



2015 Town Gown Report

City of Cambridge | Planning Board Presentation

February 2, 2016

Planning & Development Priorities



Supporting Academic Programs and Research

Planning & Development Priorities



Housing Harvard's Affiliates

Planning & Development Priorities



Enhancing the Campus Experience

Planning & Development Priorities



Promoting Campus-wide Sustainability

Planning & Development Priorities

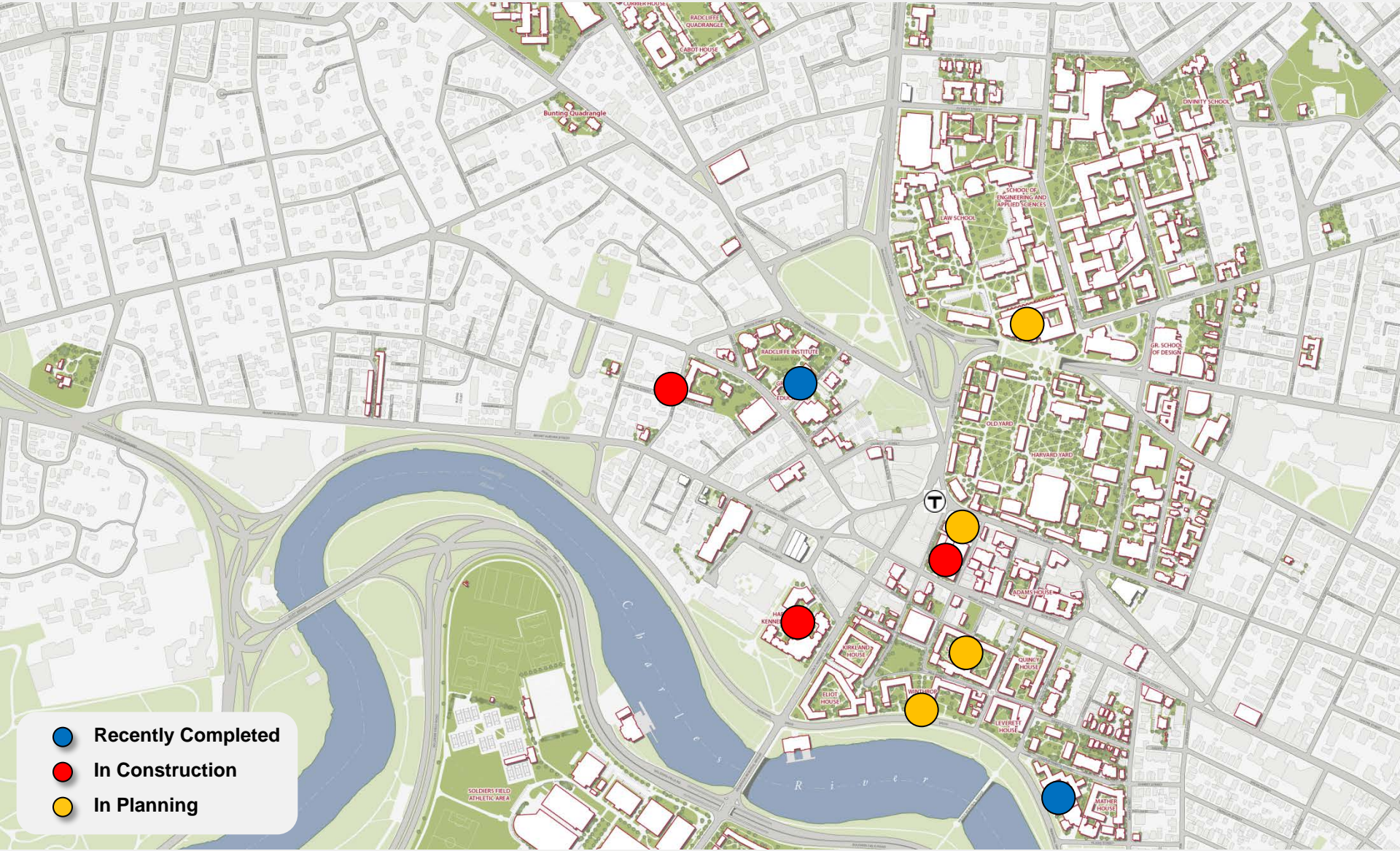


Improving Campus Infrastructure



Current Projects

Current Projects in Cambridge



Dunster House – House Renewal

Recently Completed

Harvard College



Dunster House – House Renewal

Recently Completed

Harvard College



Comprehensive renewal of undergraduate House · *Kieran Timberlake*

Dunster House – House Renewal

Recently Completed

Harvard College



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Recently Completed

Harvard College



Comprehensive renewal of undergraduate House · *Kieran Timberlake*

Winthrop House – House Renewal

In Planning

Harvard College



Winthrop House – House Renewal

In Planning

Harvard College



Comprehensive renewal of undergraduate House • *Beyer Blinder Belle*

Winthrop House – House Renewal

In Planning

Harvard College

PROJECT OVERVIEW
EXISTING SITE PLAN



Comprehensive renewal of undergraduate House • *Beyer Blinder Belle*

Winthrop House – House Renewal

In Planning

Harvard College

PROJECT OVERVIEW
PROPOSED SITE PLAN



Comprehensive renewal of undergraduate House • *Beyer Blinder Belle*

Winthrop House – House Renewal

In Planning

Harvard College



Comprehensive renewal of undergraduate House • *Beyer Blinder Belle*

Winthrop House – *House Renewal*

In Planning

Harvard College



Comprehensive renewal of undergraduate House • *Beyer Blinder Belle*

Lowell House – House Renewal

In Planning

Harvard College



Lowell House – House Renewal

In Planning

Harvard College



Comprehensive renewal of undergraduate House • *Kieran Timberlake*

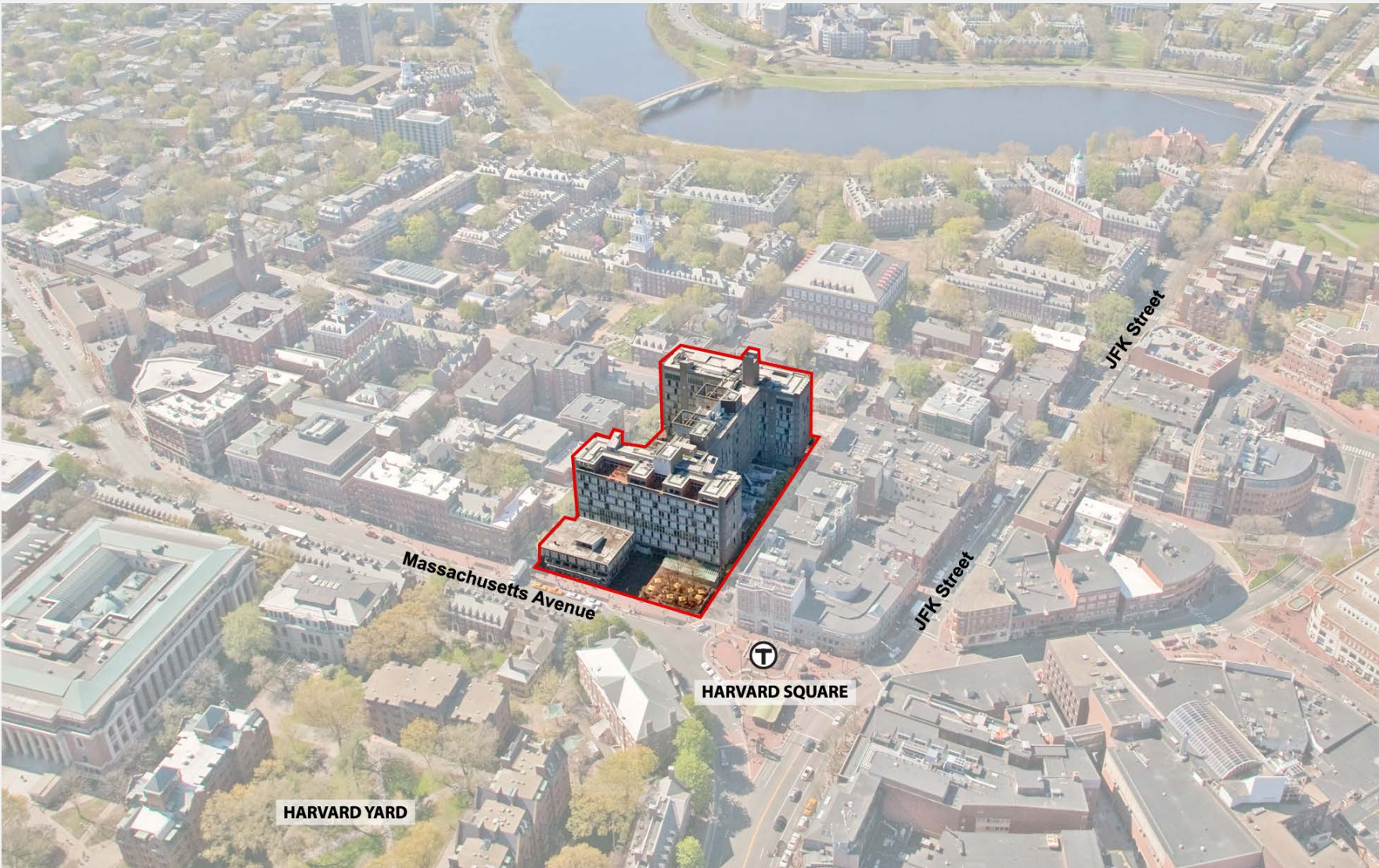
Richard A. and Susan F. Smith Campus Center

Harvard Campus Services



Richard A. and Susan F. Smith Campus Center

Harvard Campus Services



Smith Campus Center Facade Restoration

In Construction

Harvard Campus Services



Building facade restoration • *Bruner/Cott*

Harvard Campus Services



Creation of a campus center · Hopkins Architects

Smith Campus Center

In Planning

Harvard Campus Services



Creation of a campus center · *Hopkins Architects*

Harvard Campus Services



Creation of a campus center · Hopkins Architects

Harvard Campus Services



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Creation of a campus center · Hopkins Architects

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Creation of a campus center · Hopkins Architects

Harvard Campus Services



Creation of a campus center · Hopkins Architects

Campus Development

In Construction

Harvard Kennedy School



Harvard Kennedy School



Construction of new academic space · *Robert A.M. Stern Architects*

Harvard Kennedy School



Construction of new academic space • *Robert A.M. Stern Architects*

Harvard Kennedy School



Construction of new academic space • *Robert A.M. Stern Architects*

Longfellow Hall

Recently Completed

Harvard Graduate School of Education



Longfellow Hall

Recently Completed

Harvard Graduate School of Education

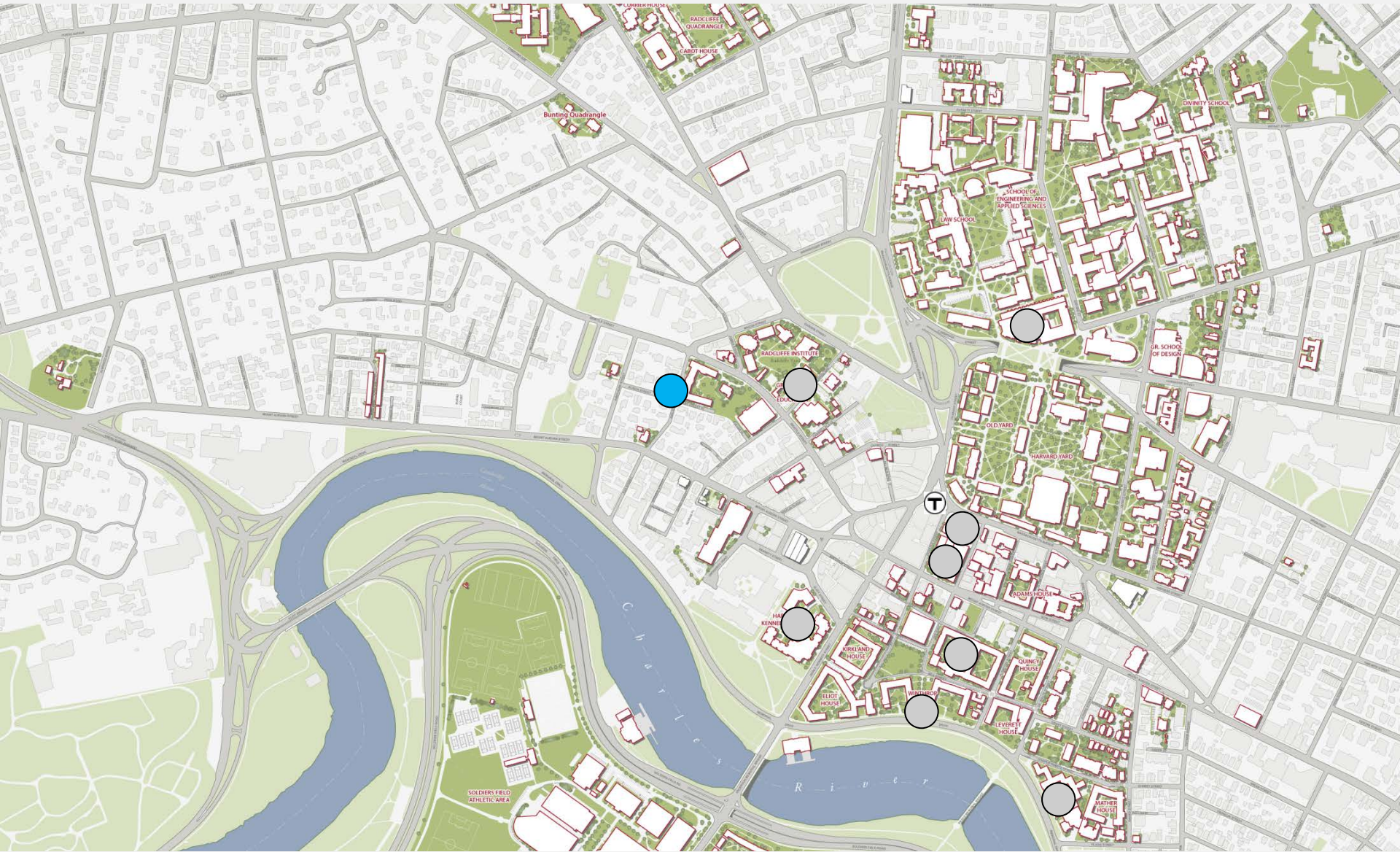


Partial renovation and addition • *Baker Design Group*

9 Ash Street

Recently Completed

Harvard Graduate School of Design



9 Ash Street

Recently Completed

Harvard Graduate School of Design

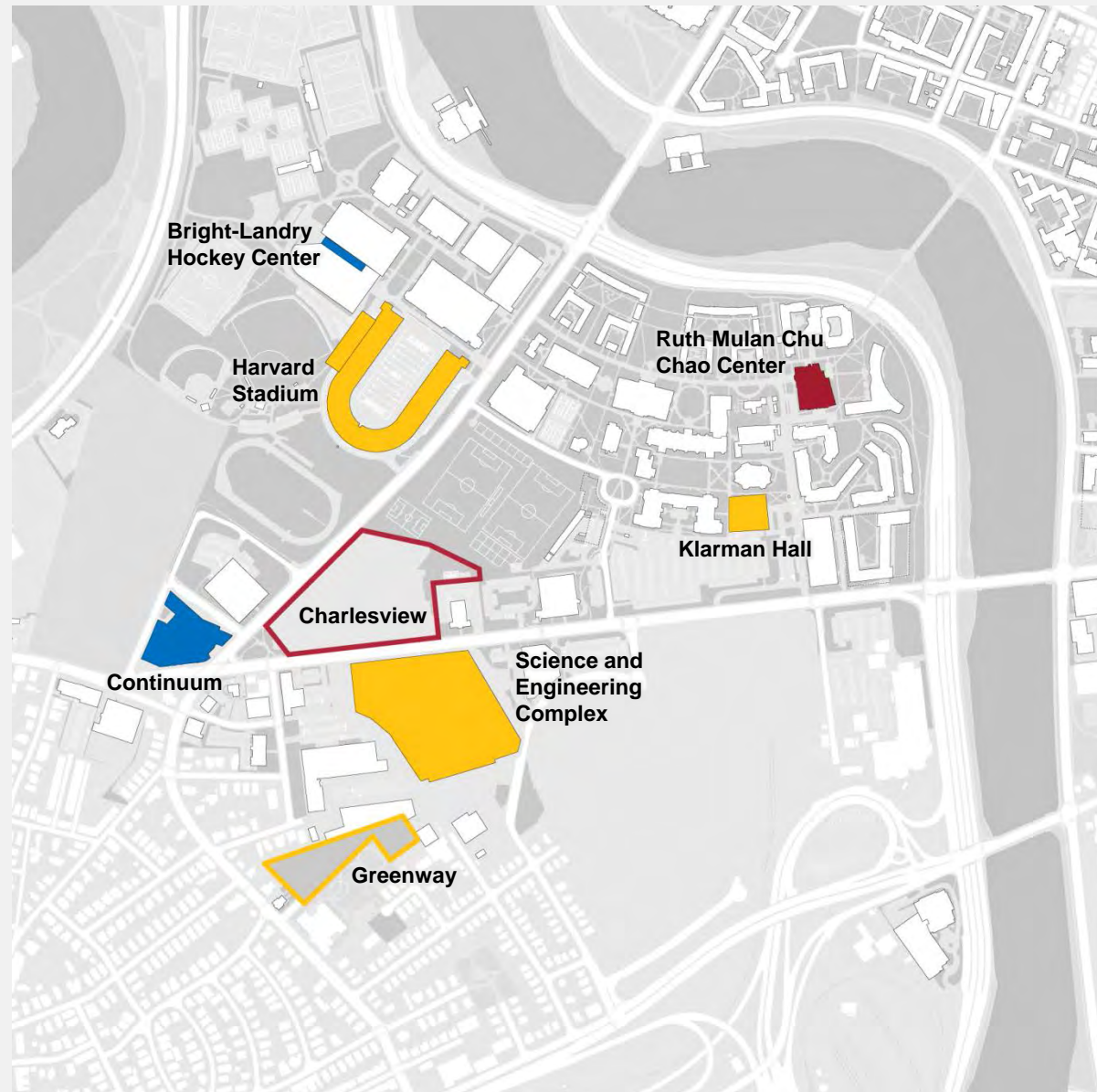


Restoration of historic house • *Thomas Pfifer and Partners*

Allston Campus

Projects in Planning

- Recently Completed
- In Construction
- In Planning





Science and Engineering Complex



Continuum

Harvard in Cambridge Public Schools



Harvard programs are available in **every public school** in Cambridge.

Each year, students from Cambridge Public Schools take part in:

- approximately 100 mentoring and enrichment programs,
- visit the University's museums, or
- learn from Harvard educators



Harvard in Cambridge Public Schools



Curriculum-based initiatives engaging every student at various grade levels

Grade 4: Science curriculum at Harvard Museum of Natural History

Grade 5: History curriculum at Harvard Peabody Museum of Archaeology & Ethnology

Grade 6: Science curriculum - Harvard Graduate School of Education's EcoMUVE program

Grade 7: Project Teach to develop a college-going identity for students by working with teachers, students, and families

Grade 8: Harvard John A. Paulson School of Engineering and Applied Sciences' Annual Science & Engineering showcase



Highlights of Harvard-CRLS Programs

Cambridge Harvard Summer Academy (CHSA)

Created to address the achievement & opportunity gaps, CHSA offers students remedial and enrichment classes and serves as CPS' summer school program. CHSA opened its doors during the summer of 2001. To date, program has served approximately 4,500 students.

Crimson Summer Academy (CSA)

Since 2004, CSA has been an academically rigorous enrichment program designed to offer economically challenged students tools to prepare and excel in college. To date, 65 students from Cambridge have graduated from CSA and 100% have matriculated to a four-year college.

Harvard Program Incorporated into CPS Science Curriculum

All Cambridge Rindge and Latin School (CRLS) Biology teachers use the Harvard Museum Natural History program on evolution as part of the CRLS science curriculum.

Extension School Scholarships

In the past five years, 115 CRLS students have received scholarships to enroll at the Harvard Extension School to take advanced courses not offered at CRLS.

Marine Biology Internship

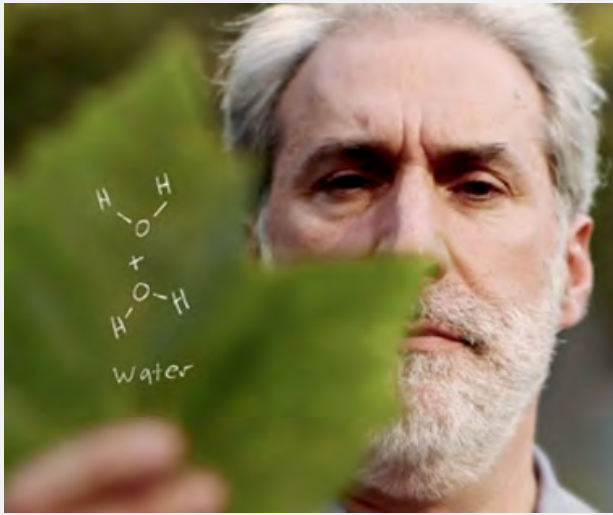
Through a partnership co-developed by CRLS teacher Paul McGuinness, Harvard supplements the school's Marine Biology course by training, mentoring and placing CRLS students in Harvard labs for research opportunities with Harvard Professor Peter Girguis.



Campus Sustainability

Tackling Climate Change

Leveraging the power of interdisciplinary knowledge to create powerful solutions across the globe.



...in the lab



...in the
classroom



...on our
campus

Multidisciplinary Research For a Low Carbon Future



- Launch Harvard Global Institute, \$3.75M grant to China climate project.
- First round of 7 multidisciplinary research projects funded by through \$12M Climate Change Solutions Fund.
- Planetary Health Alliance led by T.H. Chan faculty and supported by the Rockefeller Foundation and Wildlife Conservation Society.
- Harvard Project on Climate Agreements team participates in Paris COP21 conference.

Educating and Nurturing Leaders of Tomorrow



- T.H. Chan School of Public Health and Harvard Medical School sign White House pledge to teach nexus of climate and health.
- Secondary Field of Energy and Environment.
- Over a dozen climate and energy focused initiatives or centers across Harvard's 12 Schools.

Holistic Sustainability Plan



“The Plan... recognizes our shared responsibility to build and operate a campus that contributes to the well-being of every member of our community.”

– President Drew Faust



Reducing Our Footprint: 4 Goals

GREENHOUSE GAS EMISSIONS



OUR PROGRESS
21% REDUCTION AS OF
FY 2014

OUR GOAL

30% REDUCTION BY 2016

WASTE PER CAPITA



OUR PROGRESS
27% REDUCTION AS OF
FY 2014

OUR GOAL

50% REDUCTION BY 2020

WATER USE



OUR PROGRESS
21% REDUCTION AS OF
FY 2014

OUR GOAL

30% REDUCTION BY 2020

LANDSCAPING

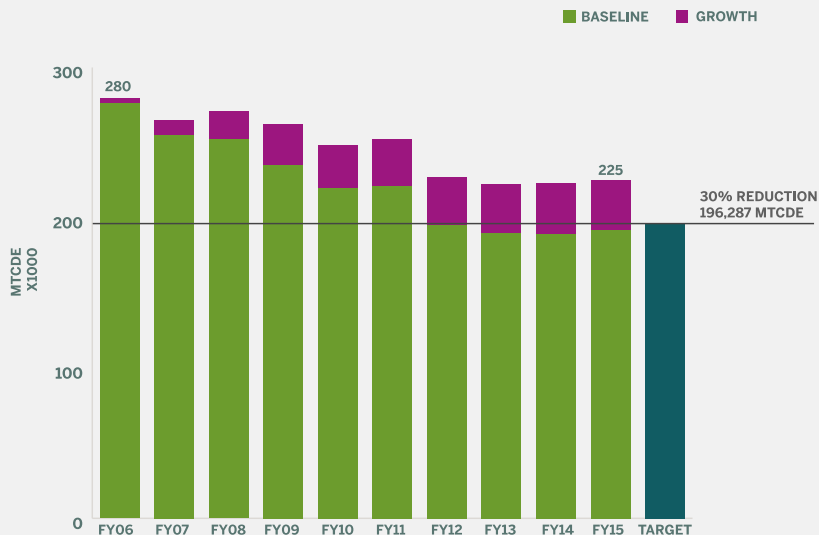
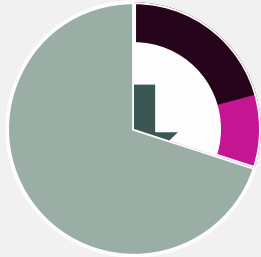


IN PROGRESS
ESTABLISHING THE
BASELINE

OUR GOAL

75% ORGANIC BY 2020

Climate Leadership: Science-based Goal Since 2008



- **Based on science** – Includes all Kyoto gases, ambitious target based on what science says is necessary.
- **Absolute goal** (net of growth) – 3 million square feet of growth since FY2006.
- **Leading with “all-inclusive” boundary** – Includes all properties within operational control in North America.
- **Aggressive short-term target** – Set to spur immediate action.
- **Long-term commitment** – Fostering continual improvement toward carbon neutrality.

Cleaner Energy Supply

Expansive improvements to central utilities, including fuel switching and co-generation, have reduced emissions by over 32,000 MTCDE = **annual electricity use of 4,402 homes**



Renewable Energy Investment



- One of first large-scale PPAs – 12MW wind power in Maine.
- 1MW+ of solar installed to date.
- Solar thermal, geothermal, and cogeneration systems.
- University-wide renewable energy study.

Standards Drive University-wide Alignment

Buildings and Resilience

- 2009+ GREEN BUILDING STANDARDS
- 2016 CLIMATE PREPAREDNESS STANDARDS
- 2020 UNIVERSITY-WIDE CLIMATE PREPAREDNESS PLAN

Best-in-class Sustainable Operations

- 2017 GREEN IT STANDARDS
- 2018 ENVIRONMENTALLY PREFERRED PRODUCTS
- 2020 GREEN CLEANING STANDARDS
- 2020 SUSTAINABLE LANDSCAPING STANDARDS

Enhancing Well-Being

- 2020 SUSTAINABLE AND HEALTHFUL FOOD STANDARDS

100 LEED Certified Projects Milestone

*“The certification of Harvard’s 100th LEED building is very impressive and meaningful,” said **Rick Fedrizzi, CEO and founder of USGBC**. “As a pre-eminent leader in higher education, research, and the development of the leaders of tomorrow, Harvard is a proving ground for new ideas. The fact that the institution pursues and embraces LEED demonstrates their commitment to sustainability in all of their endeavors.”*



Optimizing Energy Performance



Partnering With Faculty to Enhance Well-Being



- Healthy Green Campus partnership with Silent Spring Institute and Harvard T.H. Chan Center for Health and Global Environment.
- Healthy products disclosure required in Green Building Standards.
- Harvard becomes first University to sign flame retardant-free furniture pledge, acting on research and regulatory shift.
- Sustainable and Healthful Food Standards (in progress).



Foodbetter.

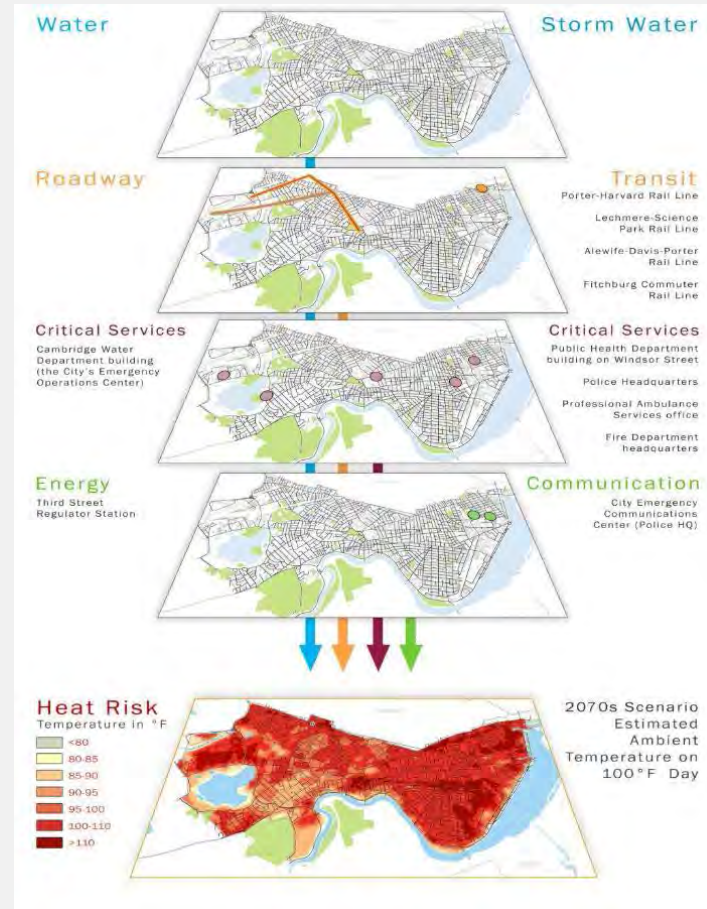
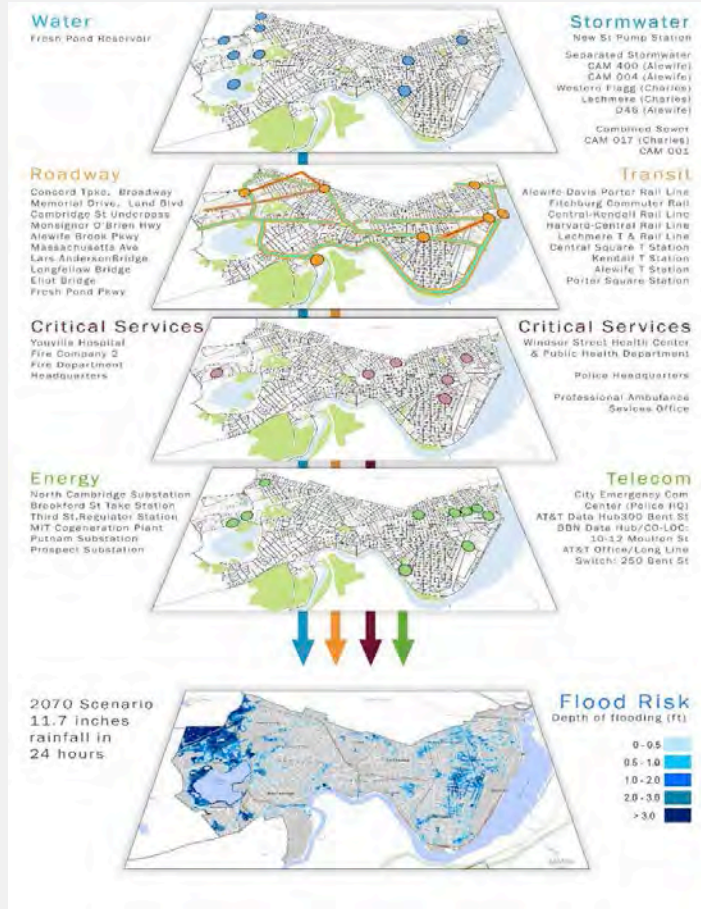
Preparedness and Resiliency

2016

CLIMATE PREPAREDNESS STANDARDS

2020

UNIVERSITY-WIDE CLIMATE PREPAREDNESS PLAN



Source: Cambridge Vulnerability Assessment

Translating Research Into Practice



- Integrating campus challenges into the classroom (CS50, SEAS, ES96, etc...).
- Partnering with faculty and students in using campus for active research projects.
- Student grants providing seed funding for innovative ideas.
- Experiential learning opportunities engage students in real-world challenges.

Amplify Impact by Collaborating on Shared Solutions



- Co-Chair Cambridge Compact for a Sustainable Future
- Co-Chair International Sustainable Campus Network working group (affiliated with WEF Davos).
- Lead Boston Green Ribbon Commission Higher Education Working Group.



Project examples:

- Renewable energy purchasing
- Climate preparedness modeling
- MA Green High Performance Computing Center



Resources for Additional Information

PLANNING

Harvard Planning & Project Management

www.hppm.harvard.edu

Construction Mitigation

www.construction.harvard.edu

HARVARD IN THE COMMUNITY

www.community.harvard.edu

SUSTAINABILITY

Office for Sustainability

www.green.harvard.edu

Harvard University Sustainability Plan

www.green.harvard.edu/commitment/our-plan



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