

Healthy Urban

Environments (HUE)

Initiative Request for Proposals - Spring 2021

About Healthy Urban Environments

Arizona State University (ASU) in collaboration with the Maricopa County Industrial Development Authority has established Healthy Urban Environments (HUE) as a solutions-focused research, policy, and technology incubator. HUE's goal is to rapidly develop, test, and deploy heat mitigation and air quality improvement strategies and technologies. In collaboration with practitioners and community members, HUE seeks to create healthier urban environments for communities across Maricopa County.

Proposal Overview

HUE seeks to underwrite high-quality, community-engaged, solutions-oriented projects that will be selected from submitted proposals. In 2021-2022, priority will be given to proposals that 1) originate from or prominently feature project leadership from non-ASU organizations, and 2) demonstrate practical, real-world implications or solutions which can be implemented and evaluated within the project's duration of 1 year. Importantly, we seek to leverage and amplify emerging or existing efforts which would benefit from additional financial, technical and logistical support from HUE.

Topical Areas

All projects must focus on the topics of developing and implementing solutions in the areas of air quality and/or urban heat. HUE is specifically interested in projects that address questions such as:

- Mitigating dust from vacant lots and alleys for improving particulate matter (PM) concentrations
- Modifying landscaping practices and design choices for reducing air pollution emissions and providing thermal comfort
- Encouraging alternative forms of transportation for improving air quality
- How does heat mitigation or adaptation get integrated into development and/or municipal planning processes
- Understanding the effects of heat and air pollution on asthma and interventions to reduce impacts
- Characterizing and/or mitigating the impacts of outdoor air pollution and extreme heat on indoor exposures



- Using a systems view to evaluate what green infrastructure interventions work best to lower air pollution and urban heat
- Communication warning systems for highly vulnerable populations to the effects of Heat + Air Pollution (elderly, asthma, cardiovascular, athletes especially high school students)

Project Themes

These proposed projects should fall under one of the following themes: training and evaluation, demonstration projects, technology development or applied research.

Training and evaluation may include public, workforce, K-12, or management education and capacity building through the development of curriculum, modules, workshops, standards or awareness programs. Demonstration may include field- and site-based pilot applications of design elements, materials, techniques or other innovative approaches which can demonstrate the efficacy in mitigating heat and/or air quality. Technology project elements may involve basic or applied research and development of novel technologies and intellectual property to address urban heat and/or air quality.

Project Teams

Project teams for HUE proposals should be interdisciplinary and reach across stakeholder groups. All project teams must include 1) team members from one or more non-university based organizations or stakeholder groups, and 2) at least one relevant researcher, or research group, based at ASU. External collaborators who do not have a known collaborator at ASU can engage with HUE team members to be partnered with an appropriate ASU researcher. Eligible non-university based organizations and stakeholders include municipalities, agencies, community or neighborhood groups, 501(c) non-profit organizations, real estate developers, commercial developers, local businesses, schools, or other relevant local stakeholders not defined here.

Formatting

We ask that all proposals submitted to HUE adhere to the following structure:

1. Project Basis/Justification

Describe the general background of the issue your project seeks to address, your proposed approach, and any relevant evidence, data, experience or scientific merit to justify and support your approach to implementing your solution. This may also include any preliminary results which indicate the success of your approach.

2. Solutions Outcomes

Identify the target solutions themes (see "Project Themes") and expected outcomes for your project. These may include tools, curriculum, technologies, datasets, monitoring installations, or other resources related to heat and air quality mitigation.



3. Project Team

Please describe the composition of your project team, and what roles and responsibilities each member will serve. If you plan to engage additional partners who are not part of the core project team, please describe these partners and their role relative to the project.

4. Budget

Provide a summary budget for the project.

Proposal Guidelines

Additionally, please note the following guidelines while preparing your proposal:

- All proposals must be submitted by April 15, 2021.
- Anticipated project start date is May 15, 2021.
- Proposals should be 1 to 2 pages of text maximum, not including references.
 Please use either Times New Roman or Arial font in size 12.
- Text should clearly explain the importance/basis of the activities and solutions outcome envisioned.
- Funding is generally limited to \$50,000 of direct expenses to be spent within 12 months (although we will allow expenditures to continue in a one-year no-cost extension).
- Funding renewals are not envisioned.
- Brief semi-annual reports and a more extensive final report will be required of each project throughout the award period.
- Any research component of the project must adhere to all appropriate and relevant ASU research protocols, including human subjects review if applicable.

Proposal Submission

Submit completed proposals via email to <u>Liza.Golden@asu.edu.</u> Priority for funding commitments will be given to proposals submitted by the April 15, 2021 deadline.

Before submitting, if you would like to discuss your proposal further or have an idea and would like assistance finding an ASU researcher or research group to collaborate with, please contact the HUE Project PI's - Charles Redman (Charles.redman@asu.edu) and Matthew Fraser (Matthew.fraser@asu.edu). We would be happy to help our stakeholders and external partners navigate this process.

