

RESEARCH BRIEF SERIES QUICK RESPONSE

This research brief is part of an award program designed to support the collection of perishable data following disasters and other extreme events to promote social science innovation in hazards and disaster research. This program fosters new knowledge and perspectives by prioritizing research that fills gaps in the literature and is unlikely to be funded rapidly by other means.

THE RISE OF THE ZERO RESPONDER: GRASSROOTS DISASTER RESPONSE AFTER HURRICANE IAN

OVERVIEW

In September 2022, Hurricane Ian made landfall on the western coast of Florida, causing historic flooding and destruction as it moved inland. In the aftermath of the storm, civilians stepped in to assist in impacted counties, using personal boats to rescue stranded victims, providing food and water, and distributing supplies, among other grassroots response activities. These individuals are known as zero responders, a term used in emergency medicine to differentiate spontaneous helpers from official aid and large nongovernmental and nonprofit organizations involved in the response.

Using a mixed-methods approach, including surveys ($n = 192$), interviews ($n = 64$), and secondary sources ($n = 272$), this study examined how and why zero responders participated in the early aftermath of the storm. We specifically aimed to investigate the role of social capital—defined as the networks of trust and relationships that enable people to access resources—in this grassroots disaster response.

The findings from this research can help local authorities and first responders better understand how communities mobilize different types of social capital. This can help the official response identify practical ways to leverage zero responders, including assisting public officials in supporting those who may be excluded from community ties, such as immigrants, unhoused individuals, and undocumented persons.



People use a canoe to navigate through a flooded neighborhood in Florida after Hurricane Ian. Source: Alfonso Lozano del Rey / Shutterstock.com

KEY FINDINGS

- According to both survey data and interviews, zero responders engaged in a wide range of response activities. Among survey respondents, the most commonly reported actions include food and water delivery (55%), search and rescue (48%), wellness checks (35%), and debris removal (34%). These roles mirrored traditional first responder functions but were carried out spontaneously by neighbors, grassroots groups, and local businesses.

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- Zero responders often coordinated aid through social media platforms, such as Facebook and NextDoor, and communication networks like CommsConnect. In online forums, affected families openly requested resources and assistance, often reaching informal volunteers before official channels could respond.



A screenshot of residents offering supplies in the Facebook community group “Let’s Hear It Arcadia. Source: Christa Remington, September 30, 2022.

- *Bonding ties*, or relationships among family, neighbors, and peers, offered pre-existing trust and obligation that could be activated instantly. Interviews indicate that bonding social capital facilitated swift assistance to affected individuals.
- Churches, community-based organizations, and local businesses facilitated *bridging ties*, which extended social networks beyond kinship and immediate proximity, bringing new resources into hard-hit communities. Nonprofit and faith-based groups mobilized hundreds of volunteers. Local businesses also stepped in to provide resources outside their normal customer base.
- Federally supported programs such as Community Emergency Response Teams and the Medical Reserve Corps offered *linking ties*, to connect storm survivors to more formal aid, but their presence varied widely across counties. While respondents widely trusted local networks and digital platforms, fewer than half expressed confidence in government-led response efforts.
- Emergency management officials recognized that action by zero responders was indispensable, but expressed concerns about safety, liability, and interference with coordinated operations.

RESEARCH IMPLICATIONS

- Survey respondents overwhelmingly trusted local actors, but were skeptical towards government. This suggests that disaster management must consider not only structural coordination, but also social trust.
- Digital communication partially compensated for weak formal linking structures, enabling faster information flow and coordination when institutional systems lagged. This highlights both the potential and the limitations of programs like Community Emergency Response Teams in connecting grassroots energy with official systems.
- Grassroots networks form the backbone of disaster response when institutional systems are delayed or distrusted. Local governments should introduce policies to strengthen collaboration with these actors, such as registration systems, accessible community responder training, and formal agreements with grassroots groups, which could improve response without undermining the flexibility that makes informal networks effective.
- Partnerships with nonprofits, faith-based organizations, and local businesses could move disaster management toward more integrated, community-centered systems.

AUDIENCE

This research is relevant for both local governments and emergency management authorities who want to leverage social capital and build relationships with potential zero responders for more effective disaster response.

Full Report: Remington, C. L., Remington, C. R., Duckworth, C., & Havird, S. (2026). *The Rise of the Zero Responder: Grassroots Disaster Response After Hurricane Ian*. (Natural Hazards Center Quick Response Research Report Series, Report 372). Natural Hazards Center, University of Colorado Boulder. hazards.colorado.edu/quick-response-report/the-rise-of-the-zero-responder-grassroots-disaster-response-after-hurricane-ian



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