

# BERDO REVIEW BOARD MEETING

August 11, 2025



# BERDO REVIEW BOARD



**Jessica Boatright**  
*Board Chair*



**Gabriela Coletta Zapata**  
*City Councilor*



**Stephen Ellis**  
*Board Member*



**Hessann Farooqi**  
*Board Member*



**Lori Ferriss**  
*Board Member*



**Gail Latimore**  
*Board Member*



**Reginald Stovell Jr.**  
*Board Member*

# City of Boston Staff



**Diana  
Vasquez**

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*BERDO Review  
Board Manager*



**Dr. Claudia  
Diezmartinez**

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*Policy and Equity  
Advisor*



**Zengel  
"Ziggy" Chin**

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*BERDO Review Board  
Assistant*

# Agenda

*Today's Meeting*



## **Public Meeting**

- 1.** *Vote on Flexibility Measure Application*
- 2.** *Report and Discussion on BERDO Proposed Regulations Update*
- 3.** *Approval of Meeting Minutes*
- 4.** *Administrative Updates*
- 5.** *Adjournment*



# Flexibility Measure Applications

*Discussion and Vote*

The background of the slide is a dark blue aerial wireframe map of a city grid, showing various building footprints and street layouts in a light blue color. The map is centered and covers the entire background.

# Harvard University

*Building Portfolio Application*



# Building Portfolio Application

Harvard University



## Background Information

- Submitted through Pathway 2.
  - *On-site Campus District Energy Systems that use non-renewable or CO2e emitting fuels and are located in Environmental Justice Populations.*
- 82 BERDO IDs in the neighborhoods of Fenway, Jamaica Plain, Allston, and Brighton.
- Applicant meets all eligibility criteria and application was deemed complete.

## Standard Conditions

- Timely compliance with reporting and third-party verification requirements.
- Timely compliance with the requirements in [Section XI.b](#), including, when applicable, the submission of a satisfactory Emissions standard compliance plan.
- The Review Board or its designee may inspect any Building that is part of an approved Building Portfolio, at reasonable times and with reasonable notice, in order to assess compliance with the terms and conditions of said Building Portfolio.

# Harvard University Proposed Portfolio

**Owner:** Harvard University

**Building Use Types:**

- Assembly
- College/University
- Food Sales & Service
- Lodging
- Office
- Retail
- Services
- Storage
- Technology/Science

**Number of BERDO IDs:** 82

[Full list of BERDO IDs in Harvard University's Building Portfolio](#)

# Harvard University Proposed Portfolio

## Calculated Blended Emission Standards



### Calculated Blended Emissions Standards (kgCO<sub>2</sub>e/SF/Yr)

Default Emissions Standard(s)	2025-2029	2030-2034	2035-2039	2040-2044	2045-2049	2050-
College/University (n=72)	10.2	5.3	3.8	2.5	1.2	0
Food Sales & Service (n=2)	17.4	10.9	8.0	5.4	2.7	0
Lodging (n=1)	5.8	3.7	2.7	1.8	0.9	0
Office (n=1)	5.3	3.2	2.4	1.6	0.8	0
Retail (n=3)	7.1	3.4	2.4	1.5	0.7	0
Service (n=1)	7.5	4.5	3.3	2.2	1.1	0
Storage (n=1)	5.4	2.8	1.8	1.0	0.4	0
Technology/Science (n=1)	19.2	11.1	7.8	5.1	2.5	0
<b>Portfolio Blended Emissions Standards</b>	<b>9.7</b>	<b>5.1</b>	<b>3.6</b>	<b>2.4</b>	<b>1.1</b>	<b>0</b>

# Environmental Justice Map- Allston



**Environmental Justice Map #1A: EJ Population Criteria - Allston Neighborhood**  
Harvard University - BERDO Building Portfolio Application | Boston, MA



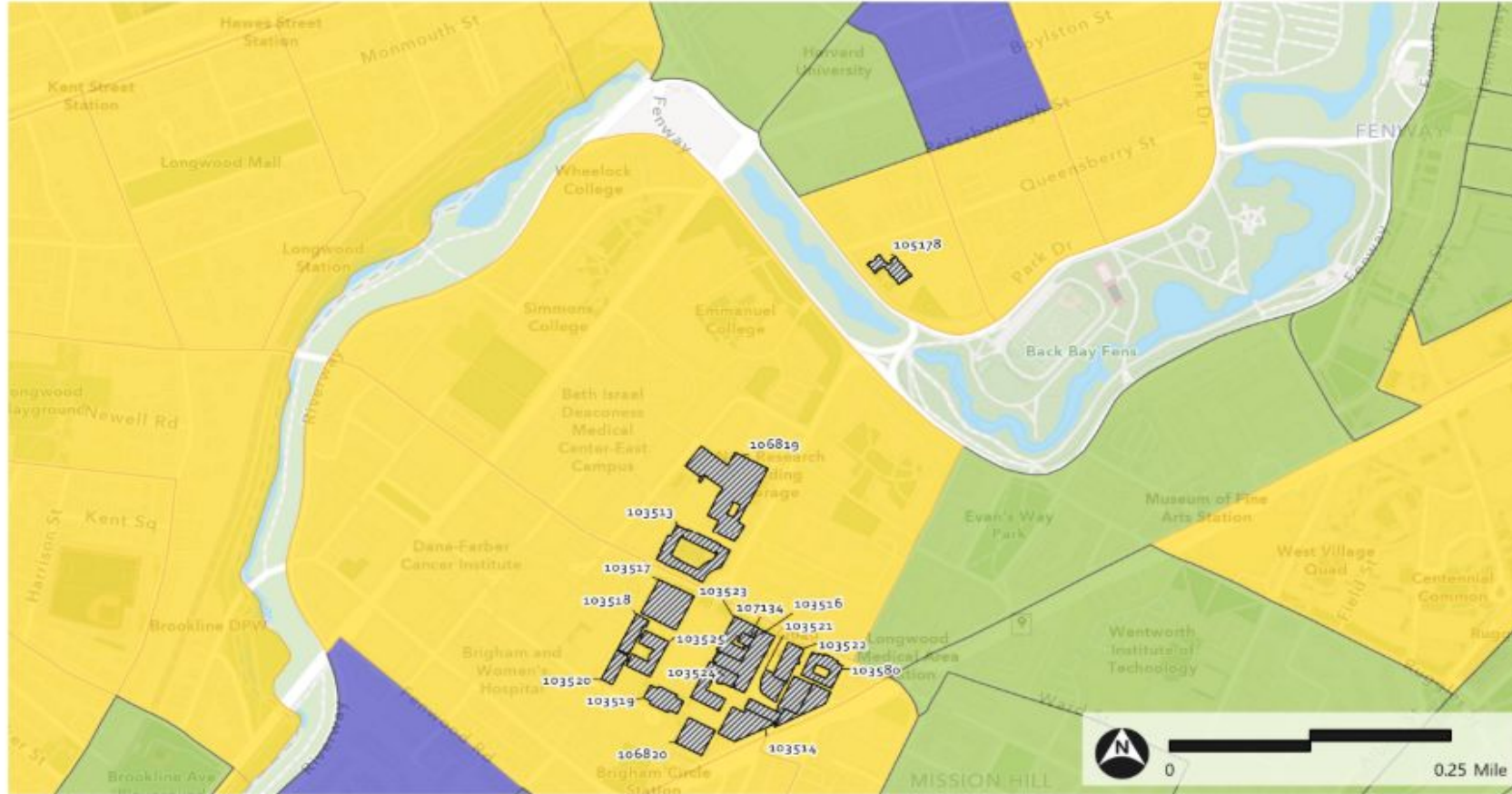
Path: \\vhb.com\gis\proj\Wat-EV\16411.00\Harvard BERDO\Project\Harvard BERDO\_EJ.aprx (D'Goris-Koib, 8/13/2024)

- Massachusetts Environmental Justice Populations 2020**
- Minority
  - Minority and Low-Income
  - Low-Income and English Isolation
- Harvard BERDO Buildings - EJ
- Harvard BERDO Buildings - Non-EJ
- Allston District Energy Facility

# Environmental Justice Map- Longwood Medical Area



**Environmental Justice Map #1B: EJ Population Criteria - Longwood Medical Area**  
Harvard University - BERDO Building Portfolio Application | Boston, MA



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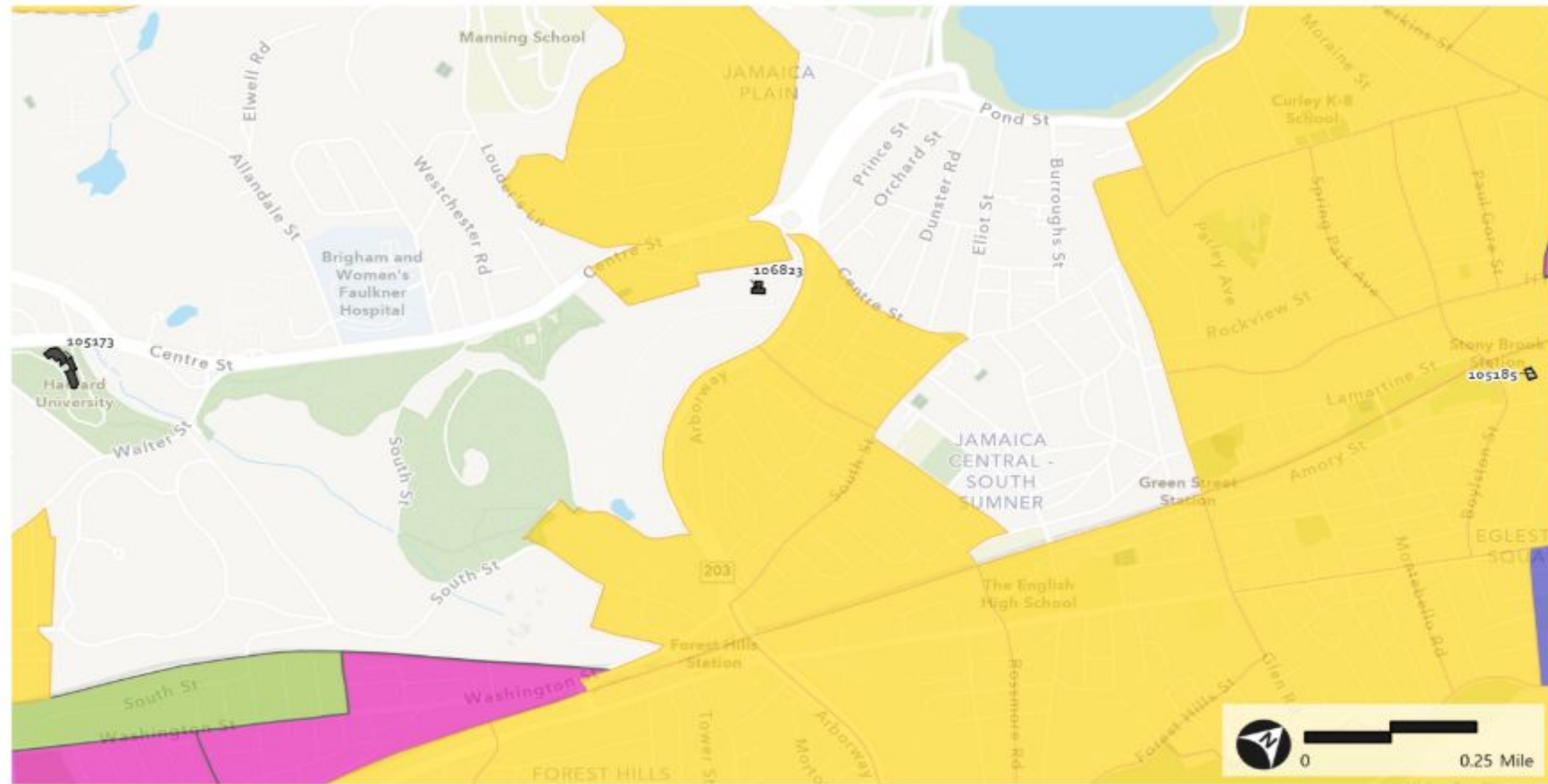
- Massachusetts Environmental Justice Populations 2020**
- Minority
  - Minority and Low-Income
  - Minority, Low-Income and English Isolation
- Legend:
- Hatched pattern: Harvard BERDO Buildings - EJ
  - Solid black: Harvard BERDO Buildings - Non-EJ

# Environmental Justice Map- Jamaica Plain



## Environmental Justice Map #1C: EJ Population Criteria - Jamaica Plain Buildings

Harvard University - BERDO Building Portfolio Application | Boston, MA



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### Massachusetts Environmental Justice Populations 2020

- Minority
- Minority and Low-Income

- Minority and English Isolation
- Minority, Low-Income and English Isolation

- Harvard BERDO Buildings - EJ
- Harvard BERDO Buildings - Non-EJ

# Asthma Prevalence Map- Allston



## Environmental Justice Map #2A: Asthma Prevalence - Allston Neighborhood

Harvard University - BERDO Building Portfolio Application | Boston, MA



- |  |  |
|--|--|
| Asthma Prevalence  |  Harvard BERDO Buildings - EJ     |
|  Low Asthma Prevalence  |  Harvard BERDO Buildings - Non-EJ |
|  High Asthma Prevalence |  Allston District Energy Facility |

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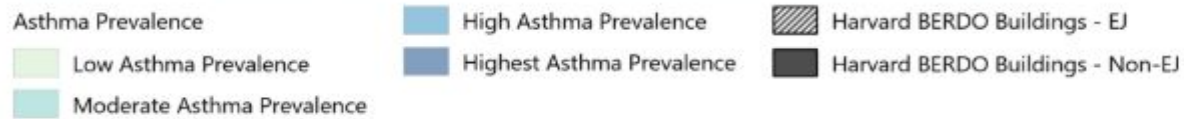
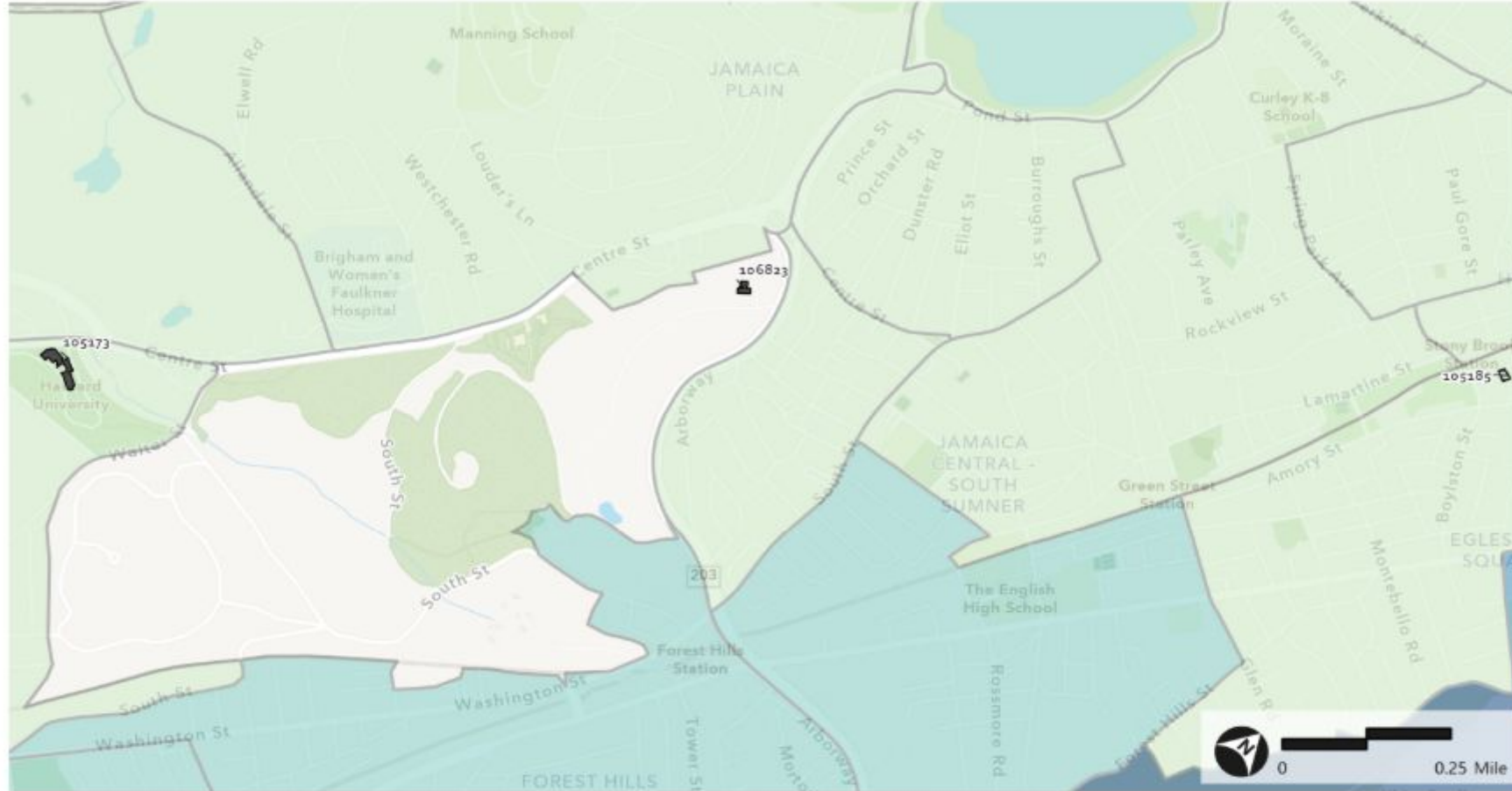


# Asthma Prevalence Map- Jamaica Plain



## Environmental Justice Map #2C: Asthma Prevalence - Jamaica Plain Buildings

Harvard University - BERDO Building Portfolio Application | Boston, MA



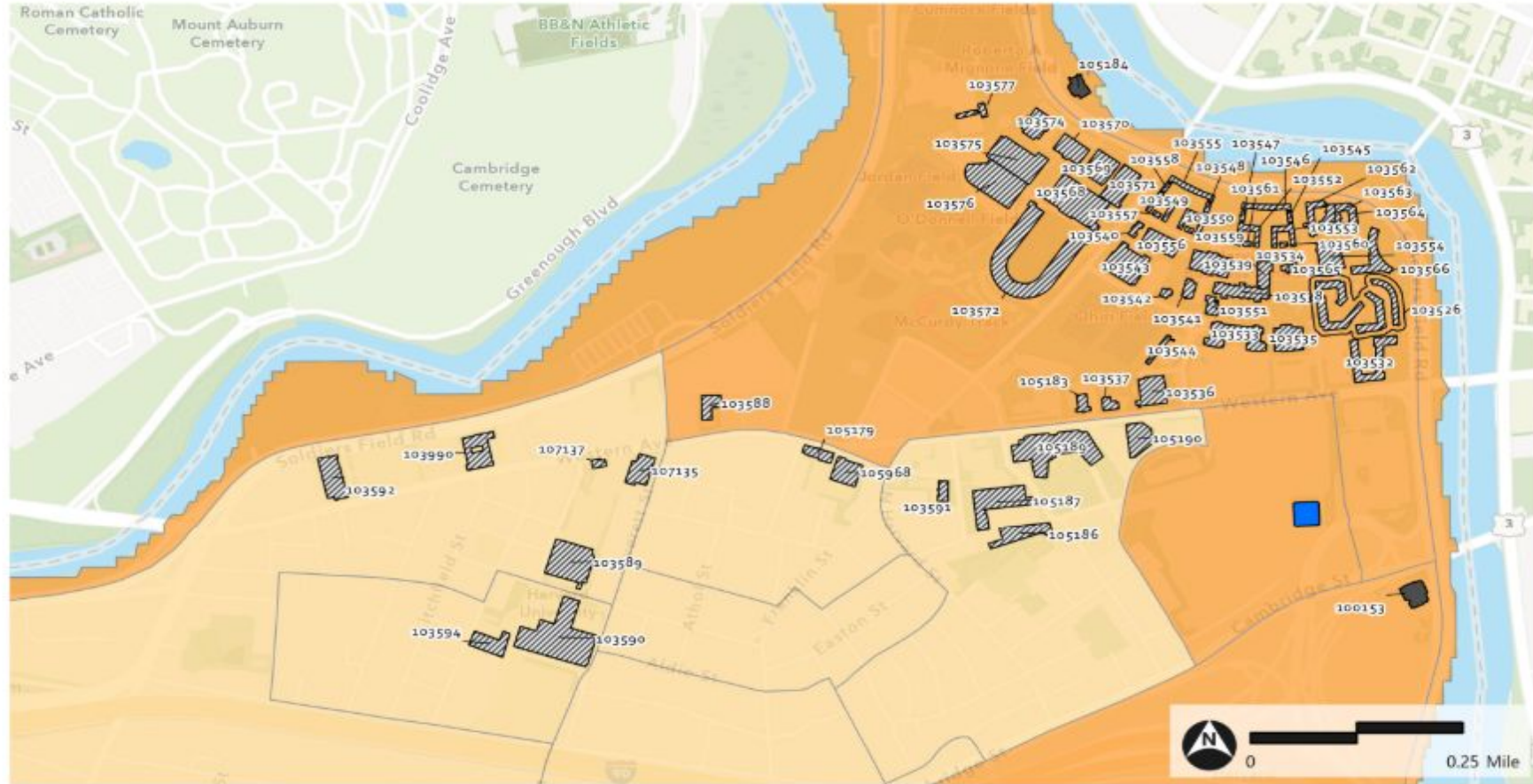
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# Respiratory Hazard Map- Allston



## Environmental Justice Map #3A: Respiratory Hazard - Allston Neighborhood

Harvard University - BERDO Building Portfolio Application | Boston, MA



- |                             |                                  |
|-----------------------------|----------------------------------|
| Respiratory Hazard Index    | Harvard BERDO Buildings - EJ     |
| Low Hazard Index in Boston  | Harvard BERDO Buildings - Non-EJ |
| High Hazard Index in Boston | Allston District Energy Facility |

Path: \\vhb.com\gis\proj\Wat\_EV\16411.00 Harvard BERDO\Project\Harvard BERDO Respiratory\_1.aprx (D.Garris-Kolb, 8/14/2024)

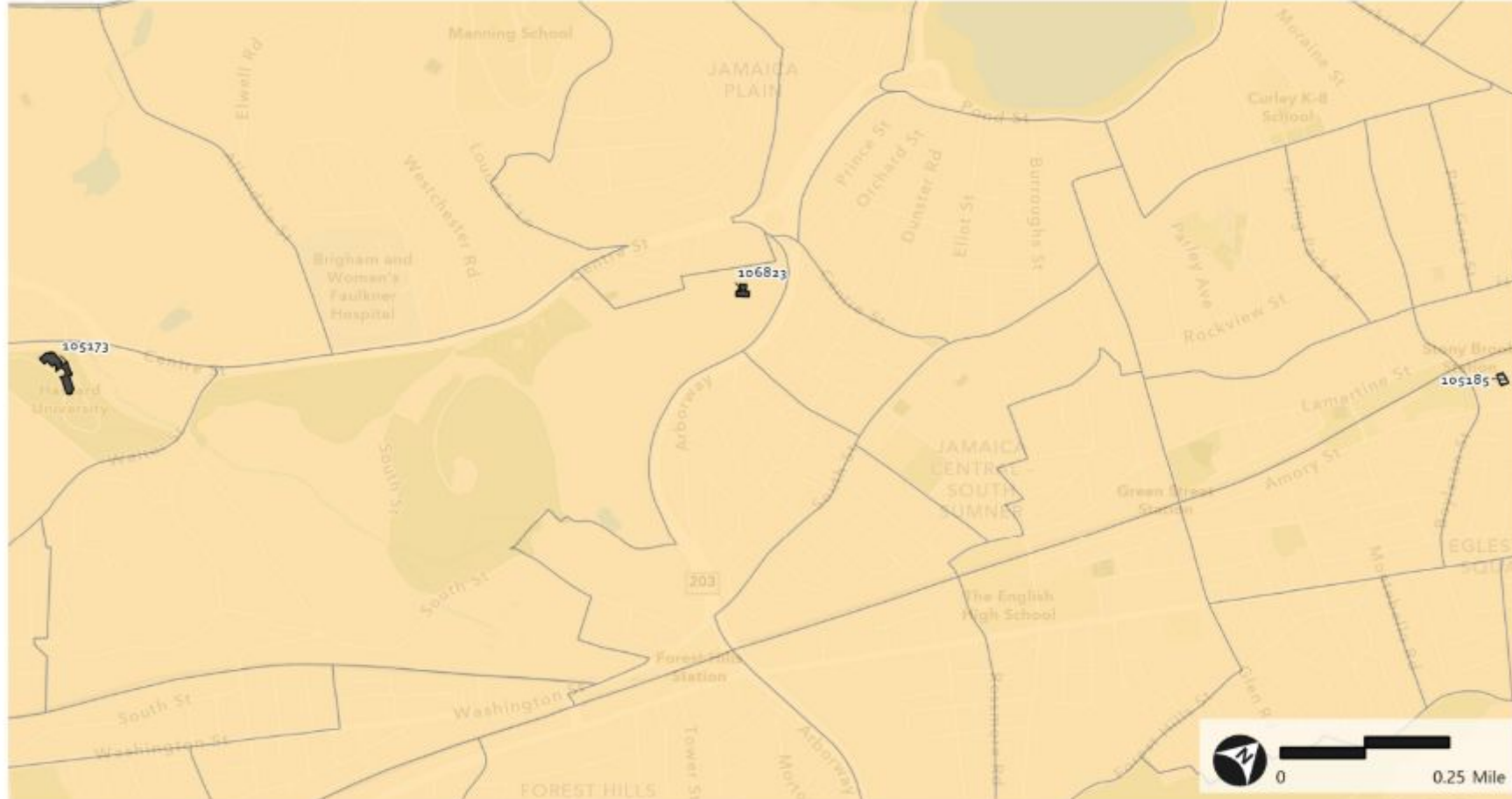


# Respiratory Hazard Map- Jamaica Plain



## Environmental Justice Map #3C: Respiratory Hazard - Jamaica Plain Buildings

Harvard University - BERDO Building Portfolio Application | Boston, MA

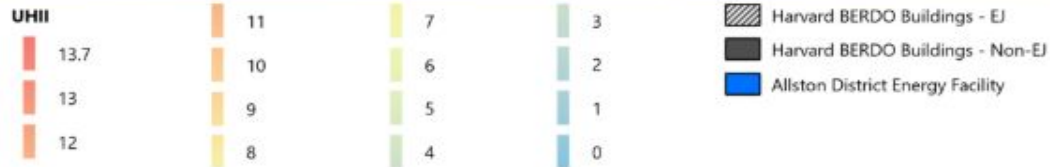


Path: \\vhb.com\gis\proj\Walt-EV\1611100 Harvard BERDO\project\Harvard BERDO Respiratory\_1.aprx (D'Gorris-Kolb, 8/7/2024)

- Respiratory Hazard Index
- Low Hazard Index in Boston
- Harvard BERDO Buildings - EJ
- Harvard BERDO Buildings - Non-EJ

# Urban Heat Island Intensity Map- Allston

Environmental Justice Map #4A: Urban Heat Island Intensity (UHII) Index - Allston Neighborhood  
 Harvard University - BERDO Building Portfolio Application | Boston, MA

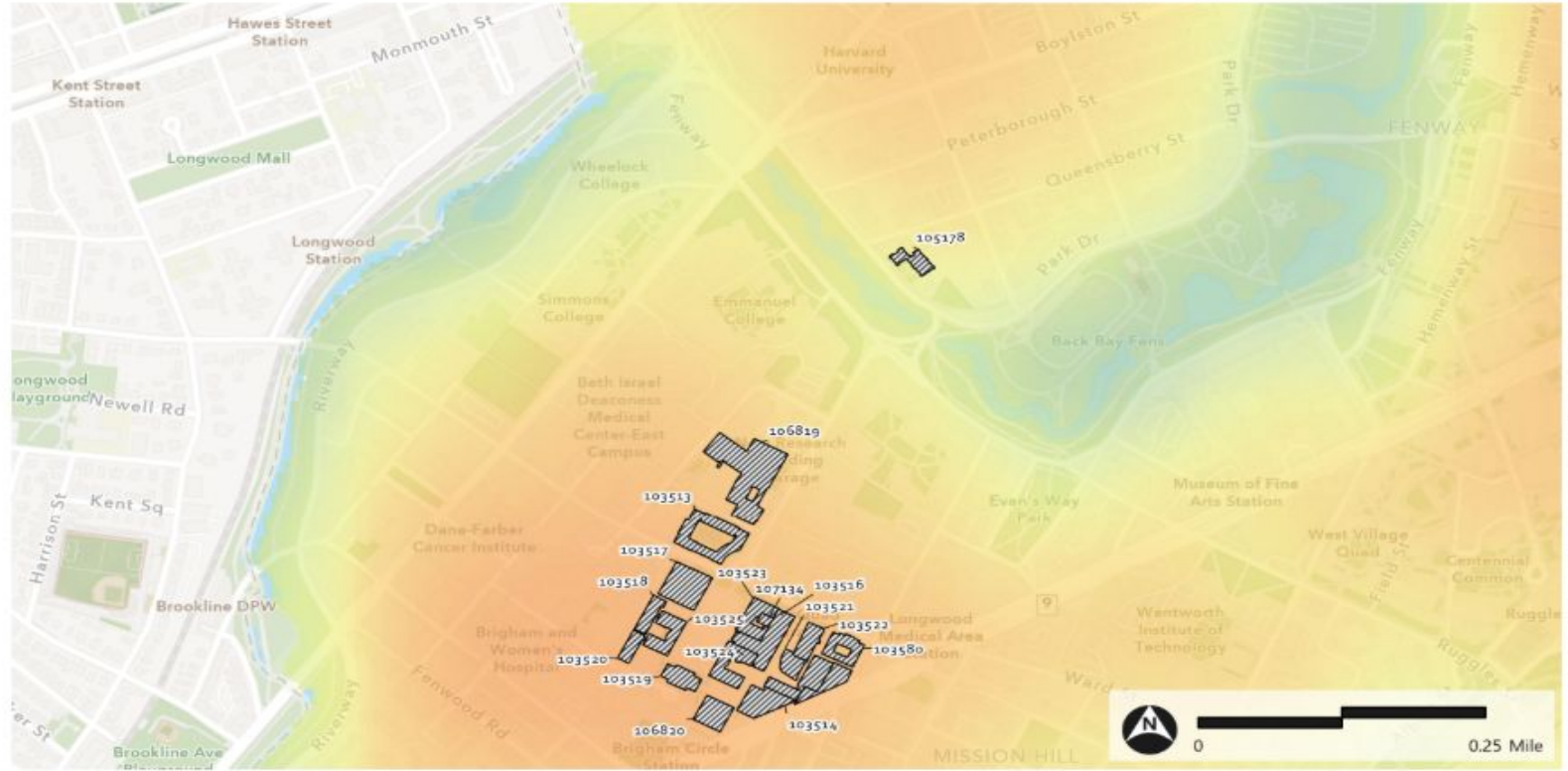


Source: MA EEA GIS, City of Boston Heat Resilience Study, ESRI  
 Note: UHII values represent the number of degrees F above the rural ambient temperature.

# Urban Heat Island Intensity Map- Longwood Medical Area



**Environmental Justice Map #4B: Urban Heat Island Intensity (UHII) Index - Longwood Medical Area**  
 Harvard University - BERDO Building Portfolio Application | Boston, MA

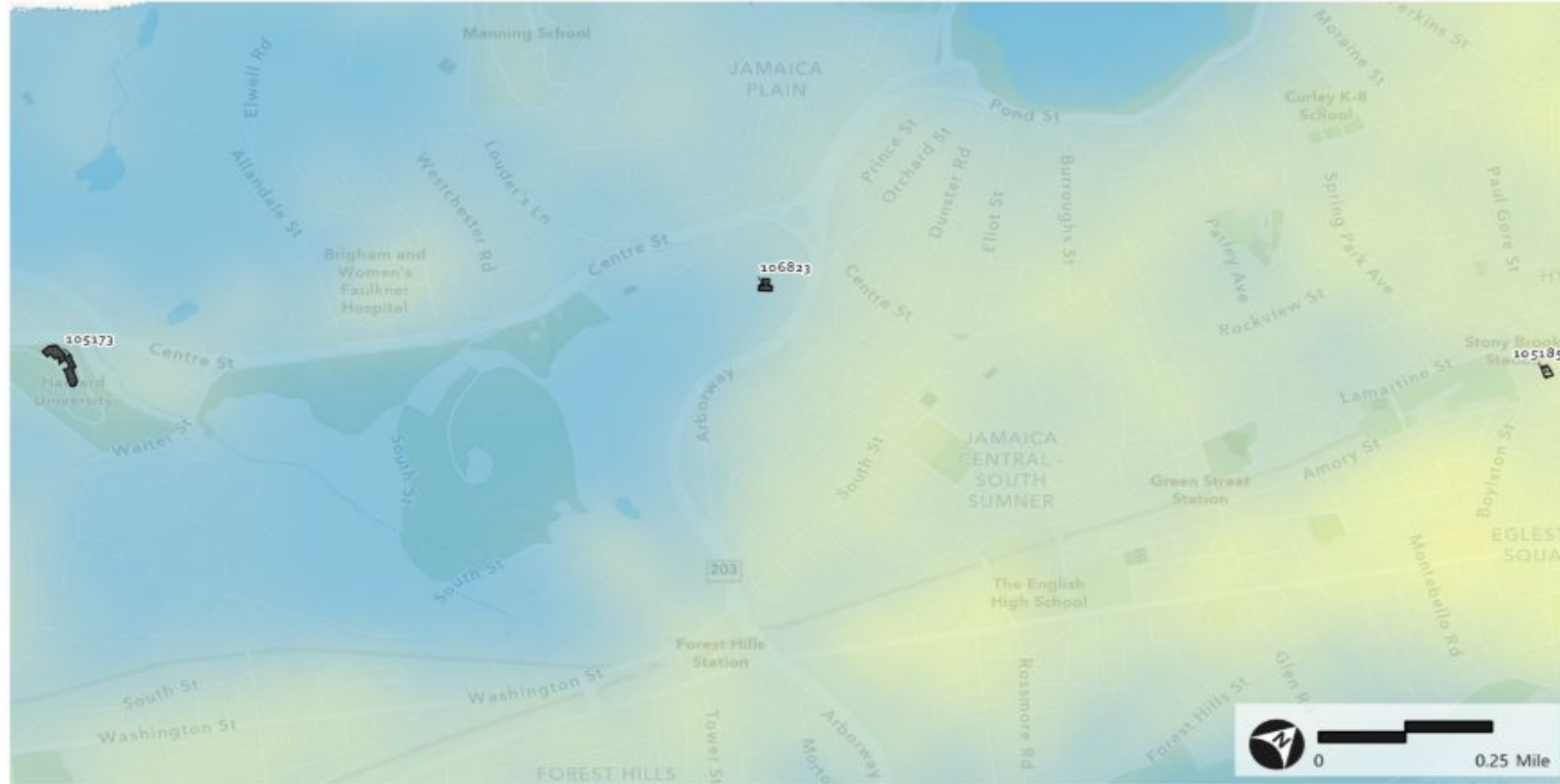


Source: MA EEA GIS, City of Boston Heat Resilience Study, ESRI  
 Note: UHII values represent the number of degrees F above the rural ambient temperature.

# Urban Heat Island Intensity Map-Jamaica Plain



**Environmental Justice Map #4C: Urban Heat Island Intensity (UHII) Index - Jamaica Plain Buildings**  
 Harvard University - BERDO Building Portfolio Application | Boston, MA



Source: MA EEA GIS, City of Boston Heat Resilience Study, ESRI  
 Note: UHII values represent the number of degrees F above the rural ambient temperature.

The background of the slide is a dark blue wireframe illustration of a city skyline, viewed from an elevated perspective. The buildings are represented by white and light blue lines, creating a complex geometric pattern. A semi-transparent dark blue horizontal band runs across the middle of the image, serving as a backdrop for the text.

# Staff Comments

*Environment Department shares staff comments*

An aerial wireframe map of the Harvard University campus, rendered in a light blue color against a darker blue background. The map shows the outlines of numerous buildings, courtyards, and streets, providing a detailed architectural overview of the university's layout.

# Board Q&A

*Harvard University*



The background of the slide is a dark blue aerial wireframe map of the Harvard University campus. The map shows the outlines of numerous buildings, courtyards, and streets, creating a complex geometric pattern. The lines are white and light blue, providing a detailed view of the university's layout.

# Board Motion & Vote

*Harvard University*



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# Presentation and Discussion

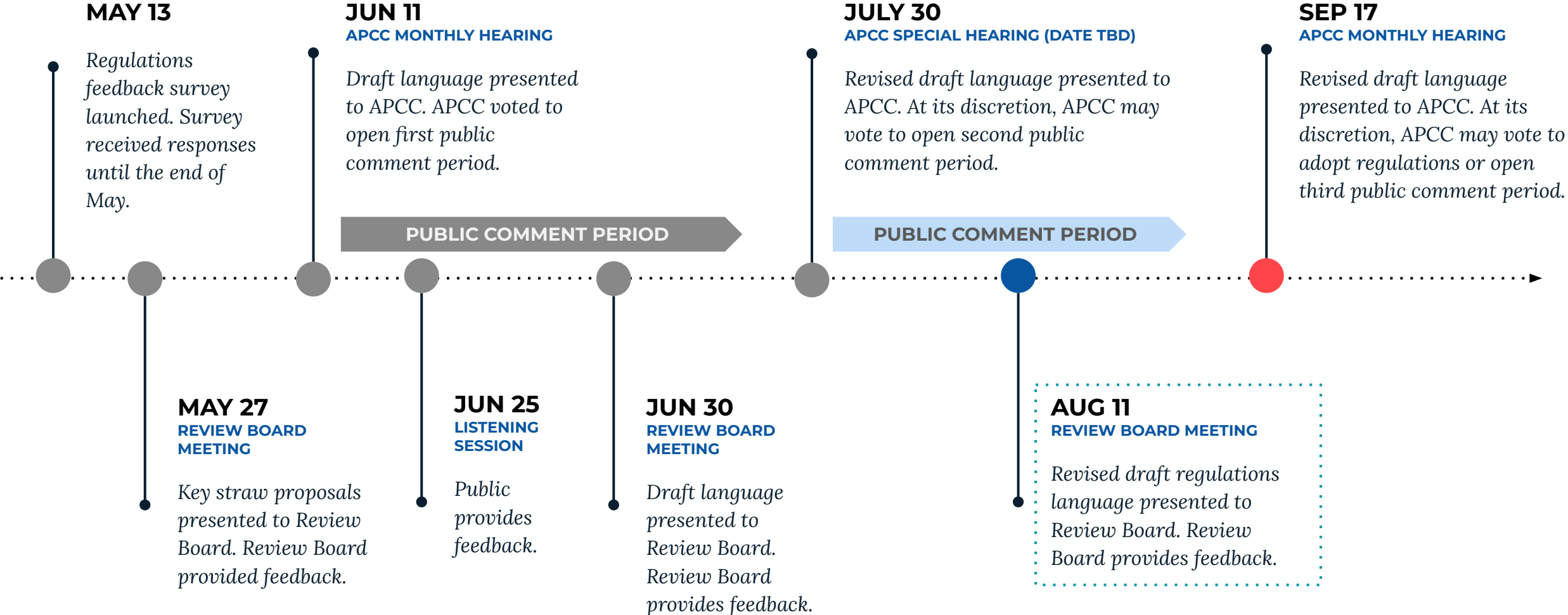
*BERDO Proposed Regulation Updates*





# 2025 BERDO Regulations Update Tentative Timeline

Timeline subject to change at the discretion of the Air Pollution Control Commission (APCC)



# Public Comment Period

- The public comment period opened on **June 13, 2025** and ended on **July 15, 2025 at 5:00 p.m.**
- The APCC received **four comment letters** from the following organizations:
  - PowerOptions
  - Conference of Boston Teaching Hospitals (COBTH), Longwood Medical Energy Collaborative (LMEC), and Longwood Collective (LC)
  - A Better City
  - NAIOP Massachusetts

# Summary of Feedback

## FLEXIBILITY MEASURE APPLICATION PROCESSES

- Request to remove the requirement to record decisions related to long-term Hardship Compliance Plans in the Registry of Deeds for all buildings.
- Support for updated flexibility measure application deadlines, with some clarifying questions.
- Support for language allowing the addition of newly constructed buildings subject to NZC Zoning in Building Portfolios, with or without Hardship Compliance Plans.
- Requests to exempt all solar systems from MA Class I REC retirement, including those outside the City of Boston, in the case that H. 4144, An Act Relative to Energy Affordability is passed.

## THIRD-PARTY VERIFICATION

- Support for updated verification requirements.

## OTHER BERDO PROCEDURES

- Requests for opportunities to provide public feedback in the case that an alternative platform to ESPM or alternative data sources to the US EPA EJ Map are needed.
- Requests to delay the May 15 annual reporting deadline due to the updated date of publication for annual emissions factors (April 1 → April 15).
- Requests to delay the update of projected grid emissions factors until 2030.
- Request to allow existing owners to request a notice of compliance status from the Environment Department.
- Clarifying questions on language related to reporting extensions and other procedures.

# Summary of Revisions in Draft Regulations (I)

## SECTION III. DEFINITIONS

- **Added** definition for “Policies and Procedures”.

## SECTION IV. REPORTING PROCESS

- **IV.j. Requesting Alternative Reporting Dates.**
  - **Clarified** that building owners must submit requests for reporting extensions according to the procedures created by the Review Board.
  - **Clarified** that the Environment Department may approve reporting extensions subject to the procedures created by the Review Board.

### Please note:

- BERDO will continue to use ESPM as a reporting platform.
- In the event that ESPM becomes unavailable, the BERDO team is committed to providing multiple opportunities feedback and collaboration in the design or selection of an alternative reporting form.

## SECTION VIII. EMISSIONS FACTORS

- **VIII.a. Clarified** deadline for Environment Department to publish annual Emissions Factors to **“No later than April 15”** instead of “By April 15”.

### Please note:

- The May 15 annual reporting deadline is set by the BERDO Ordinance and cannot be modified through Regulations.
- April 15 would enable the BERDO Team to have the **certainty that any annual Emissions Factors that are published are finalized numbers** that will not need to be updated following the review of District Energy System emissions factors (which must be submitted by April 1).
- The BERDO Team is committed to pursue all efforts to publish the annual emissions factors **well before April 15** and will offer **reporting extensions** in case that the date of publication of annual grid emissions factors poses additional challenges to building owners.

# Summary of Revisions in Draft Regulations (II)

## SECTION X. ADDITIONAL COMPLIANCE MECHANISMS

- **X.d. Local Renewable Energy Generation. Clarified** that the Review Board reserves the right to approve or reject any requests to approve of solar systems that do not meet the requirements in Section X.d.i.a.

### Please note:

- **All behind-the-meter solar projects are already authorized for BERDO compliance**, regardless of whether the building is able to retain its associated RECs.
- The proposed exemption language would enable the Review Board to **grandfather** solar systems outside the City of Boston that were meant to be installed and start operations before 2024 yet faced extenuating circumstances to begin operations on time.
- The BERDO Team will continue to follow the H.4144 bill and reassess if any changes are needed if the Act is passed.

## SECTION XI. BUILDING PORTFOLIOS

- **XI.b. Requirements for Building Portfolios. Clarified** language regarding newly constructed buildings:

*“Any Building in the proposed Building Portfolio, **including newly constructed Buildings**, that is required to meet a more stringent or net-zero Emissions standard prior to 2050 set through zoning requirements must meet its Building-specific Emissions standard every year.”*

### Please note:

- Per the Ordinance, Emissions standards set through NZC Zoning are considered binding and shall supersede any less stringent Emissions standards set by BERDO.
- **Any NZC Building included in a Building Portfolio must still meet its corresponding NZC Emissions standard.** This applies even if the Building Portfolio has a HCP.
- The Review Board may grant **other types of relief** to NZC Buildings with a HCP.

# Summary of Revisions in Draft Regulations (III)

## SECTION XI. BUILDING PORTFOLIOS

- **XI.c. Application Process for Building Portfolios.**
  - **Clarified** that if the Review Board extends an application deadline for a given year, said deadline would apply for all applications, and not on a case-by-case basis: \*\*

*“[...] the Review Board may extend this deadline for all such applications for a given year [...]”*

- **Clarified** that, if the building owner requests a later date for the Review Board to make a decision, this must be approved in writing by the Environment Department: \*\*

*“Within forty-five (45) Days of the Environment Department’s finding of completeness, or at such later date as requested in writing by the Owner and approved in writing by the Environment Department, the Review Board shall vote to [...]”*

## SECTION XIII. HARDSHIP COMPLIANCE PLANS

- **Removed** requirement to record decisions related to long-term Hardship Compliance Plans for all buildings.
- **XIII.h. Process for Hardship Compliance Plans Applications.**
  - **Clarified** process to apply for a short-term HCP after the applicable deadline for a given year.

## SECTION XV. DISCLOSURE OF RECORDS AND INFORMATION

- **XV.c. Added** language to enable any owner to request a notice of compliance status:

*“Any Owner may request the Environment Department to provide a notice of compliance status for their Building or Building Portfolio.”*

# Summary of Revisions in Draft Policies and Procedures

## SECTION 1. INTRODUCTION

- **Clarified** language regarding updates to Policies and Procedures:

*“The Environment Department may recommend updates to these Policies and Procedures to the Review Board. The Review Board shall have discretion to adopt any updates to Policies and Procedures.”*

## SECTION 5. CALCULATING BUILDING EMISSIONS

- A. **Clarified** language; no substantive changes.

## APPENDIX B. PROJECTED GRID EMISSIONS FACTORS

- Policies and Procedures already required projections to be reviewed “at least every five years” and “before the 2030 compliance period”.
- Given that initial projections were developed in 2021, **updating emissions factors for 2027 onwards is aligned with the update schedule established in Policies and Procedures.**
- The updated projected grid emissions factors will provide **more certainty** for building owners by enabling them to estimate their electricity emissions more accurately as soon as possible, and **closer to the actual electricity emissions** that they should expect to see year-to-year with the **annual electric grid emissions factors** calculated by the Environment Department.

# Next Steps

- The APCC opened a **second public comment period** on the revised draft language for BERDO Regulations and Policies and Procedures from **Friday, August 1 to September 2, 2025 at 5:00 p.m.**
- Based on any new feedback, the BERDO team will work to analyze public comments and make revisions to the draft language.
- Revised draft language would be presented to the APCC on **September 17, 2025.**

The background of the slide is a dark blue wireframe illustration of a city skyline, viewed from an elevated perspective. The buildings are represented by white and light blue lines, creating a complex geometric pattern. A semi-transparent dark blue horizontal band runs across the middle of the image, serving as a backdrop for the text.

# Board Q&A

*BERDO Regulations Update*



# Approval of Meeting Minutes

*Board votes on approving previous meeting's minutes*

The background of the slide is a dark blue aerial wireframe map of a city, showing the outlines of buildings, streets, and parks. The lines are light blue and create a complex, geometric pattern.

# Administrative Updates

*Staff presents administrative updates*



# BERDO Fest




BERDO Fest will serve as a central hub for Boston building owners and property managers to build connections with experts and professionals across the building decarbonization ecosystem.

More information can be found at [boston.gov/berdo-fest](https://boston.gov/berdo-fest)

- **Date:** Thursday, October 23, 2025
- **Time:** 12:00 p.m. – 6:00 p.m.
- **Location:** Artists for Humanity at 100 W 2nd Street, Boston, MA 02127

## BERDO FEST

Learn, Connect, Decarbonize




[WHAT IS BERDO?](#) [GET INVOLVED](#) [PARTNERS](#)

A free event dedicated to bringing together the stakeholders driving building emissions reductions across Boston. BERDO Fest will serve as a central hub for BERDO building owners and property managers to build connections with experts and professionals across the building decarbonization ecosystem. Participants will learn about the projects that the City is recognizing as leading in building decarbonization.

**THURSDAY, OCTOBER 23, 2025**

**12:00 P.M. - 6:00 P.M.**

**ARTISTS FOR HUMANITY AT 100 W 2ND STREET, BOSTON, MA 02127**

 [ENVIRONMENT@BOSTON.GOV](mailto:ENVIRONMENT@BOSTON.GOV)

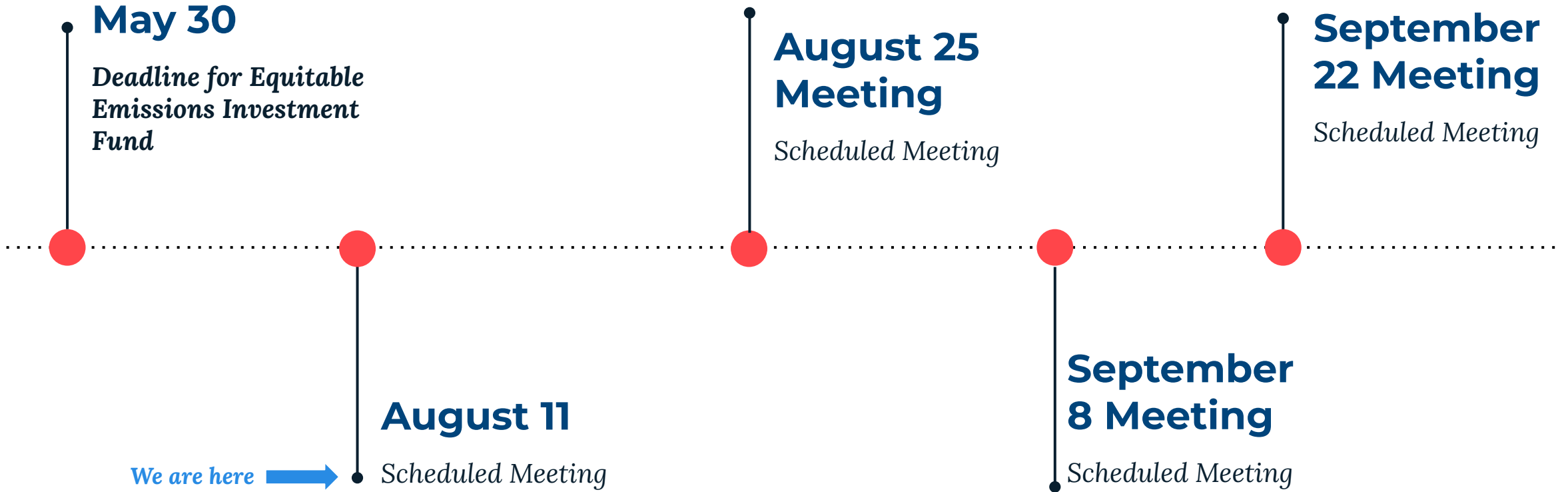
**STAY CONNECTED**

Stay in touch with Boston's Environment Team! Sign-up to receive updates on BERDO Fest and other ongoing initiatives.

**ENTER YOUR EMAIL ADDRESS**

**ZIP CODE**

# Review Board Upcoming Timeline



# Adjourn

Thank you! A recording and slide deck for this meeting will be available at [boston.gov/berdo-review-board](https://boston.gov/berdo-review-board).

