NOAA Climate Program Office Funding Opportunities

Informational Webinar

NIHHIS-CAPA
Urban Heat Island
Community Science
Field Campaigns

nihhis.cpo.noaa.gov/
Urban-Heat-Island
-Mapping/UHI-Campaigns

Extreme Heat Risk Initiative
Competition: Urban Climate Science
for Decision-making & Evaluation
of Heat-Health Interventions

cpo.noaa.gov/grants

Extreme Heat Risk Initiative Team
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Agenda

- Background
  - NOAA Climate Program Office
- Opportunity Details
  - NIHHIS-CAPA UHI Community Science Field Campaigns
  - Extreme Heat Risk Initiative
- Q&A

NOAA's Mission

1. To understand and predict changes in climate, weather, oceans and coasts;
2. To share that knowledge and information with others; and
3. To conserve and manage coastal and marine ecosystems and resources.

National Weather Service

Provide weather, water, and climate data, forecasts and warnings for the protection of life and property and enhancement of the national economy.

National Ocean Service

Provide science-based solutions through collaborative partnerships to address evolving economic, environmental, and social pressures on our ocean and coasts.

National Marine Fisheries Service

Stewardship of the nation's ocean resources and their habitat: productive and sustainable fisheries, safe sources of seafood, the recovery and conservation of protected resources, and healthy ecosystems.

National Environmental Satellite, Data, and Information Service

Provide secure and timely access to global environmental data and information from satellites and other sources to promote and protect the Nation's security, environment, economy, and quality of life.

Oceanic and Atmospheric Research

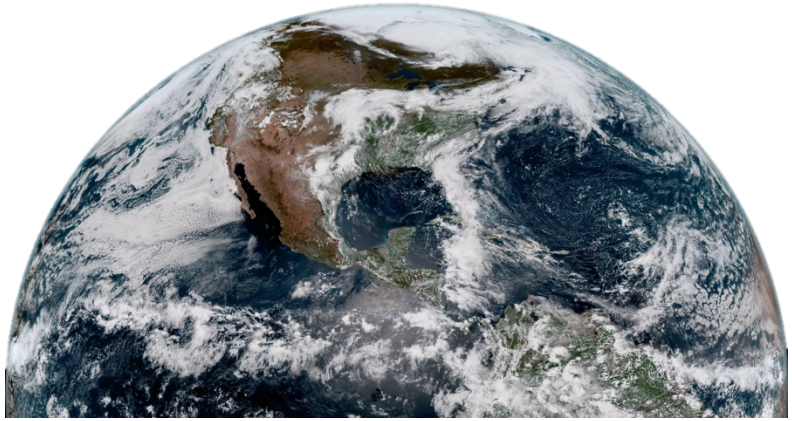
Conduct research to understand and predict the Earth system; develop technology to improve NOAA science, service, and stewardship; and transition the results so they are useful to society.

Office of Marine and Aviation Operations

Safely deliver effective Earth observation capabilities, integrate emerging technologies, and provide a specialized, flexible, and reliable team responsive to NOAA and the nation.

NOAA's Climate Program Office

- The Climate Program Office (CPO) manages competitive research programs in which NOAA funds high-priority climate science, assessments, decision support research, outreach, education, and capacity-building activities
- We aim to advance our understanding of Earth's climate system, and to foster the application of this knowledge in risk management and adaptation efforts.



NOAA's Vision of the Future

1. Resilient Ecosystems, Communities, and Economies;
2. Healthy ecosystems, communities and economies that are resilient in the face of change.

Three Divisions:

- Communication, Education, and Engagement
- Climate and Societal Interactions
- Earth System Science and Modeling

Four Cross-cutting Risk Areas:

- Coastal Inundation
- Marine Ecosystems
- Water Resources
- Extreme Heat

The National Integrated Heat Health Information System (NIHHIS)

- NOAA and CDC launched the National Integrated Heat Health Information System (NIHHIS) in June of 2015 to address heat risk across timescales.
- NIHHIS quickly grew to include representation from several agencies (right) in an **interagency working group**. The group launched the NIHHIS portal and began harmonizing information and guidance.
- NIHHIS has also launched **local pilots** to understand local decision-making context and information needs, and to improve the transition of research to action.

Ongoing activities include:

- Prototyping new integrated climate-health products,
- 'Decision calendar' exercises to understand multi-disciplinary needs in the Northeast,
- National projects to spread awareness and create useful and usable data as Urban Heat Island campaigns.

NIHHIS operates according to a common framework of core questions under the following thematic areas: capacity & partnership, heat-health parameters & outcomes, data and forecast products, communication, intervention effectiveness

NIHHIS facilitates an integrated approach to providing a suite of decision support services to reduce heat related illness and death

Funding Opportunities

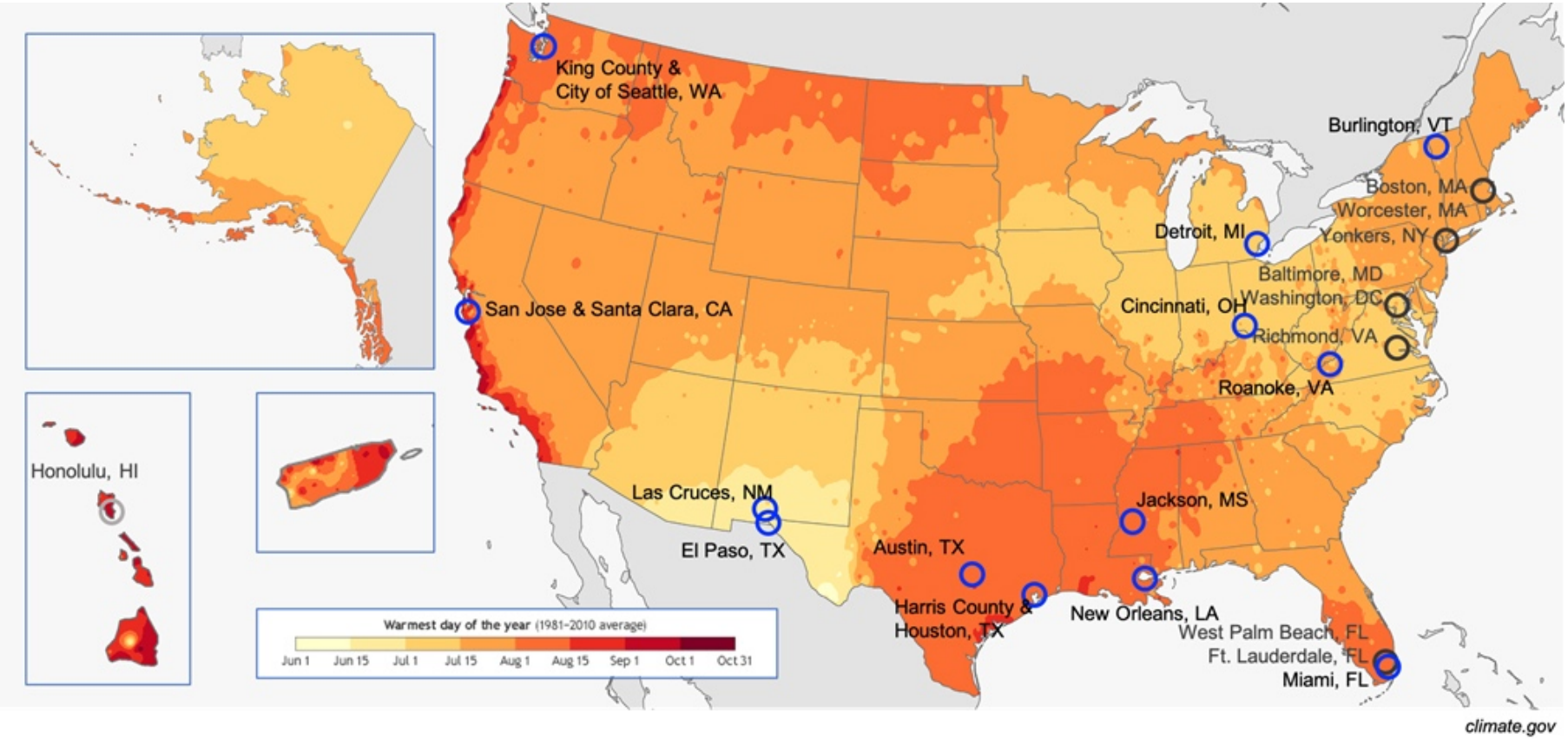
NIHHIS-CAPA UHI Community Science Field Campaigns

- Empowers community members and decision-makers to understand and address heat risk by mapping the distribution of heat across cityscapes.

Extreme Heat Risk Initiative

- Builds on UHI campaigns, encouraging scientists and decision-makers to work together to implement and evaluate evidence-driven mitigation and adaptation efforts to manage heat.

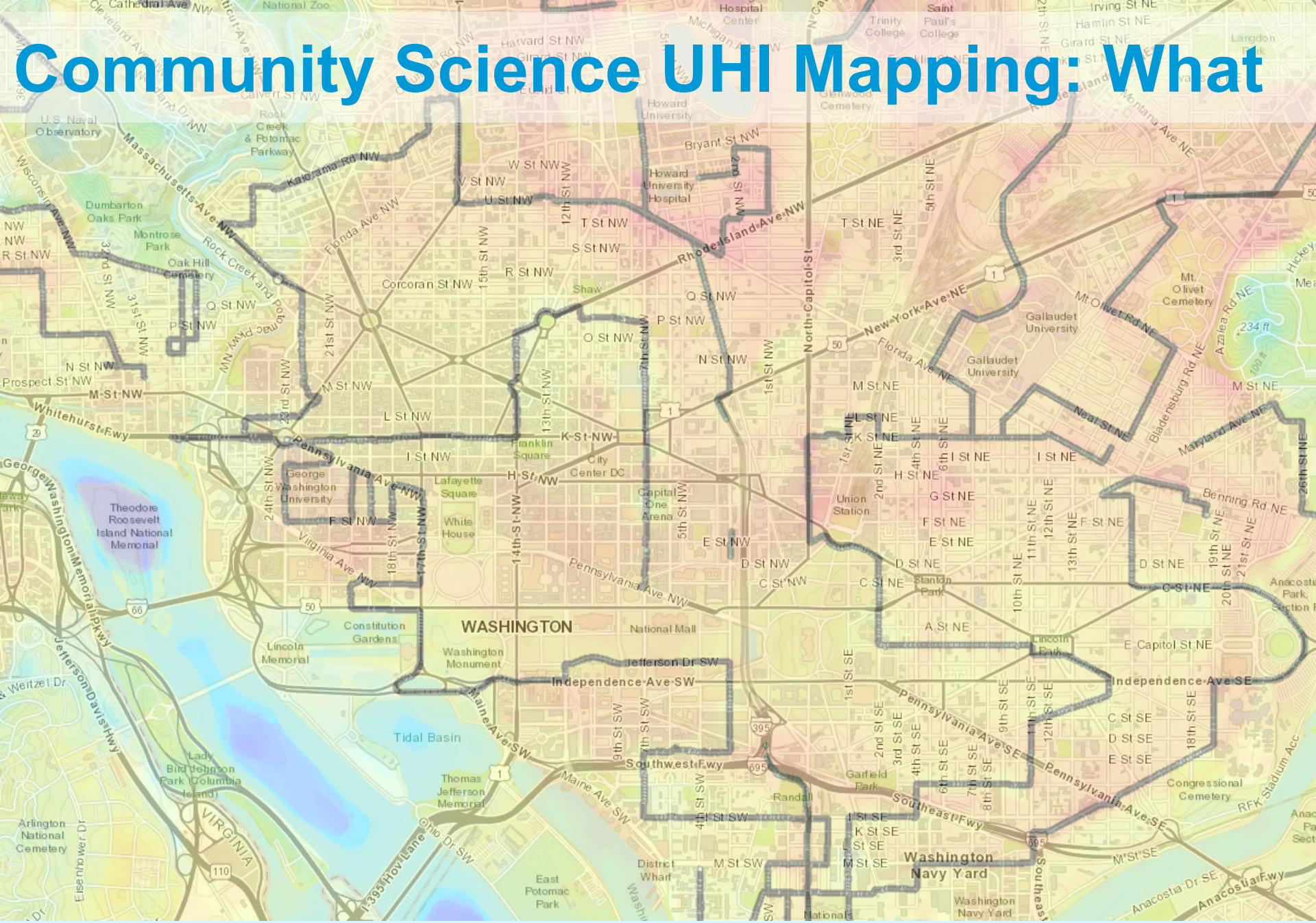
Community Science UHI Mapping: Where



This map shows the locations of the previous Urban Heat Island mapping campaigns superimposed upon a map of the climatological (1981-2010) average hottest day of the year. Historical climate information as well as weather and climate predictions from NOAA are used to plan the campaigns in cities across the U.S.

CAPA strategies

Community Science UHI Mapping: What



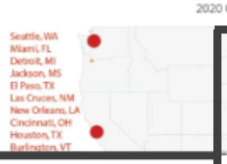
Community Science UHI Mapping: How

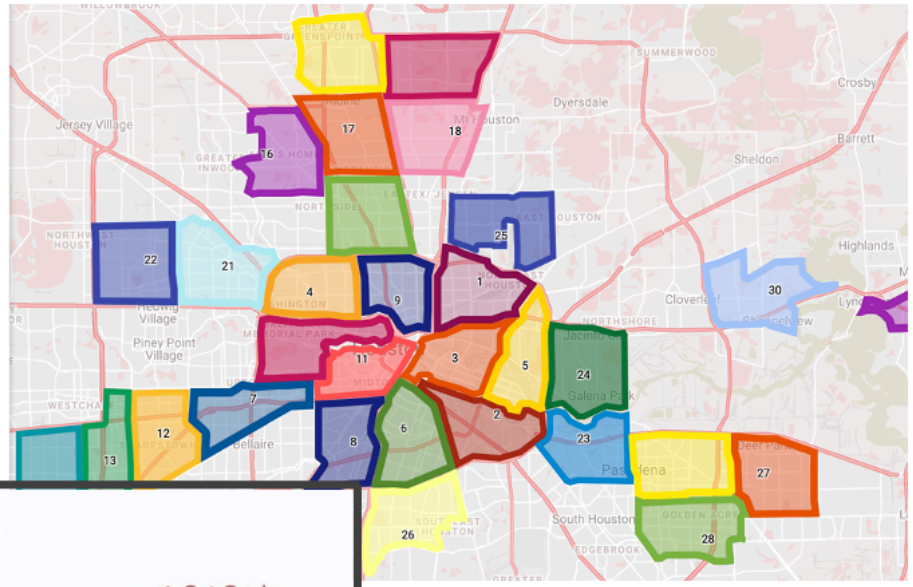
HEAT BEAT
newsletter

Timely information for people and communities who are working to address local concerns about heat health.

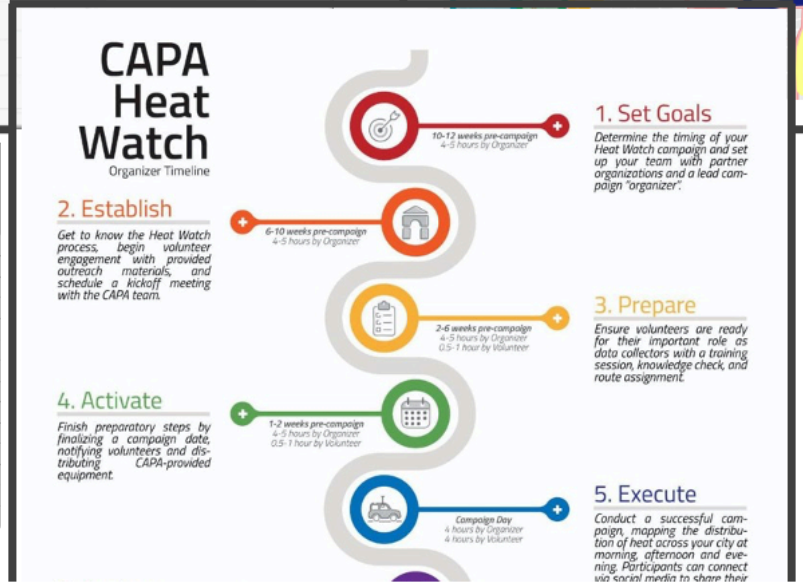
NOAA-funded 2020 Heat Campaign Cities Announced

Through a peer-review process, NOAA's Climate Program Office (CPO) selected thirteen community partners in cities across the U.S. to receive funding support to perform a community science urban





Urban Heat Island (UHI) Campaign City Location	NWS Site	WPC Forecast Maximum Temperature and UHI Weather Criteria Assessment (Highly Favorable) (Favorable) (Less Favorable) SAT SUN MON TUE WED	Average Summer High	Average Summer Record High	Average Annual 90° Days	Average Annual 95° Days	Average Annual 100° Days
Seattle, WA	SEA	Local Campaign Complete	74°F	92°F	4	1	0
San Jose/Santa Clara, CA	SJC	86°F 87°F 88°F 88°F 88°F	83°F	101°F	18	7	2
Las Cruces, NM	LRU	Local Campaign Complete	94°F	106°F	107	59	18
El Paso, TX	ELP	Local Campaign Complete	94°F	106°F	115	68	25
Austin, TX	AUS	Local Campaign Complete	94°F	104°F	114	64	21
Houston, TX	IAH	Local Campaign Complete	93°F	103°F	111	49	7
New Orleans, LA	MSY	Local Campaign Complete	90°F	98°F	88	17	0
Jackson, MS	JAN	89°F 88°F 88°F 90°F 91°F	91°F	103°F	86	28	3
Miami, FL	MIA	Local Campaign Complete	90°F	96°F	91	4	0
Roanoke, VA	ROA	Local Campaign Complete	86°F	100°F	30	6	0
Cincinnati, OH	LUK	Local Campaign Complete	84°F	100°F	22	4	0
Detroit, MI	DTW	Local Campaign Complete	82°F	98°F	13	2	0
Burlington, VT	BTV	Local Campaign Complete	79°F	95°F	8	1	0
Providence, RI	PVD	Local Campaign Complete	81°F	97°F	11	3	0

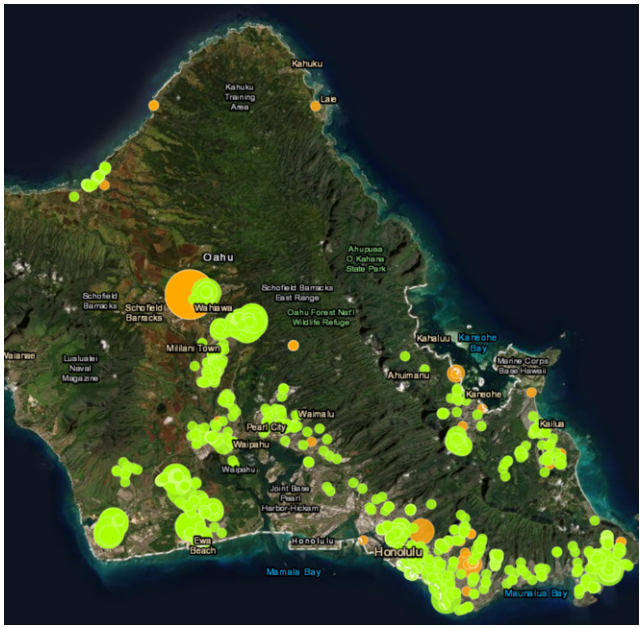


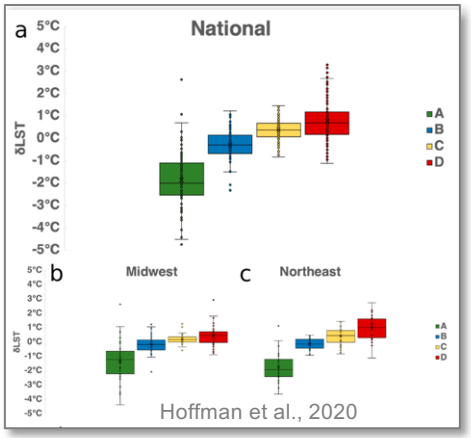
HARC
The Nature Conservancy
Harris County Public Health
Building a Healthy Community
RESILIENT HOUSTON

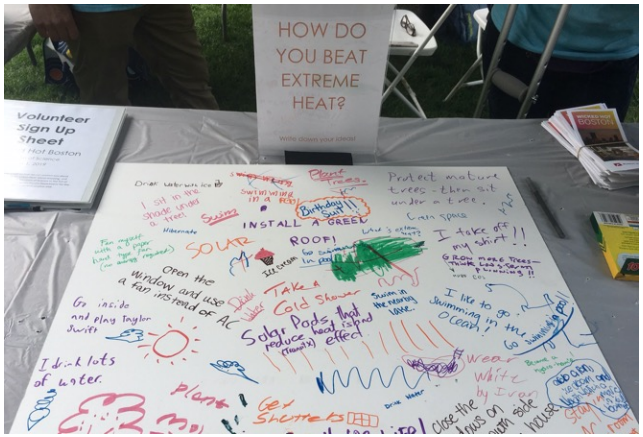
HOUSTON HARRIS HEAT ACTION TEAM (H3AT)

https://nihhis.cpo.noaa.gov/

Outcomes and Next Steps







Early results from UHI Campaigns:

- Informing 10,000 Trees Honolulu
- Publication: The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas
- Throwing Shade in RVA @ the Richmond Science Museum
- Wicked Hot Boston
- Extreme Heat Risk Initiative Opportunity >>

NIHHIS-CAPA Urban Heat Island Opportunity

Application Criteria

- Articulate a clear need for the campaign and resulting data.
- Have local leaders and ready partners required to make your campaign a success.
- Clear and ambitious goals for the campaign and resulting engagement and data.
- Organization & volunteer support.
- Engagement with NOAA and/or NIHHIS activities and partners
- Other scientific factors: diversity of urban climate, urban structure (density, land use).

Application for NIHHIS Urban Heat Island Mapping | CAPA Heat Watch 2021

CAPA Strategies, in partnership with the National Integrated Heat Health Information System (NIHHIS), is now accepting applications from organizations interested in participating in the 2021 cohort of NIHHIS-CAPA Urban Heat Island mapping campaigns. Pending the availability of funds and the amount of matching funds provided by communities, we anticipate being able to run Heat Watch campaigns in 5-10 communities.

Your responses to the following questions will help us understand community needs and efforts to map heat across the nation. Answers will also help us select the municipalities that will benefit most from our co-investment in their effort.

Important Dates

- **8 January 2021 @ 5PM Eastern**
  Application deadline
- **1 February 2021**
  Anticipated notification of selection
- **14-26 February 2021**
  Onboarding call with 2021 cohort
- **1 March 2021**
  Communities confirm participation and finalize matching funds

Q&A Frequently Asked Questions

- What does a successful application get us?
- What is the role of the community partners versus CAPA Strategies versus NOAA?
- What does a campaign typically cost?
- Are matching funds required?
- For a full list, visit nihhis.cpo.noaa.gov

Questions about campaign execution or logistics:

info@capastrategies.com

Questions about the funding opportunity or priorities:

hunter.jones@noaa.gov

Extreme Heat Risk Initiative Competition

- Extreme Heat is one of CPO's 4 new risk areas.
- The risk initiatives are the "tip of the spear" for the office, exploring new research areas, and building bridges between existing grant programs and initiatives, foundational science and applied science for decision-making.
- The Extreme Heat Risk Initiative's current focus is **Urban Climate Science for Decision-making & Evaluation of Heat-Health Interventions**

CPO's 4 Risk Areas

- Coastal Inundation
- Marine Ecosystems
- Water Resources
- Extreme Heat

EHRI Competition Builds on UHI Mapping

- Increasing capacity for past and future (summer 2021 cohort) campaign communities to apply campaign outcomes and outputs for heat resilience, and to explore **new and innovative approaches to monitoring, modeling, and mapping urban heat**.
- Applicants should address the health impacts of extreme heat by improving the climate information and services available to inform **consideration, selection, and evaluation of actions, plans, programs, and policies to improve resilience to heat.**
- Collaboration with decision-makers in target cities is required. Letters of support are strongly encouraged.

Programmatic Scope and Priorities*

- Focus on a past or future NIHHIS-CAPA community; applicants need not be based in those communities.
- We prioritize applications that are transdisciplinary, co-developed with decision-makers and at-risk communities, scalable to other CAPA-NOAA mapping communities, and that leverage existing NOAA assets & programs.
- *Read the NOFO and info sheet for more requirements and priorities.

2021 EHRI Competition Focus

Proposals to extend the observations, modeling, applications of campaigns:

- Incorporate new observation targets for modeling or monitoring urban climate and heat-health hazards or additional datasets
- model outputs and derivative information products or indices targeted to a specific use or decision-making requirement
- national UHI modeling, testing generalizability to other communities, and ground truthing the modeled outputs with obs
- Develop or enhance data-driven decision-making processes enabling communities to select and evaluate the most appropriate urban heat mitigation approaches

Austin, TX
Baltimore, MD
Boston/Cambridge, MA
Burlington, VT
Cincinnati, OH
Detroit, MI
El Paso, TX
Fort Lauderdale, FL
Honolulu, HI
Houston, TX
Jackson, MS
Las Cruces, NM
Miami, FL
New Orleans, LA
Portland, OR
Providence, RI
Richmond, VA
Roanoke, VA
San Jose / Santa Clara, CA
San Juan, PR
Seattle / King County, WA
Vancouver, CA-BC
Washington, DC
West Palm Beach, FL
Worcester, MA
Yonkers, NY

New Cities in 2021

Timeline and Important Details

- 8 January 2021
  - EHRI Letters of Intent due to competition program manager by 5pm Eastern [hunter.jones@noaa.gov]
  - *NIHHIS-CAPA Applications for UHI Mapping also due*
- ~22 January 2021
  - LOI responses sent to applicants encouraging or discouraging a full proposal
- 15 February 2021
  - Full applications submitted through grants.gov by 5pm Eastern
- ~ May-June 2021
  - Targeted project start window, subject to many factors

Important Resources

- Notice of Funding Opportunity
  Requirements for submitting an application for funding.
  https://grants.gov
- Competition Information Sheet
  Program priorities & competition background and details.
  cpo.noa.gov/grants

Questions and Answers

- Can cities that are not listed as part of previous mapping campaigns be part of this call?
- Can I / my organization lead a proposal but also be a collaborator on another?
- Will the extreme heat risk initiative run more competitions like this in the future?
- Will other CPO risk area teams run competitions for the water-related risks?

Updated FAQs will be posted to:

- cpo.noaa.gov/grants
- nihhis.cpo.noaa.gov