

Healthy Urban Environments (HUE) Arizona State University Spring 2020 Request for Proposals

HUE Project Leads

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MARICOPA
COUNTY



Healthy Urban Environments: Overview

- Investment of \$1M/yr with initial commitment for 3 years from Maricopa County Industrial Development Authority.
- Objective to develop, demonstrate and deploy innovative, community-based approaches to mitigate urban heat and air quality.
- Focus on **collaborative, community-driven** solutions in partnership with stakeholders including municipal partners, non-profits, local businesses, private developers, schools and community groups.



2020 Solutions Proposals: Community-driven



- First year of HUE Solutions Projects (2019) focused on leveraging existing partnerships and efforts within ASU.
- In 2020-2021, priority will be given to proposals that:
 - 1) originate from or prominently feature project leadership from non-ASU organizations
 - 2) demonstrate practical, real-world implications or solutions which can be implemented within the project's duration of 1 year.
- We aim to leverage and amplify *emerging or existing efforts* which would benefit from additional financial, technical and logistical support from HUE.

2020 Solutions Proposals: Guidelines

Project Themes

All projects must address development, implementation and evaluation of solutions to heat and/or air quality.

Training & Evaluation
Public, workforce, or management education and capacity building

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Curriculum, workshops, tools, standards, equity evaluations, or community engagement programs

Demonstration
Field or site-based pilot applications of design elements, materials, & techniques.

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Novel transit stop design implementation and testing

Technology & Research
Basic or applied research and development of novel tech and/or IP

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Solar panel coatings to reduce NOx

2020 Solutions Proposals: Guidelines

Project Teams

Projects teams *must include*:

1. Team members from one or more non-university based organizations
2. At least one relevant researcher, or research group, based at ASU

All project teams should be:

- Interdisciplinary
- Target at least 1 project theme



Non-University Based Organizations

Municipalities, agencies, community or neighborhood groups, 501(c) non-profit organizations, real estate developers, commercial developers, local businesses, schools, or other relevant local stakeholders



ASU Researcher or Research Team

Please contact HUE if you have project ideas and would like assistance finding a relevant ASU partner

2020 Solutions Proposals: Guidelines

Additional Project Funding Guidelines

- Funding requests should be focused on supporting development, implementation, and evaluation of heat and/or air quality solutions and mitigation techniques.
- Funds are not intended to underwrite capital improvement projects.
- Addressing vulnerable communities most likely to be affected by heat and/or air quality is desirable.
- Examples:
 - **Acceptable:** Using HUE funds to add or evaluate heat and/or air quality mitigation features for an existing capital improvement project (e.g. adding trees or shade structures and equipment to measure impacts).
 - **Unacceptable:** Using HUE funds to pay for significant construction or infrastructure costs (e.g. repaving asphalt surfaces).

Research Guidelines

- Research components of projects should have substantial field- or lab-based empirical components

2020 Solutions Proposals: Examples

1. Transit stop design & walkshed evaluation

- Use evidence-based intervention to redesign a transit stop and improve thermal comfort; evaluate outcomes
- “Walk-shed” analysis to understand transit user thermal exposure and experience traveling to and from this stop.



Photo credit: Phoenix Public Transit

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- “Walk-shed” analysis to understand transit user thermal exposure and experience traveling to and from this stop.

2. Redesigning asphalt parking infrastructure

- Apply innovative design techniques and elements to improve performance of a parking lot with regards to heat, stormwater, and user experience; evaluate outcomes

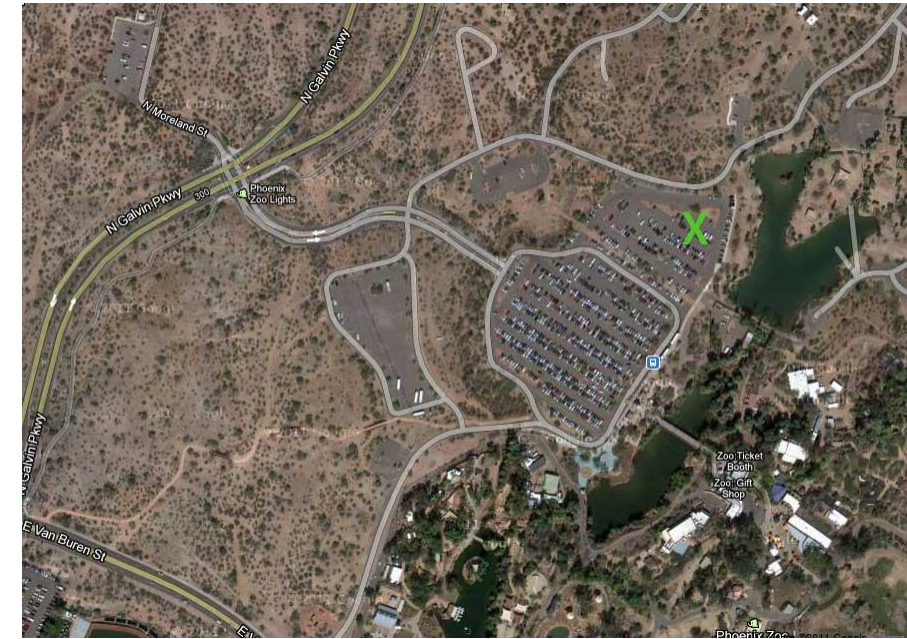


Photo credit: Google Earth

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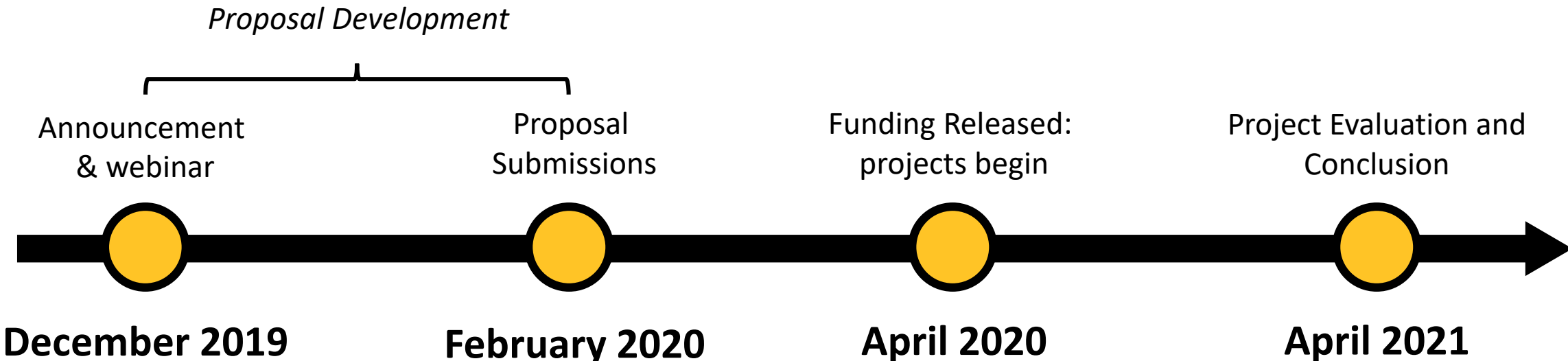
3. Citizen science program to monitor air quality

- Engage citizens and communities in training and use of low-cost sensors to monitor and evaluate air quality.
- Complement participation with educational materials or curriculum to improve air quality literacy and awareness; share results to support relevant action or interventions.



Photo credit: Boston Science Museum

2020 Solutions Proposals: Timeline



Questions?

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<https://hue.asu.edu>



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