



PLAN: Charlestown

Climate Resilience & Open Space

December 16, 2020

Welcome

Technology & Tips

Jason Ruggiero, Community Engagement Manager



Meeting Recording

At the request of community members, this event will be recorded and posted on the PLAN: Charlestown project webpage at **<http://bostonplans.org/PlanCharlestown>** for those who are unable to attend the Zoom event live.

Also, it is possible that participants may be recording the meeting with their phone cameras or other devices. If you do not wish to be recorded during the meeting, please turn off your microphone and camera.

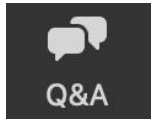
If your camera and microphone are off, you can still participate through the text chat feature.

Agenda: Open Space & Climate Resilience

- Open Space in Charlestown
 - Park properties and park planning (*Boston Parks and Recreation Department*)
 - Online Activity: On our website after this event
- Climate Resilience in Charlestown
 - Climate Ready Charlestown (*Climate Ready Boston, Environment Department*)
 - Question and Answer
- If you have a follow up item, please reach out to Jason Ruggiero (Jason.Ruggiero@boston.gov) and we will be in touch as soon as possible.

Meeting Format

- Presentation followed by Q & A and comments.
- During the presentation, all microphones will be muted.
- Once the presentation is over, we will take questions and comments in two ways:



Through the **Q&A tab** at the bottom of your screen; or



You can **raise your hand** and we will take your questions in the order that hands were raised.

Zoom Tips

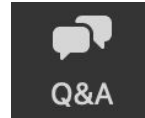
Welcome! Here are some tips on using Zoom for first-time users.

Your controls should be available at the bottom of the screen.

Clicking on these symbols activates different features:



Mute/unmute (you will remain muted until a host gives you access)



Q&A to ask questions throughout the presentation



Turn video on/off (your video will remain off until a host gives you access)



Raise hand to ask for audio/video permission at the end of presentation

Slido

Slido is an interactive polling feature that will allow for real time feedback

1. Go to **slido.com**
2. Type **8302** where it says “Enter code here”

slido

Product

Solutions

Pricing

Resources

Enterprise

Log In

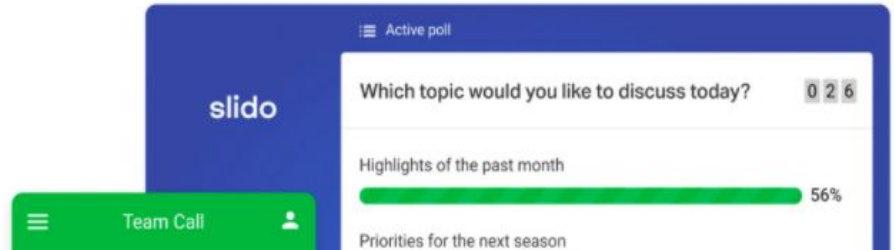
Quick event

Joining as a participant?

Enter code here



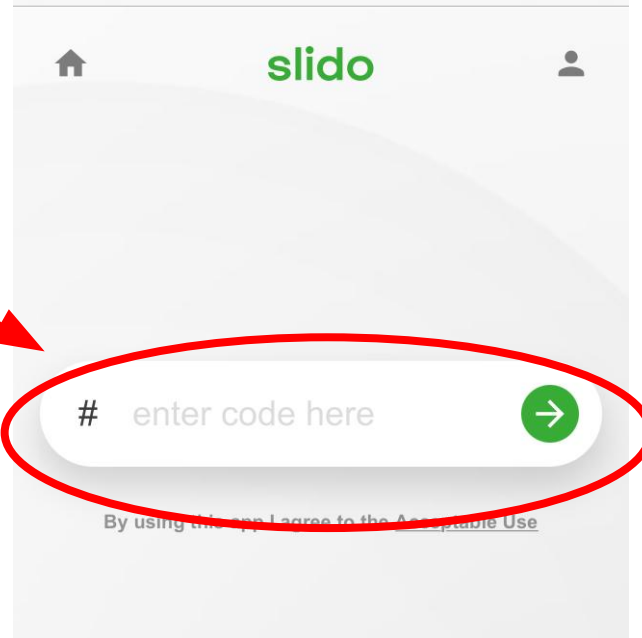
Host meetings
people will love



Slido

Slido is an interactive polling feature that will allow for real time feedback

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2. Type **8302** where it says
“Enter code here”



COVID-19 Resources

Stay up-to-date with COVID-19 related announcements, City of Boston reopening plans, and resources for you and your community at:

boston.gov/coronavirus

Content available in 16 languages.



The screenshot shows the City of Boston website page for COVID-19 resources. The header includes the City of Boston logo, Mayor Martin J. Walsh's name, and a menu icon. The main heading is "CORONAVIRUS DISEASE (COVID-19) IN BOSTON". Below the heading, there is a paragraph of text: "The state has updated guidance on the [Reopening Massachusetts website](#). We also continue to update City-specific guidance for Boston on [our reopening website](#)." The date "July 12, 2020" is displayed. To the right, it says "PUBLISHED BY: PUBLIC HEALTH COMMISSION". Below this, there is a section for "MULTILINGUAL CONTENT" with a list of languages: العربية (Arabic), Kriolu (Cabo Verdean creole), 中文 (Chinese), Français (French), Kreyòl ayisyen (Haitian Creole), Português (Portuguese), and Русский (Russian). At the bottom, it states "BOSTON (AS OF FRIDAY, JULY 10)" and "13,673 CASES | 9,683 RECOVERED".

For all meeting content:

<http://www.bostonplans.org/plancharlestown>

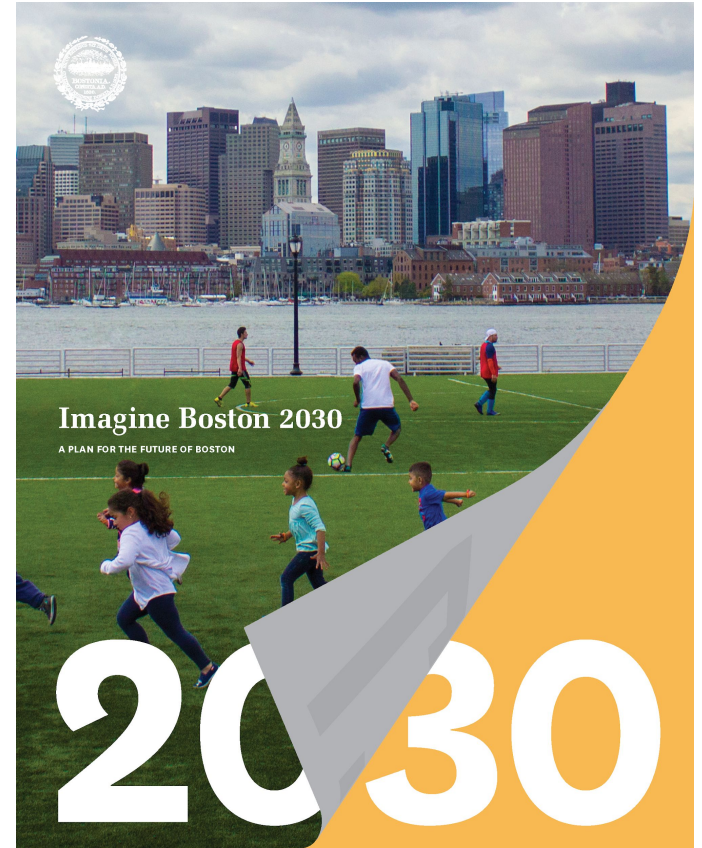
Context

Ted Schwartzberg, Senior Planner

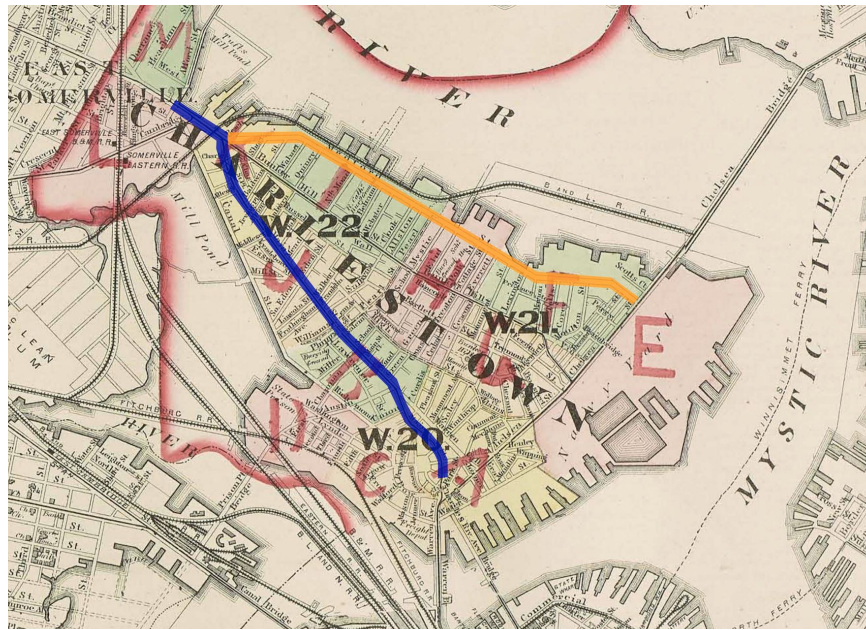
What is Imagine Boston 2030?

Begun in 2015 and completed in 2017, Imagine Boston 2030 (IB2030) is the first citywide plan in 50 years.

It created the guiding principles and framework to guide all growth in the City of Boston. In partnership with the BPDA, the City of Boston can ensure that priorities are carried out through creative and thoughtful land use regulations and guiding principles.



Overview



1875 Hopkins Map
Main & Medford Streets highlighted

- 2019
- January 2020
- August 2020
- October 2020
- Tonight
- Next

Pre-process: 14 engagement events
Kick-Off Open House: *all planning topics*
Open Office Hours
Land Use Over Time Workshop and Office Hours
Open Space and Climate Resilience Workshop
Mobility

Open Space in Charlestown

Ted Schwartzberg: Senior Planner, BPDA

B Chatfield: Landscape Architect & Project Manager, Boston Parks and Recreation



slido

How would you define "Open Space"

 Start presenting to display the poll results on this slide.

Open Space Typologies - *Active Recreation*



Ryan Playfield

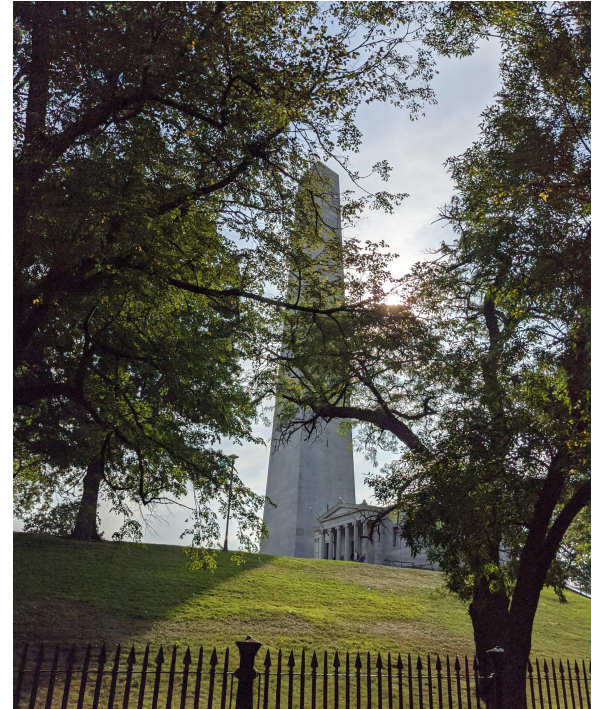
Photo: Ted Schwartzberg

Open Space Typologies - *Passive*



Paul Revere Park

Photo: Ted Schwartzberg



Monument Square

Photo: Ted Schwartzberg

Open Space Typologies - *Playgrounds*



Caldwell Street Play Area

Photo: Ray Dunetz
Landscape Architecture

Open Space Typologies - *Community Gardens*



Gardens for Charlestown

Photo: Ted Schwartzberg



**boston planning &
development agency**

Open Space Typologies - *Plazas*



O'Reilly Park

Photo: Ted Schwartzberg

Open Space Typologies - *Squares*



City Square

Photo: Ted Schwartzberg



Thompson Square

Photo: Ted Schwartzberg

Open Space Typologies - *Malls*



Dartmouth Avenue Mall

Photo: Leslee Masten



Harvard Mall

Photo: B Chatfield

Open Space Typologies - *Urban Wilds*



Nanny Goat Hill / Forty Flights

Photo: Jill Zick

Open Space Typologies - *Linear Parks*



Candy Cane Light Path

Photo: Ted Schwartzberg



Future Path & rail right of way

Photo: Ted Schwartzberg

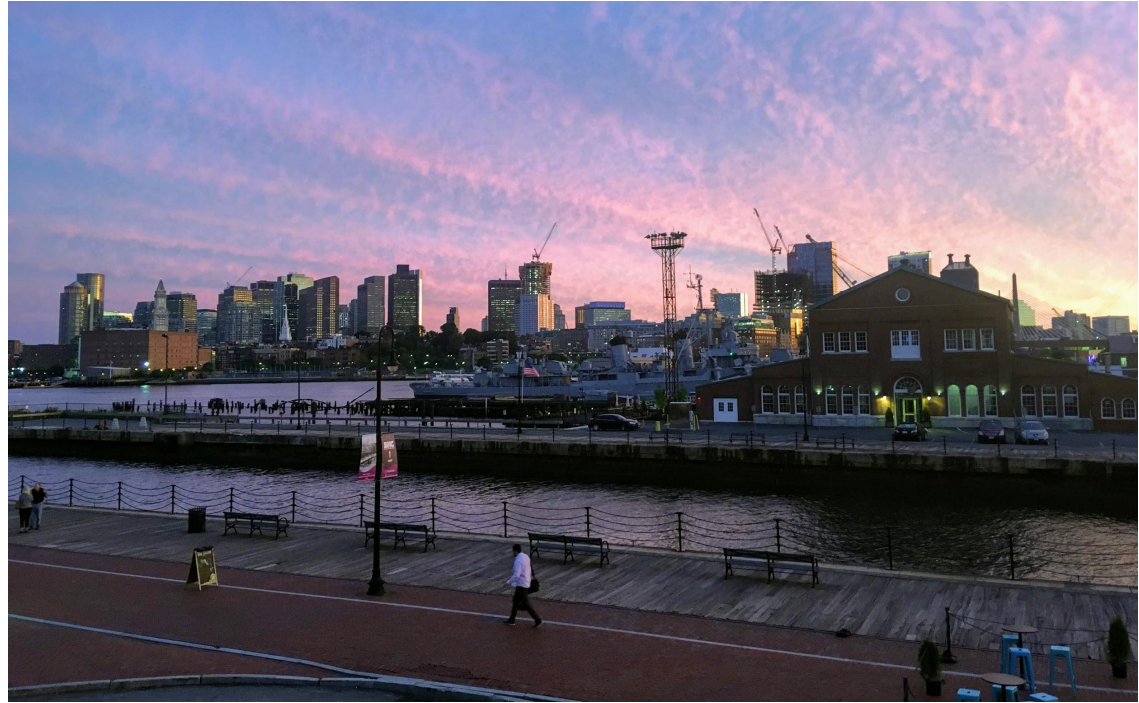
Open Space Typologies - *Pocket Parks*



Peace Park

Photo:Quinlan Locke

Open Space Typologies - *Waterfront (public)*



Navy Yard Harborwalk

Photo: Ted Schwartzberg

Open Space Typologies - *Waterfront (private)*



Schrafft's Harborwalk

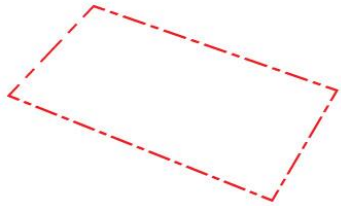
Photo: Ted Schwartzberg

Open Space

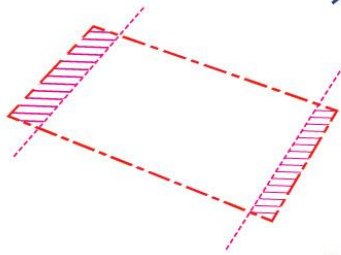


Privately-Owned Public Open Space

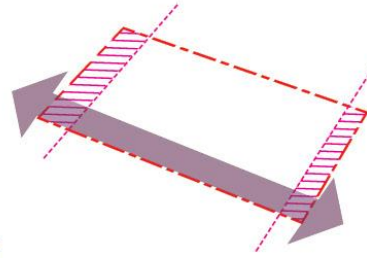
Plan Implementation



Setbacks

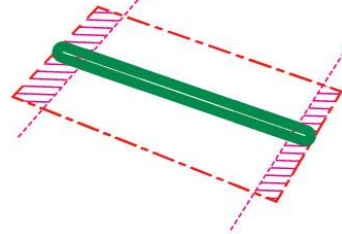


Harborwalk (State Regulation)

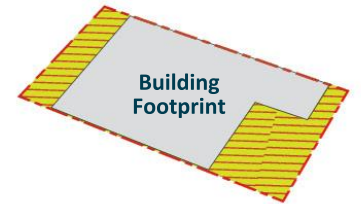
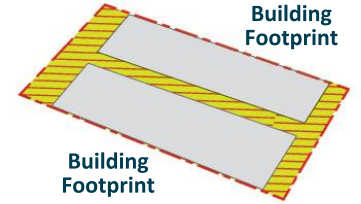
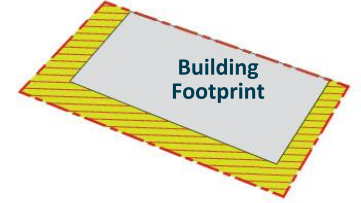
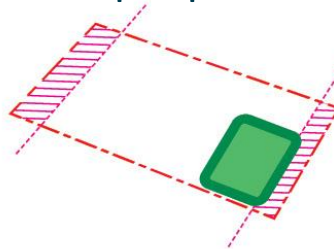


 New Public Open Space

Public Pedestrian Way



Public Open Space & Place-Making



Cook Street Play Area



Cook Street Play Area

Photo: B Chatfield



Cook Street Play Area

Photo: B Chatfield

Cook Street Play Area



Cook Street Play Area

Photo: B Chatfield



Cook Street Play Area

Photo: B Chatfield

Doherty Playground



Ensign John Joseph Doherty, Jr.
Playground

Photo: B Chatfield



Ensign John Joseph Doherty, Jr.
Playground

Photo: B Chatfield

Doherty Playground



Ensign John Joseph
Doherty, Jr. Playground

Photo: B Chatfield



Ensign John Joseph
Doherty, Jr. Playground

Photo: B Chatfield

Winthrop Square/Training Field



Winthrop Square

Photo: B Chatfield



Winthrop Square

Photo: B Chatfield

Winthrop Square/Training Field



Winthrop Square

Photo: B Chatfield



Winthrop Square

Photo: B Chatfield

Winthrop Square/Training Field



Winthrop Square

Photo: B Chatfield

John Harvard Mall



John Harvard Mall

Photo: B Chatfield



John Harvard Mall

Photo: B Chatfield

John Harvard Mall



John Harvard Mall

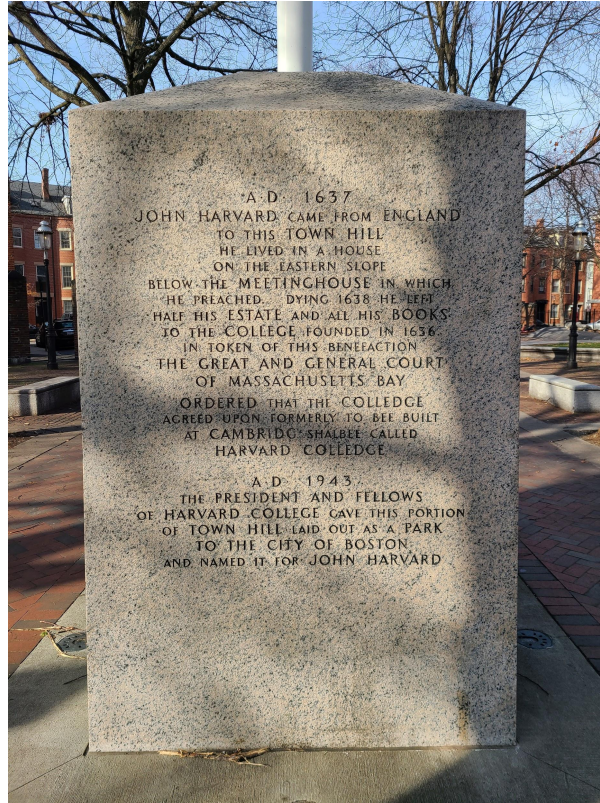
Photo: B Chatfield



John Harvard Mall

Photo: B Chatfield

John Harvard Mall



John Harvard Mall

Photo: B Chatfield

Mayor Thomas M. Menino Park



Mayor Thomas M. Menino Park

Photo: B Chatfield

Mayor Thomas M. Menino Park



Mayor Thomas M.
Menino Park

Photo: B Chatfield



Mayor Thomas M.
Menino Park

Photo: B Chatfield

Mayor Thomas M. Menino Park



Mayor Thomas M.
Menino Park

Photo: B Chatfield



Mayor Thomas M.
Menino Park

Photo: B Chatfield

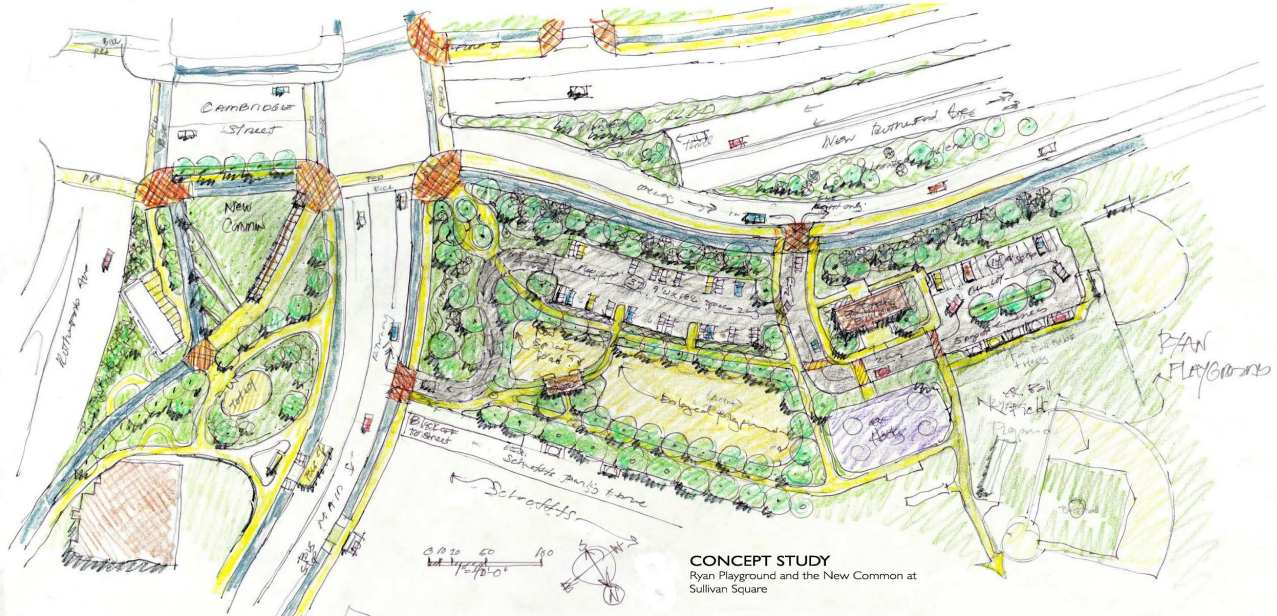
Ryan Playground



Ryan Playground

Photo:BPDA

Ryan Playfield at Alford/Rutherford Edge

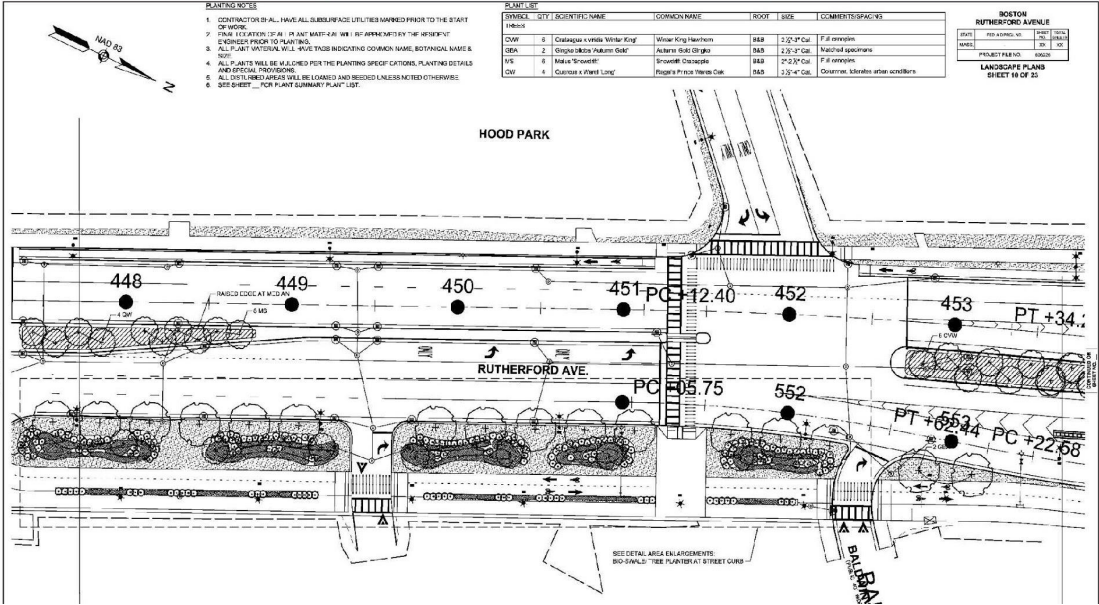


Concept Study
Boston Transportation Dept.

CONCEPT STUDY
Ryan Playground and the New Common at
Sullivan Square

Street Edge Spaces

Proposed Raingardens along Rutherford Avenue Linear Park



Linear Park

Boston Transportation Dept.

slido

Tell us what you primarily use the existing open spaces in Charlestown for?

 Start presenting to display the poll results on this slide.

slido

What should open spaces in Charlestown
accommodate?

 Start presenting to display the poll results on this slide.

Online Activity

- Take a photo of your favorite open space in Charlestown. Say what makes this particular open space great, and submit it on the project website!
- Entries will be accepted until January 15th.

Climate Resilience

Peyton Siler Jones: Climate Resilience Program Coordinator, Environment Department

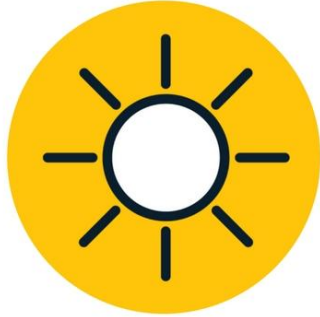


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CLIMATE READY BOSTON



**EXTREME
TEMPERATURES**



HEAT

**EXTREME
PRECIPITATION**



**STORMWATER
FLOODING**

SEA LEVEL RISE



**COASTAL & RIVERINE
FLOODING**

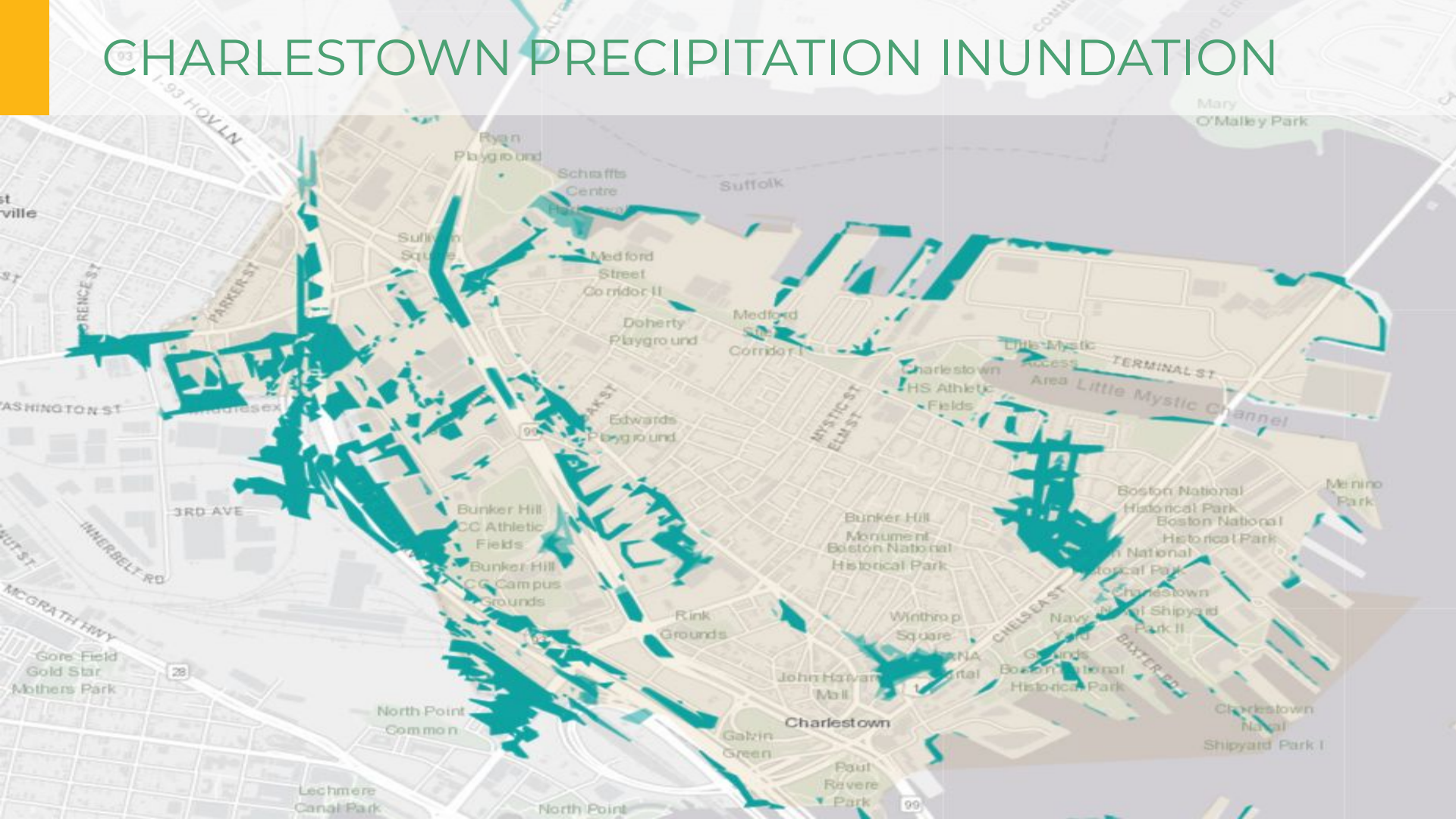
**COASTAL
STORMS**



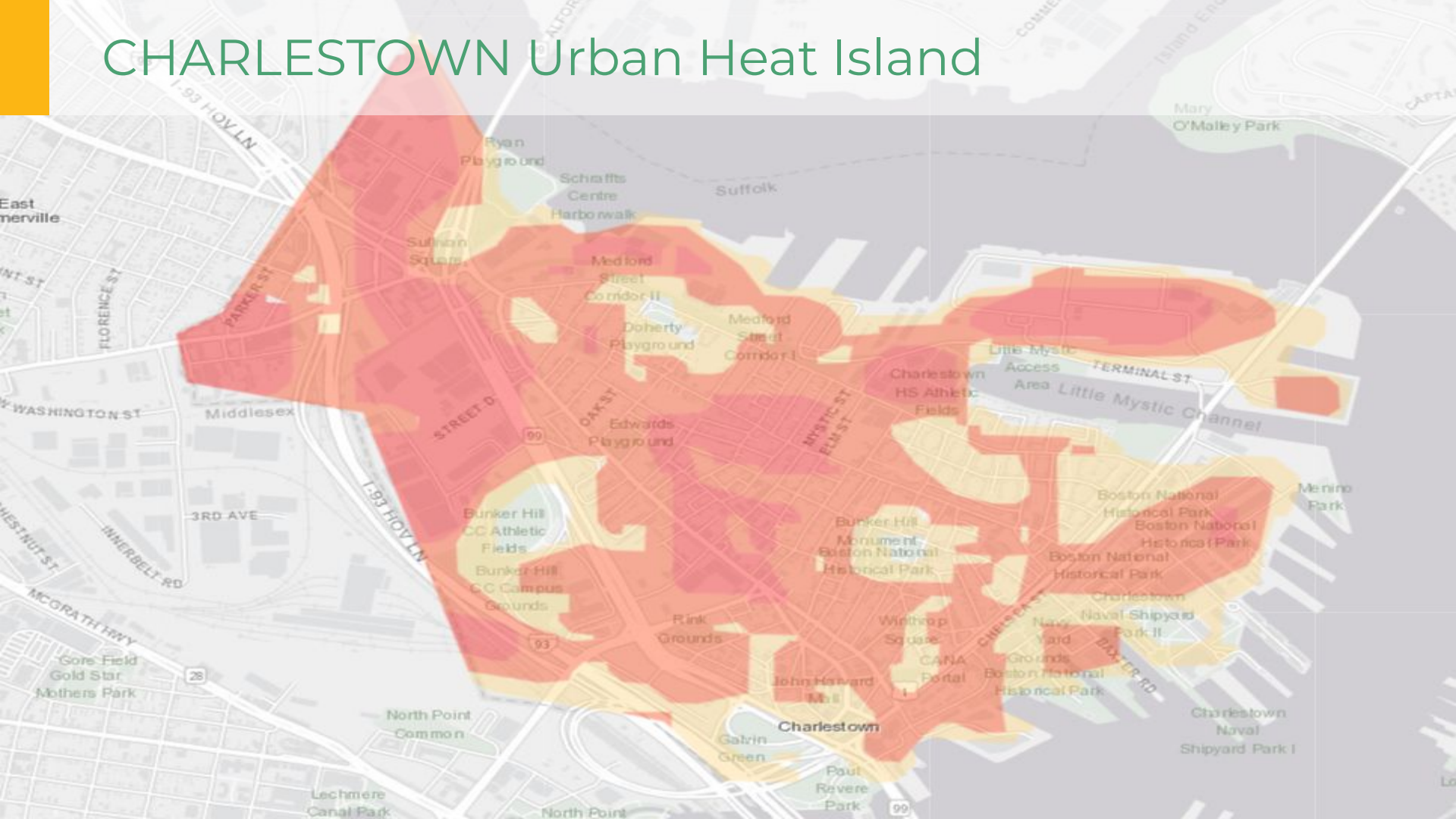
CHARLESTOWN SEA LEVEL RISE



CHARLESTOWN PRECIPITATION INUNDATION



CHARLESTOWN Urban Heat Island



ADAPTING TO CLIMATE CHANGE



PROTECTED SHORES



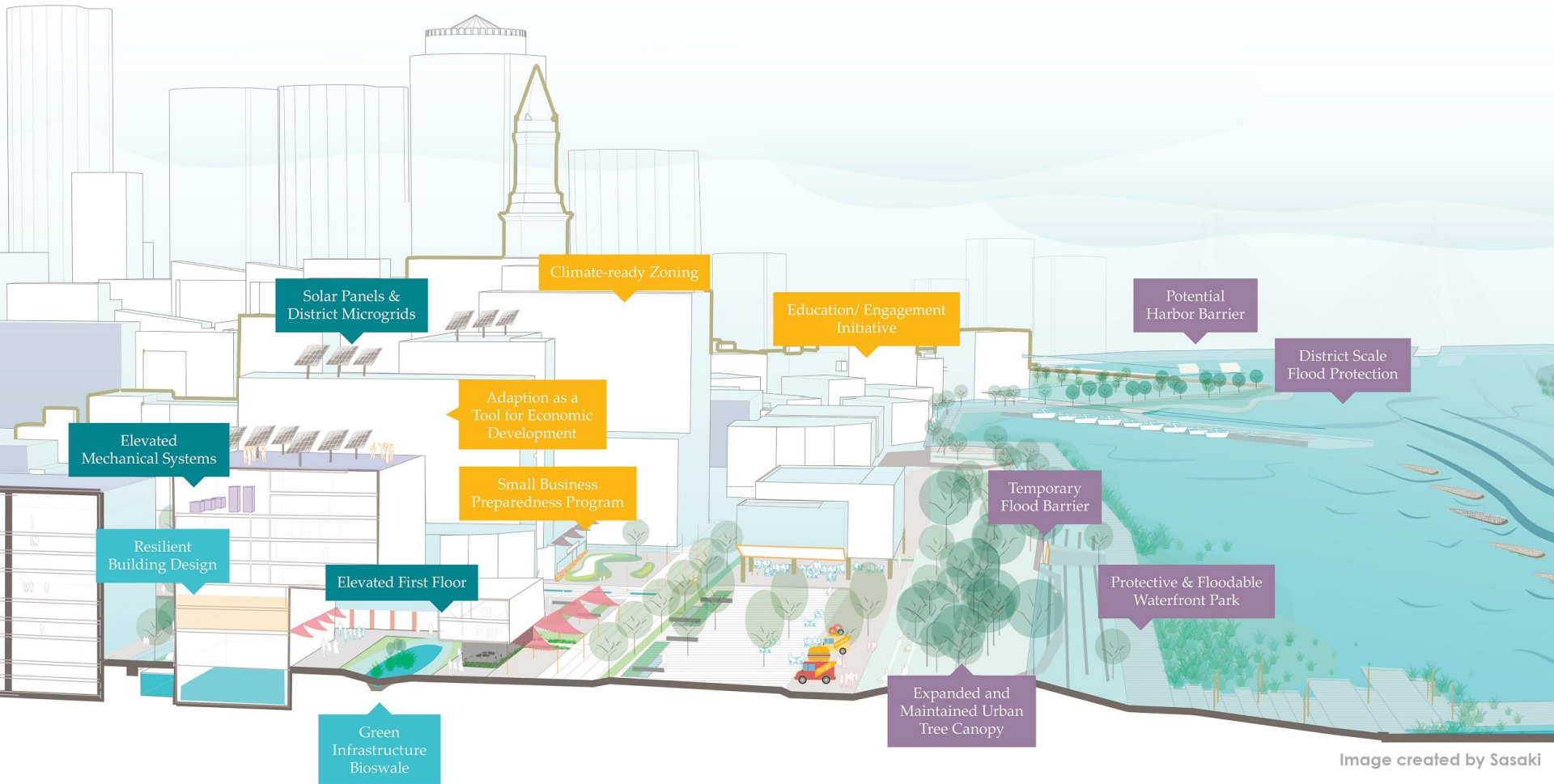
PREPARED AND CONNECTED COMMUNITIES



RESILIENT INFRASTRUCTURE



ADAPTED BUILDINGS



Solar Panels &
District Microgrids

Climate-ready Zoning

Education/ Engagement
Initiative

Potential
Harbor Barrier

District Scale
Flood Protection

Elevated
Mechanical Systems

Adaption as a
Tool for Economic
Development

Small Business
Preparedness Program

Temporary
Flood Barrier

Resilient
Building Design

Elevated First Floor

Protective & Floodable
Waterfront Park

Green
Infrastructure
Bioswale

Expanded and
Maintained Urban
Tree Canopy

NEIGHBORHOOD PLANNING



Climate Ready Downtown and North End

We have started the planning process to protect the Downtown area from coastal flooding.



Climate Ready East Boston

Our first neighborhood coastal resilience plan. Read the report.



Climate Ready Charlestown

We are finding ways to reduce flood risk while improving the community.



Climate Ready South Boston

Read the report on coastal resilience strategies across the neighborhood.



Moakley Park Vision Plan

We're working with the Parks Department on a redesigned, resilient Moakley.



Climate Ready Dorchester

Launching Fall 2019 to design solutions for coastal flood risk that address connectivity, accessibility, and equity.

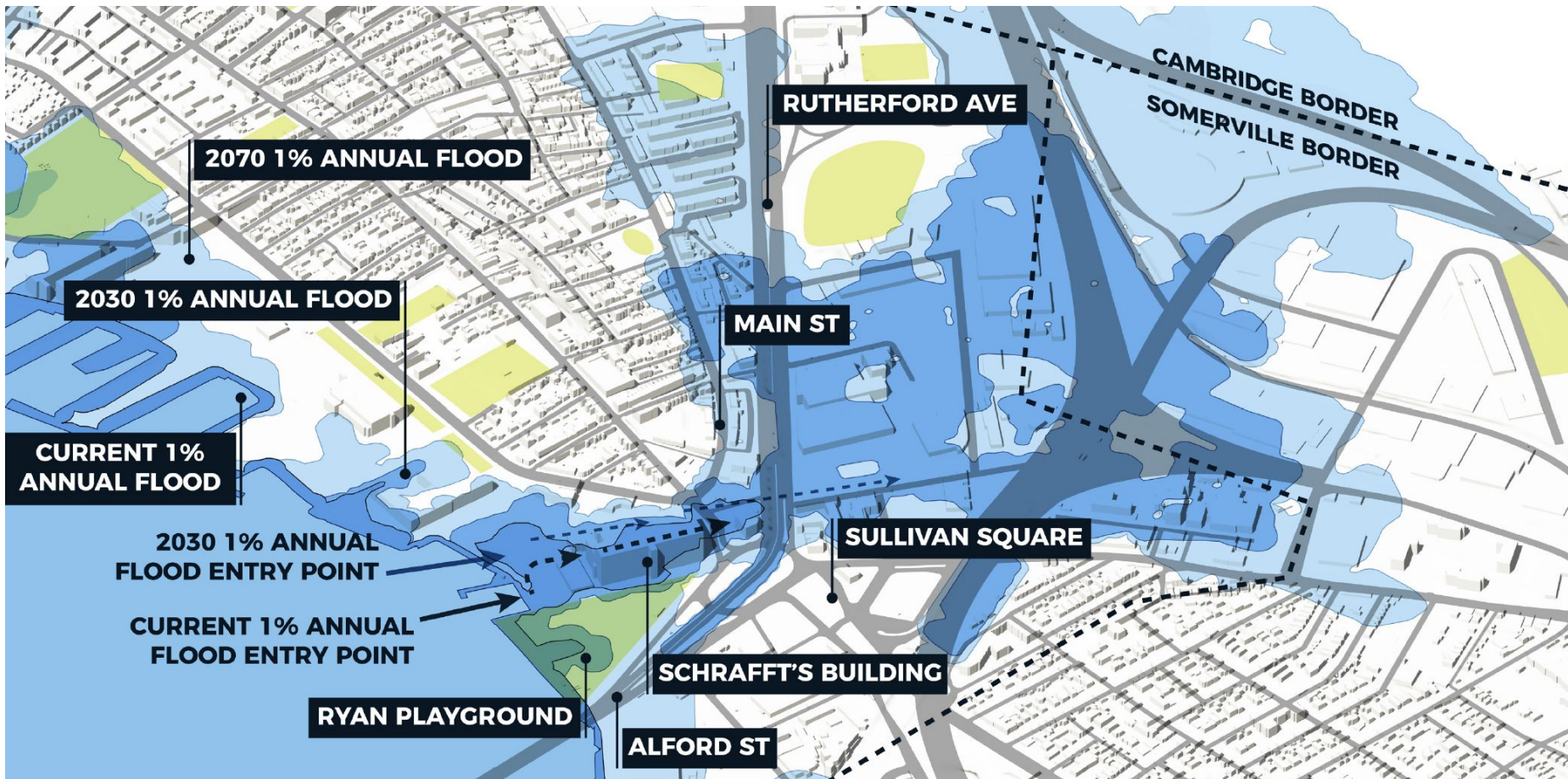


RESILIENT BOSTON HARBOR

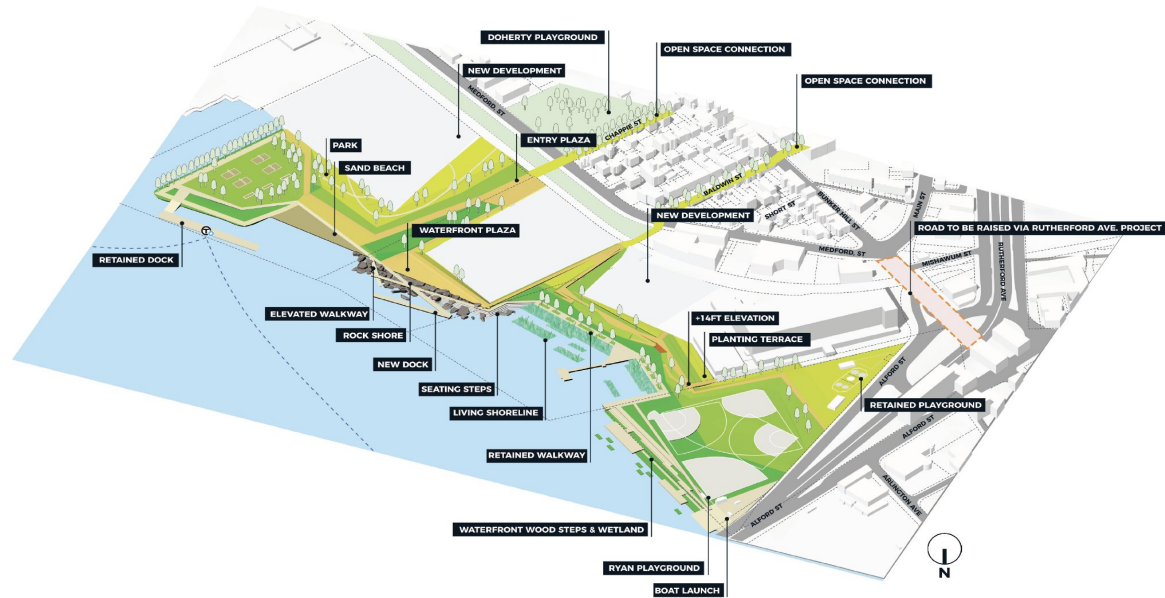
CHARLESTOWN PHASE I



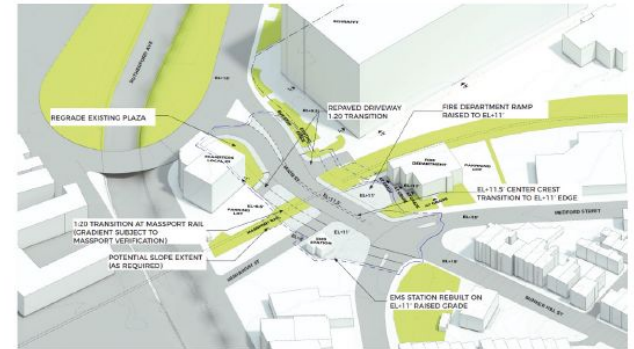
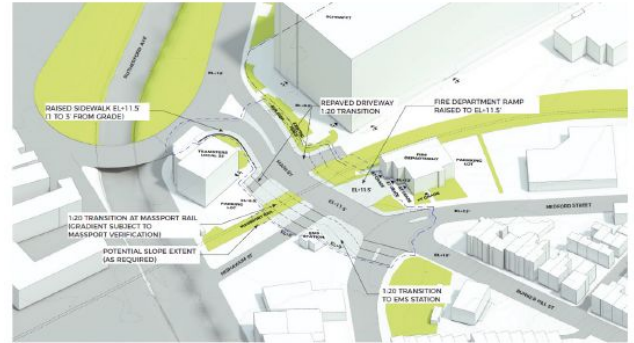
IN CHARLESTOWN PHASE I, THE CITY LOOKED AT ONE MAJOR FLOOD PATHWAY.



MAIN ST & SCHRAFFT'S CENTER ARE THE CORE OF PHASE 1.



The Sullivan Square waterfront is anchored by new open space and flood protection systems across three Schrafft's Center properties in the long-term climate resilient strategy.



RYAN PLAYGROUND IS LOW LYING WATERFRONT PROPERTY.



CHARLESTOWN PHASE II



DORCHESTER

SOUTH BOSTON

DOWNTOWN

EAST BOSTON

COASTAL RESILIENCE SOLUTIONS FOR CHARLESTOWN PHASE TWO

I. Flood modeling

A. *Timing and location of flooding*

II. Stakeholder engagement and outreach

A. *Community Advisory Board*

B. *Open housing*

C. *Focus groups*

D. *Survey*

III. Coastal resilience design options

HEAT RESILIENCE

- ☐ Heat Resilience Planning Project
 - ☐ Boston Parks Department: Urban Forestry Plan
 - ☐ Boston Public Health Commission
 - ☐ *Extreme Temperature Response Plan*
 - ☐ *Extreme Temperature Communications & Outreach*
 - ☐ *Neighborhood Emergency Preparedness Plans*
 - ☐ Museum of Science Heat Mapping Data
 - ☐ Covid & Heat AC Pilot Program



STORMWATER FLOODING MITIGATION

- ❑ Partnership with Boston Water and Sewer Commission
 - ❑ *Stormwater Modelling*
 - ❑ *Stormwater Retention Planning*
 - ❑ *Outfall Protection*
 - ❑ *Stormwater Fee*
 - ❑ *Coastal Resilience Discharge Analysis*

- ❑ Smart Utilities Policy

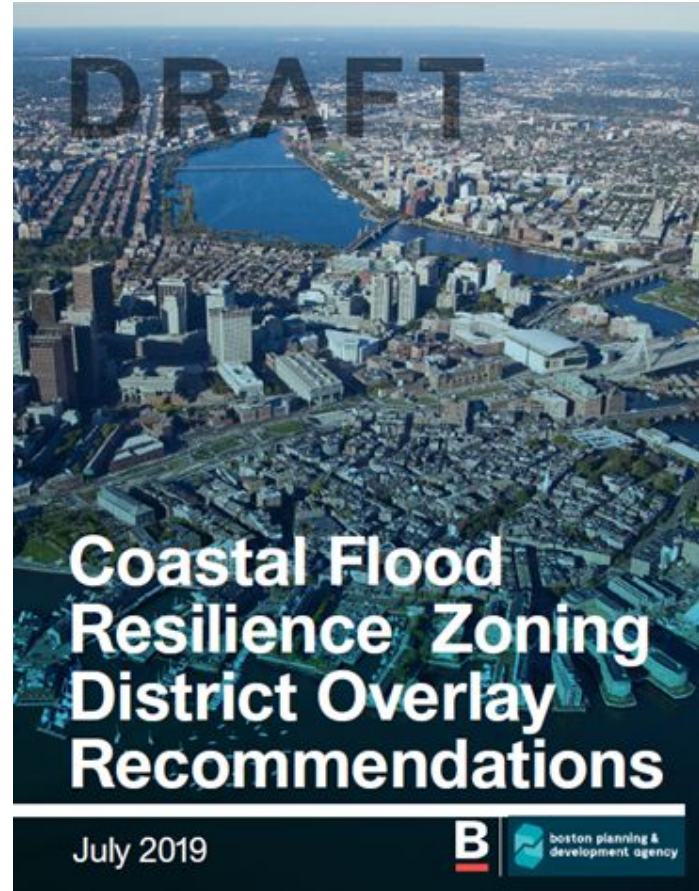
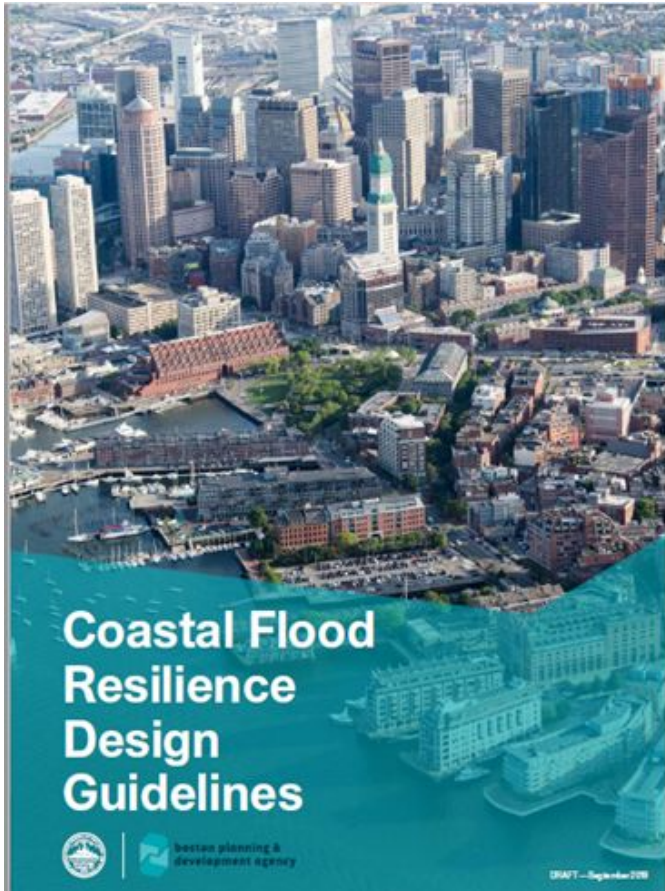


2019 Stormwater Management Report



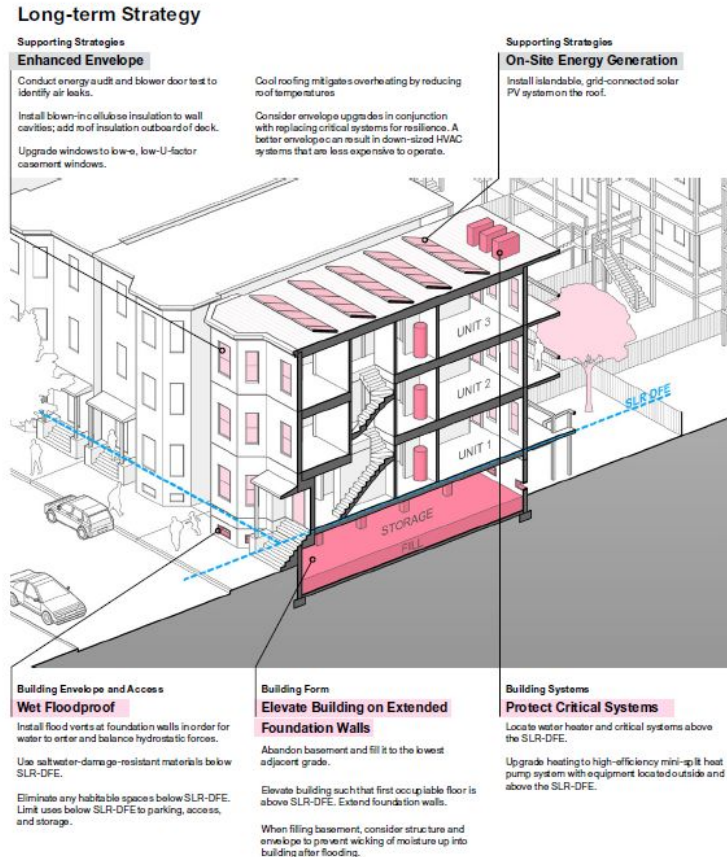
Boston Water & Sewer Commission

COASTAL RESILIENCE DESIGN GUIDELINES & ZONING



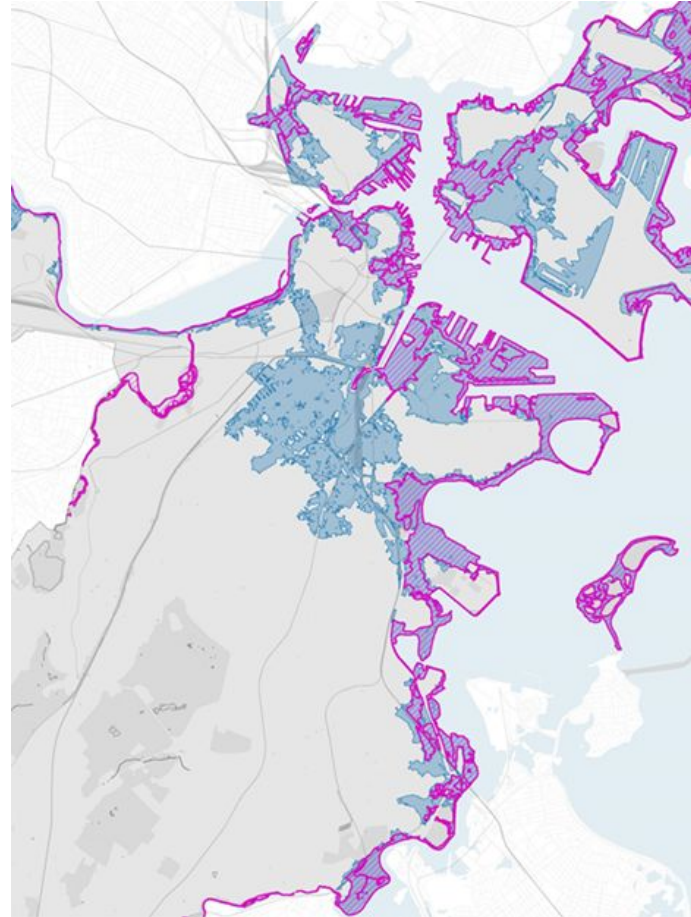
COASTAL RESILIENCE DESIGN GUIDELINES

- ❑ Provide specific design direction on implementing resilience measures for new construction and retrofits
- ❑ Illustrate flood protection measures in Boston context
- ❑ Guide development in Zoning Overlay



COASTAL FLOOD RESILIENCE ZONING OVERLAY DISTRICT

- ❑ Protect against risks to life safety and property damage, and conserve the value of land and buildings
- ❑ Overlay District: 1% chance storm event with 40-inches of sea-level-rise
- ❑ Specific zoning definitions, building dimensional and use provisions to facilitate resilient design measures



HOW TO GET INVOLVED?

I. **Contribute to planning**

- Heat Resilience
- CRB Charlestown Phase II

II. **Build social resilience in your community**

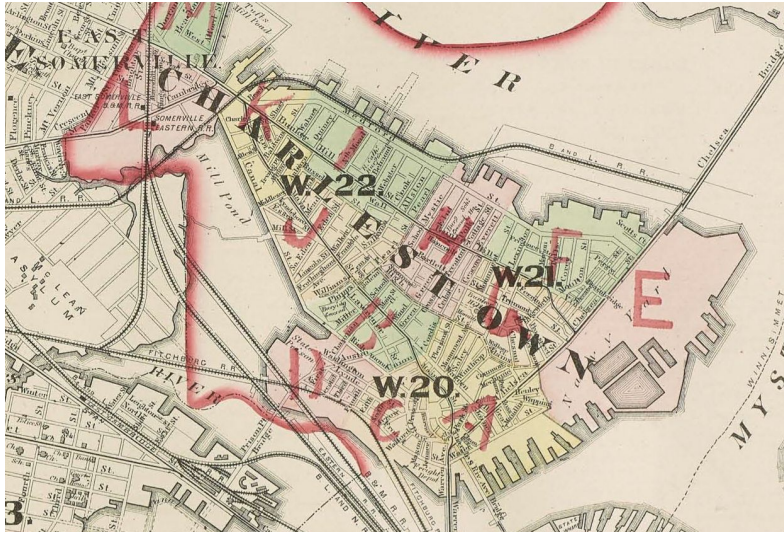
- Educate yourself, your friends, and family on climate change (Greenovate Leaders)
- Create a BPHC Emergency Kit



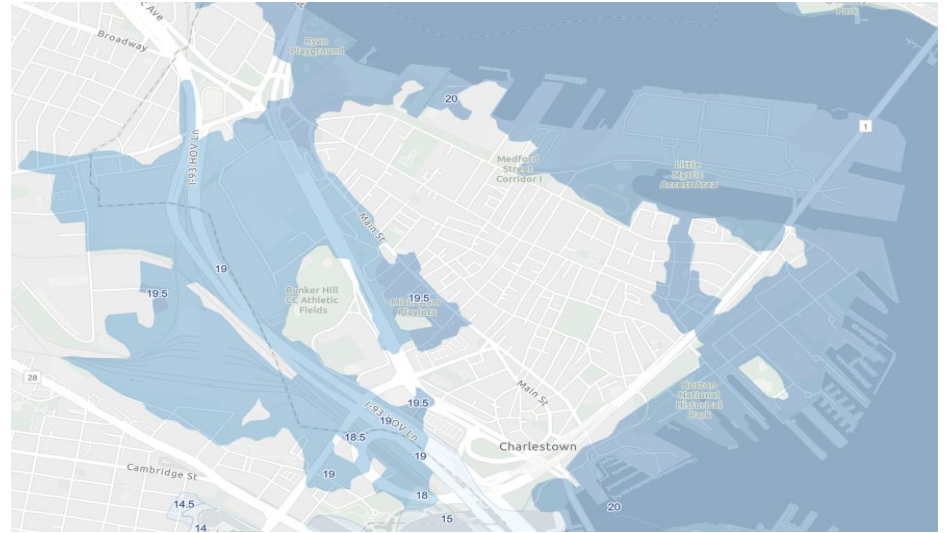
THANK YOU!



PLAN: Charlestown



1875 Hopkins Map



Projected Sea Level Rise

PLAN: Charlestown

Q&A

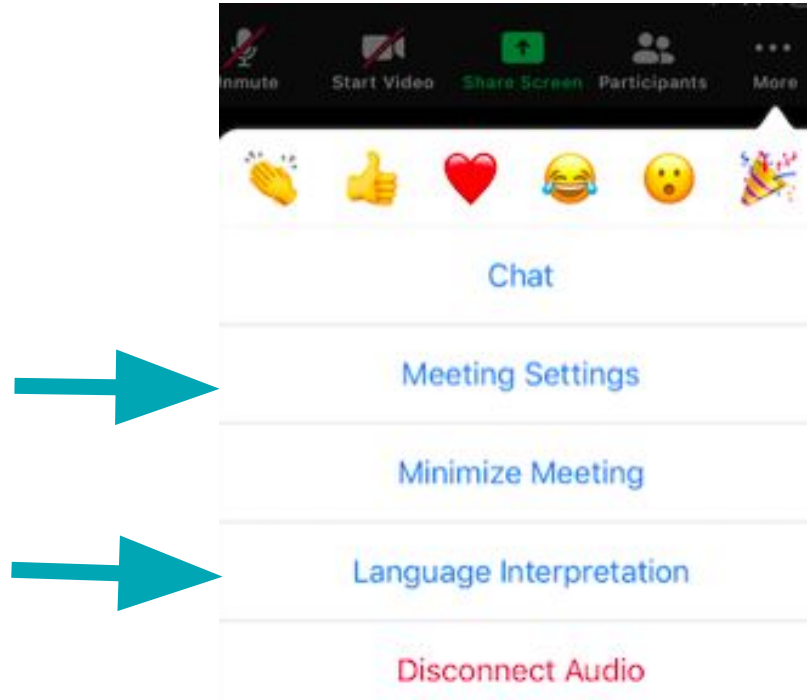


Thank you!

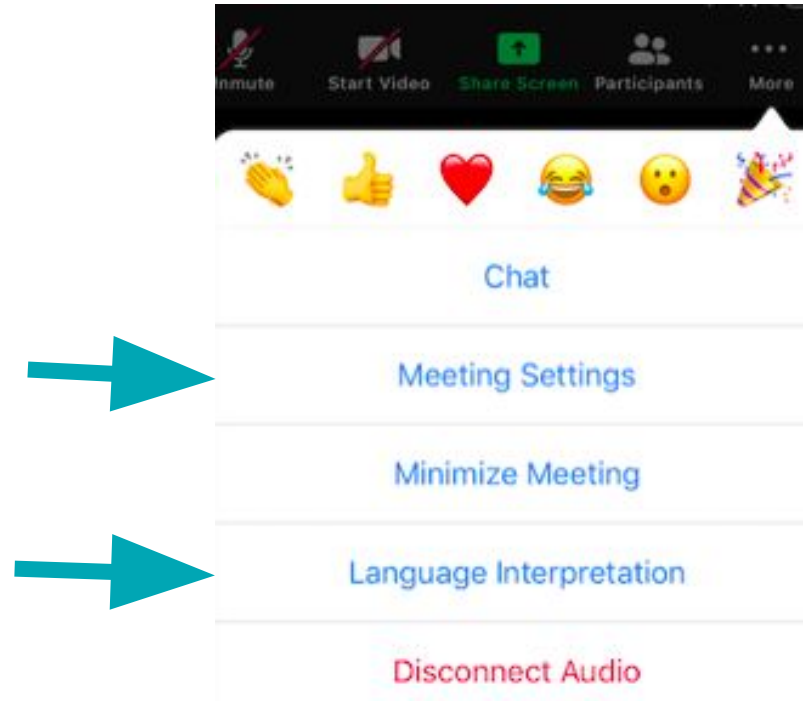
*for more information about this planning process
visit: bostonplans.org/PlanCharlestown*

Appendix

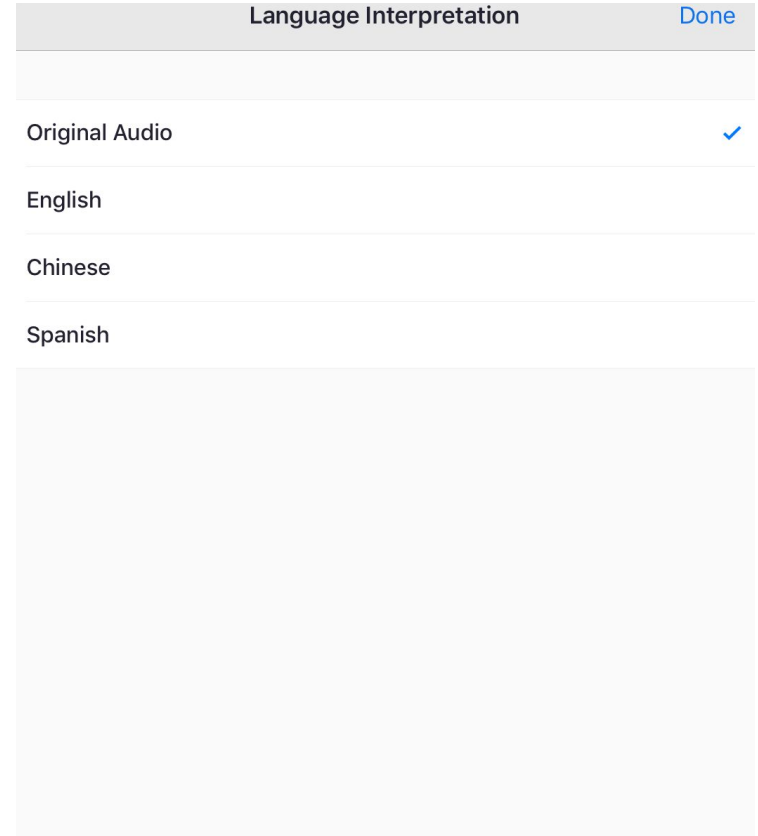
Tablet Screenshot



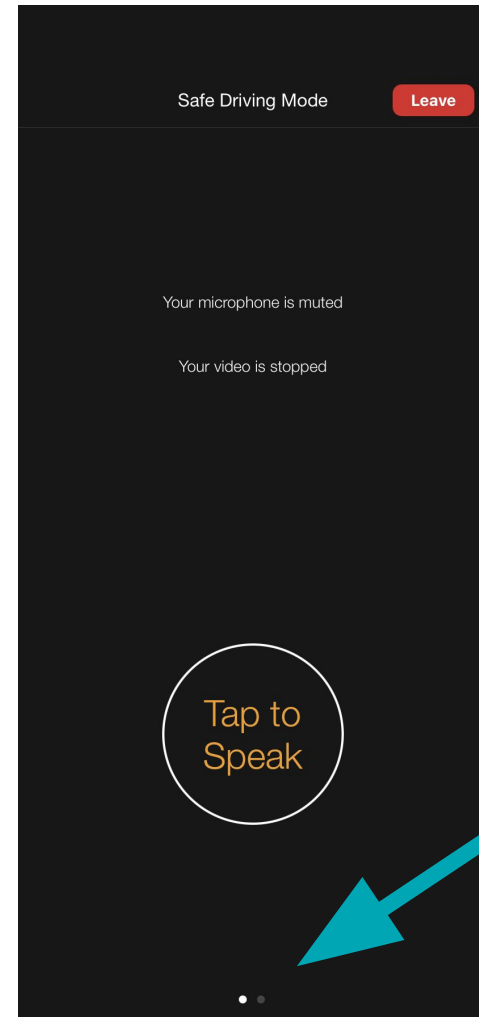
Phone screenshot



Phone screenshot



Phone screenshot



Bunker Hill Housing

- **Key takeaways from tree assessment:**

- 340 trees identified, 82 of which are recommended for removal = 258 remaining
- 109 are in good condition, 133 are in fair condition = 242 trees
- 60% of the existing trees on site are 15" or less DBH (diameter)
- 93 good and fair condition trees have good location values and are 16" DBH or larger
- Trees are evenly dispersed around the site, making it infeasible to plan development around the trees.

Bunker Hill Housing



Bunker Hill Housing

- **Tree preservation approach:**

- Open space has been modified to preserve as many trees as possible
- 81 trees identified across the site that are potentially preservable
- Trees that are in good condition, have good location values and are at least 16" DBH will be closely evaluated for opportunities to accommodate their preservation within building sites
- Approximately 500 trees will be planted over the course of the project; after 15-20 years, the total DBH on site will be over 2.25 times the total DBH that currently exists on site in trees that are in good or fair condition.

Bunker Hill Housing

● PROPOSED TREES: 500+ TREES (1500 DBH AT TIME OF PLANTING 7500 BY YEAR 20)



Bunker Hill Housing

- GOOD CONDITION
- FAIR CONDITION



Bunker Hill Housing

 PROPOSED TREES: 75 (225 DBH)



Bunker Hill Housing

- GOOD CONDITION
- FAIR CONDITION



Bunker Hill Housing

- Carbon reductions: maximize building efficiency
 - Full build carbon savings vs current buildings: 3,800 tons annually
 - (for context: current tree canopy carbon reduction: 3.7 tons annually)
- Path to net zero carbon: maximize cleaner electricity
 - Electric heating and cooling systems
 - Solar + Storage ready



Bunker Hill Housing

- **Superior** indoor air quality
 - Continuous fresh air supply to every bedroom
 - Energy recovery of ventilation air pre-heats/cools
 - MERV 13+ filtration (comparable to hospitals) of fresh air controls:
 - Pollen
 - Auto fumes
 - Mold/spores
 - Dust mites
 - Etc.



###

Name, Title