10X CONVERGENCE
RESILIENCE NETWORK WORKSHOP NOTES – October 22, 2025

ATTENDING

- Leslie Antunez, Senior Municipal Sustainability Manager – City of San Antonio, Texas
- Allison Boss, Resilience Project Coordinator – City of Jacksonville, Florida
- Debra Butler, Executive Director, American Society of Adaptation Professionals
- Casi Callaway, Founder and Director, Activate-Build-Connect, Inc.
- Julia Chase, CRO – City of San Diego, California
- Anne Coglianese, CRO – City of Jacksonville Florida
- Marc Coudert, Climate Resilience & Adaptation Manager – City of San Antonio
- Ali Frazzini, Policy Director, Los Angeles County Chief Sustainability Office, California
- Ashantae Green, Sustainability Manager – City of Jacksonville, Florida
- Jennifer Hinton, Deputy Resilience Officer – City of Jacksonville
- David Hondula, Director of Heat Response and Mitigation – City of Phoenix, Arizona
- Fatima Luna, CRO – City of Tucson, Arizona
- Colleen McHugh, Senior Planner, The Water Institute
- Douglas Melnick, CSO – City of San Antonio, Texas
- Laura Patino, CRO – City of San Antonio, Texas
- Richard Rushforth, Research Associate Professor, School of Complex Adaptive Systems · Arizona State University
- Rae Ulrich, Senior Director, Ten Across
- Natalia Urbina – Resilience Manager, City of San Antonio, Texas
- Grace Wickerson - Senior Manager, Climate and Health on the Climate and Environment team at the Federation of American Scientists

Unable to attend:

- Jessica Beach, CRO, Deputy Director Utilities and Public Works – City of St. Augustine, Florida
- Maeven Rogers, CRO, St. Peterburg, Florida

AGENDA

Welcome and goals for the workshop – RAE
Quick Introductions – ALL
Guest Presentations
Workshop Breakouts – Extreme Heat Recommendation Prioritization
Discussion + Next Steps

SPECIAL GUEST PRESENATIONS

- **Debroah Halberstadt**, Special Advisor to the Insurance Commissioner on Biodiversity and Inclusive Insurance, California Department of Insurance

  (presentations provided on the (workshop resources webpage))

- **Walker Wieland**, CalHeatScore Lead – Office of Environmental Health Hazard Assessment/California EPA

  (presentations provided on the (workshop resources webpage))

WORKSHOP ACTIVITY – Extreme Heat Recommendations Prioritization

Taking recommendations that came out of the April Extreme Heat Convening, participants collectively prioritized recommendations and identified where there are opportunities for collective action/collaboration.

Decision criteria to help rank or prioritize projects included:

- Importance (how critical it is to goals/mission?)
- Opportunity (the potential benefits, impact, or value created?)
- Feasibility (how achievable it is given resources, capacity, constraints?)
- Scalable (how applicable/feasible is it along the I-10 corridor?)

GROUP 1 NOTES

Group included representatives from: San Antonio, Tucson, Phoenix, American Society of Adaptation Professionals, and the Water Institute

Group prioritized the following action items actions #1, #2, #4, #8, and #9

- **Quantifying the cost of heat** - The "true" costs of extreme heat are unknown. Complete estimates for heat-related impacts, especially in real-time, remain elusive: Health, Economic, Infrastructural

- **Benefit-cost analysis tool** - identify quantitative and qualitative evidence for tribal, state, and local governments to use to complete a benefit-cost analysis for projects addressing extreme heat.

- **Heat Plan Coordination Framework** - Existing heat plans across municipalities, states, territories, Tribes and regions are uncoordinated. A framework is needed to help guide municipalities and to provide a more

- **Infrastructure Threshold Data -** Most infrastructure is not designed for the 21st century climate. Shared threshold data is needed to better inform long-term planning

- **Housing Building Codes/Recommendations** - Housing is not designed and prepared for the 21st century climate.

Summary of additional breakout discussion items:

- Particularly, the group was very interested in **energy resilience**, e.g. how we would plan for the worst-case scenario - major grid system failure during an extreme heat event.

- They wanted the **worst-case scenario and its consequences** to then inform an argument for resilience investments like home weatherization, urban greening, community cooling, microgrids, etc, which are currently underinvested in.

- Further, **better understanding of the infrastructure thresholds and the risks of outages/failures because of heat** could better inform local/state/regional planning processes for extreme heat, and a map of the fall-out costs and impacts could inform benefit-cost analyses.

It was noted that Alistair Heyden at Cornell University is building a model of the NY State grid system in order to test a couple scenarios where the grid could overload, including due to a heat event. ***Rae will reach out to see if there is an opportunity for sharing approach.***

GROUP 2 NOTES

Group prioritized the following action items actions #1, #6, #7, #4, #3, #9, and #8 :

This is why you'll see the data item and the trigger definitions included in the 1 bullet. Each community can decide how they quantify or report the data, but we need to define what should be collected by everyone so that ultimately, it could be compared, compiled, and used to make policy changes.

a. **Quantifying the cost of heat** - The "true" costs of extreme heat are unknown.
    i. Focus on the topics/the list of what is lost by heat that need to be quantified. Determining the actual costs may be more localized and challenging, but collecting the same data across the region will help.
    ii. Each community can decide how they quantify or report the data, but we need to define what should be collected by everyone so that ultimately, it could be compared, compiled, and used to make policy changes.

b. **Data Challenges**:
    i. Group discussed the **challenges associated with actually getting to the numbers –** political, community, etc. **Group noted wanting to start (as lower hanging fruit), with naming the data items we need to collect across the entire region.**

ii. **Heat-impact data** (e.g. deaths) is not standardized, universally accessible, or always actionable.
iii. **There is a need for data standardization**, reporting of data in a timely manner, and the development of frameworks for integrating different types of data (e.g., on mortality, healthcare systems, emergency medical services, utility systems) to inform decision making.
iv. Data regarding **real-time usage of cooling centers**, **extreme heat's impacts on health systems**, and **financial impacts and losses attributed to heat** are needed to justify increased financial assistance, better understand the **cascading impacts of extreme heat**, and justify disaster declarations.

c. **Trigger Definitions** - There are no widely agreed-upon triggers for a heat emergency.

Heat Plan Coordination Framework - Existing heat plans across municipalities, states, territories, Tribes and regions are uncoordinated.

d. This is really a first important step. If we get to this, smaller communities can pick it up and do their own plans within their own budgets.

Staff Training Protocols/Toolkits - Not all relevant staff are appropriately trained and integrated into heat planning and programming.

e. We talked about having this be a range of internal versus external versus partners. Internal education/training is first and easy.
f. Training external folks could be health departments on how they are reporting deaths – simply including the outside temperature at the time is a critical first step.

Housing Building Codes/Recommendations - Housing is not designed and prepared for the 21st century climate.

g. Better building codes is a heavier lift, but crucial.

Infrastructure Threshold Data - Most infrastructure is not designed for the 21st century climate. Shared threshold data is needed to better inform long-term planning

h. Jacksonville is doing this and they want to get to a place where they can share what they did, how they did it, and then we can test it in our communities.
i. This is not really a move forward as a group item, but we all wanted it on the list.

The following recommendations surfaced as a priority in both groups:

- Heat Data Standardization
- Quantifying the Cost of Heat
- Benefit-Cost Analysis Tool
- Heat Plan Coordination Framework
- Infrastructure Threshold Data
- Housing Building Codes/Recommendations

NEXT STEPS

At the next 10X Resilience Meeting, the group will identify which of the prioritized projects short list it would like to focus on collectively.