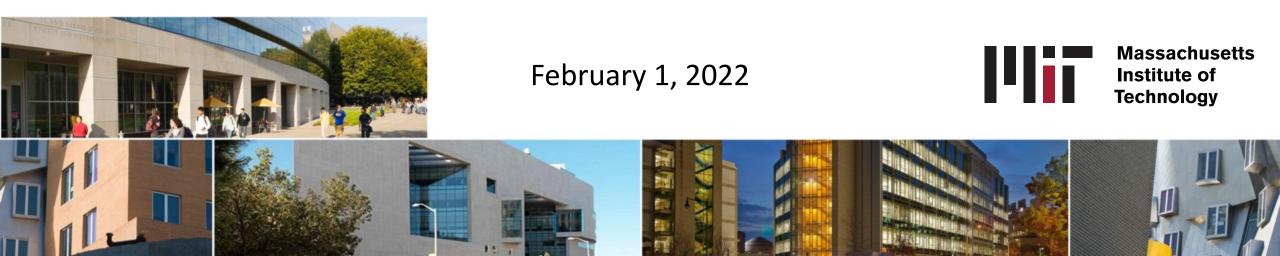


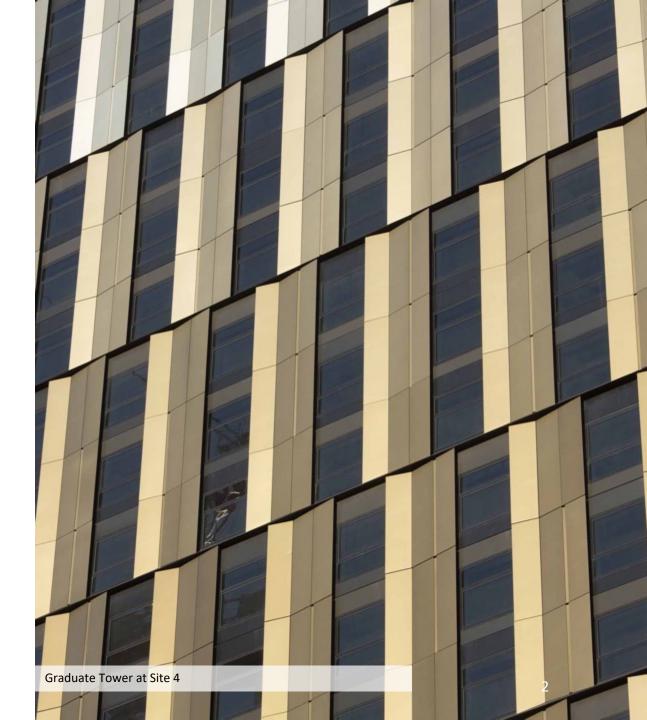
#### 2021 Town Gown Report to the City of Cambridge



## **Glen Shor**

## Executive Vice President and Treasurer





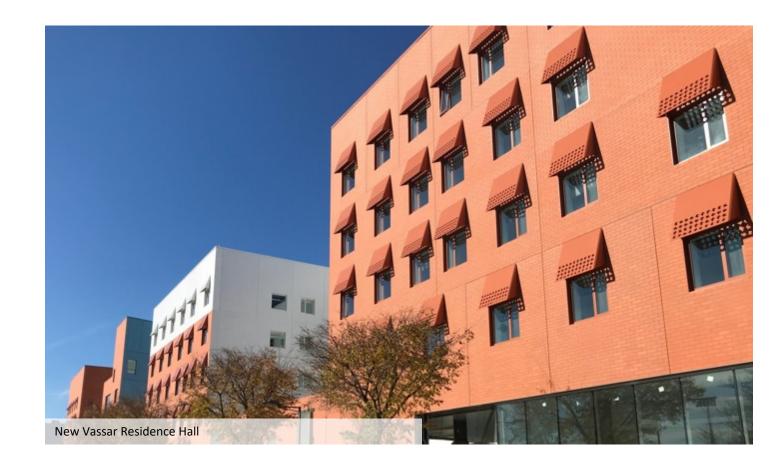


#### Covid-19





### Housing



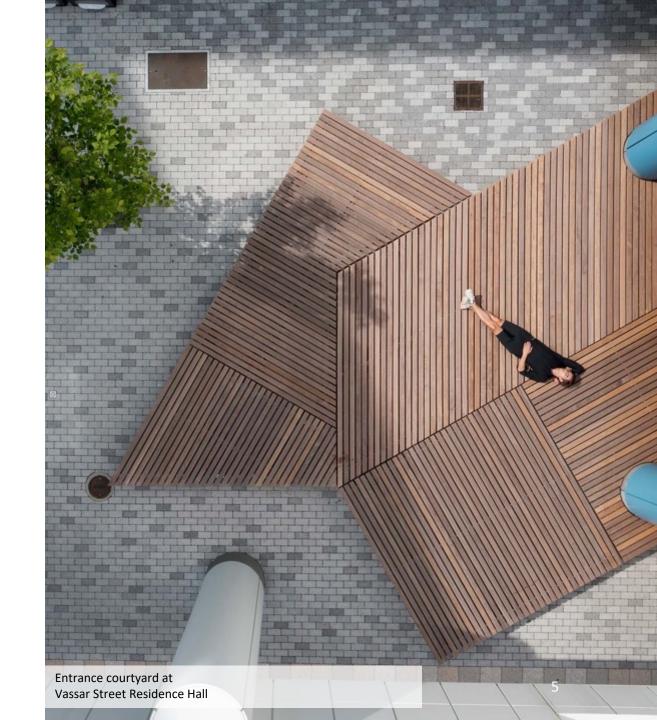


## Academic Projects

## Joe Higgins

Vice President for Campus Services and Stewardship





## Vassar Street Corridor





Fort Washington Crossing at West Campus Graduate Dormitory

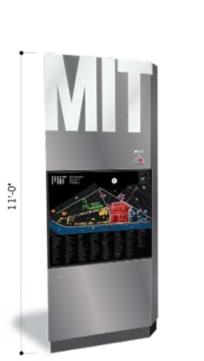


at Vassar Street Residence Hall



at Upgraded Central Utilities Plant

## Wayfinding



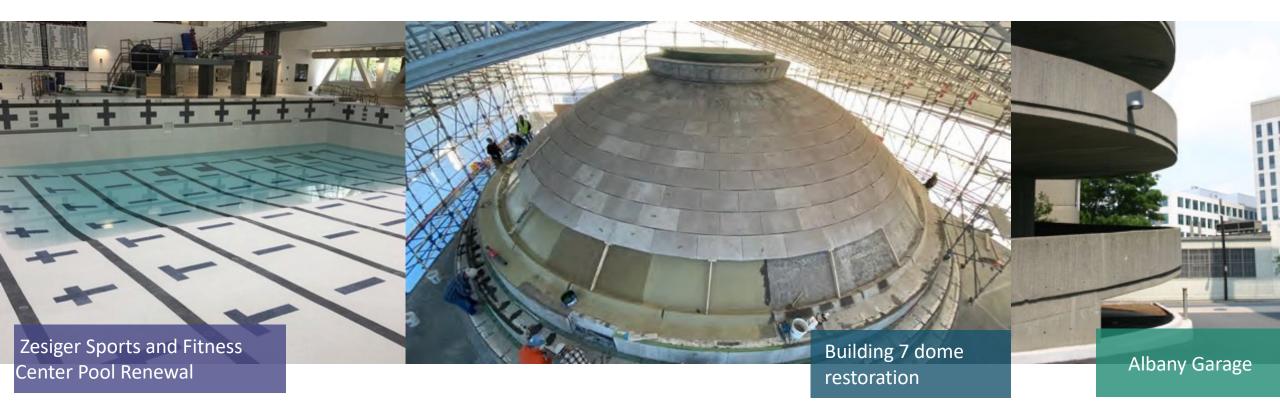


Campus Identifier at Gateways Campus directory

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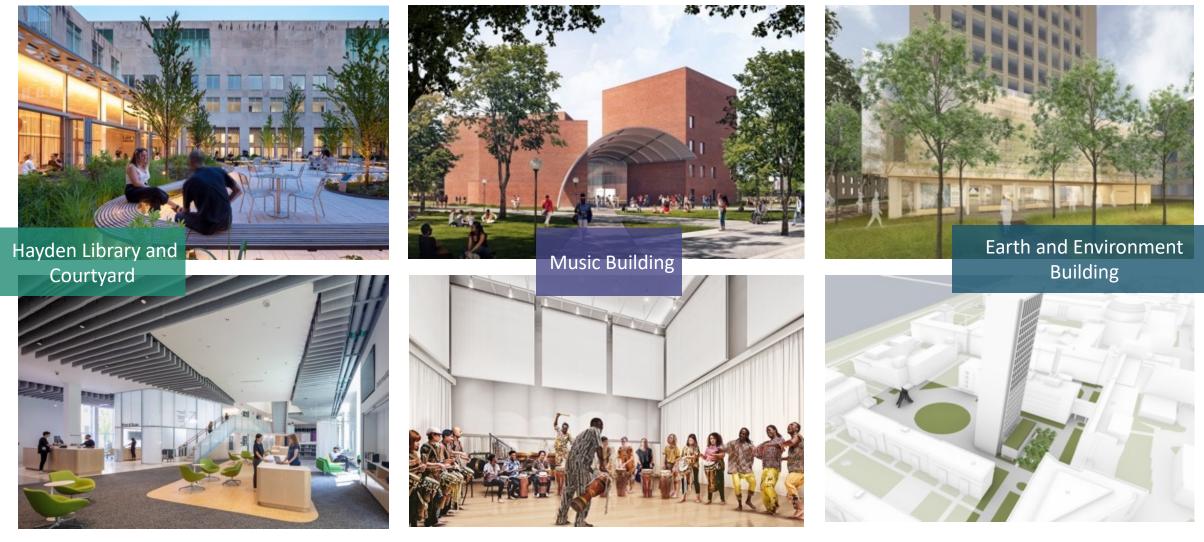
Pedestrian Beacon

#### **Capital Renewal**





### **Project Highlights**



## Commercial Projects

## Michael Owu

Managing Director, Real Estate





### Kendall Square



Institute of

Technology

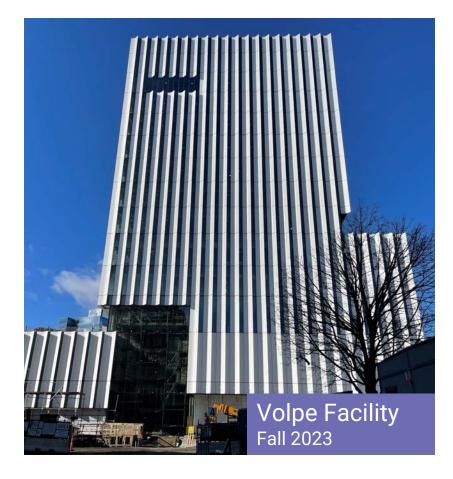






11

## New DOT Volpe Facility & 730-750 Main Street









## Volpe Redevelopment



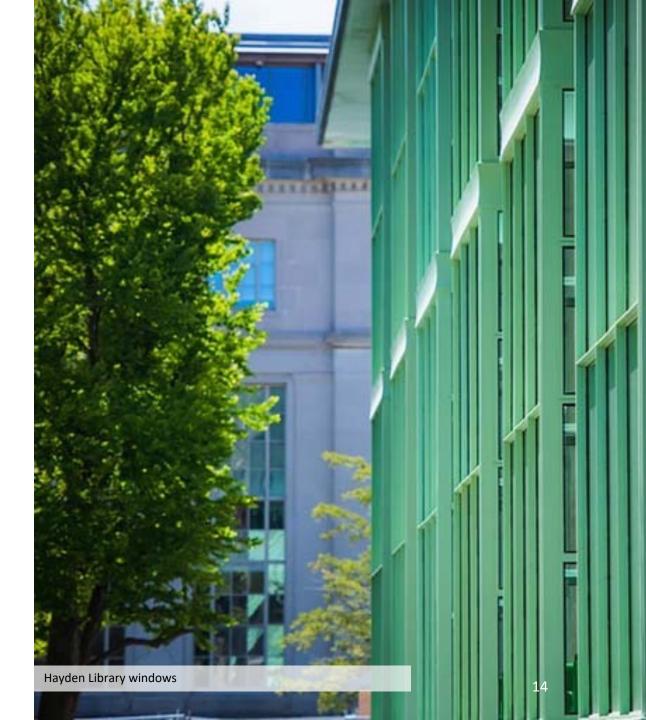


# Sustainability

## Julie Newman

#### Director of Sustainability





#### The 'super wicked problem' of climate change is our Earthshot

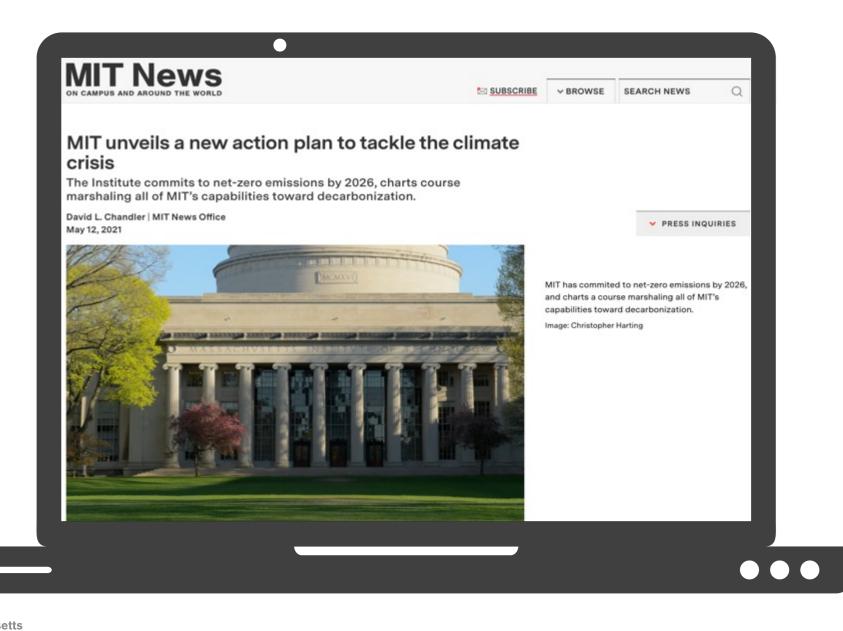
We must find affordable, equitable ways to bring every aspect of the global economy to net-zero carbon no later than 2050.

By L. Rafael Reif Updated April 19, 2021, 3:00 a.m.

 $\bigcirc$ 









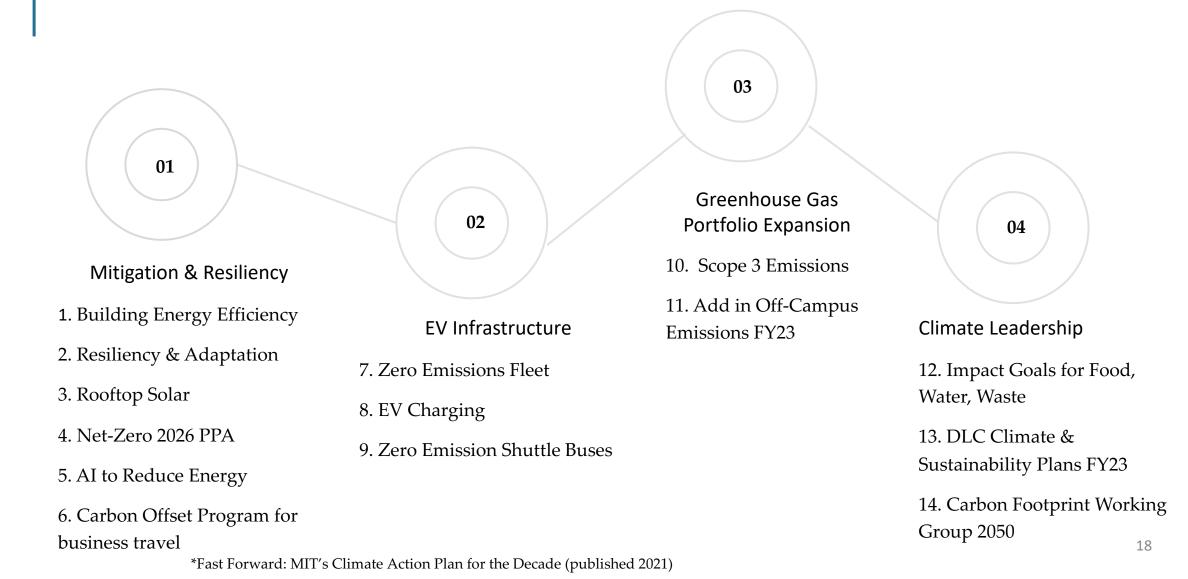
## Meeting the World's Climate Challenge

To achieve net-zero direct carbon emissions by 2050 + adapt to effects we can't prevent:

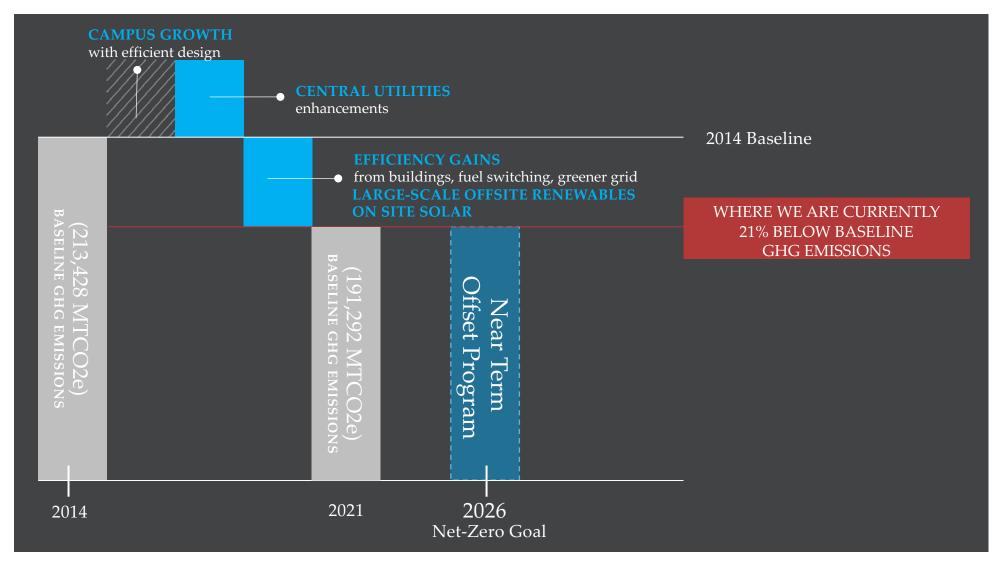
- GO AS FAR AS WE CAN, AS FAST AS WE CAN, with the tools we have now. Tools include science and technology, policy, markets, infrastructure, and behavioral and cultural changes.
- **INVEST IN, INVENT, AND DEVELOP** the suite of new tools, including science and technology breakthroughs and new institutions and policies needed to deploy them rapidly, wisely and equitably.
- EDUCATE AND EMPOWER THE NEXT GENERATION, those who are inheriting this problem and will be the people who must ultimately solve it.



#### Reducing MIT's Climate Impact: 14 Commitments



### Net-zero by 2026





### A Goal of Eliminating Direct Emissions by 2050

...recognizing that making this happen will depend on significant advances in carbon-reducing technologies and a decarbonized electrical grid in New England.

To advance toward this goal, we are taking steps now:

- A new carbon footprint working group to begin developing a roadmap to decarbonization
- Deep energy reduction in existing buildings
- Leading-edge design in new buildings and renovations
- Converting campus distribution systems
- On-campus renewable energy
- Electrification of transportation
- Electrification of buildings
- AI-enabled energy systems
- Behavior change
- Scenario planning for breakthrough technologies



#### **Deep Energy Retrofits**

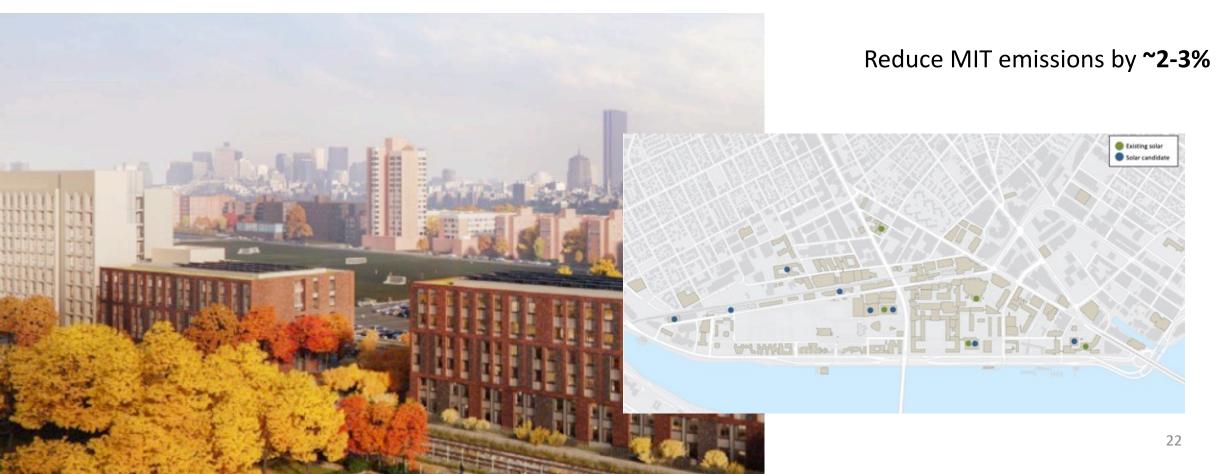
Buildings 46, 76, 68, 32, E25, E14



Reduce MIT emissions by 10-15%

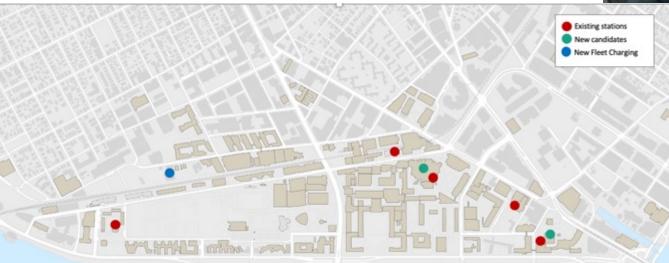
#### Solar on Roofs

Increase renewable energy installations (primarily solar) on campus by a minimum of 400% by 2026 (from 100kw to 500kw)



#### Electric Vehicle Infrastructure

- Initiate the conversion of campus shuttle bus vehicles to zero-emission buses by 2026.
- Increase campus car-charging stations by a minimum of 200% (from 120 to 360) by 2026.
- All future MIT fleet purchases of light-duty vehicles will be zero emission, subject only to availability.

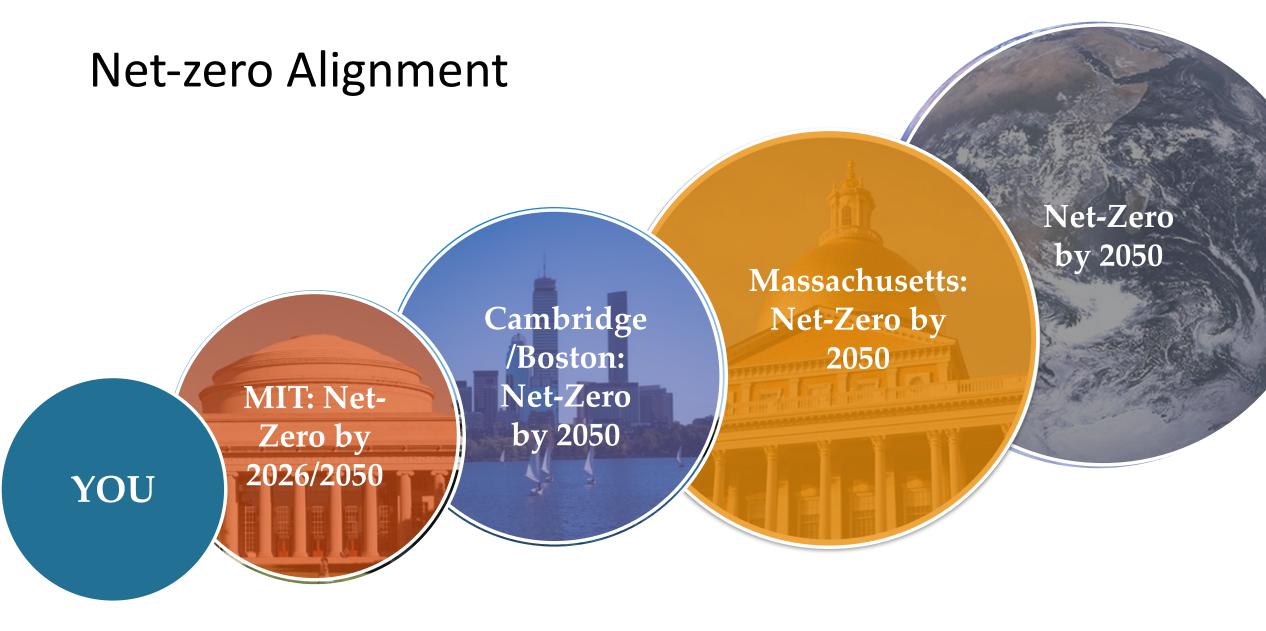




### Modeling Shared Data: Campus + City

No issues detected 🛪 💿 Edit 🛛 Climate Resiliency 🖪 🎔 🖉 🗏 📊 😥 Office of Sustainability **MIT Climate Resiliency Dashboard** Climate Resilient MIT MIT Climate Risks Current: 10-Year Storm Current: 100-Year Storm 2030: 10-Year Storm 2030: 100-Year Storm Flood Risk to Buildings Heat Risk Resources Current | 100-Year Storm + ŵ This map illustrates modeled peak flood elevation in the \_ event of a future potential 8.7" 24-hour storm on campus under the current climate. Each year, the probability of this event is 1%. However, over the course of 50 years, there's 39% chance that this event will happen. The assumptions for this modeled storm are based on current climate conditions. How to read this map? The projected flood depth is represented by a gradient of blue color, where darker color indicates higher water depth. Clicking on a projected flood polygon will open a pop-up window with location specific ground elevation, water depth, and peak water elevation. Zooming in will expose the peak flood elevation for every point. Note that the water depth and peak water elevation values are the result of a modeling exercise based on the best available science and involve ranges of uncertainty. Assumptions about future urban development and the rate of greenhouse gas emissions mitigation, as well as continuous improvements to flood risk models, may shift these projected flood elevations over time. Red lines delineate the boundaries of each drainage catchment area on campus. Any water that falls or moves across the surface within each boundary generally flows to the same collection point, such as a stormwater drain system. The campus and City share an integrated stormwater pipe network that runs beneath the streets and carries stormwater to different downstream drainage locations. What can we understand from this map? 1. Describes one moment in time. The model that simulated this map shows the flow of water for the entire 24-hour period, and we provide this image to explore the impact on campus for the peak water elevation. 2. Describes existing outdoor conditions. The map shows Harvard University, City of Boston, City of Cambridge, MassGIS, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, EPA I Harvard .

Massachusetts Institute of Technology





## Community Support

Sarah Gallop

Co-Director, Office of Government & Community Relations





TO: Clifford Cook, Data Manager Cambridge Community Development Department

FROM: Sarah Gallop, Office of Government and Community Relations

DATE: May 29, 1998

RE: Town-Gown Report for 1997

On behalf of MIT, I am pleased to transmit to the City of Cambridge the attached Town-Gown Report for 1997. If you have any questions about the contents of this submittal, please contact me at 253-0942.

Thank you.



2021 Town Gown Report to the City of Cambridge



#### Quarter Century of Submissions





Massachusetts Institute of Technology Quarter Century of Town Gown Submissions

1997

	Housing
î,	Sustainability
	Building activity
	Transportation
<b>1891</b>	City collaboration
$\checkmark$	Notable milestones

2021

Institute Community & Equity Office

Diversity, Equity, and Inclusion On Campus and in the Community

Strategic Action Plan for Diversity, Equity, and Inclusion

K

Inclusion Drives Innovation Volpe Equity and Inclusion Workshops

VPF Offic Vice

Office of the Vice President for Finance

Small and Diverse Business Program



## Open Space Programming

- Programs and events
- Collaborations and community partners
- 'A Community Reflects' public art
- Future programs







## MIT and Cambridge Public Schools

- Selected current initiatives:
  - City of Cambridge Global Local Challenge
  - MIT Impact Scholarships
  - Scanning Electron Microscope Explorations with CPS
  - Charles River Floating Wetlands Educational Kits
- Pathways to Invention
- Community collaborators



#### The Job Connector by MIT



- Virtual and in-person programming
- My Brother's Keeper partnership
  - Career Pathways
  - Summer Youth Empowerment
    Program
- 2020-2021 Workshops
  - Prepare for it Now
  - Career Readiness
  - Introduction to Construction and the Building Trades



## Thank you!

