# Tornadoes, Aging, and Resilience: How Elderly in Texas Living Facilities Experience Storms

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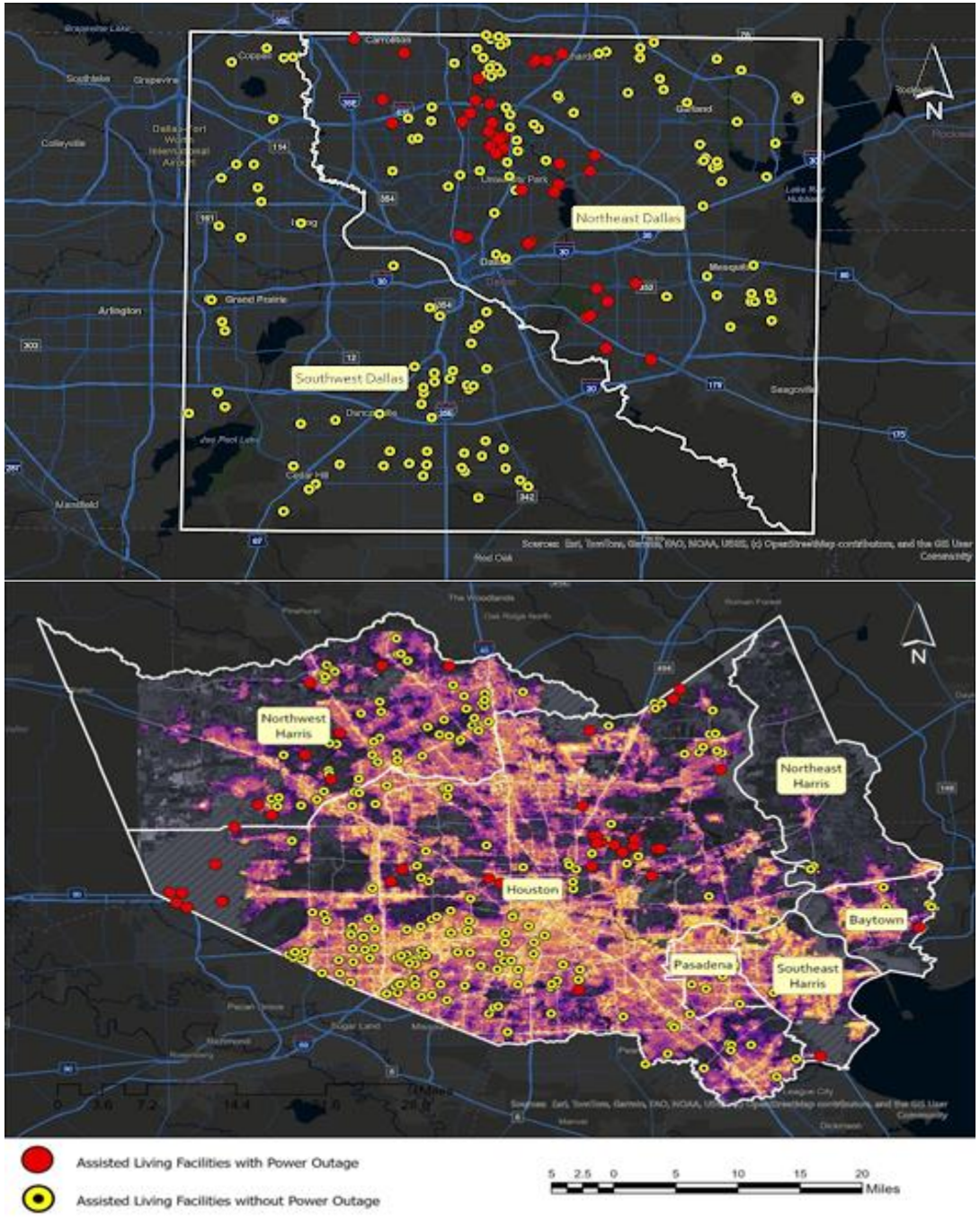
# Subject Areas

## Dallas Tornado 5/28/24

- EF-2 tornado touched down in densely populated suburban area
- Minimal warning time for many facilities
- Structural damage and long-term power outages affected elder care

## Houston Derecho 5/16/24

- Widespread straight-line winds over 100 mph
- Caused extensive tree damage, structural failures, and at least 8 deaths and 2 being elderly residents
- Over 900,000 residents lost power, including multiple senior living centers



# Background and Motivation

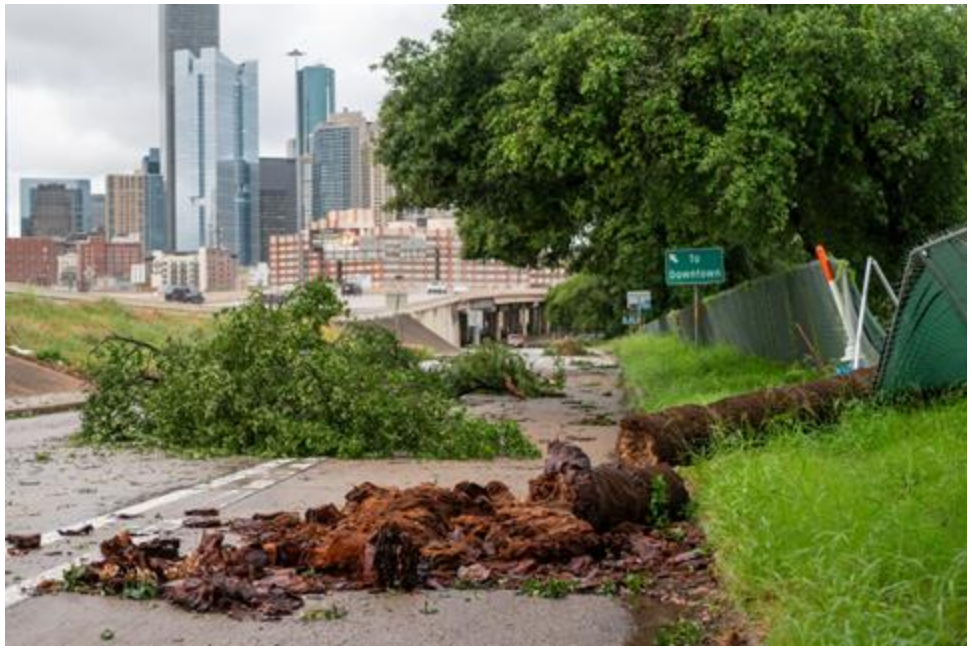
- **Older adults in assisted living facilities** are often excluded from emergency planning frameworks
- These residents rely heavily on **staff to receive, interpret, and act on weather warnings**
- Many facilities operate with **minimal emergency preparedness training**
- Research and policy often assume **individuals are independent decision-makers**
- **My study aims to**:

1. Center the experiences of residents and staff in assisted care
2. Understand how weather warnings were (or were not) received and acted upon
3. Identify breakdowns and recommend systems-level improvements

# Research Overview

## Study Sample & Sample

- **Regions:** Houston Metro & Dallas–Fort Worth
- **Facility Types:**
- Assisted living, Skilled Nursing,Continuing care retirement communities
- **Both corporate and locally managed sites**



## Eligibility Criteria

- **Residents:** Must be age 65+ and have lived in the facility during the May 2024 event
- **Staff:** Must have been working at the facility at the time of the storm
- **Family Members:** Those involved in emergency-related decisions or communications

# Research Overview

## Data Collection (to date)

- **55 +facilities visited across both metro areas**
- **25+ interviews conducted with:Residents,Staff (direct care and administrators), Family members**
- **Supplemented by:Facility emergency plans, Power outage records, Notes from site visits**

## Methods

- **Semi-structured interviews**
- **Document and plan analysis**
- **Field observation of facility infrastructure**: Shelter access, generator availability, alert systems
- **Thematic focus areas:**
- Warning communication & decision-making
- Preparedness protocols
- Resident vulnerability and institutional response

# Preliminary Findings/ Emerging Themes

**What We're Hearing:**

- Staff often take the lead, adapting in residents' best interest
- Warnings come through TV or personal phones, not formal systems
- Few sites had clear shelter plans or designated safe spaces
- Residents were frequently unaware of the storm until it hit
- Emotional stress and confusion were common
- Facility responses varied widely, even within the same city

**Research Barriers:**

- Some facilities hesitant to participate or share emergency plans
- High staff turnover limits access to those present during events
- Some residents unable to participate due to health or memory issues

# Where We're Headed

**Why This Matters:**

- Assisted care facilities play a critical role in disaster response, **but they're not consistently equipped or integrated into emergency planning**
- Staff are doing their best with limited resources, but formal systems are needed to support them and protect residents

**Next Phase of the Project**

- Continue fieldwork in assisted living settings
- Expand to independent living communities to compare preparedness
- Analyze how response strategies differ across ownership, location, and structure
- Identify scalable practices and gaps to inform training, planning, and policy

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