



Data Sciences Center

Boston University

Fifth Amendment to the Boston University Charles River Campus 2013-2023 Institutional Master Plan

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submitted to the **Boston Planning & Development Agency**

submitted by **Trustees of Boston University**

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Chapter 1

INTRODUCTION

CHAPTER 1: INTRODUCTION

In 1986, Boston University (the “University”) was the first university in the City of Boston to prepare an Institutional Master Plan. To date, the University has completed four Institutional Master Plans, the most recent of which received approval from the Boston Zoning Commission and the Boston Redevelopment Authority (BRA) now doing business as the Boston Planning & Development Agency (BPDA) in early 2013. From the fall of 2011 to the fall of 2012, the University undertook a comprehensive planning initiative to define its space needs for the coming decade. The 2013 – 2023 Institutional Master Plan (the “IMP”) heavily referenced the University’s strategic plan, *Choosing to be Great*, by incorporating academic, research, and residential facilities throughout the campus. Five years later, the IMP is the driving force behind critical campus projects taking shape today.

1.1 SUMMARY OF PREVIOUS AMENDMENTS

Since the implementation of the IMP in 2013, four amendments have been reviewed and approved, as described in the following sections.

1.1.1 FIRST AMENDMENT – CENTER FOR INTEGRATED LIFE SCIENCES AND ENGINEERING

The First Amendment to the IMP (the “First Amendment”) added the Rajen Kilachand Center for Integrated Life Sciences and Engineering (CILSE) located at 610 Commonwealth Avenue as a Proposed Institutional Project (PIP). The First Amendment was reviewed and approved by the BRA in November 2013 and by the Boston Zoning Commission in January 2014. The state-of-the-art neurosciences research facility was completed in 2017 and has become home to research programs formerly scattered across the Charles River Campus.

1.1.2 SECOND AMENDMENT – 700 BEACON STREET

The Second Amendment to the IMP (the “Second Amendment”) added an existing building at 700 Beacon Street to the list of PIPs. Acquired by the University from another college in January of 2015, the three-story, 37,000 square foot space at 700 Beacon Street is being used to house various institutional functions such as art studios, labs, office and meeting spaces, and teaching rooms. The Second Amendment was reviewed and approved by the BRA in September 2015 and approved by the Zoning Commission in October 2015.

1.1.3 THIRD AMENDMENT – 1047 COMMONWEALTH AVENUE

The Third Amendment to the IMP (the “Third Amendment”) allowed the University to lease the residential portions of an existing building at 1047 Commonwealth

Avenue for a term of 22 months. This lease accommodated up to 350 students and resident assistants displaced by the Myles Standish Hall Renovation Project. The lease of the property commenced in August 2016 and terminated on June 30, 2018. The Third Amendment went into effect in May 2016.

1.1.4 FOURTH AMENDMENT – BU CASTLE

The Fourth Amendment to the IMP (the “Fourth Amendment”) allowed for a small addition to be constructed at the existing building at 225 Bay State Road (the “Castle”) by adding the project to the list of PIPs. The Fourth Amendment to the IMP went into effect in May 2017. The project was completed in early September 2018.

1.2 THE FIFTH AMENDMENT TO THE 2013 – 2023 IMP

This Fifth Amendment of the IMP (“Fifth Amendment”) increases the allowable building height and eliminates 300 proposed underground parking spaces for the previously approved Proposed Institutional Project located at Site CC at 645 - 665 Commonwealth Avenue (the “Site”). The University proposes to construct a new academic building to serve the departments and institutes focused on computational and data sciences in one centrally located signature building (the “Project”). In addition, proposed digital signage to be located at Warren Towers, located at 700 Commonwealth Avenue, is included as a PIP in this amendment. See Figure 1-1, Proposed Institutional Projects.

1.2.1 DATA SCIENCES CENTER

The need for and location of the Project was identified and approved as a PIP in the IMP. The IMP described an Academic Building located at the corner of Commonwealth Avenue and Granby Street on Site CC. The IMP further states that “New academic space, which could be developed as either a single or multi-phase project, is proposed for the site.” This academic space is described as allowing the development of a building or buildings of up to 350,000 square feet (sf) Gross Floor Area (GFA) developed in one or two phases, on a site of 42,000 sf providing for a maximum Floor Area Ratio (FAR) of 8.4. The allowed maximum height was 15 stories at 225 feet. Below grade parking with up to three levels and 300 spaces was also considered in the IMP.

This Amendment seeks an increase in the height of the building to 305 feet with a total of 19 stories, while maintaining the GFA at 350,000 sf and the FAR at 8.4 as provided for in the IMP. Below grade parking will not be included in the Project.

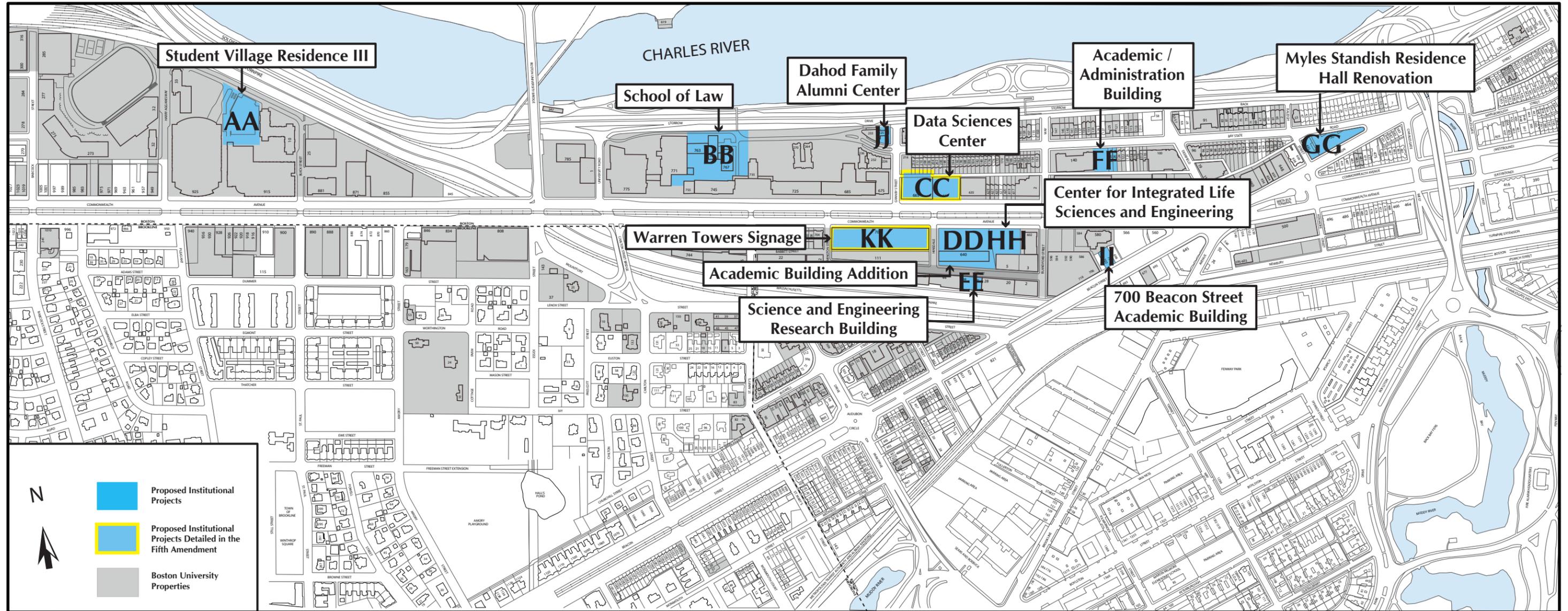
The Data Sciences Center is undergoing Large Project Review under Article 80B of the Boston Zoning code concurrently with this IMP amendment process. Further details about the Project can be found in Chapter 4, Proposed Institutional Master Plan Amendment and in the Draft Project Impact Report (DPIR).

1.2.2 WARREN TOWERS SIGNAGE

Consistent signage helps identify Boston University as a unified urban campus within the City of Boston. The University welcomes and guides pedestrians with clear, streamlined signage throughout the Charles River Campus, and has a comprehensive strategic signage program that includes both exterior on-building signage and interior directories.

Decades ago, poster cases were installed at Warren Towers for student and faculty groups to promote events and programming to the Boston University community and the public. Over time, the cases have required various repairs due to weather damage. The University proposes to replace each of the existing 12 poster cases with digital screens that match the dimensions of the existing poster cases at 6' high and 4'- 6" wide. These screens will be installed in the same locations across the Commonwealth Avenue façade. Digital screens will be powered on-site and managed by the University through a software program.

Consistent with the regulations for development review by the BPDA and its staff under Article 80, including Article 80D, of the Code, the BPDA shall review either through Large Project Review or Small Project Review, as applicable, the design and installation of the Warren Towers electronic signage, and such review shall include the issuance of a Certification of Consistency, pursuant to Section 80D-10, and, if applicable, a Certification of Compliance under Large Project Review, pursuant to Section 80B-6, or the certification required under Small Project Review, pursuant to Section 80E-6.



Chapter 2

BOSTON UNIVERSITY MISSION AND GOALS

CHAPTER 2: BOSTON UNIVERSITY MISSION AND GOALS

2.1 INTRODUCTION

Boston University is an international, comprehensive, private research university committed to educating students to be reflective, resourceful individuals ready to live, adapt, and lead in an interconnected world. The University is committed to generating new knowledge to benefit society.

The University remains dedicated to its founding principles: that higher education should be accessible to all and that research, scholarship, artistic creation, and professional practice should be conducted in the service of the wider community on a local and international scale. These principles endure in Boston University's insistence on the value of diversity, tradition, standards of excellence, and dynamic engagement with the City of Boston and the world.

2.2 UPDATE ON MISSION AND GOALS

Boston University comprises a remarkable range of undergraduate, graduate, and professional programs built on a strong foundation of the liberal arts and sciences. With the support and oversight of the Board of Trustees and through its world-renowned faculty, the University continually innovates in education and research to ensure that it meets the needs of students and an ever-changing world.

In 2007, the University completed its strategic plan, *Choosing to be Great*. The plan includes eight concrete goals in support of the University's mission. Each goal is the product of extensive discussions undertaken as a community involving its students, faculty, alumni, and friends.

Boston University's goals include:

- To support and enhance a world-class faculty whose members are dedicated to teaching and engaged in research, scholarship, and their professions.
- To continue to develop the special undergraduate educational environment that combines its commitment to a liberal arts and sciences education with professional opportunities, while creating flexible educational opportunities to leverage the depth of the College of Arts and Sciences and its other schools and colleges. To continue its commitment to inclusiveness based on merit for all students, irrespective of race, religion, or economic status, and to raise the financial aid needed to do this.

- To expand and enhance the College of Arts and Sciences (CAS) as the core of Boston University and its undergraduate programs. The University is committed to increasing the number of CAS faculty members and expanding and renewing the College’s facilities.
- To enhance the residential campus and student life experience for its undergraduate students in the special urban environment of Boston.
- To strengthen scholarship and research throughout Boston University by support of key disciplinary graduate programs.
- To enhance its nationally recognized professional schools and colleges, including Medicine, Management, Law, and Fine Arts. The University’s commitments to Medicine, Law, and Management are key to its prominence as a major urban research university. The College of Fine Arts offers a special opportunity for showcasing Boston University on campus, in the city, and around the world.
- To increase its emphasis on interdisciplinary research and graduate education in order to expand its leadership in important fields and the collaborative atmosphere across the University’s campuses.
- To continue to foster the engagement of the University in the City and the world, through public service and by extending the reach of its educational programs, including both study-abroad opportunities for Boston-based students and the creation of new opportunities for students from around the world to experience a Boston University education.

The above goals formed the basis for the 2013-2023 Charles River IMP and remain valid today as expressed through the IMP. No changes to these goals are proposed in this amendment. The University prepares and files an IMP Update every two years, the most recent of which was filed in October 2017. The next update will be filed in October 2019 and will include updated information on the progress toward IMP goals and program objectives, as well as further information as requested in the Scoping Determination.

2.3 COMMUNITY BENEFITS UPDATE

Boston University expresses the great value of its dynamic relationships with the City of Boston through the wide range of educational, cultural, social, legal, and medical community programs and services it provides. The University also makes direct financial contributions to the City of Boston in the form of real estate taxes, payment in lieu of taxes, and linkage payments. The University has a substantial impact on the local and regional economies through direct employment, purchased services, and student, faculty, and staff spending.

2.3.1 NEW AND ENHANCED COMMUNITY PROGRAMMING SINCE THE 2013-2023 IMP

Scholarship Program Expansion – Boston Public School Transfer Students

Since the implementation of the 2013-2023 IMP, Boston University has expanded its signature community benefits program called the Boston Scholars Program. The Boston Scholars Program includes two types of scholarship awards for Boston Public School (BPS) students: the Thomas M. Menino Scholars (formerly known as the Boston High School Scholars), and the Community Service Award. In December 2016, Mayor Walsh and the University announced yet another expansion of the Community Service Award program to include incoming transfer students who are BPS high school graduates, beginning with the fall semester of 2017.

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

Since 2017, 44 students have received approximately \$2.2 million in funding from this scholarship expansion. Refer to Section 2.3.2 and Table 2-2 for a full breakdown of scholarship aid.

Boston Women’s Workforce Council

In late 2016, the University embarked on another important new community benefit initiative in partnership with the City of Boston when it welcomed the Boston Women’s Workforce Council to its Charles River Campus. The Women’s Workforce Council is a public-private partnership tied to City Hall’s Office of Women’s Advancement, which strives to take measurable steps toward achieving pay equity. The University is proud to now house the Women’s Workforce Council at its Hariri Institute for Computing and Computational Science & Engineering, which undertakes collaborative, interdisciplinary data research initiatives aimed at providing positive societal impacts. The Hariri Institute has been partnered with the Women’s Workforce Council for some time on gathering payroll data for the Council’s pay equity initiative, making the Council’s location at the University a natural next step in that partnership.

Summer Camp with BCYF Leahy Holloran Community Center

In 2017, Boston University launched a summer camp with BCYF Leahy Holloran that is led by University staff and coaches. Now in its third year, the summer camp provides 70 BCYF summer campers the ability to participate in a two-day long program and experience the University’s world class athletic facilities.

City Scholars Summer Fellows

To continue to invest in the success of BPS graduates while they receive an education at Boston University, the University created the City Scholars Summer Fellows program in 2017. The City Scholars Summer Fellows program provides 10-week full-time paid fellowships at a competitive salary to Boston University sophomores or juniors that are BPS graduates. Funded by the University, the program allows students who show a commitment to public service and an interest in local government to get paid while gaining experience working for the City. Since inception, students have had paid fellowships within various City Hall departments and agencies, including the Boston Parks and Recreation Department, the Boston Planning and Development Agency, Health and Human Services, and the Boston City Council.

Boston University's Wheelock College of Education and Human Development Partnerships with BPS

In June of 2018, Wheelock and Boston University's School of Education officially merged to establish Boston University's Wheelock College of Education and Human Development (WCEHD). Planning is well underway to develop the initiatives in teacher education and evidence-based research that will propel the new Boston University Wheelock into a leadership position for K–12 education at a major urban research university. Having a positive impact in local and global communities remains central to everything the new colleges does:

- Upward Bound and Upward Bound Math Science help prepare low-income and first-generation college students to succeed in higher education.
- The Aspire Institute connects educators, community partners, and families to improve education, human development, and community wellness.
- The Intergenerational Literacy Program offers English literacy classes to immigrant parents and children.
- Jumpstart allows Boston University Wheelock Students to mentor preschoolers in Boston's South End neighborhood.
- The Earl Center of Innovation and Learning allows teachers and students to explore technological advances and innovative practices.
- Educators Rising Boston University gives high school students hands-on teaching experiences.
- The American Association of Colleges for Teacher Education Holmes Scholars Program provides mentorship and professional support to doctoral students from underrepresented communities.

Efforts at Massachusetts Ave and Melnea Cass Blvd.

The University has also been working in close collaboration with the City of Boston to address the opioid crisis, the impacts of which are especially evident near the University's Medical Campus in the South End. Through this on-going collaboration, the University contributed over \$100,000 in 2016 to a partnership initiative with the City of Boston and Project Place to beautify and provide public health outreach on "Recovery Road" at the intersection of Massachusetts Avenue and Melnea Cass Boulevard in Boston's South End and Lower Roxbury neighborhoods. Boston University has also been a partner in the City's engagement center located at 112 Southampton Street, supporting special holiday events at the center and targeted programmatic support.

Additional Community Benefits and Programming

Beyond updating these community benefits, the University also continues to provide a wide array of community programs, resources, and services through its schools and colleges. A comprehensive account of these programs and services is included in the University's most recent IMP, which can be viewed at <http://www.bu.edu/community/masterplans/>.

2.3.2 ECONOMIC IMPACTS

Boston University is the fourth largest private research university in the nation, the third largest private employer in the City of Boston, and the 14th largest employer in the Commonwealth. Founded in 1839 and chartered in 1869, the University has grown to include 17 schools and colleges offering more than 300 programs of study. The University received \$486.8 million in sponsored research awards in FY2018 and is the first private university invited to join the prestigious Association of American Universities since 1995. The University places a strong emphasis on excellent scholarship and outstanding teaching as well as path-breaking interdisciplinary research, with major initiatives in neuroscience, systems biology, photonics, engineering biology, data science, urban health, global health and development, and emerging infectious diseases, as well as research in communications and the humanities. With more than 34,000 undergraduate and graduate students from all 50 states and 140+ countries, and over 10,000 faculty and staff, discoveries and advances take place on the three Boston campuses with exciting frequency. *U.S. NEWS & WORLD REPORT* ranks Boston University among the top universities at 42nd nationally and 46th globally and named the University one of the nation's "Most Innovative Universities" for 2019. The University has an annual operating budget of \$2.5 billion and generates approximately \$3 billion annually in economic activity. Boston University provides over \$11 million annually in financial aid to graduates of the BPS and contributes over \$6 million a year in PILOT payments to the City.

Table 2-1: Real Estate Tax and PILOT Payments

Year	Real Estate Tax ¹		Payment in Lieu of Taxes	Linkage Payments	Subtotal
	Paid Directly to City of Boston	Paid to Landlord for Leased Properties			
FY2013	\$4,253,797	\$891,082	\$5,307,167	\$1,584,472	\$12,036,518
FY2014	\$2,854,675	\$988,193	\$6,065,651	\$148,023	\$10,056,542
FY2015	\$2,982,024	\$881,321	\$6,056,960	\$999,803	\$10,920,107
FY2016	\$3,225,118	\$1,022,968	\$6,115,824	\$1,067,489	\$11,431,399
FY2017	\$2,276,319	\$2,527,655	\$6,116,233	\$0	\$10,920,207
FY2018	\$1,955,107	\$2,406,883	\$6,100,000	\$202,521	\$10,664,511
Total	\$17,547,040	\$8,718,102	\$35,761,835	\$4,002,307	\$66,029,284

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

Transportation and Infrastructure

Boston University contributes directly to projects that benefit Boston and the surrounding area, including providing matching dollars to city, state, and federal sources to improve the regional transportation network. The Commonwealth Avenue Improvement Project, which the University began in conjunction with City of Boston, state, and federal agencies in 2007, is a prime example of the many public-private partnerships in which the University has participated.

The University has committed more than \$13 million to Commonwealth Avenue Phases 1 and 2, as well as funding for the Kenmore Square Project. Construction and design costs for these projects totaled over \$44 million. Commonwealth Avenue Phase 1 was completed in 2015, and Phase 2A has an anticipated completion date in June of 2019.

Scholarship Aid

The University's longstanding commitment to education extends well beyond its campus boundaries, as is evident in its scholarship programs. Since the 2013-2023 IMP, the University committed a total of \$78.8 million in scholarship money to more than 2,200 students. The amount of aid offered in FY2018 is broken down by program in Table 2-2, Scholarship Aid.

Table 2-2: Scholarship Aid

Scholarship Program	Amount Offered in FY2018	Number of Recipients
Boston Scholars Program	\$11,750,890	269
Community Service Award	\$7,092,209	176
Thomas Menino/ Boston High School	\$4,658,681	93
Cardinal Medeiros	\$2,370,570	47

Scholarship Program	Amount Offered in FY2018	Number of Recipients
Boston City Employees	\$507,781	51
SPH Health Care	\$38,232	6
Roxbury Community	\$101,960	2
Bunker Hill Community	\$101,960	2
Total	\$14,871,393	377

Chapter 3

UPDATE ON THE 2013 – 2023 INSTITUTIONAL MASTER PLAN

CHAPTER 3: UPDATE ON THE 2013 – 2023 INSTITUTIONAL MASTER PLAN

Boston University is fully committed to the objectives set forth in the IMP. In the ensuing years since the approval of the IMP, progress has been made on several PIPs, including the School of Law tower, CILSE, the Myles Standish Hall Renovation Project, and the construction of an addition to the existing building formerly known as the “Castle,” now known as the Boston University Dahod Family Alumni Center, located at 225 Bay State Road. In addition to these PIPs, the University has continued to work with the City of Boston and the Commonwealth on important infrastructure projects, including Phase II of the Commonwealth Avenue Improvement Project and the replacement of the Commonwealth Avenue bridge over the Massachusetts Turnpike, which has been completed.

Enrollment and housing goals are an important part of the IMP and continue to guide the efforts of the University. Progress on these aspects of the University is described below.

3.1 CAMPUS DEMOGRAPHICS UPDATE

Boston University is the fourth-largest independent, nonprofit university in the country and the largest in New England. At the time the IMP was approved in 2013, the University had nearly 33,500 students and 10,000 faculty and staff on its two campuses. Since 2013, these numbers have increased marginally to 34,300 students and 10,200 faculty and staff.

While not the subject of this IMP, the 2018 acquisition of Wheelock College, a 130-year old private institution composed of three schools focusing on education, social work, and arts and sciences was one of the factors that affected to a small degree the University’s overall enrollment numbers. The merger resulted in the new Boston University Wheelock College of Education & Human Development, which is an academic unit within BU, located on Wheelock’s Boston and Brookline campuses and BU’s Charles River Campus. In 2017, Wheelock enrolled approximately 1,000 undergraduate and graduate students. All Wheelock students in good academic standing who wished to continue at BU became students of a program within BU and had the option to live in the residence halls on the former Wheelock campus or to apply to live in residences on BU’s campus. As a result, the full-time enrollment and students needing housing has increased in 2018 above the anticipated number in the IMP. The Fenway Campus is the subject of a separate existing Institutional Master Plan and is not included as part of this IMP Amendment.

3.1.1 STUDENT POPULATION

As of the fall 2017 semester, there were 15,865 full-time undergraduate students at the Charles River Campus. Due to an increase in retention rates and transfer students, this number is 2.6% higher than in 2015. The number of incoming freshmen,

however, was 3.6% lower in 2017 than it was in 2015. See Table 3-1: Full-Time Undergraduate Students.

Table 3-1: Full-Time Undergraduate Students

Full-Time Undergraduate Students	Fall 2015 Actual	Fall 2018 Actual
Freshman Class	3,628	3,611
Continuing and Transfer Students	11,835	12,739
Total Full-Time Undergraduates	15,463	16,350
Full-Time Undergraduates Forecast	15,577 ^a	16,284 ^b
# of Students Above (Below) Forecast	(114)	66
% Above (Below) Forecast	(0.73%)	0.41%

^aApril 2012 forecast from IMP 1st Amendment.

^bProjected full time enrollment as of August 2018, as indicated in the October 2018 Institutional Master Plan Notification Form. Projection includes Fall 2018 Wheelock transfers in enrollment totals.

The June 1, 2018 merger between Boston University and Wheelock College has had a temporary effect on increased enrollment. As a result of the merger, 300 students formerly enrolled at Wheelock transferred to Boston University in the fall of 2018, resulting in a freshman class size of 3,611. These students additionally have a minor impact on the total number of undergraduate students enrolled during the 'teach-out' years of 2018-2020. This is reflected in the enrollment numbers shown in Table 3-2: Projected Full-Time Undergraduate Enrollment.

Table 3-2: Projected Full-Time Undergraduate Enrollment*

Fall	Enrollment	Freshman Class Size
2019	16,009	3,100
2020	15,645	3,100
2021	15,494	3,100
2022	15,313	3,100

*Projected full time enrollment as of November 2018. Actuals include 311 Wheelock College transfers. Projected Wheelock continuing students: 192 in Fall 2019 and 99 in Fall 2020.

As illustrated in Table 3-2, the incoming freshman class for 2018 exceeds the following years due to an unanticipated increase in the yield from those who were admitted. The impact of this increase in the 2018 freshman class is carried through the projections for total full-time undergraduate enrollment in the 2019-2021 period. Projected enrollment of freshmen in subsequent years decreases and remains steady at 3,100 students.

3.1.2 EMPLOYMENT

Boston University is proud to be one of the city's largest private employers. In fiscal year 2012, 6,685 people were employed at the Charles River Campus alone. This number has grown over the term of the 2013 Institutional Master Plan, as shown in Table 2-5, Historical Employment at the Charles River Campus.

Table 3-3: Historical Employment at the Charles River Campus

Fiscal Year	Employee Headcount
2013	6,658
2014	6,580
2015	6,730
2016	6,758
2017	6,856
2018	7,062
2019	7,254

One-quarter of the employees at the Charles River Campus are residents of the City of Boston. Approximately 86 percent of all employees at the Charles River Campus are employed on a full-time basis. Faculty and staff constitute approximately 33 and 67 percent of the workforce, respectively. These figures are detailed in Tables 3-4 and 3-5.

Table 3-4: Charles River Campus Boston Resident Employees [November 2018]

Designation	Full Time		Part Time		Total	
	Number	% of all Employees	Number	% of all Employees	Number	% of all Employees
Faculty	316	4.4%	141	1.9%	457	6.3%
Staff	1,324	18.3%	66	0.9%	1,390	19.2%
Total	1,640	22.6%	207	2.9%	1,847	25.5%

Table 3-5: All Charles River Campus Employees [November 2018]

Designation	Full Time		Part Time		Total	
	Number	% of Total	Number	% of Total	Number	% of Total
Faculty	1,674	23.1%	724	10.0%	2,398	33.1%
Staff	4,537	62.5%	319	4.4%	4,856	66.9%
Total	6,211	85.6%	1,043	14.4%	7,254	100.00%

Future employment levels are dependent on the growth rate in academic programs and research activities. Consistent with the last five years, employment levels may fluctuate up or down in any given year, but it is anticipated that there will be a small, steady increase over the longer term.

3.2 STUDENT HOUSING UPDATE

In response to concerns of the City and the surrounding neighborhoods, the University has been and remains committed to increasing the amount of on-campus housing both available to and occupied by undergraduate students. The University was challenged to create housing that would be attractive to upperclassmen that are more likely to reside off campus, and as a result, has made great strides in increasing the availability and variety of on-campus housing options. With the construction of two new residential buildings at 10 Buick Street and 33 Harry Agganis Way and a number of other improvement projects, including the renovation of Bay State Road undergraduate residences, the University has increased the number of students housed on campus from 67 percent in 1994 to 73 percent in 2017. See Table 3-6, Students Housed on Campus.

In 2016, the University began the Myles Standish Hall Renovation Project, which substantially rehabilitated the interior of the 730-bed residence hall in addition to providing a historically-sensitive restoration of the exterior. The University is currently planning to renovate Kilachand Hall (listed as Shelton Hall in Table 3-3 of Section 3.2 of the IMP). Due to its age and function as a residence hall, Kilachand Hall is greatly in need of updates, or “refurbishing and renewal,” to bring it into compliance with current accessibility, energy saving, and building code requirements. In its present configuration and condition, Kilachand Hall provides 416 beds, academic and administrative support space, and lounge/study areas. Rehabilitation and upgrades to the ground floor entrances, elevator cores, egress, and the building envelope will result in much-needed access, accessible beds, energy, and life safety improvements.

The University will continue to work diligently toward maximizing on-campus housing opportunities.

Table 3-6: Students Housed on Campus

Year (Fall)	Enrollment	Undergraduate Occupancy	Students Needing Housing	Percent Housed	Freshman Class Size
2008	15,540	10,629	14,486	73%	4,131
2009	15,386	10,825	14,288	76%	4,130
2010	15,573	11,128	14,635	76%	4,409
2011	15,540	11,109	14,465	77%	4,022
2012	15,419	10,986	14,486	76%	3,877
2013	15,402	10,967	14,467	76%	3,807
2014	15,458	11,046	14,437	77%	3,915
2015	15,463	11,074	14,744	75%	3,628
2016	15,673	11,100	15,050	74%	3,551
2017	15,865	11,166	15,256	73%	3,498
2018	16,380	11,377	15,604	73%	3,611

3.3 EXISTING PROPERTY AND USES UPDATE

Boston University's Charles River Campus consists of 113 acres of land and 285 buildings containing approximately 12.1 million gross square feet of space. The campus is centered on Commonwealth Avenue and extends from Kenmore Square to Packard's Corner. Properties owned and leased by Boston University on the Charles River Campus are identified in Figure 3-1, Boston University Properties.

Since the approval of the IMP in 2013, the following changes have been made to Charles River Campus properties:

- As identified in the First Amendment, the University constructed the Rajen Kilachand Center for Integrated Life Sciences and Engineering at 610 Commonwealth Avenue in 2017, adding 170,000 square feet of academic and research space.
- As identified in the Second Amendment, the University acquired 700 Beacon Street in 2015, a three story, 37,000 square foot building currently in academic use.
- As identified in the Third Amendment, the University entered into a lease for a portion of 1047 Commonwealth Avenue for less than two years to accommodate displaced students during the renovation of Myles Standish Hall. The University no longer leases this property.
- As identified in the Fourth Amendment, the University added approximately 1,000 square feet of space to the Dahod Family Alumni Center at 225 Bay State Road in 2016-2018.
- The University constructed the Booth Theater at 820 Commonwealth Avenue in 2018, a 148,323 square foot performing arts center in Brookline.
- In connection with the redevelopment of the University's commercial properties in Kenmore Square, the University entered into a long-term ground lease with a commercial developer for the properties at 648-660 Beacon Street, 533-541 Commonwealth Avenue, and 19 Deerfield Street in 2016. These properties total approximately 68,032 square feet of land area and 334,441 square feet of buildings.
- In connection with the disposition of the Hotel Commonwealth, the University entered into a long-term ground lease with a private party for 500–528 Commonwealth Avenue in 2012. The property includes 64,821 square feet of land and 184,208 square feet of buildings.
- In 2016, the University sold 601 Newbury Street, amounting to a reduction of 24,000 square feet of building area and 9,778 square feet of land.

3.4 PLANNING AND URBAN DESIGN

For over 150 years, Boston University has played a vital role in the development of the City of Boston. Since it was formally established in 1869, the University has transformed from a geographically scattered collection of buildings to a coherent urban campus fully integrated into the city and its surrounding neighborhoods. Founded as an institute dedicated to social equality and inclusiveness, the Charles River Campus has continued to develop in keeping with the guidance of the University’s third president, Lemuel Murlin, who in the 1920s advised the Trustees to purchase fifteen acres of land in Back Bay to pursue an identity “in the heart of the city, in the service of the city.”

Over time, the University has developed the Charles River Campus vision in consideration of its mission, riverfront location, proximity to historic neighborhoods, and the insertion of major transportation infrastructure within the heart of its campus. As Boston and the University have grown together, the Campus is now surrounded by well-established, distinctive neighborhoods that provide a context for its ongoing development. Since the original acquisition of land along the Charles River in the 1920s, the University has sought to create a vibrant and attractive campus that supports academic excellence and enriches student life in the heart of the city. Through decades of renovation, new construction, and investment in public infrastructure, the University has created a cohesive campus from a disparate series of properties.

Throughout its history, Boston University’s developments and renovations have integrated it into the fabric of the city’s diverse architectural styles. It is important that buildings respond to the immediate context around them and maintain the dynamism of the Commonwealth Avenue boulevard, which the University aims to achieve through highly unique architectural expression, transparent and active ground floors, and a strong street wall. However, there is no desire to create a unified urban expression in the area, as reflected by the diverse architectural styles that the University has continued to preserve, renovate, and construct over the course of the IMP.

Further description of the University’s existing relationship to, and future vision within, the larger urban context can be viewed in Chapter 4, Planning and Urban Design, of the IMP and throughout the IMP’s Urban Design Supplemental Information document.

3.5 UPDATE ON PROPOSED INSTITUTIONAL PROJECTS

Included in the IMP and the First through Fourth Amendments are ten PIPs. The PIPs outlined in the IMP as amended include:

- School of Law, 763 - 767 Commonwealth Avenue
- Academic Building Addition, 640 Commonwealth Avenue

- Academic/Administrative Building, 130 Bay State Road
- Academic Buildings, 645 - 665 Commonwealth Avenue
- Science and Engineering Research Building, 30 - 38 Cummington Mall
- Myles Standish Hall and Annex Renovation, 610 - 632 Beacon Street
- Center for Integrated Life Sciences and Engineering, 610 Commonwealth Avenue
- Academic Building, 700 Beacon Street
- Temporary Student Residence, 1047 Commonwealth Avenue
- The Castle Addition, 225 Bay State Road

In addition to the PIPs outlined above, the Student Village Residence III project, approved in the Planned Development Area No. 38, will be further developed as student housing demand and University financing become available.

Since the approval of the IMP, progress has been made on a number of PIPs, while others are not planned for implementation until later in the IMP term. Provided below is a summary of the status of the PIPs from the IMP as amended that have been completed or are currently underway.

3.5.1 RENOVATION OF THE LAW TOWER

The rehabilitation of and addition to the 18-story School of Law tower was proposed and approved in the IMP in recognition of the critical need to provide a facility with the appropriate space and amenities to meet the contemporary requirements of an excellent legal education. The addition to the Law Tower, as well as the interior renovations and exterior upgrades, were completed in September 2015.

3.5.2 MYLES STANDISH HALL AND ANNEX RENOVATION, 610 – 632 BEACON STREET

Myles Standish Hall was originally constructed in 1926 as suite-style hotel and has been used for Boston University undergraduate housing since 1949. Together with the Myles Standish Annex, which was acquired in 1980, the complex provided 760 student bed spaces.

Renovation of the Myles Standish Hall and Annex maintained the historic structure while adapting the building to meet contemporary housing needs. The renovation maximized bed count and private bedrooms, as well as modern amenities, to retain the number of undergraduate students seeking on-campus housing. The project also

provided public realm improvements in the form of a LEED-certified design, new sidewalks, street trees, pedestrian benches and ramps, bicycle racks, and a 6,400 square foot open space plaza. Additionally, traffic calming improvements were made to the intersection of Bay State Road and Charlesgate, and a bike lane was implemented along that portion of Beacon Street.

The Project was constructed in three phases, lasting approximately 28 months from May 2016 until August 2018. Phase 1, the renovation and rehabilitation of Myles Standish West, was completed in August 2017. Phase 2, the Myles Standish East and associated plaza, was completed in May 2018. Phase 3, which began in May 2018, has been completed. The completed project welcomed students at the beginning of the Fall 2018 semester.

3.5.3 RAJEN KILACHAND CENTER FOR INTEGRATED LIFE SCIENCES AND ENGINEERING, 610 COMMONWEALTH AVENUE

In response to the increasing demand for more advanced, collaborative, and innovative programs for scientific advancement, the University proposed the construction of the CILSE in Fall 2013. The First Amendment to the IMP included the addition of a new life sciences and research facility at 610 Commonwealth Avenue and was approved in early 2014. The new building replaced an existing surface parking lot and provides significant benefits to the pedestrian experience along Commonwealth Avenue.

The construction of the CILSE building began in May 2015. The construction is complete, and the facility was issued a Certificate of Occupancy in May 2017.

3.5.4 ACADEMIC BUILDING, 700 BEACON STREET

The property at 700 Beacon Street is bordered by University-owned properties and was identified as a potential development site for academic purposes in prior Institutional Master Plans. The University purchased the site from Lesley University in 2015 when the institution relocated its Art Institute of Boston Program to Cambridge. At the time of purchase, the site was used for institutional uses by Lesley University. Boston University sought and received approval for the Second Amendment to the IMP to add the building as a PIP and to incorporate the site into the Boston University IMP Overlay Area. The three-story, 37,000 square foot space is used to house various institutional functions such as art studios, labs, office and meeting spaces, and teaching rooms.

3.5.5 TEMPORARY STUDENT RESIDENCE, 1047 COMMONWEALTH AVENUE

To provide housing for the 350 undergraduate students and residence assistants displaced because of the Myles Standish Renovation Project, the University sought

approval for entering a short-term lease of an existing building at 1047 Commonwealth Avenue. The Third Amendment to the IMP was approved in May 2016. The lease of the property began in August 2016 and expired on June 30, 2018.

3.5.6 BOSTON UNIVERSITY CASTLE ADDITION, 225 BAY STATE ROAD

The Dahod Family Alumni Center (formerly the Castle) is the site of event, conference, and office space as well as the home of a small pub (Fuller’s Boston University Pub) open to members of the University community. The distinctive Tudor Revival mansion was constructed in 1915 and is located proximate to the Charles River.

A small expansion to the Castle was approved in the Fourth Amendment to the IMP in May 2017. The addition provided space for an expanded kitchen to serve the basement pub and existing catering operations on the first floor. Other aspects of the project included making the building, constructed in 1905, fully accessible and restoring the exterior. Work on the project began in October 2017 and was completed in early September of 2018.

3.5.7 130 BAY STATE ROAD

The property at 130 Bay State Road was identified in the IMP as a PIP. The site offers the opportunity to integrate two existing brownstones with a new addition to create an approximately 60,000 square foot academic and administrative space. The University is continuing to define priorities for advancing this project in line with its mission and objectives.

3.5.8 SCIENCE AND ENGINEERING RESEARCH BUILDING

The property at 30-38 Cummington Mall was identified in the IMP as a PIP. The site offers the opportunity to replace an existing building and create a new science and engineering research building. The University is continuing to define priorities for advancing this project in line with its mission and objectives.

3.5.9 ACADEMIC BUILDING ADDITION,

The property at 640 Commonwealth Avenue was identified in the IMP as a PIP. The site offers the opportunity to construct a 50,000 sf addition to the existing building serving the College of Communications. The University is continuing to define priorities for advancing this project in line with its mission and objectives.

3.5.10 ACADEMIC BUILDINGS, 645 - 665 COMMONWEALTH AVENUE

Now known as the Data Sciences Center (Site CC), the first and largest phase of this PIP will be as envisioned in the IMP. The Data Sciences Center is the subject of this

Amendment and is further described in Chapter 4, Proposed Institutional Master Plan Amendment.

3.6 UPDATE ON PUBLIC REALM IMPROVEMENTS

In concert with the PIPs planned for the term of the IMP, the University identified public realm improvement projects to enhance the pedestrian experience around the Charles River Campus. These improvements include the addition of several pocket parks and improvements to Commonwealth Avenue.

3.6.1 COMMONWEALTH AVENUE PHASE 1A IMPROVEMENTS

Through a partnership with the Massachusetts Department of Transportation (MassDOT), the City of Boston, and the University, the Commonwealth Avenue Phase 1A Improvement Project was successfully completed. With a financial contribution of several million dollars by the University, an enhanced street configuration was implemented along Commonwealth Avenue from Kenmore Square to the Boston University Bridge. All sidewalk furnishings, plantings, and surfaces are maintained and replaced by the University.

3.6.2 COMMONWEALTH AVENUE PHASE 2A IMPROVEMENTS

Through a partnership with MassDOT, the City of Boston, and the University, the Commonwealth Avenue Phase 2A Improvement Project will continue the streetscape improvements along Commonwealth Avenue from Amory Street to Alcorn Street. The improvements will include fully-accessible Green Line stations, separated bike lanes and buffered sidewalks, and protected intersections.

The Commonwealth Avenue Phase 2A project was included in the MassDOT Transportation Improvement Program for funding in 2015 at an anticipated cost of nearly \$17 million, of which the University will provide \$2.4 million. Crews began prepping utility infrastructure in the fall of 2016, while major construction began in spring 2017. The project is expected to take three years to complete and will terminate in the summer of 2019.

3.6.3 MYLES STANDISH PLAZA

The renovation of the Myles Standish Hall and Annex includes the creation of an approximately 5,500 square-foot open space plaza at the eastern point of the site. The plaza, which was previously an underutilized expanse of pavement, features landscaping and pedestrian amenities to enliven the public realm. With the addition of a free-standing Boston University sign, the plaza is intended to serve as a dynamic gateway to the University campus. Changes to the intersection of Bay State Road and

Charlesgate have improved traffic circulation and provided traffic calming measures. Construction of the plaza was completed in August 2018.

3.6.4 RAJEN KILACHAND CENTER FOR INTEGRATED LIFE SCIENCES AND ENGINEERING POCKET PARK

Although not included in the IMP, a new pocket park was proposed and constructed in concert with the CILSE project. In the space between the new CILSE building and the existing Morse Auditorium, the fully accessible pocket park provides a mix of soft and hardscape surfaces in addition to secondary access to both buildings. The park features vertical plantings against the western wall of the Morse Auditorium and small trees and vegetated areas. The pocket park was completed in 2017 and is currently in use.

3.7 UPDATE ON BOSTON UNIVERSITY INITIATIVES

3.7.1 TRANSPORTATION

The University has been successful through its robust Transportation Demand Management (TDM) program in encouraging the use of alternative transportation modes. In addition to the major initiative mentioned below to develop a campus-wide bicycle plan, the University continues to increase parking fees to discourage use of single occupancy vehicles. Parking lot use has declined by 10% over the period of 2016-2018, demonstrating the success of the TDM program in driving visitors and employees to other modes of travel. Through the University's partnership with the City of Boston and the Commonwealth, the Commonwealth Avenue Bridge over the Massachusetts Turnpike and Phase IIA of the Commonwealth Avenue Project have been implemented, providing enhanced facilities for pedestrians and bicycles. The Project that is the subject of this Amendment will decrease the available supply of parking spaces and further encourage the use of alternative transportation modes. Further description of the University's TDM measures and their impacts, as well as the specific impacts of the Project, can be found in Chapter 5 of the Draft Project Impact Report.

Transportation Master Plan

Adopted in 2013, the Charles River Campus Transportation Master Plan is a companion document to the IMP. Designed as a comprehensive analysis and inventory of current transportation conditions at Boston University, the document also provides projections through the period of the IMP and defines the University's transportation goals. Three primary goals were identified to shape the University's policy and programs through 2023:

1. Improve safety and efficiency for all modes with particular emphasis on pedestrian and bicycle safety.
2. Increase the use of sustainable modes by employees and students currently commuting to the Charles River campus in single occupancy vehicles.
3. Minimize the University's traffic and parking impacts on adjacent communities.

These goals are evaluated in connection to the proposed institutional projects and their possible impact on transportation infrastructure. A robust program of Transportation Demand Management (TDM) measures were developed to support these strategies.

Mode Share

In October 2018, the University administered a random sample survey to applicable employees and students to determine the modes used to travel to and from the University. Applicable employees are defined as those who begin and end their work day between 6:00am and 8:00pm, work 17 or more hours a week and use their personal vehicles for work purposes fewer than five times a month. Applicable students are defined as those who begin and end their day between 6:00am and 8:00pm, are considered full time by the institution (typically taking 12 credits or more) and use their personal vehicles for classroom purposes fewer than five times a month. Of a 34,986 total University population at the time of the survey, 20,215 were considered applicable.

Surveying a sample size of 1,014 people, it was found that in 2018, 24% drive alone, 7% carpool, 46% take transit, 9% ride a bicycle, 12% walk, and 2% use another form of transportation. Carpooling, bicycling, walking, and other modes have remained relatively steady since 2014, while driving alone has decreased by nine percentage points. The drive-alone rate for faculty and staff is approximately 29%, which significantly offsets the student drive-alone rate of 6%.

On-Campus Parking Facilities

The University owns and operates nine major off-street surface parking lots and nine parking garages. In addition, the University regulates on-street parking along several private alleyways and a variety of small miscellaneous off-street parking areas located throughout the campus. According to the University's Parking and Transportation Services Office, as of February 2018, the University managed a total of 3,280 parking spaces, a decrease of 429 spaces since the IMP.

The University charges fees for all parking permits issued to faculty, staff, and students. Campus parking rates reflect the true cost of parking and are nearly market-

rate for all users (including faculty, staff, and students). Accurate pricing discourages unnecessary vehicle trips. The cost of these permits is offered at a discounted rate (50%) to employees who carpool.

Boston University Charles River Campus Bicycle Plan

In the spring of 2017, the University conducted an extensive data collection and public outreach effort to examine existing bicycle conditions on the Charles River Campus and identify opportunities for improvement. The Charles River Campus Bicycle Plan summarizes these findings and presents recommendations and an analysis of expected future conditions. Recommendations are organized into five categories (Bike Parking, End-of-Trip Amenities, Campus Bicycle Network, Blue Bikes Use, and Campus Bicycling Culture), which culminate in an action plan that presents a roadmap to implementation in the short-term, mid-term, and long-term.

Pedestrian Circulation

Safe pedestrian circulation is critically important for an urban campus, and walking is one of the most popular modes of transportation for students on the Charles River Campus. Pedestrian volumes are extremely high along Commonwealth Avenue and have continued to grow steadily since pedestrian volumes were first measured in 1987. Through both public realm and building projects, the University seeks to create a cohesive, accessible pedestrian experience along Commonwealth Avenue, emphasizing improved sidewalk conditions and streetscapes for the pedestrian scale.

Blandford Mall, Cummington Mall, and Hinsdale Mall have all been converted from vehicle to pedestrian use, while the upcoming Commonwealth Avenue Phase 2A project will create additional streetscape improvements between Amory Street and Alcorn Street. Improved bicycle infrastructure, such as dedicated bicycle lanes, further improve pedestrian circulation by minimizing mode encroachment.

3.7.2 SUSTAINABILITY

Approved by the Board of Trustees in December 2017, Boston University's Climate Action Plan (the "Plan") has five major commitments:

1. Prepare the University for the impacts from climate change that can no longer be avoided
2. Reduce greenhouse gas emissions to operate the University to net zero by 2040
3. Develop a plan to reduce indirect (Scope 3) emissions
4. Integrate climate change into the University's education and research mission
5. Integrate the Climate Action Plan with the University's Strategic Plan

While the Plan is specific to Boston University, it has been developed in the context that climate change is a global problem that extends beyond the University's campuses. Implementing the Plan will elevate the University's position as a leader by addressing the challenges of climate change in its educational programs, research, operations, finance, and community engagement. Building energy, which accounts for 96% of the University's generated emissions, is the backbone of the Plan. Specific goals include:

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

Calendar 2018 was a pivotal year for Boston University's sustainability efforts, kicking off the implementation of the University's Plan. The year's work provided the foundation to position the University as a leader in climate action and sustainability by building capacity to implement, manage, engage and communicate around the Plan. The progress detailed below represents FY2018 data. The National Emerging Infectious Diseases Laboratories, the Tanglewood Institute, miscellaneous smaller properties in New England, and the University's portion of emissions from the Massachusetts Green High Performance Computing Center are included in this analysis.

Climate	130,000 MTCO ₂ e emitted, a 22% reduction from FY2006
Energy	1,742,000 MMBtus used, a 3% reduction from FY2006
Campus Site EUI	130 kBtu/sf, a 13% reduction from FY2006*
Water	400.5 million gallons used, an 8% reduction from FY2006
Waste	9,497 tons of total waste produced, a 13% reduction from FY2006
Diversion	39% diversion rate, up from 36% in FY2017
Goodwill not Landfill	Collected 70 tons of donations, a total of 672 tons since 2009
Green Cleaning	98% of cleaning products are GreenSeal or EcoLogo Certified

*The EUI calculation is based on 13,400,000 square feet of conditioned space (garages are excluded from GSF area) in FY2018.

LEED Gold Certification

The University began LEED certification for major projects in 2008 and has over 880,000 square feet of LEED certified space to date, 90% of which has achieved LEED Gold. LEED certification provides a process and system that integrates sustainable design strategies to support the Plan's objectives and bring the Plan to fruition. The Plan established the following LEED criteria:

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

BU Wind

In July, the University executed a Power Purchase Agreement (PPA) for a wind project in South Dakota to match 100% of the University's electricity demand. The project is designed to generate an average of 205,000 MWh of electricity each year from 48.6 MWs of generation capacity. This represents approximately 20 wind turbines and will provide a 53% reduction in Boston University's carbon footprint for campus operations.

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

Solar Initiative

The University has engaged solar energy and structural engineers to conduct a campus-wide solar feasibility study. The study, which is expected to be completed in June 2019, is exploring a total of 29 buildings and sites across all the University's three campuses. With a maximum installed generation capacity of approximately 2.3 MW, it is the University's intention to aggregate these projects into a PPA and to allocate a portion of the solar project to the Data Sciences Center.

Groundwater Recharge

Portions of the University's campus sit within the Groundwater Conservation Overlay District. The University owns most of the historic brownstones along Bay State Road, which are protected by the district, and has worked with the City to ensure that groundwater levels are maintained in this area. Stormwater recharge is also incorporated in all new major construction projects on the campus.

City of Boston Programs

- Green Ribbon Commission: Boston University has been a member and supporter of the City of Boston’s Green Ribbon Commission since its inception. President Brown sits on the Green Ribbon Commission and the Carbon Free Boston Working Group. The University is also actively participating in the Commission’s Higher Ed Working Group, a collaborative body of Boston area academic institutions convening around emerging and best practices on energy efficiency, large scale renewables procurement, climate preparedness, green labs, etc.
- Carbon Free Boston: Boston University’s Institute for Sustainable Energy developed the process and implemented the analysis and reporting for Carbon Free Boston to help the City understand the policies and programs that need to be put in place if the City is going to meet its goal to be carbon free by 2050.
- Zero Waste Advisory Committee: The University participated in the City of Boston’s Zero Waste Advisory Committee to make recommendations for nineteen Zero Waste options for implementation in the short-, medium- and long-term.

3.7.3 CAMPUS-WIDE SIGN STANDARDS

The University adopted the Campus Sign Standards Manual in 2009 to provide technical specifications for the development of a comprehensive exterior signage program. Basic elements such as standard typestyles and colors, as well as universal symbols, are identified in the manual to provide general guidelines for the Boston University brand identity. Technical specifications, graphic standards, and sign types are each identified with narrative and graphical depictions to clearly illustrate design intent. The manual is intended as a “kit of parts” for consistent application by an outside Sign Contractor and is updated and maintained by the University’s Facilities Department. All signage proposals on campus are coordinated through the Marketing and Communications office. These standards have been mutually agreed upon by the BPDA.

Chapter 4

PROPOSED INSTITUTIONAL MASTER PLAN AMENDMENT

CHAPTER 4: PROPOSED INSTITUTIONAL MASTER PLAN AMENDMENT

4.1 INTRODUCTION

The IMP documented the University's desire to develop significant new academic buildings within its Central Campus on Commonwealth Avenue. As discussed in Chapter 1: Introduction, the need and location for this academic building was identified and approved as a PIP at Site CC (645-665 Commonwealth Avenue) in the IMP.

This Fifth Amendment to the IMP proposes to modify the description of this PIP (Site CC) to allow for a building with more floors and greater height and to eliminate the below-grade parking garage. The Project as-planned will not alter the Gross Floor Area (GFA) allowed nor the Floor Area Ratio (FAR) allowed for in the IMP. Further, the proposed uses in the building, which include academic uses for instruction, research, office, and ancillary uses, will be consistent with the IMP.

The proposed building at 665 Commonwealth Avenue will provide additional interdisciplinary research and teaching space for faculty and students in the study and advancement of mathematics & statistics, computer science, and academic research (the "Data Sciences Center"). In keeping with Boston University's mission and objectives, the Project represents the commitment to continually pursue innovations in education and research. The data sciences field has emerged as one of the fastest-growing job categories in recent years, and the University expects that its evolving computational science curriculum, renowned faculty and staff, and especially the Data Sciences Center locus will all be essential drivers of that changing workforce. The Project is an opportunity to enhance a world-class faculty and further develop an integrated and interdisciplinary student environment.

In addition to the PIP described above, the University proposes to add digital signage to the Warren Towers Residence Hall at 700 Commonwealth Avenue as a replacement for the existing poster cases. The Warren Towers buildings are identified as Large Residence Halls in the IMP in Chapter 3: Existing Property and Uses, Table 3-3, Large Residence Halls. The locations of the proposed Data Sciences Center and Warren Towers Signage can be viewed in Figure 4-1, Aerial View of Proposed Institutional Projects.

4.2 DATA SCIENCES CENTER

The University proposes to construct a building of up to 350,000 sf GFA for academic and research space to support its expanding programs in the area of data sciences with appurtenant site and public realm improvements. The University's programs in the related

fields have continued to thrive, which has led to the need for expanded academic space and consolidation from several locations across the campus.

Located approximately 0.3 miles from Kenmore Square, the Project will be constructed in the core of the Boston University Charles River Campus. To the east and the west, the Site is flanked by University academic and research buildings. To the north, a block of multistory brick townhouses serves as Boston University student residences. Across Commonwealth Avenue to the south is a major complex of buildings that support instruction, research, and student housing. These buildings include the recently constructed Rajen Kilachand Center for Life Sciences and Engineering. Warren Towers, an 18-story undergraduate residence hall, and Boston University Grounds South complete the block. The Proponent owns and controls most of the buildings along Commonwealth Avenue from Kenmore Square to the Boston University Bridge.

The Site currently consists of an existing surface parking lot with 126 parking spaces and a small area of paved open space with benches. Prior to its acquisition by the Proponent, the Site was utilized for commercial uses, including a gas station and a fast food restaurant. The surface parking lot is bordered by three curb cuts on Commonwealth Avenue and two on Granby Street.

The Project will bring together closely allied data sciences disciplines, providing a new platform for collaboration and innovation on an underutilized property. The academic, office, and research and instruction space will serve the departments of Mathematics & Statistics, Computer Science, and the Rafik B. Hariri Institute for Computing and Computational Science & Engineering, which will be co-located with general classrooms and teaching space. The Project will allow these academic and research entities to consolidate from five different locations across the campus to one building, which is a critical factor for units that are highly collaborative in their field. New faculty and staff will join existing faculty who will be relocating from other University buildings on the Charles River Campus.

The Data Sciences Center will specifically include: dedicated computer science and mathematics computing laboratory and workspaces, general classrooms and department teaching spaces, seminar rooms, focused and informal collaboration spaces, faculty and graduate/post-doctoral offices, and administration spaces, as well as seminar rooms, conference and meeting rooms, and typical building support areas (including restrooms, utility rooms, dining, mechanical rooms, and common areas). The existing surface parking lot located on the Site will be removed to allow for construction of the Project. Three curb cuts on Commonwealth Avenue will be closed to create a continuous pedestrian experience from Granby Street to Silber Way. One existing curb cut on Granby Street will be removed and one will be reconstructed. Existing conditions and boundaries of the Site can be viewed in Figure 4-2, Existing Conditions Plan.

Additional improvements to the Site and surrounding areas will include: strengthening existing pedestrian connections between the Project and nearby University buildings and schools, improving Granby Street with a two-way orientation as well as landscape features and dedicated bicycle lanes, and introducing improvements to the alley abutting the Site to the north, transforming it into a pedestrian-friendly laneway. The Project will provide 120 covered bicycle storage spaces on the eastern edge of the Site, with additional spaces on Commonwealth Avenue, Granby Street, and at the townhouses to the north of the laneway. Americans with Disabilities Act (ADA) accessible pathways will be provided at the four main entrances to the building and throughout the Site.

The Project will remove the 126 spaces provided at the University-owned Granby Lot, and the reconstruction of the private laneway will remove 35 University reserved off-street permit spaces. No new parking is proposed at the Site. Approximately 710 net new vehicle trips are anticipated as a result of the Project, which will be redistributed to Garages K, L, and M and the CAS Lot, all within a quarter mile of the Site. Further analysis of the Project's impact on parking demand and supply can be found in Chapter 5 of DPIR.

The massing of the building will create a truly bold architectural statement that will serve as a new, iconic landmark of the University. As proposed in the IMP, Site CC would be developed for new academic space in either a single or a multi-phase project totaling 15 stories and 350,000 sf with a maximum FAR of 8.4. The Project as currently proposed includes five podium levels that will be oriented toward pedestrians, with an additional 14 floors of tower levels sited above the podium at the corner of Commonwealth Avenue and Granby Street. Reaching a total of 19 stories and 305,000 sf of GFA, the initial phase of construction will have a FAR of 6.5. To reach full build-out of Site CC, future development may include an additional 45,000 sf adjacent to the proposed tower. The first phase of development is anticipated to begin in 2020 and be completed in 2022. Future phases of development are not currently planned. See Figure 4-3, Site CC Build-Out.

The Project embodies the recommendations of the Climate Action Plan and is intended to become the University's first fossil fuel free building. If successful, it will be the largest fossil fuel free building in Boston, illustrating the University's leadership in transforming the built environment. To be fossil fuel free, the building must first be energy efficient. The design is targeting a Site EUI of 36, below the goal of 40 kBtus/SF set in the Climate Action Plan. To shift from natural gas for heating and cooling, 30 1,500-foot-deep wells will be drilled for ground source heat exchange for 90% of the load. Electric boilers will provide supplemental heating for peak periods. The Boston University wind project will provide Green-e Certified RECs to match the electrical load. By leading the building sector, this University is documenting the fossil fuel free decision-making process to share with other building owners to understand this pathway to bring down emissions in new construction. The Project is targeting a minimum of LEED Gold Certification.

The Site is owned outright by Boston University and there are no Urban Renewal Plans or land disposition agreements applicable to the Site. The project will be subject to the applicable Development Impact Plan requirements at the time of approval based on the final gross floor area.

The PIP is described in Table 4-1: Data Sciences Center (Site CC) Program Elements. Further description of the Project's urban design goals and sustainability components can be viewed in Chapters 3 and 6, respectively, of the DPIR.

Table 4-1: Data Sciences Center (Site CC) Program Elements

Element	Dimensions/Count
Location	665 Commonwealth Avenue
Current Zoning	(H-4 Underlying Zoning) IMP Area
Total Project Site	47,700 sf
Total Maximum Gross Floor Area (Per Zoning)	350,000 sf
Maximum Floor Area Ratio (Per Zoning)	8.4
Maximum Stories	19
Maximum Building Height	305'
Proposed Uses	Institutional use, including academic instruction, research, office, and ancillary uses

4.3 WARREN TOWERS DIGITAL SIGNAGE

Boston University has a comprehensive strategic signage program which includes exterior on-building signage and interior directories.

Decades ago, poster cases were installed at Warren Towers for student and faculty groups to promote events and programming to the Boston University community and the public. Warren Towers at 700 Commonwealth Avenue is the largest residence hall at Boston University, and its location along the busy sidewalks of Commonwealth Avenue in the core of the campus is a prime location to promote University events to pedestrians.

Over time, these cases have required various repairs due to weather damage. The paper posters, which are typically for one-time-only usage, can also be costly for campus groups to produce. An additional challenge is the limitation on the number of groups the University can support in this effort.

In 2018, the University undertook a comprehensive program to refresh campus signage, including these poster cases, which are outdated and inflexible for their intended use. The dynamic nature of digital screens streamlines information display and communication to the community and is more appropriate for contemporary needs. With digital screens, more

student and University groups can leverage this medium to promote their programming and share information.

The University proposes to replace each of the existing 12 poster cases with digital screens that match the dimensions of the existing poster cases at 6' high and 4'- 6" wide. These screens will be installed in the same locations across the Commonwealth Avenue façade. The screens will be LED exterior monitors with anti-reflection glass, internal cooling system, embedded power box, ingress protection, and tempered float glass to protect the screens. Digital screens will be powered on-site and managed by the University through a software program.

Benefits to the user population and the University include cost-savings, improved sustainability through elimination of print production, and the ability to post new information more frequently.

