

Strengthening Resiliency in Communities of Color in Arizona and Nevada

AZ Heat Preparedness & Resilience Workgroup

June 17, 2021



Research Summary Case Studies: Las Vegas, Nevada, and Phoenix, Arizona

Policies
(state, county, municipal)
for climate change,
disasters, public health



Extreme
Heat



COVID-19



Research Questions

1. What vulnerabilities to extreme heat did the COVID-19 pandemic expose or exacerbate?
2. Which policies and programs have helped address these vulnerabilities? What gaps exist?
3. How can policy enhance adaptive capacity to extreme heat?

This study is funded by the Walmart Foundation as part of its research initiative "Impact of COVID-19 on Communities of Color" (Grant ID 61390707).



**Latino
community
members**

Heat exposure

Sensitivity

Adaptive
capacity



**American Indian
community
members**

Heat exposure

Sensitivity

Adaptive
capacity

Study design

- Landscape Analysis: Policy review
- Needs Assessment: Literature + Interviews
- Gap Analysis: Interviews + Observed gaps
- Recommendations

Methods

Landscape Analysis (Policies)

1. Policy search: plans, programs, initiatives, statutes, codes
2. Theme identification
3. Codebook Development
4. Deductive coding
 - Consensus approach

Landscape analysis: Key themes

Focal Issues

- Climate adaptation
- Community engagement
- Cooler spaces/thermal comfort
- Coordination
- Energy use
- Housing security
- Public education
- Public health
- Research

Strategies

- Community engagement
- Coordination
- Funding
- Incentives
- Information
- Infrastructure
- Planning
- Regulations & laws
- Research
- Social services

Beneficiaries

- Individuals & households
- Neighborhoods
- Businesses
- General public
- Property owners
- Socio-economic subgroup

Relevant Space

- Body
- Private
- Public
- Transit
- Workplace

Phoenix case study

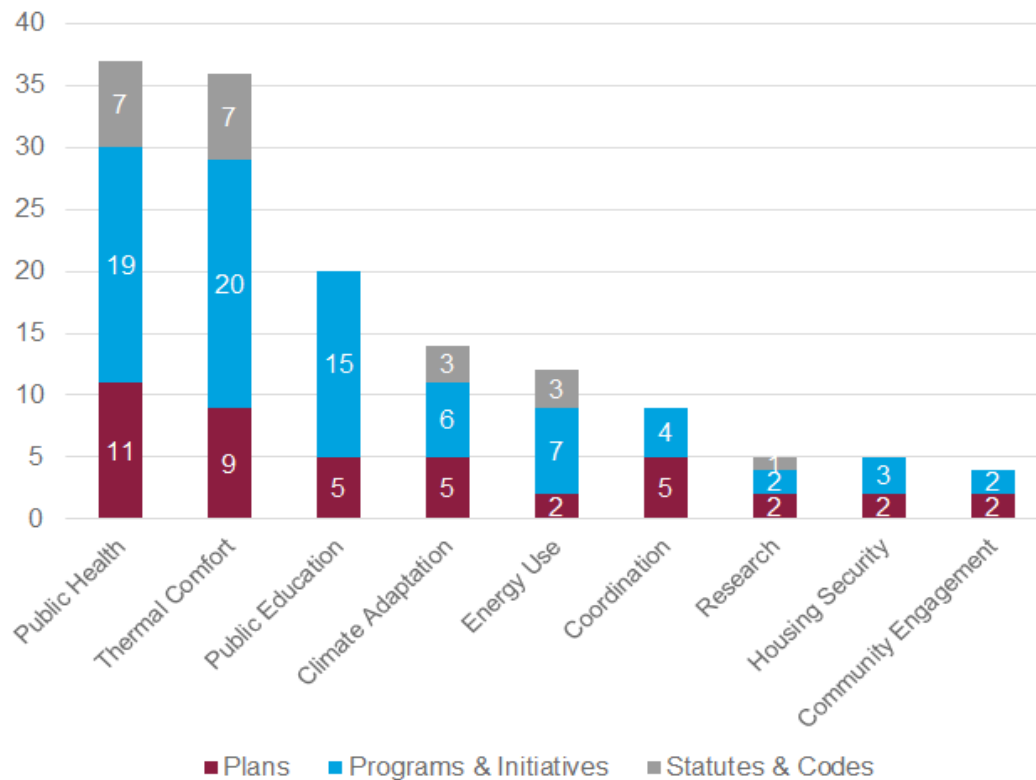
Landscape analysis

- **45** Policies directly relevant to extreme heat
 - **15** Plans
 - **23** Programs & initiatives
 - **7** Statutes & codes
- Primary heat/health issues*
 - Public health (**37** policies)
 - Thermal comfort (**36** policies)
- Primary strategies*
 - Information (**25** policies)
 - Planning (**18** policies)

**Findings are preliminary*

Preliminary Results

Focal Issues



Methods

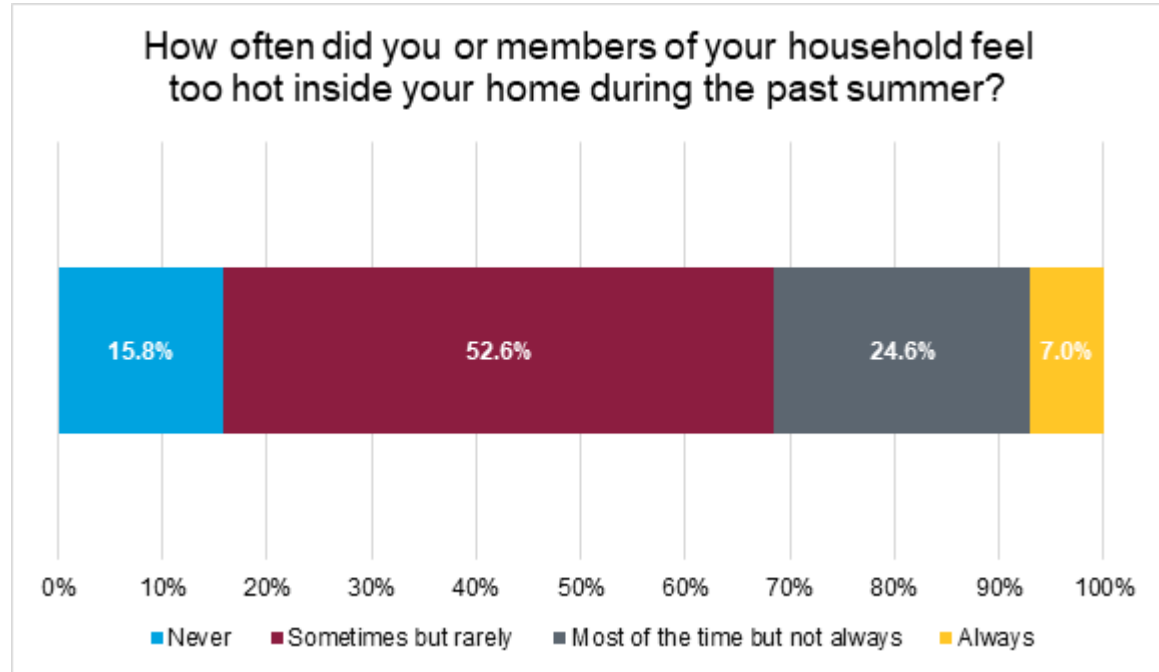
Needs assessment (interviews)

- Community leaders
- Community members
- Phone or Zoom
- Spanish language option
- Recruitment
 - Community organizations
 - Student organizations
 - Facebook advertising
- Codebook development based on policy analysis
- Deductive/inductive coding

Needs assessment

Sample description

- **15** Community leader interviews
- **57** Community member interviews
 - **24** American Indian
 - **29** Latinx
 - **4** American Indian & Latinx
- **88%** women
- **65%** working full or part-time
- **42%** earning \$25,001-\$50,000 per year
- **49%** single family home
- **38%** apartment or condo



Most participants felt too hot inside their home
“sometimes but rarely”

Community Member Interviews

Preliminary Findings

Needs assessment preliminary findings

Focal heat concerns/challenges

THERMAL COMFORT

Transit

Private & public

Body

Indoor & outdoor

Physical, mental/emotional, &
financial impacts

Exacerbated by COVID and
new challenges

“Well, we don't go outside, to be honest with you. We stay inside the house because there's no trees around our home. And there's one park but there's no trees in the park. So, we decided to stay home basically, inside”

“...the car does not have air conditioning and the house only has a cooler. The cooler helps, but the heat is very strong, also inside the house, because it does not cool everything”
[translated from Spanish]

“...in that house that we rent, like that the air conditioning does not come in all the rooms, but we tell the owners, that there is that problem. But well, they ignore us, according to them, they come and “No, everything is fine, they have no problem.”
[translated from Spanish]

Needs assessment preliminary findings

Focal heat concerns/challenges

ENERGY USE

Private

Indoor

Financial

Exacerbated by COVID

“Because my work started at telecommute program...And so I had to adjust the temperature at home to make it comfortable during the day, and that increased my electric bill almost 50 to 60%. Once I realized that was happening, I had to adjust the temperature in the house, because I could just not keep up with that expense. And it was very uncomfortable to work from home. I tried to look for other places that were safe, but I was not successful. So I ended up with a huge electric bill that I’m still on a payment plan to cover that from last summer.”

“...mainly the cost, and sometimes we do not turn on the AC; we just leave the fans running and do it that way.”

Needs assessment preliminary findings

Focal heat concerns/challenges

HEALTH

Body

Outdoor

Physical & mental/emotional
impacts

New challenges and
exacerbated with COVID

“You got to worry about sunburn, heat exhaustion. Yeah, it takes some prep work and it takes some... You have to be more cautious here and know that being outside too long in the Valley, I mean, it's probably far worse than being up north like in Flagstaff being outside for an hour.”

“So, I think when it comes to heat for me, my ability to go out and exercise and go out to walk is my biggest challenge. I especially during COVID when gyms closed, when there was a place for me to do my workouts in a cooler place, gyms were closed and I personally did not feel comfortable working out at the gym, which personally for me it did affect my health in a negative way.”

Recommendations from Community Members

THERMAL COMFORT/COOL SPACES

INFORMATION, KNOWLEDGE, & EDUCATION

INFRASTRUCTURE

SOCIAL SERVICES

ENERGY USE

In process

Gap analysis

Alignment between existing policy
and community concerns

Opportunities to address gaps

Community forums

Ground-truth findings

Provide information and
resources for heat

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