commercial[7]	5,112,406	5,112,406	5,138,431	5,096,716	**4,962,958**	
Taxable Residential[8]	175[9]	175	175	171	**164**	

Parking spaces maintained in Cambridge

Number of parking spaces maintained for students:	**1,103**
Number of parking spaces maintained for faculty, staff and visitors:	**3,267**

3 MIT and the City agreed that sub-area divisions are unnecessary in this section.

4 While this figure remains the same, previous years' acreage erroneously included 1 acre that was not tax exempt. The acreage should have been reported as 159 for 2008 and 2009.

5 The change in number of dormitory buildings is due to a change in reporting methodology.

6 The decrease in the gross floor area of Dormitory/Nontaxable Residential is due to a correction in space plans for NW86. In 2010 the gross floor area should have been reported as 2,903,504 gsf.

Housing

	Tax Exempt: MIT-Owned and Managed Housing	Tax Exempt: Other Housing	Taxable: MIT-Owned and Managed Housing[10]	Taxable: Other Housing (Univ. Park & 100 Mem. Dr. Ground Leases)
2008[11]				
Number of Units	none	none	175	1,105
Number of Buildings	none	none	15	7
2009				
Number of Units	none	none	175	1,105
Number of Buildings	none	none	15	7
2010				
Number of Units	none	none	175	1,105
Number of Buildings	none	none	15	7
2011				
Number of Units	none	none	171	1,101
Number of Buildings	none	none	15	7
2012				
Number of Units	none	none	164	930[12]
Number of Buildings	none	none	15	7
2022 (Projected)				
Number of Units	none	none	164	930
Number of Buildings	none	none	15	7

7 MIT's commercial properties are measured by rentable square feet.
8 MIT's taxable residential properties are measured by rental units.
9 The addition of three units is the result of a change in reporting methodology.
10 Occupied by both MIT and non-MIT residents.
11 The addition of three units and three buildings in the Taxable: MIT-Owned and Managed Housing count is the result of a change in reporting methodology.
12 Change in number of units from previous years is the result of a change in reporting methodology.

Property Transfers

Cambridge properties purchased since filing previous Town Gown Report: None
Cambridge properties sold since filing previous Town Gown Report: 2 Condos at 71 Spring Street, 3 Condos at 218 Thorndike Street and 1 Condo at 221 Hamilton Street.
Planned dispositions or acquisitions: None

E. Real Estate Leased

Use	Leased Location[13]	Square Feet[14]
Institutional/Academic	1 Cambridge Center	35,594
Institutional/Academic	5 Cambridge Center	30,576
Institutional/Academic	7 Cambridge Center	231,028
Institutional/Academic	11 Cambridge Center	10,940
Institutional/Academic	500 Technology Square	86,515
Institutional/Academic	600 Technology Square	83,561
Institutional/Academic	700 Technology Square	8,876
Institutional/Academic	One Hampshire Street	23,378
	TOTAL	499,528

F. Payments to City of Cambridge

	FY 08	FY 09	FY 10	FY 11	FY 12
Real Estate Taxes Paid[15]	$28,905,163	$31,219,327	$32,978,289	$34,926,204	**$36,524,580***
Payment in Lieu of Taxes (PILOT)[16]	$1,847,603	$1,774,115	$1,701,638	$1,744,179	**$2,354,917**
Water & Sewer Fees Paid	$5,456,917	$4,661,336	$5,403,736	$5,938,689	**$5,997,575**
Other Fees & Permits Paid	$3,527,639	$996,525	$851,810	$2,163,013	**$1,218,687**
Total Payments**	$39,737,322	$38,651,303	$40,801,473	$44,772,085	**$46,095,759**

* MIT's FY 12 real estate tax payment represents 12.2% of the City's total tax revenue stream.

** MIT's Cambridge First Purchasing Program resulted in the additional investment of over $58.4 million in Cambridge businesses in FY 12. This program, together with taxes paid, payments in lieu of taxes, and municipal fees, brought MIT's 2012 economic contribution to the City to more than $104.5 million.

13 Leased by MIT from third-party landlords.
14 The square footage will, in most cases, only be a portion of the entire building.
15 Includes real estate taxes paid by MIT, taxes paid on MIT-owned property through ground leases, and real estate taxes generated by Independent Living Groups.
16 The amount of MIT's PILOT payment is governed by the 2004 agreement between MIT and the City of Cambridge.

G. Institutional Shuttle Information

Route Name	Vehicle Type and Capacity	Frequency of Operation	Weekday Hours of Operation	Weekend Hours of Operation
Tech Shuttle	Mid-size transit 28 seats	10 minute peak, 20 minute off peak	6:15AM – 7:10PM	none
Boston Daytime Shuttle	Mid-size transit 28 seats	25 minute (September - May)	8:00AM – 5:54PM	none
Cambridge East Saferide	Mid-size transit 28 seats	30 minute	6:00PM – 2:25AM	6:00PM – 3:25AM
Cambridge West Saferide	Mid-size transit 28 seats	30 minute	6:00PM – 2:31AM	6:00PM – 3:31AM
Boston East Saferide	Mid-size transit 28 seats	20 minute	6:00PM – 2:37AM	6:00PM – 3:14AM
Boston West Saferide	14 passenger mini-bus	30 minute	6:05PM – 2:31AM	6:05PM – 3:31AM
Grocery Shuttle	Mid-size transit 28 seats	45 minute	none	Sunday 11:30AM – 4:30PM

Ridership Data

Route Name	Annual Ridership
Tech Shuttle	550,000
Combined Saferide Shuttles	276,000
Boston Daytime Shuttle	74,000
Grocery Shuttle	8,000
EZRide (Northwest Shuttle)[17]	265,000

Shuttle Coordination Efforts

MIT's shuttle service is designed to ensure safety and meet the demands of faculty, staff, and student users. As the demand for services changes, the Institute adjusts its shuttle services to best serve the community. There is very little overlap of MIT shuttle service with other public or private bus and shuttle services. The MIT Northwest Campus is serviced by the EZRide shuttle which is operated by the Charles River TMA.

The Parking and Transportation Office in cooperation with the Graduate Student Council and the Undergraduate Association operates a Sunday afternoon Grocery shuttle with service to Trader Joe's and Whole Foods Market from campus residences. This has resulted in better service with fewer vehicles on the road.

17 *Operated by CRTMA.*

II. Future Plans Narrative

A. MIT: Transition, Challenges and Opportunities

L. Rafael Reif was inaugurated as MIT's 17th president on September 21, 2012. The inauguration completed a transition of Institute senior leadership that started last year with Israel Ruiz being named Executive Vice President and Treasurer and continued with the appointment last summer of Professor Chris Kaiser as Provost. New leadership naturally provides an opportunity to reflect on past plans and work and to review previously set priorities.

President Reif's inaugural address underscored the continuity of traditional concerns of the Institute such as advocacy for basic research, commitment to diversity and inclusion and application of knowledge to the world's greatest challenges. President Reif also emphasized the importance of strategic support for other growing parts of MIT's culture, such as engagement and collaboration on a global scale and support for the culture of innovation and entrepreneurship starting in Cambridge, but with global impact.

MIT's 17th president, L. Rafael Reif, is introduced at his inauguration ceremony.

The Town-Gown annual report and the accompanying presentation to the Cambridge Planning Board have often been forums for MIT to explain its need for flexibility and responsiveness in its planning and development activities, primarily to accommodate research in new science and technology fields. Now, President Reif has called attention to evolving changes for teaching and the residential research university as a whole that have placed higher education at "a historically important, but difficult crossroads – one full of opportunity, but also full of risks."

President Reif is referring to the powerful emergence of on-line educational technology, in which MIT has been a prominent leader with MITx and its collaborative Edx platform. He notes that this technology presents the possibility of a credible low-cost alternative to traditional higher education at a time when cost pressures on families are particularly acute. President Reif poses several questions: What will be the impact of these trends on the residential research university? How can the new technologies "strengthen the education we offer on our own campus?" How will the MIT community lead in inventing the "residential research campus of the future?"

These challenges to the educational program of MIT come at a time when there are challenges on the financial front. To cite just one, fifty years ago, nearly two-thirds of MIT's Campus operating revenue came from research, almost exclusively from federal sources, and 16% came from current gifts and investments. Now, research makes up only 38% of operating revenue with nearly one-third coming from private, foundation and international sources. Perhaps most important, the operating budget now depends on gifts and investments for over 34% of its total.

The need to maintain affordability, the uncertainty about federal research funding going forward and the volatility of investment returns pose challenges to the achievement of the Institute's fundamental purposes in advancing knowledge and educating students to serve the nation and the world in the 21st century.

MIT is, of course, ready and willing to take on these challenges and is confident that it can succeed with the collective wisdom of both the MIT and broader Cambridge communities.

MIT 2030: MIT's Planning Framework

As described in last year's report MIT continues to be engaged in and served by MIT2030, a planning tool for the physical campus. (See http://web.mit.edu/mit2030/.) MIT 2030 is a framework that helps the Institute make thoughtful, well-informed choices about its physical development and renewal in the service of MIT's mission and evolving needs.

MIT 2030 is not a fixed plan. Rather, it's an ongoing process, a tool for envisioning — and inventing — a vibrant future for our physical campus and the innovation district close by.

The MIT 2030 framework provides principles that help focus and clarify this process.

The objectives of MIT 2030 are to:

- Align campus renewal priorities with current and future academic needs and opportunities;
- Pursue an overall development approach that integrates campus planning objectives and MIT real estate activity to continue creating and supporting an innovation ecosystem while fostering fruitful collaborations between MIT and its surrounding community; and
- Provide thoughtful guidance for the ongoing physical stewardship of the Institute, to ensure the continuation and integrity of its mission.

In carrying out these objectives, MIT is guided by the following principles:

- Where possible, address facilities requirements through renewal and renovation;
- Accelerate systematic capital renewal programs (renewal of roofs, elevators, other systems); and
- Create flexible science and technology research space that responds to innovative academic and collaborative initiatives

The MIT 2030 framework will continue to guide MIT senior leadership in the evolution of the campus and its surrounding environment in the coming years. This past summer, Provost Kaiser convened a faculty task force to provide advice on the shape of the Kendall Square initiative and on how to engage the MIT community in the evolution of the MIT 2030 framework. We expect that MIT 2030 will continue in the evaluation of the needs of the campus and, as a result, will continue to evolve and change over time.

B. Accelerated Capital Renewal and Comprehensive Stewardship

The wave of growth since 2000 increased the total space on campus from 9.4 million square feet to 12.2 million square feet, an increase of 30%. During this same period, the estimated backlog of deferred maintenance grew from $900 million to $2.4 billion . Deferred maintenance is the cost to make all necessary repairs for building systems to enable MIT's mission of teaching and research by providing a safe and comfortable physical environment. MIT's previous program to address deferred maintenance was to repair or replace a few building systems across the campus, typically in the course of programmatic alterations, engage in a small number of major renovation projects and to repair immediate needs upon failure. The average spending on this program was $20 million per year. Continuation of this program would have resulted in an expanded backlog of deferred maintenance items, estimated to total $3.3 billion by the end of this decade.

Addressing the primary objective of MIT 2030 of aligning campus renewal priorities with current and future academic needs and opportunities, MIT has established a new program called Accelerated Capital Renewal (ACR) to reverse this trend. There are three major goals of the new program:

1. Maximize the impact of investment, by selecting projects that
    a. Improve the physical environment (i.e., technical condition, human comfort and experience and safety)
    b. Enable MIT's mission
    c. Leverage programmatic investments
2. Stabilize physical deterioration by prioritizing work
    a. Create new program of maintenance and stewardship for newest buildings, keeping new buildings operating in peak performance
    b. Address issues in oldest buildings, reducing deferred maintenance
3. Improved accountability and stewardship of MIT's physical assets

Earlier this year, MIT approved the first phase of projects for ACR. A methodology for setting priorities using the goal of maximizing impact of investment was established and used to select priority buildings. The $250 million three year program has been initiated to slow and then reverse the growth in deferred maintenance needs on the campus.

The Accelerated Capital Renewal program consists of the following five areas:

1. Comprehensive Building Upgrades: A set of priority buildings has been identified for which MIT is conducting Rapid Response Feasibility Studies. These assessments will document deficiencies in buildings' systems and outline options for building renovation.

2. Targeted Systems: A process to capture capital renewal needs, focusing on building systems for each priority building.

3. Programmatic Support: Specific infrastructure upgrades and installations to leverage planned programmatic investments.

4. MRO+: An expanded scope to existing Maintenance Repair Operations (MRO) funds intended to address failing or near failing system needs across campus immediately.

5. Utilities: Capital renewal needs associated with utilities distribution infrastructure and the Central Utility Plant (CUP).

Another major component of the overall program is to ensure that the regular maintenance of MIT's buildings reflects higher standards of asset management. Starting with a collection of new or substantially renovated buildings on campus, the Comprehensive Stewardship Group has been established to move MIT's existing level of effort characterized as "Reactive Management," to one of Comprehensive Stewardship. This includes not only a higher day-to-day maintenance effort, but also regular upgrades of building systems and equipment.

This coordinated effort will reduce deferred maintenance in our buildings, better enable our buildings to support the Institute's initiatives, and provide a systematic approach to our stewardship of the campus.

C. MIT Students, Faculty, and Staff

The number of undergraduates at MIT dropped by 524 over 25 years, reaching a low point of 4,109 in 2004. The opening of Fariborz Maseeh Hall in the fall of 2011 facilitated growth in the undergraduate population to 4,363 and will permit implementation of the long-discussed plan to restore the undergraduate population to 4,500 over the next few years. (Please note that the figures for student population reflect the prior school year's numbers.)

In recent years, the number of graduate students has been below 6,000, finally surpassing 6,000 in 2010-2011 with 6,040 total graduate students. For the 2011-2012 year, there was growth of 3.6% in the graduate student population resulting in a total of 6,259 graduate students. Graduate student population growth is contingent on a large number of factors, including research funding levels, and economic conditions.

For 25 years, the number of tenured faculty members has been stable at around 1,000. The separation of the Broad Institute from MIT in July 2009 was reflected in the 9.4% decrease in total staff for the 2009-2010 school year. This change was a one-time reduction in staff population and removed a growth driver from the Institute's population numbers. There has been a 1.74% annual gain in the staff population over the last two years.

D. Housing

Undergraduate Housing

MIT provides housing for its undergraduate students in 12 residence halls. In addition, students may choose to live in one of 37 residential fraternities, sororities, or independent living groups (FSILGs) in Boston and Cambridge. Housing is guaranteed for all four years of the undergraduate experience; therefore over 98% of MIT's 4,363 undergraduates live in residence halls or FSILGs. MIT is evaluating the existing conditions of our residences as part of renewal planning.

Graduate Housing

Graduate housing is provided in seven residence halls and apartment buildings on the MIT campus. Currently, MIT houses 39% of its total graduate student population and 56% of its graduate students who live Cambridge. Since 1997, the number of MIT graduate students housed on campus has risen from 1,660 to 2,463. During that time, MIT has invested significantly in the creation of a graduate resident community in the northwest sector of the campus that has brought on line over 1,300 new graduate beds in three new or renovated facilities:

- The Warehouse, 224 Albany Street (2001): 120 beds
- Sidney-Pacific, 70 Pacific Street (2002): 681 beds
- Ashdown, 235 Albany Street (2008): 541 beds

By way of comparison, of the 38,200+ graduate students attending schools in the City of Boston, 65.1% live outside of Boston and only 6% are housed on university campuses. MIT stands out among its peers in housing 39% of its graduate students. This is higher than other major local institutions, such as Harvard (34%) and Boston University (6%). Among MIT's peer institutions, only Princeton, Stanford and UC San Diego provide a higher level of graduate student housing.

Despite these achievements, the high cost of housing in Cambridge and other central areas continues to present problems for MIT graduate students living on limited means during their studies. The faculty task force convened by the Provost, mentioned above, noted the following about graduate housing in its report:

> "MIT needs to carefully consider the need for additional campus-serving housing, especially for graduate students... At this point our Task Force does not have sufficient information to judge whether more graduate student housing is needed on or off campus and, if so, how much…Therefore, a study of housing needs of graduate students, faculty, and staff should be undertaken with involvement from these constituent groups as part of the MIT 2030 process. The study should consider the benefits and costs of Kendall Square and other on – or off – campus potential housing sites."

MIT will launch such a study in 2013 with expected completion in 12-18 months.

Faculty Housing Assistance Program

To assist with the high cost of housing in the regional area, MIT provides flexible, tax efficient, low interest mortgage programs for its faculty. The overall program has proven to be an important recruiting and retention tool and is similar to ones offered by MIT's peers. The program enrollment is approximately 90% of eligible faculty. There are programs for both junior and senior faculty which were significantly enhanced in 2005. Over 500 faculty members have participated in these programs. Among current participants, 146 live in Cambridge. An important goal of the program is to promote the ability for faculty to choose where they would like to live in the region.

Some faculty and senior administrators live on campus as residence hall housemasters. These housemasters are invested in the student experience and live with 100-500 students. There are currently 46 housemasters at MIT living in 19 residence halls.

E. Looking Ahead at MIT Planning & Development

Development Opportunities

As identified on Map 3, several areas in and around the MIT campus provide development opportunities, but, in most cases, no specific site has been selected for any particular building. Parking lots, buildings that are not appropriate for contemporary academic requirements, obsolete commercial buildings and aging parking garages are all possibilities for rehabilitation or redevelopment in the future.

The areas outlined on Map 3 support the narrative describing some of the development opportunities in and around MIT. The borders are fully permeable and are not meant to be mutually exclusive. Although some major rehabilitation projects are referenced, the focus is on development and redevelopment that substantially alters the built form around the campus. It is also an attempt to more broadly include all MIT-affiliated projects, including academic, MIT-managed investment projects and investment projects on MIT land being managed by others, such as Forest City Enterprises and Novartis.

There has been an evolution in MIT's approach to real estate investment and academic development leading to greater integration of these efforts over time. Historically, most MIT investment activity has taken place at some distance from the core campus, sometimes with commercial partners. Then, as now, real estate investment has provided income that supports MIT's core mission of education and research. The property taxes generated by this real estate amount to approximately $36.5 million, about 12% of the City's total tax levy, which contribute to the many programs and services enjoyed by Cambridge residents. And through this investment activity, MIT has been able to improve previously blighted areas around the campus.

More recently, MIT's investment activity has been near the core campus. These real estate investment activities provide a platform for educational and research collaborations between MIT and industry, help build and sustain Cambridge's powerful innovation cluster and improve the urban environment for the academic campus and our neighbors.

Far West Buildings and Northwest Parking Lots

These lots could be used for administrative, support, or residential uses, but their unusual shapes, low density zoning and remoteness from campus make them less attractive. However, over time the perception of this area could be altered by transportation improvements and the provision of new zoning that better supports transit-oriented development than the existing low-density zoning.

West Campus

The Westgate Lot is a very large site with potential to accommodate a great deal of space, but its distance from MIT's main campus makes it less attractive for academic uses. However, the relocation of the MIT Police to W89 on Vassar Street a few years ago, the use of W98 (600 Memorial Drive) for administrative uses, and the consolidation of many functions of Information Services and Technology (IS&T) in W91 and W92 demonstrate that the west end of campus is a viable location for a variety of administrative and support activities.

The Grounds Services group has been relocated from its quarters at 306 Massachusetts Avenue to temporary facilities for personnel and a vehicle repair bay in the West Annex parking lot. This location was selected after last year's Town-Gown report was completed. A permanent location for this function has not yet been selected.

Northwest Buildings and the West Garage

The existing research buildings along Albany Street in the Northwest Sector of MIT's campus comprise 7.2% of MIT's academic and research space. Though these buildings have capacity to support additional users, the location has not been attractive for researchers from the main MIT campus. The common perception among these researchers is that the location is too remote from their colleagues working at MIT's main campus and from other campus amenities. MIT has a study of these buildings underway to develop a framework to evaluate investments to more intensively use these resources.

The West Garage on Vassar Street is being evaluated along with the laboratory buildings in this area. The garage could provide an important site linking the Northwest and West campuses, but the displacement and relocation of parking, if required, would be significant. Redevelopment in this location might entail structured parking combined with other uses.

Massachusetts Avenue Corridor

Just to the south of the new Novartis buildings there are parcels on the east side of Massachusetts Avenue, stretching from Albany Street, across the railroad tracks to Vassar Street which are underutilized and could provide a site for a variety of academic uses, in close proximity to the core academic campus. The Energy & Environment building has been considered for this location, but no formal siting has been done. The high quality of the new Novartis building will provide a great opportunity to extend the urban quality of Massachusetts Avenue, eventually closing the gap on the street between Lafayette Square and the main block of MIT's historic campus. The frontage on three streets would allow for ground floor uses that would further contribute to the activation of the street.

Further up Massachusetts Avenue towards Lafayette Square, MIT has entered into an agreement with Forest City to redevelop part of the block between Blanche Street and Landsdowne Street. This agreement, a logical extension of the Institute's 25-year relationship with Forest City at University Park @ MIT, could result in the creation of an office/laboratory facility with ground floor retail on Massachusetts Avenue. Earlier this month, Forest City submitted a third zoning petition for this development and expects a decision in 2013.

Through these initiatives, MIT hopes to continue the transformation of this section of Massachusetts Avenue into a vibrant and attractive corridor connecting the Institute to Lafayette Square and beyond.

MIT was an active participant in the City's Central Square (C2) Advisory Committee. The Institute looks forward to continuing to work constructively and cooperatively with the City and business and residential neighbors to implement some of the ideas and recommendations that emerge from this process.

Main Street Corridor

The 730-750 Main Street block is an optimal size for an academic or commercial science building. In addition, future redevelopment of this site would allow for the continuation of the emerging retail corridor along Main Street.

The triangular-shaped 600 Main Street block is relatively close to the core campus. Its location and scale make it an attractive site for academic uses. The site provides an opportunity to improve street frontage in an area in which significant new developments have taken place, are planned, or are under construction, including the retail space at Tech Square and the north building on the 610 Main Street site.

North and Main Campus

The Albany Street Garage and the adjacent parking lot could provide an important academic site in proximity to the core campus, but, just as with the West Garage, the burden of accommodating parking relocation would be significant. There are continuing needs to build utility infrastructure to support the campus, most notably Phase II of the Chilled Water plant which will add chillers and cooling towers on the previously constructed span over the railroad tracks.

Planning on the MIT core academic campus is centered on renovation and revitalization. A major restoration is now in design for Building 2 of the original Main Group buildings. The nano-Materials, Structures and Systems (nMaSS) Laboratory is the most significant redevelopment on campus. The nMaSS building has been a challenge to site because of its technical and programmatic requirements. A feasibility study, including a concept design, has been completed for a site in and around Building 12.

East Campus and Kendall Square

On December 13, 2012, MIT formally submitted a rezoning petition for a 26-acre parcel of Institute-owned property in the Kendall Square area to the City of Cambridge. Public hearings before the Planning Board and the Ordinance Committee will likely begin in early 2013.

MIT had filed an earlier version of the petition in April 2011 and had engaged the MIT and Cambridge communities in extensive dialogue before allowing that rezoning effort to expire in October 2011; MIT determined that it would benefit from seeking more input about its proposal.

The City Council suggested at the time that a broad-based urban planning study be undertaken of the Kendall Square area in order to examine the complexities of its unique urban framework. This comprehensive process, dubbed K2C2, also reviewed the Central Square area and resulted in a series of recommendations related to dimensional features, housing, innovation space, sustainability, and community benefits.

In response to questions and concerns raised by some members of the MIT faculty, MIT Provost Chris Kaiser established a task force in August 2012 to examine the Institute's redevelopment proposal for Kendall Square. The task force worked to understand the history and dynamics of Kendall Square, as well as the Institute's needs and aspirations in the East Campus area.

The task force report, issued in October 2012, recommended that the Institute move forward with the zoning, implement a participative conceptual design process to examine the potential of the gateway area on Main Street, establish a comprehensive urban design plan for the remainder of the East Campus area, and carry out a study of MIT housing needs. The precise plans for each of these initiatives are in the process of being defined, but the efforts will be launched in 2013, with completion in 12-18 months.

The new zoning petition retains the current allowed capacity for academic buildings in East Campus while permitting additional development capacity for commercial development, including residential, retail, and office/lab uses. The new petition also embraces the dimensional framework recommended through the K2 process, increases the number of housing units from 120 to as many as 300 (with a mix of low, moderate, market-rate, and micro units), provides for innovation space, sets LEED Gold as a standard for all commercial buildings, and establishes a community fund for open space, transportation, and workforce training. In addition, the petition allows for the creation of a new campus gateway/node, as recommended by the faculty Task Force, which will develop through a participative conceptual design process that integrates with planning for the rest of MIT's East Campus.

As with other parts of the campus, aging or obsolete buildings in the East Campus also are subject to consideration for rehabilitation, expansion, or replacement. The first to be considered for rehabilitation is Building E52, the Sloan Building, occupied by the Department of Economics and Sloan School of Management. This project is in design phase, and includes the possibility of an additional floor for expanded meeting and conference facilities.

F. Transportation

Bicycle Planning and Improvements

MIT is committed to providing bicycle amenities to support and encourage students, faculty, and staff to commute to MIT by bicycle. In 2012, MIT created a total of 330 new and replacement bike parking spaces at existing high demand locations and as part of an ongoing program to meet demand for bike parking on campus. All bike racks have been located with a focus on providing secure, accessible, well-lit spaces close to building entrances, and placed indoors or in covered areas where possible. The racks installed are the "invert-

A Hubway Bicycle Station located on Vassar Street near the Stata Center

ed-U" style recommended by the City, which allow for greater ease of use, security, and space efficiency. MIT plans to continue to provide additional parking spaces and other bicycle infrastructure to meet the needs of our growing and enthusiastic cycling community.

The MIT Bicycle Commuter Benefit Program experienced its most successful year since its creation in 2009, with enrollment of 180 cyclists. Full-time employees are eligible to participate in the program, which provides reimbursement of $20/month ($240/year) for the purchase, improvements, repair or storage of a bicycle used for commuting to MIT. Additionally, bicycle commuters who need to drive to campus a few times per month have the option of enrolling in a pre-paid, post-tax occasional parking permit.

MIT released an updated version of the annual "Getting around MIT by Bicycle" map and information pamphlet (http://web.mit.edu/facilities/transportation/Getting_Around_by_Bike_map.pdf). The map provides information on bike lanes, bike parking areas, and bike repair stations, and the brochure educates the community on bike safety, etiquette, security, and communicates the need to "share the road" with pedestrians, vehicles, and other roadway users.

On August 8th, MIT joined the City of Cambridge in celebrating the expansion of Hubway bike share from Boston into Cambridge, Somerville, and Brookline. MIT is proud to sponsor two Hubway stations on campus, one located near 77 Massachusetts Avenue and the other on Vassar Street near the Stata Center. Hubway has proven very successful and continues to shatter ridership records, with the 500,000th ride taken in September 2012. According to data from Hubway, the MIT-sponsored station at Massachusetts Avenue had 1,985 trips in September, making it the most popular station in all of Cambridge.

In addition to sponsoring two Hubway stations, MIT subsidizes annual Hubway memberships for all MIT students, staff, and faculty, offering memberships at $25/year (regularly $85/year). The subsidy has been very well received, with 628 members of the MIT community signed up for the membership as of November 1, 2012.

MIT has collaborated with stakeholders and City officials in the development of proposed bicycle parking zoning regulations, providing comments to Community Development and then to the Planning Board. MIT supports many of the ideas outlined in the proposal, as they formalize best-practice bicycle parking strategies that have been implemented on campus for many years.

Pedestrian Crossing of Grand Junction Railroad Tracks

MIT is now completing construction for the pathways leading up to a grade-level pedestrian crossing from the end of Pacific Street to Vassar Street. The Commonwealth of Massachusetts has acquired the CSX tracks and track rights, including the Grand Junction rail line. MIT has an agreement with the Commonwealth to construct the railroad crossing, using MIT's design and funding. Construction of the crossing, signals and gate-arms by the Commonwealth's contractor, the Massachusetts Bay Commuter Railroad, is now underway and is expected to be complete by the end of the year.

New Pedestrian Crossing of Grand Junction Railroad Tracks

Urban Ring

The Urban Ring is no longer an active transportation project. MIT intends to continue working with the City of Cambridge and others to see what progress can be made with existing resources and projects in preparing the Urban Ring to move forward when resources become more available.

One reason that the Urban Ring remains of interest to MIT is the increase of MIT administrative uses and the potential for additional academic and residential uses on the far west end of the campus. Development in this area would improve the visibility of the Fort Washington Park and create a node of transit-supported buildings that would help transform this area of small scale service and residential buildings, obsolete industrial buildings, service yards, and parking lots. The new transit node suggests an opportunity to revise the existing low density zoning to a density more appropriate to transit-oriented development (TOD).

Grand Junction Commuter Rail

The Commonwealth has indefinitely deferred running passenger service from the Worcester/ Framingham line up the Grand Junction to North Station, which had included a new station in Kendall Square. Pending a renewal of interest on the part of the Commonwealth, MIT has suspended its assessment of the potential benefits and difficulties that such a service would pose for MIT.

Grand Junction Community Path

MIT participated in 2004 in the feasibility study conducted by the City with regard to this proposed multi-use path, offered detail comments at that time and has met with City staff from time to time to discuss how and whether the City's proposed multi-use path on MIT property in the Grand Junction corridor should be built. Some of the practical issues of potentially conflicting uses in the corridor have been raised but not resolved. MIT has suggested that its significant investment in the Vassar Street cycle track and widened sidewalks provides the essential connection and most of the benefits that the Grand Junction Path would provide at no cost to the City and with no intrusion on MIT's existing operations or future development. The on-street bicycle improvements proposed for Binney Street and Galileo Way will provide an important link to the existing Vassar Street cycle track improvements, including crossing at the already signalized Main Street and Vassar Street intersection.

Longfellow Bridge

The long-planned rehabilitation of the Longfellow Bridge is expected to begin construction next year. When complete, this important project will provide benefits to all types of travelers – motorists, bicycles and pedestrians for decades. Because of its scale and scope, it will also be a huge disruption to everyday travel to MIT and its neighbors in Cambridge. Among other impacts anticipated are 80+ weekends of Red Line shutdown and a 3-4 year detour of all Cambridge-bound motorists through Leverett Circle and over the Craigie Bridge.

Limited information has been available to date on plans to mitigate these transportation impacts. MIT plans to work closely with the City of Cambridge, the Kendall Square Association and other stakeholders to make sure there is appropriate mitigation planned for and implemented by this very large project.

G. Sustainability through Energy Conservation, Efficiency, and Design

The Institute has prioritized the development of a robust, fiscally disciplined program targeting energy conservation investments across campus. Emphasis has been placed on measures that will have a substantial impact on energy consumption and greenhouse gas emissions, while at the same time offer positive economic return. Each project is being monitored to establish the best available data concerning actual energy savings as well as capital costs.

Conservation & Efficiency Measures

From FY2007 through FY2012, MIT has successfully accumulated over 191,000 MMBTU (million BTUs) of annual energy savings from thermal and electrical projects resulting in over $4.5 million cumulative annual savings. Major electrical and thermal savings were achieved through investments in lighting, central utility plant upgrades, new construction systems, demand ventilation, variable speed drives, air change rate reductions, chiller upgrades, and residential hall residence hall refrigerator replacements. MIT successfully completed the second calendar year of MIT Efficiency Forward – the industry-leading energy conservation and efficiency program to save 34 million kWh over three years and $50 million over the lifetime of projects. In calendar year 2011, MIT surpassed its cumulative two-year target annual energy savings goal of 22 million kWh by saving an additional 10.1 million kWh.

This year's electricity savings goal was met through the following efficiency strategies:

- Lighting retrofits achieved approximately 5.5 million kWh savings (50% of total),
- Mechanical and operational improvements on heating, ventilation and air conditioning (HVAC) systems through monitoring-based building commissioning (25%),
- High-performance new construction (20%), and
- Other strategies (5%)

The David H. Koch Institute for Integrative Cancer Research at MIT; Photo by Peter Vanderwarker

By the end of FY2012, energy efficiency investments on campus have touched nearly 85% of all buildings on the Cambridge campus.

In addition to the above efforts, MIT's Information Services and Technology office (IS&T) has fostered use of more efficient equipment and operating practices. IS&T activities in FY2012 included sustaining the momentum in the following areas: participating in the W91 data center energy efficiency study as part of the MIT-DOE Commercial Buildings Partnership; promoting individual smarter printing practices and consolidating single function devices to multi-function devices; implementing "hold and release print" infrastructure to minimize unclaimed print jobs in public Athena computer clusters; and hosting several seminars and web resources to promote more energy and resource efficient computing and printing.

400 faculty, staff, and student Green Ambassadors have been recruited to date to drive sustainable practices in offices, labs, and dorms. A new pilot building-occupant engagement program focused on building Green Teams is being implemented in the Koch Institute.

MIT has made strong progress towards the US Department of Energy's new Global Superior Energy Performance (GSEP) Partnership piloting the program's new building energy management certification program, and is nearing completion of MIT's ISO 50001 energy management documentation. MIT's participation in DOE's Commercial Building Partnership is deploying national laboratory technical assistance to implement advanced energy efficiency strategies in building 32 and W91.

Sustainable Design

In FY2012, the new Sloan School of Management, the Koch Institute for Integrative Cancer Research, and 640 Memorial Drive each were awarded a Gold rating from the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program for their high degree of sustainable design.

In FY2012 metered operation, the new Sloan School building has met or exceeded the goals MIT set for the architect and engineers for peak loads: for every square foot of floor area, it uses 0.75 watts for lighting and 10 Btu per hour for heating, and for every 1,000 square feet, 1 ton of cooling. These figures are all about 50% of typical building design values for lighting, heating, and cooling.

After 18 months in operation, the Koch Institute consumes dramatically less energy during peak loads than predicted across the board: electrical peak demand, anticipated by engineers at 14.6 watts per square foot, landed at 3.8 watts per square foot; steam heat was forecast at 35,000 pounds per hour for the coldest days, and turned out to be around 20,000 pounds per hour; and the building's peak cooling demand is actually 2,354 tons of chilled water, compared to the engineers' predicted 3,350 tons. The building reduces total energy use by about 35% as compared to a standard laboratory research building.

MIT Sloan School of Management, Building E62; photo by Andy Ryan

MIT also recognizes the importance of integrating sustainable design into major renovations of existing buildings as, collectively, these buildings comprise the vast majority of energy use on campus and provide the greatest opportunities for conservation and efficiency. Last year, the major renovation and restoration project of Maseeh Hall was completed and integrated a high degree of sustainable design, including an energy efficient mechanical system, operable windows, efficient lighting, and sustainable finish materials. The building also uses an innovative new refrigeration compressor for cooling. Awarded a Gold rating in the LEED program, energy models indicate the building is anticipated to use 34% less energy than a baseline building built only to required codes.

In addition, the renovation of the historic Arthur D. Little building (E60), built in 1916, was completed. This restoration integrated the latest in sustainable design strategies while preserving

the historic qualities of this landmark building. It features heat recovery, chilled beams, low energy lighting, daylighting controls and high-performance spray foam insulation. The building has been certified with a Gold LEED rating. The building is anticipated to use about 33% less energy than a baseline building built only to required codes.

The choices we make today will significantly impact our campus for decades to come, and in order to take full advantage of the opportunities before us, we have recently begun our search for an individual to fill the new position of Director of Sustainability. This individual will play a key role in leading, coordinating and communicating MIT's sustainability program across campus and with municipal and Cambridge communities, and will insure that we integrate sustainable practices in capital projects and throughout our accelerated capital renewal program.

III. List of Projects

A. Completed in Reporting Period

Wood Sailing Pavilion floating docks; photo by Matthew Wall

Wood Sailing Pavilion Floating Docks

The project provided a new floating dock to the existing MIT sailing facility. The floating dock provides space for approximately 100 boats and sailboards, which were stored on the pile-supported fixed elevation pier and within the MIT Sailing Pavilion storage bays. The project did not expand the number of vessels at the facility. It was designed to address constraints associated with limited dock space and up to a 3-foot elevation difference between the existing dock and river surface, which posed safety concerns and boat maintenance issues. The floating dock remains on the Charles River year-round.

Grounds Services

The Grounds Services unit has moved from 310 Massachusetts Avenue to a temporary location at 169 Vassar Street, adjacent to the West Garage. A renewed effort to permanently relocate Grounds Services and to potentially co-locate it with the Repair & Maintenance group and other operations units is anticipated. The California Paint building at 142 Waverly is no longer being considered for this use.

640 Memorial Drive Renovation

This property consists of a five-story historically significant building containing approximately 206,000 square feet of office and laboratory space. MIT completed the renovation of the base building systems for a first class laboratory facility in 2011 and has since leased the west half of the building to sanofi-aventis, U.S. Inc. and three floors of the east end of the building to Boston Biomedical. Both Sanofi-aventis and Boston Biomedical expect to occupy the building in the first quarter of 2013.

B. In Construction

Buildings E17 and E18

This renovation project is to renew and repurpose E17 and E18, vacated by the Koch Institute for Integrative Cancer Research. The renovation will provide needed expansion space for Chemical Engineering and office swing space to enable future renovation projects on campus. Construction is scheduled to be completed late this year or early next year.

Building E25

This project includes the complete renovation of the basement of E25 to update and improve efficiency of the existing laboratory support facilities. The scope includes replacing the facility's air handler, which is at the end of its useful life. Construction is scheduled to be complete by the end of 2012.

Renovation progress in Building E18

Construction at 610 Main Street

610 Main Street

Located on the site of current former surface parking lot, this new development consists of 418,000 square feet in two office and/or laboratory buildings above a below-grade parking garage. On September 1, 2011, MIT signed a 10-year lease with Pfizer Inc. to occupy 80% of the south building. Construction of the south building and the underground garage started on the site last fall and is expected to be completed at the end of 2013. In addition, MIT has also executed a lease with Pfizer Inc. to occupy approximately 75,000 square feet of space in the adjacent 700 Main Street property on a temporary basis during the construction of its new facility at 610 Main Street South.

130 Brookline Street and 17 Tudor Street

130 Brookline Street is a two-story, 45,000 square foot concrete frame industrial structure built in the 1920s. 17 Tudor is an adjacent two-story, 11,000 square foot building. These two buildings are now being rehabilitated for laboratory and office uses, respectively, with ancillary parking between them. Although MIT has not secured a tenant, the Institute started renovating the buildings to improve their physical appearance and prevent further deterioration of the structures. Base building work is scheduled to be completed in 2013.

Concept of 130 Brookline Street

By Others

181 Massachusetts Avenue (Novartis)

Novartis Institutes for BioMedical Research leased a four-acre parcel of MIT land at 181 Massachusetts Avenue (corner of Albany Street) to augment the Novartis Cambridge Campus, where its global research headquarters are located. By expanding in proximity to MIT and other research institutions, Novartis intends to create an ideal environment for interdisciplinary collaboration, open communication, and exchange of knowledge.

The Novartis Cambridge Campus serves as an important connection between Kendall and Central Squares. Its expansion will add vibrancy to the area with ample green space, pedestrian connections, and street-level retail space.

The project encompasses the construction of two new buildings with 550,000 square feet of laboratory, office, and retail space, and the renovation of the parcel's second existing structure (Building N42). Novartis will seek LEED Gold certification for the new buildings. Per MIT's lease requirements, the buildings Novartis is proposing will include active ground floor uses on Massachusetts Avenue, helping to improve this important commercial corridor. Construction is underway and is scheduled for completion in 2015.

C. In Planning & Design

TCC Vassar (Technology Children's Center)

MIT plans to construct a new Technology Children's Center (TCC) at 219 Vassar Street in response to high demand among faculty, staff, and students for convenient, top-quality childcare. The new facility is vital to MIT recruitment and provides another reason for talented individuals to build their careers at MIT.

TCC Vassar will accommodate 126 infants, toddlers and preschoolers — continuing to grow MIT's in-house childcare capacity which has increased nearly fivefold over the past decade. A welcome addition to the four existing TCC facilities on MIT's Cambridge campus and at Lincoln Laboratories, the new two-story building will house 11 classrooms separating children by age. Its outdoor facilities are expected to include a variety of playgrounds, sand pits, climbing structures, and gardens.

Rendering of the Technology Children's Center at 219 Vassar Street

MIT has demolished the building located at 219 Vassar Street, which had been vacant for approximately five years, with soil and utility work to follow. Design for a modular building, play space and parking is nearing completion. Construction completion is scheduled for 2013.

Building 2

There is a pressing need to continue renewing the Main Group buildings for state-of-the-art education and research. Possible pilot opportunities include renovation of sections of Building 2, home to MIT's Department of Mathematics and portions of MIT's Department of Chemistry. The chemistry portion of the Building 2 project is expected to start construction early in 2013. The project will be completed using sustainable design and construction initiatives with the goal of achieving a minimum rating of LEED Silver.

Building 2

E52 - Sloan and Economics Department

Since E52 was partially vacated by MIT Sloan School of Management, MIT now has an opportunity to renovate the building to accommodate a conference center, the Department of Economics and other administrative units of the Sloan School. Building E52 was constructed in 1938 as the headquarters for Lever Brothers and has not been significantly upgraded.

Music and Theater Arts

The Music and Theater Arts (MTA) section at MIT has grown and is in need of teaching and performance spaces for its academic program. One option that has been under consideration for Music and Theater Arts is a major renovation of Walker Memorial. Investigation of how best to accommodate the programmatic needs of Music and Theater Art is continuing.

nano-Materials, Structures and Systems (nMaSS) Laboratory

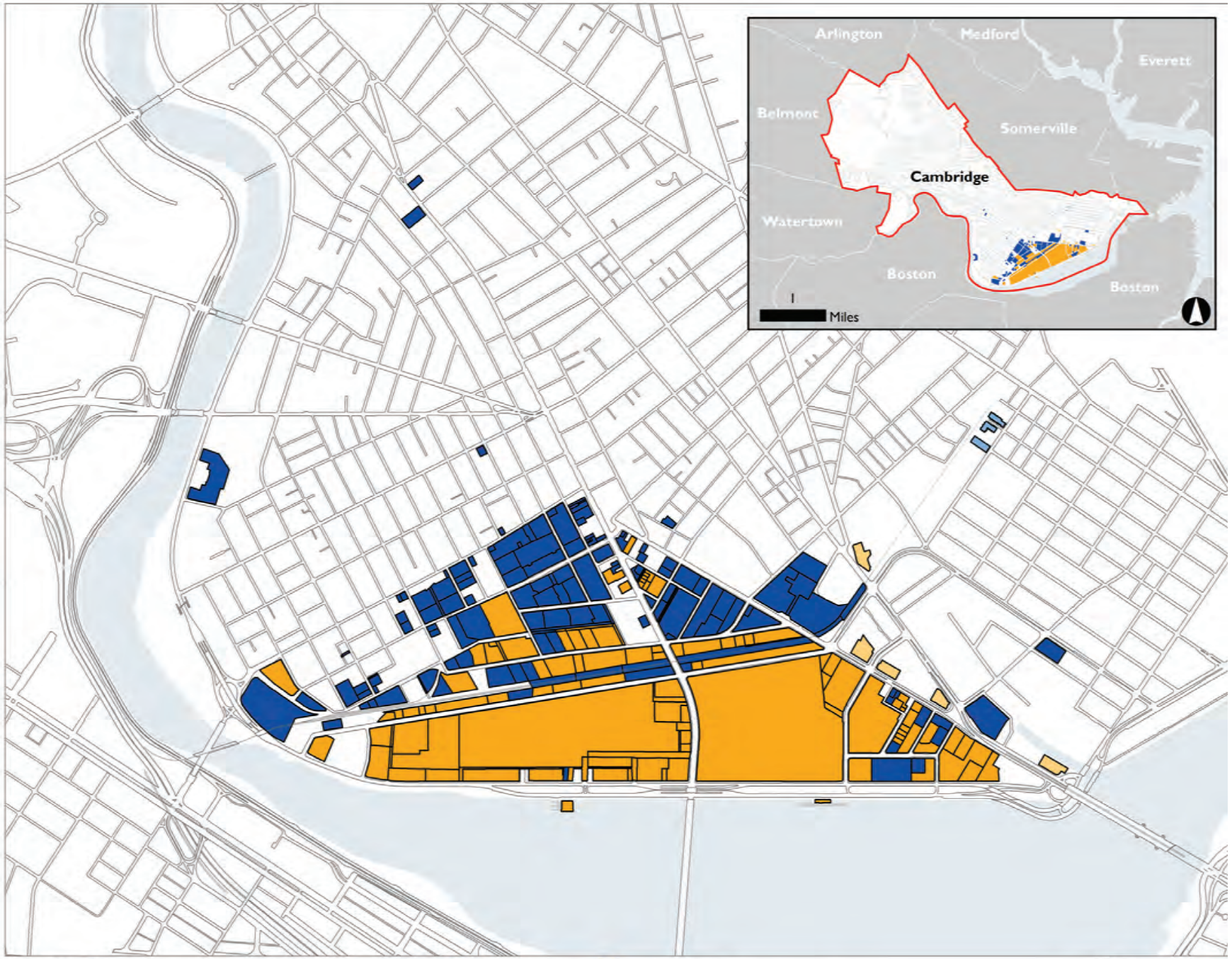
Still in planning, this new building will support materials research at the nanoscale and will accommodate top programmatic priorities expressed by the deans of the School of Science and the School of Engineering. MIT is engaged in the preliminary analysis of the programmatic and technical requirements for this advanced research facility. A feasibility study, including a concept design, has been completed for a site in and around Building 12.

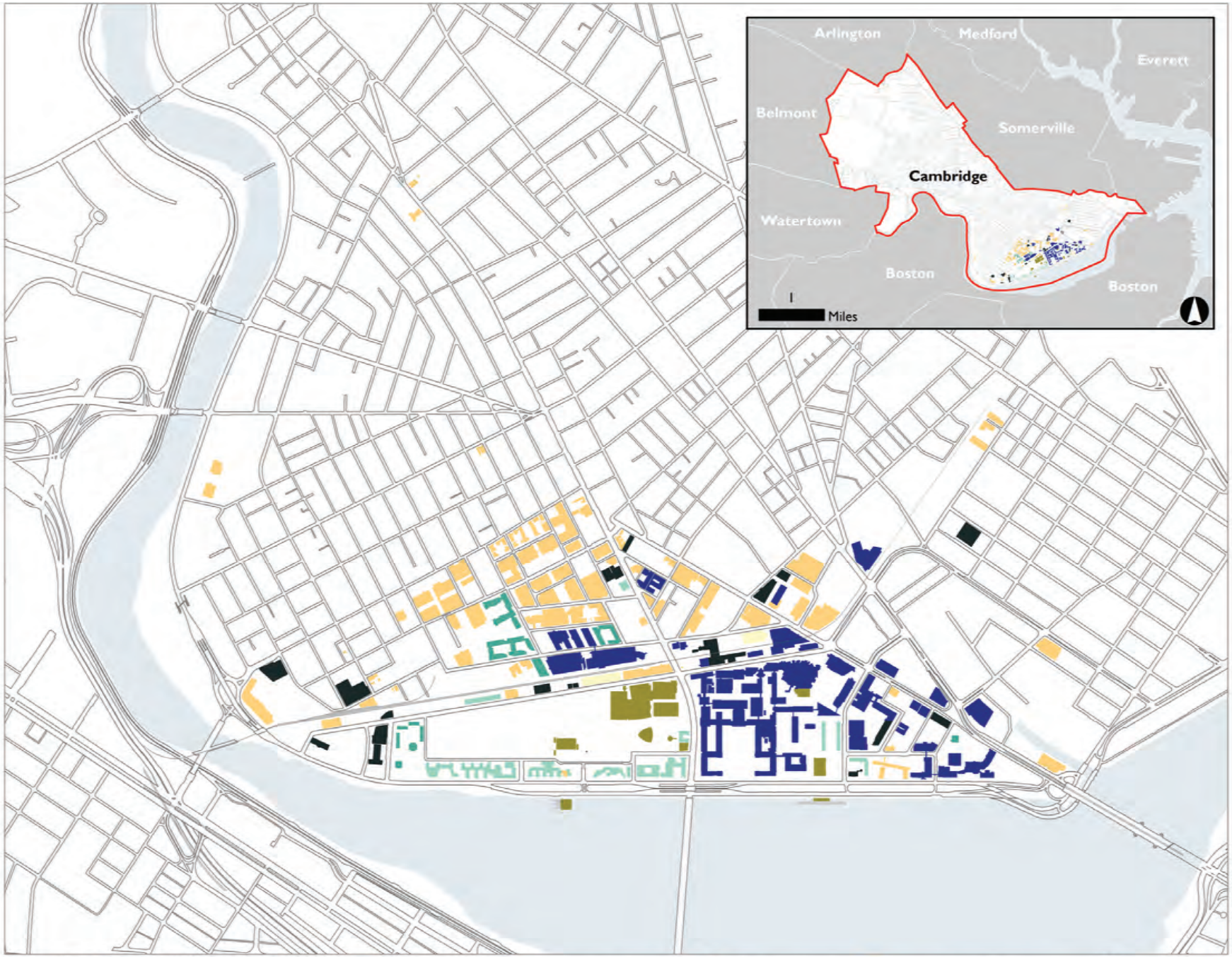
345 Vassar Street

This two-story, 32,000 square foot building was previously occupied by Idera Pharmaceuticals. MIT completed interior demolition of the obsolete offices and laboratories and is exploring alternatives to position the building for multi-tenant office, laboratory, or institutional use.

IV. Mapping Requirements

Map 1: MIT Property in Cambridge
Map 1a : MIT Buildings by Use
Map 2: MIT Projects
Map 3: Future Development Opportunities
Map 4: MIT Shuttle Routes
Map 5: MIT LEED Certified Buildings
Map 6: MIT Energy Efficiency Upgrade Projects
Map 7: MIT Capital Renewal Rapid Response Feasibility Studies


Arlington
Medford
Everett
Belmont
Somerville
Cambridge
Watertown
Boston
Boston
1
Miles
Map 1: MIT Property in Cambridge
December 2012 (Data as of June 30, 2012)
Academic Plant
Academic Leased
Investment Property
Investment Property - Condominium Only
1,000
Feet



Map 1a: MIT Buildings by Use

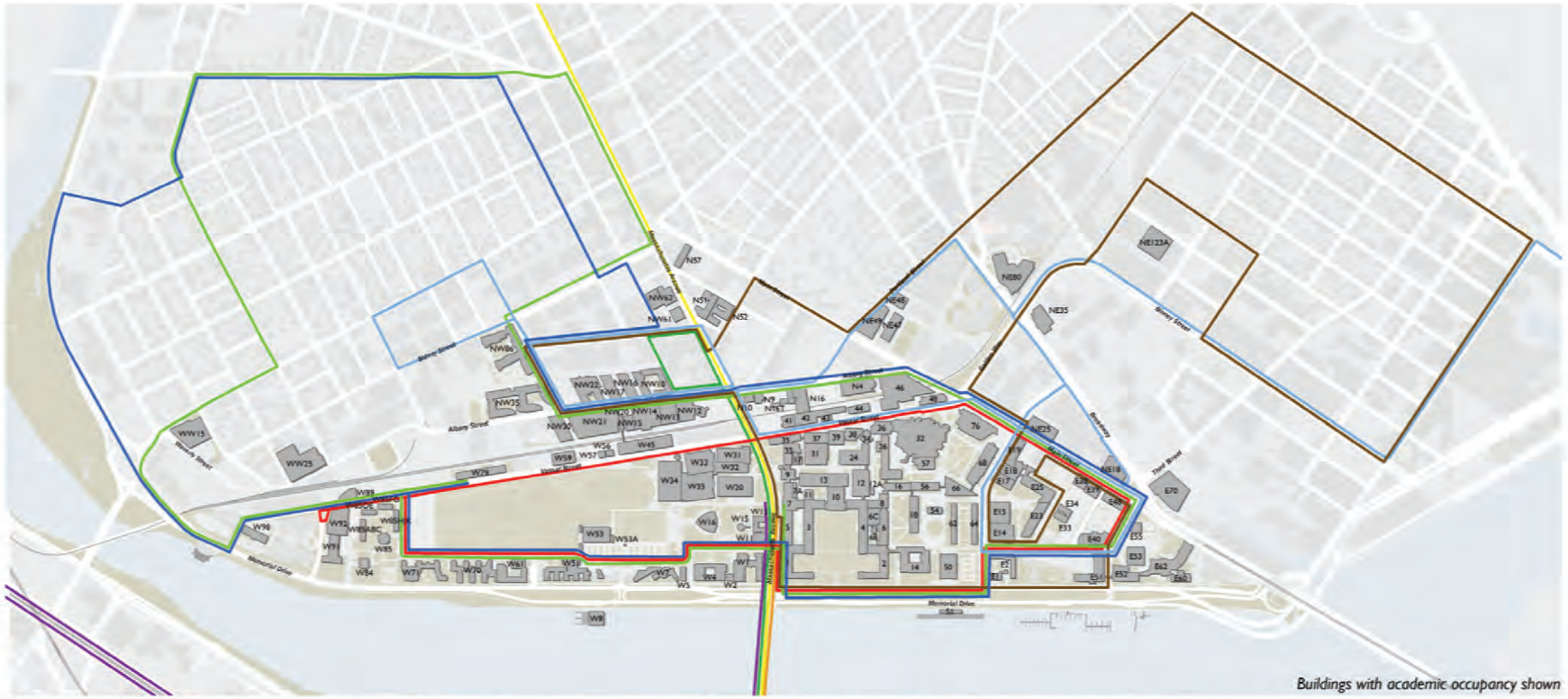
December 2012 (Data as of June 30, 2012)

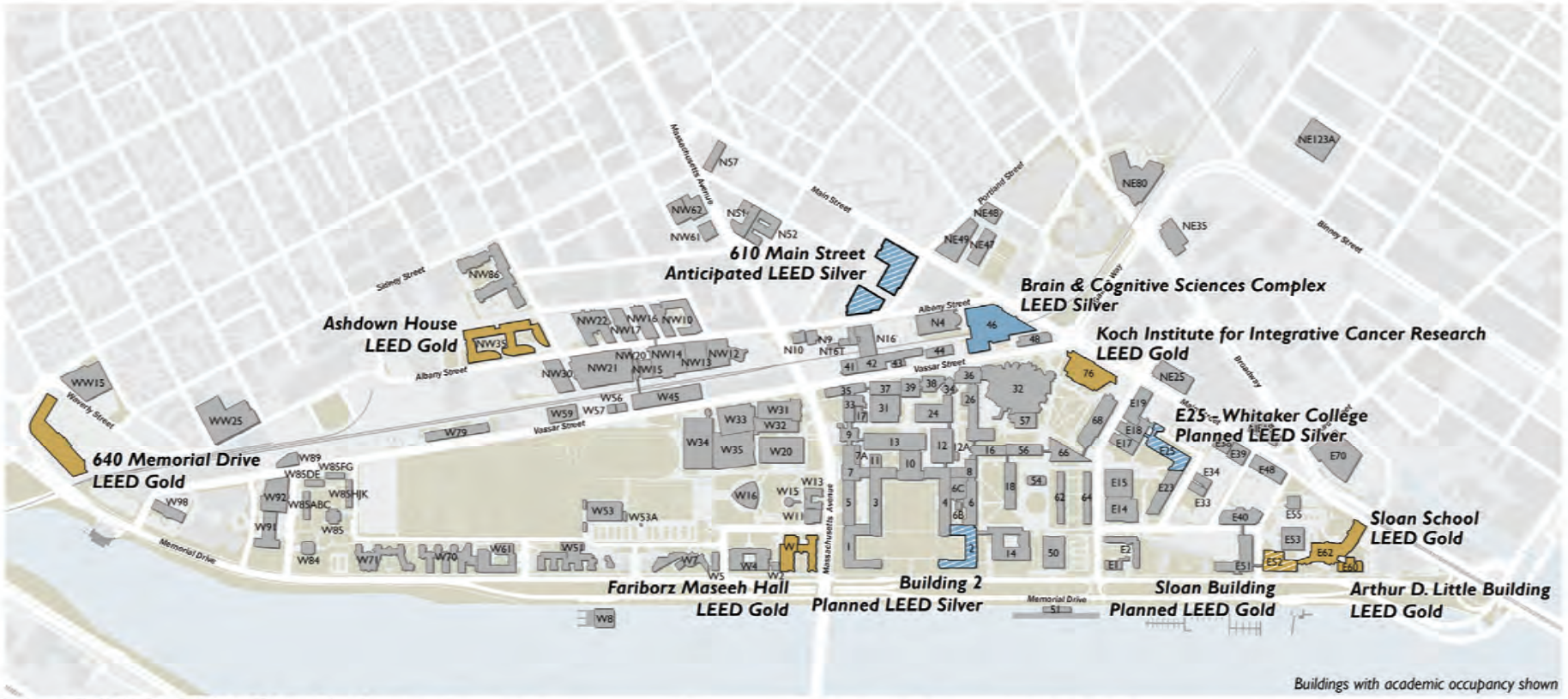
Map 2: MIT Projects

December 2012 (Data as of June 30, 2012)

Map 3: Future Development Opportunities

December 2012 (Data as of June 30, 2012)


Buildings with academic occupancy shown
Map 4: MIT Shuttle Routes
December 2012 (Data as of June 30, 2012)
MIT Shuttle TECH
Boston Daytime
Weekend Shuttle
M2 Shuttle
EZ Ride
Saferide Shuttle Cambridge East
Saferide Shuttle Cambridge West
Saferide Shuttle Boston East
Saferide Shuttle Boston West
1,500
Feet



Map 5: MIT LEED Certified Buildings

December 2012 (Data as of June 30, 2012)

LEED Certified
LEED Gold
LEED Silver

Anticipated LEED Certified
Anticipated LEED Silver
(Design application phase complete)

Plannned LEED Certified
Planned LEED Gold
Planned LEED Silver

1,000 Feet

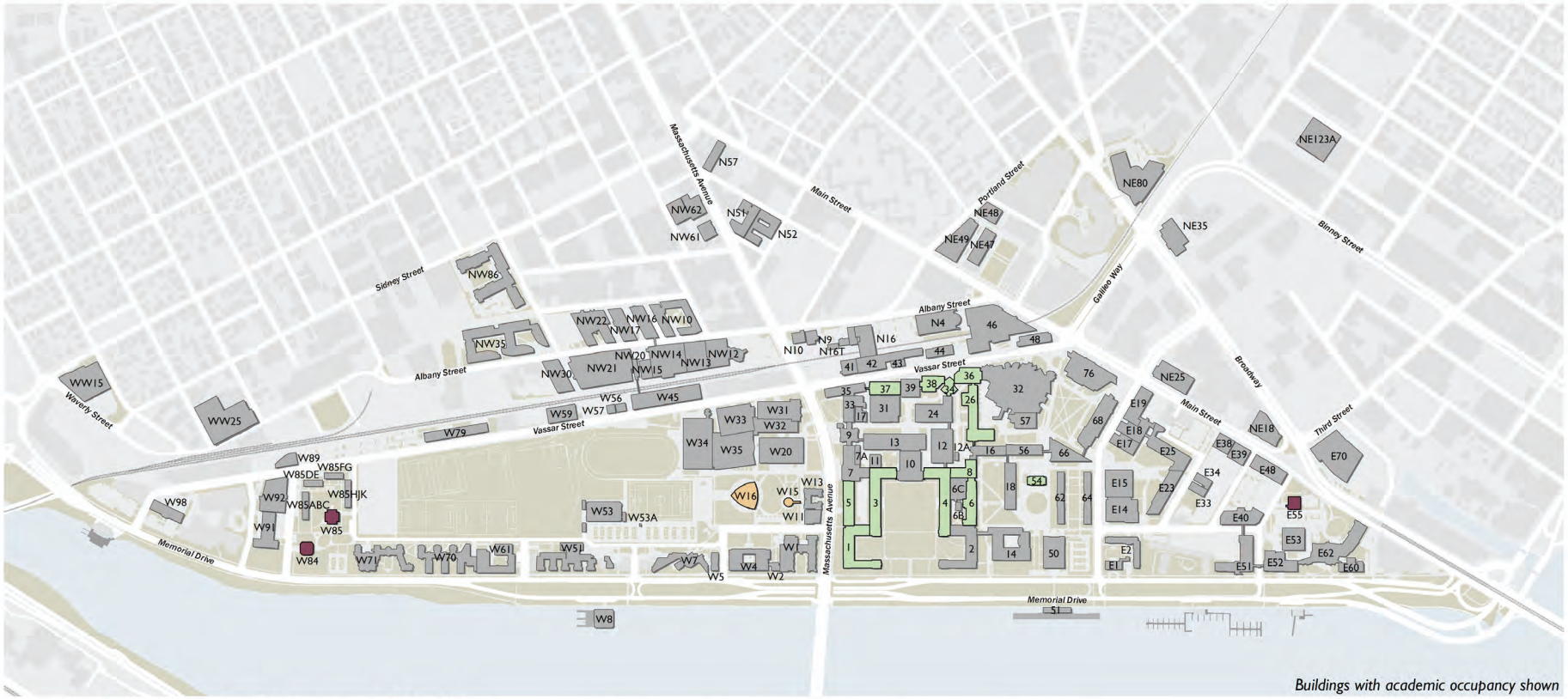
Map 6: MIT Energy Efficiency Upgrade Projects

December 2012 (Data as of June 30, 2012)

Buildings with Energy Efficiency Upgrade Projects

Completed in 2011/2012 | In Construction or Planned for 2012/2013

1,000 Feet



Map 7: MIT Capital Renewal Rapid Response Feasibility Studies

December 2012 (Data as of June 30, 2012)

V. Transportation Demand Management

A. Commuting Mode of Choice

MIT conducts a commuting survey every two years. The data below was collected in the fall of each corresponding year. The chart below summarizes the responses to the survey question, "How did you commute to campus each day last week?" Data reflects average Monday-Friday responses and excludes students living on-campus and people reporting that they did not come to campus.

Commuting Mode	2004	2006	2008	2010	**2012**
Drove alone entire way	26%	26%	21%	20%	**22%**
Took public transportation	36%	37%	39%	42%	**41%**
Carpooled	6%	6%	7%	7%	**6%**
Bicycled	12%	12%	13%	14%	**15%**
Walked	15%	14%	16%	15%	**13%**
Other	4%	5%	4%	3%	**3%**

B. Point of Origin for Commuter Trips to Cambridge

Home Location	Number of People working on the MIT Main Campus	Percentage
Cambridge	2359	23.3%
Boston	1313	13.0%
Somerville	738	7.3%
Arlington	369	3.6%
Brookline	311	3.1%
Newton	276	2.7%
Lexington	248	2.4%
Medford	239	2.4%
Belmont	234	2.3%
Watertown	165	1.6%
Quincy	144	1.4%
Malden	127	1.3%
Waltham	102	1.0%
Woburn	76	0.8%
Acton	64	0.6%
North Of Boston	631	6.2%
South Of Boston	65	0.6%
West of Boston	127	1.3%

B. Point of Origin for Commuter Trips to Cambridge (continued)

Home Location	Number of People working on the MIT Main Campus	Percentage
Outside 128	1524	15.0%
Outside 495	321	3.2%
Out of State - Connecticut	16	0.2%
Out of State - Maine	21	0.2%
Out of State - New Hampshire	123	1.2%
Out of State - Rhode Island	49	0.5%
Out of State - Vermont	3	0.0%
Outside New England	475	4.7%
Unknown	7	0.1%
Grand Total	10127	100.0%

C. TDM Strategy Updates

Electric Vehicle Charging Stations

MIT in partnership with the City of Cambridge and was awarded two Coulomb Technologies, Inc. electric vehicle charging station(s) under the ChargePoint America™ Program. The Program was funded in part under the terms of Grant number DE-EE0003391 from the United States Department of Energy as part of the American Reinvestment and Recovery Act.

One charging station was installed in the building 46 parking lot on Vassar Street, which is located in the center of campus. A second station was installed at building WW15 on Brookline Street. Under the terms of the grant the stations are accessible to the public.

MIT also received a charging station with the purchase of an Electric Ford Transit van which was installed in the Stata Garage Loading Dock.

Future plans include installation of additional stations on campus as needed.

Hubway Bike Share

In cooperation with the City of Cambridge, MIT sponsored two Hubway stations on campus — “MIT Mass Ave.” located on Massachusetts Avenue and Amherst Street in front of Building W11, and “MIT Stata Center” located between the Stata Center and the Koch Institute on Vassar Street.

MIT has signed on as a Hubway Corporate Member, and is offering a subsidized annual membership and discounted hourly rates for members of the MIT Community.

There are currently over 500 MIT Community Hubway members.

MBTA Pass Subsidy

In response to the recent MBTA rate increase, MIT elected to maintain a 50% subsidy on all MBTA passes for students and staff. There are currently 5,100 students and staff taking advantage of our Subsidized Pass Program.

VI. Institution Specific Information Requests

1. How do you anticipate that the K2C2 Study will affect your long term academic facility planning?
Please see E. Looking Ahead at MIT Planning & Development in Section II. Future Plans Narrative

2. Provide an update on long term academic and non-academic planning for the main campus, with a particular focus on all potential locations for academic uses and plans for green space and edges along Massachusetts Avenue, particularly near the railroad crossing, and adjacent to Area 4.
Please see E. Looking Ahead at MIT Planning & Development in Section II. Future Plans Narrative

3. Provide information on any plans for additional housing or other uses under consideration for MIT owned parcels in Cambridgeport and Area 4.
Please see E. Looking Ahead at MIT Planning & Development in Section II. Future Plans Narrative

4. Provide information on MIT's plans for ground floor retail along Main Street and in both Kendall Square and Central Square.
Please see E. Looking Ahead at MIT Planning & Development in Section II. Future Plans Narrative

5. Provide an update on discussions about development of a multi-use path along the Grand Junction railroad right-of-way.
Please see F. Transportation in Section II. Future Plans Narrative

6. Discuss planning for bicycle facilities on campus, including Hubway stations.
Please see F. Transportation in Section II. Future Plans Narrative

7. Provide information on the extent to which MIT students make use of city parks, in particular the Pacific Street property, and the extent to which MIT-affiliated groups reserve city-owned fields for their use.
MIT does not collect data on MIT-affiliated group use of Cambridge parks and athletic fields. Department of Human Service Programs, Recreation Division officials report that although the Pacific Street property is not in the field reservation system, the Recreation division does provide a manual reservation for a single community soccer group , typically Monday-Friday, 3:00 pm to dusk and all day Saturday and Sunday during the soccer seasons. No reservations have ever been made by MIT-affiliated groups. A field reservation would always pre-empt any informal use of the Pacific Street or any Cambridge field by MIT students or affiliated organizations.

8. Include in your discussion a review of the extent to which open spaces on the MIT campus are permeable to the public. Provide information on open spaces on your campus that are open to public use. Indicate the times when these spaces are accessible to the public and the range of activities that are permitted.
MIT maintains an open campus. Gardens, walkways, plazas and larger green spaces, like North Court or Killian Court, are fully permeable and open for public enjoyment. There are no specific time limits for access, although many buildings are secured in the evening. The open spaces are sometimes reserved for special short-term exclusive use by MIT, such as during Commencement, but are otherwise open to the public for the same kind of passive recreation and other uses that are typical of the MIT community. Reservation requests for these spaces and of athletic facilities (courts, fields, swimming pools, etc.) for short term use by neighbors are welcome, although honoring such requests is subject to availability. These requests are managed by the Office of Government and Community Relations.

9. Has MIT measured the housing preferences of graduate students and to what extent does MIT-provided housing met the stated needs of its graduate students.
Please see D. House in Section II. Future Plans Narrative