May 2025

Cooling Corridors Study: Lessons learned from expert panel with chief heat and climate officers

Metro hosted an online expert panel featuring chief heat and climate officers from around the world to learn about building heat and climate resilience in communities.

Metro is in the process of developing the Cooling Corridors Study that is anticipated to be completed in Fall 2025. The study was designed to assess heat risk in greater Portland and identify strategies to address urban heat island effects and extreme heat across the region.

Metro has looked to other regions doing similar work as examples of what can be done in greater Portland. The project team invited chief heat and climate officers from different levels of government to attend a panel focused on addressing urban heat.

Metro hosted the virtual expert panel on May 5, 2025, from 8 to 10 a.m. (PST). The expert panel was open to Metro Councilors, Metro leadership, and Metro staff.

Malu Wilkinson, deputy director of Metro Planning, Development and Research, opened the discussion. The co-leads of the Metro project team served as moderators for the discussion: Joe Gordon, principal researcher, and André Lightsey-Walker, senior transportation planner.

Panelists

Jane Gilbert, Chief Heat Officer, Miami-Dade County, Florida

Eleni Myrivili, United Nations Global Chief Heat Officer and Senior Advisor at the Atlantic Council's Climate Resilience Center, Athens, Greece

Brian Swett, Chief Climate Officer, City of Boston, Massachusetts

Summary

The conversation covered three main topic areas: strategies for urban heat adaptation, partnerships and collaboration, and challenges to implementation. After the guided discussion, Metro leadership and staff had an opportunity to ask questions to the panelists.

Urban Heat Strategies

To guide discussion, panelists were asked to share their short-term priorities and long-term goals, emphasizing actions that have been impactful and how actions have been funded.

Before acting, panelists first wanted to understand where the most vulnerable live to target interventions through mapping.

In the short-term, the panelists seem focused on preventing heat-related harm through targeted, visible, and operational responses. These actions included raising public awareness, lowering heat advisory thresholds, training frontline workers in heat safety, and deploying quick solutions like misting tents.

Looking long-term, panelists hope to transform urban systems, policies, and infrastructure to sustainably reduce heat risk over time. This can be done by integrating heat resilience into energy efficiency programs and building codes, creating dedicated funding streams for heat resilience, and expanding green infrastructure on streets and buildings.

Partnerships and Collaboration

Panelists were asked about organizational or community-based partnerships they have formed and what lessons they have learned through collaboration.

Working with trusted community partners, such as healthcare workers or the Red Cross, can help community members understand and support heat mitigation or adaptation work, recognize heat-related illnesses, and learn what to do to prepare for extreme heat.

Co-designing projects with local community groups helps guarantee success, and working with universities can expand an agency's capacity to research solutions.

Implementation Challenges

To end the guided discussion, panelists were asked to share what challenges they have faced when planning and implementing cooling strategies and interventions.

The main challenges are designing and sustaining effective, long-term interventions with physical, policy, and funding constraints, and building political, financial, and community support.

Audience Q&A

Balancing Short-Term Emergency Response and Long-Term Heat Mitigation

It is important to prioritize education and outreach early on to generate political and community support for future actions. Likewise, building partnerships with emergency managers and understanding emergency response protocols is important early on. To prioritize funding in the short-term, panelists shared the idea of considering assets like splash pads and parks as emergency response assets or critical infrastructure. Updating Public Works manuals, building codes, or transportation policies to address extreme heat can meet long-term needs.

Effects of Federal Government on Climate Work

Adjusting the language used for adaptation plans, policies, and projects and reframing the benefits of climate actions is important to maintain access to federal funding and desired outcomes. For example, one panelist frames their rationale for climate actions towards economic benefits rather than racial and social equity benefits, framing extreme heat and weather as expected costly events to justify investments.

Community Resilience Hubs

Stigma or mobility issues may prevent community members from going to cooling centers. Bolstering walking and biking infrastructure around centers and including programming can help achieve success. Regional agencies can consider developing frameworks for resilience hubs, providing models for nonprofits, municipalities, and county facilities.

Tree Planting Considerations

Panelists shared some recommendations for tree planting: only plant a certain number of a species on a site to avoid blight, plant a diverse array of climate-resilient species along streets to avoid the pitfalls of monocultures, and plant several levels of vegetation beneath trees.

Chronic Heat Exposure Training

In the panelists' experience, training courses have been well received. Public schools and community centers are good places to teach communities about the dangers of heat and how to prepare.

Lessons Learned from Medellin's Green Corridors

Three design principles guided the city's program: heat (i.e., making sure people can walk more while maintaining thermal comfort), biodiversity (i.e., supporting ecosystems), and joy (i.e., creating joyful spaces for people to be in).

Key takeaways

Based on the conversation with the panelists, Metro learned the following lessons:

- **Extreme heat needs equal prioritization as other climate threats** in both emergency response and policy planning.
- **Engagement with trusted partners**, like healthcare workers and neighborhood groups, is critical for successful outreach, credibility, and adoption of new initiatives.
- **Localized pilot projects can build political and community support** before policies are scaled citywide or regionwide.
- **Co-designing projects with community builds ownership and trust** and ensures culturally appropriate and effective interventions.

Building and Operating Bus Shelters

Advertising at bus shelters can generate revenue to cover the capital costs of transit shelters. Green roofs or solar panels can be implemented on shelters after being tested in pilot projects.

Interested in learning more?

For more information, including a more detailed summary, see Metro's project website: oregonmetro.gov/coolingcorridors.

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