

UNDERSTANDING HAZARD IMPACTS AND ADAPTATION THROUGH THE COMMUNITY'S VOICE



Qualitative interviews about flooding and air quality in Southeast Texas

WHY NOW?

Decisions about which neighborhoods need protection or investments from hazards, are often based on national-level data. We know that these data are often too coarse and can overlook local challenges and specific local population needs. The problem is identifying, through community input, who is most affected by disasters and how resources should be targeted.

WHAT WE DID

Twenty-two community leaders were interviewed about their experiences with hazards and how neighborhoods in Southeast Texas are affected. In discussions totaling more than 28 hours, participants identified flooding patterns, air quality concerns, and the neighborhoods most impacted. They also described previous mitigation strategies and investments, as well as ongoing needs. These conversations provided geographic data to use along with population information for mapping community experience with hazards.

WHO WAS INVOLVED?

The SETx Urban Integrated Field Lab's Task Force served as the main participants for these interviews. The one-on-one interviews allowed us to get richer and deeper information from each partner. We also interviewed other nonprofits and government agencies.

FINDINGS

Local residents agreed on what areas they avoid due to flooding or poor drainage, and attributed flooding to the topography of the region and old infrastructure. Participants also suggested that providing low-income households with financial help to afford flood insurance would help more people recover more quickly from flooding. In addition to low-income households, participants were concerned about seniors due to decreased mobility during disaster and decreased access to computer-based recovery assistance.

VOICES

- As one participant said, "People who can afford insurance and people who have a little bit in the savings account, they bounce back. Other folks do not, or they find it extremely difficult."
- Another stated, "[W]e don't have nowhere for the water to go... [W]e need total sewer or sewage replacement. And we need total drain replacement."
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MORE ABOUT SETX-UIFL

The Southeast Texas Urban Integrated Field Lab (SETx-UIFL) is one of four projects funded in 2022 by the U.S. Department of Energy to study how climate, environment, and urban changes affect cities. A team of over 80 researchers from UT, Lamar University, Texas A&M, Prairie View A&M, Oak Ridge National Lab, and Los Alamos National Lab has collected data and conducted modeling across hazards including flooding, hurricanes, heat stress, and air quality. Our Why: Southeast Texas faces numerous hazards, yet smaller communities like this one have often felt forgotten compared to larger cities. The SETx-UIFL was designed to explore the complex dynamics of disaster vulnerability for this economically and culturally vibrant region. We believe Southeast Texas is a bellwether for the entire Gulf Coast, and an exemplar for strategies that protect people and places. We hope this effort supports your path toward lasting resilience.



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