



# Resilience and Equity

Climate Action Champions

July 9, 2015

# Agenda

## **Brief Introductions**

Linda Silverman, Department of Energy & Sunaree Marshall, US Department of Housing and Urban Development

## **Incorporating Equity in Climate Adaptation Planning and Implementation in the Boston region**

[Cammy Peterson](#), Manager, Clean Energy, Metropolitan Area Planning Council

## **Overview of Equity and Climate Resilience issues and approaches**

[Sarita Turner](#), Associate Director, PolicyLink

## **Overview of Public Health and Climate Resilience issues and approaches**

[John Balbus](#), Senior Advisor for Public Health, National Institute of Environmental Health Sciences, US Department of Health and Human Services

## **Additional Resources on the topic**

Sunaree Marshall

## **Discussion / Q&A with Climate Action Champions**

Moderator: Sunaree Marshall,

Additional Contributors:

Marsha Minter, Interagency Working Group on Environmental Justice Program Manager, EPA;

Sandra Howard, Senior Environmental Health Advisor, HHS;

Melinda Downing, Environmental Justice Program Manager, DOE;

Linda Belton, Policy Advisor for Intergovernmental Affairs and Tribal Liaison, NOAA ·



# **Presentations**

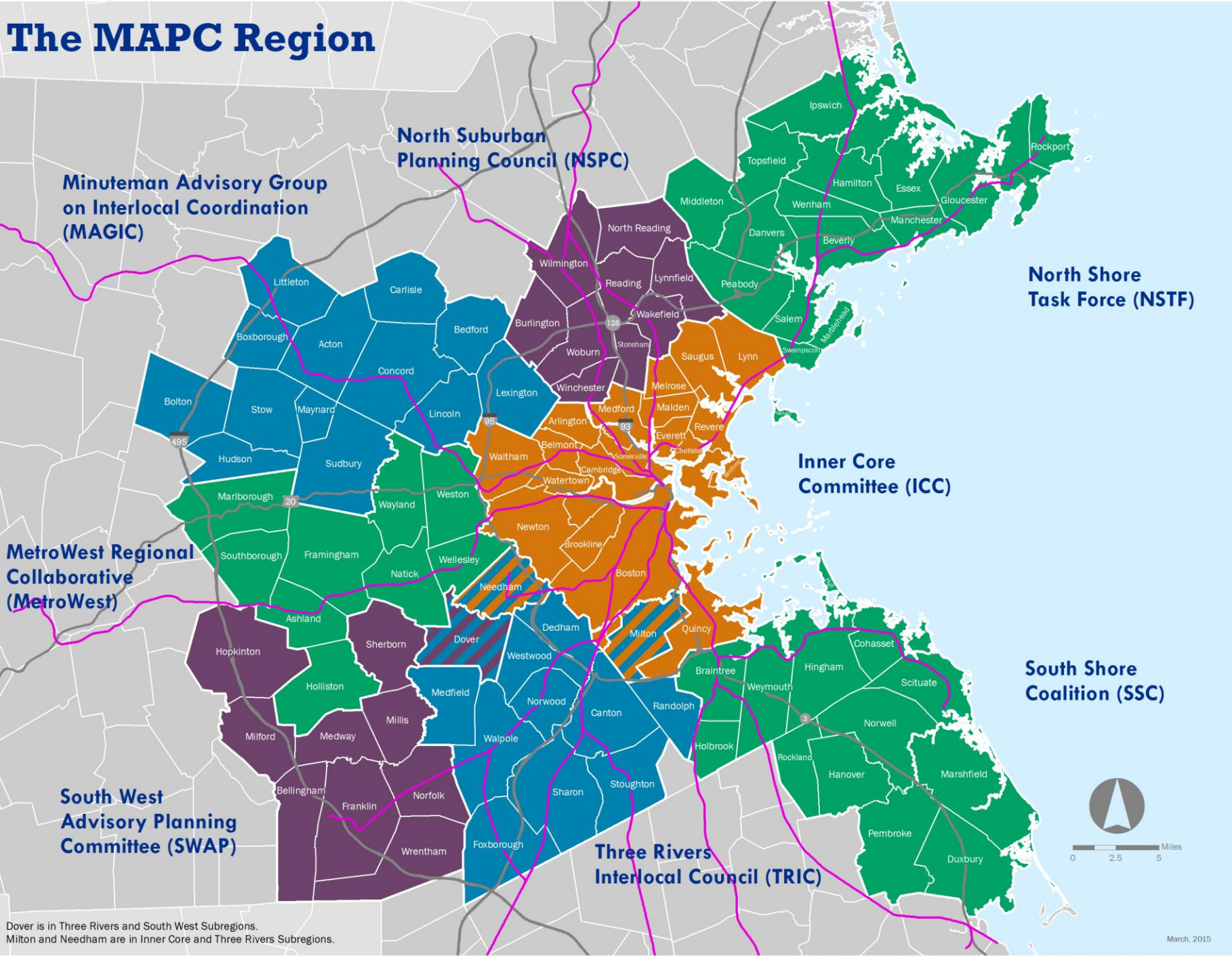


METROPOLITAN AREA PLANNING COUNCIL  
CAMMY PETERSON, MANAGER OF CLEAN ENERGY

## **Incorporating Equity in Climate Adaptation Planning and Implementation**

July 9, 2015

# The MAPC Region

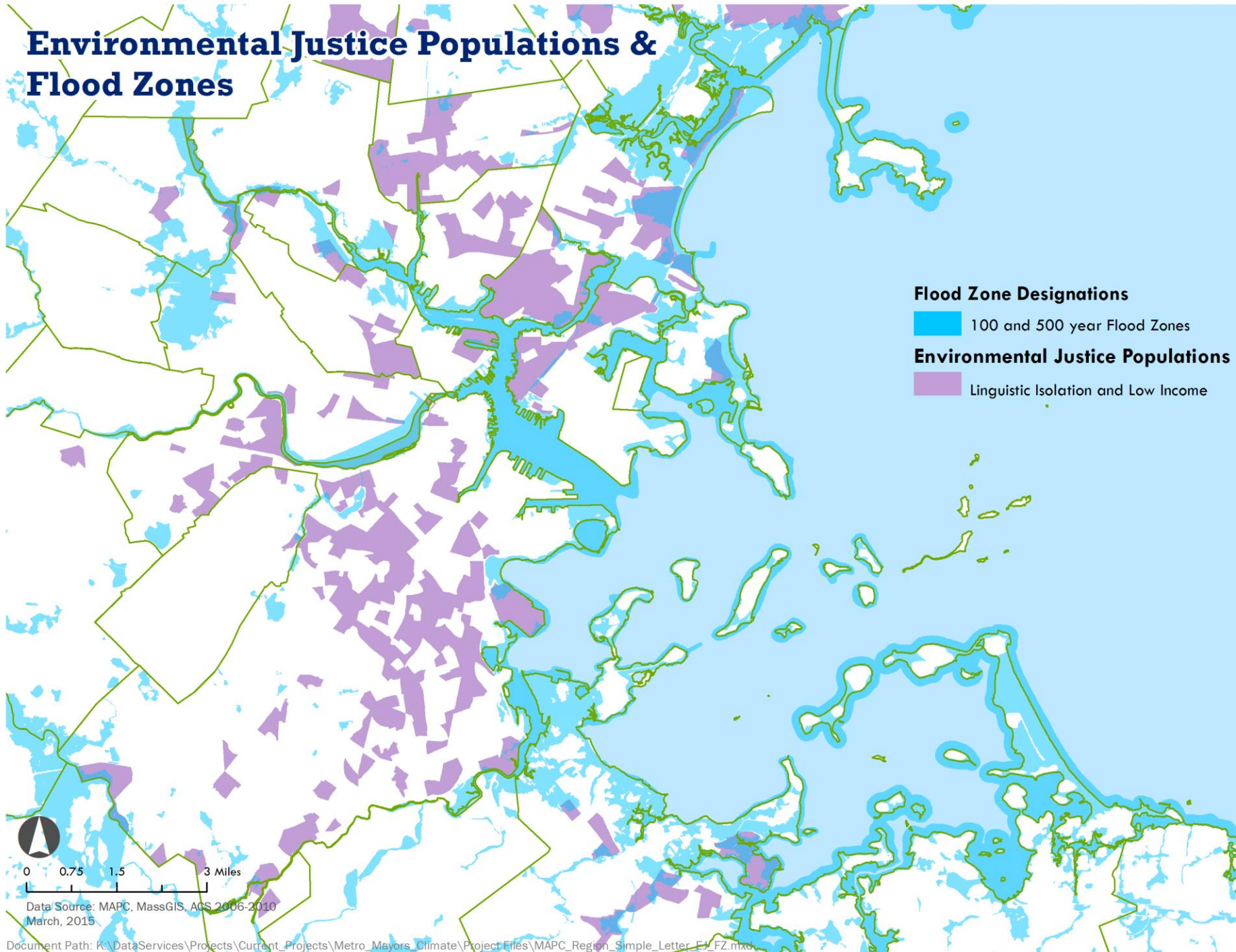


- 101 municipalities
- 1,440 square miles
- Nearly 3.2 million residents
- 1.8 million jobs (2010 Census)
- HUD Sustainable Communities grant recipient

Dover is in Three Rivers and South West Subregions.  
Milton and Needham are in Inner Core and Three Rivers Subregions.



# Environmental Justice Populations & Flood Zones



# PROSPERITY IN METRO BOSTON

Measuring Progress Toward Equitable and Resilient Economic Growth



[www.regionalindicators.org](http://www.regionalindicators.org)



Winter 2015

Boston, Massachusetts Annual total snowfall to date: **110.3"**

(Boston Globe, 3/22/15)



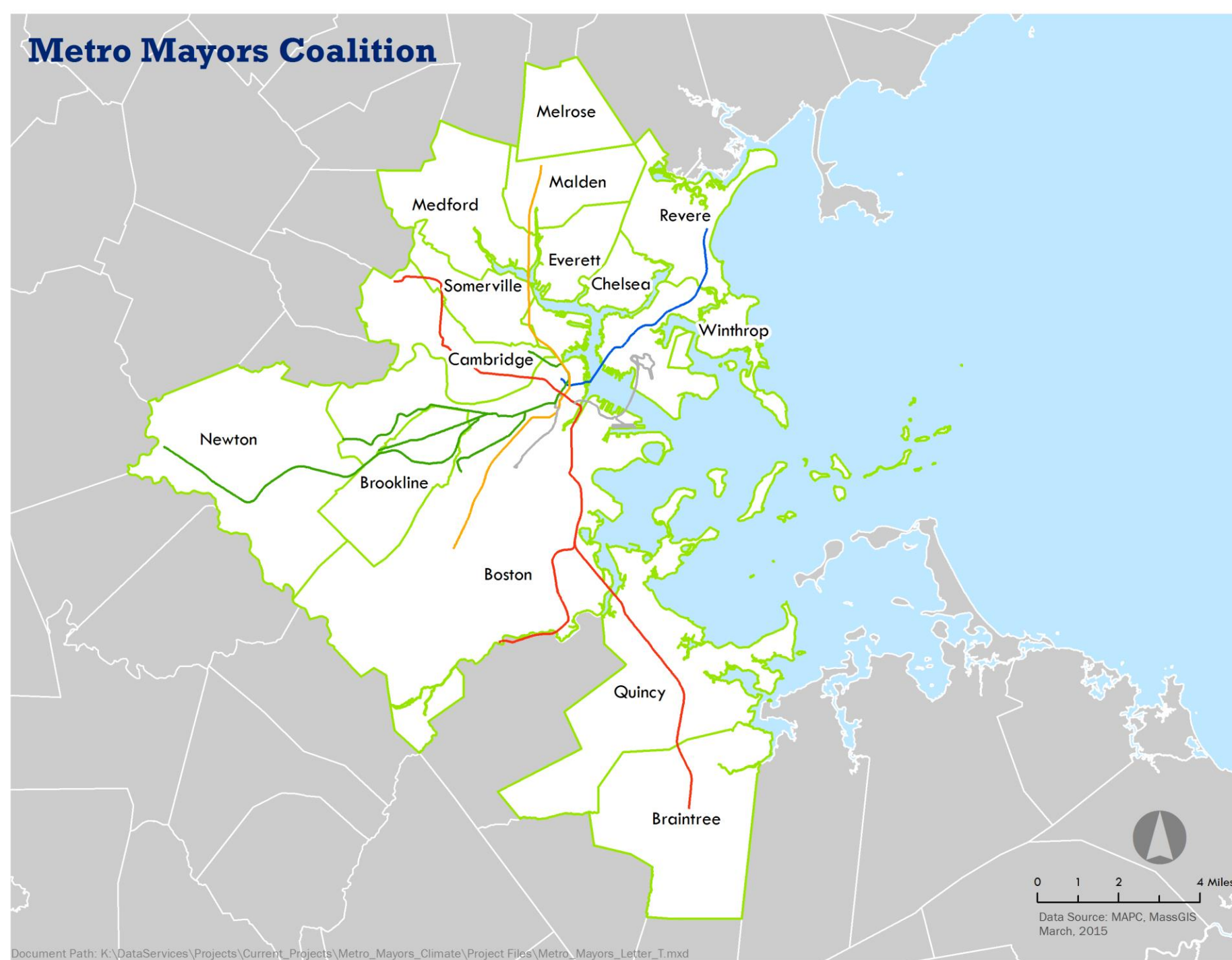


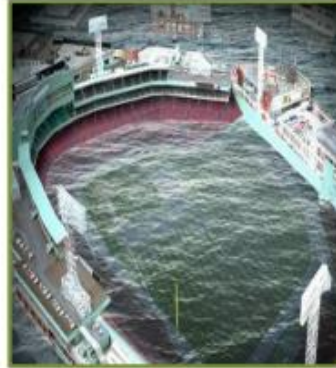
# Metro Mayors Coalition



## Metro Mayors Region:

- 14 Municipalities
- Population:  
Nearly 1.4 million (2010 Census);  
43% of the MAPC region population
- Land Area:  
Approximately 150 square miles,  
roughly 10% of the MAPC region land  
area





# **Metro Boston Regional Climate Change Adaptation Strategy Report**

Funding provided by the Federal  
Sustainable Communities  
Program and the Barr Foundation

**Revised March 5, 2015**

**By:**

Metropolitan Area Planning  
Council  
60 Temple Place  
Boston, MA 02111  
617.933.0700  
[www.mapc.org](http://www.mapc.org)

With assistance from:  
Tellus Institute  
11 Arlington St.  
Boston, MA 02116





MAPC

**citiesGOgreen**

over **56**

Communities engaged on  
clean energy planning and  
projects

**104**

efficiency and renewable  
clean energy projects



**Solar**

16,000 annual  
GHG Avoidance  
320,000 lifetime  
GHG Avoidance\*



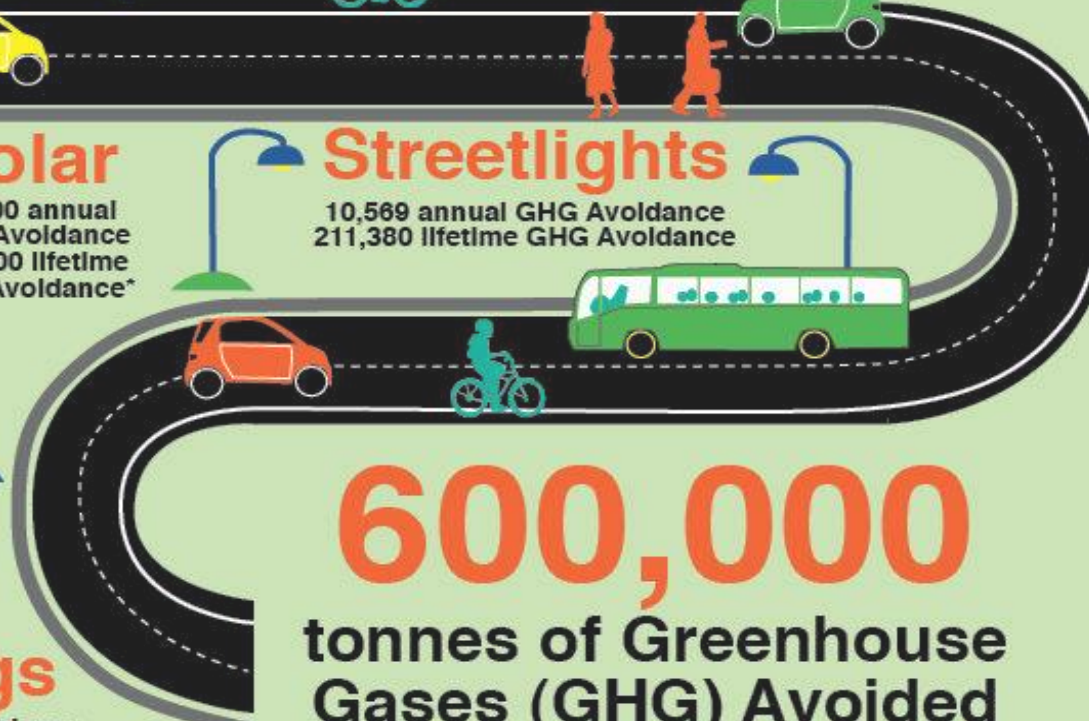
**Streetlights**

10,569 annual GHG Avoidance  
211,380 lifetime GHG Avoidance



**City  
Buildings**

2,028 annual GHG Avoidance  
40,559 lifetime GHG Avoidance



**600,000**  
tonnes of Greenhouse  
Gases (GHG) Avoided

\*These GHG numbers are the potential avoided—they have not yet been built.



# Climate Smart Cities: Metro Boston



# COMMUNITY ENGAGEMENT STRATEGY CHART

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



Metropolitan Area Planning Council – 60 Temple PL Boston MA – [www.mapc.org](http://www.mapc.org)  
[Based on the Midwest Academy Strategy Chart for Organizers]

## 1. Purpose of Engagement

### Constituent Engagement

Ask yourself these questions, they will help you define the engagement strategy. Be specific!

- 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, engage, or empower?



## 2. Stakeholders

Know the community. Who will be directly or indirectly impacted by the outcomes of the project? (Think: community groups, residents, business owners, committees, etc.)

Create a list of stakeholders. Examine demographic and socioeconomic data.

*Is anyone being left out of the process?*

Things to consider:

- Are people already organized?
- Are there any language barriers?
- Is the project contentious?
- Is there government mistrust?
- Is there education that needs to be done on a particular topic?



## 3. Resources & Scale of Engagement

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

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



Based on steps 1, 2, and 3, select the projects Scale of Engagement:

- **Broad:** Most opinions are taken into account for the outcomes of the project.
- **Moderate:** Some stakeholders' opinions are taken into account.
- **Limited:** Almost no public input during the planning process.

## 4. Messaging

A) **Appeal to people's self interest.** What is in it for them? Why should they care?  
*\*Best practice: talk to community leaders to find out community interests and concerns in advance.*

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

C) **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?

## 5. Approach

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

**To Inform:**

- Fact sheets
- Websites/flyers
- Powerpoints

**To Engage:**

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

**To Empower:**

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

**Your approach must be:**

- In context and make sense to your audience
- Directed at a specific constituency
- Flexible and creative

For more information, connect with our  
Clean Energy or Environment Divisions at

<http://www.mapc.org/clean-energy>

or

<http://www.mapc.org/environment>.

Thank you.



**METROPOLITAN AREA PLANNING COUNCIL**

Cammy Peterson, Manager of Clean Energy  
cpeterson@mapc.org

**Incorporating Equity in Climate  
Adaptation Planning and  
Implementation**

July 9, 2015



# HUD Climate Action Champions Webinar

## Planning for Climate and Resilience by Advancing Equity

July 9, 2015

Sarita Turner

PolicyLink

Sarita@policylink.org



PolicyLink is a research and action institute dedicated to fostering equitable communities of opportunity by *lifting up what works*.

## Equity Is

- Equity is just and fair inclusion into a society in which all can participate, prosper, and reach their full potential.

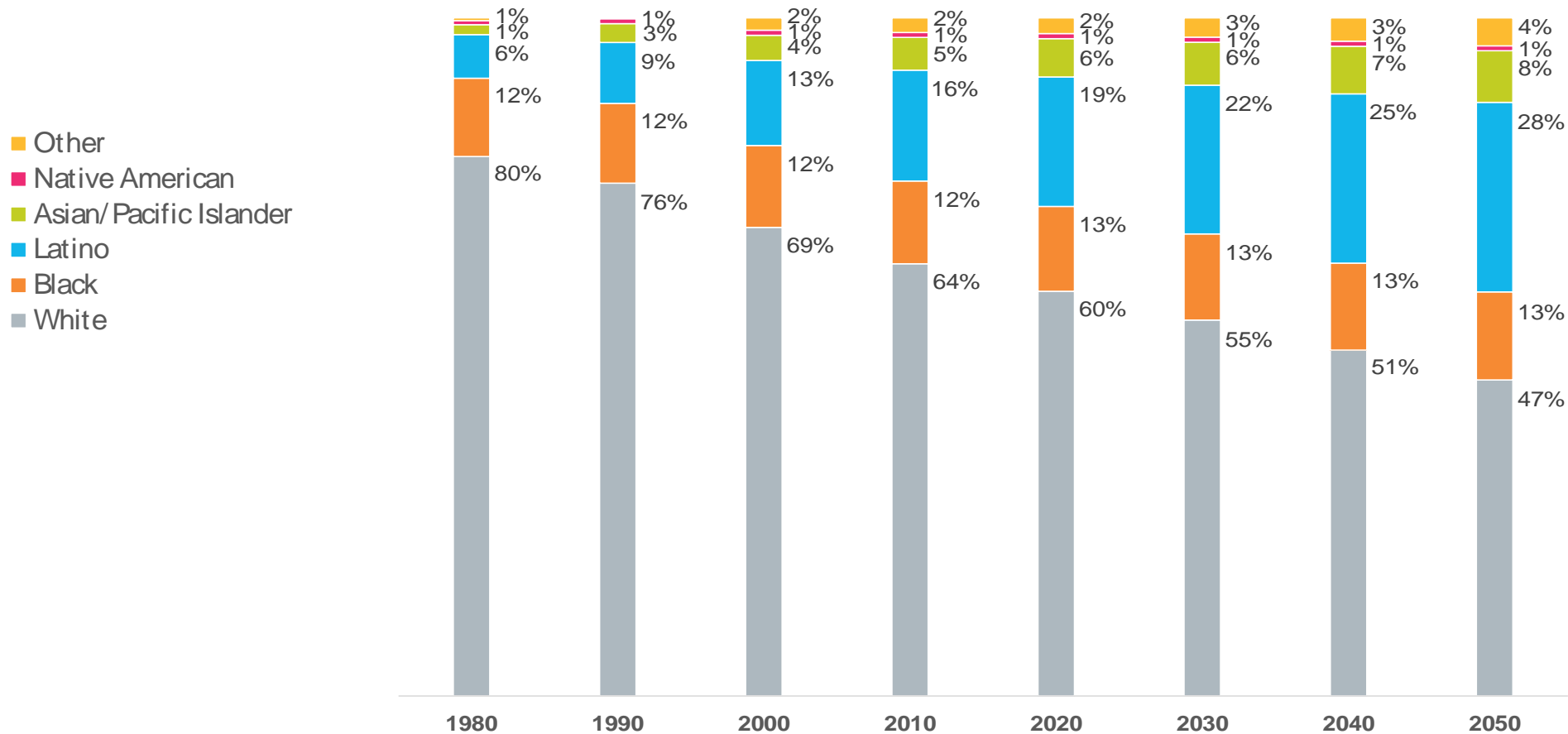
## Equity Means

- Addressing equity in climate change means ensuring the most vulnerable *people, places, and systems* are strengthened and have the capacity and resilience to withstand climate change impacts



# Equity a Critical Component of Climate Planning and Implementation

American will be Majority People-of-Color Nation by 2043

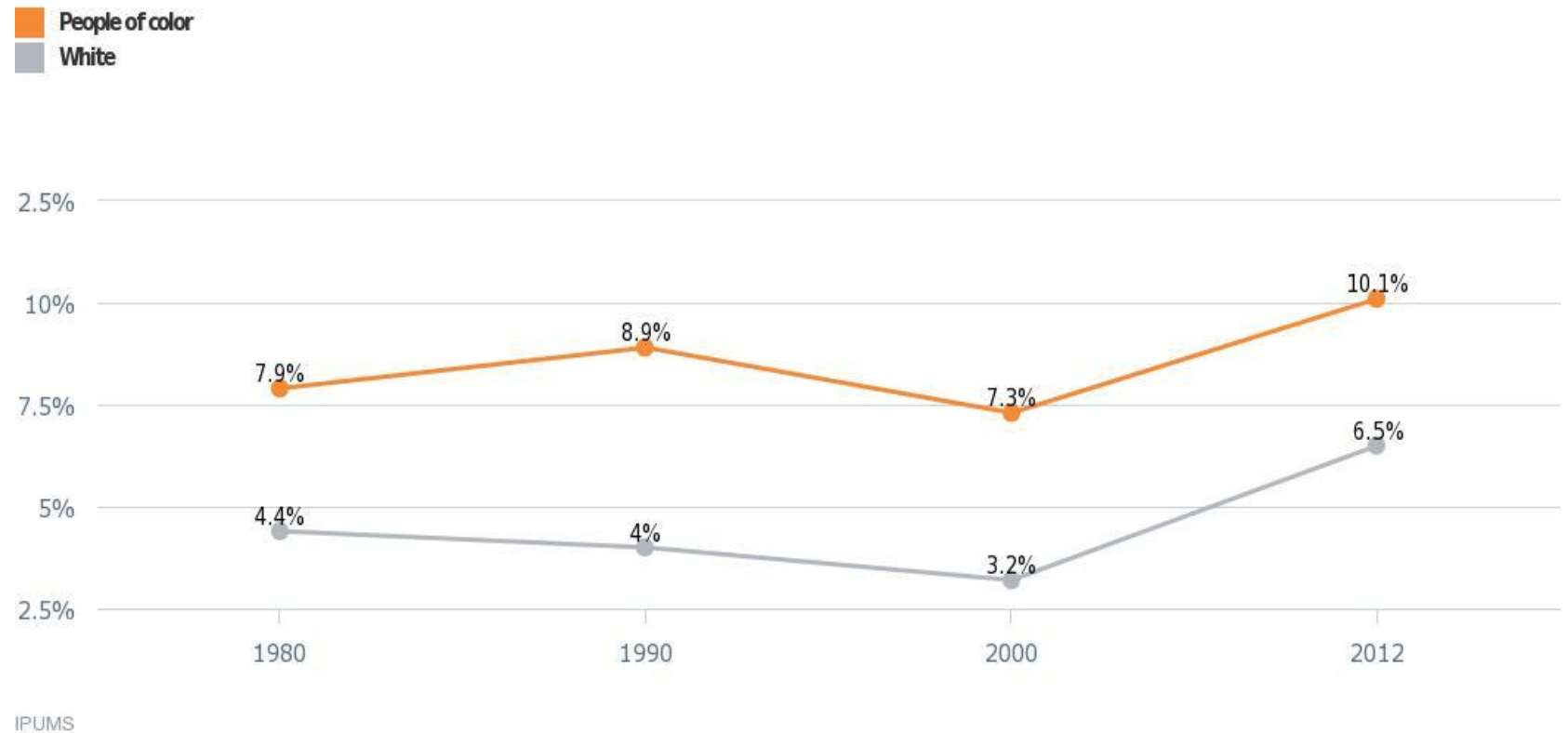


Source: 1980-2010 decennial censuses; U.S. Census Bureau, 2012 National Population Projections.

# Equity a Critical Component of Climate Planning and Implementation

## People of Color are Suffering the Most Economically

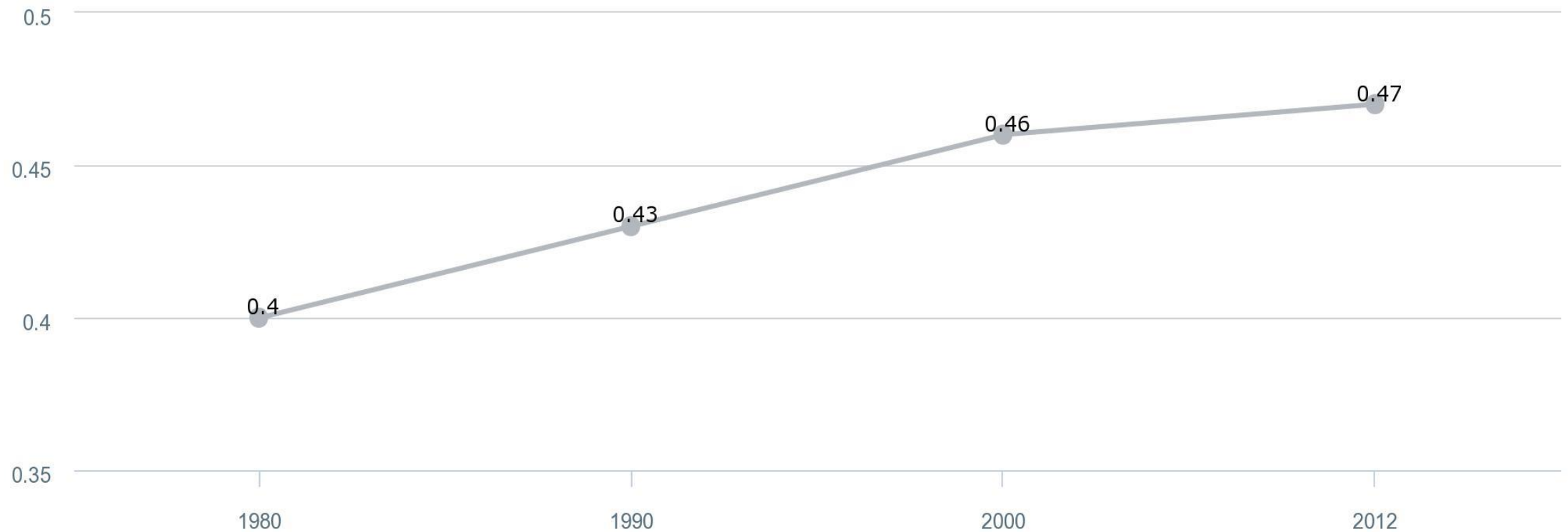
Unemployment Rate by Race,  
1980-2012, United States



United States: In 2012, the average unemployment rate for people of color was 3.6 percentage points higher than the average unemployment for whites

# Equity a Critical Component of Climate Planning and Implementation

## Gini coefficient: United States, 1980–2012



IPUMS

PolicyLink/PERE National Equity Atlas, [www.nationalequityatlas.org](http://www.nationalequityatlas.org)

United States: The Gini coefficient in 2012 was 0.47 compared with 0.4 in 1980



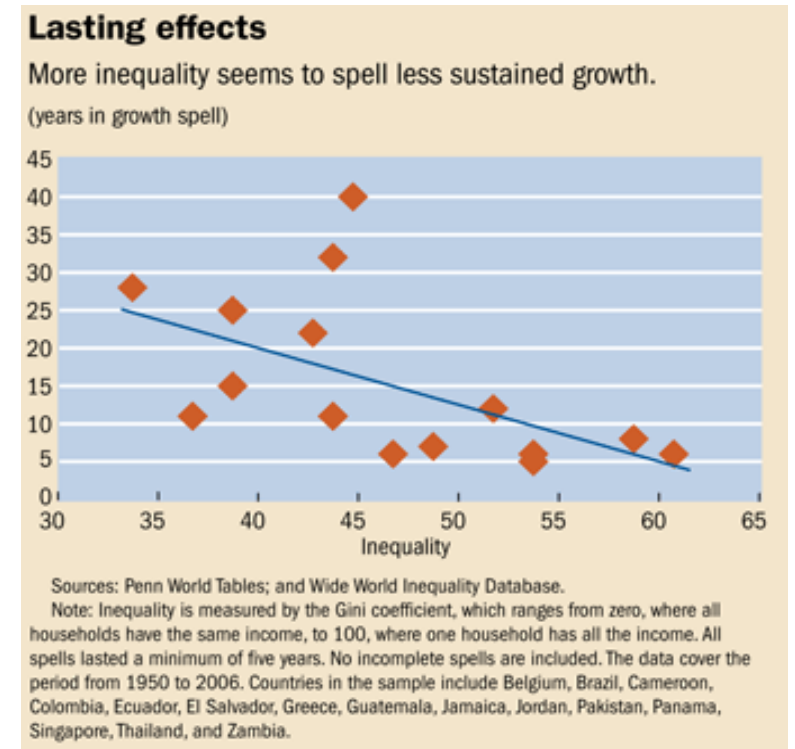
# Why is Equity a Critical Component of Climate Planning and Implementation

- Inequality creates economic vulnerability
- Economic vulnerability weakens our ability to respond to the impacts of climate change

According to the IMF, lower inequality results in faster and more sustained economic growth.

- A [2011 study](#) analyzed over 100 countries and found that every 10 percent increase in income inequality increased the length of a country's growth cycle by 50 percent.
- A [2014 study](#) found lower inequality is correlated with faster economic growth.

Source: Andrew Berg & Jonathan Ostry, International Monetary Fund



# Equity a Critical Component of Climate Planning and Implementation

There is a growing consensus that inequality has a negative impact on growth.

**Income inequality hurts economic growth, researchers say**



Income Inequality May Take Toll on Growth

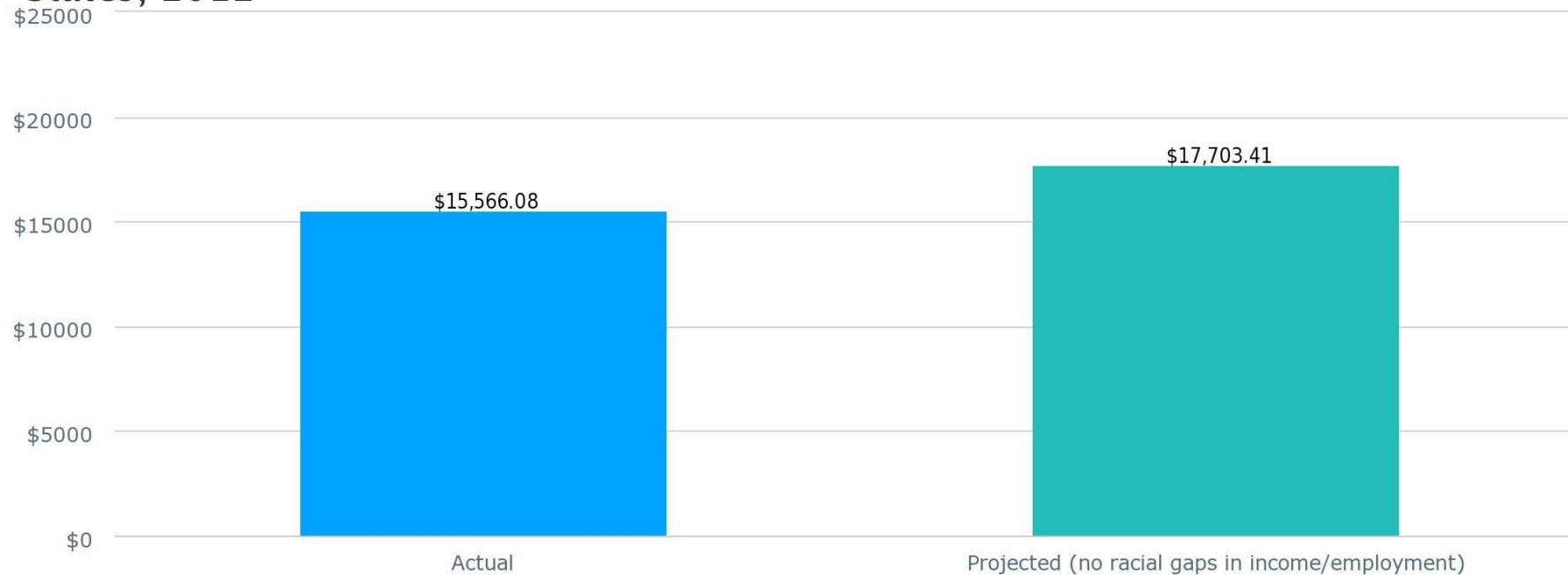
IMF study finds inequality is damaging to economic growth

"This inequality is destabilizing and undermines the ability of the economy to grow sustainably and efficiently," she said. Income inequality, she continued, "is "anathema to the social progress that is part and parcel of such growth."

“How  
Increasing  
Income  
Inequality Is  
Dampening  
U.S. Economic  
Growth”

# Equity a Critical Component of Climate Planning and Implementation

Actual GDP and estimated GDP with racial equity in income (billions): United States, 2012



Bureau of Economic Analysis; IPUMS  
PolicyLink/PERE National Equity Atlas, [www.nationalequityatlas.org](http://www.nationalequityatlas.org)

United States: In 2012, the economy would have been \$2,137.33 billion larger if there had been no racial gaps in income.

# Incorporating Equity in Climate Change and Implementation

- **Utilize data** to identify most vulnerable communities (disaggregate by race, income, housing tenure, unemployment, disability, transit dependence)
- **Engage communities of color and low income residents and other vulnerable populations** - through trusted partners (CBOs, faith orgs, cultural orgs, health, housing and food systems)
- **Inclusive governance** structures and processes to not only engage communities, but include community leaders in decision-making
- **Place-based investments and economic development** targeted to most vulnerable communities
- **Economic inclusion** in all strategies – jobs, contracting and procurement, equitable development
- **Build community capacity and deliver on outcomes** – education, experiential learning, inclusion



# National Equity Atlas



PolicyLink

About the Atlas

Data Summaries

Indicators

Reports

Data in Action

Search



## Indicators

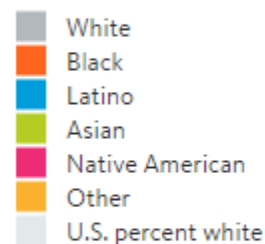
Select an Indicator: [Demographics](#) [Equity](#) [Economic Benefits](#)

Enter a region or state.

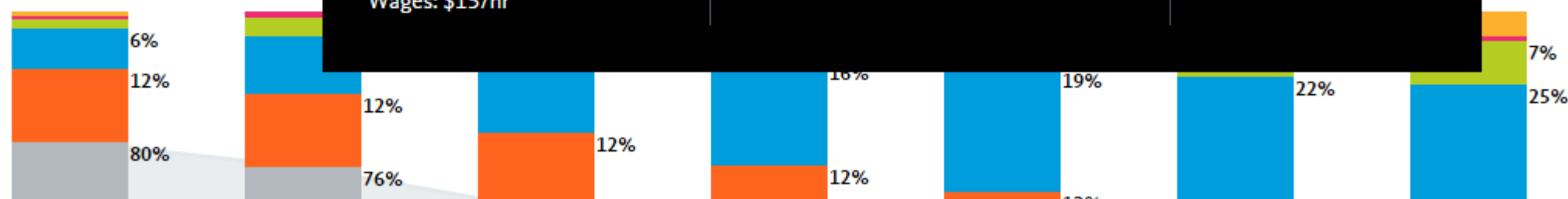


Race/ethnicity United States

Racial/ethnic composition: United States



1980-2040



### Economic Vitality

Wages: Median  
 Income inequality: Gini  
 Job and GDP growth  
 Job and wage growth  
 Income growth  
 Unemployment  
 Homeownership  
 Income inequality: 95/20 ratio  
 Wages: \$15/hr

### Readiness

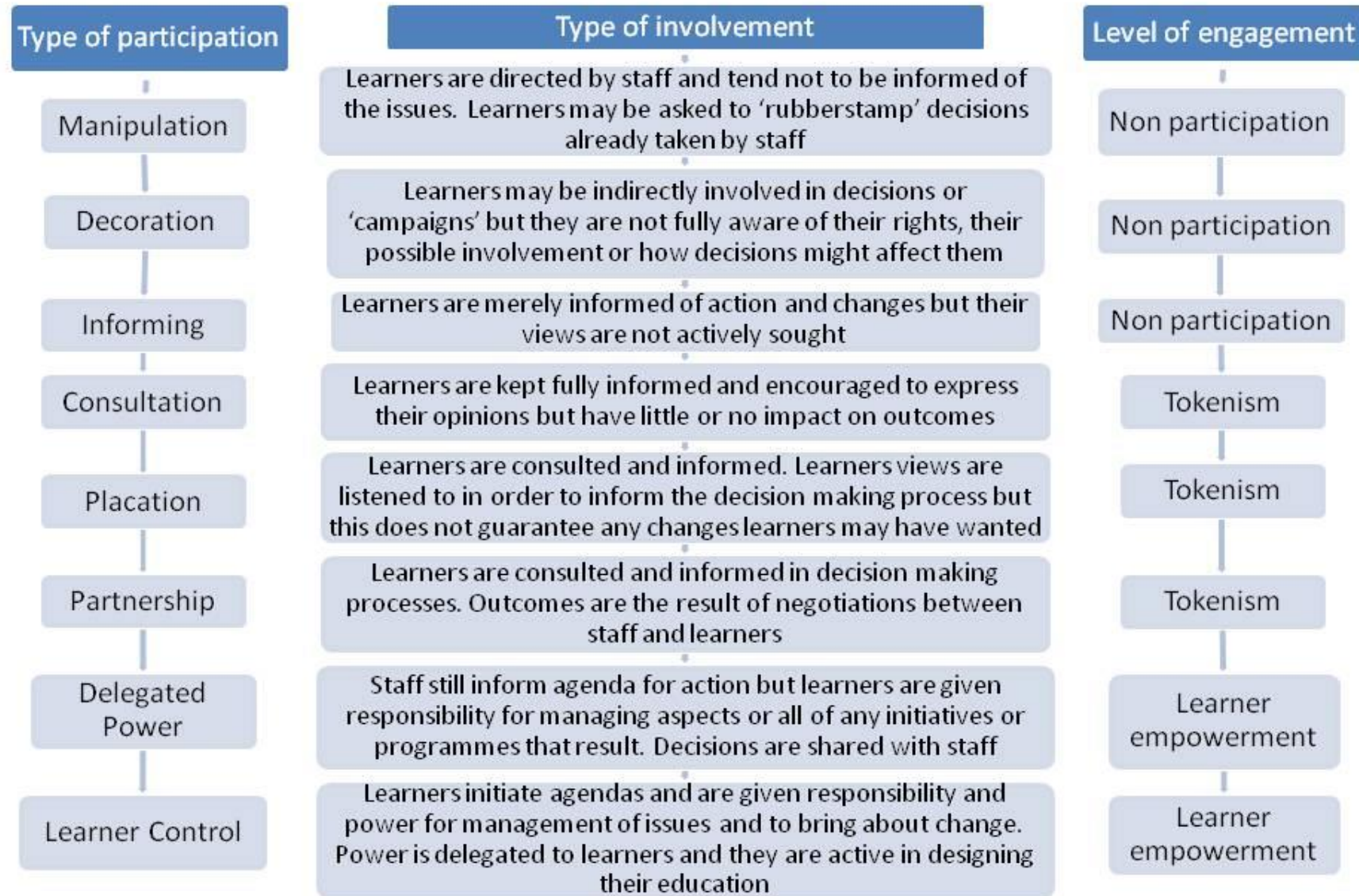
Education levels and job requirements  
 Disconnected youth  
 Overweight and obese

### Connectedness

Housing burden  
 Neighborhood poverty  
 Car access

# Engagement, Governance, Decision-Making

## 'LADDER' OF PARTICIPATION



# Engagement, Governance, Decision-Making

## King County Model for Community Engagement

Levels of Community Engagement				
We inform	We consult	We engage in dialogue	We and community work together	Community directs action
Characteristics of Engagement				
<ul style="list-style-type: none"> <li>Primarily one-way channel of communication</li> <li>One interaction</li> <li>Term-limited to event</li> <li>Addresses immediate need of county and community</li> </ul>	<ul style="list-style-type: none"> <li>Primarily one-way channel of communication</li> <li>One to multiple interactions</li> <li>Short to medium-term</li> <li>Shapes and informs county programs</li> </ul>	<ul style="list-style-type: none"> <li>Two-way channel of communication</li> <li>Multiple interactions</li> <li>Medium to long-term</li> <li>Advancement of solutions to complex problems</li> </ul>	<ul style="list-style-type: none"> <li>Two-way channel of communication</li> <li>Multiple interactions</li> <li>Medium to long-term</li> <li>Advancement of solutions to complex problems</li> </ul>	<ul style="list-style-type: none"> <li>Two-way channel of communication</li> <li>Multiple interactions</li> <li>Medium to long-term</li> <li>Advancement of solutions to complex problems</li> </ul>
Strategies				
Media releases, brochures, pamphlets, outreach to vulnerable populations, ethnic media contacts, translated information, staff outreach to residents, new and social media	Focus groups, interviews, community surveys	Forums, advisory boards, stakeholder involvement, coalitions, policy development and advocacy, including legislative briefings and testimony, workshops, community-wide events	Co-led community meetings, advisory boards, coalitions, and partnerships, policy development and advocacy, including legislative briefings and testimony	Community-led planning efforts, community-hosted forums, collaborative partnerships, coalitions, policy development and advocacy including legislative briefings and testimony



# Resiliency Outcomes in Place-Based Strategies

Investments, Economic  
Development, Capacity building





**Target adaptations to  
low income households  
and underinvested  
communities**





# Link with schools to train youth of color in climate and resiliency jobs of the future

Photo Credit: Verde, Living Cully





# Target high unemployment populations for jobs in resiliency



- Retrofit municipal buildings, affordable housing for energy efficiency
- Address storm water and rising sea levels through natural barriers
- Upgrade building systems to be out of harm's way



# Contract with people and firms of color to plan, design and build neighborhood resiliency

## Living Cully Partnership

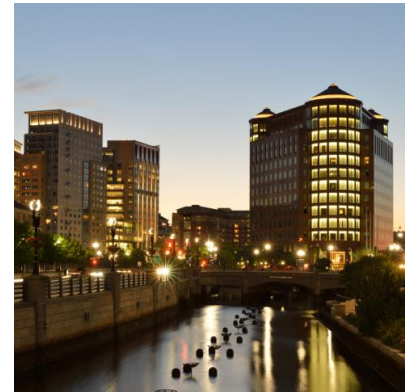
- -Transforms a Portland neighborhood landfill into a community park
- -Utilizes social enterprise and people of color firms for the work





# Foster Structural Changes in Government

- The Rhode Island Statewide Planning Program developed an Equity Profile
- Governor enacted an Executive Order on Diversity
  - Goal of increasing government job and contracting opportunities for people of color
  - Directs government agencies and departments to develop recommendations and strategies to increase hiring of people of color and contracting with minority businesses



# Structure competitive grants to pilot projects in underserved communities



## MAPC grants to Equity Projects in Sustainable Communities Initiative

- **Applicant:** Vietnamese American Initiative for Development, Inc. (Viet-AID)  
**Activity Type:** CDC Pre-Development Planning  
**Geography:** Fields Corner Neighborhood in Boston  
**Project Partners:** Greater Four Corners Action Coalition; Dorchester House; City of Boston  
**Funding Approved:** \$60,000



# NOLA: Created equity imperative

Lifting Up What Works  
**PolicyLink**

  
LOUISIANA DISASTER RECOVERY FOUNDATION  
*Louisiana's Fund for Louisiana's People*



**Delivering Equitable Development to a Recovering Louisiana:**  
A State Policy Guide for 2008 and Beyond

by Dominique Duval-Diop and Kalima Rose

**Bringing Louisiana Renters Home**  
An Evaluation of the 2006-2007 Gulf Opportunity  
Zone Rental Housing Restoration Program



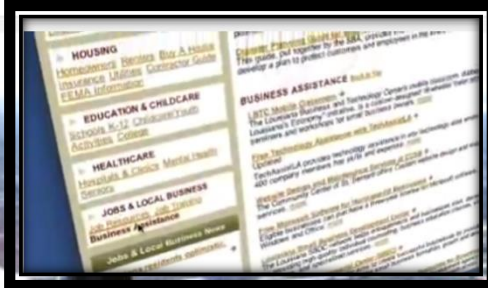
Issue Brief: Building a Better New Orleans  
**HOPE NEEDS HELP**

AUGUST 2007

## Equity Atlas

A Long Way Home: The State of Housing Recovery in Louisiana 2008

Home Executive Summary Rental Homeowner Methodology



**Deborah Cotton**  
Editor, LouisianaREBUILDS.info



# Deliver on Equity Outcomes



- Increased resources to African American households and neighborhoods
- Directed rental housing resources to communities with greatest loss
- Won Fair Housing cases to allow housing choice
- Built policy capacity of diverse neighborhoods, city leaders
- Implemented integration of people with disabilities
- Greened the recovery through policy and practice
- Made neighborhoods safer



# **Equity is: Community and Economic Inclusion in Climate Planning and Implementation**

- Community engagement and inclusive governance
- Sector and workforce development strategies aimed at good jobs
- Erase barriers and expand opportunities
- Building on assets and anchors
- No subsidies without accountability and clear policy goals
- Diversity in entrepreneurship, contracting and procurement

# Equity Summit 2015: All in for inclusion, justice, and prosperity

**PolicyLink**

Lifting Up What Works®



- Equity 2015:The National Summit
- October 27-29, 2015
- Los Angeles, California
- **Register Now!** [www.PolicyLink.org](http://www.PolicyLink.org)



# Thank You!

**Sarita Turner, Associate Director, PolicyLink | [sarita@policylink.org](mailto:sarita@policylink.org)**



National Institute of Environmental Health Sciences  
*Your Environment. Your Health.*

# Climate Resilience and Public Health

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John Balbus, MD, MPH

Senior Advisor for Public Health

Director, NIEHS-WHO Collaborating Centre for Environmental Health Sciences

National Institute of Environmental Health Sciences

HUD Climate Action Champions Webinar

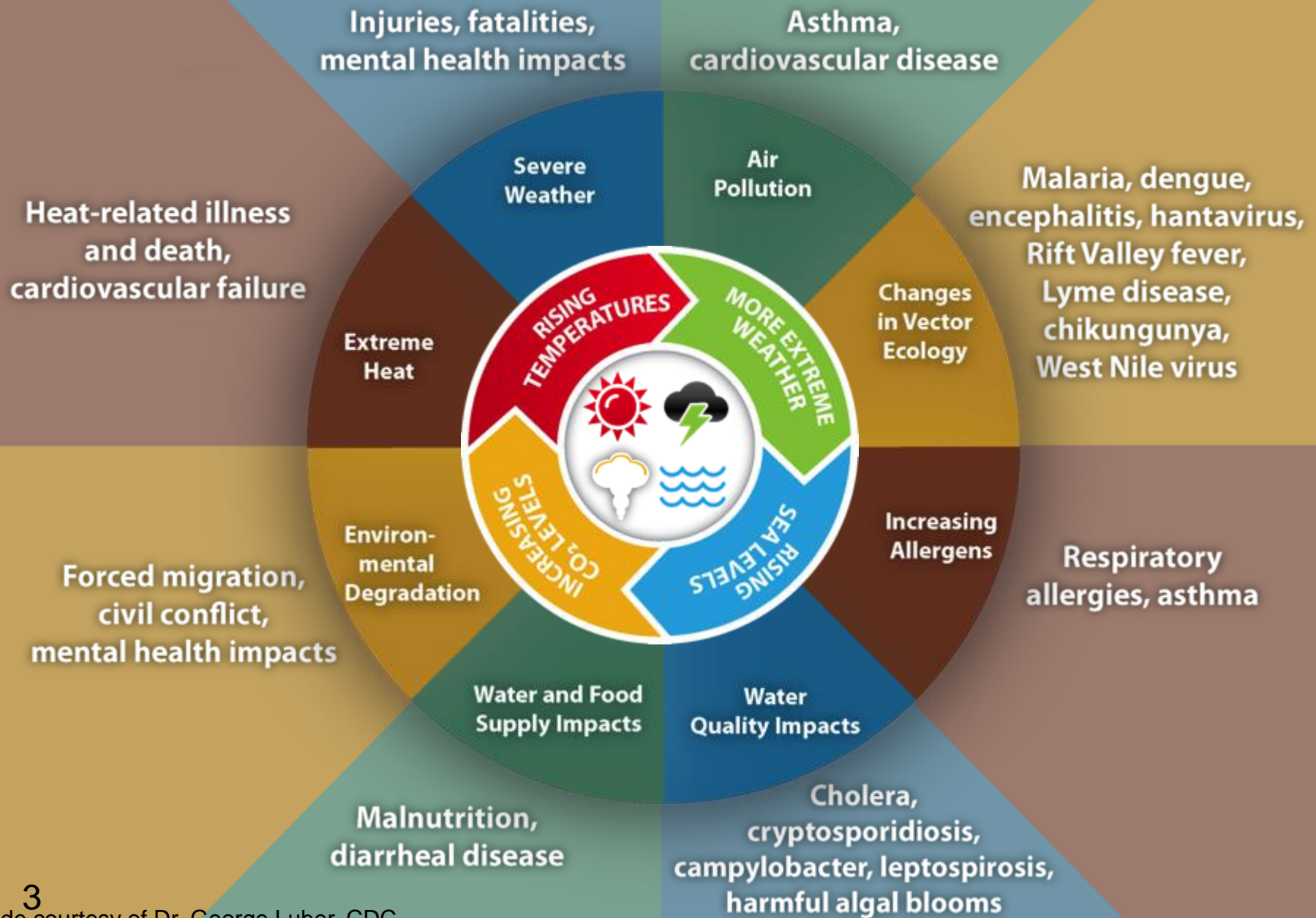
July 9, 2015



# Climate change: threats as well as opportunities



# Impact of Climate Change on Human Health

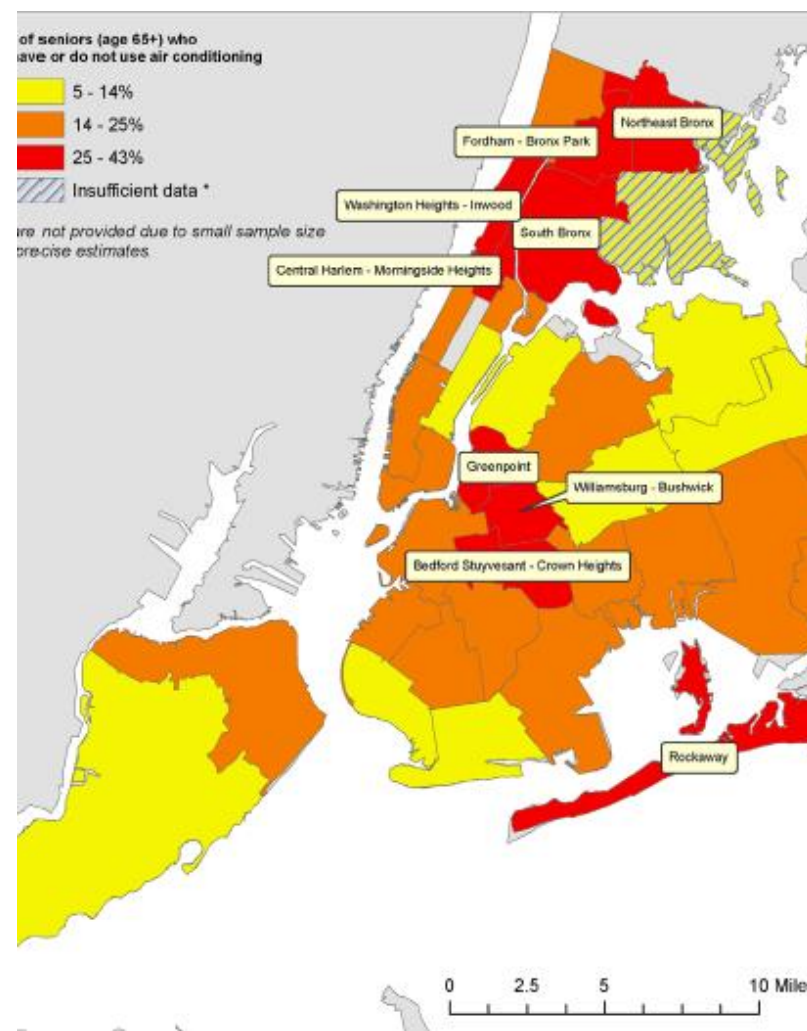
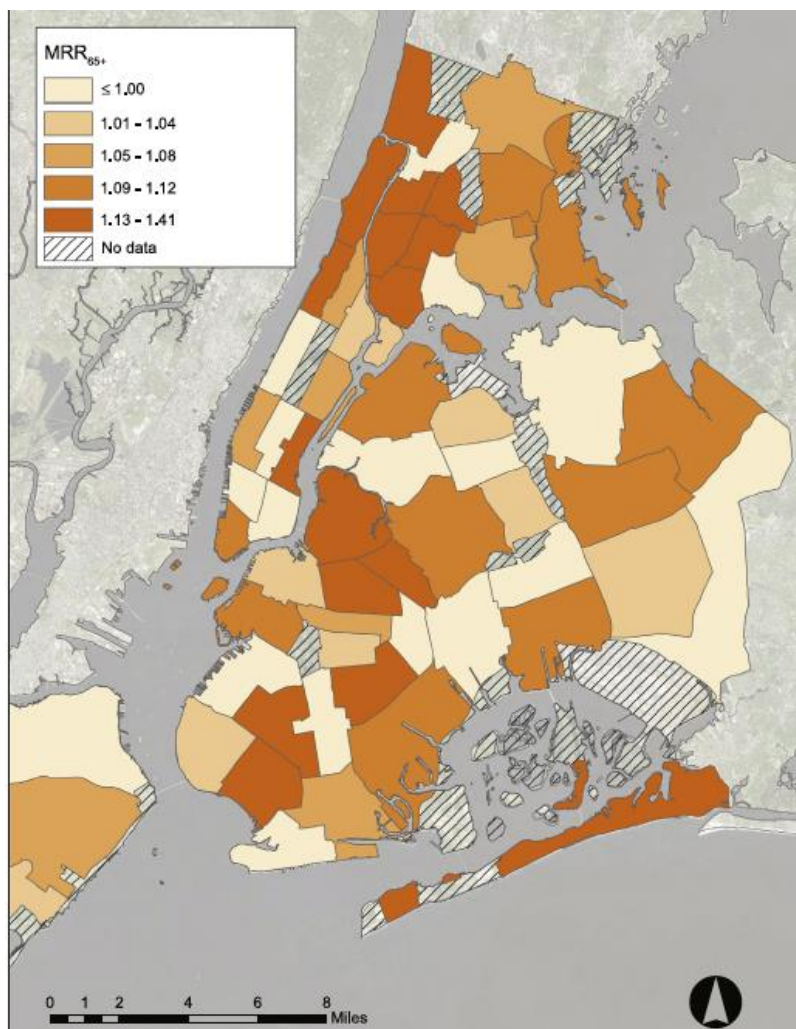




## Urban climate and health adaptation in IPCC's 5<sup>th</sup> Assessment Report

- Cities concentrate risks (e.g., heat islands, air pollution) but also concentrate resources for adaptation
- Climate change impacts on cities are tied to interactions with other stressors:
  - rapid population growth
  - political instability
  - poverty and inequality
  - aging or inadequate infrastructure.
- Urban governments are at the heart of urban adaptation
  - Need for capacity building, evidence base, connection to communities and higher levels of governance
- Urban climate adaptation provides opportunities for both incremental and transformative development
  - As well as co-benefits for mitigation (and health)

# Heat: mortality in NYC linked to lack of air conditioning





## National Public Health Week Focus for 2015: Climate Change

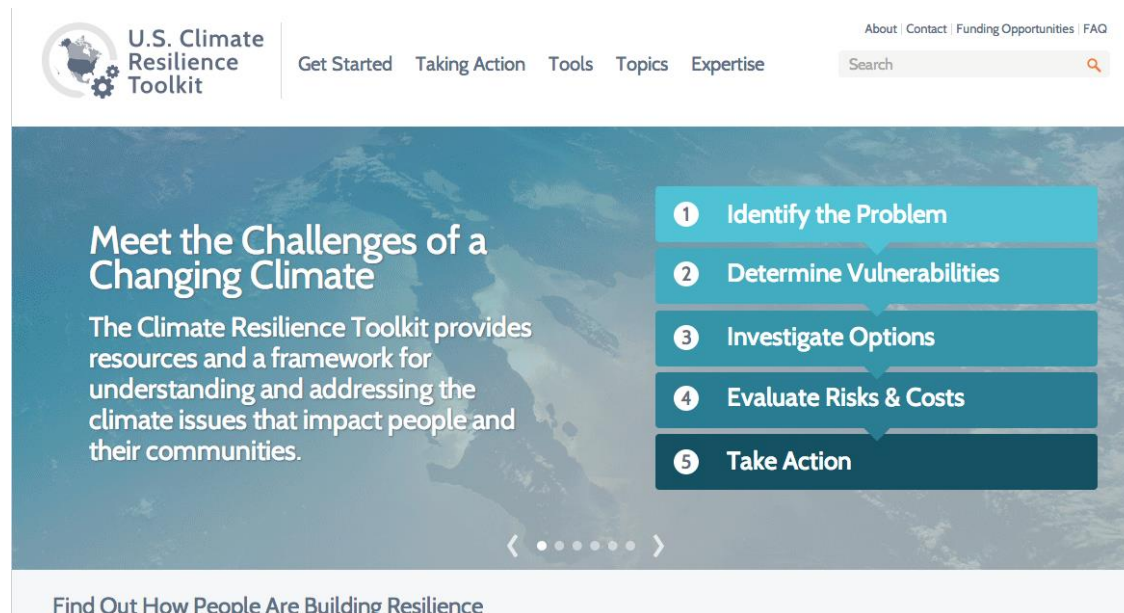
- Release of Draft Climate Health Assessment
- 20 health resilience tools on WH Climate Resilience website
- Sustainable and Climate Resilient Health Care Facilities Toolkit
- 150 health-related datasets on [climate.data.gov](http://climate.data.gov)
- 14 commitments from private sector, including Google, Microsoft, Esri, 427 Climate Solutions
- Roundtable and commitments: Deans of Medical, Nursing, Public Health Schools



*A “C” change....*

# The U.S. Climate Resilience Toolkit

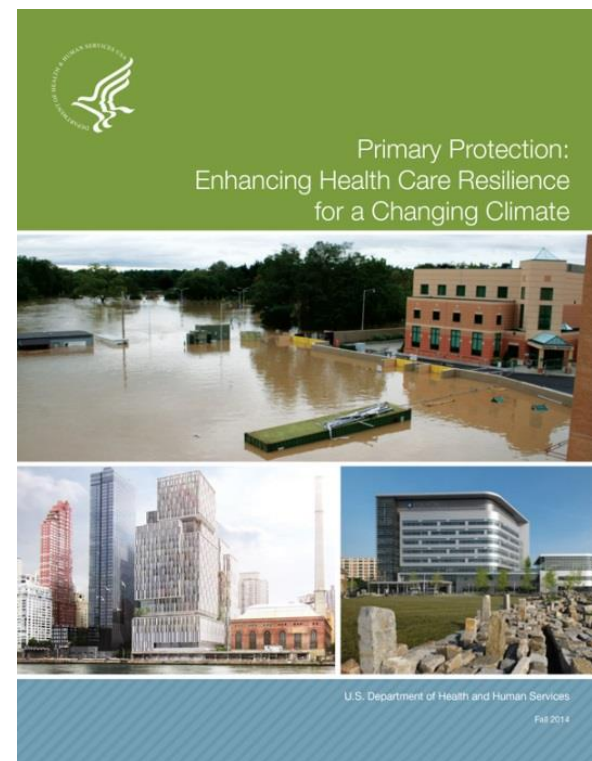
- Toolkit.climate.gov
- Health sector launched during National Public Health Week, now with 30 tools



- Organized by health topic (heat, infectious diseases, etc.)
- Selected tools highlighted for each health topic
- Continuous development

# Sustainable and Climate Resilient Health Care Facilities Initiative

- 3 Part Background “Guide”
- 5 Element Framework for Healthcare Facility Resilience
  - Checklists and resources
- Compendium of Resources
- Case Studies
- Bibliography





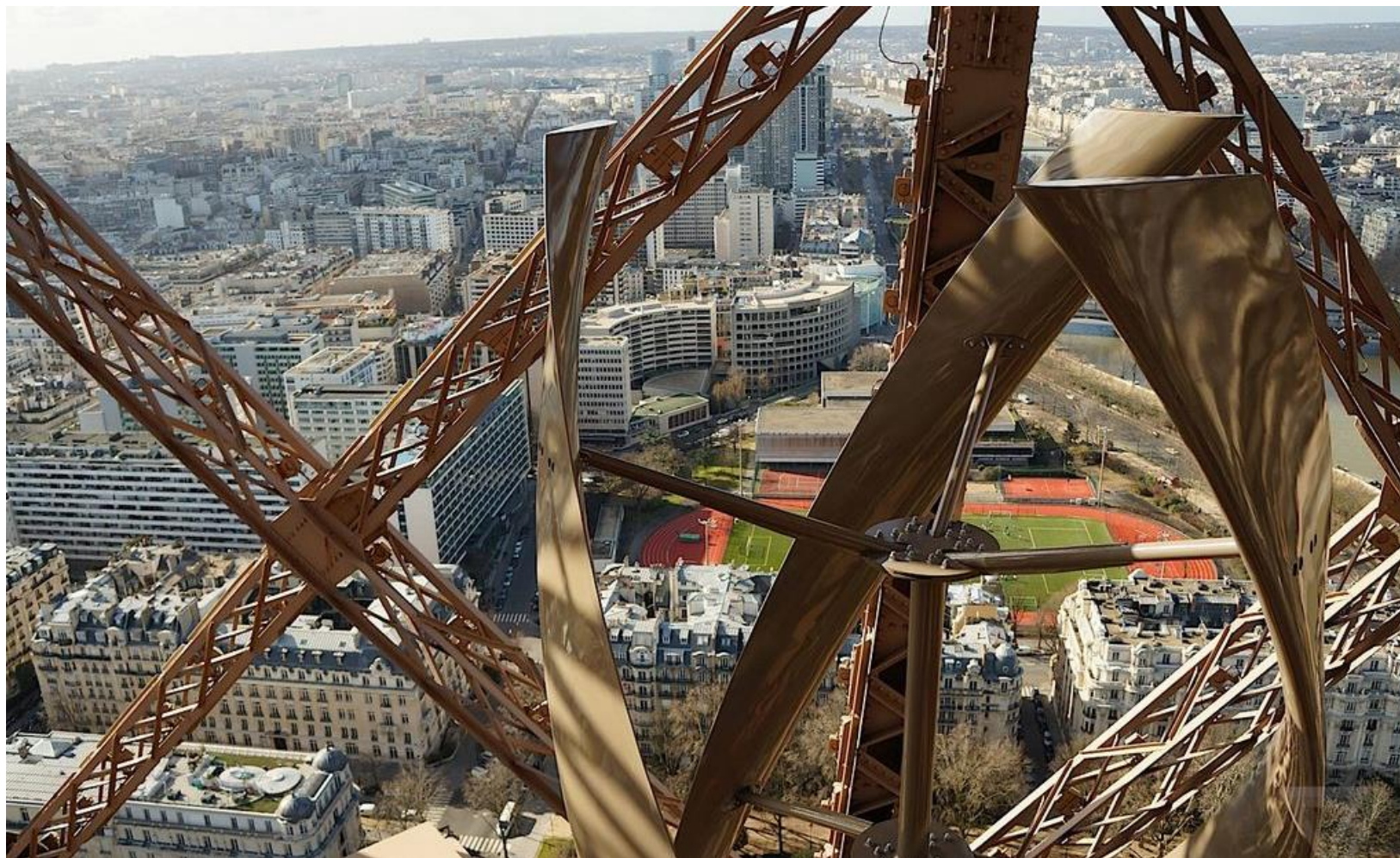
# Climate Change and Health Innovation Challenge Series

- Sponsored by HHS, NIH, Esri
- Organized around four core information needs:
  - Climate impact and co-benefit research questions
  - Tools to support individual and community vulnerability analyses
  - Apps and tools to show benefits of sustainable and healthy behaviors
  - Apps and tools to support clinical and biomedical research facility climate resilience

## Proposed NIEHS Climate and Health Challenge

- Visualize vulnerability from interactions between climate change (i.e., sea level rise, extreme events) and toxic exposures
  - Hazardous waste sites and brownfields
  - Pesticides
  - Air pollutants
  - Harmful algal blooms, food and water toxic contaminants
- Focus on federal datasets as basis for challenge
  - Historical and projected climate, health surveillance, utilization, etc.
- Invite private sector to include additional datasets

# Transformation is coming... equity must be part of it





## Summary

- Urban sustainability, resilience and health are all tightly linked
- Climate change brings significant threats but can also force transformative positive change for health
- New tools, assessments, and data resources can help communities promote health and resilience



National Institute of Environmental Health Sciences  
*Your Environment. Your Health.*

# Thank you!



National Institute of Environmental Health Sciences  
*Your Environment. Your Health.*



National Toxicology Program  
U.S. Department of Health and Human Services



<http://www.niehs.nih.gov/geh>  
John.balbus@Nih.gov



# Additional Resources

- Who is at the decision-making table?
- Who is vulnerable? Who is least able to adapt?
- Can you layer data to tell a compelling vulnerability story?
- What are the opportunities to build equity into existing programs/ strategies?
- Do any of your adaptation strategies have adverse impacts? Are they disproportionate?
- Where are there opportunities for community wealth building?
- Who is implementing the work? Are you working on, for, or **with** communities?



# Additional Resources

- Data, analysis, and tools:
  - EPA EJ SCREEN - <http://www2.epa.gov/ejscreen>
  - HUD CPD Maps - <http://egis.hud.gov/cpdmaps/>
  - HUD AFFH tool (forthcoming)
  - Climate Toolkit - <https://toolkit.climate.gov/>
- Community Resilience:
  - HUD Portal (incl. vulnerable populations section) - <https://www.hudexchange.info/manage-a-program/community-resilience/community-resilience-planning-resources>

# Q&A

- What's your challenge?
- How could the federal family help?

*To submit your questions, please send them via chat to “EPSA WebEx” and we will read them for the group.*