Healthy Urban Environments Initiative Arizona State University

Project Update: Second Quarter, 2019
Date of Report: October 15, 2019



Project Overview

As outlined in the Healthy Urban Environments (HUE) Initiative proposal, ASU has launched HUE as a solutions-focused research, policy and technology incubator to rapidly develop, test and deploy heat-mitigation and air-quality improvement strategies and technologies. This will be accomplished through four project components: 1) research, solutions and innovation incubator; 1) communication, networking and solutions hub; 3) implementation and evaluation of new insight in real world contexts; and 4) public, workforce and management education and capacity building. The schedule for delivery of each component as proposed is shown below; we will report on progress for each of these components separately in the following pages.

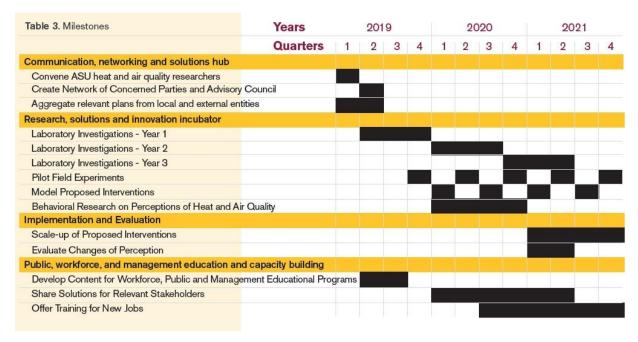


Figure 1. Gantt Chart for ASU Healthy Urban Environments project deliverables.

1. Research, Solutions and Innovation Incubator Overview:

ASU will develop a research, solutions and innovation incubator to test novel heat and air pollution mitigation technologies; deploy field demonstration projects to quantify the heat and air quality mitigation effectiveness; and modeling projects to simulate the impact of heat and air quality mitigation approaches.

October 15, 2019 Status:

In our second quarter, HUE expanded its capacity to serve as a Research, Solutions and Innovation Incubator by recruiting two key team members. Our first expansion was the hiring of a full-time project manager in July 2019, Christopher Sanchez, to manage day-to-day operations for the program and assist with the development and administration of project goals and deliverables. Since coming onboard Chris has helped to coordinate HUE's Research Solutions, and Innovation activities and serve as a liaison to HUE's sponsored seed projects. Additionally, Chris has supported the development and launch of resources to support HUE's other goals. Secondly, HUE funded a Graduate Student Assistantship position for Melissa Guardaro, a Ph.D. Candidate in the ASU School of Sustainability. Melissa brings years of expertise and experience in regional heat planning and mitigation efforts to HUE. Her involvement in the project includes assisting with project planning and stakeholder engagement, and she has proved an important asset in developing our Network of Concerned Parties. These additions to our team will ensure additional capacity to support existing and future projects sponsored or hosted within HUE.

2. Communication, Networking and Solutions Hub Overview:

Arizona State University (ASU) will convene workshops to share mitigation approaches, initiate new inquiries to expand on urban heat and air quality improvement strategies, and provide summative reports on relevant community strategies for interventions for urban heat and air quality.

October 15, 2019 Status:

In the second quarter of this project, HUE has planned an external stakeholder meeting – the Network of Concerned Parties Fall 2019 Solutions Workshop. Scheduled for October 28, 2019, this event will serve as the formal launch for our Network of Concerned Parties. This Network will convene a diverse working group of practitioners from over 37 local municipalities, agencies, private entities, businesses, non-profits, community member, as well as including key personnel from HUE and ASU. This stakeholder-driven and community-focused workshop will open with a review of HUE's progress to-date, with the bulk of the meeting will be dedicated to "pitches" from local practitioners about relevant upcoming collaboration opportunities related to heat and air quality mitigation. The remainder of workshop time will be dedicated to facilitating planning and action related to these proposals. We anticipate between 40-50 attendees from external stakeholders, and expect this meeting to generate a number of key opportunities for HUE to support and engage with both research and solutions (Pillar 1) as well as implementation (Pillar 3) of heat and air quality mitigation efforts. Ultimately, we aim for

these work teams formed during this workshop to develop and submit full project proposals for consideration in our next call for proposals for sponsored projects (Year 2).

To support HUE's goals of serving as a communications and networking hub, we have developed and launched our website: https://hue.asu.edu. This first iteration of our website has several key functions. The website serves to provide information about HUE and our current cohort of sponsored projects (https://sustainability.asu.edu/hue/research/). Here users can access overviews of each project, as well as links to all relevant partners engaged in each project. Additionally, our website provides a platform to share news items related to HUE, such as media mentions for any HUE projects or affiliated project personnel, key announcements or project updates, and other important articles or media reporting on heat and air quality (https://sustainability.asu.edu/hue/news/). Moving forward, we are actively developing a new "Resources" component of our website where we will be hosting several public-facing resources that will serve as a "go-to" hub for local/regional heat and air quality knowledge, reports, and information. We aim to launch the first of these Resources next quarter.

3. Implementation and Evaluation of New Insights in Real World Context Overview:

ASU will test new solutions developed as part of HUE; conduct surveys and in-depth interviews with community members; and enable Technology Transfer and Intellectual Property licensing on all projects sponsored by HUE.

October 15, 2019 Status:

In support of HUE's goal to ensure our efforts target relevant real world contexts and achieve implementation, we have administered a survey ahead of our workshop to our prospective Network of Concerned Parties. This 10-question survey has two primary functions. First, several questions investigate the existing and desired resources and needs related to heat and air quality. For example, Question 7 asks: "What existing resources have been most useful to you and/or your organization? (Some examples include datasets, interactive maps, information, and results from models.)" This will help us understand what existing types of resources have been most effective, and what are the needs or desires of stakeholders for new resources going forward. Secondly, with regards to the workshop the survey asks practitioners and stakeholders to share any upcoming heat and air-quality related projects or initiatives they think would be good candidates for HUE support in the near future. From these solicited ideas we will follow-up and work with survey respondents to design workshop content to support discussion, planning, and implementation for these important real world opportunities. All together, the survey will ensure that our workshop and future implementation and evaluation efforts are relevant to the needs and interests of our community members and stakeholders.

4. Public, Workforce, and Management Education and Capacity Building Overview:

ASU will enable capacity through development and implementation of workshops aimed at stakeholders and community members; create online modules to be integrated into existing ASU outreach programs; and develop material for new workforce training programs.

October 15, 2019 Status:

A key outcome of the upcoming HUE Solutions Workshop will be the formal establishment of our Network of Concerned Parties. In doing so, we hope to gather feedback and guidance from the stakeholders and partners included in this network to best understand the needs for future development in this pillar. We are awaiting this input to guide the development of our public, workforce, and management education resources and ensure our materials support targeted and effective health and education outcomes with regards to heat and air quality awareness. Going forward, we envision our newly launched website serving to host, communicate and distribute these resources.