

# Integrating Information Flows and Supporting Communities as Decision-Makers in Response to Acute and Chronic Stressors

Katherine Lieberknecht, The University of Texas at Austin

IRG

NSF Award ID: 1952196



**TEXAS**  
The University of Texas at Austin



# Project Overview

Project Title



## Project Challenge

- Produce a community-led, innovative data interface to help residents prepare for acute stressors while building long-term resilience to chronic ones
- Integrate local knowledge with existing data to improve municipal, NGO, & household decision making related to climate & health stressors

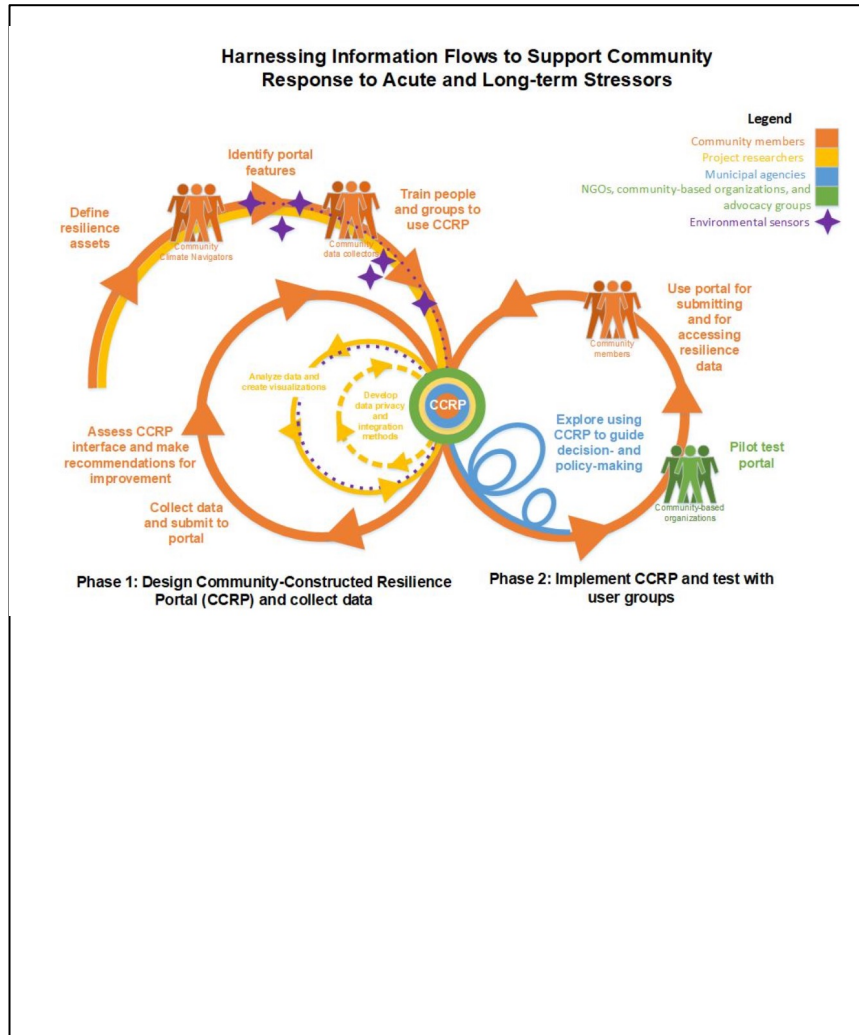
## Project Vision

With residents of the Dove Springs neighborhood of Austin (TX) and our community partners (Go! Austin/Vamos! Austin, the City of Austin, Community Resilience Trust, & St. Edward's University), we identified a community need for an online interface where residents can:

- access information to address acute and chronic stressors (e.g., flooding, food insecurity)
- share information useful for developing more effective stressor-related policies and programs (e.g., identifying areas in need of more shade to address heat events)
- share information to celebrate positive news.

# Project Overview

Project Title

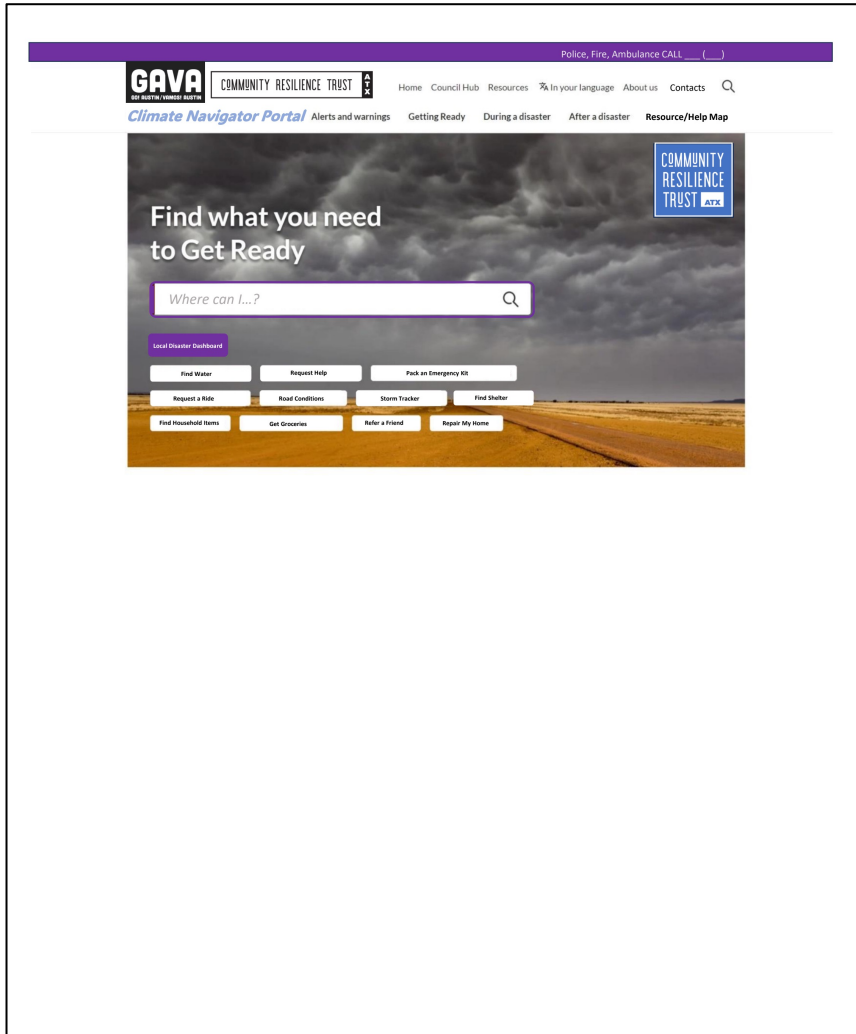


## Integrative Research

- a community-led, innovative technological interface to help residents prepare for acute stressors & respond to chronic stressors
- a safe, secure, & private technological system to collect, store, & analyze local knowledge
- a co-developed process to integrate local data into policy and decision-making
- an original knowledge management framework to support planning, policy making, and decision making
- a system to integrate local knowledge into big-dataset integrative modeling critical for developing scenarios to envision & plan for resilient futures at regional and statewide scales

# Project Update

Project Title



## Research Progress and Outcomes

- Outcome: community-led, innovative technological interface to help residents prepare for acute stressors & respond to chronic stressors. ***Sites & Stories (portal) template improved; Climate Navigator & City/NGO staff interviews conducted & transcribed/translated/analyzed; Portal Design Workshops & survey conducted; Data shared with Sites & Stories team; Portal mock-up completed; One article published; One article accepted.***
- Outcome: a safe, secure, & private technological system to collect, store, & analyze local knowledge. ***In process.***
- Outcome: a co-developed process to integrate local data into policy and decision-making. ***Reactivated Climate Navigator program (after COVID) & recruitment & training of additional Navigators; researchers/City/NGO communications strengthened; Advisory Council formed; Literature review finished; Policy review finished; Article in development.***
- Outcome: an original knowledge management framework to support planning, policy making, & decision making. ***Q-sort completed; Indicators developed; Knowledge graph produced; Article in review.***
- Outcome: a system to integrate local knowledge into big-dataset integrative modeling critical for developing scenarios to envision & plan for resilient futures at regional and statewide scales. ***Working with TACC, DataX, and MinT.***



# Future Goals

Project Title



## Plans for the Next Year / Anticipated Outcomes

### **Begin final phase of the longitudinal assessment of community resilience**

- After portal launch & in use, conduct final interviews.

### **Finish & launch portal**

- Pilot test portal with Climate Navigators.
- Train Climate Navigators in portal use. Navigators to train other residents.
- Launch portal.