

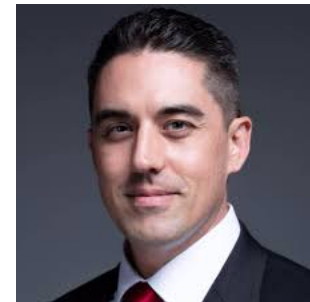
GHHIN Master Class – Innovating in Urban Planning and Governance for Heat Health Part C

# Community participation in heat governance

David Hondula, Arizona State University

Ryan Winkle, RAIL CDC

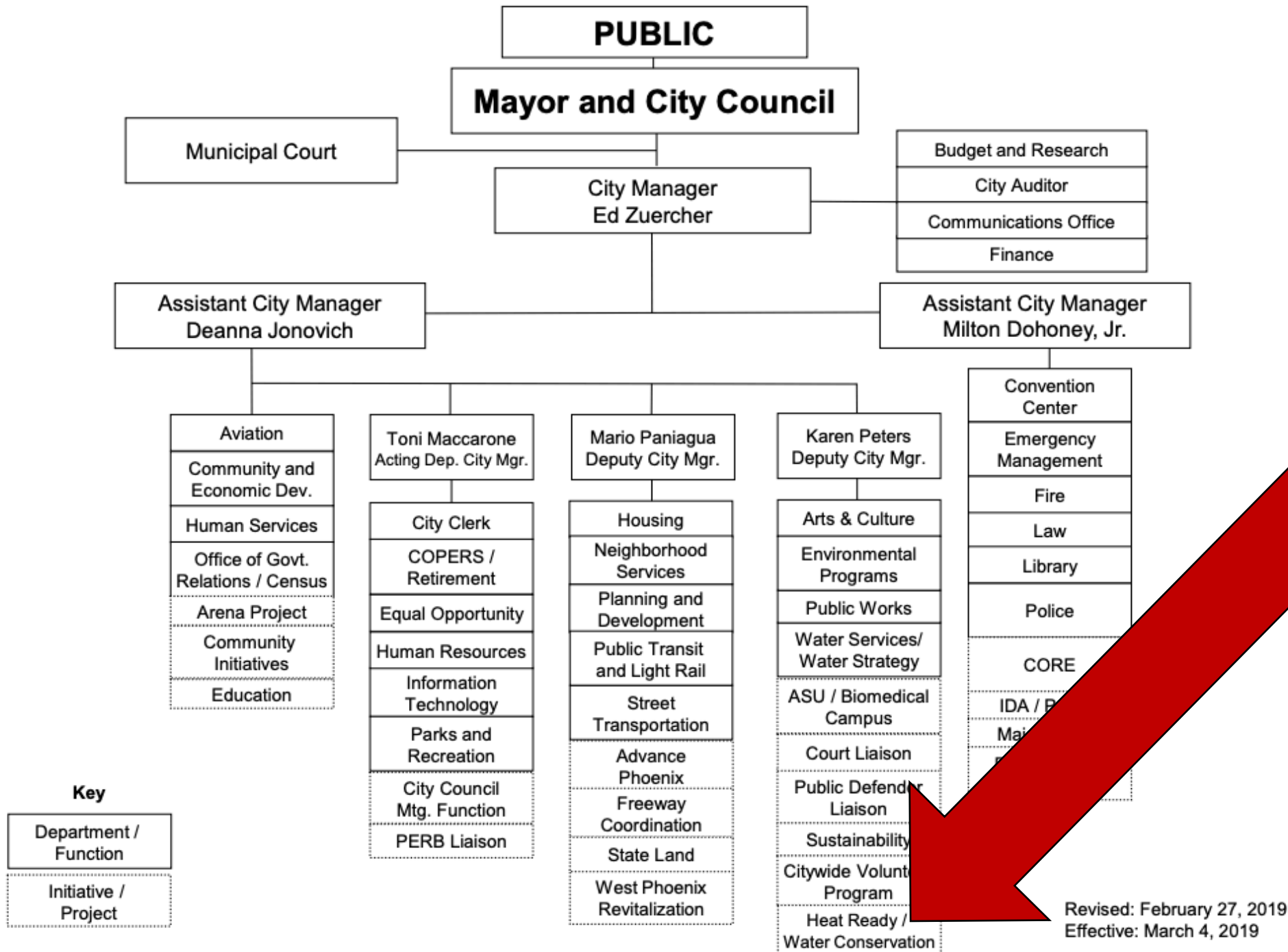
With thanks and credit to Melissa Guardaro, David Crummey, and the rest of the Nature's Cooling Systems project team



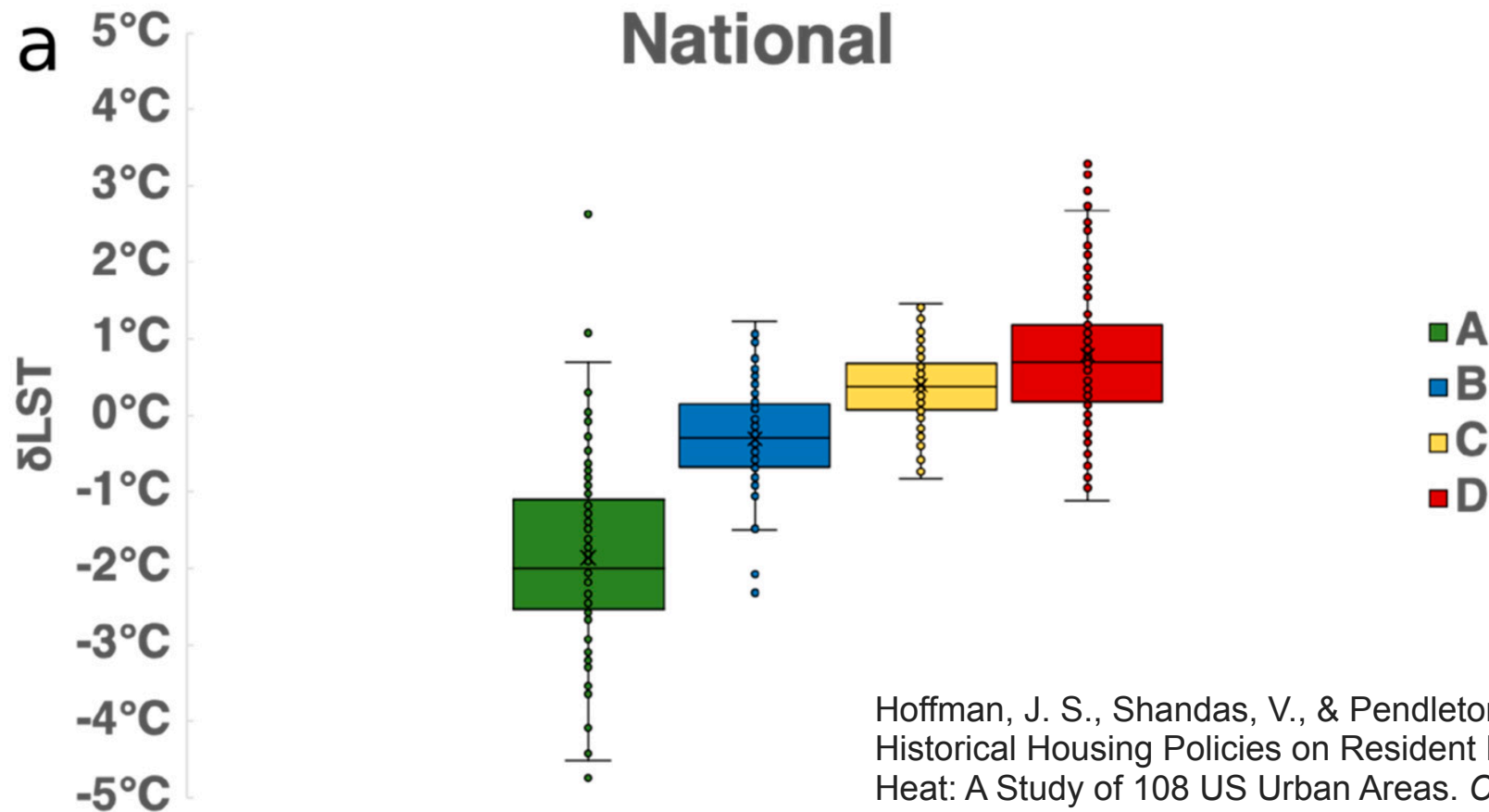
“I think the biggest hurdle is that mitigating heat is **nobody’s responsibility**, yet it’s everybody’s concern”

SCIENTIFIC  
AMERICAN.

How Phoenix Is Working to Beat  
Urban Heat

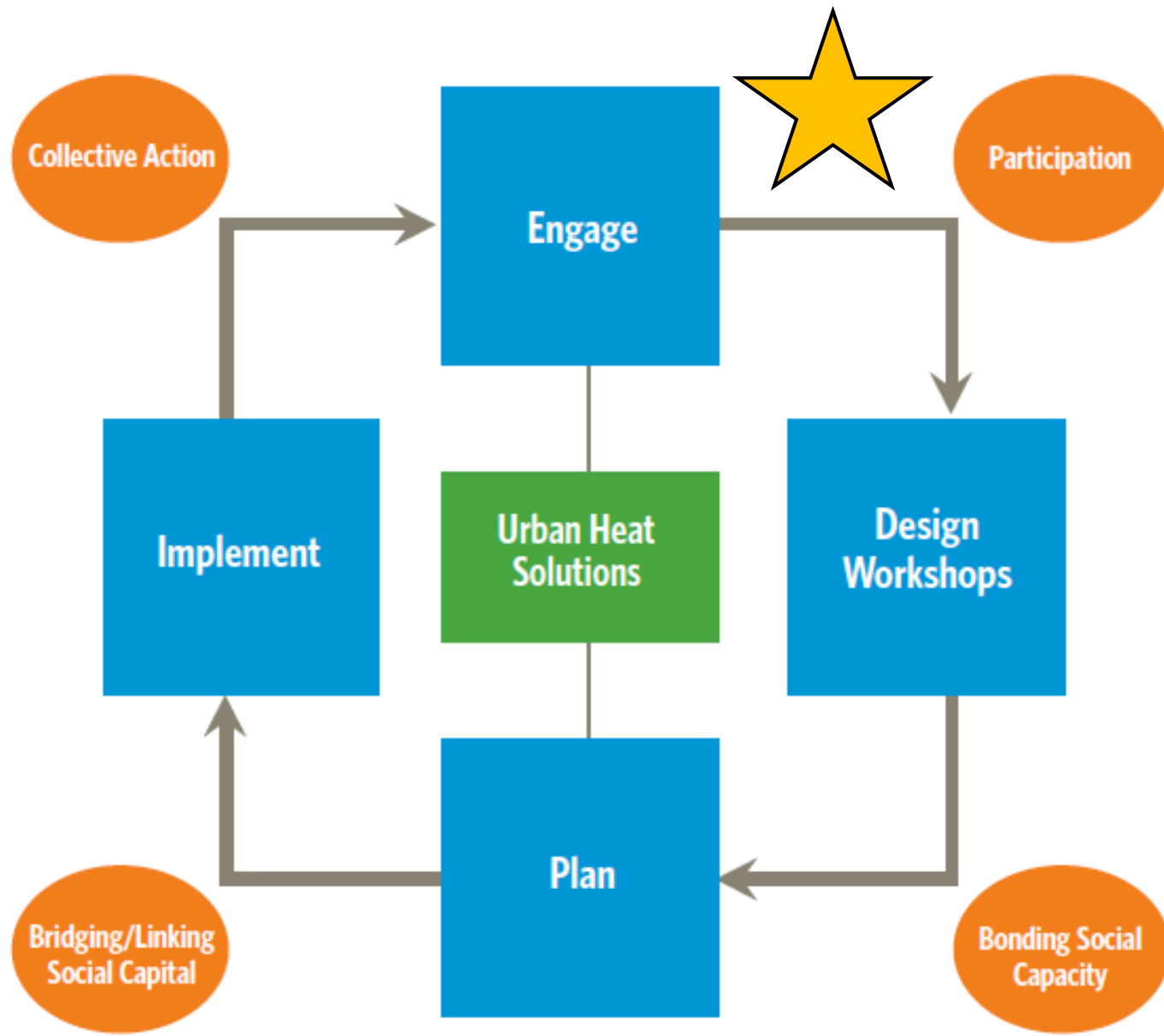


# Local governments can learn to manage heat, but need to **unlearn** decades of institutionalized practices









Heat Action Planning Process methodology  
adapted from Semenza, et al. (2007)



**Workshop I:**  
Discover our major concerns  
and potential actions

**Workshop II:**  
Invite designers and  
decision-makers to hear our  
concerns and determine  
feasible actions

**Workshop III:**  
Make decisions about our  
priorities for implementation

Nature's  
Cooling  
Systems  
Methodolog  
y  
Design  
Process





# Criteria for Selection of Neighborhoods

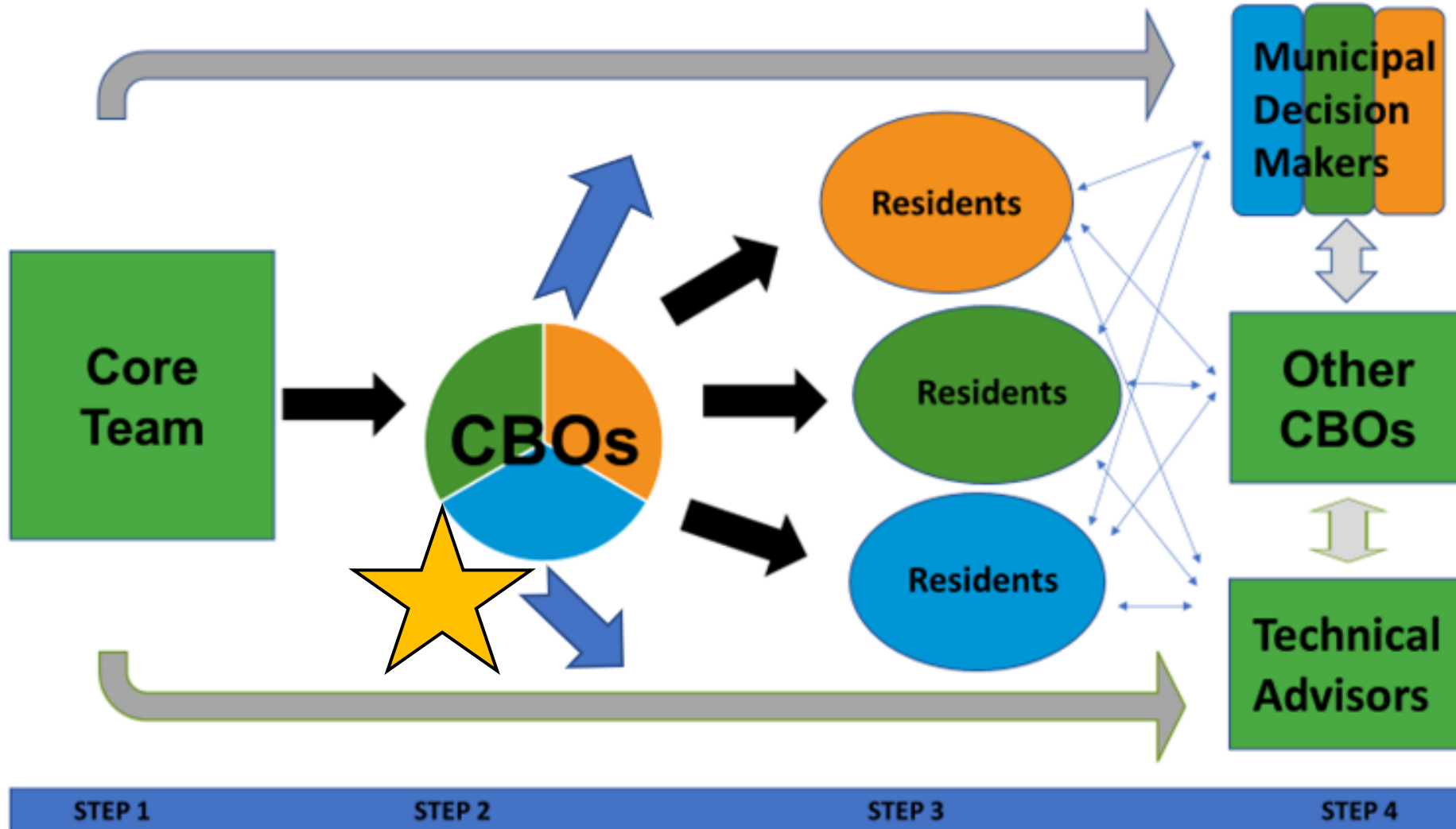
Heat
Low vegetation coverage Low vegetation index High surface temperature

Usage
High use of public spaces High transit use

History & Opportunity
High % vacant lots Invitation from community Slated housing, renovation, or capital improvement projects

Community
Strong sense of community identity Potential for mutual learning (residents:stakeholders) Previously surveyed

Health & Vulnerability
High rate heat deaths / heat-related illnesses Low-income High rates of self-reported heat concerns Lack of A/C



Nature's  
Cooling  
Systems  
Community  
Engagement

CBO: Community-based Organization

## Heat Action Planning Guide

MESA CARE NEIGHBORHOOD

Creating Urban Heat Solutions in the Valley of the Sun



This guide was created for the Nature's Cooling Systems Project, a partnership of The Nature Conservancy, Arizona State University's Urban Climate Research Center and Urban Resilience to Extremes Sustainability Research Network, Maricopa County Department of Public Health, Central Arizona Conservation Alliance, Phoenix Revitalization Corporation, RAILMesa, Puente Movement, and Center for Whole Communities.

# Heat Action Planning Guide

Developed by:

- The Nature Conservancy
- Arizona State University
- Maricopa County Department of Public Health
- RAIL Community Development Corporation
- Residents of the Mesa CARE Neighborhood

Available at:

[repository.asu.edu/items/54600](https://repository.asu.edu/items/54600)  
[RAILCDC.org](https://RAILCDC.org)

# Strategic Themes

**Advocate and Educate**

**Improve  
Comfort/Ability  
to Cope**

**Improve Safety**

**Build Capacity**

## Mesa Care

Using social media and hashtags to highlight child safety and bus route issues



## Lindo-Roesley

Planting vegetation for empty lots to reduce dust



## Edison-Eastlake

Create signage for heat safety and wayfinding could reduce risk







## WHO SHOULD BE INVOLVED IN ADVOCACY AND IMPLEMENTATION?

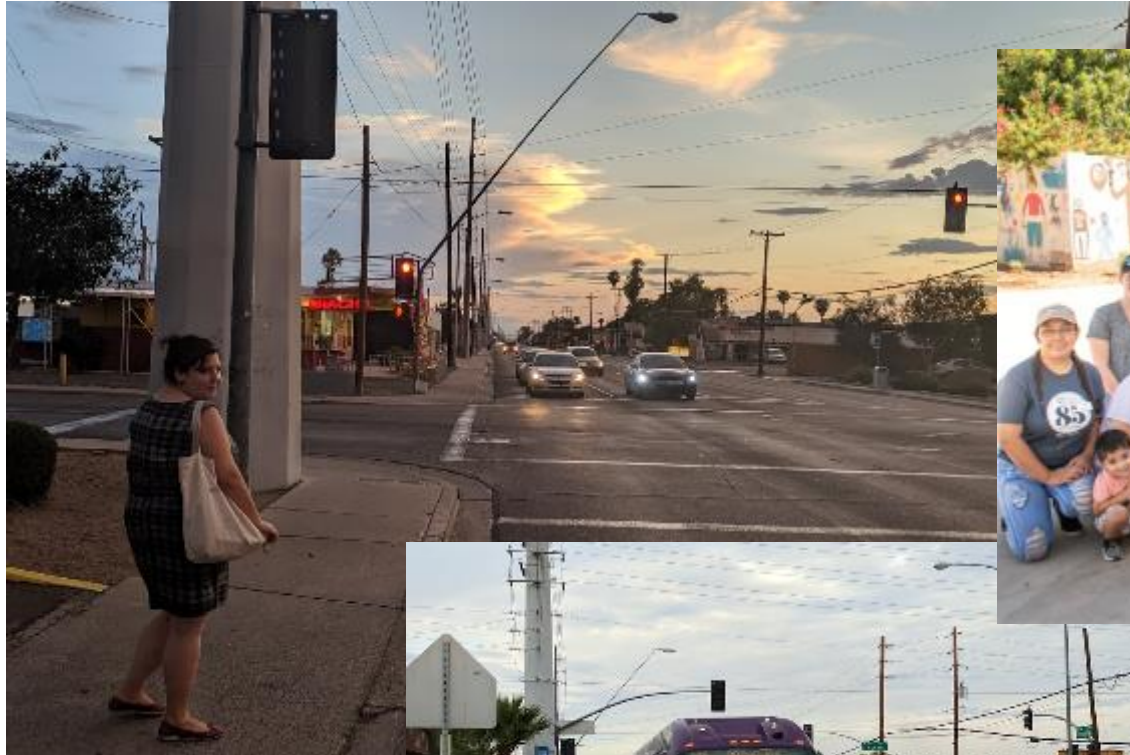
TYPE	EDISON-EASTLAKE	MESA CARE	LINDO-ROESLEY
Government	City of Phoenix Housing	City of Mesa Housing & Community Development	Municipality - Village Planning Committee
	City of Phoenix Streets	City of Mesa Transit	State
	City of Phoenix Parks & Rec	City of Mesa Transportation	City Council
	Phoenix transit/Valley Metro	City of Mesa Engineering	Valley Metro
	MAG Heat Relief Network	City of Mesa Parks & Recreation	
	County Hospital	Maricopa County Health Improvement District	
	AZ Dept of Health Services	Mesa Public Schools / Charter Schools in the area	
		City of Mesa Electric / SRP / APS	
Community Organizations	Salvation Army		
	Senior Center	Community Bridges / Center of Hope	Comité de Madres (CHISPA)
	Phoenix Revitalization Corporation	RAILMesa	Spaces of Opportunity
	Trans Queer Pueblo	Catholic Charities Care Campus	Puente
		A New Leaf / Mesa CAN	Unlimited Potential

# Mesa Care Neighborhood/ Water Tower Improvement District Heat Action Plan



# Water Tower Improvement District - CARE Neighborhood

What does CARE







# Why In The World Would We Participate With THESE People?





# What Worked in Mesa

- Involve residents from the beginning
- Understand issues of the community itself
- Develop social capital - not extractive
- Collecting neighborhood stories
- Two-way, level communication with academic and neighborhood experts
- Understanding neighborhood context - where to meet, how to communicate
- Working with kids
- Food & Childcare





# Understanding the Context

- Before even starting interaction, understanding the community
- Sunbelt city disconnection
  - Geography and social networks not well-linked
- Who is already organized in the neighborhood, where are natural connections and partners?
- Day of the week and time of day
- Meeting location
  - Eagles Community Center - Not what we hoped





# Meaningful Involvement

- Design of the program included collaborative - and iterative - engagement. Collaboration to meet, and respond to, the needs of the community
- Involve community members at the earliest stage
- Be flexible

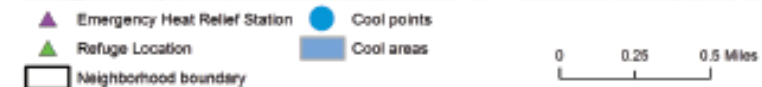
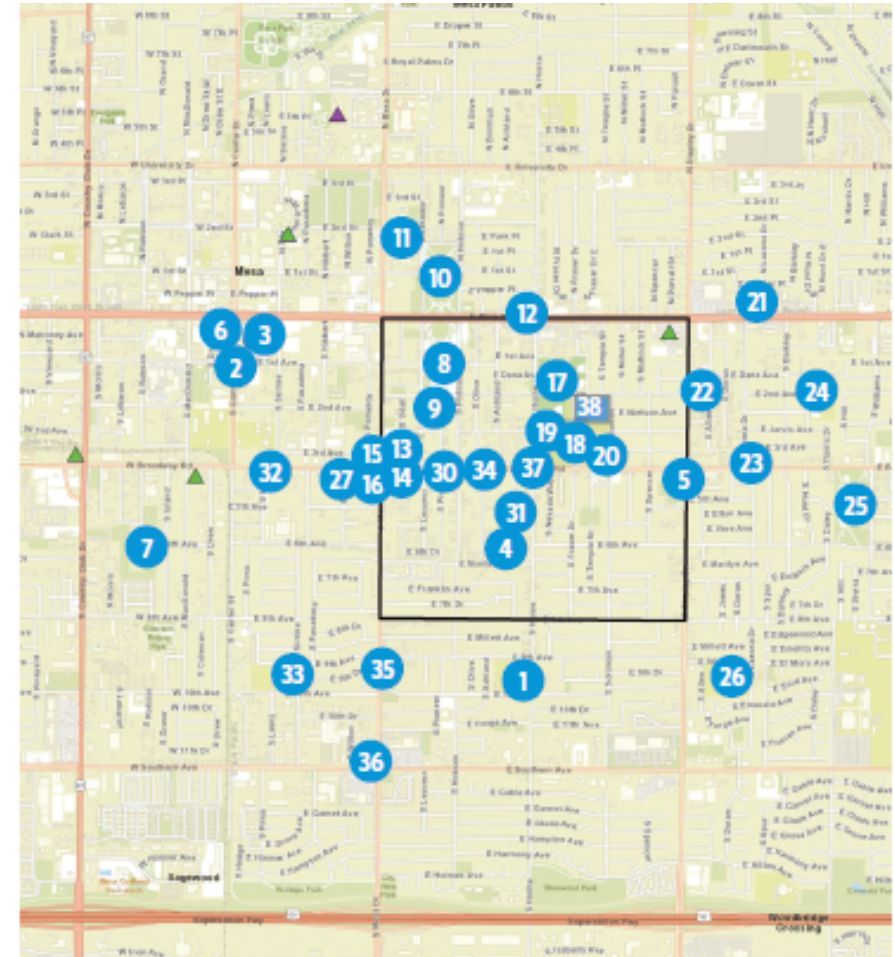
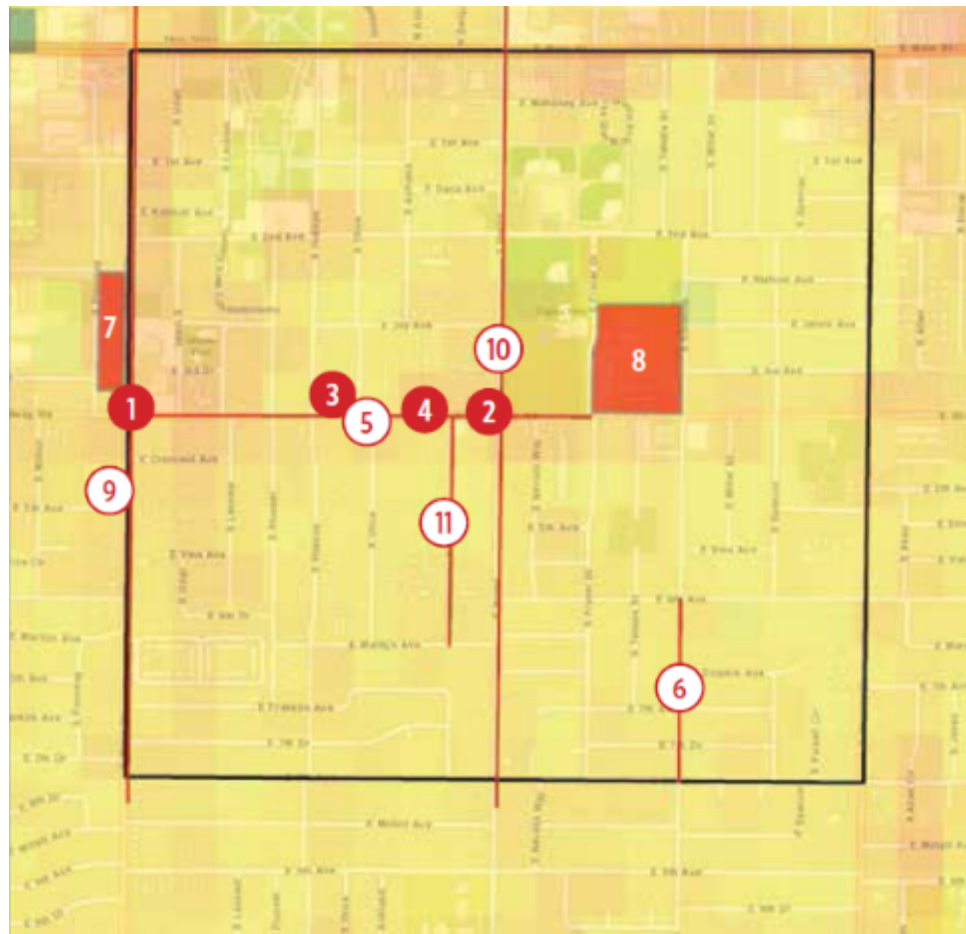




# Mapping Hot & Cool Spots



# Scales of Problems and Assets





# Leave it Better than You Found It





# Frequent, Meaningful Contact

- Usual stuff:
  - Knocking doors
  - Leaving flyers
  - Talking with people door-to-door
- Collecting stories
- Texts & phone calls
- Paying for participation
- After-school program
- Zine survey (Minneapolis)

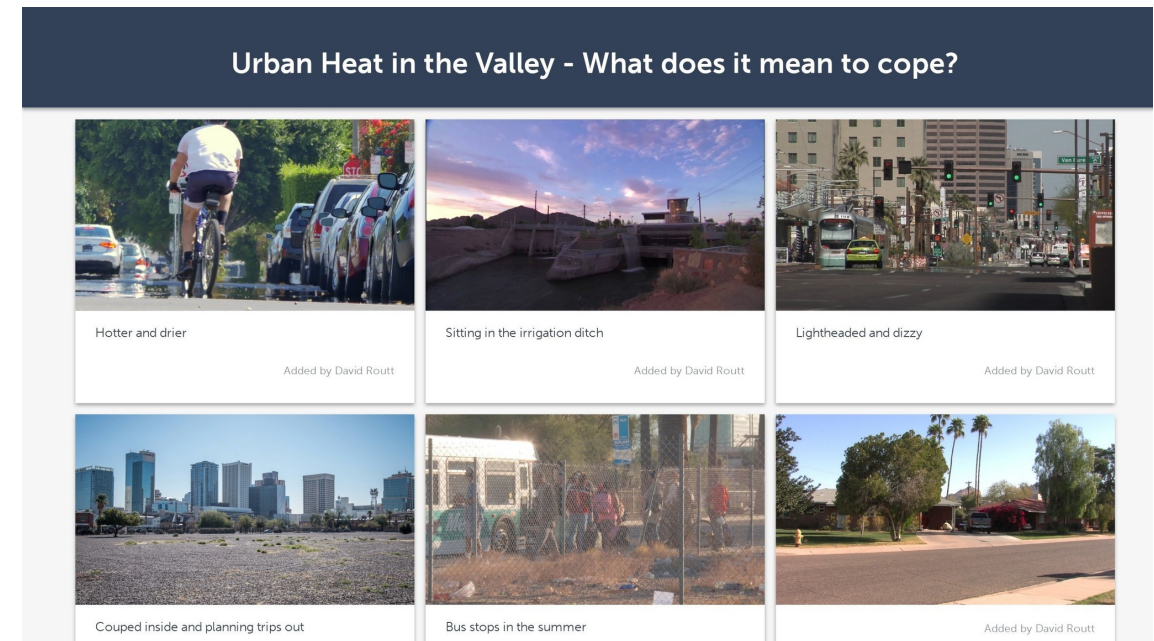






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# Asset Sharing

- Two-way, level communication with academic and neighborhood experts
- Setting norms that everyone is learning
- Not “top down” education, but bringing knowledgeable people together
- Fishbowl





# Return Anything Gathered

- Any data gathered in the community is owned by the community
- Commitment to return, in meaningful way, anything collected





# Resident Concerns

1. The need for shade, especially along routes to school or during long wait times at traffic lights
2. Lack of access to drinking water
3. Connectivity from community to broader transportation routes
4. Safety for children and elderly, especially for those living alone
5. Need for advocacy for urban heat solutions





# Solution Story – one example

## MORE, BETTER SHADE

- Install shade on hot walking routes, especially along Broadway to school
- Reduce wait times at traffic lights; stop in all directions, diagonal crossing
- Use vertical shading at bus stops and corners
- Community fund for tree maintenance and planting
- Plant trees in retention areas



# Lessons Learned

- ✓ Community-based organizations are an essential part of the process



# Lessons Learned

- ✓ Solutions were generated by bridging grassroots wisdom and evidence-based urban heat solutions.



# Lessons Learned

- ✓ Community heat awareness and heat action building is a slow build

Dealing with “The Collective Shrug”





# Lessons Learned

- ✓ Taking the time to build trust resulted in expanding participation and interest



# Lessons Learned

- ✓ Need to be flexible as the process unfolds



# Lessons Learned

- ✓ Community-based organizations are an essential part of the process
- ✓ Solutions were generated by bridging grassroots wisdom and evidence-based urban heat solutions.
- ✓ Community heat awareness and heat action building is a slow build
- ✓ Taking the time to build trust resulted in expanding participation and interest
- ✓ Need to be flexible as the process unfolds

# Disclaimer!

**“Replicating this: you can’t take this and hope to replicate elsewhere, readymade. The approach is something that works because it is developed organically based on the team and its context”**

**-Core team member in exit interview**

# Whole Measures for Urban Heat



**Justice and Fairness**

CONSERVATION FOR ALL



**Community Engagement**



**Economic Vitality**



**Community Resilience**



# Objective 1.01: Prioritize heat solutions that provide environmental benefits for under-resourced communities

MEASURES (OF SUCCESS) or METRICS				
NEGATIVE (-3)	NEUTRAL (0)	MODEST (+3)	STRONG (+5)	HIGHEST IMPACT (+10)
Projects with known possible negative impacts are given high priority despite knowledge of impacts (for example, decreased access to public transportation, job loss, loss of housing, increased flood impacts).	The potential negative impacts of projects on the community are considered, but projects that provide clear benefits are not prioritized.	Projects that result in some direct quality-of-life improvements are given additional weight when prioritizing strategies.	Projects that are likely to result in clear, measurable, positive impacts on health and other components of well-being are prioritized.	<p>Highest priority is given to projects targeting problems in under-resourced communities. Projects are designed and implemented in response to the community's self-identified needs and priorities.</p> <p>Projects are successful in creating measurable improvements in health and well-being.</p>

# Questions?

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