

DISASTER RELIEF: HOW GEOGRAPHY SHAPES ORGANIZATIONAL HUMANITARIAN RESPONSE IN FLORIDA

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Introduction

Disaster response is often discussed in terms of how much aid is given, but where aid goes and how the response differs across places are just as important. Communities affected by hurricanes do not experience the same conditions. Geography can shape access to resources, local organizational presence, infrastructure, and the speed or type of support that reaches affected areas.

Before working on this project, I understood disaster philanthropy in broad terms: organizations donate money, supplies, and services after a disaster. I had not yet considered how humanitarian response may vary depending on which areas are affected, which organizations are present, and how geography influences targeting and coordination.

My research question asks: How do humanitarian responses differ depending on geography and affected areas? Through this project, I began exploring that question as part of a broader study of organizational-level disaster philanthropy in Florida (2024-2025) using a survey of organizations impacted by or responding to disasters.



References

Methods

This project uses an online survey to examine disaster philanthropy at the organizational level of analysis. The survey is distributed to individuals at organizations that were either impacted by disasters or involved in disaster response in Florida during 2024-2025. Respondents include organizations across sectors, including nonprofits, corporations, religious congregations, government agencies, and volunteer groups. Organizations are identified through targeted recruitment and snowball sampling through networks of organizations.

The broader survey examines the extent, form, targeting, coordination, and motivations of disaster-related aid. For this poster, I focus specifically on survey items related to money generated, money spent, which hurricanes organizations responded to, and which geographic areas were served. This geographic focus allows the project to examine how humanitarian response may vary across affected places rather than treating disaster philanthropy as a uniform process.

Direct Hurricane Strikes by State from 1851 to 2024

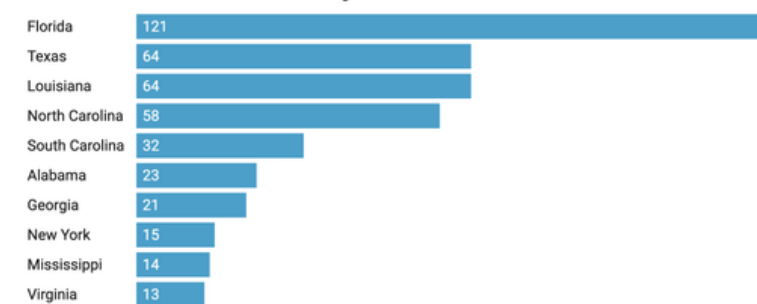


Chart: Created by Brodie Henson and Carrie Peets • Source: NOAA • Get the data • Created with Datawrapper

Figure 1. Historical hurricane strike data show why Florida is an important setting for studying geographic variation in disaster response

Preliminary Results

Survey responses are still being collected; therefore, results are presented as initial patterns the survey is designed to test, rather than finalized findings. The dataset is structured to compare organizational response by geography using four core measures:

- Where money is generated
- Where money is spent
- Which hurricane-affected areas are served
- How broadly organizations reach across communities

Preliminary patterns to be evaluated as responses arrive include:

- Place-based variation in response intensity
- Some affected areas may show higher reported fundraising and spending than others.
- Differences in geographic targeting
- Organizations may concentrate activity in specific regions rather than distributing aid evenly across Florida.
- Uneven organizational reach across communities
- Some communities may receive support from many organizations, while others receive limited coverage.
- Event-driven differences (hurricane-specific variation)
- Organizational engagement may differ depending on the hurricane and the location(s) affected.



Figure 2. Damage from Hurricane Michael illustrates the scale of destruction that can shape organizational response needs

Discussion

Interpretation

- Geography likely shapes both response scale and response strategy
- Differences in local capacity, infrastructure, and accessibility may influence what organizations can deliver and where.
- Networks and partnerships may drive “coverage”
- Communities with stronger organizational ties may receive broader support, while less-connected areas may be underserved despite need.
- Coordination may vary by place
- Some areas may have more networked, coordinated response activity than others.

Strengths

- Organizational unit of analysis (not just individuals), enabling clearer comparison of cross-sector response behavior.
- Cross-sector coverage (nonprofit, government, for-profit, religious, volunteer groups), allowing geographic patterns to be compared across organizational types.
- Geographic targeting built into the survey, making place-based analysis possible (money raised/spent + areas served + hurricane-specific response).

Limitations

- Preliminary status: responses are still being collected; findings will strengthen as participation increases.
- Sampling bias risk: snowball sampling may overrepresent organizations that are already well-networked.
- Self-reported data: reported spending/capacity may vary in accuracy and may not fully capture long-term impact.

Future Work / Application

- Compare response patterns across regions and specific hurricanes.
- Identify whether infrastructure, partnerships, and network membership are associated with broader geographic reach.
- Use results to inform:
 - place-based planning for emergency management,
 - coordination strategies for cross-sector networks,
 - and potential equity gaps in response coverage.