PUBLIC MEETING AGENDA

Tempe
Neighborhood Services

NEIGHBORHOOD ADVISORY COMMISSION and SUSTAINABILITY COMMISSION JOINT MEETING

Wednesday, Jan. 6, 2021
6 – 7:30 p.m.
Virtual Meeting

Join Microsoft Teams Meeting
Or call in (audio only)
+1 480-498-8745 United States, Phoenix (Toll)
Conference ID: 360 837 976#

AGENDA

NAC Mission Statement - "The Neighborhood Advisory Commission will advise the Mayor, Council and City departments by proposing and promoting programs and policies that preserve or enhance our neighborhoods and encourage a sense of community."

1. Call to Order

2. Attendance Roll Call

3. **Public Comment** – The Neighborhood Advisory Commission welcomes public comment. According to the Arizona Open Meeting Law, the Commission may only discuss matters listed on its meeting agendas. Matters brought-up by the public under public appearances that are not listed on the meeting agenda cannot be discussed by the Commission. A three (3)-minute time limit per person will be in effect.

4.* Neighborhood Engagement for Climate Action Plan Update

5.* 2021 State of the Neighborhoods Planning Update

6.* Cook Kids, Cool Places, Cool Futures Grant

7. Adjournment

The City of Tempe endeavors to make all public meetings accessible to persons with disabilities. With 48 hours advance notice, special assistance is available at public meetings for sight and/or hearing-impaired persons. Please call 350-4311 (voice) or 350-8400 (TDD) to request an accommodation to participate in a public meeting.

*Background Materials

Climate Action Plan 2021 Update

January 6, 2021

Tempe

Making waves in the desert

Purpose

- Provide space & listen to build collaboration with community and improve upon the Climate Action Plan (CAP) 2019
  - Co-create a process to engage stakeholders
  - Co-create actionable items that are important to stakeholders

Outcomes

Equitable climate action strategies
that best serve our community

Partnerships for **decarbonization** and
resilience to extreme heat

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What is Equitable Climate Action

- Advocates for justice people and the planet
- Identifies ways in which injustices between marginalized communities and the earth are interconnected
- Does not minimize or silence social justice

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Equitable Climate Action Examples

- Training Childcares to Reduce Children's Exposure to Pesticides
- Educating Low-Income Families to Identify & Address Environmental Hazards in their Homes including exposure to extreme heat
- Training residents on how to read their energy bill and lower utility costs
- Neighborhood green infrastructure projects in parks and in right of ways
- Allergy and Asthma Testing in Economically Vulnerable Communities
- Cooling Stations or Shaded Bus Stops
- Youth Climate Town Hall

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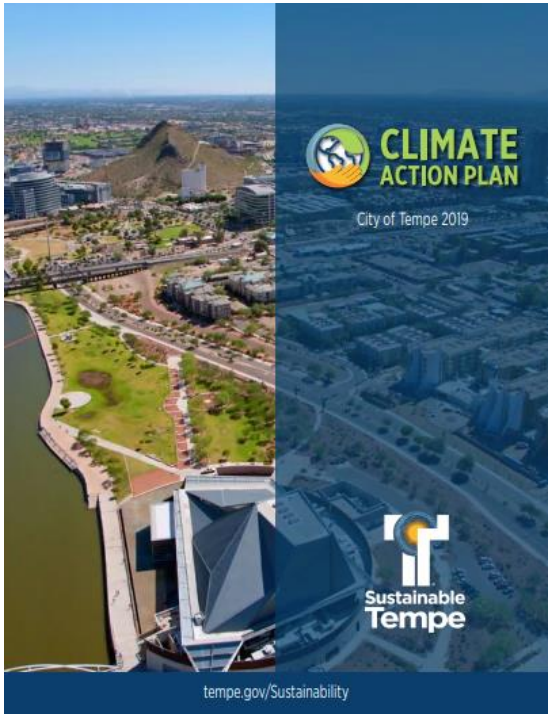
Climate Action Plan 2019

- 1st Climate Action Plan
- Areas of Focus
  - Energy
  - Transportation
  - Resilience to Extreme Heat
- Highlight Actions
  - Resilient Energy Hubs
  - Transportation Demand Management
  - Green Infrastructure
  - Green Construction Code



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Climate Action Plan 2021 Update

- **Stakeholder Groups:**
  - Built Environment Professionals
  - Business Leaders
  - Equity and Social Justice Leaders
  - Faith-Based and Non-profit Organizations
  - Neighborhoods and the General Public
  - Youth and Students

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Climate Action Interests

- What would you like to see in Tempe?
- What does a sustainable Tempe look like?

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Climate Action Collaboration

- What should we do?
- Who should be involved and how do we get them to the table?

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Climate Action Plan 2021 Update

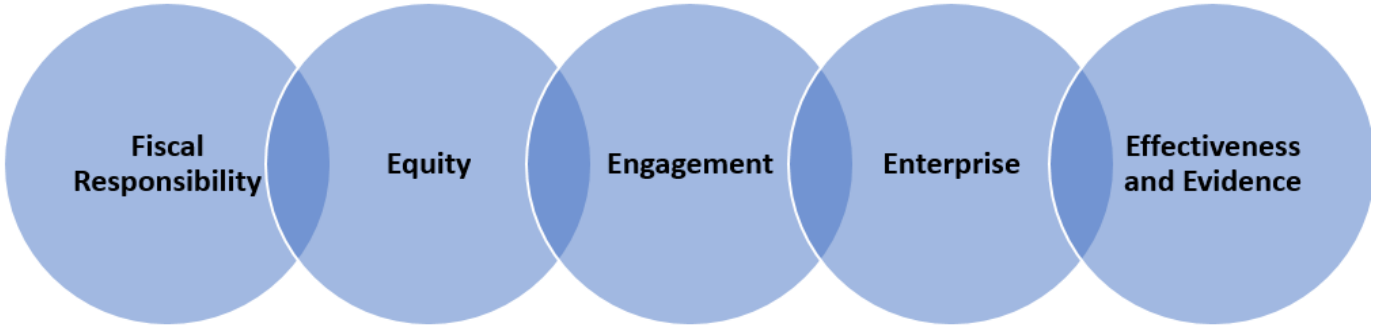
- **Engagement:**
  - Listening Sessions (2nd Round)
  - Climate Justice Outreach and Training
  - Highlight action policy adoption
  - Cool Kids
  - March Forum
  - Storywalks
  - Social Media

Storywalks

Climate Justice

Guiding Principles

Tempe's CAP 2021 Update will incorporate G**uiding Principles** to ensure **quality** and **effective climate action** is taken:



Next Steps

- Identify other stakeholders to involve
- Create and share storywalks and social media
- Identify specific climate actions to collaborate on
- Adopt policy on highlight actions

Moving Forward

We will advance climate action by:

- Grant applications: arts engagement, equity, schools
- ASU partnerships including coursework
- Adopting policy
- Investing in infrastructure and programs

We will work with stakeholder groups on:

- Policy development
- Pilot projects: green infrastructure & neighborhood grants

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Thank You

- We want to partner with you to accelerate **equitable climate action** in Tempe!

MEMORANDUM

To: Neighborhood Advisory Commission and Sustainability Commission

From: Shauna Warner, Neighborhood Services

Date: January 6, 2021

Subject: 2021 State of the Neighborhoods Planning Update

The April date for the 2021 State of the Neighborhoods Awards and Workshops event is Saturday, April 17, 2021. Specific morning hours to be determined. The 2021 event will be virtual or a hybrid format with some limited in-person activities, if safe to do so at that time.

The following possible priorities were identified by the Neighborhood Advisory Commission for additional exploration and follow up, but no overarching theme was chosen. Sustainability Commission members are welcome to bring ideas for how the event could incorporate climate action.

1. Cooking - local restaurants demonstration or a cooking class
2. Trees – gardening in desert
3. Retail space uses
4. Crime prevention
5. Affordable housing
6. Climate Action Plan and neighborhoods – collaborate with Sustainability

Award categories:

Neighbor of the Year Award - recognizes neighbors, organizations and businesses that help to strengthen and creatively build the Tempe community through their commitment to and involvement in neighborhoods.

Alley Award - recognizes neighbors that keep their alleys well maintained, clean and free of weeds and graffiti.

Arts & Culture Award - recognizes individuals and organizations that have made significant contributions to arts and culture in Tempe.

Beautification Award - recognizes efforts by neighbors to beautify residential properties or community areas that enhance the neighborhood's appearance and help create more inviting and comfortable environments.

Sustainability Award - recognizes residents, organizations and businesses that help to strengthen and creatively build the Tempe community through their commitment to and involvement in sustainability.

Water Wise Landscape Award - recognizes individuals who have created outstanding desert environments using the principles of xeriscaping.

Cool Kids, Cool Places, Cool Futures:

Youth-driven, Arts-enhanced + Community-based approach for equitable urban cooling and emergency management

Tempe
Making waves in the desert

+

ASU
Arizona State University

CLIMATE ACTION PLAN

Tempe Office of Sustainability

Tempe

CLIMATE ACTION PLAN

Youth, Arts, + Community

Approach to Climate + Health Action

Climate urgency

Collective ownership + identity

Amplifying action

Social cohesion + connectivity

CLIMATE ACTION PLAN

Youth, Arts, + Community
Approach to Climate + Health Action

Cool Global Idea #1 - Wellington, N. Z.:

"Community Resilience Concept" revolutionizing emergency management

Cool Global Idea #2 - Morocco (Ten cities):

Arts-enhanced, youth-driven processes celebrating jazz and teamwork for community organizing, creative expression, and infrastructure action

Cool Global Idea #3 - Medellin, Columbia:

A district-based participation process for public utilities

Dan Neely, right

Corina Kwami, below

CLIMATE ACTION PLAN

Youth, Arts + Community

Approach to Climate + Health Action

Community resilience
to extreme heat
Public Cooling Utility

Agenda for Cooling — *County-level* → *Regional Resilience*

Support + Integration Phase

Hubs + Principles for Action — *Tempe-level* → *EM Training + Integration of City Plans*

Assessments + Cooling Projects — *Neighborhood-level* → *Neighborhood Cooling*

A + B

Capacity Building Phase

Youth Council

Artists

Equity + CD + Heat Researchers

Neighborhood A

City Staff

EM +Resilience Researchers

EM & Sustainability

Pre-planning Phase

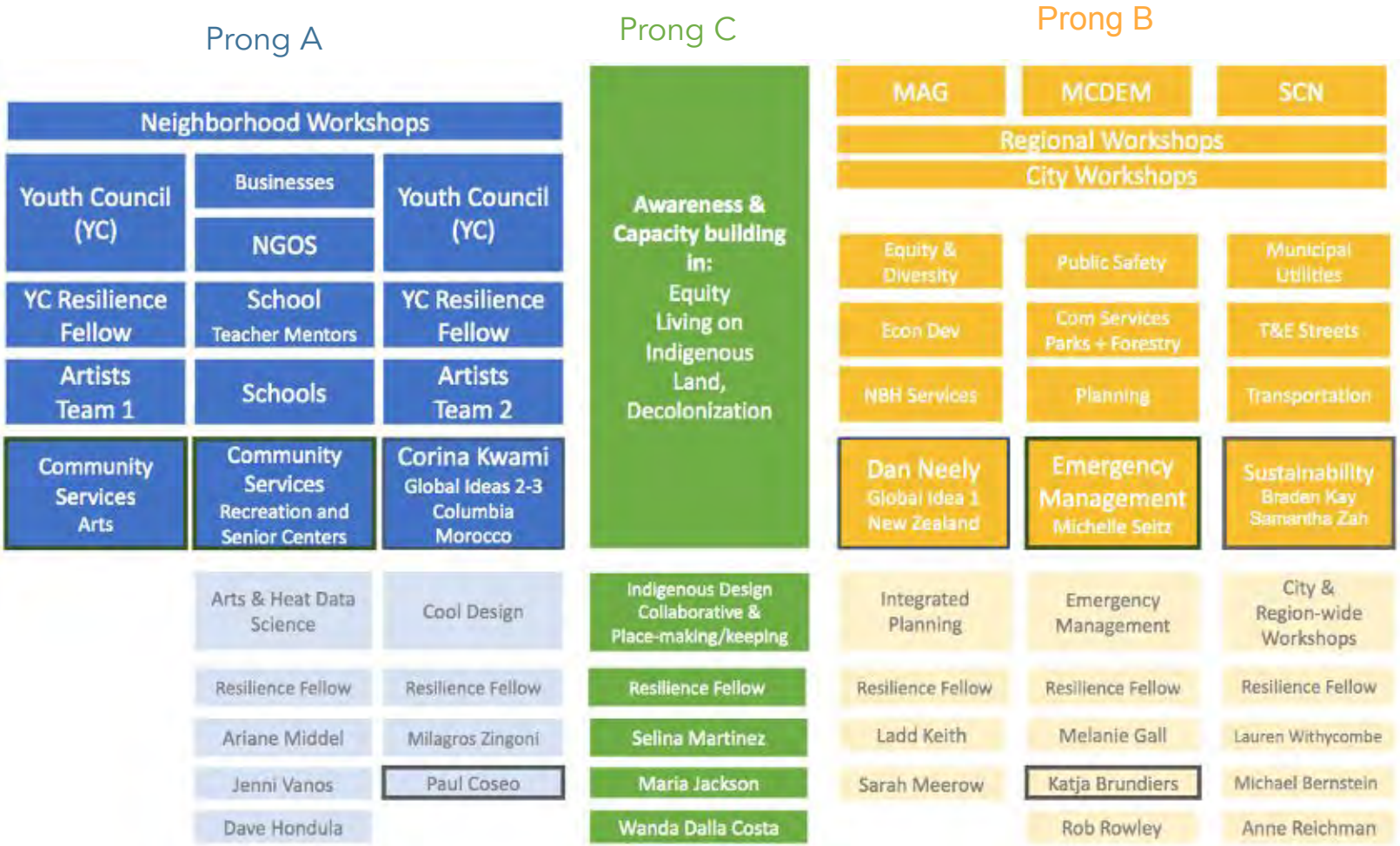
Build Prong C
Indigenization of Cities

Prong A
Arts-enhanced, Youth-focused Community Development

Individual resilience
to extreme heat
Water Bottles

Prong B
Community-based
EM + Integration of City Plans

Organizational Chart for Cool Kids, Cool Places, Cool Futures



Overview of concurrent activities in the three major phases of Cool Kids

November 2020 — April 2023

Pre-planning → **Capacity-building** → **Community Support & Integration**

Prong A: Arts-based Community Development for Resilience to Heat

- Set up Youth Councils
  Recruit Artists
  Recruit Teacher Mentors
  Form Community Network
- Document cultural cooling assets
  Equity + decolonization training
  Heat walks & Heat Maps
  Create cool arts projects
  Create pilot cooling projects
- **Arts-based workshops:**
  Design NBH EM+Resilience plan
  Design Cooling principles
  Implement pilot cooling projects
  Co-host: City-Workshop
- **Arts-based workshops:**
  Regional Agenda for Urban Cooling
  Co-host: Regional Workshop

Creating multi-disciplinary artworks and video to broadcast on local Channel 11 and social media

Prong B: Community-based Emergency Management + Integration of City Plans

- Equity + decolonization training
  Heat & cooling trainings
  Engage with Youth-Council
- City Resilience Plan +
  Heat-Integrated Plans
  People-centered EM training
- Community-based EM Processes & Plans, incl.:
  Hubs guides, Community EM training, city-wide hub activation
- Workshop on policy making:
  Transportation tax extension
  Resilience Collaborative
  Heat in All Hazards Plan

Engage with Youth Council for integration of youth work in planning and policy-making

Prong C: Indigenization of Cities

- Design and co-facilitate equity + decolonization training
- Integrate indigenous perspectives into pilot cooling projects & plan integration
- Integrate indigenous perspectives into cooling principles & planning documents
- Support Regional Agenda for Cooling

Co-current work between prong 3 and the other prongs to foster critical reflection and intergenerational and intercultural dialogue

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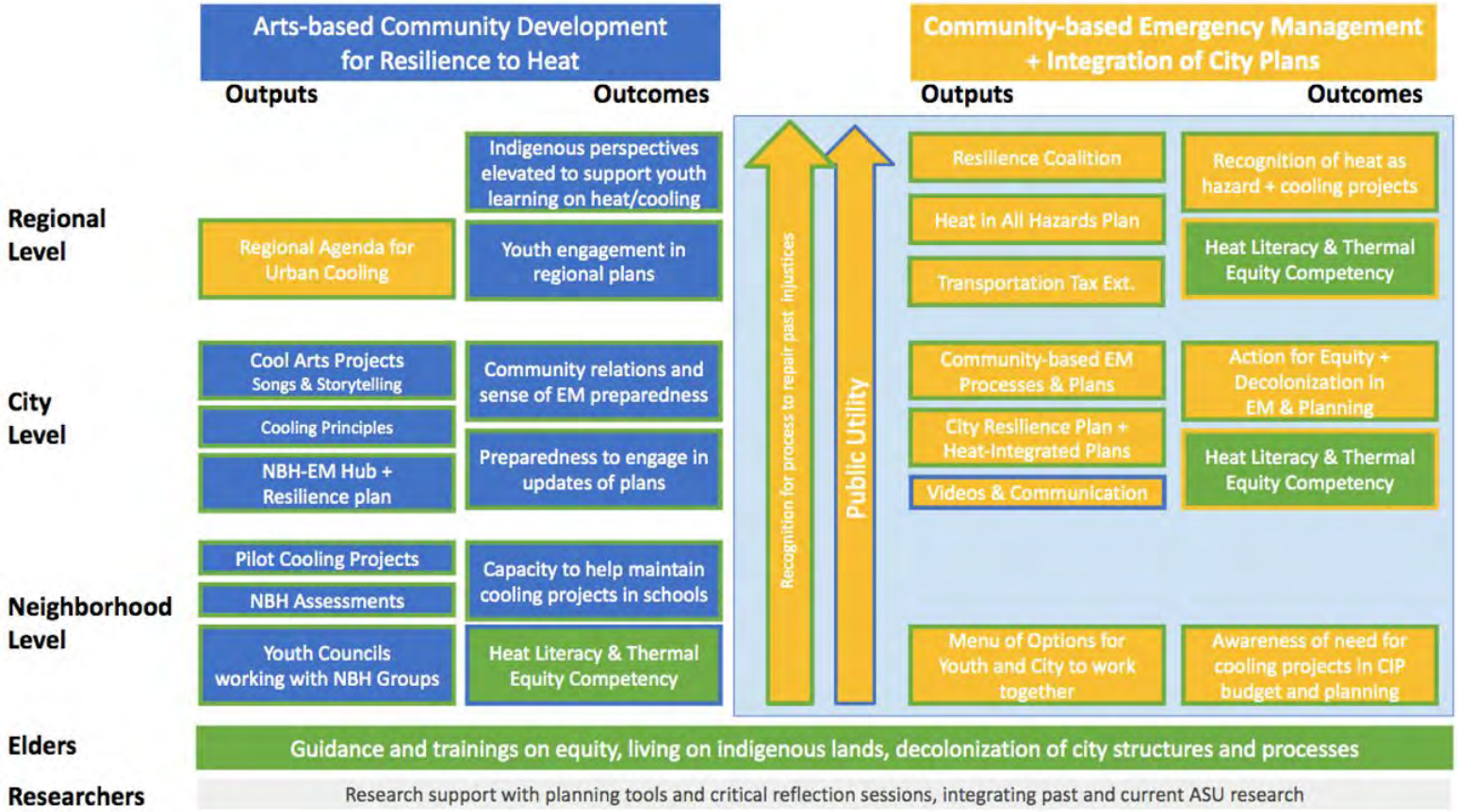
Overview of Outputs & Outcomes Generated through Cool Kids



Evidence of Success:

Cool Kids success means a transformation in conversations about heat resilience as a public responsibility, rather than an individual concern.

(We've adapted these based on comments from Corina and Selina)

"Heat + Health + Healing (H3) Walk 2.0" (for OBJECTIVE 1): This people-centered thermal performance metric involves a heat walk and combines 1) walker's thermal perception, 2) walker's thermal sensation vote, and 3) mean radiant temperature (MRT), all of which would be discussed in a focus group with detailed discussion of health impacts (e.g. diversity of heat stress and illnesses) of the walk. Lean toward the thermal wellness and livability.
We will refine people-centered thermal performance metrics developed in the Health Impact Project for sidewalks and multi-use paths in Tempe (Supplemental 6).

"How Cool + Healthy + Healing are We" (for OBJECTIVE 2): Measures the total number of policy changes adopted by Council (variable 1) + number of Capital Improvement Projects that integrate heat mitigation (variable 2) + public perception of heat actions (variable 3).
This metric measures the progress toward objectives of the cooling action for intergenerational and intercultural equity.

"Equity Reflections on Cooling + Health + Healing" metric (for OBJECTIVE 3): Measures the outcome of the training in equity, living on indigenous lands, and decolonization.We will use pre-post surveys, reflections using PhotoVoice, and semi-structured focus groups each semester in 2022-23 (4 times total). The metric will be co-developed and tested with Councils in the pre-planning phase.
The metric will gage the quality of experiences, the inner workings of the social cohesion process, how perspectives on equity are shifting, and how levels of agency have changed. These tools will also provide critical feedback on shifts in ethical understanding of indigenous-non-indigenous relations and how to course correct during the grant period.

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General Questions

Chat waterfall question #1,

1-minute then hit send at same time

Racial Justice Movement:

How should we adapt and/or stay the course, as we implement the project, to more explicitly meet the Black Lives Matter and larger racial justice movement?

Chat waterfall question #2,

45 seconds then hit send at same time

COVID-19 Questions:

How might ongoing disruptions and effects of the COVID-19 pandemic affect your project, if at all?

Chat waterfall question #3,

45 seconds then hit send at same time

New big ideas and shared values:

Since May 2020, how have your thoughts evolved on how we should be working on resilience to extreme heat and equity?

Chat waterfall question #4,

1-minute then hit send at same time

Questions for RWJF:

What are your questions for RWJF Global Team staff?

CLIMATE ACTION PLAN

Thank you!

Appreciation for:

Healthy Urban Environments

City of Tempe

Arizona State University

Please send questions to:

Braden_Kay@tempe.gov, or

Katja.Brundiers @asu.edu, or

Paul.Coseo@asu.edu

Multi-use Paths

Street Bike Lanes + Sidewalks

Desert Preserves

Transit corridors

Oasis Parks

Hubs + Corridors Approach

Developing a vision...

Vision: Climate Action to Increase Thermal Wellbeing

All Tempe residents have access to city infrastructure that supports outdoor physical activity in the summer months by providing adequate protection from and awareness of dangerous heat and sunlight conditions. The Tempe city government and residents have high awareness/ competency/ interest of/ in thermal comfort. Tempe is a city where heat-health risks and thermal comfort are well-integrated in planning and budgeting processes that impact current and future infrastructure and residents have a sufficient level of climate literacy to equitably engage in civic advocacy and action around extreme heat.

Project Objectives (June 2020- June 2021)

1. Support existing researcher-city staff relationships
2. Support overarching synthesis of data in context of user experience
3. Inform prioritization of placement of investments (macro) and inform design of site scale infrastructure (micro)

Placement (Macro-level Data)

City Staff + ASU Researcher

City Engineer
Emergency Mgmt
Equity & Inclusion
GIS: Transportation, Community Dev
Parks
Stormwater
Strategic Mgmt
Streets ROW
Urban Forestry

Design (Micro-level Data)

City Staff + ASU Researchers

Hubs:

Parks (playgrounds) & Rec Centers (Cooling Centers)

Corridors:

Transportation
Urban Forestry
Community Development

Partners: Macro- and Micro Heat Maps

Partners (Macro-level Heat Data),

Dave Hondula / ASU Researcher / City Staff

- Urban Forestry (Richard Adkins)
- Streets ROW (Shawn Thomson)
- Stormwater (Gregg Kent)
- Parks (Craig Hayton)
- Equity & Inclusion (Jonae Harrison)
- City Engineer (Julian Dresang)
- GIS (Stephanie Dietrich)
- Strategic Mgmt (Aaron Peterson)
- Emergency Mgmt (Michelle Seitz)
- GIS Transportation & GIS Community Dev

Partners (Micro-level Heat Data)

- **Hubs** (Jenni Vanos):
  - Parks (playgrounds) & Rec Centers (Cooling Centers)
  - Dave McClure
  - Craig Hayton
- **Corridors** (Ariane Middel)
  - Transportation (Robert Yabes, Vanessa Spartan, Bonnie Richardson)
  - Urban Forestry (Richard Adkins)
  - Community Development

Project Management: Braden Kay, Paul Coseo, Katja Brundiers & Grace Logan

Project Deliverables

1. Integrated heat + public health maps, complementing macro-scale maps (location) with micro-scale maps for action
2. Document heat + health experiences to ground heat + health maps in lived experiences
3. Heat + public health information + training to support decision-making using the heat and public health maps
    a. Including educational videos for broader public

How should we work?
Reflection questions we should always ask:

1. Who is missing from the conversation and/or from our understanding of lived-experience?
2. What ideas or terms are confusing or hard to understand?
3. How are we creating space for new perspectives, questions and ideas? How are we modeling making space for new ideas to reduce bias?

Relationship: Macro- and Micro Heat + Health Maps

Macro-level Heat + Health Data
Identifies 4 zones of priority, (drawing on time of day, time of year, aggregate)
helps with **placement** of heat mitigation structures / green infrastructures (which of these is most relevant)

Micro-level Heat + Health Data
Identified the "right measure for the right application" - surface temp for playgrounds, MRT for parks, etc.
helps with **design** of heat mitigation structures / green infrastructures (material, orientation is successful)

- Support existing researcher-city staff relationships
- Support overarching synthesis of data in context of user experience;
- Inform prioritization of investments and a "Heat Investment Index" (macro) AND inform design of infrastructure (micro)

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2019 - 5 activities / tools were deployed:

Macro = Tool 1 – Citywide Heat and Health Survey

Micro = Tool 2 – Playground assessment
Micro = Tool 3 – Multi-use paths + parking lots assessment
Micro = Tool 4 – Wall assessment
Micro = Tool 5 – Heat walk

Infrastructure:
Parks/Playspaces
Multi-Use Paths
Arterial Walls
Parking Lots

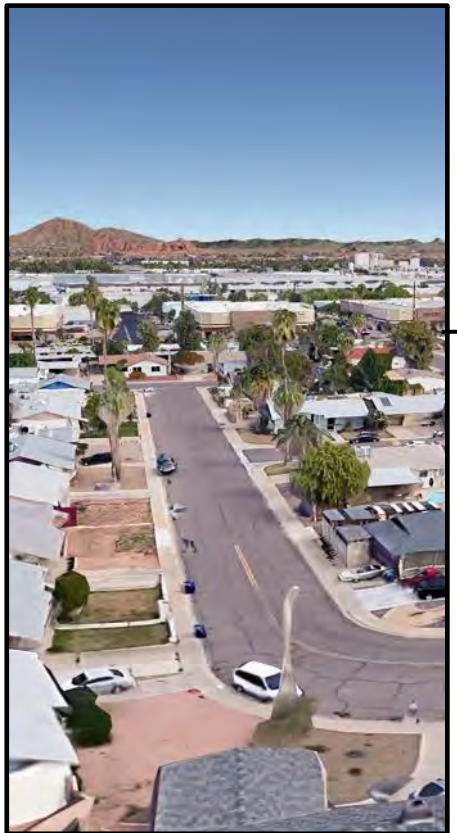
Tempe

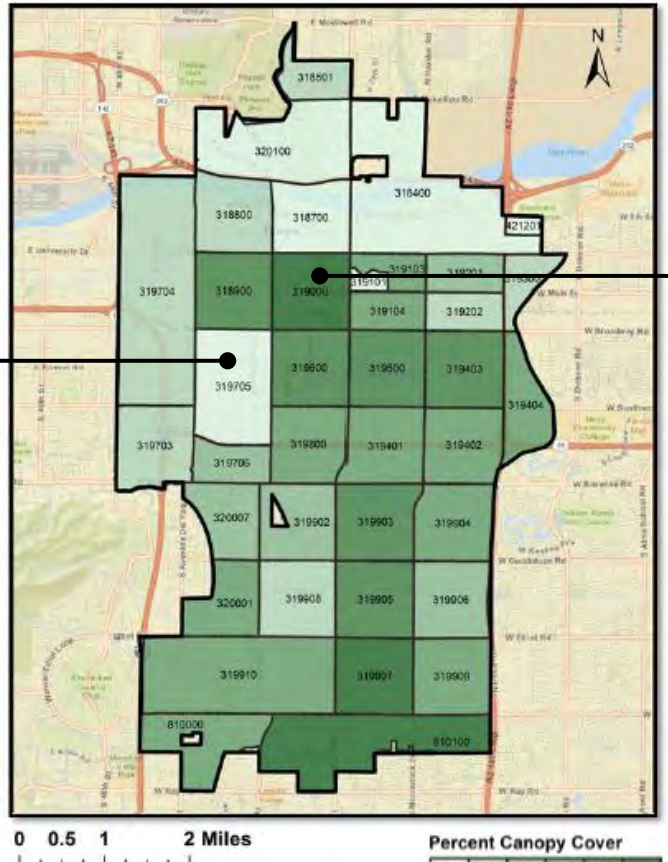
Macro Data

Placement for thermal equity

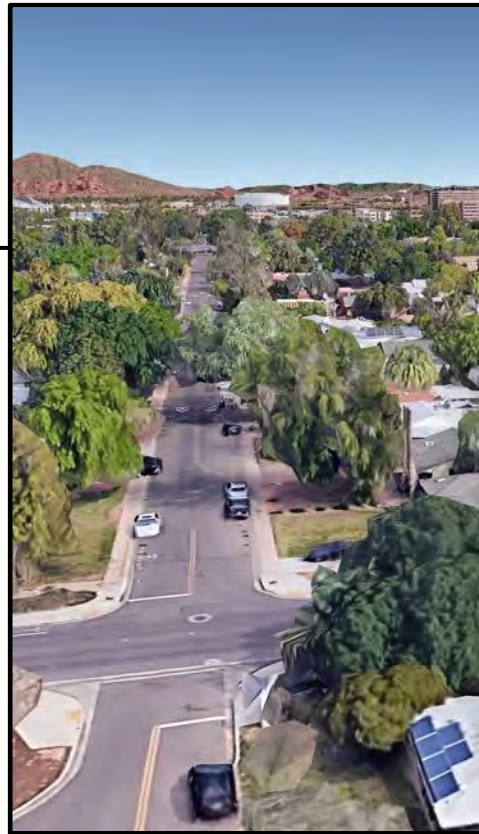
The right measure for the right scale

5-8.1% tree cover





20.3-25.8% tree cover



CLIMATE ACTION PLAN

Heat + Health + Infrastructure Challenges

In the chat:

What are your placement challenges?

CLIMATE ACTION PLAN

Heat + Health + Infrastructure Challenges

Placement challenges at city scale:

- Challenges with definitions of spatial thermal equity
- Agreement on best macro variables (city-wide data) to include (e.g surface temps, poverty) in prioritization of placement with city
- Coordination between departments
- Speed at which research turns into “desktop ready” tool for planning pedestrian

Dave + Liza insert macro slides here

Dave + Liza insert macro slides here

Dave + Liza insert macro slides here

Dave + Liza insert macro slides here

Micro Data

What is design for comfort and health?

Kiwanis Park, Tempe, August 25, 2019 during 7-8pm

high 103F
low 85F

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CLIMATE ACTION PLAN

Heat + Health + Infrastructure Challenges

In the chat:

What are your site scale challenges?

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Heat + Health + Infrastructure Challenges

Or we could ask City staff what are their biggest site scale issues?

Design challenges at site scale:

- Limited microclimate data including user thermal experience data and impacts of heat on people
- Day, night, time of year, and user behavior dynamics
- Urban materials (e.g. touching hot surfaces)

Micro = Tool 5 – Heat walk

Heat stories + conversations

- 40 Participants Tempe Heat Walk (photo below)

"Informed and hot!" - Heat walker, 9/21/29

Results Based Accountability

Proposed Performance Metric:

The mean radiant temperature (MRT) performance threshold metric for sidewalks and multi-use paths.

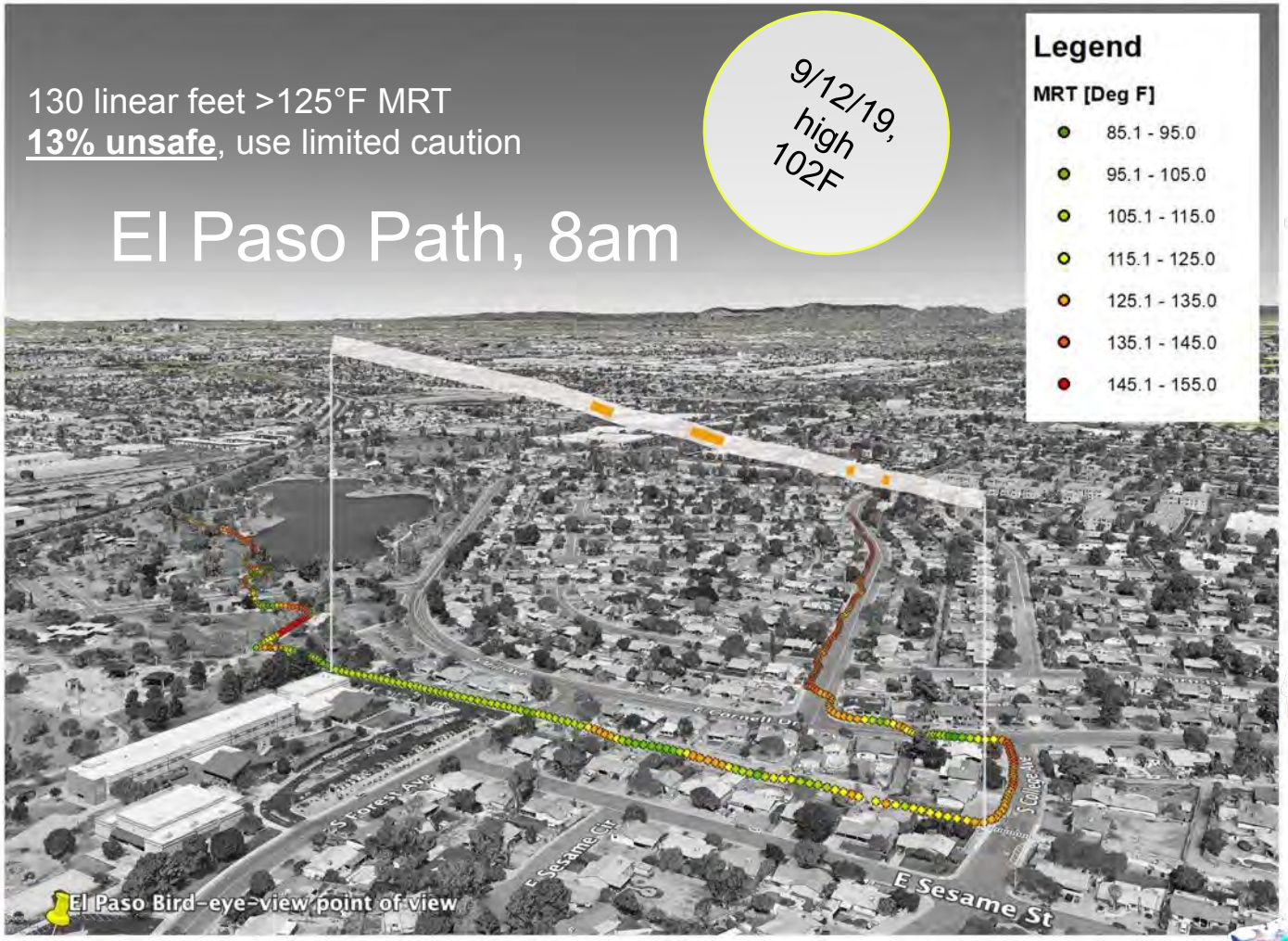
To calculate the percentage, we used the following calculation:

$$\text{\% unsafe} = \frac{\text{(linear feet over 125°F MRT / total length)}}{100\%} X$$

130 linear feet >125°F MRT
13% unsafe, use limited caution

El Paso Path, 8am

9/12/19, high 102F



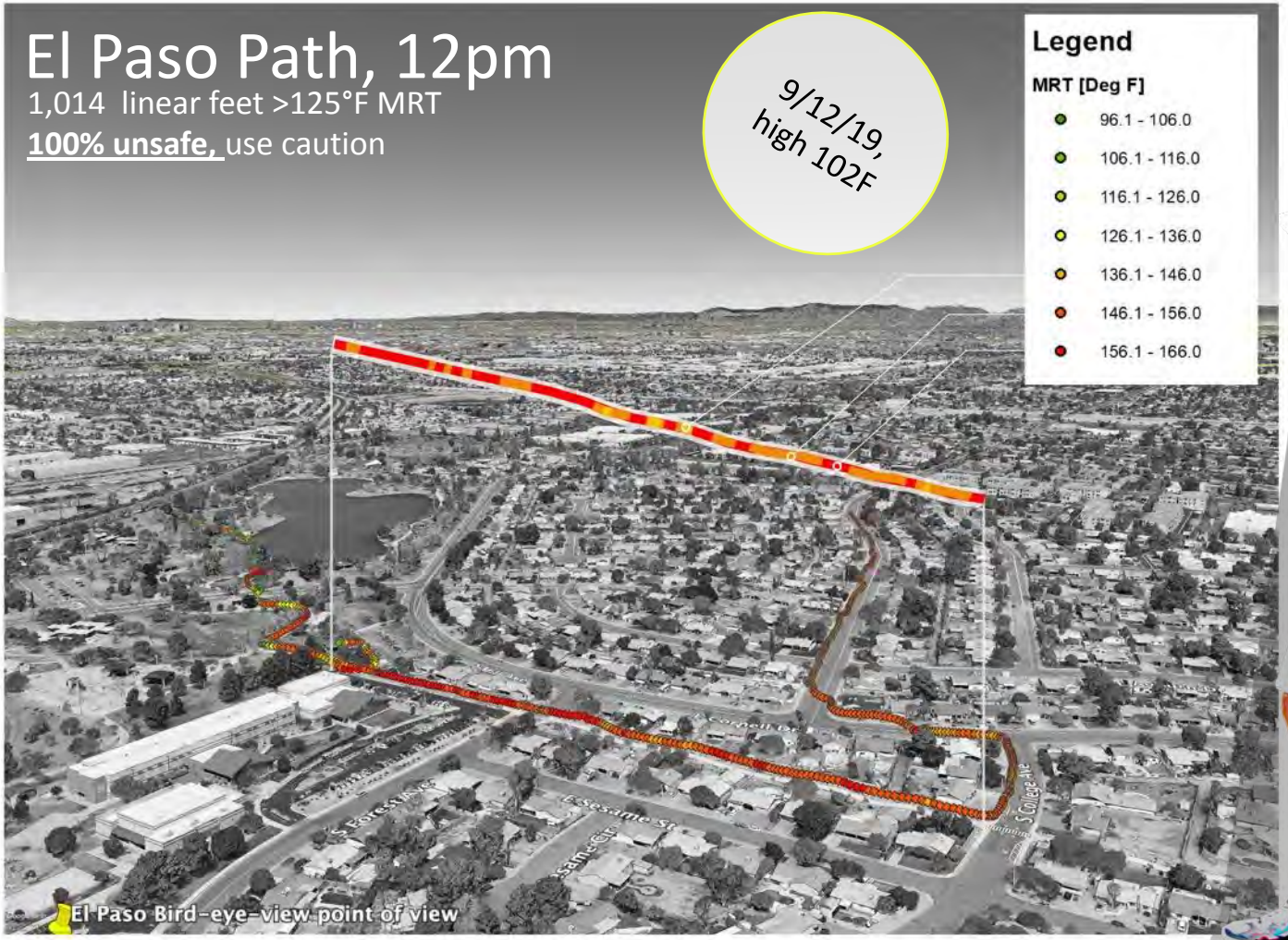
Mostly safe in full sun

El Paso Path, 12pm

1,014 linear feet >125°F MRT

100% unsafe, use caution

9/12/19, high 102F



Protection recommended

1,014 linear feet >125°F MRT
100% unsafe, use caution

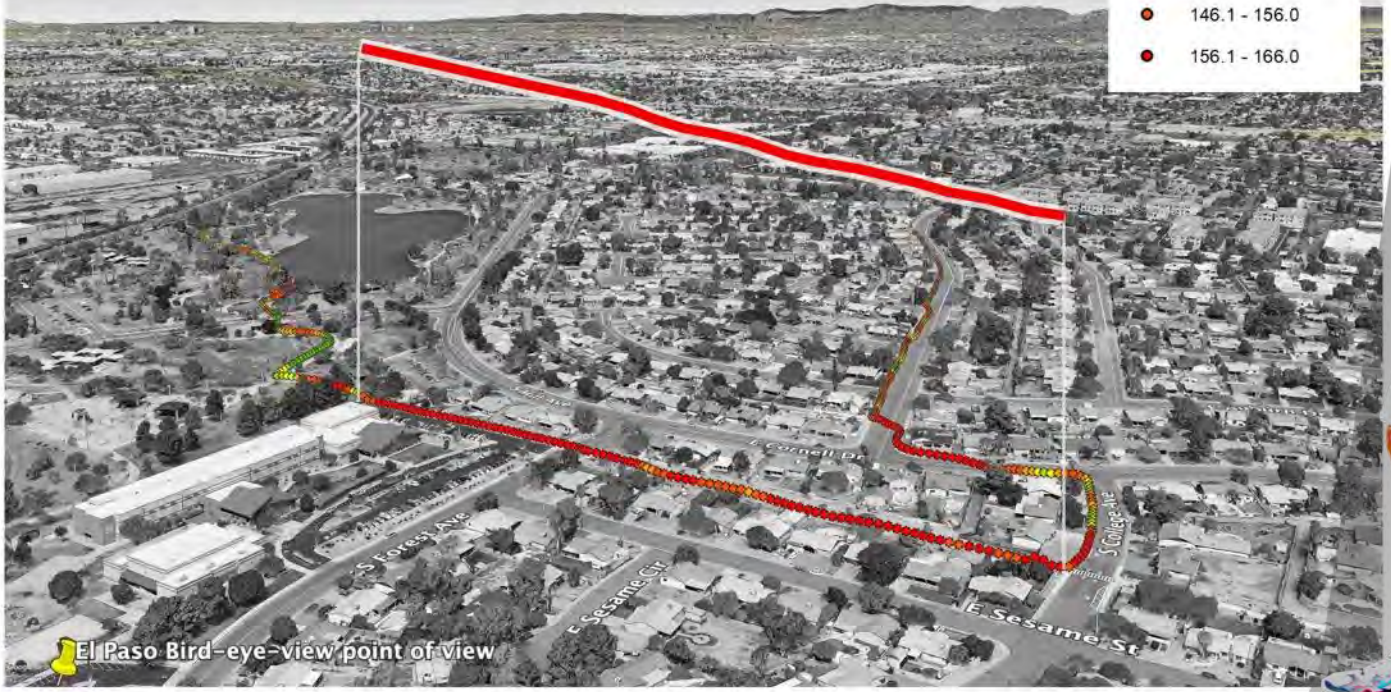
El Paso Path, 3pm

9/12/19, high 102F

Legend

MRT [Deg F]

- 96.1 - 106.0
- 106.1 - 116.0
- 116.1 - 126.0
- 126.1 - 136.0
- 136.1 - 146.0
- 146.1 - 156.0
- 156.1 - 166.0



Protection recommended

0 linear feet >125°F MRT
0% unsafe, 100% safe

El Paso Path, 7pm

9/12/19, high 102F

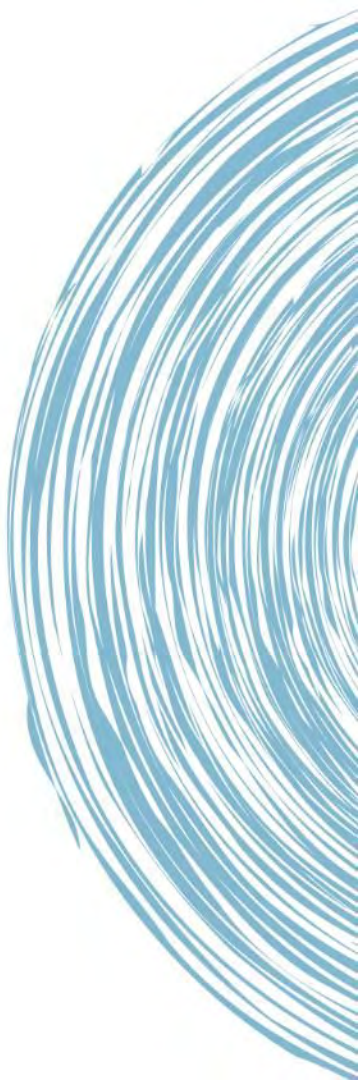
Legend

MRT [Deg F]

- 76.1 - 79.0
- 79.1 - 82.0
- 82.1 - 85.0
- 85.1 - 88.0
- 88.1 - 91.0
- 91.1 - 94.0

Safe

Jenni, Ariane, and Florian insert Micro slides here



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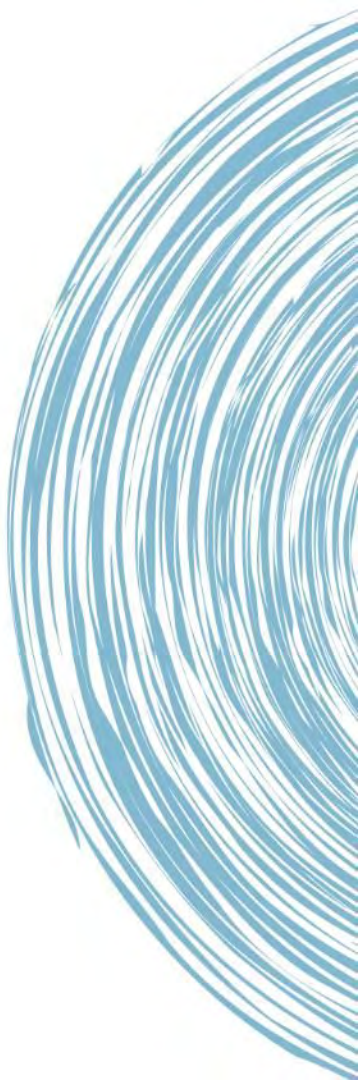

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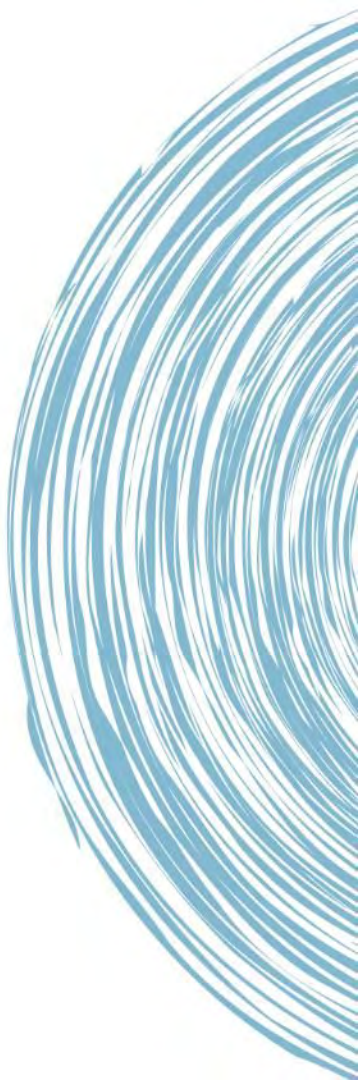

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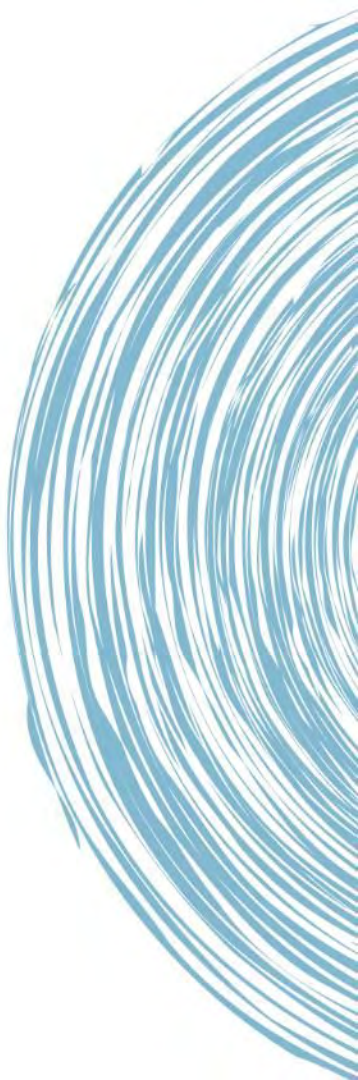

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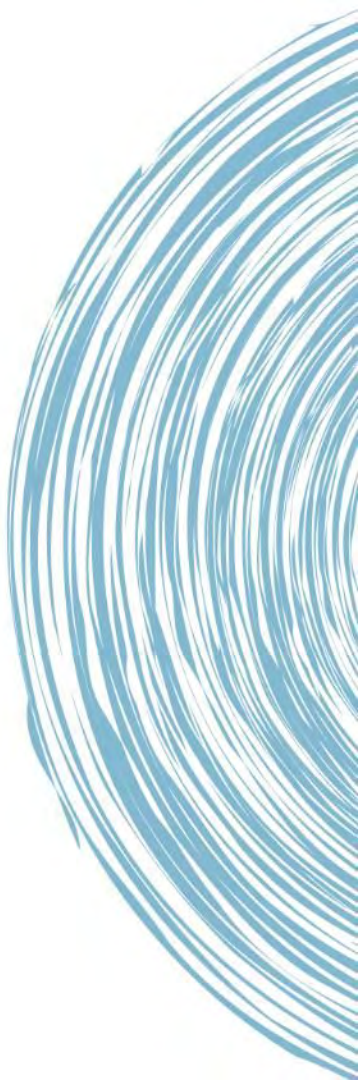

Integrated Process to develop our maps and associated deliverables

Steps

- NASA DEVELOP Proposal
- Review existing macro data resources

Steps

- Review existing micro data resources
- MRT excursions
- Heat + health experiences to contextualize the heat maps in lived experiences of residents in Tempe

Coordinated and shared activities

- HUE Project Presentation on 7/29
- Biweekly meetings (open for everyone, with specific invitations)
- Advise how to synthesise data into educational material

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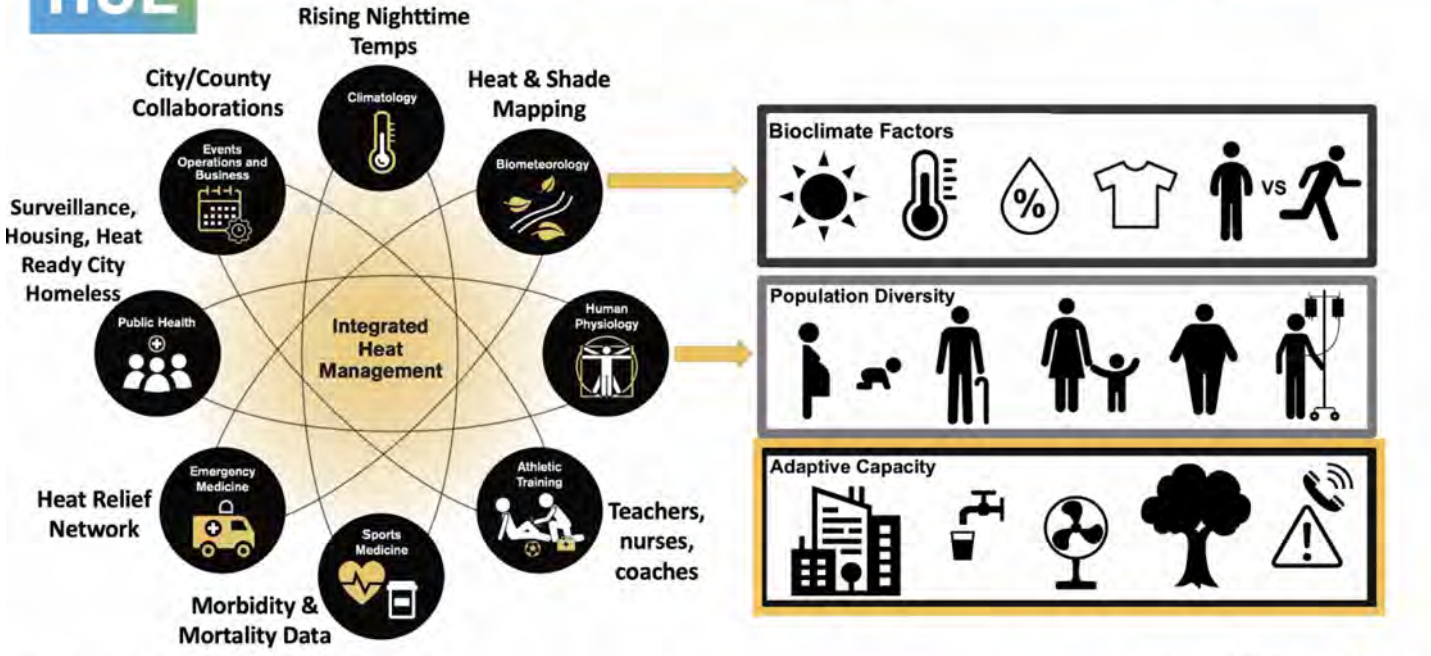
Jenni put your heat integration slides here

HUE

.... Develop, test, and deploy heat-mitigation and air-quality improven... and technologies for a healthier city and population across Maricopa County.

Talking: Jennifer Vanos



Hosokawa & Vanos (2020), *Temperature.*

Vanos et al. (2020), *Nature Comms.*

Please respond in the chat:

What are some characteristics of “Desk-ready” heat maps? Macro + Micro.

What existing effective data tools at the City should we be learning from as a prototype?

What should heat assessments look like in Tempe?

What do “Desk-ready” heat maps look like?

What do we mean with “desk-ready heat maps”?

- Connect city perspective with researchers perspective
- Build a common understanding for future research and mainstreaming data

What is our project process to clarify expectations and work towards these?

- Discuss roles, meeting frequency, and working relationships

Frequency of data updates and procedures to keep up with data updates

- Macro-level heat data: ? years (may depend on how infrastructure changes)
- Micro-level heat data: 4-5 years (may depend on how infrastructure changes)

CLIMATE ACTION PLAN

Thank you!

Appreciation for:

Healthy Urban Environments

City of Tempe

Arizona State University

Please send questions to:

Braden_Kay@tempe.gov, or

Katja.Brundiers @asu.edu, or

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