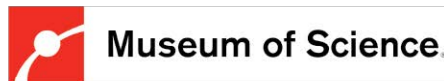


From Snow Days to Heat Waves

Climate Impacts on Heat and
Health in the Boston Area

Monday, May 24, 2021, 6pm EST



NOTIFICATION OF RECORDING

This meeting will be recorded and the Metropolitan Area Planning Council (MAPC) may choose to retain and distribute the video, still images, audio, and/or the chat transcript. By continuing with this virtual meeting, you are consenting to participate in a recorded event. The recordings and chat transcript will be considered a public record. If you do not feel comfortable being recorded, please turn off your camera and/or mute your microphone, or leave the meeting.



Welcome!

In this webinar, we will have both the chat and the Q&A open.

- **Zoom Chat:** Share insights and comments with other attendees and panelists.
- **Zoom Q&A:** Ask the speakers questions that we'll try to address during the Q&A

Your microphone is not on. Please use the Q&A and the chat to communicate with us and each other. Please be respectful of the panelists and other attendees.

Welcome!

This meeting is being recorded. Chat transcripts and the recording are public record.

We will send a recording and presentation materials to registrants in the next week!

Welcome



Mia Mansfield
Executive Office of Energy and
Environmental Affairs

Our Speakers



Jeanette Pantoja
Metropolitan Area
Planning Council



Patricia Fabian
Boston University



Zoe Davis
City of Boston



Sara Benson
Museum of
Science, Boston



**Ibrahim
López-Hernández**
GreenRoots



Melanie Gárate
Mystic River
Watershed
Association

Moderator



Joey Williams
CAPA Strategies



Ben Cares
City of Chelsea



Sasha Shyduroff
Metropolitan Area
Planning Council

Moderator



Heat, Health, and Climate Change

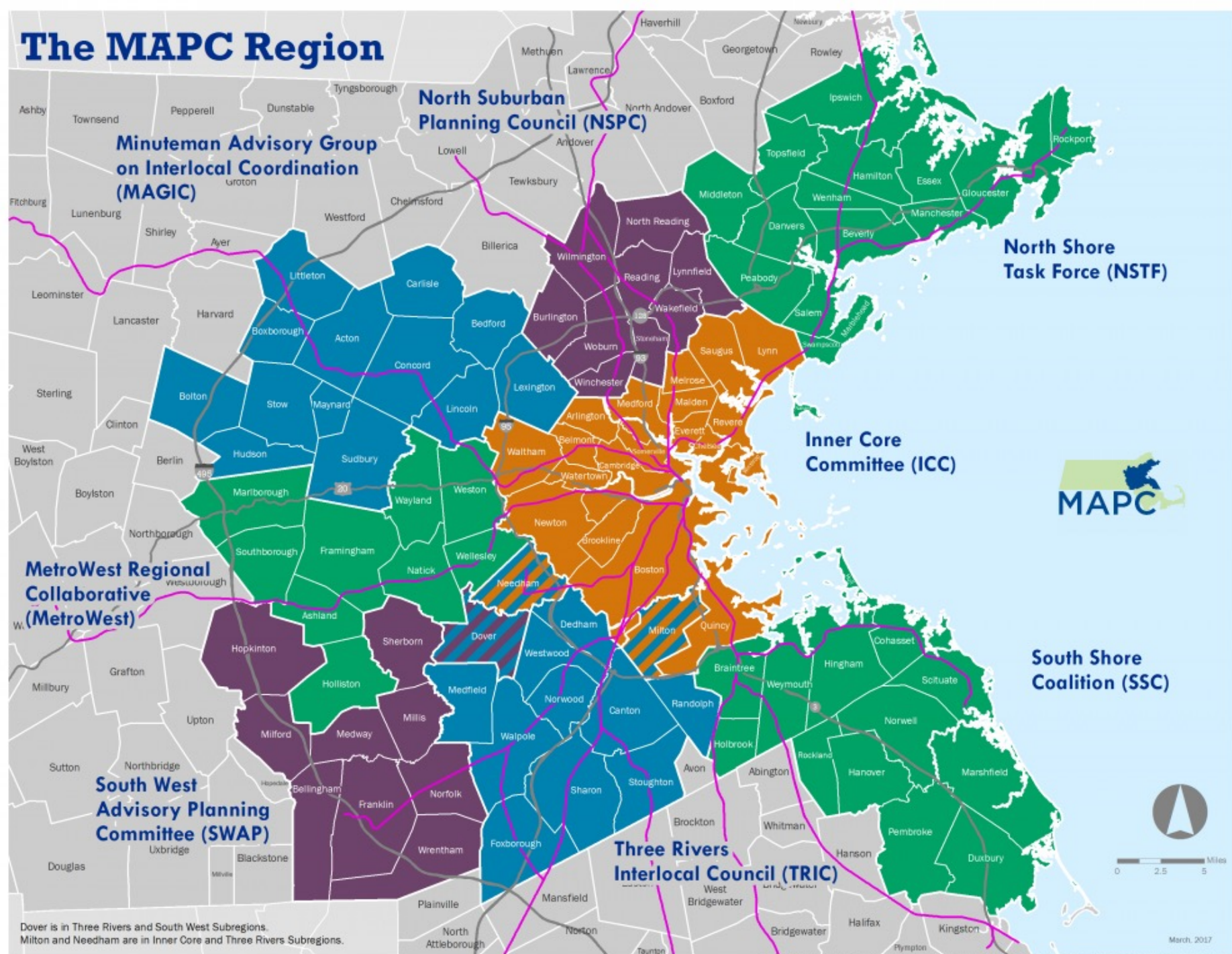
Presentation by Metropolitan Area Planning Council

For “From Snow Days to Heat Waves” Webinar

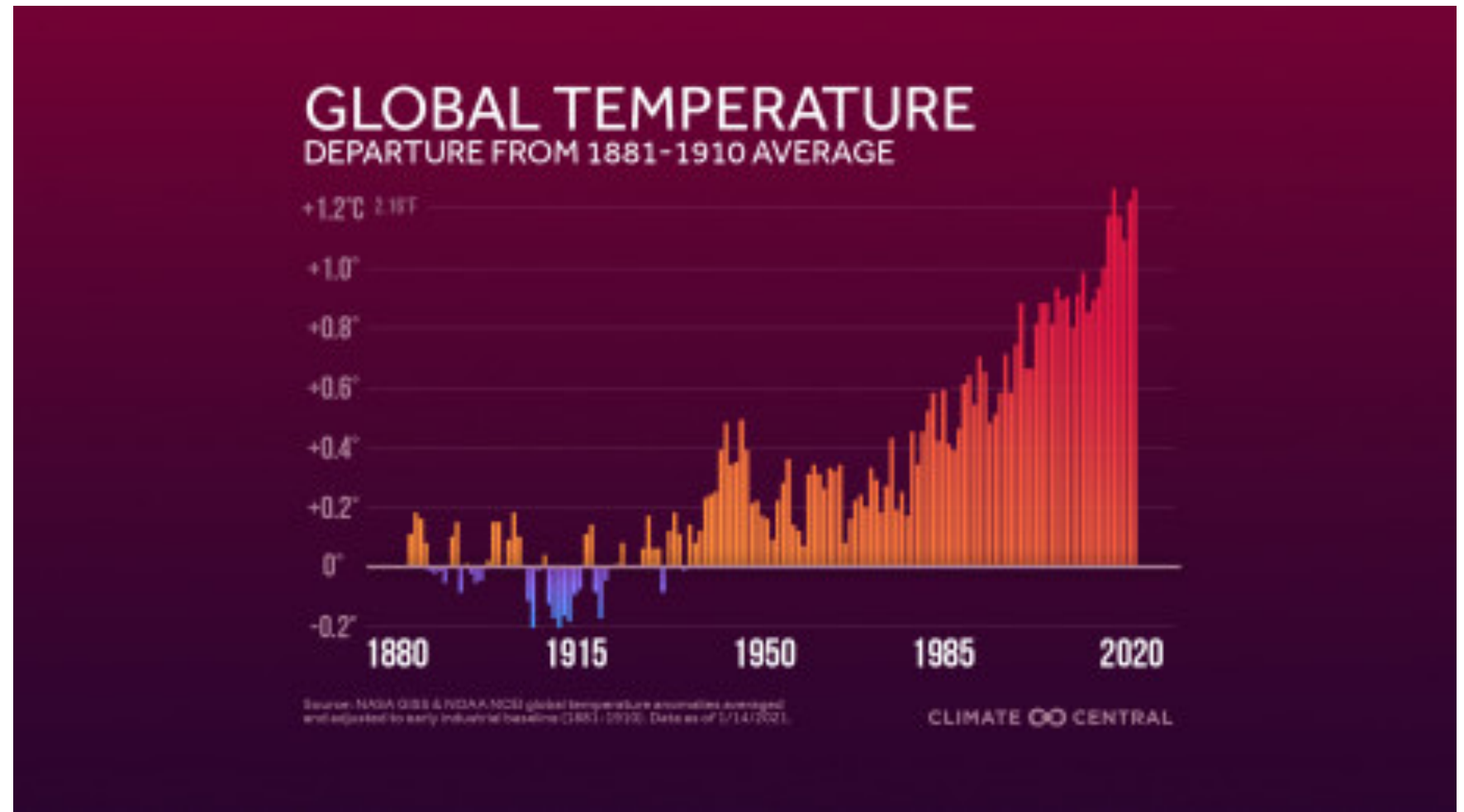
May 2021



Metropolitan Area
Planning Council –
Regional Planning
Agency for
Greater Boston

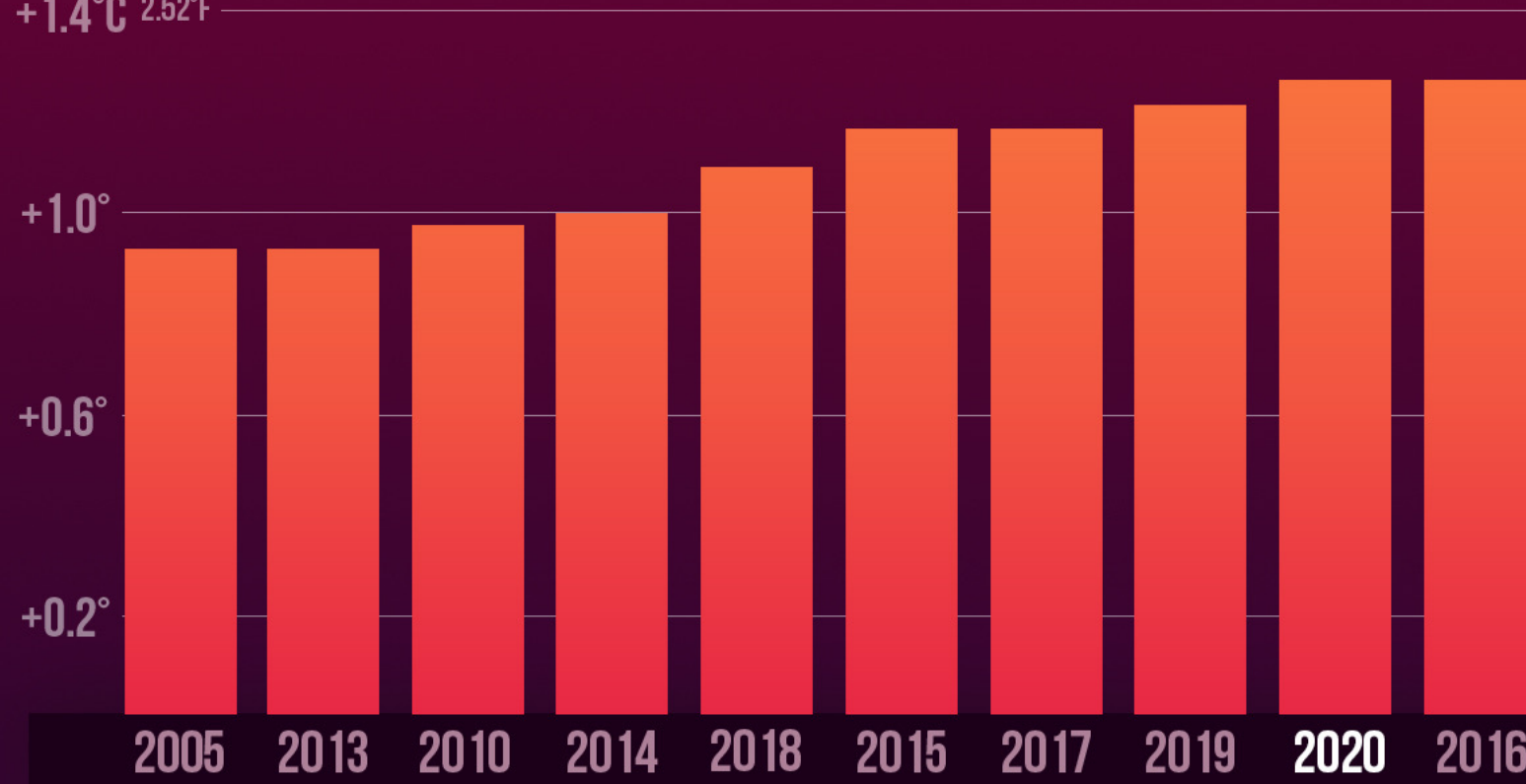


Our planet has been getting warmer for at least 100 years.



10 HOTTEST GLOBAL YEARS ON RECORD

+1.4°C 2.52°F



Source: NASA GISS & NOAA NCEI global temperature anomalies averaged and adjusted to early industrial baseline (1881-1910). Data as of 1/14/2021.

We expect increasingly hot summers.

TYPE IN YOUR LOCATION (CITY OR COUNTY) i

🔍 Boston, MA

CHOOSE HOW HOT i

Above 90° ▼

GO

WHERE WE ARE NOW

Historically
1971-2000 average

11

DAYS PER YEAR

WHERE WE ARE CURRENTLY HEADED i

Midcentury
2036-2065 average

41

DAYS PER YEAR

Late Century
2070-2099 average

69

DAYS PER YEAR

WITH BOLD ACTION i

Extreme Heat
Limited to

34

DAYS PER YEAR

Source: Union of Concerned Scientists Killer Heat Interactive Tool (2019).

We have a lot more to learn about the connections between health and climate change.

COMMENTARY | ENVIRONMENTAL HEALTH

[HEALTH AFFAIRS](#) > [VOL. 39, NO. 12](#): CLIMATE & HEALTH

COMMENTARY

Adding A Climate Lens To Health Policy In The United States

[Renee N. Salas](#), [Tynan H. Friend](#), [Aaron Bernstein](#), and [Ashish K. Jha](#)

[AFFILIATIONS](#) ▾

PUBLISHED: DECEMBER 2020 [Open Access](#)



Only **5 percent** of all US climate resilience investments went to the healthcare sector in 2016.

CLIMATE | OPINION

We Need a National Institute of Climate Change and Health

The NIH has a budget of more than \$40 billion—but spends a measly \$9 million on this looming public health emergency

By Howard Frumkin, Richard J. Jackson on November 22, 2020

Extreme heat interferes with our body's ability to cool down, causing a range of symptoms.

HEAT EXHAUSTION

Headaches
Dizziness

Weakness &
Muscle Cramps

Nausea &
Vomiting
Diarrhea

Dehydration

Pale, moist skin



What to do

Sip water or sports drink

Move to a cool place

Remove excess clothing &
fan skin

Place cool cloths on skin or
take a cool bath

NOAA's National Weather Service

Heat Index

Temperature (°F)

Relative Humidity (%)	Temperature (°F)															
	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution

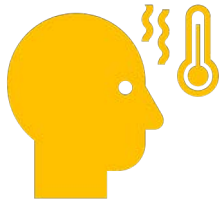
Extreme Caution

Danger

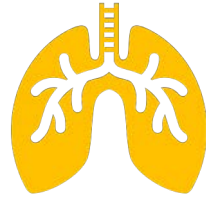
Extreme Danger

Heat is more harmful to human health when humidity is high because humid air hinders the evaporation of sweat, and thus reduces the body's ability to cool itself.

Heat impacts health in several ways.



Heat Illnesses



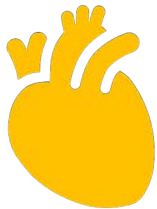
Respiratory and
Allergenic Disorders



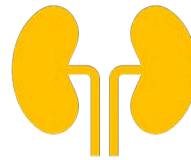
Infectious Diseases



Maternal and
Infant Health



Heart Disorders

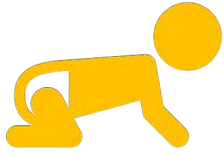


Kidney Disorders



Mental Health

Heat affects us all, but some of us are at greater risk.



Infants or young children



Older adults



People with pre-existing health conditions



Pregnant People



People who work in hot environments



Socially isolated people

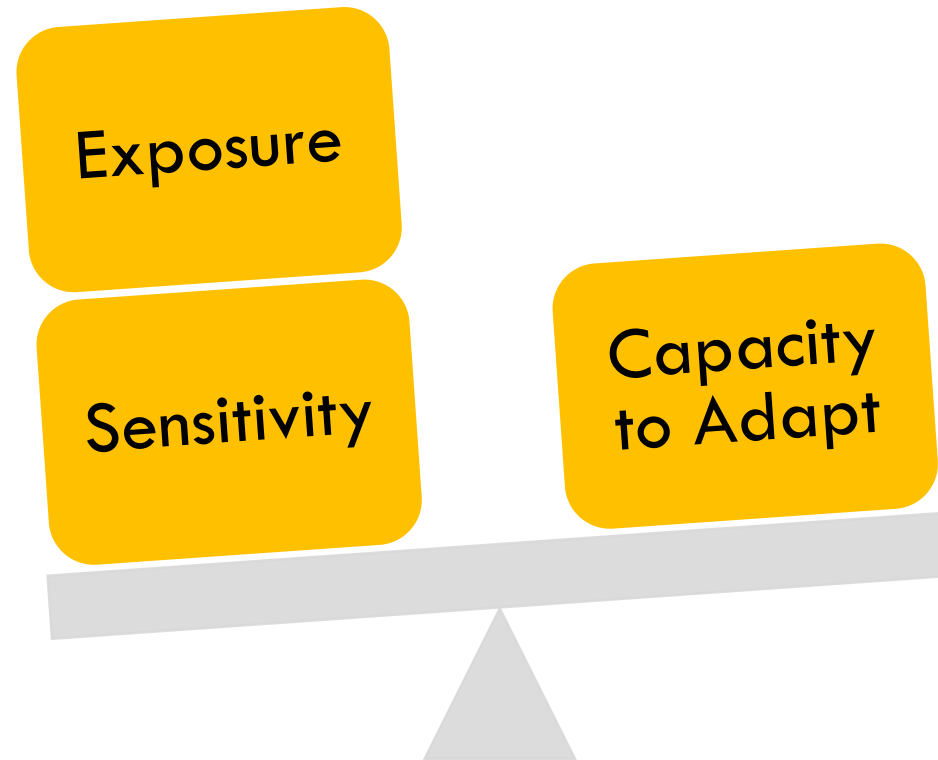


People who rely on transit & walking



People without AC or stable housing

Our vulnerability to the impacts of climate change depends on three factors:



Exposure

The level of exposure to weather-related hazards (e.g., low-elevation community on the coast, neighborhood with few trees and lots of parking).

Sensitivity

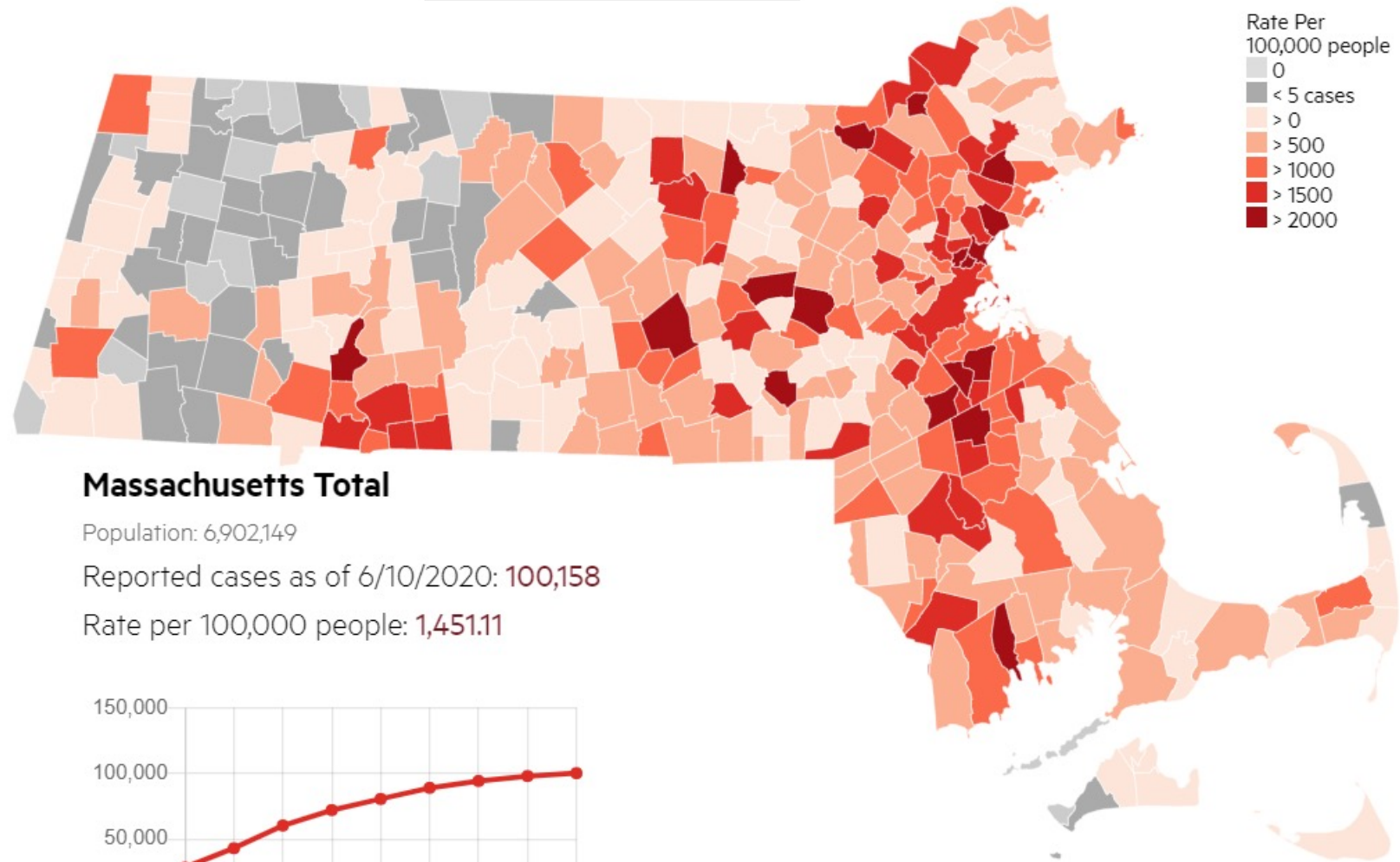
The conditions that affect someone's sensitivity to or degree to which they can be affected by those hazards (e.g., age, pre-existing health status, work outside).

Capacity to Adapt

The ability people have to get out of harm's way, adjust to changes, or bounce back after an event (e.g., access to information and financial resources).

Coronavirus Cases, By Town Or City

Select town or tap on the map: ▼

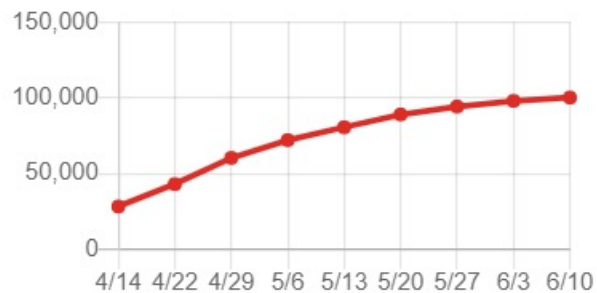


Massachusetts Total

Population: 6,902,149

Reported cases as of 6/10/2020: 100,158

Rate per 100,000 people: 1,451.11



Total persons tested as of 6/10/2020: 668,092 (9.7%)

Source: WBUR

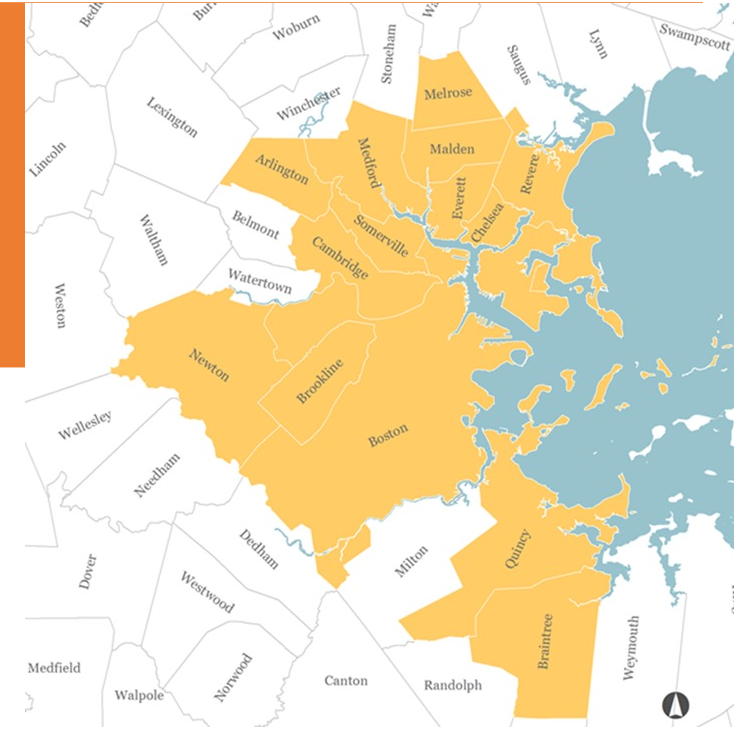
Similar social inequities that contribute to climate vulnerability increased vulnerability to COVID-19.

Why do we care about climate vulnerability?

- Efforts to mitigate climate change and build resiliency through the built environment should prioritize communities most impacted by climate change
- For solutions to tackle vulnerabilities at the root, those most impacted should be active leaders and participants in mitigation and resiliency efforts

MAPC Heat Projects Across the Region

- Metro Mayors “Building Resilience to Climate-Driven Heat” Preparedness and Adaptation Plan
- COVID-Safe Cooling Grant Program
- Keep Cool Somerville
- Cool It with Art How-To Guide
- Peak Demand Management



Communications Resources for Municipalities and Individuals

- Extreme Heat Flyer Template
- Social Media Toolkit on Extreme Heat
- Utility Bill Assistance One-Pager

www.mapc.org/resource-library/extreme-heat-resources/





CAPA
strategies

Expanding local
capacity to
address
climate change



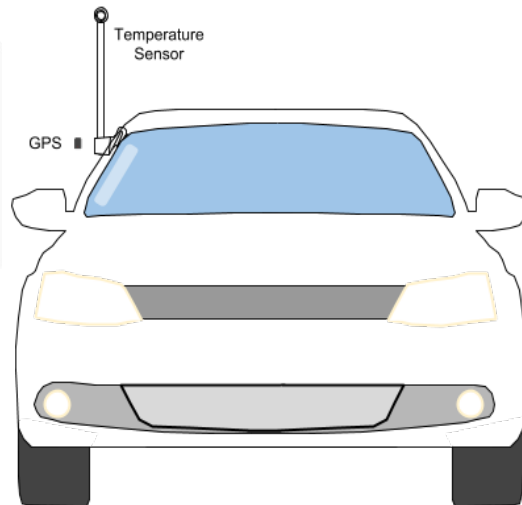
Heat Watch

Mobile Monitoring

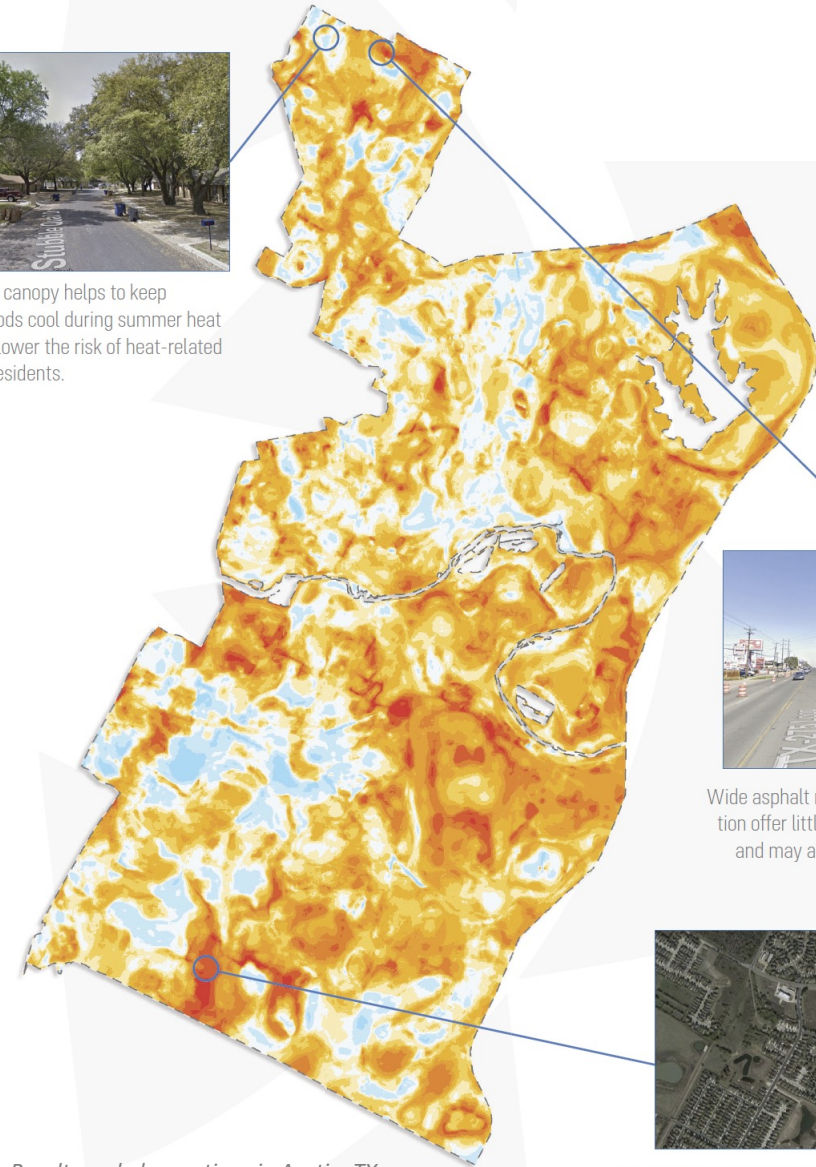
- Volunteers affix temperature sensors to vehicles.
- Drive pre-planned routes across city.
- During one-hour traverses, collect tens of thousands of data points depicting near-ground temperature and humidity.
- Measurements are used to create heat maps at 10-meter accuracy (compare ~90m for satellite imagery). Prioritizes accurate measurements and community engagement.



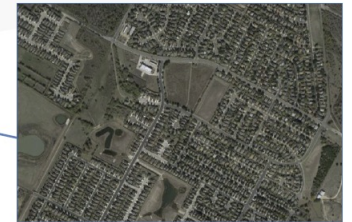
Volunteer team in Jackson, MS



Mature tree canopy helps to keep neighborhoods cool during summer heat waves and lower the risk of heat-related illness for residents.



Wide asphalt roadways with sparse vegetation offer little to no refuge for pedestrians, and may also contribute ambient heat to surrounding residential areas.



Homogeneous suburban developments attract heat, though conserved natural areas such as Grand Meadow Park may help to buffer or break the heat between neighborhoods.

Results and observations in Austin, TX

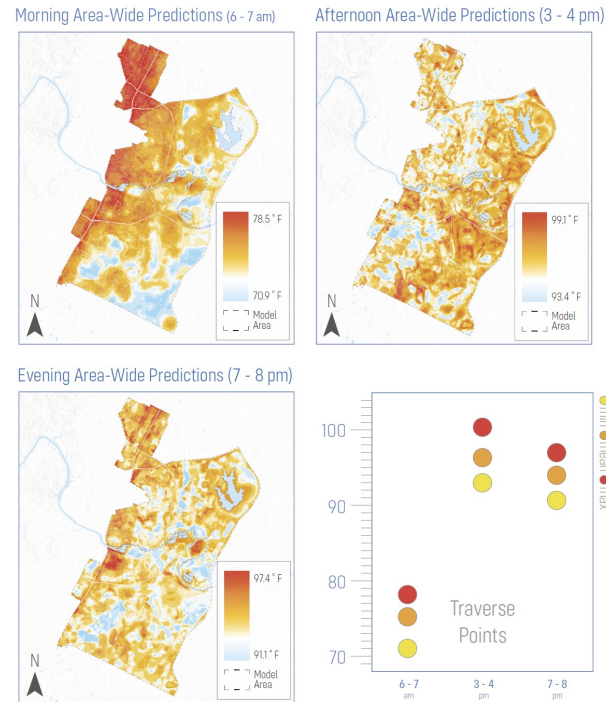


Campaign Outcomes

Locally generated data empowers city decisions

- Spatial distribution of heat: Detailed maps at 10-meter resolution across the city.
- Social vulnerability: Which communities are exposed to higher or lower temperatures.
- Distribution of green assets: Do street trees, parks and water bodies result in lower temperatures? Evenly distributed?
- Built environment: Which structural types and design features correlate with high or low temperatures?
- Housing policy: Can increased housing density be achieved while keeping temperatures the same (or less) than today?

City-level workshops and an optional peer learning component help prioritize heat mitigation interventions: increase canopy cover; decrease impervious surfaces; green corridors; zoning incentives for cool roofs etc.; cooling stations; awareness campaigns.



Left: Austin, TX: Model outputs from morning, afternoon, and evening traverses; traverse point data summary

Below left: Wide asphalt roadways with sparse vegetation. This landscape type appears to absorb heat throughout the day and remain hot.

Below right: Shaded residential areas remain cooler during summer heat waves and lower the risk of heat-related illness.



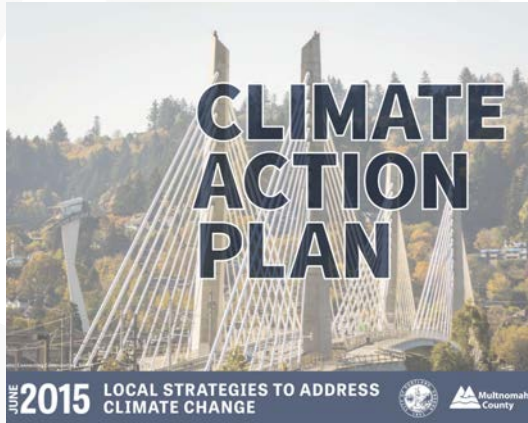
Wide asphalt roadways with sparse vegetation



Shaded residential neighborhood



Heat Data Implementations



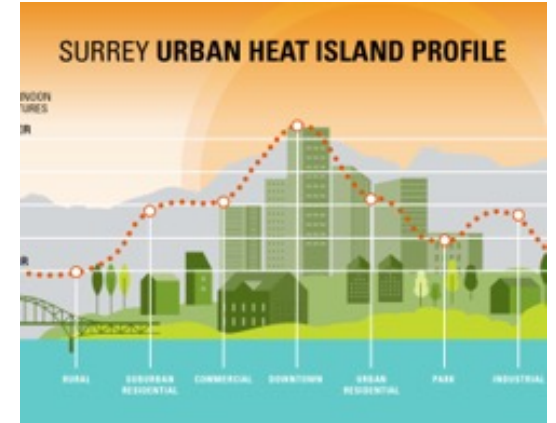
Climate Action Planning
Portland, Oregon



Social Vulnerability & Adaptation Strategies
O'ahu, Hawaii



Tree Canopy Intervention
Boise, Idaho



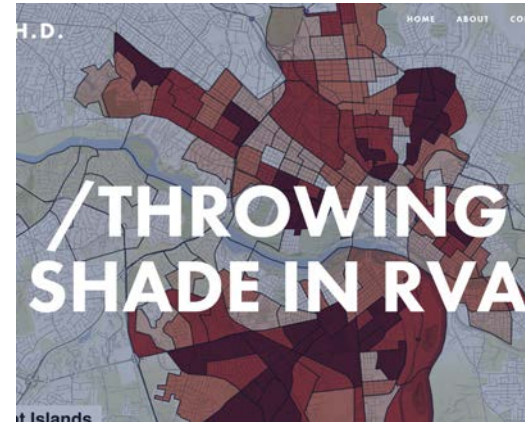
Heat Preparedness
Surrey, British Columbia



Partnership Building & Collaborative Action
Houston & Harris County, Texas



Public Engagement
Boston, Massachusetts



Health Vulnerability & Youth Engagement
Richmond, Virginia

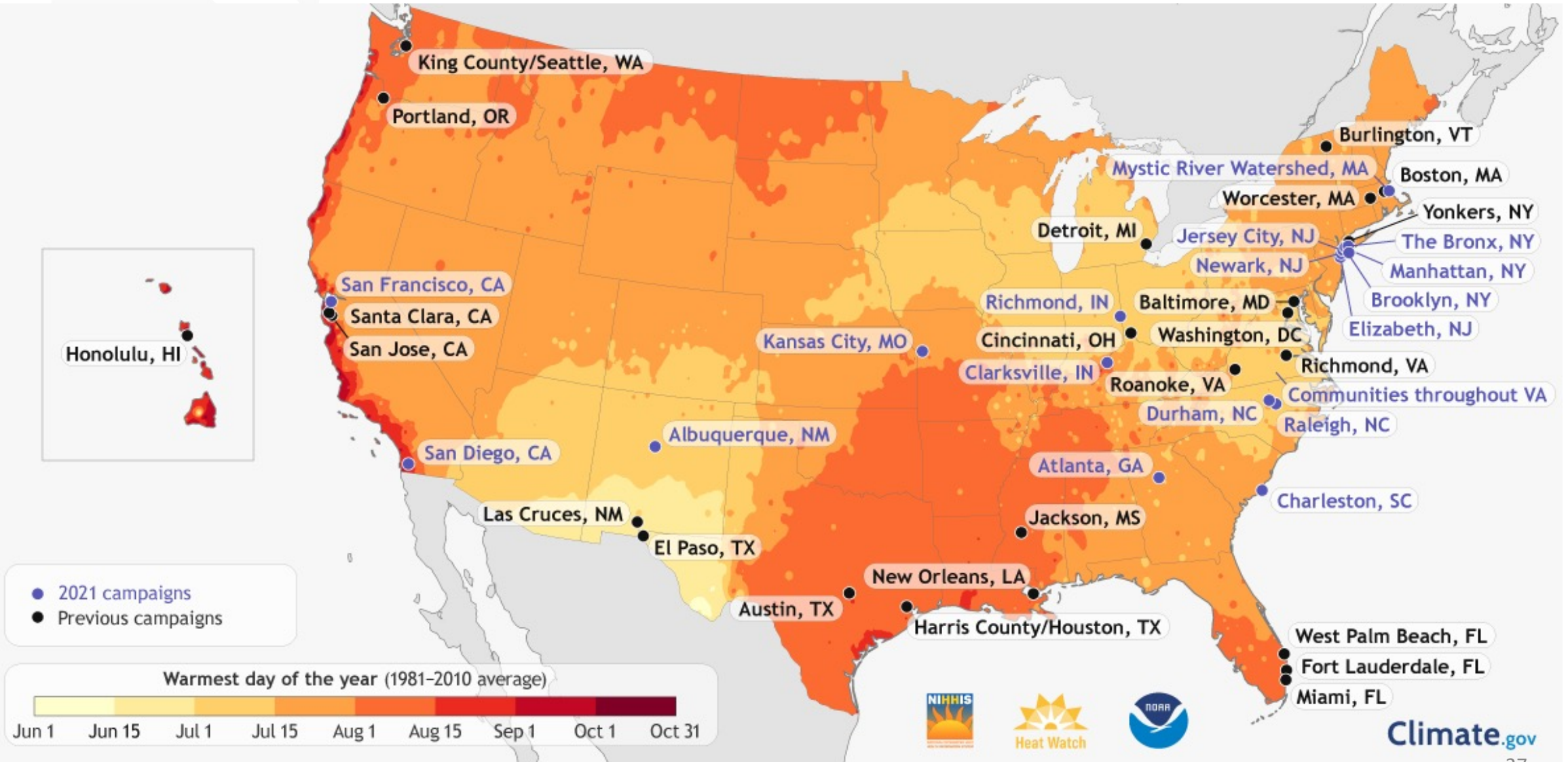


Heat, Health, and Community
Baltimore, Maryland



US Heat Mapping Locations ('17-

'21)



WICKED HOT MYSTIC

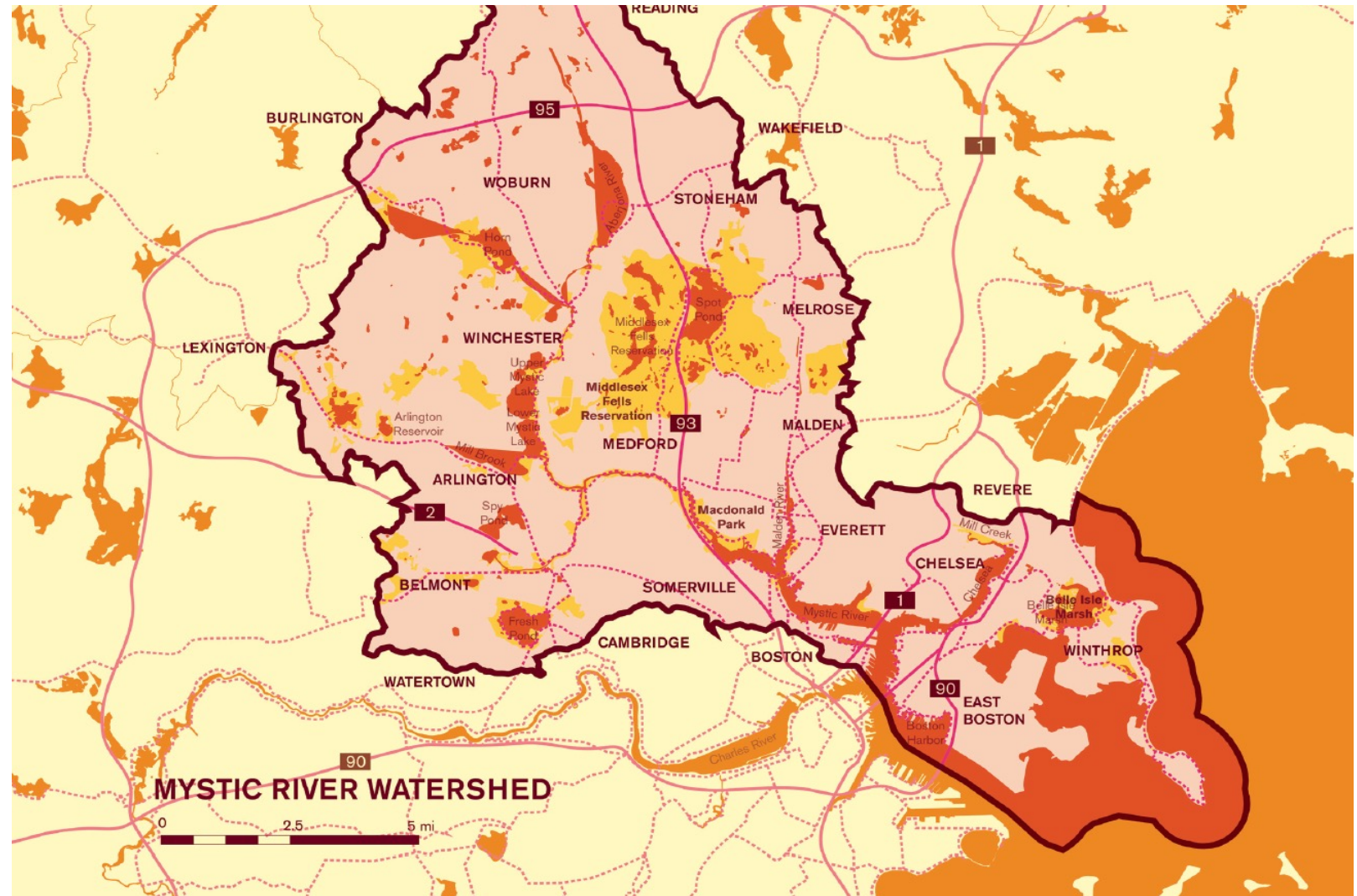
Wicked Hot Mystic: Heat Mapping in the Mystic River Watershed

Sara Benson
Museum of Science, Boston
sbenson@mos.org



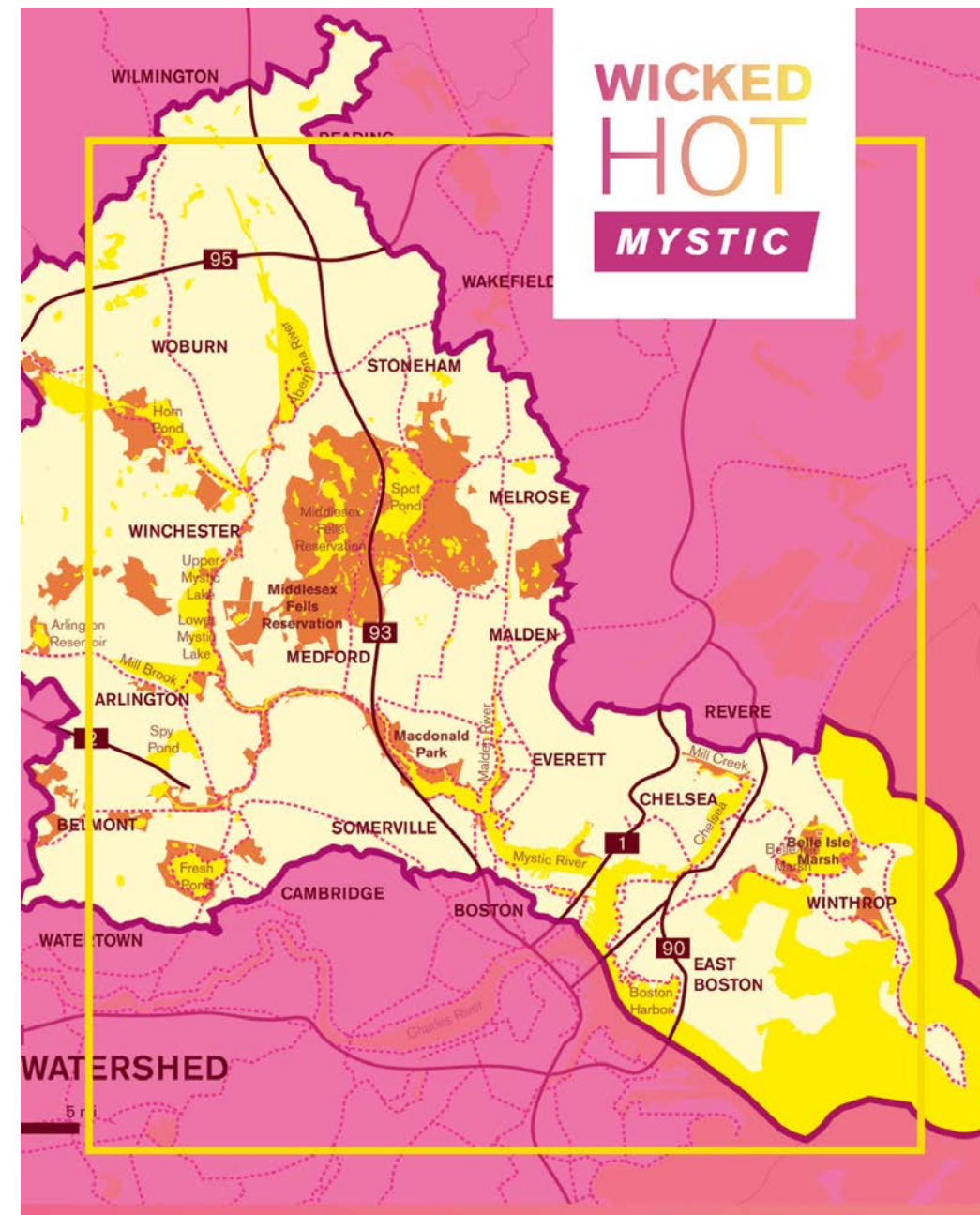
What is the Mystic River Watershed?

Located in the Greater Boston Area, the Mystic River watershed is home to over half a million diverse residents within 76 square miles and 21 communities



What is Wicked Hot Mystic?

- Heat and air quality mapping in the Mystic Watershed
- Goals:
 - Community engagement
 - High resolution temperature data
 - Data visualization and communication
 - Layer maps with factors such as tree canopy, surface temperature, income level, elderly population, or emergency room visits.
 - Compare maps of extreme heat “hot spots” in the Boston area with maps of where people are in order to understand what neighborhoods and people are the most impacted.





I SEE CHANGE



Fershid Aspi

Aug 30

Investigating: [Extreme Heat](#)



📍 Brookline, MA, US

81.4°F

Could use some shade at this barren intersection (Charlesgate westbound on Comm Ave).



Suzanne Mrozak

Jul 17

Investigating: [Extreme Heat](#)



📍 Boston, MA, US

79.3°F

Our cat's favorite way to beat the heat :-)



Jo Oltman

Aug 9

Investigating: [Extreme Heat](#)



📍 Cambridge, MA, US

83.1°F

Pretty warm out today, but so lovely in the cemetery, under the shade of trees and surrounded by greenery

Urban Heat Island Mapping

- Collecting air temperature, humidity, and air quality data
- Late July/Early August 2021
- Involving volunteer scientists from all 21 communities in the Mystic

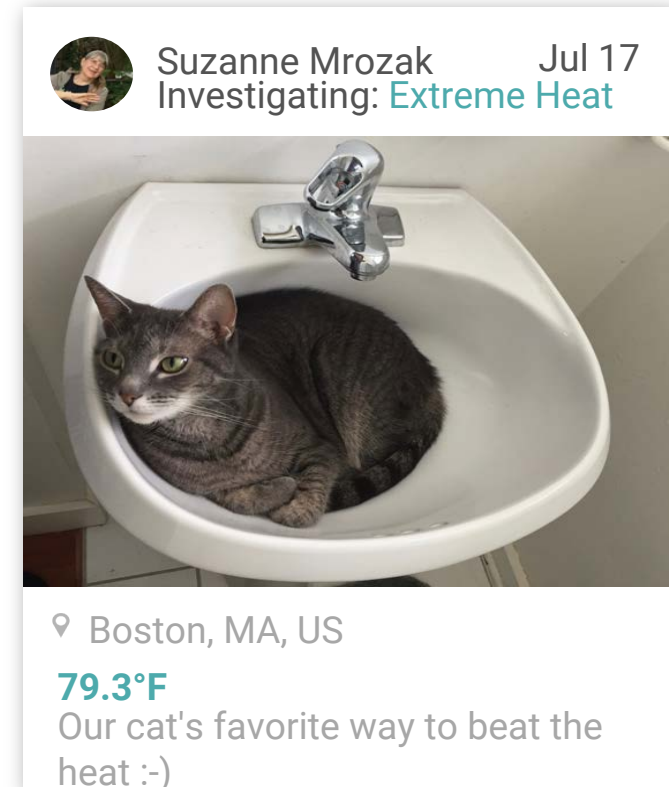


How can you be involved?

- Sign up to be a volunteer scientist for summer 2021!
- mos.org/wickedhot



- Collect data on your own time
- Sign up at ISeeChange.org



Thank You!

mos.org/wickedhot



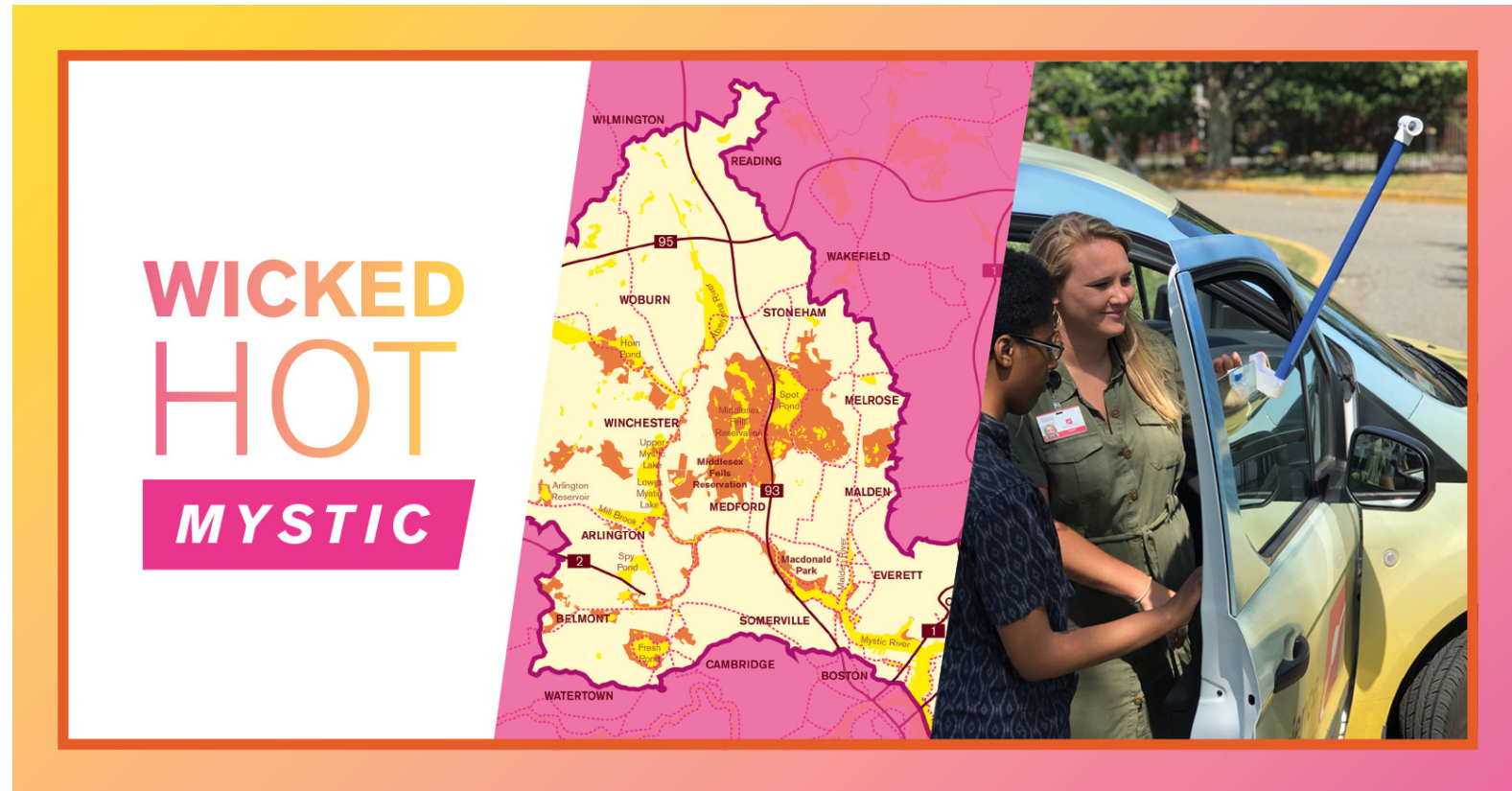
@museumofscience
@mystic.river.watershed
@noaaclimate



@museumofscience
@MysticMyRWA
@NOAAClimate

Contact:

Sara Benson
sbenson@mos.org
@sarabenson7



The work is funded by the Municipal Vulnerability Preparedness grant program



Data Dashboard
About Us

City Heat Plans

Temperature Sampling

Photovoice

Community Resources

Presentations



C-HEAT:

A study of heat exposure in Chelsea and East Boston, Massachusetts

A collaborative research project between [GreenRoots](#) and the [Boston University School of Public Health](#).

The main goal of the project is to build the capacity for these communities to respond to extreme heat events. Our research considers heat exposure and related health concerns among the most vulnerable populations in the Chelsea Creek communities.

c-heatproject.org

Twitter: [@C_HEATProject](https://twitter.com/C_HEATProject)

Co-directors: Fabian & Scammell
Funded: Barr Foundation



Celebrating **25** Years
of Fighting for Social and
Environmental Justice!
GreenRoots



Boston University



- Patricia Fabian
- Madeleine Scammell
- Leila Heidari
- Chad Milando
- Pilar Botana
- Flannery Black-Ingersoll
- Julie de Lange
- Abgel Negassa
- Alina McIntyre
- Jonathan Levy
- Patrick Kinney
- He Guo
- Fei Carnes
- Ameera & Alex Saba

GreenRoots

- Roseann Bongiovanni
- Ibrahim López-Hernández



Chelsea and East Boston study participants

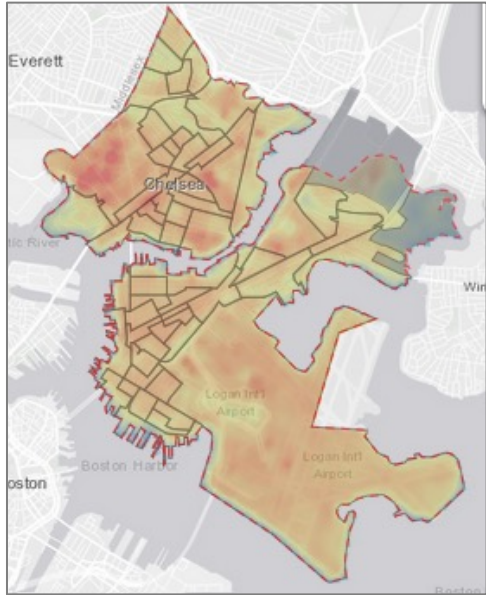
Advisory team

- **Ben Cares** City of Chelsea, Planning and Development Department
- **Melanie Gárate** Mystic River Watershed Association/Mystic Resilience Collaborative
- **Matt Frank** Chelsea Housing Authority
- **Rafael Mares** The Neighborhood Developers
- **Peyton Siler Jones** City of Boston, Climate Resilience Program
- **Fidel Maltez** City of Chelsea, Department of Public Works
- **Tracy Nowicki** Chelsea Senior Center
- **Indrani Ghosh** Weston & Sampson

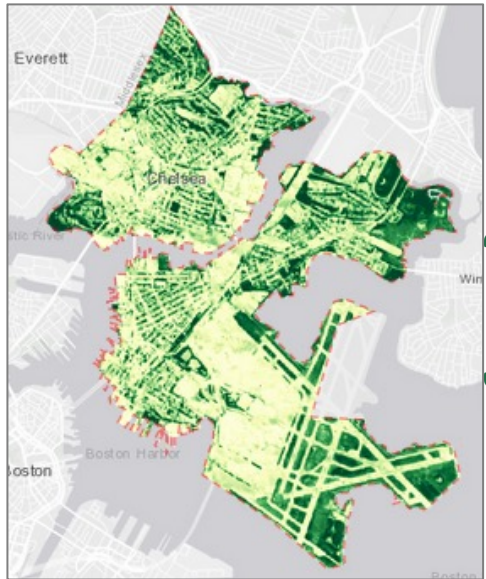


- Kalila Barnett



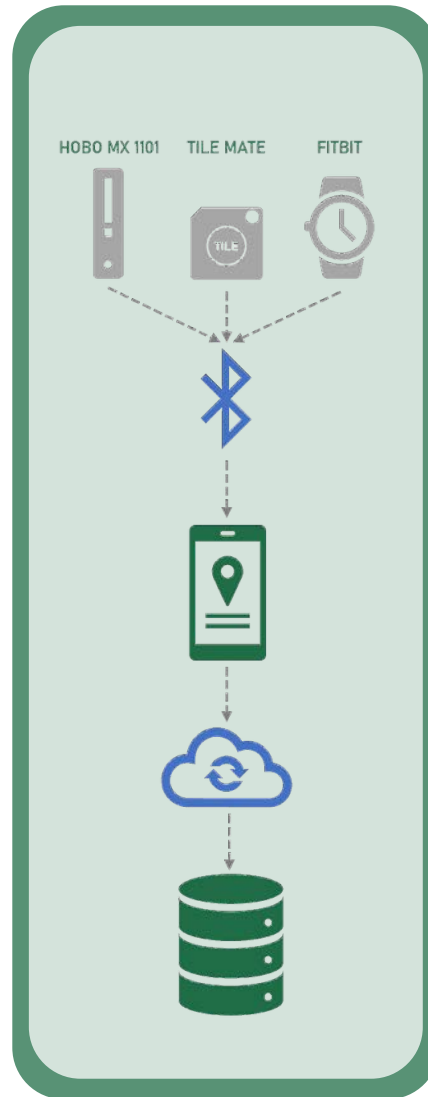


**Land surface
temperature**



**Vegetation index
(NDVI)**

**Summer 2020
Verano 2020**



**Summer
2021**

Verano 2021

1



**Youth
involvement**
Participación de
jóvenes

2



Photovoice groups
Grupos de fotografía

3



**Collaboration with other
projects**
Colaboración con otros proyectos

Temperatures indoors during hot week, summer 2020



Mean heat index

- Outdoor 74 °F
- Indoor 77 °F
- Personal 78 °F

Participants:

- Spent **75%** time indoors at home
- **100%** have some form of air conditioning but **80%** described their home last summer as **hot** or **warm**
- **38%** said they had to make choices about which bills to pay



- Indoor temperature was higher than outdoor temperature **87%** of the time (38%-100%)
 - Temperature difference: **7.1°F** higher (3.5°F -9.7°F)

Cooling strategies, Summer 2020

Most popular:

- Turn on AC
- Remove clothing
- Open windows



Least popular:

- Leave the home for cooler area
- Use the ceiling fan
- Close window shades



Almost **50%** did not think they drank enough water



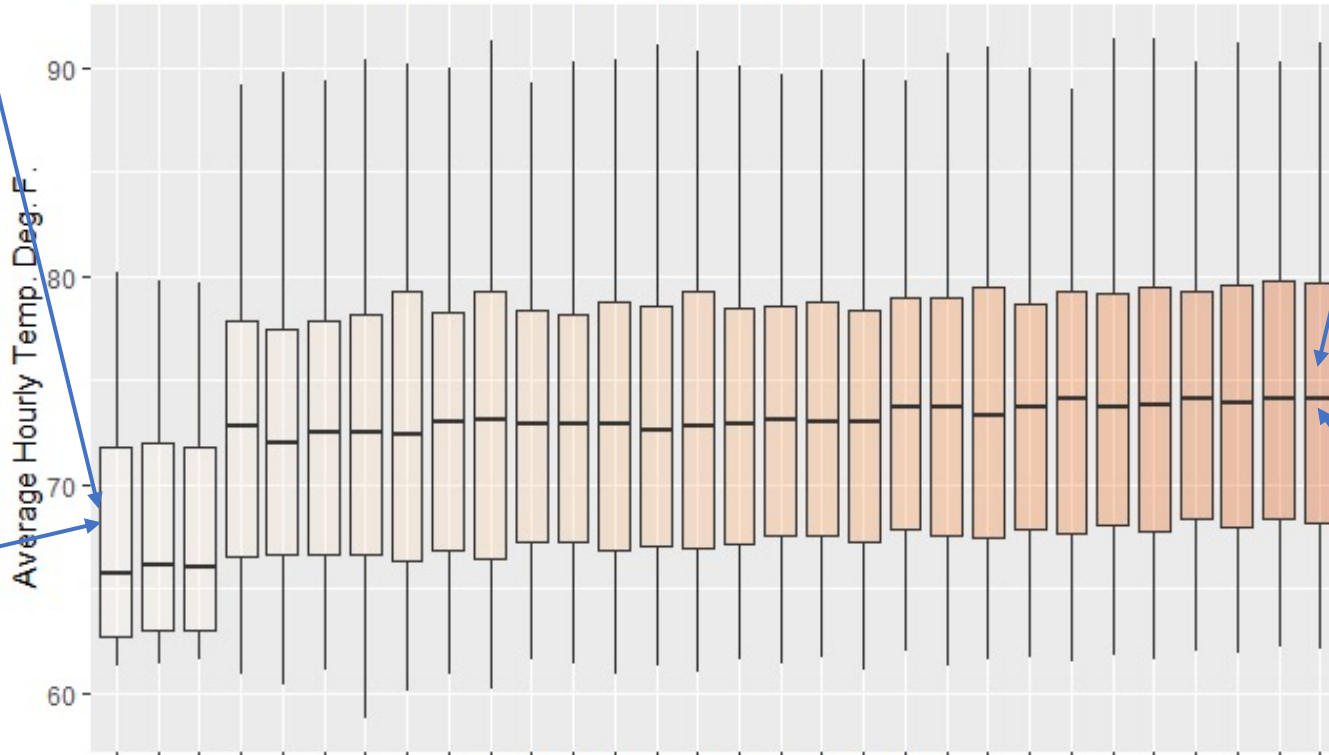
60% aware of dangerously high heat & heat warnings



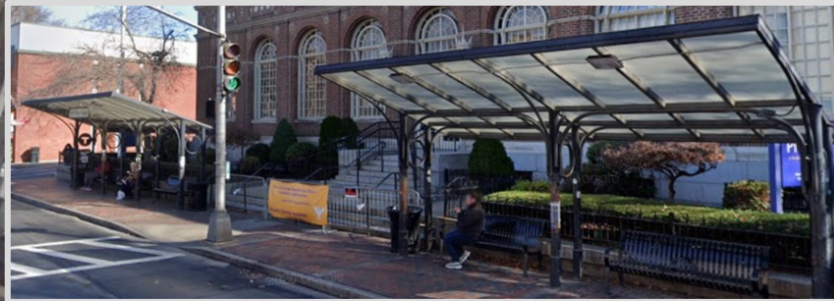
Temperature outdoors on a hot week, summer 2020



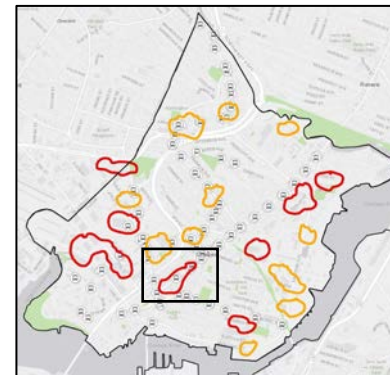
Outdoor Temperatures 8/21 through 8/28




Mapping potential locations for outdoor interventions: bus stops



Bus stops:
Average # passengers getting on daily (weekdays) Source: MBTA



-  Local Heat Island
-  Emerging Local Heat Island

* Local heat island locations provided by City of Boston and Weston & Samson

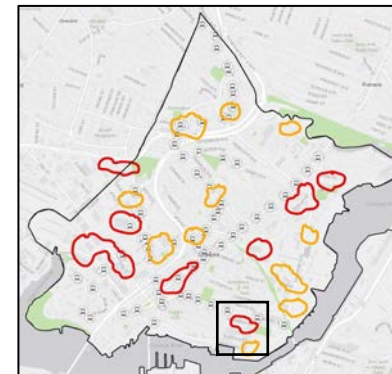
Mapping potential locations for outdoor interventions: white roofs and greenspace



Empty lot (GreenRoots project)

<https://www.youtube.com/watch?v=c50btcowo90&t=1s>



Jordan Boys and Girls Club



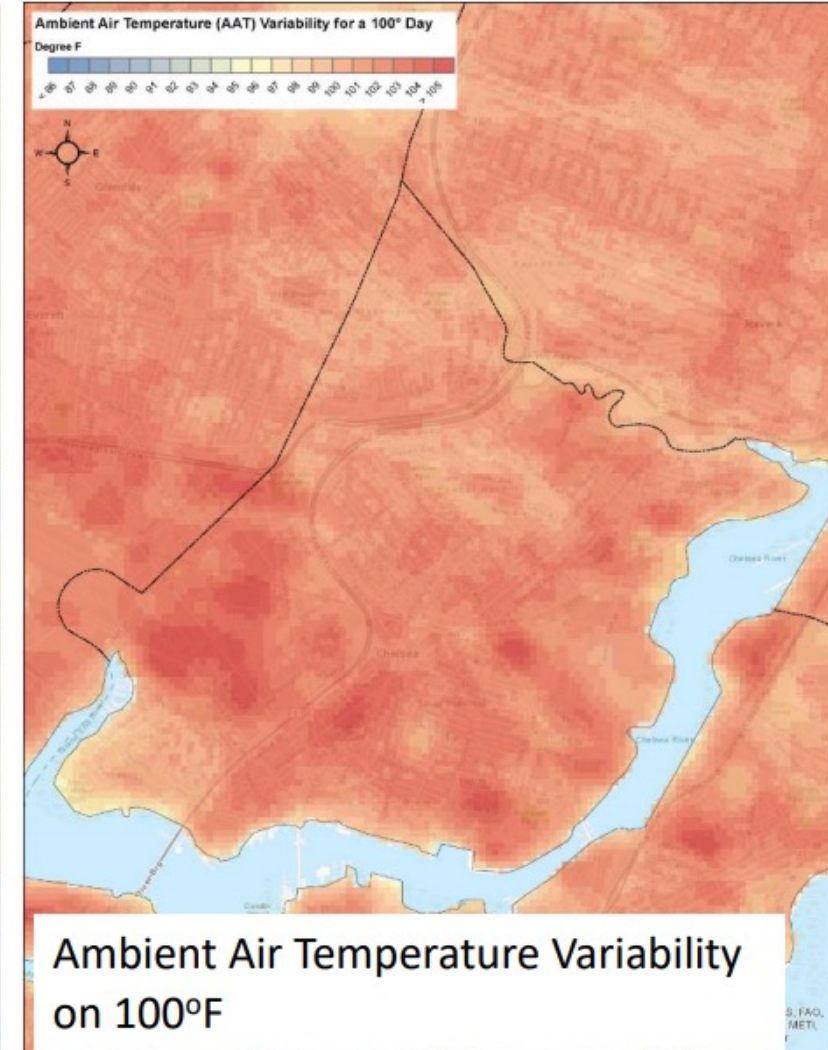
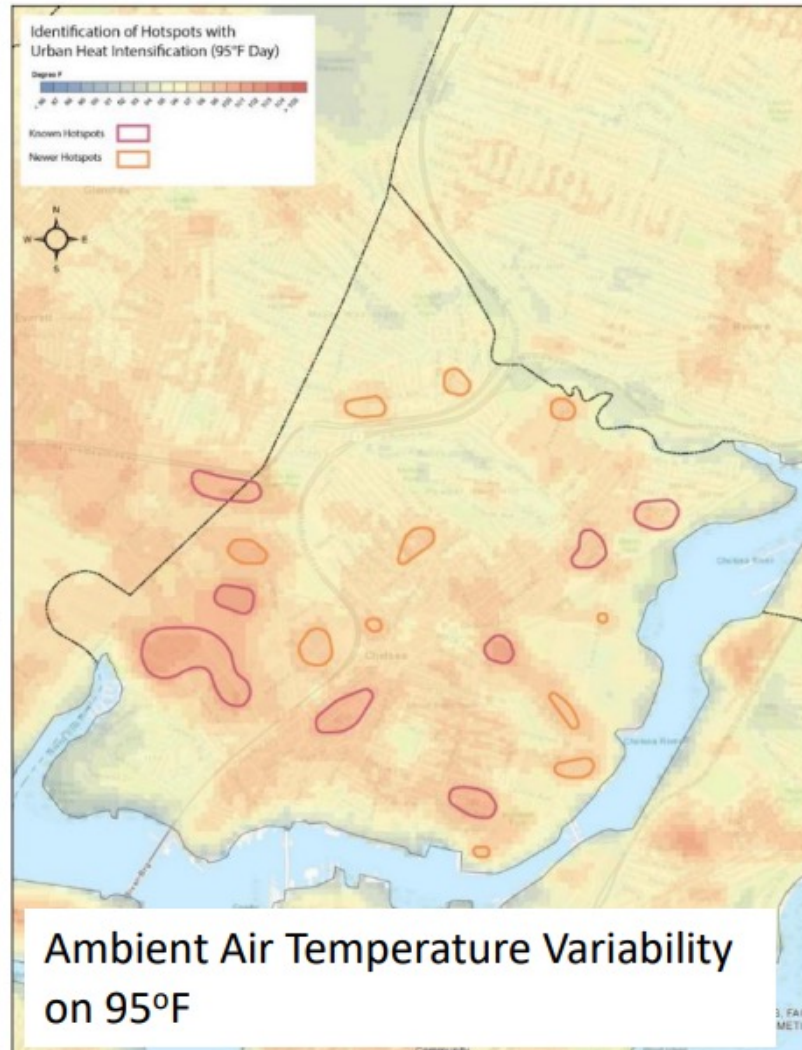
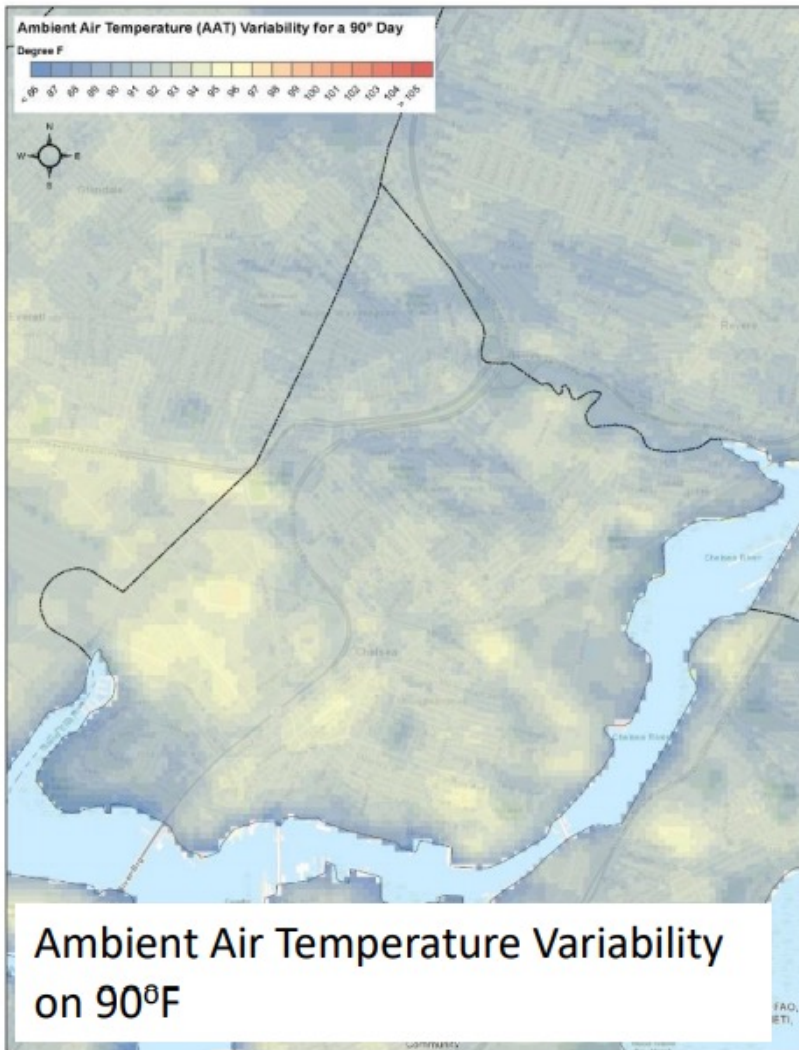
-  Local Heat Island
-  Emerging Local Heat Island

* Local heat island locations provided by City of Boston and Weston & Samson

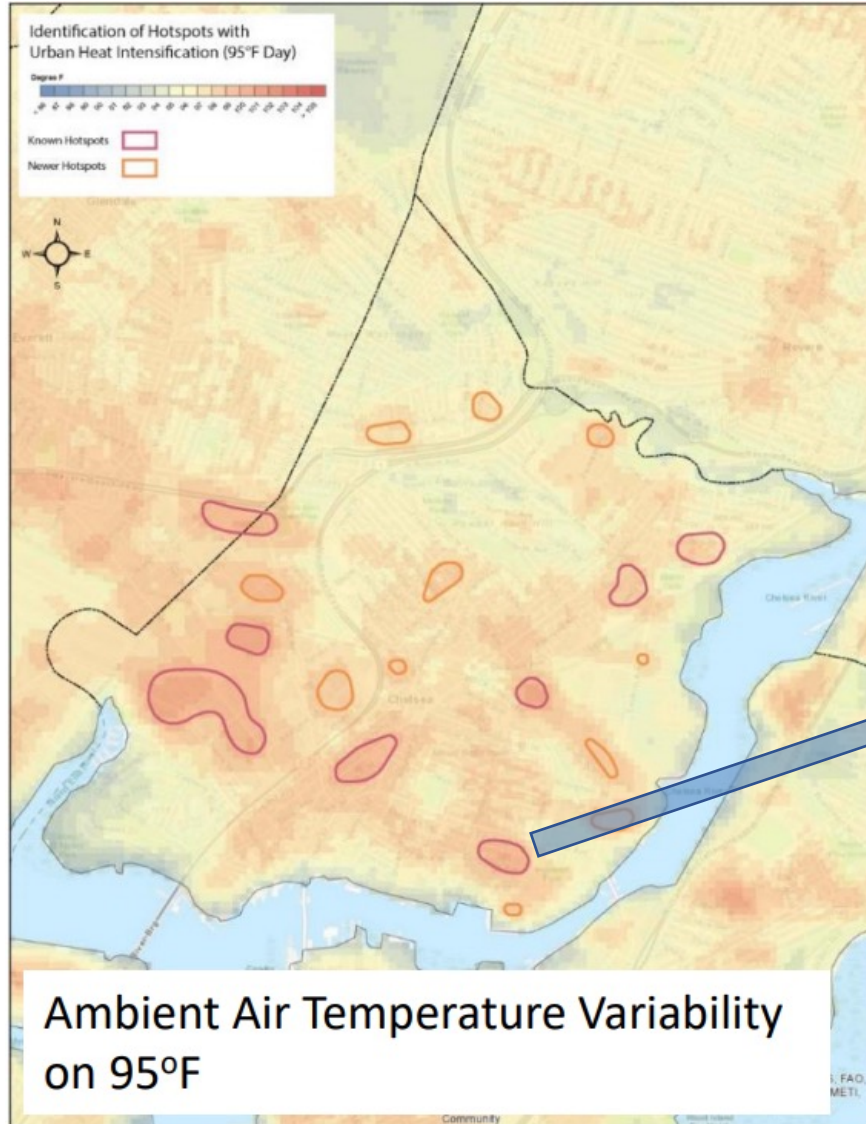
Municipal Vulnerability Preparedness Grant Program; Urban heat index mapping, Summer 2020 Data – Chelsea, MA



Weston & Sampson



Municipal Vulnerability Preparedness Grant Program; Urban heat index mapping, Summer 2020 Data – Chelsea, MA



Municipal Vulnerability Preparedness Grant Program; Urban heat implementation project

Boys & Girls Club
@ Congress Avenue & Willow Street



Cool Roof



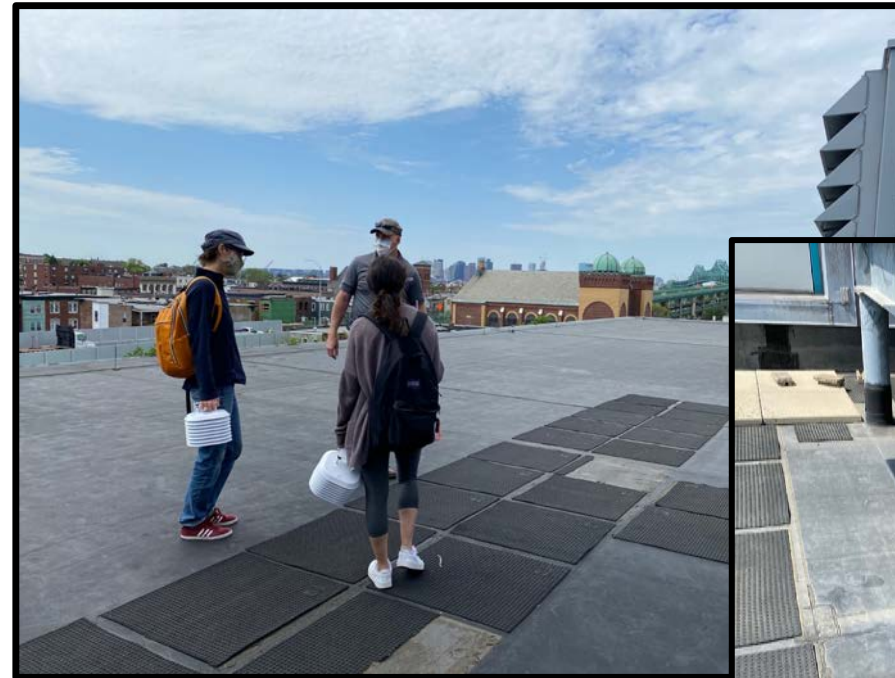
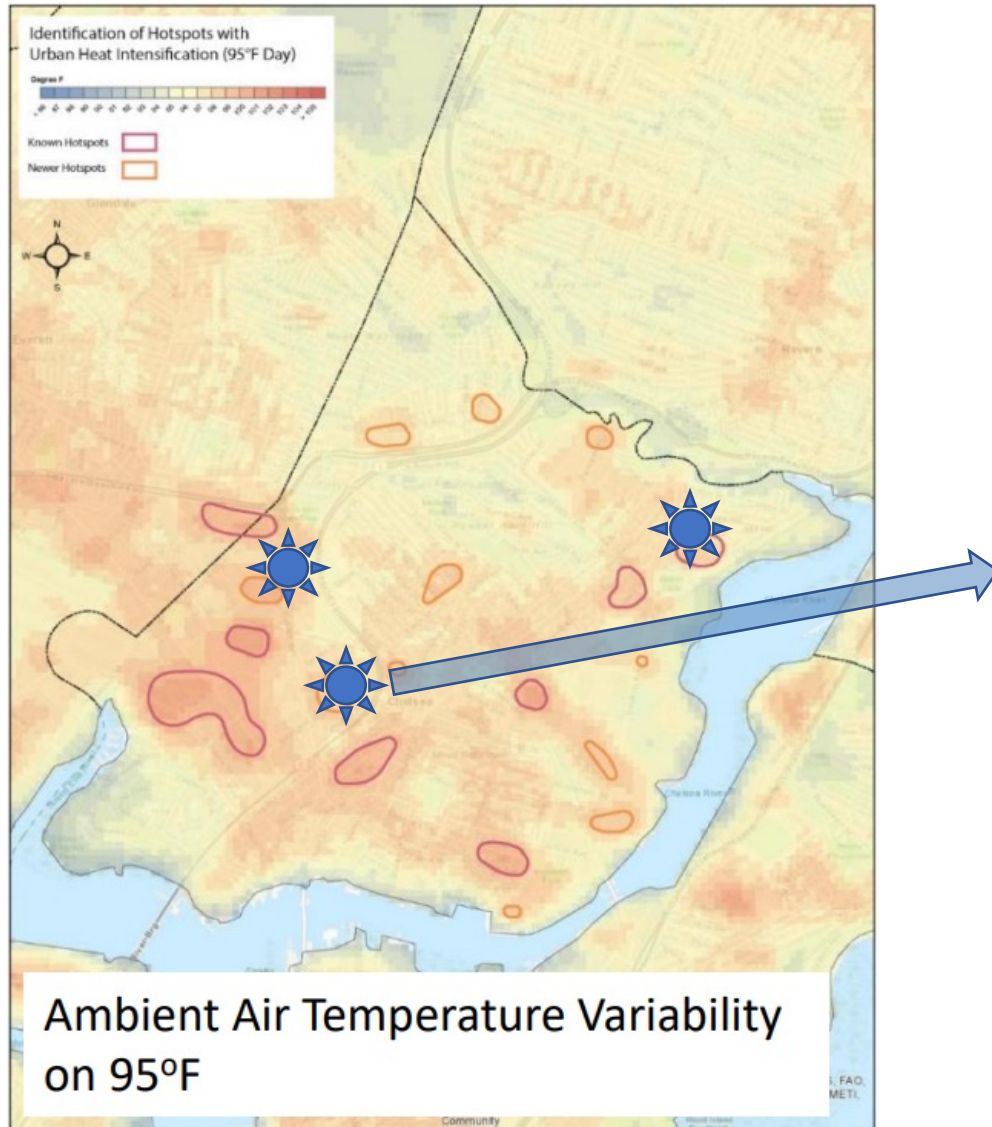
Trees



Green Open Space



Municipal Vulnerability Preparedness Grant Program; Urban heat data collection, Summer 2021 Data – Chelsea, MA



Chelsea Public Schools;
Williams Middle School

SUMMER 2021 PLANS

**Summer
2021**

Verano 2021

1



**Youth
involvement**
Participación de
jóvenes

2



Photovoice groups
Grupos de fotografía

3

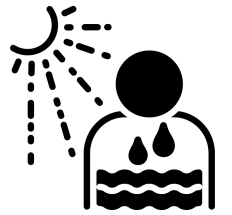
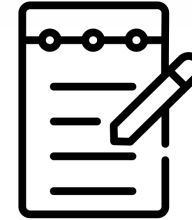


**Collaboration with other
projects**
Colaboración con otros proyectos

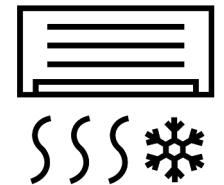
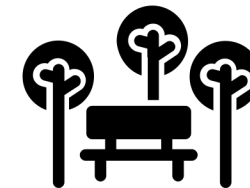
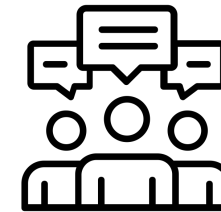
Photovoice



1) Residents record and reflect on their community's strengths and concerns **related to heat vulnerability**



2) Promote critical dialogue and knowledge **about heat vulnerability and mitigation strategies**



3) Generate insights that will be relevant **to resiliency efforts** of policymakers

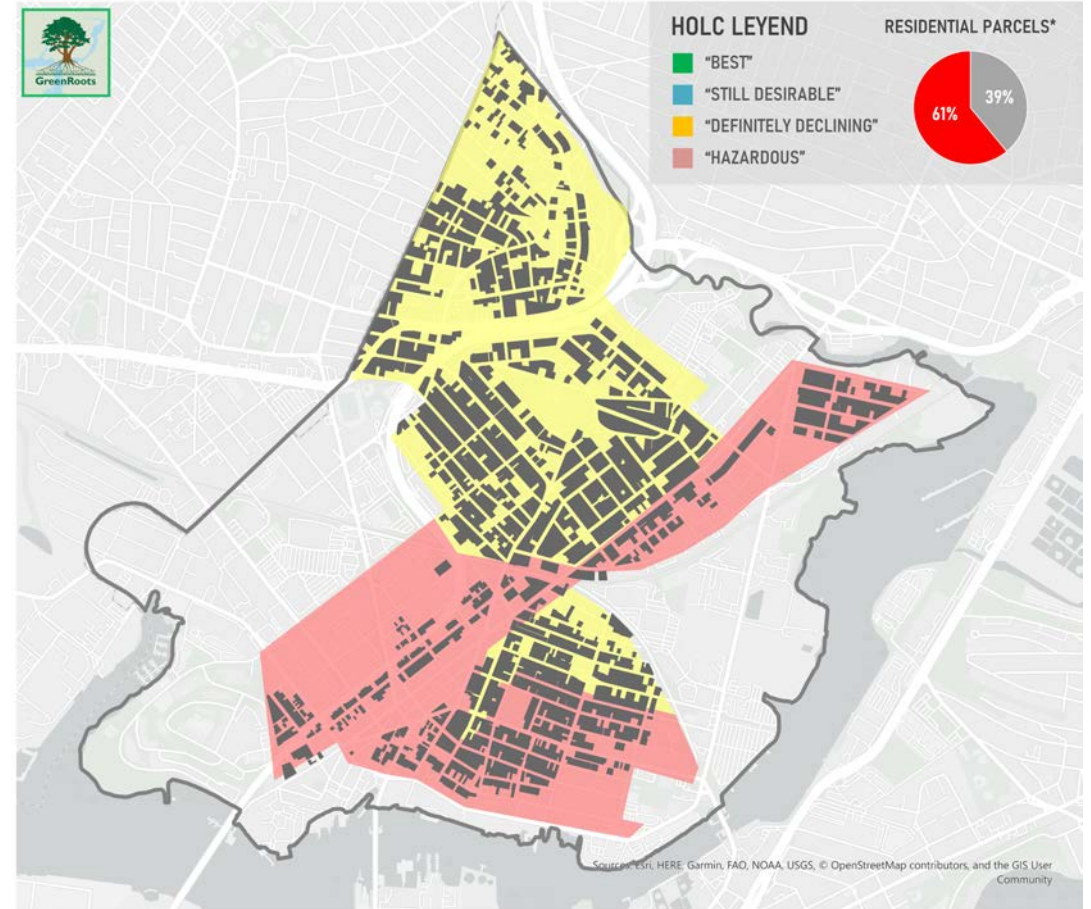


Youth Involvement: ECO

1. Capture & analyze surface temperatures in parks / open spaces.
2. Promote awareness of urban heat islands and historic redlining
3. Use collaborative mapping tool to upload data.
4. Help with C-HEAT Photovoice project.
5. Work on hydration station placemaking.

REDLINING IN CHELSEA

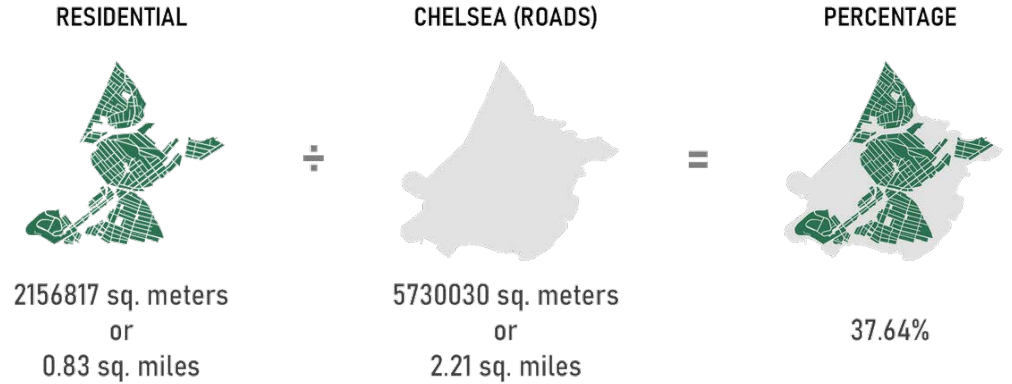
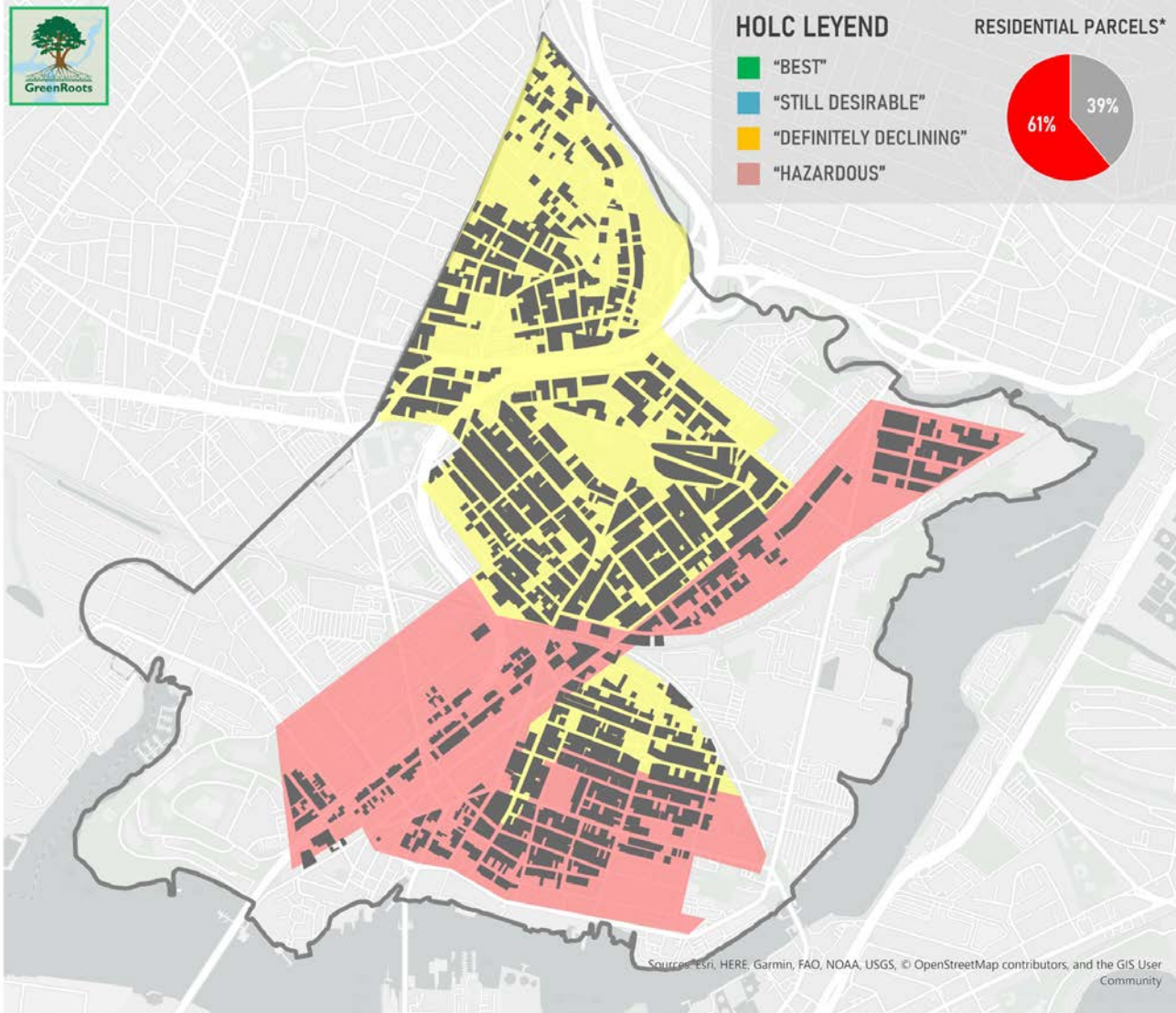
CURRENT RESIDENTIAL PARCELS* AS THEY WERE APPRAISED BY THE HOME OWNERS LOAN CORPORATION (HOLC) IN 1938



* Residential parcels identified in this analysis includes parcels designated as R1 and R2 by the City of Chelsea, where structures were constructed prior to 1938.

REDLINING IN CHELSEA

CURRENT RESIDENTIAL PARCELS* AS THEY WERE APPRAISED BY THE HOME OWNERS LOAN CORPORATION (HOLC) IN 1938



- 1 Majority of residential structures were redlined.**
- 2 Historical disinvestment practices contributed to lack of greenspace.**
- 3 Increased flooding and extreme heat risk to public health.**

* Residential parcels identified in this analysis includes parcels designated as R1 and R2 by the City of Chelsea, where structures were constructed prior to 1938.

Heat Monitoring

- Use "heat guns" to collect surface temperature measurements

- Create a data collection campaign and strategy (e.g., Prioritize locations, teams, and data collection plan)
- Record observations (e.g., # of people, families, children, at parks, etc.)

- Identify locations in redlined areas.
 - Are they hotter?

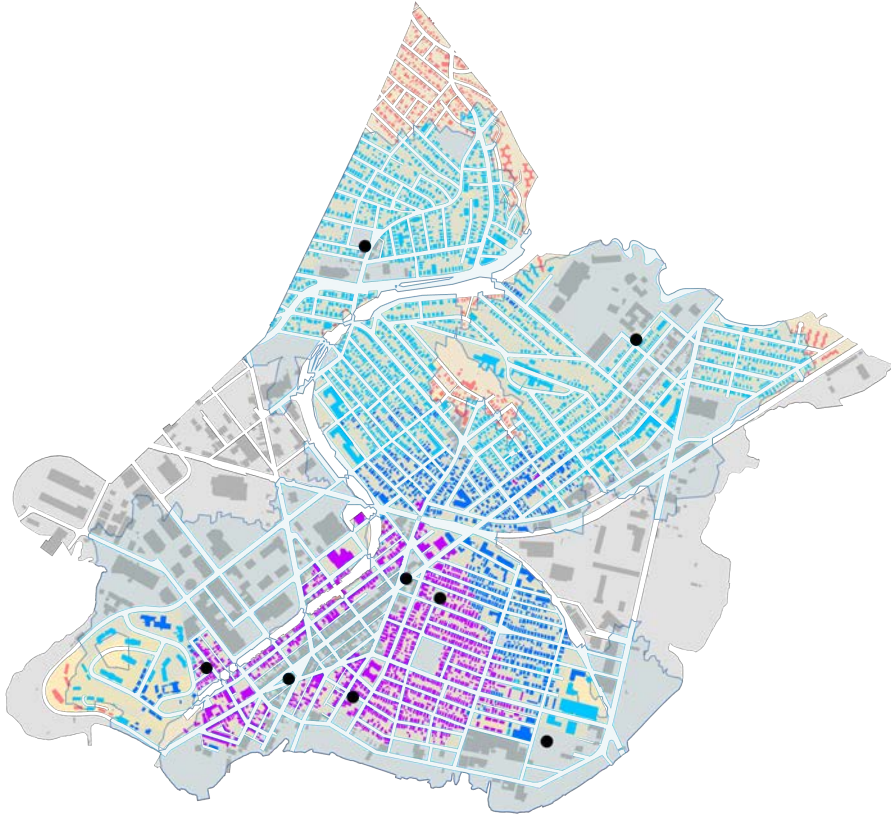


Expansion & Upgrading of Hydration Stations

MAP LEGEND

- Current Hydration Station Location
- Expected Hydration Station Expansion
- 10 Minute Area
- 3+ Stations in 10 Minute Area
- 2 Stations in 10 Minute Area
- 1 Station in 10 Minute Area
- 0 Stations in 10 Minute Area
- Residential Parcels (2020)

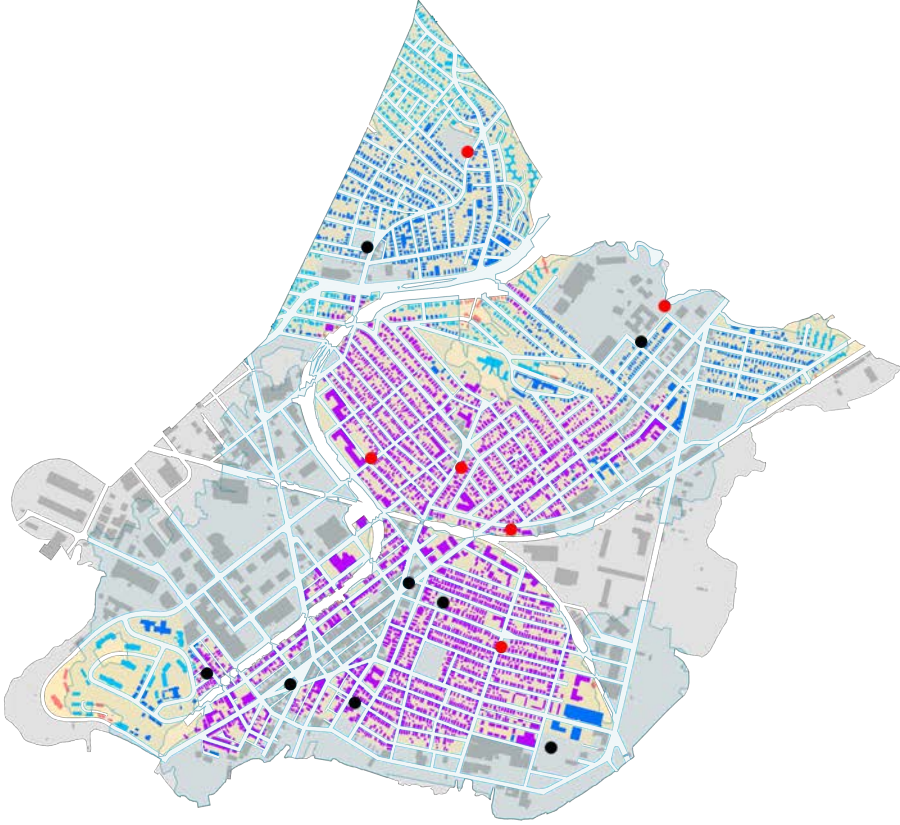
Current Network



90% of buildings in residential zones are currently within a 10-minute walk of a hydration station in Chelsea.

25% of buildings in residential zones currently have at least **3 hydration stations** within a 10-minute walk of a hydration station in Chelsea.

Extended Network



99% of buildings in residential zones would be within a 10-minute walk of a hydration station in Chelsea.

62% of buildings in residential zones would have at least **3 hydration stations** within a 10-minute walk in Chelsea.

Thanks!

¡Gracias!



CITY OF BOSTON HEAT RESILIENCE STUDY



CLIMATE READY BOSTON



DORCHESTER

SOUTH BOSTON

DOWNTOWN

EAST BOSTON

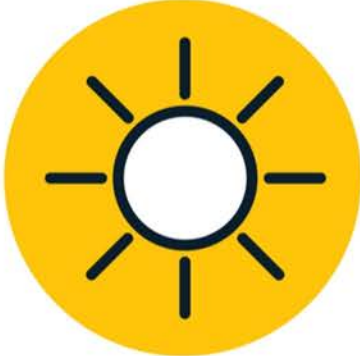


RESILIENT BOSTON HARBOR

-  = FLOOD ADAPTED BUILDINGS
-  = ELEVATED LANDSCAPES
-  = CONNECTIONS AND ACCESS

BOSTONIANS ALREADY EXPERIENCE IMPACTS OF CLIMATE CHANGE

**EXTREME
TEMPERATURES**



HEAT

**EXTREME
PRECIPITATION**



**STORMWATER
FLOODING**

SEA LEVEL RISE



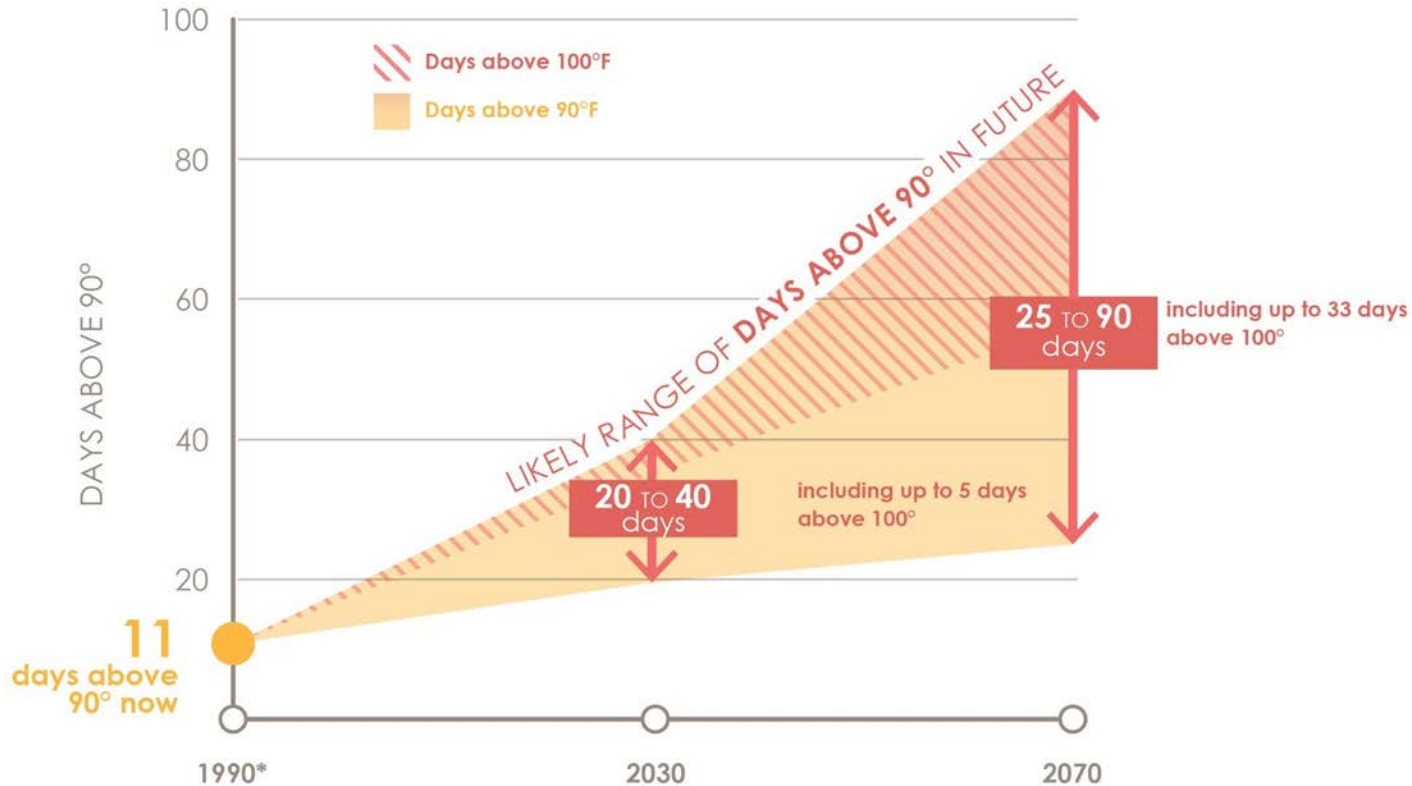
**COASTAL & RIVERINE
FLOODING**

**COASTAL
STORMS**



Boston's summers are projected to be much hotter in the future

THE NUMBER OF VERY HOT DAYS WILL INCREASE



* Baseline represents historical average from 1971-2000
Upper values from high emissions scenario. Lower values from low emissions scenario.

Data source: Rossi et al. 2015

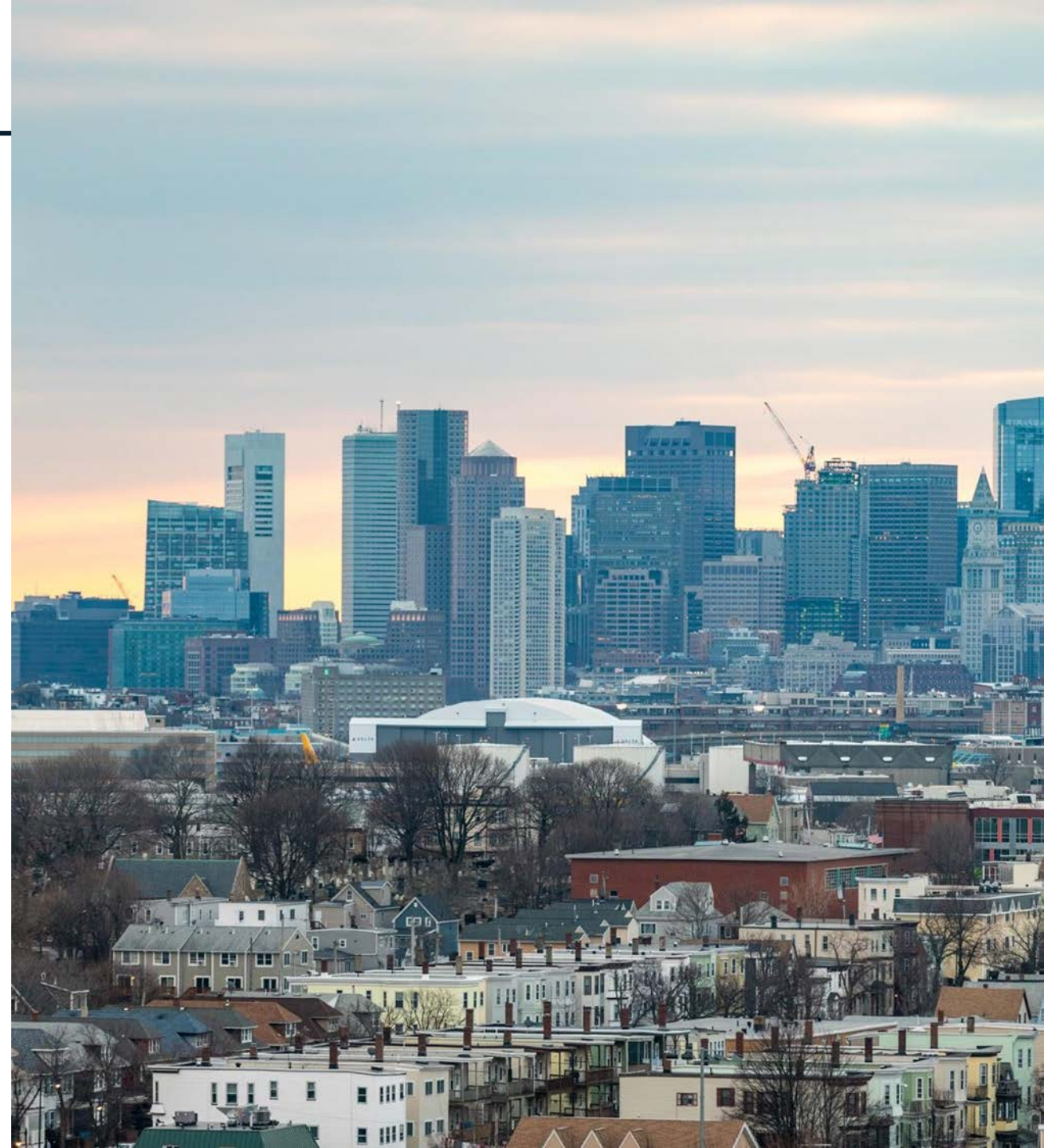
Projected changes in summer temperatures:

- Increase in average summer temperature
- Increase in number of days with extreme heat
- More frequent, longer, and hotter heat waves
- Temperatures increase will depend on how quickly and by how much we can reduce global greenhouse gas emissions.

HEAT RESILIENCE STUDY

The Study will identify:

- *Heat adaptation strategies*
- *Metrics for heat risk and reduction*
- *Where strategies will have the greatest impact*
- *Implementation timeline*



Citywide + 5 Focus Neighborhoods

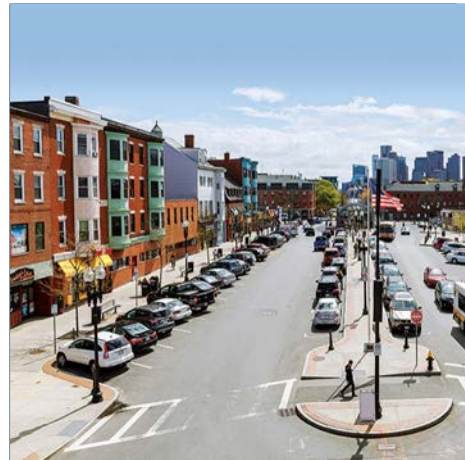
Chinatown



Dorchester



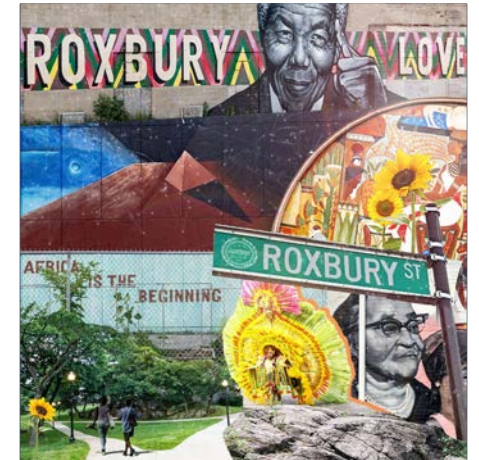
East Boston



Mattapan



Roxbury



HEALTHY PLACES BOSTON

Collaboration between three City plan:

- *Expand the urban tree canopy*
- *Plan for open space*
- *Help Bostonians thrive in a changing climate*



Heat Resilience Study

The heat resilience study identifies strategies to address future impacts of extreme heat. The goal is to increase citywide resilience.



Urban Forest Plan

The 20-year plan will be designed to set citywide goals for canopy protection and expansion.

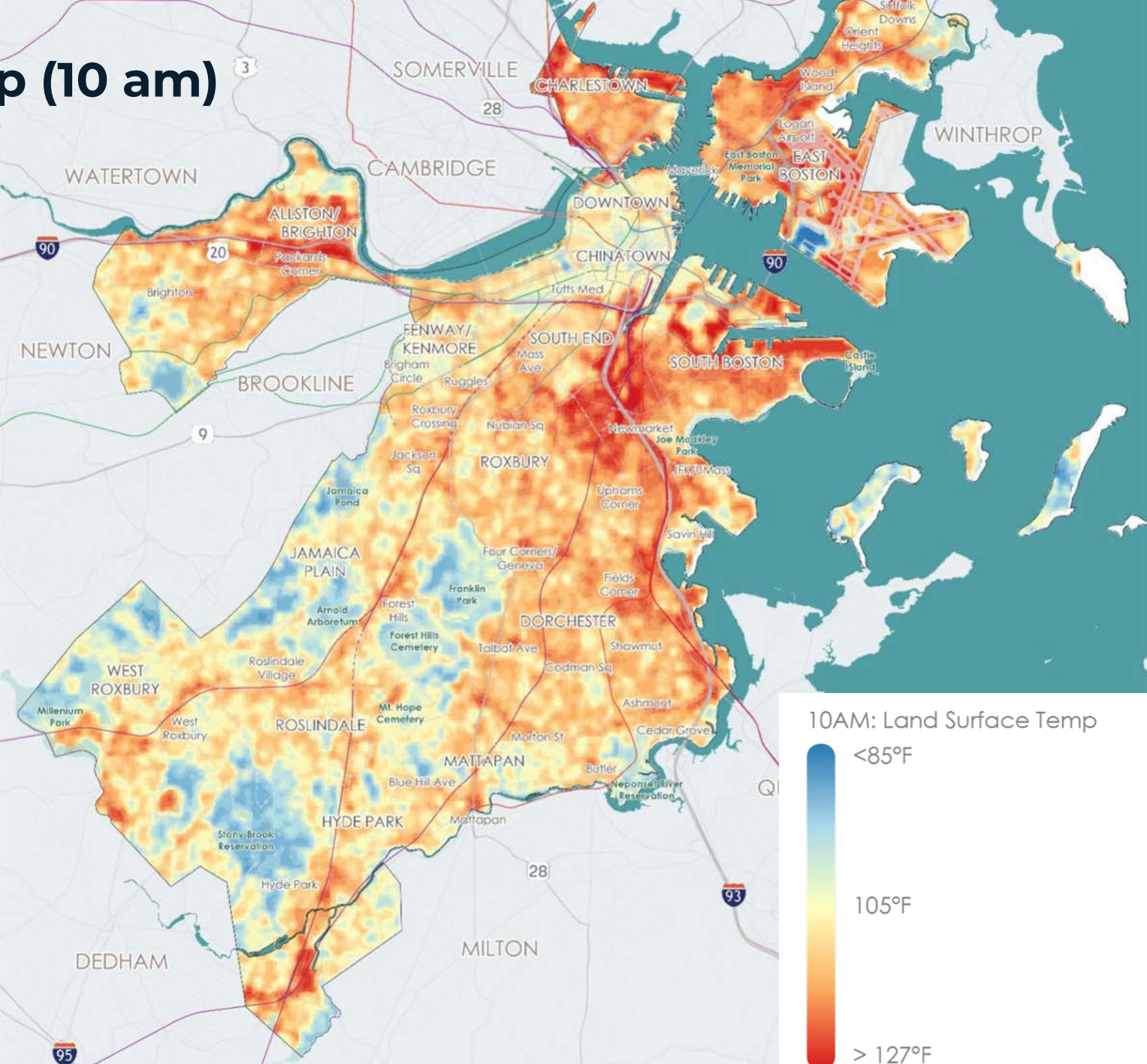
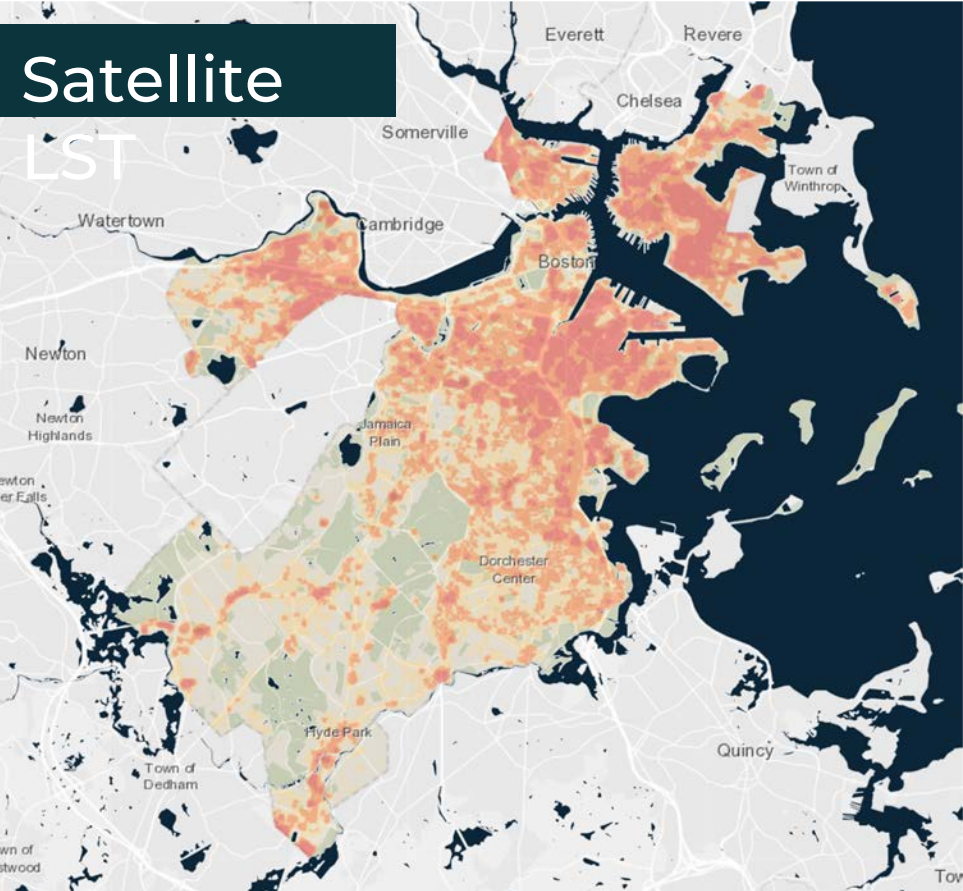


Open Space and Recreation Plan

Updating the seven-year plan for improving and protecting open space in Boston.

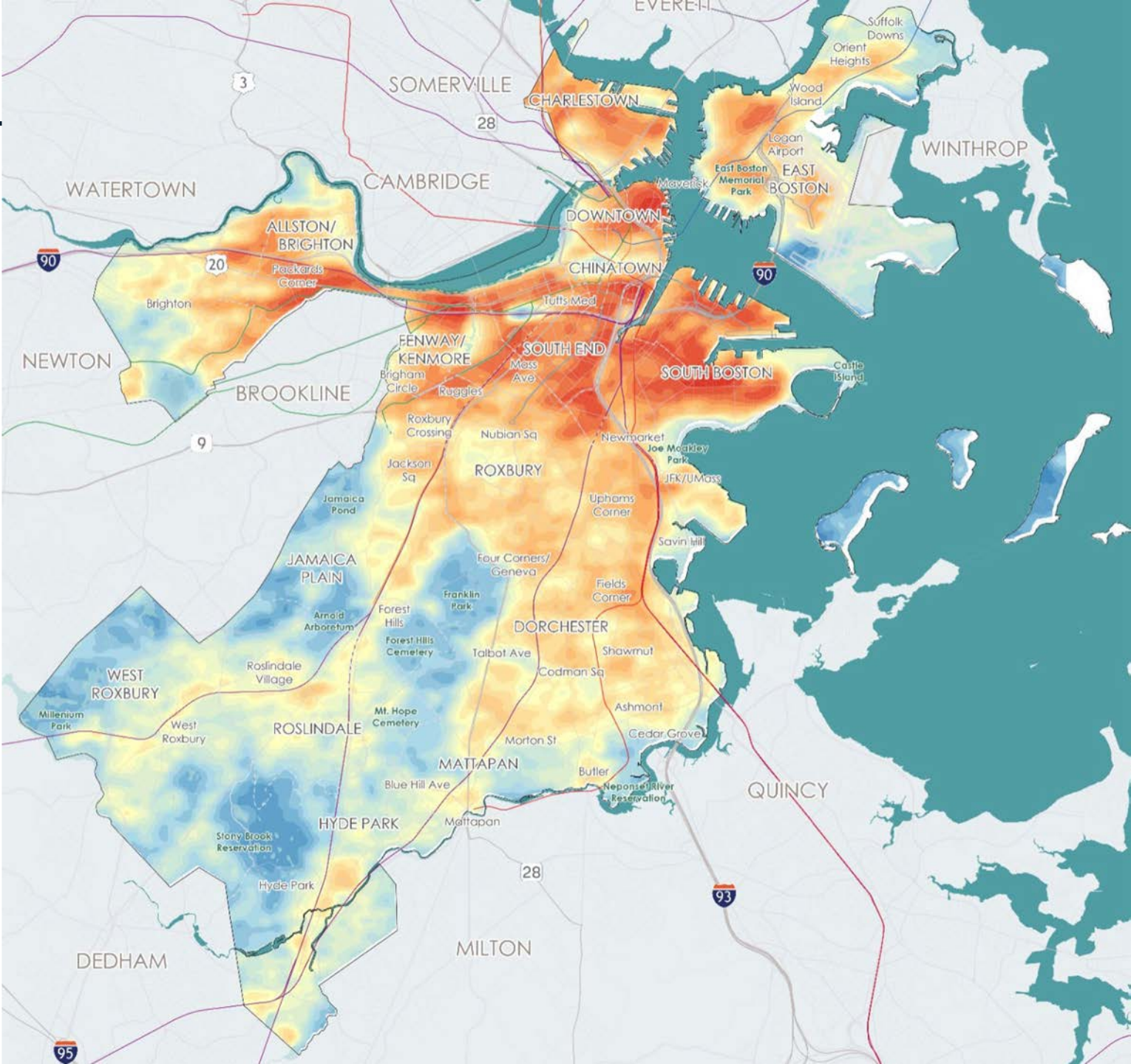
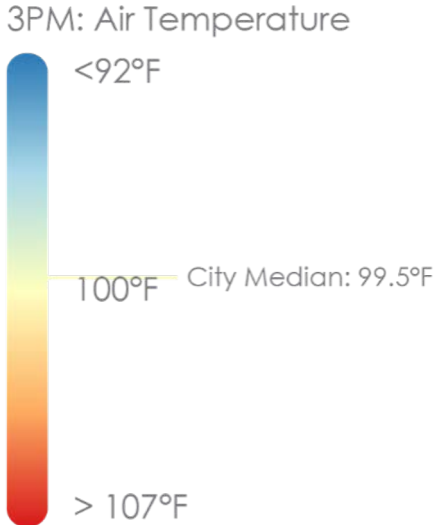
Citywide Heat Modeling

Modeled Land Surface Temp (10 am)



Daytime Air Temp (3 pm)

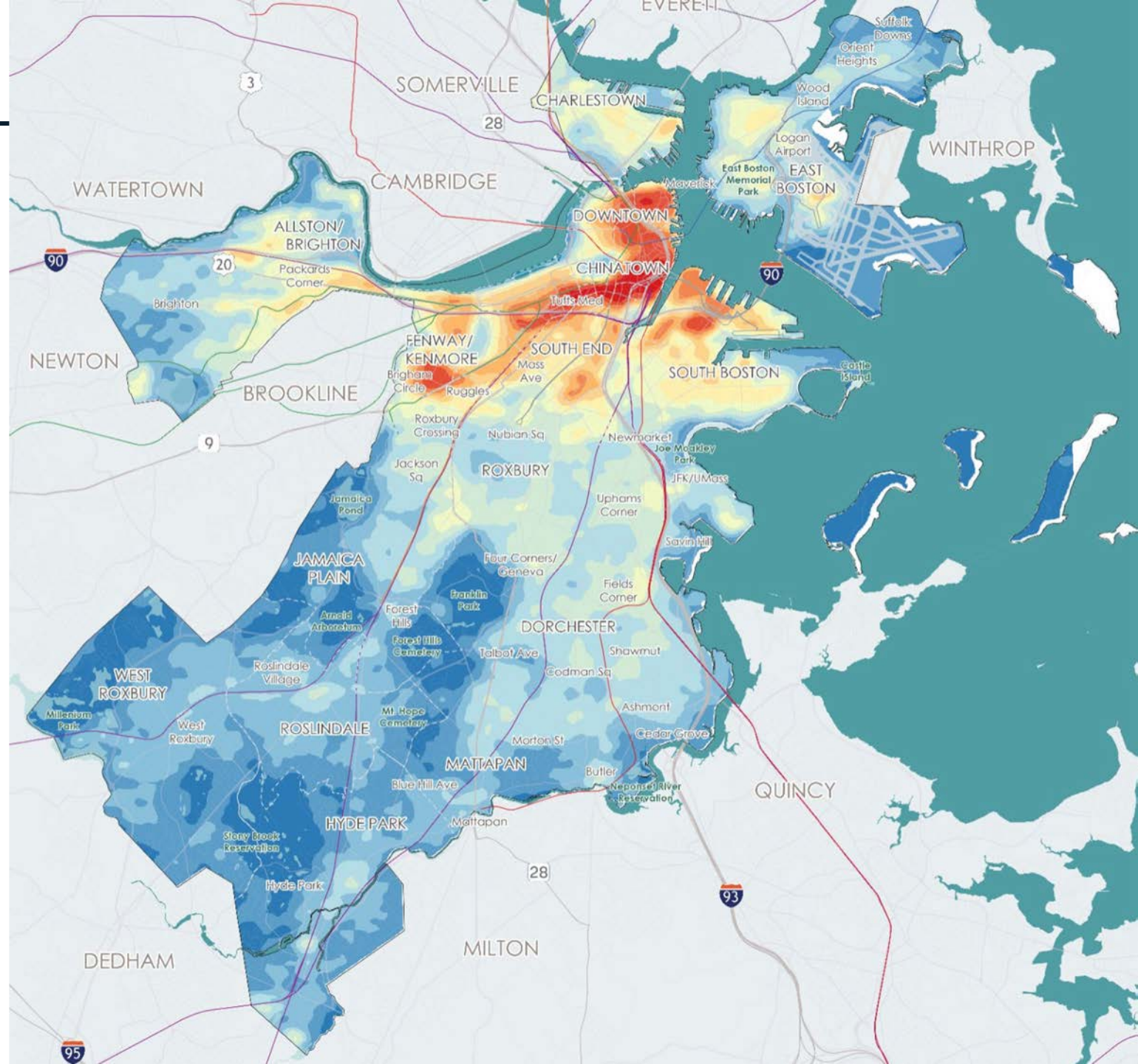
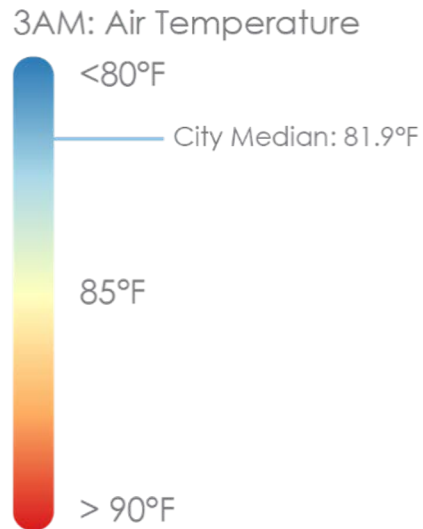
High daytime temperatures generally follow solar exposed areas with hardscape areas, limited vegetation, and or limited wind ventilation



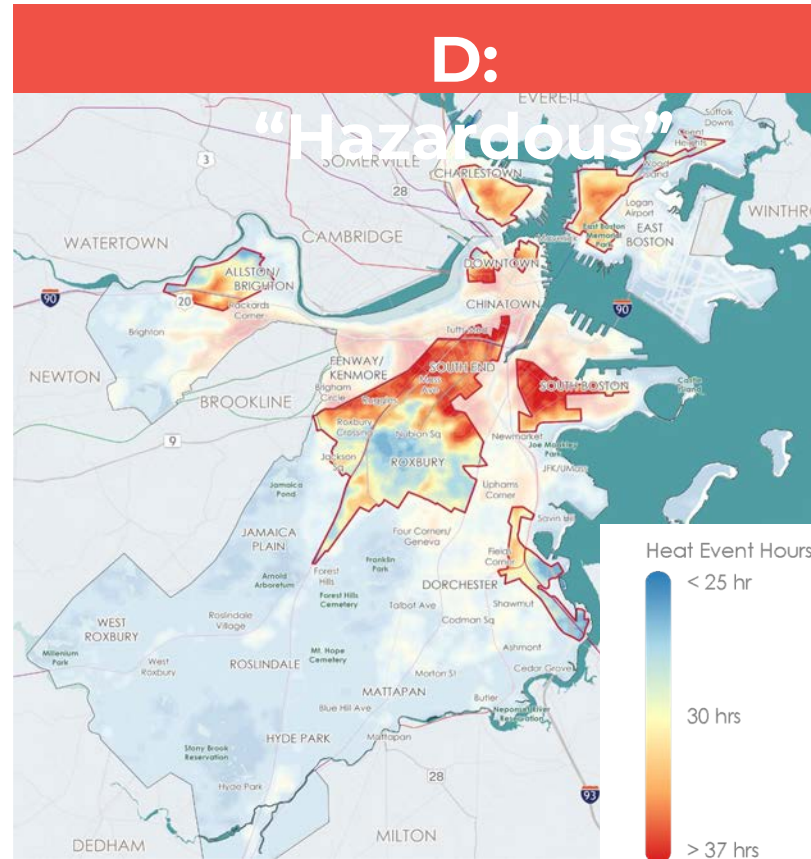
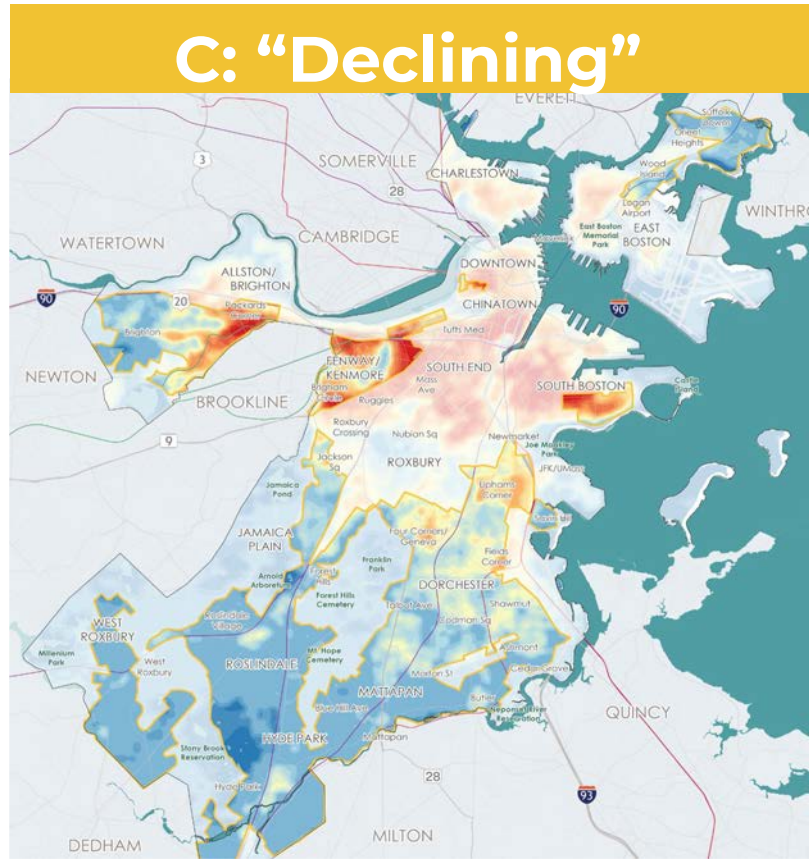
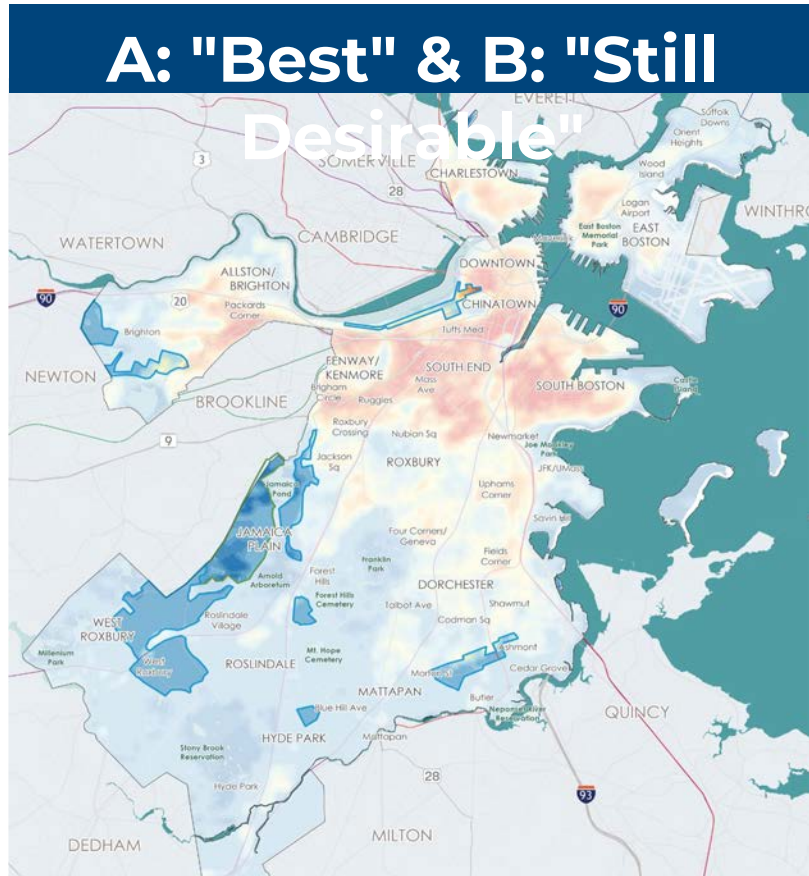
Nighttime Air Temp (3 am)

High nighttime temperatures generally follow areas that retain and slowly release stored heat.

Urban centers with massing and form trap heat within the urban canopy due to limited ventilation, sky views and high thermal storage.



Areas that were **redlined** in the past are **hotter** today



Compared to Boston's citywide median ...

A areas:
4.2°F cooler in day
1.7°F cooler at night
4% more parkland*
32% more tree cover*

B areas:
1.3 F cooler in day
0.5°F cooler at night
18% less parkland*
7.5% more tree cover*

C areas:
 (median temp same as city median in day and night)
12% less parkland*
2.2% more tree cover*

D areas:
3.3°F hotter in day
1.9°F hotter at night
16% less parkland*
7% less tree cover*

*percentage points

Heat Resilience Strategies

Strategies to improve heat resilience

Heat Relief Cooling off during heat waves



Heat Reduction Cooler neighborhoods



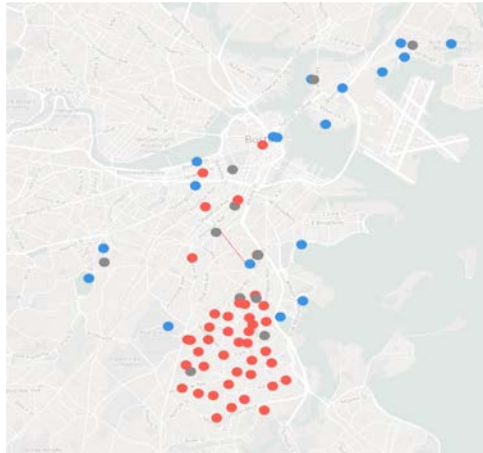
Healthier Neighborhoods & Community Healing



Supporting Strategies

- *Growing community connections and checking on neighbors*
- *Mitigate displacement risk from heat strategies*
- *Increase adaptive capacity*
- *Reduce carbon emissions to reduce long-term warming*

COMAP SURVEY



OPEN HOUSE #1 May 27th, 2021 | 7-8pm



OTHER UPCOMING EVENTS

- **Neighborhood & Charrettes - Weeks of June 7th and 14th**
 - *Neighborhood heat modeling results and*
 - *site-specific heat resilience challenges and opportunities*
- **Open House #2 - June 29th**

Our Speakers



Jeanette Pantoja
Metropolitan Area
Planning Council



Patricia Fabian
Boston University



Zoe Davis
City of Boston



Sara Benson
Museum of
Science, Boston



**Ibrahim
López-Hernández**
GreenRoots



Melanie Gárate
Mystic River
Watershed
Association

Moderator



Joey Williams
CAPA Strategies



Ben Cares
City of Chelsea



Sasha Shyduroff
Metropolitan Area
Planning Council

Moderator

Take the MetroCommon 2050 Policy Survey!

Metro Common 2050 is Greater Boston's next long-range plan. The action-oriented plan will include steps for state and local governments, institutions, non-profits, the private sector, and even individuals to help reach our goals for equity, jobs, housing, transportation, health, and much more.

Help improve the plan by giving your feedback on our policy recommendations.

Take the survey at <http://mapc.ma/PolicyFeedback>



MetroCommon × 2050

Ways to Get Involved

- ✓ **Volunteer with Wicked Hot Mystic this summer:**
<https://mysticriver.org/climate-resilience>
- ✓ **Take the Community Survey: Experiencing Extreme Heat:** <https://www.mapc.org/planning101/heat-prep-2021/>
- ✓ **Create your personal cooling plan before the next heat wave**

More Information

Learn more throughout Heat Preparedness Week: <https://www.mapc.org/planning101/heat-prep-2021/>

Recording of today's event will be available at <https://www.mapc.org/planning101/>

Thank You!

