



# 2023 Northeast Regional Resilient Cities Summit

**Equitable Infrastructure Investments**

**June 6-8, 2023**

**Falmouth, MA**





The National League of Cities (NLC) is the nation's leading advocacy organization devoted to strengthening and promoting cities as centers of opportunity, leadership and governance. Through its membership and partnerships with state municipal leagues, NLC serves as a resource and advocate for more than 19,000 cities and towns and more than 218 million Americans. NLC's Center for Municipal Practice focuses on core municipal issues that our members struggle with as municipal leaders: housing, infrastructure, racial equity, sustainability, economic development, and others. The Center provides technical assistance, member education, critical resources and creative solutions to help local leaders improve the quality of life in their communities.

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The Boston/New England District Council, now with over 1,400 members, holds a prominent spot in the Urban Land Institute's top District Councils. ULI Boston/New England provides a unique setting by catering not just to one sector of the real estate business but to many – from architects to developers, CEOs to analysts and everyone in between. Using this interdisciplinary approach, ULI examines land use issues, impartially reports findings and convenes forums to find solutions.

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For 40 years, the Massachusetts Municipal Association has been bringing municipal officials together to articulate a clear and united municipal message, to develop and advocate for unified policies, and to share information and work together to increase the efficiency and effectiveness of municipal service delivery. In short, the MMA is the voice of cities and towns in Massachusetts. The MMA's mission is to improve the effectiveness of local government in the Commonwealth. The MMA is a private, nonpartisan, nonprofit organization of cities and towns. The MMA serves as an advocate for its members before the Massachusetts Legislature, the executive branch, regulatory bodies and the courts. The association develops and pursues a municipal policy that meets the present and future needs of the state's communities.

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The Urban Land Institute (ULI) is a global, member-driven organization comprising more than 45,000 interdisciplinary real estate and urban development professionals dedicated to advancing the Institute's mission of shaping the future of the built environment for transformative impact in communities worldwide. The ULI Randall Lewis Center for Sustainability in Real Estate leads the real estate industry in creating places and buildings where people and the environment thrive. In collaboration with ULI members and partners, the Center drives industry transformation, cultivates leaders and champions, and fosters solutions for sustainable, resilient, healthy and equitable cities and communities.

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# Overview Of The 2023 Northeast Regional Resilient Cities Summit

## Welcome to the Northeast Regional Resilient Cities Summit

Since 2015, the Resilient Cities Summit has offered participants an opportunity to discuss resilience challenges, develop connections with public and private sector leaders, and learn about examples of best practice in preparedness, adaptation and climate mitigation. Now in its sixth edition, the summit convened mayors and councilmembers, senior municipal leaders, and nationally recognized experts in urban development, design, finance and infrastructure to discuss how to achieve more equitable, resilient infrastructure for communities.



## What is resilience?

The National League of Cities and Urban Land Institute define climate resilience as **“the ability of a system and its component parts to anticipate, absorb, accommodate or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration or improvement of its essential basic structures and functions.”**<sup>1</sup>

As climate change continues to affect municipalities nationwide, it is increasingly important to consider resilience to ensure that residents can not only survive but also thrive. Climate risks disproportionately impact certain communities affected by systemic racism, poverty and other conditions that can increase social vulnerability, such as age and gender.

By amplifying local leaders’ experiences and expertise and fostering relationships with private sector experts, the summit shed light on New England’s most pressing climate resilience challenges and opportunities. These conversations can inform targeted investments in climate-resilient infrastructure, ensuring that resources are allocated where they are needed the most and working to minimize climate-fueled inequities.

Throughout the summit, presentations and discussions focused on fostering regional partnerships across sectors; coordinating efforts across municipalities through collective action facilitates more significant (and often cost-effective) outcomes. Employing a regional approach allows local officials to prioritize critical infrastructure needs more holistically.

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<sup>1</sup> Intergovernmental Panel on Climate Change (IPCC) (2012) Glossary of terms. In *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* (pp. 555-564). Cambridge University Press. [https://archive.ipcc.ch/pdf/special-reports/srex/SREX-Annex\\_Glossary.pdf](https://archive.ipcc.ch/pdf/special-reports/srex/SREX-Annex_Glossary.pdf)

## Equitable Infrastructure Investments

Across the country, old and outdated infrastructure is proving no match for intensifying storms, extreme heat, drought and other consequences of the changing climate. The communities of New England acutely feel these impacts as drainage systems are overwhelmed by heavy rainfall and utility systems are stressed by longer and more frequent heat waves, often affecting the most vulnerable. With unprecedented funding through the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA) available through federal agencies, local leaders have a once-in-a-generation opportunity to pursue more sustainable, equitable and resilient infrastructure projects that can prepare communities for new climate conditions.

The National League of Cities, the Urban Land Institute, ULI Boston/New England and the Massachusetts Municipal Association facilitated the 2023 Northeast Regional Resilient Cities Summit, sponsored by Arup and Arcadis, to further explore regional climate resilience opportunities. Participants included municipal leaders representing Massachusetts, Maryland and New York; federal policymaking staff from the U.S. Environmental Protection Agency, U.S. Housing and Urban Development, and the White House Council on Environmental Quality; experts from consulting firms and nonprofit environmental organizations; and program staff from the host organizations.



The goal of the Northeast Regional Resilient Cities Summit was to foster an environment that cultivates dialogue, questioning and learning. By engaging everyone in the room, participants discussed complex issues they face, identified innovative approaches to enhancing resilience and advancing equity, and explored their unique roles in shaping more equitable and resilient infrastructure throughout New England. The summit:

- ◆ Offered participants information, motivation and resources to pursue equitable, resilient projects and processes in their own resilience initiatives;
- ◆ Provided local officials with valuable and personal connections to their peers as well as leading experts in resilient development, planning, finance, sustainability and infrastructure; and
- ◆ Shared specific examples of practical solutions and leadership in resilient policymaking and development that center justice values and principles.

More specifically, participants at the 2023 Summit:

- ◆ Explored how decisions about land use, water access and flooding, and open space are transforming the way communities plan for adaptation;
- ◆ Examined the process by which these decisions and plans are made; and
- ◆ Identified opportunities for a more just and resilient future.

One key focus of the summit was how to address the disproportionate impact of climate change on vulnerable communities. As the climate crisis escalates, it becomes increasingly evident that marginalized communities bear the brunt of its consequences. Rising sea levels, extreme weather events and other climate-related hazards often hit these communities the hardest, exacerbating existing social and economic inequalities.

The Summit also focused specifically on the pressures facing coastal regions as storms intensify and erosion accelerates. Outdated infrastructure like roads, bridges and utilities are increasingly vulnerable to these impacts, compromising the safety and well-being of coastal communities. Stakeholders at the summit explored innovative approaches to infrastructure design and maintenance that can withstand the evolving threats posed by climate change.



## Takeaways and Trends

Coming out of the 2023 Northeast Regional Resilient Cities Summit, several consistent themes emerged from the workshops, presentations and discussions:



**Resilience is a lens to apply across core functions of municipal government.**

Defining climate resilience is critical to how municipal leaders talk about, communicate about and advance resilient infrastructure. Adding a climate resilience lens to other core functions of municipal governments strengthens all aspects of city leaders' work by identifying synergies and opportunities to address more than one issue simultaneously, such as enhancing resilience and supply of homes to address both the climate and housing crises.



**This is a once-in-a-generation moment in terms of federal funding available to address resilience needs.**

Unprecedented amounts of federal funding have been made available through legislation passed in 2021 and 2022. Municipal leaders and staff have begun taking advantage of these opportunities and have successfully secured funding for vital infrastructure projects.



**“Build infrastructure now and for 2100,” said Susanne Moser, Director at Susanne Moser Research and Consulting. “Build in a way that allows you to add on if you need it.”**



**Regional collaboration is key to success.** Successful infrastructure projects — coastal and beyond — require collaboration that is multidisciplinary, inclusive of lived experiences of diverse cross-sectors of the population, and across all levels of government. Local infrastructure decisions are more effective when they are designed with state or federal funding in mind. As one speaker noted, it is important to engage in infrastructure planning “in a way that works for us [at the municipal level] but in a way that is not isolated.”



**Social infrastructure looks different in each community.** To address social infrastructure, the voices of grassroots organizations and minority groups should be elevated. Even small communities that are majority white have a critical role to play in racial justice work. There is funding available to address these issues, and leaders can learn from past examples of success such as the Massachusetts Municipal Vulnerability Program (MVP) and the Baltimore City Community Resiliency Hub program.



**Leaders’ approaches to resilience improvements matter.** To truly understand current issues, leaders need to: 1) gain an understanding of the problem first before offering solutions; 2) start with the current status and track all progress to understand growth; and 3) maintain hope by being proactive and focused on transformative work.



## Keynote Conversations

**Susanne Moser**, who leads a research and consulting firm and is a faculty member at the University of Massachusetts Amherst and Antioch University New England, centered her keynote around climate change adaptation and ways to increase resilience, reduce vulnerability, and sustain equitable infrastructure for a livable planet.

Susanne spoke to the various definitions of resilience, offering a vision for resilient and just communities. She spotlighted her work in Homer, AK, taking participants through the phases of resilience work — from their vision to strategic planning, to indicators of success and progress.

Communities need to explore undoing the forces that hold inequitable systems in place and reorienting them towards life-sustaining ones. Susanne identified mindsets as the deepest causes underlying unsustainability and injustice: “During this conference, do not assume that your neighbor speaks exactly your language.”

While many participants are importantly focused on improving the climate-related infrastructure of their community, Susanne stressed the importance of regional collaboration: “You make decisions locally, but [show] me a decision you make that doesn’t require state or federal funding. If every single community is resilient by itself, you are not resilient.” Susanne encouraged local leaders to ground their resilience-related plans and policies in several other foundational orientations like vigilance, built-in



learning, investments in human capital (i.e., workforce training), cross-silo coordination, longer runways for and more frequent planning. “Build in a way that allows for you to add on if you need it,” she advised, encouraging participants to focus on small, flexible projects that can get the ball rolling and might end up being just as effective as larger projects.

**Sanjay Seth**, Chief of Staff and Senior Advisor Climate and Equity for the U.S. Environmental Protection Agency (EPA), leads a 550-person unit of EPA focused on the New England region. Previously serving as Climate Resilience Program Manager for the City of Boston, he shared his wealth of knowledge in the climate policy and planning space with summit participants.

Through his focus on climate change, environmental justice, and regional implementation of the Bipartisan Infrastructure Law and Inflation Reduction Act programs, Sanjay shared strategies for climate mitigation, climate resilience, environmental justice, and the intersection of these areas with public health and equity.

Specifically, Sanjay highlighted how the stakes for climate resilience have never been higher. He discussed how city leaders and stakeholders can put people-focused adaptation at the center of the work, think about adaptation in terms of socioeconomic systems and leverage human behavior lenses for the work. He applauded the great work cities are doing around addressing direct impacts of sea level rise, heat waves, droughts and storms.



## Workshop Learnings

At the 2023 Northeast Regional Resilient Cities Summit, breakout sessions with capacity-building workshops were designed to combine new content with skill building and networking. In these workshops, summit attendees built valuable personal connections, heard from leading experts and explored case studies of practical solutions currently underway. The Summit conducted nine workshop sessions led by industry leaders. The nine workshop session braided together a focus on equity, infrastructure, and investments to collectively make sense of this once-in-a-generation moment for local leaders to invest in climate adaptation.



Equity



Infrastructure



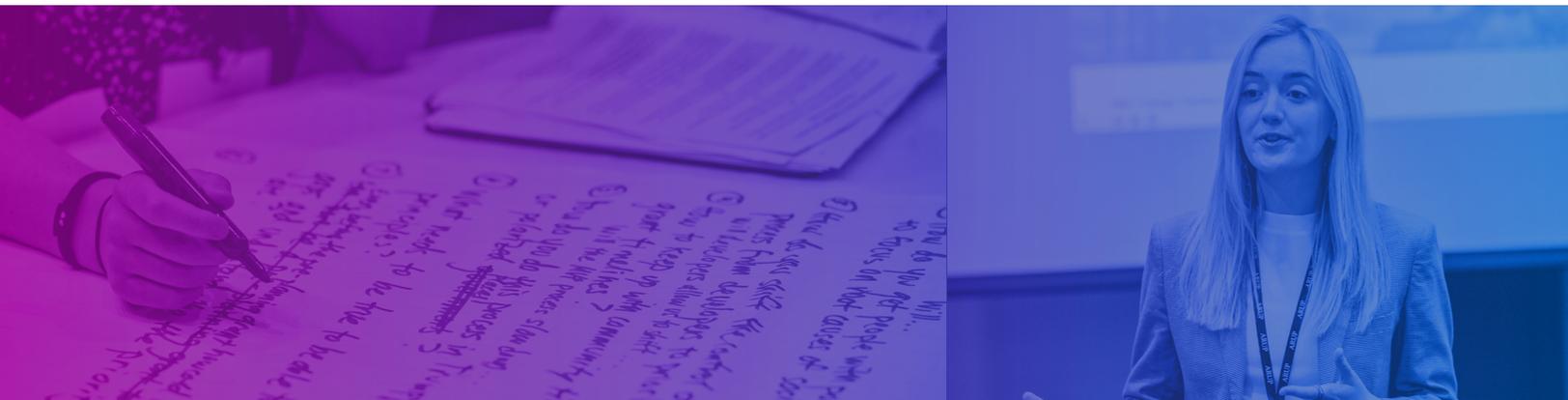
Investments

## Land Use Policy for Resilience, Health, and Equity

**Jackie Lombardi**, Senior Associate at RMI, focused on the role of land use planning in supporting resilient and equitable communities. The participants explored new research that displayed recent trends in transportation, how walkability and mobility are key and what it takes to achieve inclusive, climate-aligned land use reform.

### Core takeaways from this section:

- 1. Walkability and mobility will be key to reducing greenhouse gas emissions from the transportation sector**, as transportation persists as the largest source of greenhouse gas emissions in the U.S., comprising 35 percent of all emissions.
- 2. Housing policy largely determines transportation outcomes.** Density will be key to achieving these goals, and new housing should be planned where vehicle miles traveled (VMT) are already low and typical income is in the median range.
- 3. Many land use regulations mandate sprawl**, locking in direct transportation and indirect emissions.
- 4. Achieving inclusive, climate-aligned land use reform** will require:
  - ◆ Building the case for density and diversity with localized data,
  - ◆ Creating a policy playbook,
  - ◆ Forming diverse coalitions to ensure community leadership, and
  - ◆ En“vision”ing the change design.



## Collaborative Regional Policy Development

In this workshop, **Melanie Gárate**, Senior Associate at Consensus Building Institute, **Julie Wormser**, Senior Policy Advisor at Mystic River Collaborative, and **Lucy Perkins**, NOAA Coastal Management Fellow and New Hampshire Department of Environmental Services, discussed core actions local leaders can take to operationalize climate justice — looking beyond the jurisdictional bounds and focusing on collaborative work at a regional scale. Attendees explored the role of regional collaboration — formal and informal — in developing resilient policy serving the collective wellbeing through case studies, such as the Boston Area’s Resilient Mystic Collaborative.

### Core takeaways from this section:

- 1. Equitable outcomes for people never happen by accident.** To deliver equitable outcomes, leaders must be intentional in centering residents and communities that have historically received less to no investment. Leaders should shift the question from “Where is the most money at risk?” to “Who stands to lose the most?”
- 2. Learning from, collaborating with and properly compensating community-based organizations is critical to operationalize climate justice.** The process of co-creating programs with community-based organizations takes time, trust and care for community.
- 3. When it comes to coastal flooding, we must think regionally.** A multi-jurisdictional, cross-disciplinary approach is crucial to effective and sustainable climate adaptation.



**“We cannot truly be resilient until we are all included in the mission to achieve that vision.”**

## Deep Democracy in the Policy Process

**Wendell Joseph**, Project Planner at Toole Design, and **Michele Paul**, Director of Resilience and Environmental Stewardship for the City of New Bedford, MA, explored procedural justice in the resilient policy development process. The speakers discussed municipalities' partnerships with community-based and frontline groups to build “deep democracy,” or a decision-making method and community-building process that works to include all voices and roles, including the marginalized. Attendees explored using the power of government to create an equitable future centered on the needs of the people.

### Core takeaways from this section:

- 1. Demographically complex communities provide an opportunity.**  
Resilience is only achieved via inclusion. However, inclusion requires tailoring approaches to the needs of different subpopulations; for example, use visual cues and activities when there are language barriers, do not assume literacy standards and consider involving younger adults.
- 2. Resilience planning must be integrated across departments in local government;** no one single department can or should be responsible.
- 3. Regional coordination is key.** Success requires working with surrounding communities and regional planning agencies for a more integrated and holistic approach.



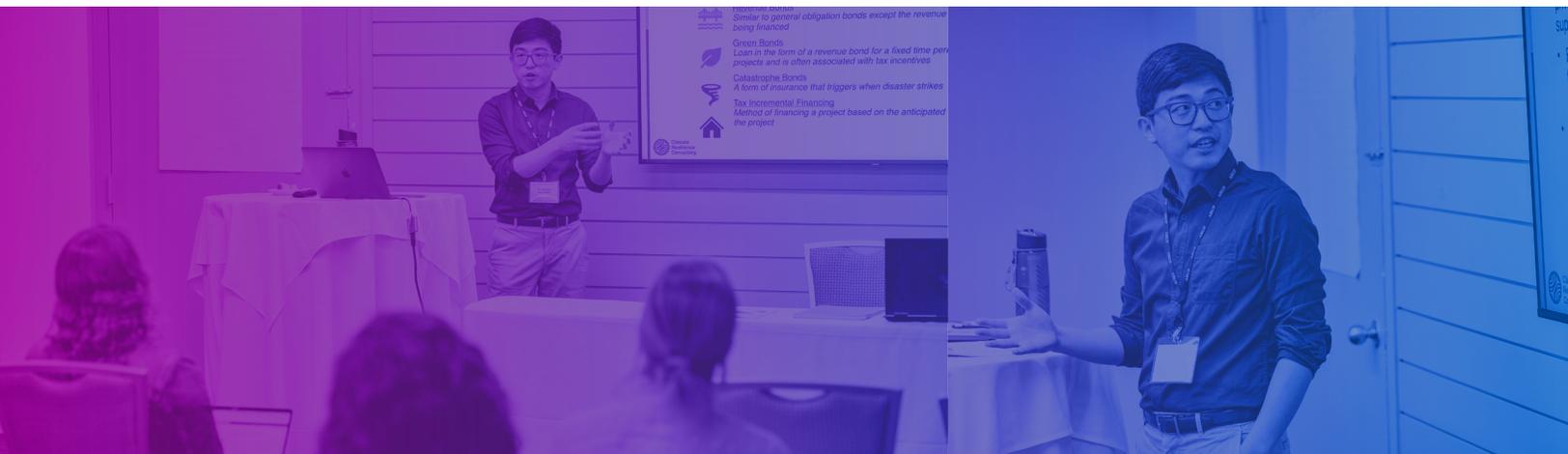
“Public spaces are the front porches of public life.”

## Financing Local Climate Resilience 101

Focusing on financing resilience, **Jonathan Lee**, Deputy Director at Climate Resilience Consulting, discussed state funding opportunities and how local leadership is essential for climate resilience. Attendees also learned about various private and federal funding opportunities to support local climate resilience, such as the Bipartisan Infrastructure Law and the Inflation Reduction Act.

### Core takeaways from this section:

- 1. Equity can and should remain central to resilience planning.** Fortunately, many funding streams require a focus on equity or bolster applications that are intentional about it.
- 2. A dual focus on equity and resilience:**
  - ◆ Enhances community trust,
  - ◆ Decreases the demand for, and cost of, a social safety net,
  - ◆ Provides long-term economic vitality, and
  - ◆ Unwinds systemic barriers.
- 3. There are multiple sources of financing, and a blended approach may be warranted.** Blended financing may require stacking a variety of funding, incorporating innovative funding mechanisms, working with partners, and/or fighting the urge to shy away from debt.



“Cities and towns throughout Massachusetts are identifying climate vulnerabilities and investing in community resilience. The MVP 2.0 program expands on the work communities have done to date and supports communities with new methods, tools, and resources for building climate resilience. In particular, MVP 2.0 is a way for you to revisit your community resilience priorities with a focus on equity and translate those priorities into action through project development and implementation.”<sup>2</sup>

## Principles of Equity and Justice in State Funding Opportunities

**Dr. Neenah Estrella-Luna**, Founder of StarLuna Consulting, and **Holly Jacobson** of Linnean Solutions discussed the Commonwealth of Massachusetts’ process of revising its Municipal Vulnerability Preparedness Program to center equity and justice in funding opportunities for climate resilience. Using the Massachusetts Municipal Vulnerability Program as a case study, attendees discussed equity and planned scenarios for their own towns and socially vulnerable groups.

### Core takeaways from this section:

- 1. The Commonwealth of Massachusetts is redesigning its Municipal Vulnerability Preparedness Program using equity and justice principles.** This will not only provide a framework within the state for municipalities and their private sector partners in the state but also a case study for other state resiliency funding programs if the model is replicated.
- 2. Creating core equity and justice principles for climate resilience planning can provide a critical framework for proceeding in line with those values.** In this session participants explored the guiding principles for the MVP 2.0 process.
- 3. Centering community voices in climate planning is one mechanism for ensuring procedural justice.** The MVP 2.0 pilot program will work to build a bigger table for just and equitable outcomes in climate planning.

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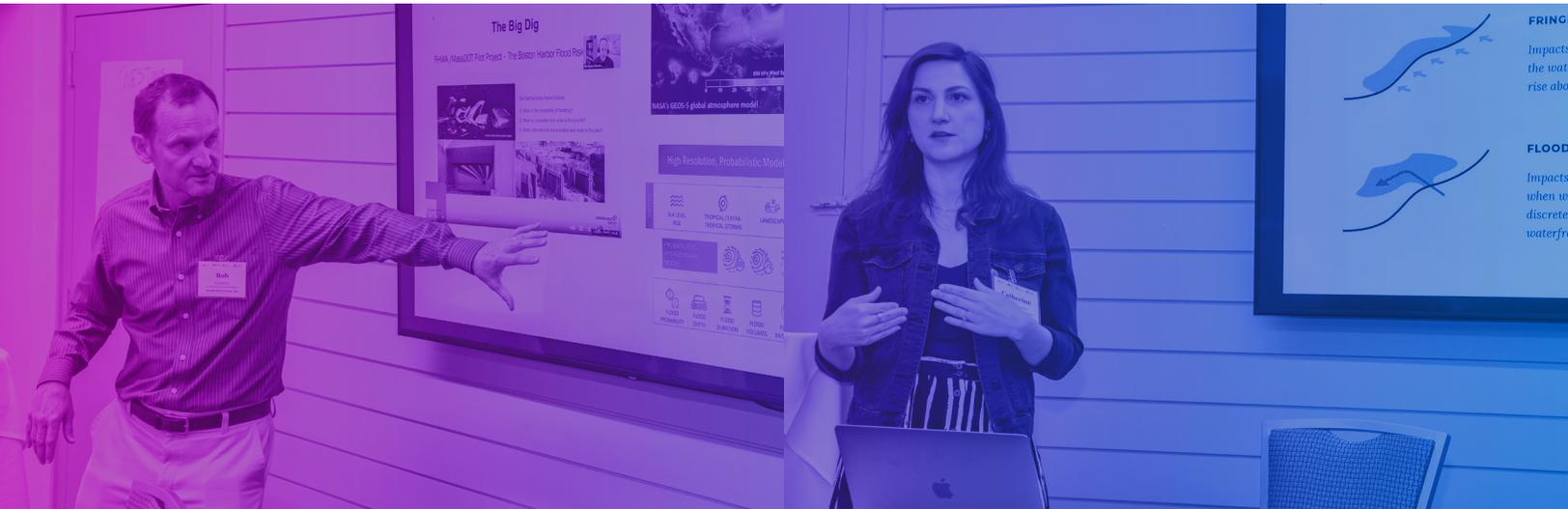
<sup>2</sup> Municipal Vulnerability Preparedness Planning. (n.d.). *The MVP 2.0 Process Guide*. Massachusetts Executive Office of Environmental Affairs. <https://www.mass.gov/doc/mvp-20-process-guide/download>

## Building Capacity for Accessing Federal Funding for Coastal Resilience

Municipalities have an unprecedented number of opportunities for federal funding through the passage of the Bipartisan Infrastructure Law and the Inflation Reduction Act. **Carly Foster**, Vice President and Principal at Arcadis and Trustee for the Village of Warwick, NY, dived deeper into the challenges city leaders face surrounding capacity, federal grants management and how local governments are leveraging this funding.

### Core takeaways from this section:

- 1. The key steps for pulling together an effective grant application include a) assessing the fit and feasibility of your project for funding, b) breaking down the application requirements and c) pulling together a cost estimate.** A spreadsheet can be a helpful tool for keeping requirements and timelines organized.
- 2. It is acceptable to submit the same application to different grant programs only if they are hosted by different agencies.** This is a smart approach to seeking funding under multiple programs for the same project, when relevant.
- 3. Building Resilient Infrastructure and Communities (BRIC) grants generally require 25 percent local cost-sharing and extensive supplemental materials, so start early!** These applications will request benefit-cost analyses (BCAs), Environmental and Historic Preservation (EHP) reviews, and other attachments to substantiate claims made in the application. BRIC grants are less likely to be granted for “run-of-the-mill projects” and are more focused on transformational infrastructure changes that will create beneficial generational change — often in areas where there are high levels of climate risk and wide inequities to address.
- 4. Promoting Resilient Operations for Transformative, Efficient and Cost-saving Transportation (PROTECT) Program grants do not have an award cap, generally require 20 percent non-federal cost-share, and are designed for transportation projects that reduce vulnerability to climate risks.** U.S. Department of Transportation is looking to be geographically diverse in funding and prioritizing rural applications.



## Using Climate Data to Build Infrastructure That Lasts

**Bob Hamilton**, CEO of the Woods Hole Group, and **Cat McCandless**, Climate Resilience Project Manager for the City of Boston, emphasized the vital role local vulnerability data plays when designing for a resilient future. Bob and Cat explored the critically important role of spatial modeling and projections in urban design, as well as how data sets like historical redlining intersect with climate data — and how that can inform equitable infrastructure design. They emphasized how data not only informs leaders about current floods or hot spots, but also how climate change will shift and shape our landscape.

### Core takeaways from this section:

- 1. Data collection and reports should not just sit on a shelf. They have a real opportunity to inform practice and address systemic issues.** The City of Boston leveraged its 2016 Climate Ready Boston report to take near- and long-term action to ensure climate change preparedness and resilience.
- 2. Climate action work can break down silos.** When done thoughtfully, climate action work engages a variety of partners, from departments across city and town hall to private sector organizations, to move in the same direction.
- 3. Look to publicly available data sources to inform your understanding of climate impacts.** FEMA, NOAA, the Climate Central Coastal Risk Screening Tool, USGS, and NROC all have data that can support municipalities in getting a sense of what they are up against.

## Enhancing Resilience Through Equity-Centered Design

**Aubrey Germ**, Climate Resilience Planner for the City of Baltimore, MD, and **Wendell Joseph**, Project Planner for Toole Design, led this session on equity-centered design strategies. Discussions focused on what it means to start with climate justice when designing resilient infrastructure — whether resilience hubs, anti-displacement strategies in park redevelopment or indigenous wisdom. Resilience Hubs are community serving facilities designed to support residents, coordinate communications, and distribute resources. Learn more about resilience hubs at [resilience-hub.org](https://resilience-hub.org).

### Core takeaways from this section:

- 1. Community based organizations are already resilience hubs.** The role of municipal governments in supporting resilience hubs is not through trying to come in to dictate a plan but rather to support resilience that already exists and lean in.
- 2. Resilience hubs supported COVID recovery.** In Baltimore, the network of resilience hubs not only provide climate resilience but supported the community during the COVID-19 pandemic. This example of “co-benefit” to overall resilience highlights the value of the resilience hub assets.
- 3. Disaster preparedness and planning requires interdepartmental partnerships.** This is critically important not only for applying for FEMA funds, but also for hazard mitigation planning. Resilience hubs are critical infrastructure to be considered in hazard mitigation planning.
- 4. Organizations and governmental agencies are stronger together.** By acknowledging the individual strengths of community-based organizations, networking them together and building trust with government entities existing resources can be better leveraged for greater community impact.
- 5. Understanding the interrelationships of individual stakeholders and groups is critical to an equity-centered design approach.** Mapping the power, dependencies, and areas of influence of each individual or group can illuminate challenges as well as opportunities.



“Land has a memory — and people embody that memory.”

## Designing Resilience Solutions Across Property Ownership Boundaries

A critically important solution to adapt to climate change is to work across property ownership boundaries and jurisdictions to identify, plan, design, and implement resilience solutions. **Derek Anderson**, Associate Civil Engineer at Arup, and **Kara Slocum**, Senior Civil Engineer and Resilience Planner at Arup, discussed how a climate-ready future is dependent on designing a more resilient city, using The Wharf District Council Flood Resilience Plan in Boston as an example. Attendees explored solutions to complex coastal resilience challenges in an urban waterfront setting, including tools for resilience planning and potential financing mechanisms to implement costly projects.

### Core takeaways from this section:

- 1. Design for the full service life of a project.** Effective coastal adaptation plans and projects should clearly identify minimum and long-term design standards to account for flooding impacts experienced today and expected impacts over the service life of a project.
- 2. Leverage existing resources to streamline climate action.** Local governments and their private property owner partners can adapt publicly available tools and templates, including those created by the Wharf District Council, to jumpstart their own adaptation efforts.
- 3. Tailor project roles and responsibilities to partner strengths.** Private sector partners play a critical role in technical assessments. In complement to this technical expertise, public agencies and community-based organizations are often well-positioned to engage stakeholders and community leaders, ensuring that community context and values are embedded in the planning process and reflected in project alternatives.



## What Comes Next

In this once-in-a-generation moment, local leaders have unprecedented access to federal and state funding through the passage of the Bipartisan Infrastructure Law and the Inflation Reduction Act. Through an “all-of-government” approach in partnership with the private sector, city leaders can leverage existing resources, share knowledge, and collaborate.

Like other coastal regions, the northeast is already experiencing the impacts of climate change: sea-level rise, coastal erosion, extreme precipitation and heat, and smoke from wildfires. The impacts of climate change in this region transcend local boundaries, requiring close collaboration among local leaders regardless of government size. Collaboration with community leaders, government officials and private sector partners encourages the exchange of innovative solutions, inspiring jurisdictions across the region to implement bold climate initiatives that can serve as world-wide models.

As more cities, towns and villages feel the strain that climate change places on their infrastructure and utility systems, they will turn to the municipalities already deploying equitable and resilient infrastructure strategies for guidance. Local elected officials, staff, and experts maintain a close connection to the issues their communities face. The Northeast Regional Resilient Cities Summit serves as a platform for committed climate champions to share their expertise — and it is their voices, stories and strategies that can inform climate resilience strategies in coastal regions all over the country.

## 2023 Resilient Cities Summit Resources

### Equity, Infrastructure, Investments

Reshaping the City: Zoning for a more Equitable, Resilient, and Sustainable Future <https://knowledge.uli.org/reports/research-reports/2023/reshaping-the-city-zoning-for-a-more-equitable-resilient-and-sustainable-future>

Local Infrastructure Hub: <https://localinfrastructure.org/>

How to Choose, Use, and Better Understand Climate Risk Analytics: <https://knowledge.uli.org/en/Reports/Research%20Reports/2022/How%20to%20Choose%20Use%20and%20Better%20Understand%20Climate%20Risk%20Analytics>

Parking Policy Innovations in the United States: <https://knowledge.uli.org/en/Reports/Research%20Reports/Innovations%20in%20Parking%20Policy?q&sortBy=relevance&sortOrder=asc&page=1>

Social Spaces, Resilient Communities: Social Infrastructure as a Climate Strategy for Real Estate <https://knowledge.uli.org/en/Reports/Research%20Reports/2022/Social%20Spaces%20Resilient%20Communities%20Social%20Infrastructure%20as%20a%20Climate%20Strategy%20for%20Real%20Estate>

Ready-to-Fund Resilience Toolkit: <https://adaptationprofessionals.org/ready-to-fund-resilience-toolkit/>

IBHS Fortified Program: <https://ibhs.org/fortified/>

FEMA Building Code Adoption Tracker: <https://www.fema.gov/emergency-managers/risk-management/building-science/bcat>

HUD Green and Resilient Retrofit Program: <https://www.hud.gov/GRRP>

## Coastal Resilience

Parks that Protect, Leveraging Waterfronts for Resilient Communities: <https://knowledge.uli.org/en/Reports/Research%20Reports/2023/Parks%20That%20Protect%20Leveraging%20Waterfronts%20for%20Resilient%20Communities>

On Safer Ground: Floodplain Buyouts and Community Resilience: <https://americas.uli.org/research/centers-initiatives/urban-resilience-program/flood-preparness/>

NOAA funding to protect coastal communities and restore marine resources: <https://www.noaa.gov/news-releases/noaa-ira-framework-2023>

The Urban Implications of Living with Water: <https://boston.uli.org/uli-resources/the-urban-implications-of-living-with-water/>

Living with Heat: [https://knowledge.uli.org/en/reports/research-reports/2019/living-with-heat?\\_gl=1\\*1htzm9n\\*\\_ga\\*MzM2NTQzMDY2LjE2Njk5MDc0OTQ.\\*\\_ga\\_68JJQP7N7N\\*MTY4NjY2MDU1NS41MTEuMS4xNjg2NjYyMjA2LjAuMC4w](https://knowledge.uli.org/en/reports/research-reports/2019/living-with-heat?_gl=1*1htzm9n*_ga*MzM2NTQzMDY2LjE2Njk5MDc0OTQ.*_ga_68JJQP7N7N*MTY4NjY2MDU1NS41MTEuMS4xNjg2NjYyMjA2LjAuMC4w)

Scorched: Extreme Heat and Real Estate: [https://knowledge.uli.org/en/reports/research-reports/2019/scorched?\\_gl=1\\*1dd0qcv\\*\\_ga\\*MzM2NTQzMDY2LjE2Njk5MDc0OTQ.\\*\\_ga\\_68JJQP7N7N\\*MTY4NjY2MDU1NS41MTEuMS4xNjg2NjYyMTgxLjAuMC4w](https://knowledge.uli.org/en/reports/research-reports/2019/scorched?_gl=1*1dd0qcv*_ga*MzM2NTQzMDY2LjE2Njk5MDc0OTQ.*_ga_68JJQP7N7N*MTY4NjY2MDU1NS41MTEuMS4xNjg2NjYyMTgxLjAuMC4w)

ULI Boston/New England Technical Assistance Panels: <https://boston.uli.org/get-involved/technical-assistance-panels/>