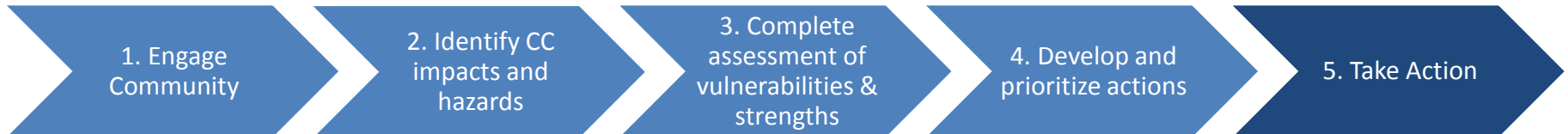




# Municipal Vulnerability Preparedness (MVP)

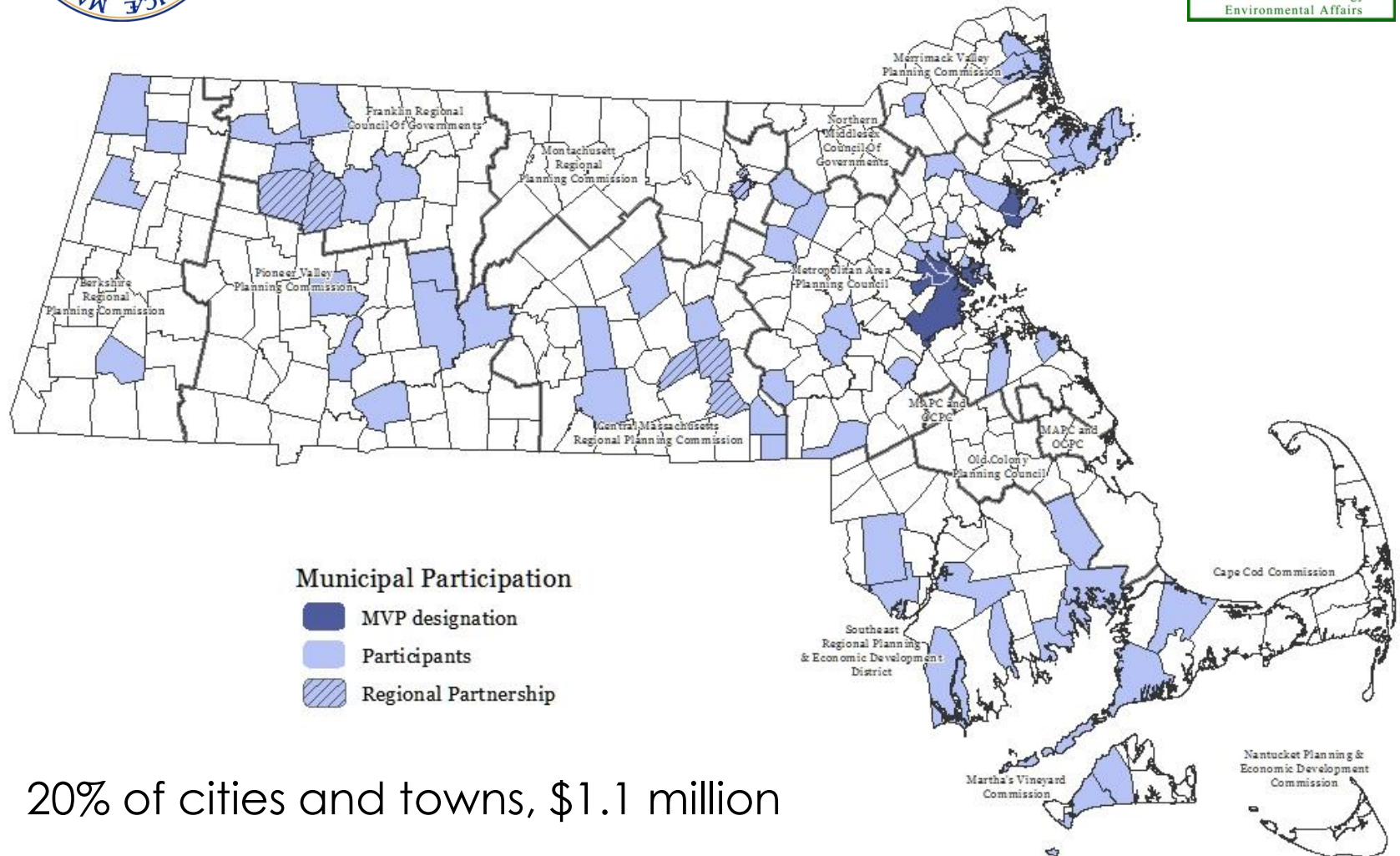


*State and local partnership grant to build resiliency to climate change*





# MVP Program 2017-2018





# MVP Program

## Ensuring Success Webinars



- Working with MVP Service Providers
  - EEA and TNC
- Advancing Social Equity in Climate Adaptation Planning
  - MAPC
- Alternatives for engaging your community
  - December 18, 2017
  - RTWN
  - Other than acting as service provider, how can you help the CRB process?
- The Importance of Listening
  - January 8, 2018
  - MMC
  - Why honest engagement with constituents and stakeholders is critical to project success
- Bylaw Review
  - January 22, 2018
  - Mass Audubon
  - The impact of local bylaws and regulation on nature based solutions
- Nature Based Solutions
  - February 5, 2018
  - TNC
  - Cost effective, long term solutions that leverage natural assets of your municipality
- Characterizing coastal flood hazards and increasing resilience
  - February 26, 2018
  - CZM
  - How to characterize future potential coastal flood risk, identify vulnerabilities and advance community action



# MVP Program

## Learn more



The screenshot shows the Mass.gov website. At the top, there is a blue navigation bar with links for "Select Language", "State Organizations", and "Log In to...". Below this is a white search bar with the text "Search Mass.gov" and a "SEARCH" button. The main content area has a blue background with a large white heading "Municipal Vulnerability Preparedness Program". Below the heading is a paragraph: "Learn about the Municipal Vulnerability Preparedness Program that helps support cities and towns develop resiliency plans." At the bottom right of the main content area is a white button with the text "TELL US WHAT YOU THINK".

<https://www.mass.gov/municipal-vulnerability-preparedness-program>

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Jenny Norwood – [jennifer.norwood@state.ma.us](mailto:jennifer.norwood@state.ma.us)

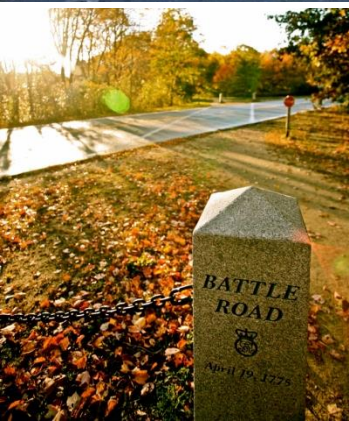
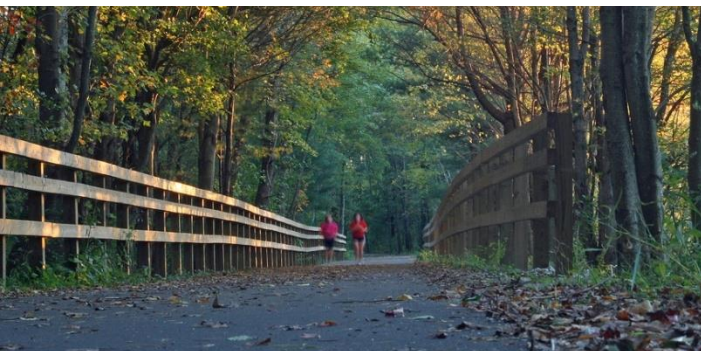


# Advancing Social Equity

## In Climate Adaptation Planning



Photo Credit: Renato Castelo



# Presenters:



**Barry Keppard**  
**Public Health Director**



**Renato Castelo**  
**Community Engagement Manager**



**Darci Schofield**  
**Senior Environmental Planner**

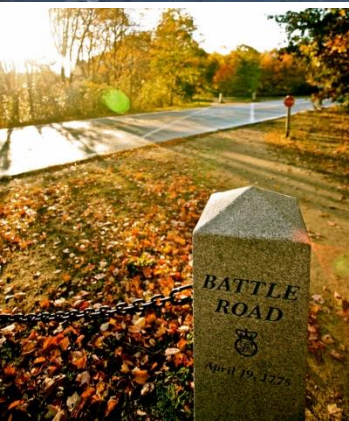
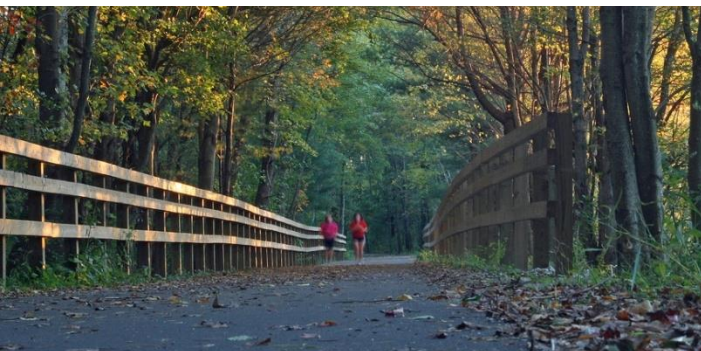






# Presentation Outline:

1. Who are the Most at Risk to Climate Change?
2. Best Practices to Ensure Diverse Participation.
3. Equity in Climate Planning-Case Studies.



# Societal Vulnerabilities

## Who is At Risk from Climate Change Impacts?





# Climate Change

Cities and Town in Massachusetts projected to experience:

Warmer Average Temperatures

Longer, hotter summers

Sea level rise

Greater extreme precipitation events

More frequent flooding



# What is most at risk to these climate change impacts?



Source: David Mark, Maynard Life Outdoors

# Who is most at risk to these climate change impacts?





# Who is most at risk to climate change impacts?

## Susceptible life stages

Pregnant women, Children and adolescents, Older adults

## Existing health conditions

Persons with preexisting chronic diseases,  
Persons with disabilities

## Occupationally exposed groups

Outdoor workers, First responders, Those working in hot indoor environments

## Groups marginalized by race/ethnicity, SES, and English proficiency

Communities of color (particularly Indigenous, Black, and/or Hispanic populations), Low income/SES, Low English proficiency speakers, Immigrants

## Groups living in vulnerable locations

Historic or predicted floodplain, urban flooding locations, areas prone to wildfire, heat islands, neighborhoods prone to power outages

*Those who encompass multiple impacted identities are at greatest risk and therefore should be prioritized in planning considerations*

# Why are these populations at risk?

## An example

- Susceptible life stages (children, pregnant women, and older adults)
  - Extreme heat events:
    - Children/young athletes may experience increases in heat illness, ER visits, and death
    - Pregnant women may experience adverse birth outcomes such as increased neonatal death, preterm birth, etc.
    - Older adults may experience heat exposure deaths and increased hospitalization for cardiovascular and respiratory disorders



# Why are these populations at risk?

## An example

- Susceptible life stages (children, pregnant women, and older adults)
  - Degraded air quality
    - Children/young athletes may experience increases in asthma hospitalization and other allergies
    - Pregnant women may experience adverse birth outcomes
    - Older adults may experience heightened asthma and COPD symptoms





# Why are these populations at risk?

## An example

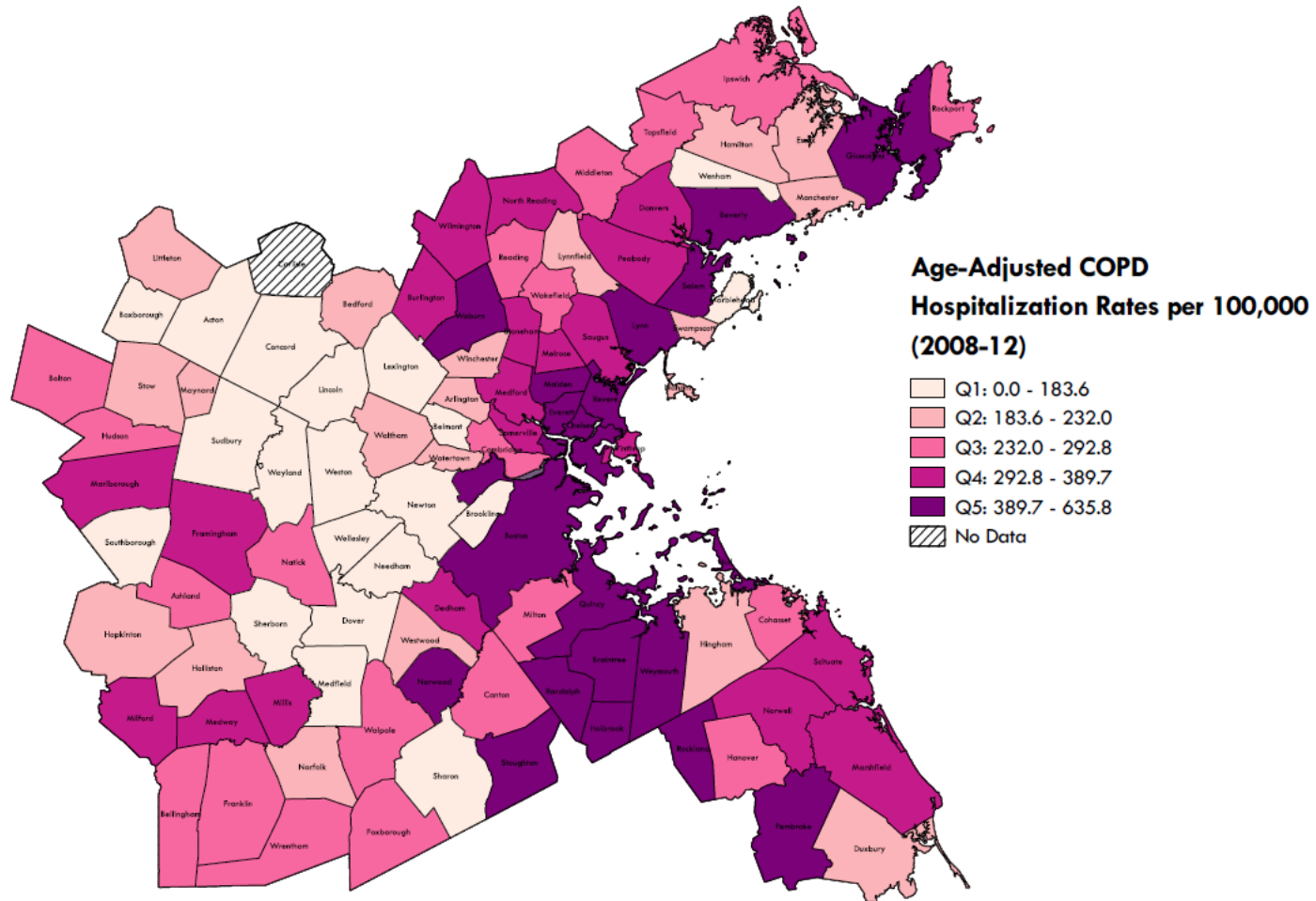
- Susceptible life stages (children, pregnant women, and older adults)
  - Infectious diseases
    - Children/young athletes may experience increases in gastrointestinal disease and death
    - Pregnant women may have greater rates of infection for themselves and the fetus – Lyme disease, West Nile virus, and more
    - Older adults may experience greater infectious disease due to compromised immune systems



How might we assist municipalities in identifying populations at risk from climate change impacts and other hazards?



# Map Locations of Populations Potentially At Risk

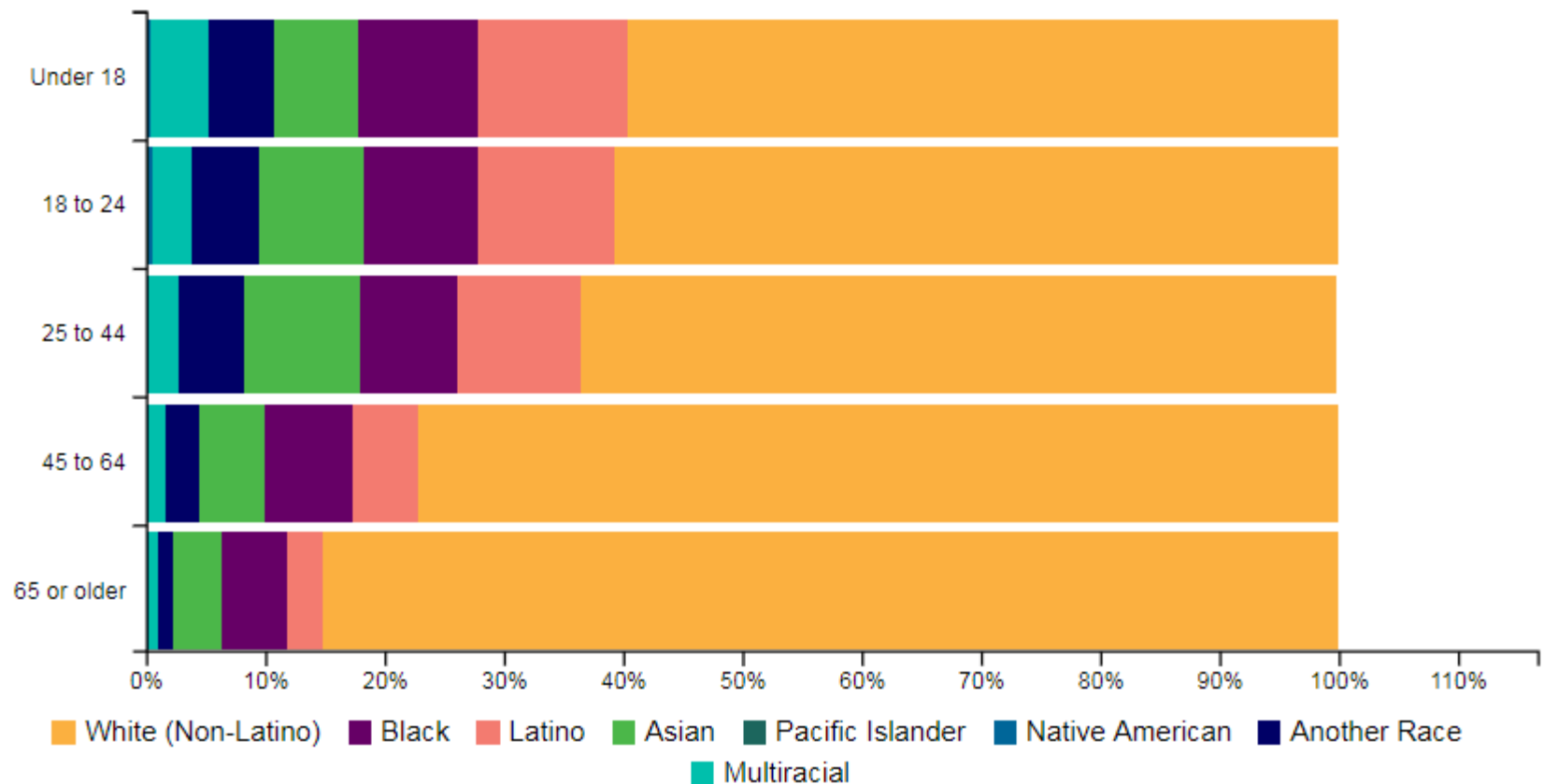


Source: MAPC, MDPH



# Explore Data About Populations Potentially At Risk

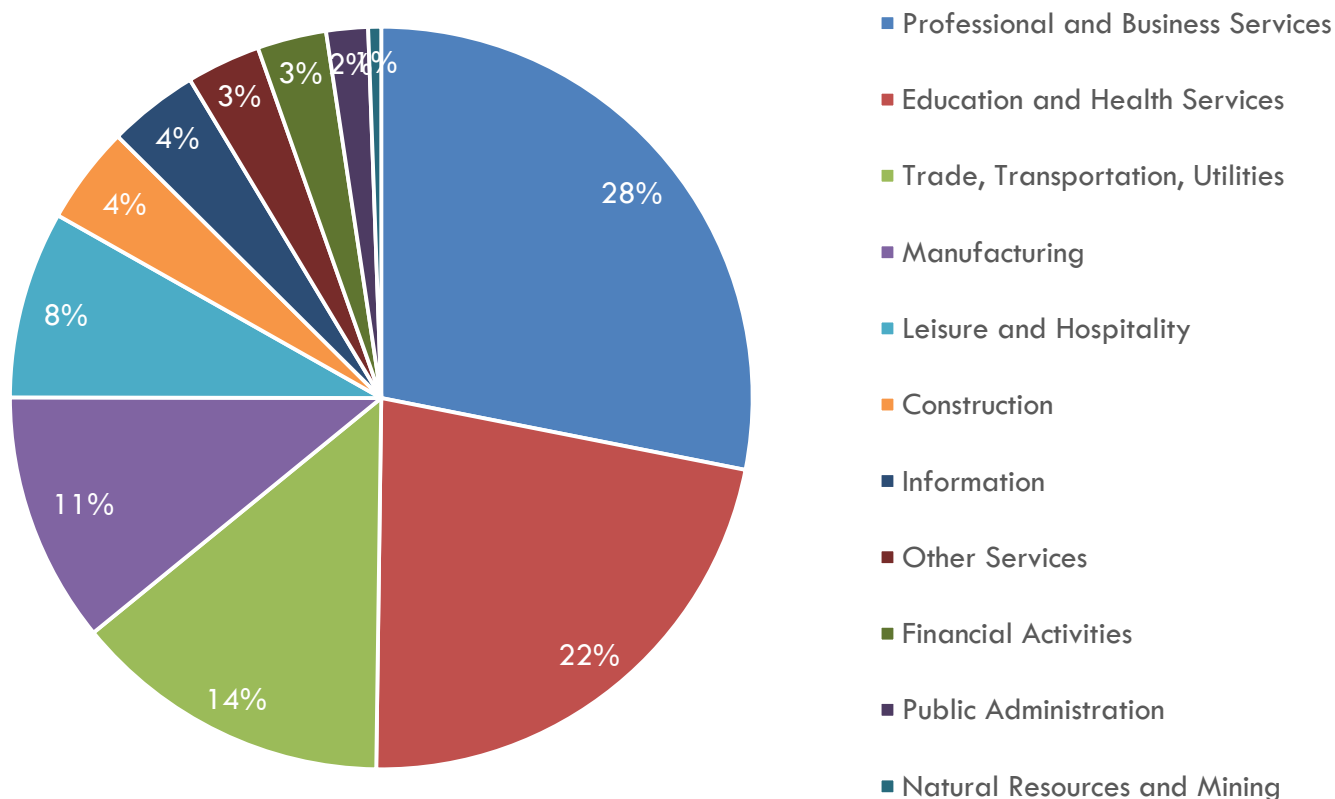
Race and Ethnicity by Age Group



Source: State of Equity Metro Boston 2017

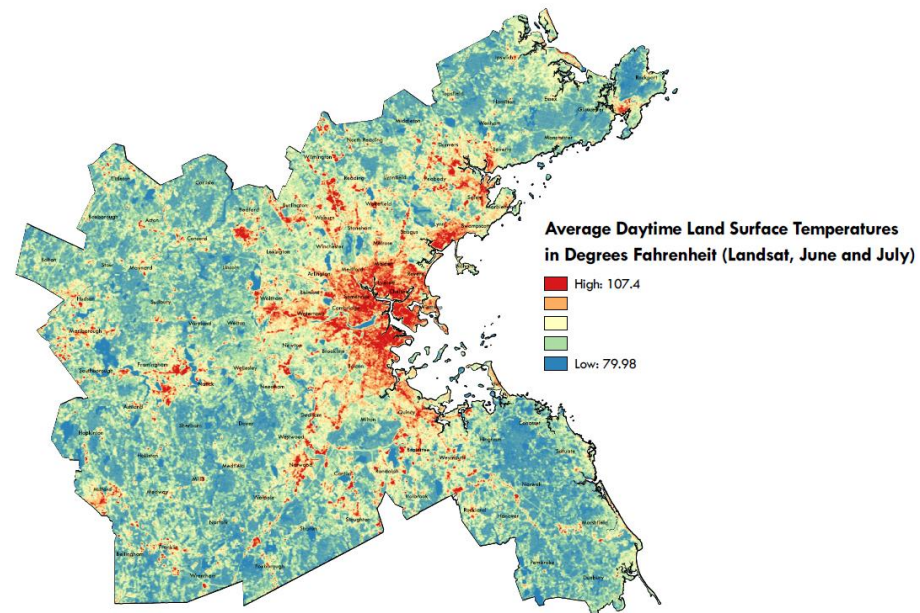
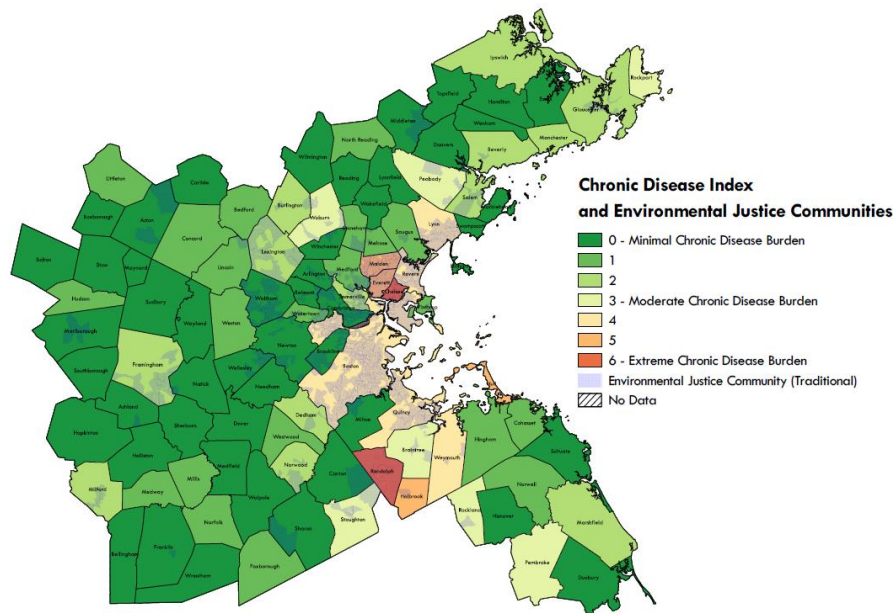
# Explore Data About Populations Potentially At Risk

MAGIC Employment by Industry, 2015



Source: State of Equity Metro Boston 2017

# Mapping and Data Provide a Guide for Who Should Be Involved



Source: MAPC, MDPH

As well as for identifying societal vulnerabilities and strengths



# Who is most at risk to climate change impacts?

Susceptible life stages

Pregnant women, Children and adolescents, Older adults

Existing health conditions

Persons with preexisting chronic diseases, Persons with disabilities

**Knowing who not only identifies who may have the greatest needs, it is also a guide to who you need to include in the process and what actions may be needed to engage those groups**

Occupationally exposed groups  
Outdoor workers, persons working in hot indoor environments

Groups marginalized by race/ethnicity, SES and English proficiency

Communities of color (particularly Indigenous, Black, and Hispanic populations), Low income/SES, Low English proficiency speakers, Immigrants

Groups living in vulnerable locations

Historic or predicted floodplain, urban flooding locations, areas prone to wildfire, heat islands, neighborhoods prone to power outages

*Those who encompass multiple impacted identities are at greatest risk and therefore should be prioritized in planning considerations*

# Ensuring Diverse Participation

## Engagement Best Practices



# Prepare for the Workshop

## Tasks:

1. Establish a core team with goals
2. Engage stakeholders
3. Prepare materials for workshop
4. Decide on participant arrangements.



# 1. Establish a Core Team with Goals

**Select members of the Core Team thoughtfully.**

- Find “natural leaders” who will help you bring people to the workshop.
- Include age, gender, race, faith and SES to form a diverse Core Team that represents the needs and interests of the boarder community.

**Charge your Core Team with responsibilities, not just tasks.**

- Empower your Core Team to own the process:
  - “Would you make these 15 phone calls telling people about the workshop? Vs. Would you take responsibility for getting 10 people to come to the workshop?”

**Time meetings appropriately.**

- This will impact the type of participants who will show up.



## 2. Engage Stakeholders

**Five steps to design your community engagement strategy:**

1. Define your purpose of engagement
2. Conduct a stakeholder analysis
3. Consider your resources, challenges, opportunities & scale
4. Craft compelling messages
5. Select approaches to reach out to community members



# 2. Engage Stakeholders

## Step 1: Core Team helps you identify the purpose of engagement

- Why is community input and involvement necessary to the project?
- What does successful engagement look like in the short and long term?

## Step 2: Conduct a stakeholder analysis with your Core Team

- Gather demographics data for the area to inform your process
- Conduct a brainstorm session with your Core Team to create a list of stakeholders (*community groups, elected officials, non-profits, etc.*)
- Get to know the community (*Visit the area, read local news, conduct interviews.*)





# 2. Engage Stakeholders

## Step 3: Look at your resources, challenges, opportunities, and scale of engagement

- Consider budget, staff time, local partners, and established relationships in the community.
- Are there internal and/or external factors that can limit or strengthen your efforts? (*Discuss with Core Team*)

## Step 4: Craft compelling messages

- Appeal to people's self-interest. (*What's in it for them? Why should they care? – be sensitive.*)
- Tailor your message to different audiences.
- Think about how to deliver your message. (*Who is the best messenger? How can the message be delivered most effectively? Does anything need to be translated?*)
- Talk to community leaders to find out community interests and concerns in advance.



# 2. Engage Stakeholders

## Step 5: Identify approaches to reach out to the community.

- With messages and stakeholders in mind, list tools and techniques to bring people to the workshop.
  - Find partners: Hold one-on-one meetings with community leaders and organizations
  - Connect with the housing authority
  - Mail workshop flyers in utility bills
  - Connect with local popular social media sites
  - Have a booth at a local community event



# COMMUNITY ENGAGEMENT STRATEGY CHART

Be specific. List all the possibilities.  
Develop a timeline.



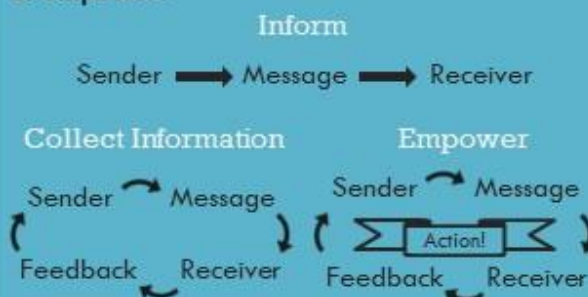
Metropolitan Area Planning Council  
Community Engagement Division – 617-933-0735  
60 Temple PL Boston, MA | www.mapc.org  
Last updated: 6/15/17

## 1. PURPOSE OF ENGAGEMENT

Ask yourself these questions. They will help you define the purpose of engagement.

- Why is community input and involvement necessary to the project?
- What does successful engagement look like in the short and long-term?

Are you looking to inform, collect information, or empower?



## 2. STAKEHOLDER ANALYSIS

### 1. Get to know the community

- \* Visit the area
- \* Read local news
- \* Conduct interviews
- \* Use local/regional data

### 2. Create a list of stakeholders

Examine demographic and socioeconomic data.



Is anyone being left out of the process?

### 3. Explore each stakeholder. Consider:

- How could they be impacted by the project?
- What's their level of support for the project?
- How could they impact project outcomes?
- What is their level of influence on the project?

## 3. RESOURCES, CHALLENGES, OPPORTUNITIES, & SCALE

List the resources your office brings to the project. Consider budget, staff time, local partners and established relationships in the community.

Are there internal and/or external factors that can limit or strengthen your efforts?

Based on steps 1-3, select your Scale of Engagement:

- **Broad:** Most stakeholder groups are taken into account during the planning process.
- **Moderate:** Some stakeholders' opinions are taken into account.
- **Limited:** Only a targeted segment of stakeholders inform the process.



## 4. MESSAGING

1. **Appeal to people's self interest.** What is in it for them? Why should they care?

2. **Tailor your message to each audience.** If I was [stakeholder X], why would I care about the goals or outcomes of the project?

3. **Delivering the message.** Who is the best messenger? How can the message be delivered most effectively (flyers, social media, radio, local access TV, etc.)? Does anything need to be translated?

**\* Best practice:** Talk to community leaders to find out community interests and concerns in advance.

## 5. APPROACH

Now, with the messaging and stakeholders in mind, list the tools and techniques you'll use.

### To Inform

- Fact sheets
- Websites/flyers
- PowerPoints

### To Collect Info

- Focus groups
- Surveys/polling
- Public meetings
- Community mapping
- Visioning workshops
- Open houses

**Need more ideas?**  
Explore MAPC's Recipe Book!

### To Empower

- Resident advisory committees
- Advocacy trainings
- Participatory decision-making
- Resident juries

### Your approach must:

- Be in context and make sense to your audience.
- Be directed at a specific constituency.
- Be flexible and creative.



# 3. Prepare Materials for Workshop

**Proposed approach could be strengthened by:**

- Build connections to increase community relations, strength, and inclusion.
  - Use an ice breaker to open the workshop, and half way through it to energize the group; allow for everyone to introduce themselves; create space to share personal stories; etc.
- Considering language needs (*interpretation/translation of materials*)
- Recognize that people are context experts – try not to pre-define all of the workshop content in advance.



# 4. Decide on Participant Arrangements

“Careful consideration should be directed to diversifying small team membership based on rank, position, roles, responsibilities, and expertise of participants.” *CRB Workshop Guide, Page. 7*

- Add race, gender, and English proficiency, faith to the list.
- Set group agreements at the beginning of the workshop.
- Be mindful about providing a space for everyone to speak.



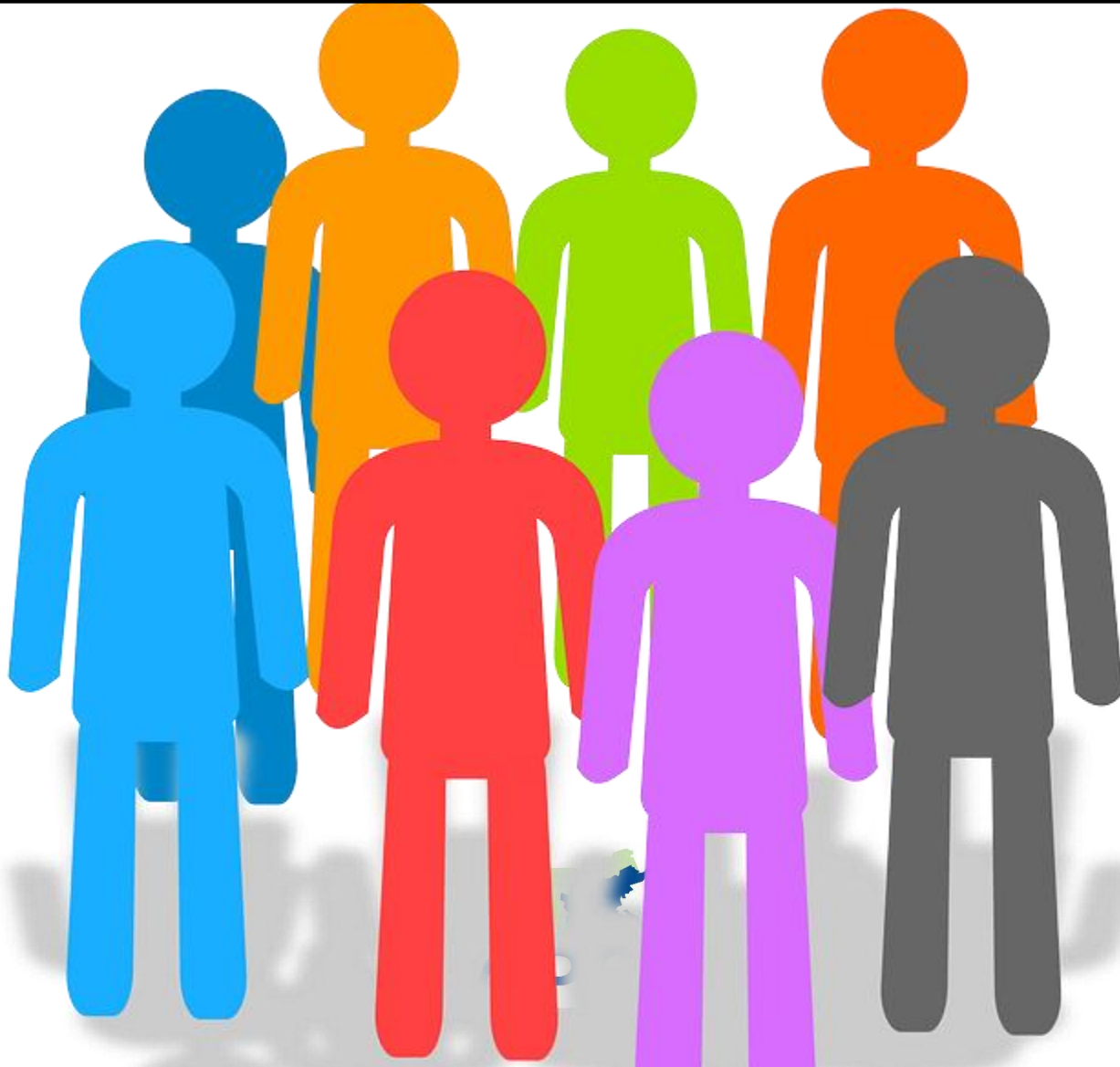
# Other Considerations:

- **Go to where people are – don't expect them to show up.** Hit the ground and see who would actually be impacted by climate issues. Focus on getting to the groups who tend to be invisible in these conversations.
- **Establish relationships with community groups/leaders.** Those who are the hardest to reach are typically the ones who have the most to lose.
- **Recognize that many people are not familiar with the system.** Many are disenfranchised, afraid of the government, or simply not used to being asked for their opinion on particular matters.
- **If possible, provide incentives for participation,** such as gift cards to participants or stipends to organizations that are helping you conduct outreach for the workshop.
- **Consider the time of your meetings.** This will impact who will show up to the workshop.



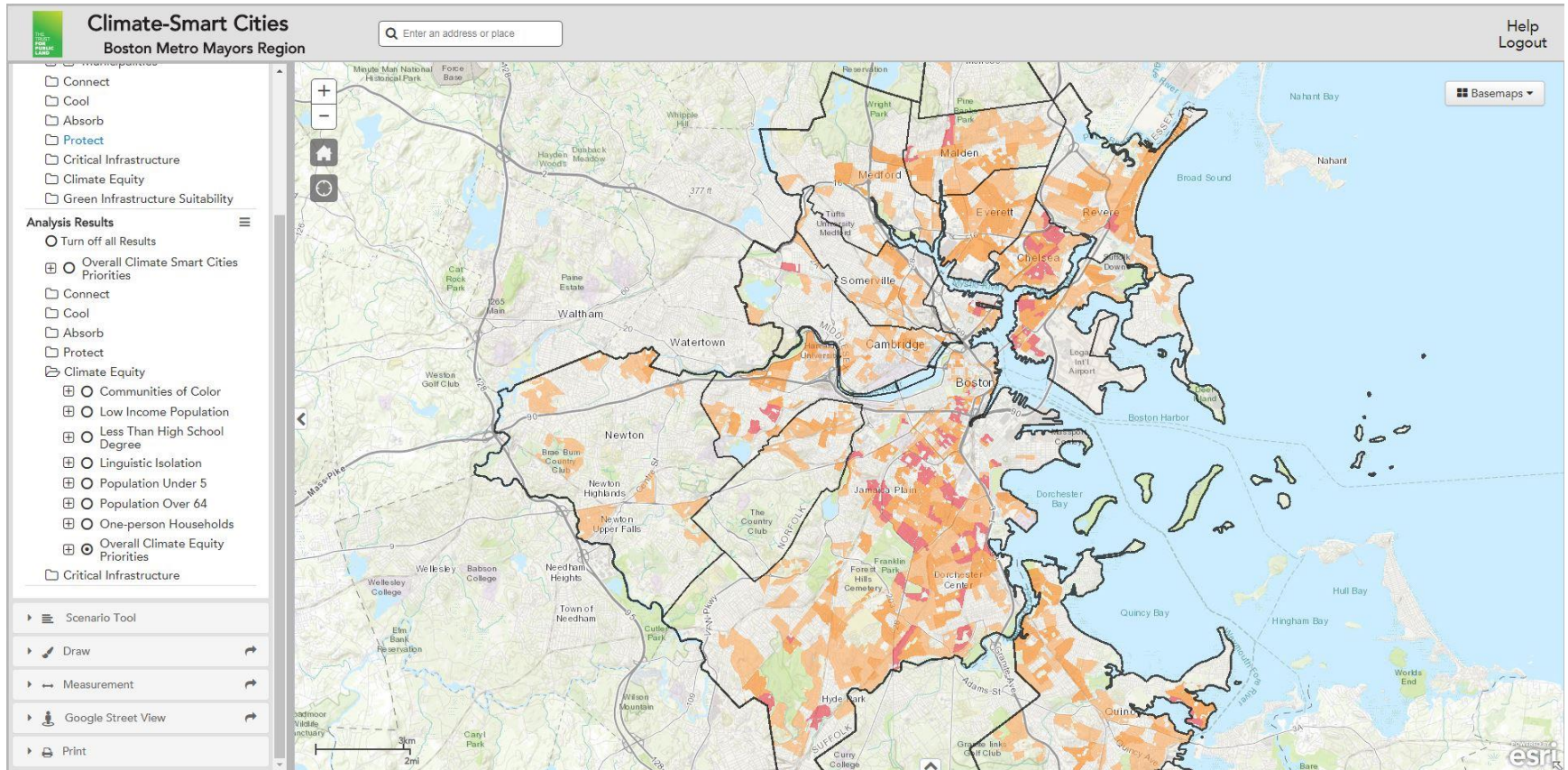
# Equity in Climate Planning

## Case Studies



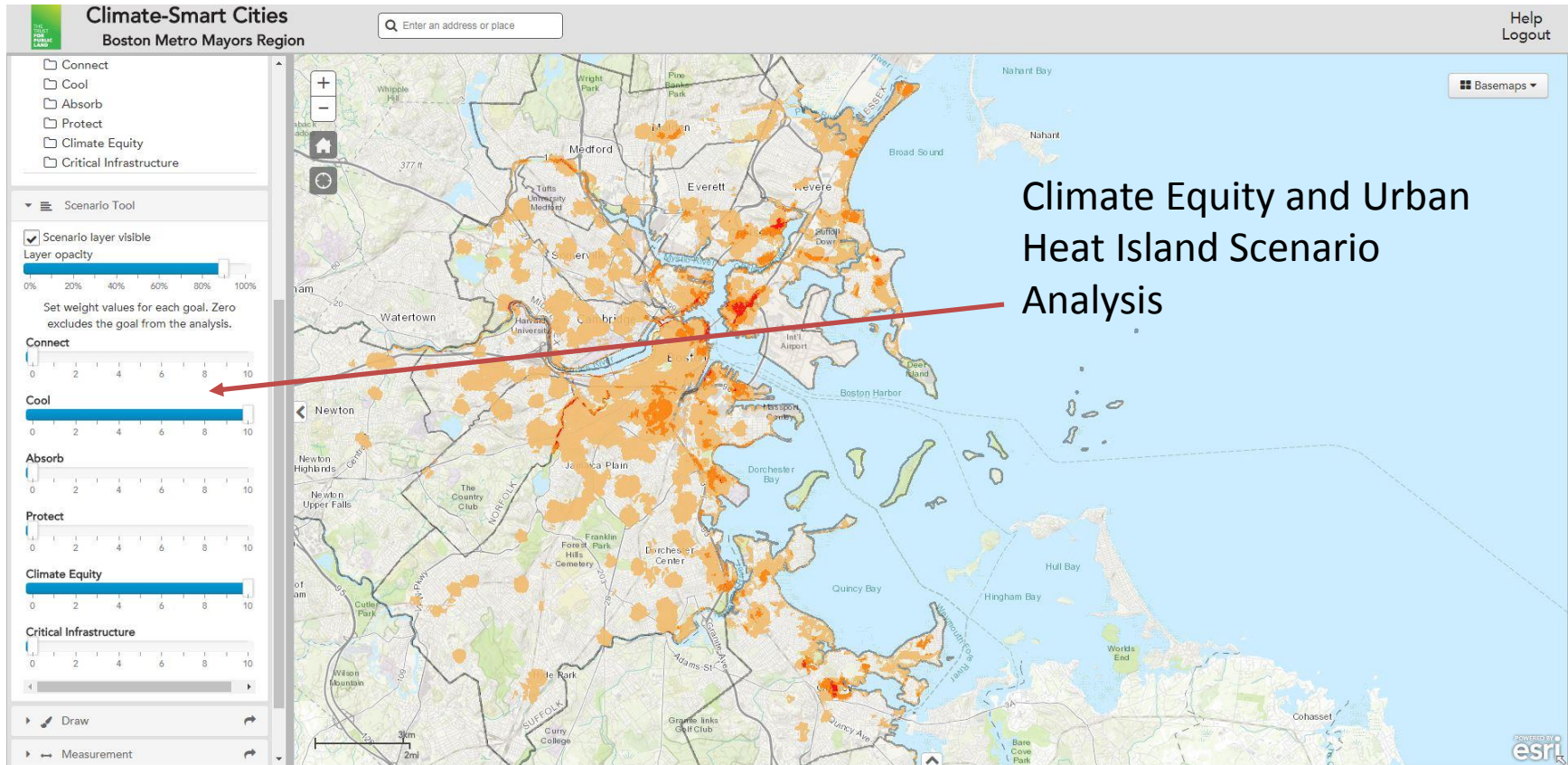


# Case Study I-Social Vulnerability Data Analysis: Climate Equity in Metro Boston



[https://web.tplgis.org/metromayors\\_csc/](https://web.tplgis.org/metromayors_csc/)

# Case Study I-Social Vulnerability Data Analysis: Climate Equity in Metro Boston



[https://web.tplgis.org/metromayors\\_csc/](https://web.tplgis.org/metromayors_csc/)



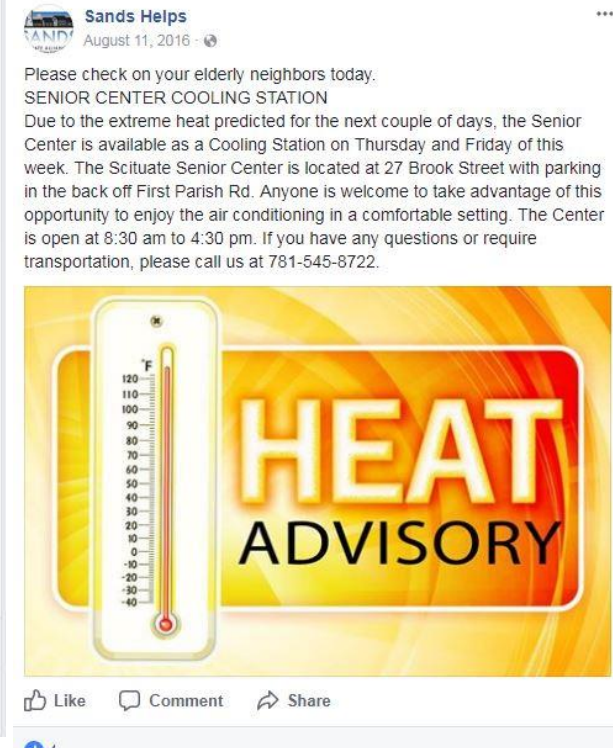
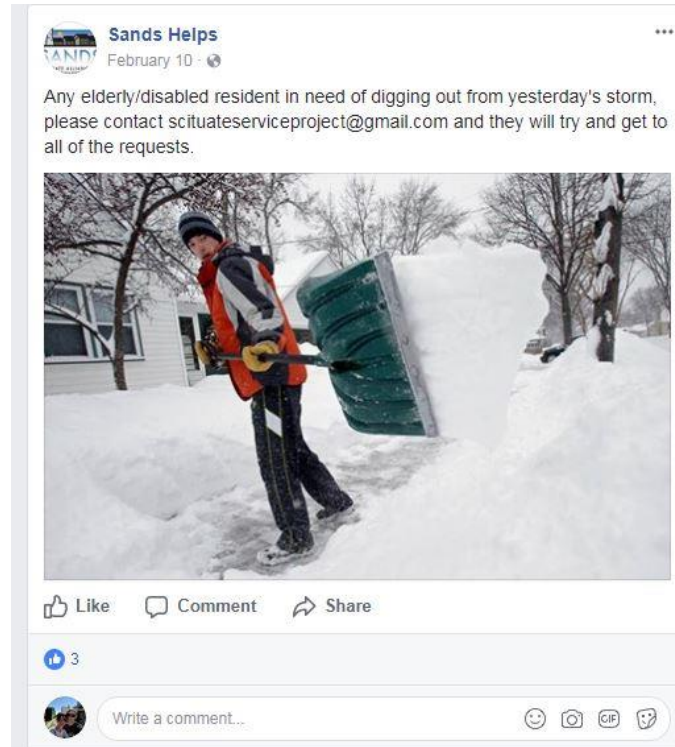
# Case Study II-Cultural Equity in Climate Planning: Climate and Cultural Resilience in a Coastal City

- 24% of population is Asian
- 5% of population has limited English proficiency
- Two major rivers, two major brooks, and 27 miles of coastline
- Coastal neighborhood with greatest population people of color and low income  
QARI-working in partnership with grassroots organization
- Chinese Mid-Autumn Festival-engagement opportunity



# Case Study III- Good Planning to Good Implementation- Seniors in a Coastal Suburb.

- 17% population is seniors.
- Most live in area at high risk to coastal flooding and extreme heat.
- After Blizzard of 2013, town hired Social Worker for the Council on Aging and Coastal Resilience Officer; Planning began.
- SANDS- MA First COAD, access to seniors through COA.



Reference: "Enhancing the Resilience of Vulnerable Groups Through Participatory Climate Change Adaptation Planning: A Case Study with the Elderly Community of Bridgeport, CT" Jason L. Rhoades, Antioch University .  
<https://aura.antioch.edu/etds/285/>



# Resources

## Data and Mapping

- Massachusetts Environmental Public Health Tracking (Climate Change): <https://matracking.ehs.state.ma.us/Climate-Change/index.html>
- Housing.MA - The Massachusetts Housing Data Portal: <http://www.housing.ma/>
- Community Health Needs Assessments: <https://www.mapc.org/resource-library/community-health-needs-assessments-in-the-mapc-region/>
- Indicator Sites (e.g., Impact Essex County, MAPC Regional Indicators: <http://www.regionalindicators.org/>)

## References and Guides

- Community-Driven Climate Resilience Planning: A Framework: <http://www.adaptationclearinghouse.org/resources/community-driven-climate-resilience-planning-a-framework-2017.html>
- The Impacts of Climate Change on Human Health in the United States - A Scientific Assessment: <https://health2016.globalchange.gov/>
- Social Equity: <https://toolkit.climate.gov/topics/built-environment/social-equity>



# Questions?



Photo Credit: Renato Castelo

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