

From the Voices of Communities, Local Governments, and Academics: Assessing Preparedness and Recovery for Socially Marginalized Communities Impacted by Natural Disasters

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EXECUTIVE SUMMARY

Federal agencies have noted the increase in worrisome trends related to climate change, particularly wildfires, hurricanes, and flooding (DHS, 2012; FEMA 2021; NOAA, 2021; NASA, 2021). Recent work shows that continual and repeated disruption disproportionately harms marginalized communities. Emerging evidence suggests that current disaster management systems have failed to build trust and awareness among disadvantaged communities after a hazardous event (Berke et al., 2011; Findholt, 2013) making them less likely to recover fully (Beaver et al., 2005; Davis et al., 2021). These results suggest a need for research to inform federal agencies and communities on building trust around disaster mitigation and recovery.

A research team from the Coastal Resilience Center at the University of North Carolina at Chapel Hill was funded from July 2021 to June 2022 to uncover how community members, local government officials and academics address systemic inequalities, suggest equitable support on disaster mitigation for marginalized populations by building relationships and trust, and recommend policy changes to improve disaster recovery.

The purpose of this report is threefold: (1) Document the extent of support marginalized communities receive before, during, and after an event, (2) Inform federal agencies on how to improve relations, communication and trust with marginalized communities, and (3) Present policy recommendations based on feedback from participants. To achieve this, we collected qualitative and quantitative data from individuals who intentionally work to support marginalized groups through a hazard. Our intended outcomes focus on building, repairing and helping to maintain a vital bridge between community members and federal agencies where both are positioned as experts. Results from the study will assist in providing actionable steps for federal organizations to address equity and create foundational conversations around recovery and justice. Specifically, this report focuses on five overarching research goals:

1. Identify the types of organizations that are supporting the long-term and short-term needs of marginalized groups after an event.
2. Examine how marginalized groups are impacted by hazards through the facilitation of group discussions with three advisory groups (community members, government officials and academics).
3. Assess the accessibility to supports for marginalized groups and the organizations that serve them, following a hazard through the administration of a nationwide online survey.
4. Identify ways to improve communication and build trust between marginalized communities and agencies.
5. Highlight the policy changes needed to better support marginalized groups through an event.

Methods

The research team applied an exploratory sequential mixed methods design that used qualitative focus groups first and then collected quantitative survey data. To begin, we conducted a literature review on participatory action research that guided our data collection and analysis strategies. Then, we facilitated three discussions with three advisory groups, totaling nine focus groups overall. Then, we analyzed the focus group data, identifying overarching patterns and themes.

These findings were used to generate an online survey that was distributed to 179 non-governmental agencies (NGOs) and 140 governmental agencies nationwide. Lastly, the team hosted a virtual workshop for community members and interested stakeholders to attend and provide recommendations.

Summary of findings

1) Explaining the long-term impacts for marginalized groups

- *Marginalized populations are excluded from disaster preparation and recovery.* Advisory group members and survey respondents identified these groups as Black, Indigenous and People of Color (BIPOC) individuals from low-wealth communities, undocumented immigrants, children, women, the elderly, individuals from rural populations and unhoused individuals. This is not an exhaustive list, but one that encompasses the groups mentioned most by respondents. Participants also stated that marginalized communities are not typically included in disaster mitigation or recovery planning.
- *Exclusion exacerbates the impact of hazards for marginalized groups.* Advisory group members articulated that hazard events negatively impact marginalized groups due to not having access to disaster relief resources (e.g., broadband internet, food, or housing) or crucial conversations that impact policy and community recovery. Members from the community advisory group stated that isolated marginalized groups are more disadvantaged than their peers living in accessible communities connected to non-profits, faith-based organizations, or local government support.
- *The long-term inequities for marginalized groups are due to systemic forms of oppression.* Community and academic advisory group members overwhelmingly identified systemic and historical racism as the reasons for significant instances of disenfranchisement amongst marginalized communities. Also, advisory group members agreed that the outcomes of an event are closely correlated with an individual's and community's pre-disaster conditions. This suggests that if a community struggles with access to housing, food, health care and quality education before an event, the impact of a hazard will only widen pre-existing communal burdens.

2) Providing & Receiving Support

- *Confusion around who is responsible for supporting the immediate and long-term needs of marginalized groups.* Overwhelmingly, community, local government and academic advisory group members agreed that non-profits, faith-based organizations, and residents are responding to the overall needs of marginalized groups before, during, and after a hazardous event. Whereas community members are frustrated that it has become their responsibility to support marginalized groups even with a lack of outside resources, local government officials are pleased with depending on communities to lead recovery efforts. The conflicting perspective reflects an overall misunderstanding of the roles and responsibilities of government officials throughout a hazardous event. It also fuels the mistrust communities have for government officials when it comes time to provide aid throughout an event.

- *The voices of marginalized people are excluded from decision-making.* All three advisory groups agreed that government officials should identify the missing voices of those who are not present, especially during meetings that address infrastructure, communal recovery, and planning. Oftentimes, conversations around emergency management represent the same type of individual (i.e., White, male and former military) and lack social, racial and ethnic diversity. Additionally, advisory group members suggested that government agencies seek out the *invisible* leaders within communities and treat them as the experts and gatekeepers of their spaces. These *invisible* leaders are visible to their communities but are unseen by those who hold the power.
- *NGOs and governmental agencies are unaware of support and lack essential resources.* With limited funding, local government advisory group members expressed that local agency staff may not know how to define equity or be able to offer equitable tactics to people in need. Community and academic advisory group members and survey respondents described the difficulty in accessing financial support through state and federal websites. Individuals also decried that gaining support felt “dehumanizing,” especially after navigating various online portals and speaking with numerous agents, which resulted in no financial support. Seventeen of 49 survey respondents were aware of the Building Resilient Infrastructure and Communities (BRIC)¹ grant program, while only one applied for support.

3) Building Relationships & Trust

- *Developing and maintaining relationships take time.* Advisory group members agreed that the development of relationships occurs over a period and should not be rushed. Respondents named the importance of following through with promises. Advisory group members noted that prior approaches to building relationships with marginalized populations could be harmful, especially when they are not culturally or socially appropriate for the community.
- *Accessing services beyond the hazard.* Advisory group members suggested that marginalized communities should have access to services without inferences of *quid pro quo* arrangements from actors (NGO personnel, government officials and researchers). Members argued that specific communities have poor access to services and facilities such as schools, stormwater infrastructure and healthcare facilities. Lack of access to these *opportunity assets* limits the capacity of marginalized people to overcome social barriers that reduce vulnerability.
- *Building trust requires living or spending significant time in the community being served.* However, just living in the community is not enough. One must spend time with community members and be involved in communal activities such as assessing the community’s history and its connections to oppression, speak to community experts about their needs, identify the *invisible* leaders and help to build trust for

¹ The Building Resilience Infrastructure and Communities (BRIC) program is a grant funding opportunity from FEMA that supports pre-disaster hazard mitigation efforts. Through BRIC, local communities, federally recognized tribes and U.S. territories are encouraged to apply.

one's actions. Advisory group members also addressed mutually beneficial relationships between community members and actors that were either based on long-term commitments or short-term transactions. In both instances, the parties have an agreed-upon form of interaction that meets the needs of marginalized populations.

- *Deference, clarity, and consistency are essential attributes when communicating with community members.* Focus group members argued the importance for all actors to be aware of their privileges and bring deference to their interactions with marginalized communities. Oftentimes, underrepresented groups are left out of disaster mitigation and recovery conversations giving the impression that they are inferior or lack expertise. According to focus group respondents, positioning oppressed individuals in a space that uplifts and highlights their voices allows for more thoughtful and intentional conversations. Additionally, survey respondents agreed that honesty, transparency, respect, empathy, trust, and communication are essential components of a healthy relationship.

Recommended policies and practices

- 1) **Provide greater access to emergency funds.** Overall, advisory group members and survey respondents called for an improvement in the ease and access for marginalized communities to retrieve emergency funding. Respondents recommended developing a set-aside fund or some other mechanism to resolve the inequities faced by marginalized populations in gaining access to emergency funding. Additionally, individuals requested a waiver or reduced match requirements to overcome barriers posed by the nonfederal cost share for marginalized populations.
- 2) **Provide funding to hire more staff.** Local government and community advisory group members and survey respondents suggested the need for more employed staff to assist with emergency management. For those at an NGO or faith-based organization, this means having the funds to support hiring more people to deal with the short- and long-term needs of marginalized groups impacted by hazardous events. For those within the local government, this meant having the capability and funding to hire more individuals to assist with the overall logistics of emergency management. Both groups saw the growing number of climate-related events and were concerned with the current lack of paid human resources within their offices.
- 3) **Acknowledge and express value to marginalized groups and the organizations that serve them.** Overwhelmingly, advisory group members, survey respondents and workshop participants indicated that a way to improve trust and build relationships between communities and governmental agencies is through practices and approaches that value and listen to marginalized communities and the organizations that serve them. Respondents provided the following recommendations for governmental agencies: act on their agreements, alter policies based on feedback, allow communities to visualize an obtainable solution, listen without trying to fix it, and follow up with questions.
- 4) **Build trust through respecting culture and co-production.** To build trust, service providers should have a cultural understanding of community, be transparent and

accountable, and be consistently involved in working with community members. Emphasis should be placed on co-production of programs and plans that account for lived experiences and perspectives of marginalized people.

Future direction

The current project focused on collecting the voices of community members, local government officials and academics through focus groups, an online survey, and a workshop. Since the survey was a pilot and given to a small sample, our suggestion for future research is to expand the study by refining the survey instrument and administering it to a larger representative national sample. Doing so will allow for a more representative voice from community members and local government agencies.

INTRODUCTION

Federal agencies have noted the increase in worrisome trends related to climate change, particularly wildfires, hurricanes and flooding (DHS, 2012; FEMA, 2021; NOAA, 2021; NASA, 2021; EPA, 2021). Continual and repeated disruptions make full recovery especially difficult for marginalized communities. Emerging evidence suggests that current disaster management systems have failed to build trust and awareness among disadvantaged communities after a hazardous event (Berke et al., 2011; Findholt, 2013) making them less likely to recover fully (Beaver et al., 2005; Davis et al., 2021). These results suggest a need for research to inform federal agencies and communities on building trust around disaster mitigation and recovery. In this report, we share our findings of how community members, local government officials and academics address systemic inequalities, suggest equitable support on disaster mitigation and recommend policy changes to improve disaster recovery.

This report has three overarching purposes: (1) Gather evidence on the extent of the support provided to marginalized communities before, during, and after an event, (2) Provide information to federal agencies on how they can better their relations, communication, and trust with these communities, and (3) Present policy recommendations based on the voices of participants.

To fulfill this objective, we recruited three advisory committees representing the community, local government and academic experts and gathered relevant information on the best ways to reduce inequalities and support marginalized groups. Concurrently, the research team identified and added new NGOs and local-government contacts to the existing database created in our prior study. We then used a list of contacts generated from the database and administered a nationwide survey to government and NGOs that aid socially marginalized groups around a natural hazard. We sought to collect information from all U.S. states, federally and state-recognized tribes and U.S. territories. Focus groups with our advisory committees provided our initial qualitative data, which we were able to combine with the quantitative survey data to provide a multi-dimensional, comprehensive view of the issue. Our work culminated in a workshop for interested stakeholders where we collected data around engaging socially marginalized groups.

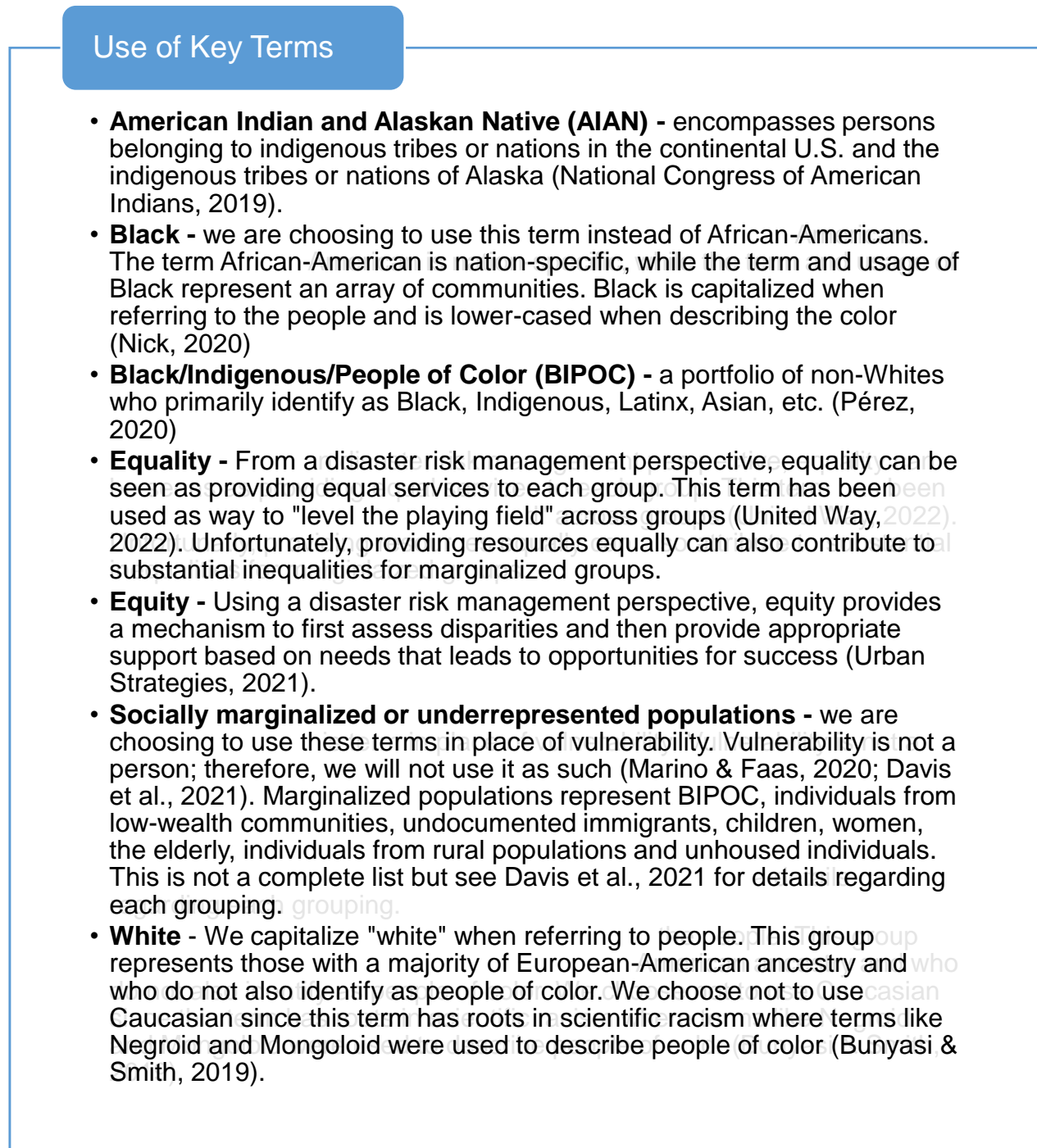
In this report, we illustrate our findings in three sections: (1) exploring the long-term impacts for marginalized groups, (2) providing and receiving support and (3) building relationships and trust. Following a summary of our findings, we conclude with policy recommendations based on

The Purpose of the Report

- (1) Provide evidence on the extent marginalized communities are receiving support before, during, and after an event.
- (2) Inform federal agencies on how to improve relations, communication and trust with marginalized communities.
- (3) Present policy recommendations based on participants' feedback.

respondents' interpretations and the next steps for further research. Figure 1 represents a series of key terms and definitions that are used throughout the report.

Figure 1. Use of Key Terms



METHODS

The team applied an exploratory sequential mixed methods design to address the following five overarching research goals:

1. Identify the types of organizations that are supporting the long-term and short-term needs of marginalized groups after an event.
2. Examine the ways in which marginalized groups are impacted by hazards through the facilitation of group discussions with three advisory groups (community members, government officials and academics).
3. Assess the accessibility to supports for marginalized groups and the organizations that serve them following a hazard through the administration of a nationwide online survey.
4. Identify ways to improve communication and build trust between marginalized communities and agencies.
5. Highlight the policy changes needed to better support marginalized groups through an event.

The team used participatory action research (PAR), described below, as a foundation for data collection and analysis. We also reviewed the literature on support for marginalized groups, administered focus groups and surveys, and pulled data from our virtual workshop. These data sources provide the team with in-depth knowledge about how marginalized groups are affected and supported through an event. In this section, we provide information about PAR, the theory that grounded our work, and the research procedure used to execute the project.

Participatory Action Research (PAR)

PAR is the overarching guide used for our study. At its core, PAR involves learning about real people and issues (Kemmis et al., 2013). Essentially, it is the idea that researchers must have cultural competence and awareness of the diverse cultures, perspectives, and beliefs of those with whom they are working (Kelman et al., 2011; Browne, 2017). Furthermore, researchers should seek to engage participants in the construction of knowledge and objectives (Trajber et al., 2019) and these two concepts should be considered equally important throughout the research cycle (McCall & Peters-Guarin, 2012). Researchers and their approaches should focus on strengths rather than deficits (Wang, 1999). The outcomes of the research should be approved by stakeholders (Meyer et al., 2018).

When used in studies such as this one, PAR unites researchers and participants, both of whose voices and perspectives are considered of equal importance.

Studies are planned and executed by members of both groups with an aim to generate a lasting improvement for the participants and their community.

Research Procedure

- Review literature
- Administer focus groups
- Administer an online survey
- Host virtual workshop
- Provide recommendations

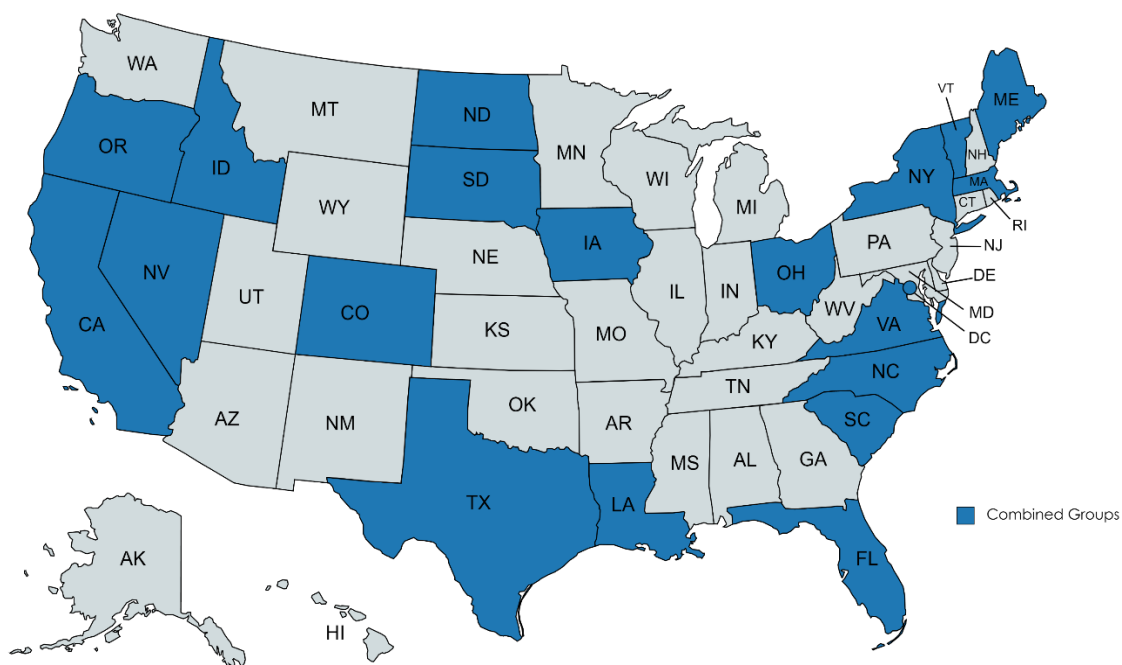
Procedure

Our research procedure had five parts. First, we **reviewed the literature** on marginalization, hazards, support, and building trust with governmental agencies. We especially drew from our previous report, *Support Strategies for Socially Marginalized Neighborhoods Likely Impacted by Natural Hazards*.

Next, we **assembled three advisory committees** with representatives from the community, local government and academia. Community members represented individuals in an administrative role at an NGO or faith-based organization. Local government officials represented a composition of professions in emergency management, urban planning and community development held in a local or state government office. Lastly, representatives from academia were those whose research interest aligned with disaster recovery and marginalized communities. Each advisory group met three times, for a total of nine focus groups from January to March 2022. Each meeting lasted between an hour and fifteen minutes and two hours. The purpose of these focus groups was to dive deeper into findings illuminated from the previous report. Topics related to building trust and relationships between communities and agencies.

Twenty-five members participated within the focus groups. Individuals represented all 10 FEMA Regions, as well as 19 states and the District of Columbia. There were 10 participants in the group of community experts, eight in the group of government officials, and seven in the group of academics. Figure 2 shows the states represented by advisory group members.

Figure 2. States Represented in Advisory Groups



The research team took detailed notes during each session. When it was appropriate, sessions were audio- and video-recorded.

Table 1 provides a description of the objectives of each focus group session. The team created three reports that summarized advisory group meetings as immediate deliverables. Abridged versions of these reports are in Appendices A-C.

Table 1. Objectives of Sessions

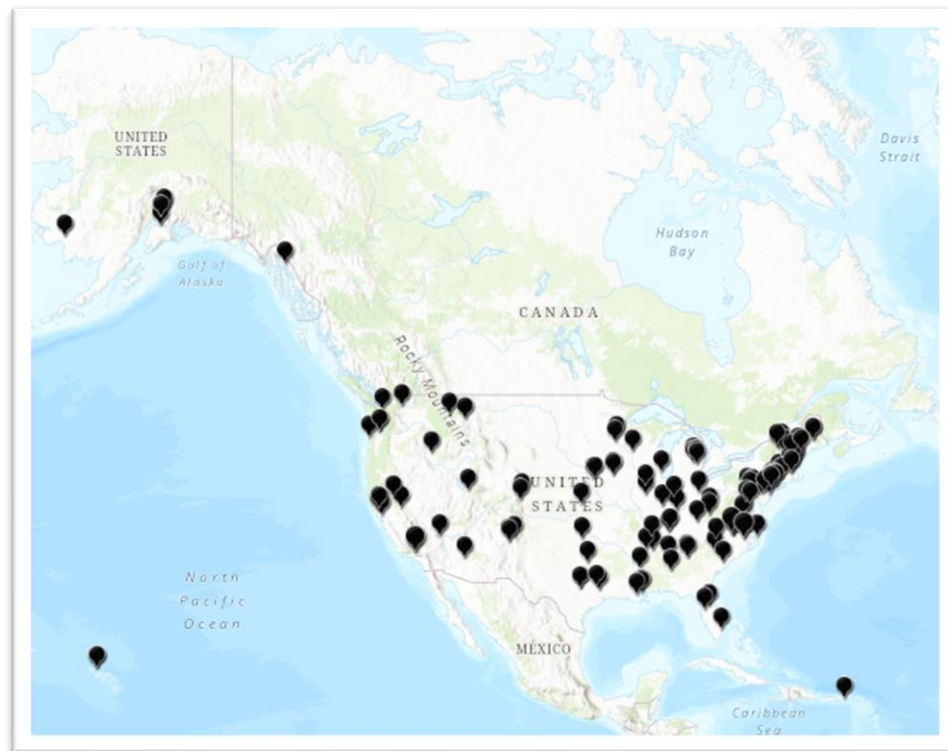
| <i>Session</i> | <i>Objective</i> |
|-------------------------------|--|
| 1st Session | The objectives of the first session were to establish definitions of words used in sessions, discuss the history of different marginalized communities, and determine which communities are most impacted by events and how they are impacted. Additionally, we heard from participants about who were the first responders in their communities and learned how different groups and organizations are working to address existing inequalities in their communities. |
| 2nd Session | The second advisory committee session sought to examine how marginalized populations were being supported and how productive relationships are achieved and maintained. The topics included relationships between governmental agencies, communities, and researchers. This discussion revolved around trust. Participants were asked what was needed from the federal government to gain trust within these communities. |
| 3rd Session | The third and final session centered around policy recommendations. Participants were asked, in an ideal world, what would need to happen for risk to be erased, who would need to be involved and what resources would be needed. They also discussed preliminary survey findings, as well as policy recommendations. |

Following the focus groups, we **administered an online survey** to hear from diverse organizations across the country. We created the online survey based on the team’s literature review and findings from the focus groups with our advisory committees. Respondents were representatives from organizations that worked with marginalized populations and aided in natural hazard preparation and recovery. The purpose of this survey was to gather preliminary information on how, if at all, organizations were meeting the needs of disadvantaged groups with a focus on mitigation. This pilot survey allowed us to test our sampling methodology and the construct validity of our survey items to inform a larger-scale deployment in the Spring of 2023.

We administered the survey to NGOs in the community and to the local government officials represented in the corresponding community. Our NGO sample represented 179 organizations and our local government sample represented 140 sites. A total of 49 respondents completed the survey. While the sample represented all 10 FEMA Regions, 51% of respondents were in FEMA

Regions 4 and 7. The sample also represented 50 states, one district and two U.S. territories. Figure 3 shows the location of sample sites recruited to take the survey.

Figure 3. NGO & Local Government Sample



The survey questions addressed five main categories: the demographics of the organizations, how organizations address and struggle to address inequalities, organizations’ awareness of available programs, how organizations build trust within their communities and policy recommendations. These categories were designed to provide a wider, overarching view of how organizations across the country are assisting marginalized groups, complementing the more specific findings from the discussion groups. More details about survey content can be found in Appendix D. The team did not include the final protocol since it is currently being modified and validated for data collection in Spring 2023.

Finally, our team **hosted a virtual workshop** in which advisory committee members, survey respondents and interested stakeholders were invited to continue the conversation around promoting equity in natural hazard recovery. The workshop lasted 1.5 hours in length. Twenty-two participants voiced their ideas, interacted with each other and proposed policy recommendations for the Building Resilient Infrastructure and Communities (BRIC) program and federal agencies to support marginalized communities. The team also collected notes from group discussions and received feedback from participants about the overall study. In Appendix E, we provide a snapshot from participants’ responses to the question, “What are some critical next steps to ensure that you, or the communities you serve, are heard and valued?”

FINDINGS

I. Exploring the long-term impacts for marginalized groups

Who are marginalized and how are they impacted by events?

Focus group participants found that hazardous events had the most impact on marginalized groups, including Black, Indigenous and People of Color (BIPOC), undocumented immigrants, rural populations, children, and low-income households. Similarly, survey respondents were asked to select up to three marginalized populations most affected by natural hazards in their respective communities. The top selections were low-income persons and households, the elderly, people experiencing homelessness, children, women, immigrants and BIPOC (Table 2).

When asked to specify which racial identity within the BIPOC category is most affected by hazards in their communities, the top selections were Black (32.4%), American Indian or Alaskan Native (27.0%) and Biracial or multi-racial individuals (24.3%). Very few respondents selected Asian (10.8%) or Native Hawaiian or other Pacific Islander (5.4%).

Table 2. Which marginalized groups are most affected by hazardous events

| | N of respondents | % of respondents |
|--|------------------|------------------|
| Low-income persons | 28 | 57.1% |
| The elderly | 21 | 42.9% |
| People experiencing homelessness | 18 | 36.7% |
| Children | 17 | 34.7% |
| Women | 16 | 32.7% |
| Immigrants | 16 | 32.7% |
| BIPOC | 15 | 30.6% |
| Mothers | 15 | 30.6% |
| People with disabilities | 15 | 30.6% |
| Rural residents | 14 | 28.6% |
| Veterans | 13 | 26.5% |
| LGBTQIA+ | 10 | 20.4% |
| No particular group or population is targeted | 10 | 20.4% |
| Urban Residents | 9 | 18.4% |

Focus group respondents were asked to discuss the reasons why marginalized groups were more likely to be affected by a hazardous event. Participants indicated that this was due to existing structural challenges, disenfranchisement, systemic and historical racism, a legacy of colonialism, poor communication from federal agencies and a lack of resources. More specifically, structural challenges stem from ignoring valued voices. A member of the academics group stated,

[Marginalized] communities being affected by climate change and disasters are left out of the decision making... their voices aren't being heard. And those are historic, you know, and structural and chronic and intergenerational patterns are being left out [due to] power differentials based on race, sex class, you know, intentional differences. And,

you know, I look at that from the lens of colonization and [how it] values extraction and exploitation...

Focus group respondents also shared that the outcomes of an event are closely correlated with individuals' and communities' pre-disaster conditions. Participants argued that disasters exacerbate inequalities. They listed several challenges that marginalized populations face before a hazardous event, such as childcare, access to food, sustainability of American Indian and Alaskan Native tribes, housing security, income and availability of mental health resources. But even surrounding an event, respondents called for the need to access cultural brokers to better communicate with FEMA and have control over decision-making processes, especially for local leaders in disaster risk management.

Participants across groups also noted that marginalized populations are negatively impacted by events due to not having access to key disaster relief tools like broadband internet, food, or housing. One community member stated, "All the systems of aid were created for people who are White, good at technology, and can make the ask again and again, until it gets done."

"All the systems of aid were created for people who are White, good at technology, and can make the ask again and again, until it gets done."

-Advisory group member

Community respondents described how organizations in isolated areas take on the responsibility of supporting their communities following an event. They noted the added burden of care for such individuals, stating: "Someone who's poor, who lives near the town my organization is in, will fare better than someone who's equally as poor who lives 30 minutes away." They continued that the local NGOs are often stressed or do not have the capacity to manage all the various components that factor into disaster recovery for marginalized groups.

A continuation of inequities

Participants named several inequalities that affect communities before, during, and after a hazard event, including access to food, stable housing, and reliable information. Local government focus group respondents argued that it was difficult to quantify the risks subpopulations experienced during a hazard. However, they recognized that individuals' and families' level of security and socioeconomic status affect their disaster outcomes. A particular group that was noted to be the most ignored by federal assistance were undocumented individuals. The community member stated, "If you are undocumented, forget it. Undocumented have access to absolutely nothing." Another member stated,

Our most vulnerable client base that has the hardest time in the long-term recovery after a disaster tend to be people who are undocumented and not eligible at all for federal assistance, who don't speak English, who don't have broadband Internet access.

Respondents also spoke about the differences in long-term inequities based on being a state- or federally-recognized tribe. Another community member stated,

...it is so very complicated for those tribes to access funding, whether they can again directly or through their state or county...The root base of the inequities is just the historical disinvestment, and then just the complexity of the governing situations.

Most participants across groups talked about the structural and institutional inequalities in marginalized communities. One member of the academics advisory group spoke on the inequality of school district resources between low- and high-wealth districts and how that affects children in the level of support they receive long-term. They found that the issues are symptomatic of institutional discrimination since the systems are not created to serve the interests of marginalized groups.

II. Providing & Receiving Support

Who are supporting marginalized groups through a hazardous event?

According to advisory group members and survey respondents, marginalized groups are immediately supported by emergency services and receive short- and long-term support from non-profits, faith-based organizations, and informal communal leaders. Although few mentioned receiving financial support from FEMA and other federal agencies, respondents agreed that the federal government provided less funding to support disaster recovery. This forces communities and local governments to rely on alternative organizations (e.g., NGOs and faith-based) to provide key resources for groups in need.

Respondents defined emergency services as groups that include the fire department, police, and local medical services. They identified these groups as the ones who provided quick responses to those in need during an emergency. However, local government officials argued that they did not have enough time or resources to anticipate or meet the immediate needs of their communities. Instead, they suggested having more tools to support marginalized groups. One stated,

When all you have is a hammer, every problem looks like a nail, so I need a bigger, wider, toolbox to better respond to any given situation. I can hammer a nail with a wrench, but it's not ideal. I'd rather have a tool that's appropriate to the situation.

Respondents in all three groups agreed that non-profits and faith-based organizations were the ones providing short- and long-term support to marginalized populations. One community respondent argued that faith-based organizations were able to support the community in ways that governmental officials could not, based on duration and length in their positions. They stated,

[The] clergy play an important role in non-profit leadership. And oftentimes, there's just so much turnover in elected officials that they tend to undermine existing emergency response plans from police, firefighters and for us [name of city] emergency management.

Another method that provides support to marginalized groups is assistance from informal community leaders and neighbors. These are individuals who may not have a formal position within the municipality but are lauded as the head of community affairs by residents. Focus group respondents equally agreed that oftentimes informal leaders are overlooked for not having the right credentials, but tend to know much about their community, are resourceful, know how to solve issues and can find the right people for the job. A local government official described finding a leader through alternative methods. The official stated,

The way we found into [an underrepresented group] was through the dry cleaner's association. I would have never thought to go into a dry cleaner.

An academic advisory group member argued that community members rely on their family and neighbors for long-term support due to a history of mistrust. The respondent stated,

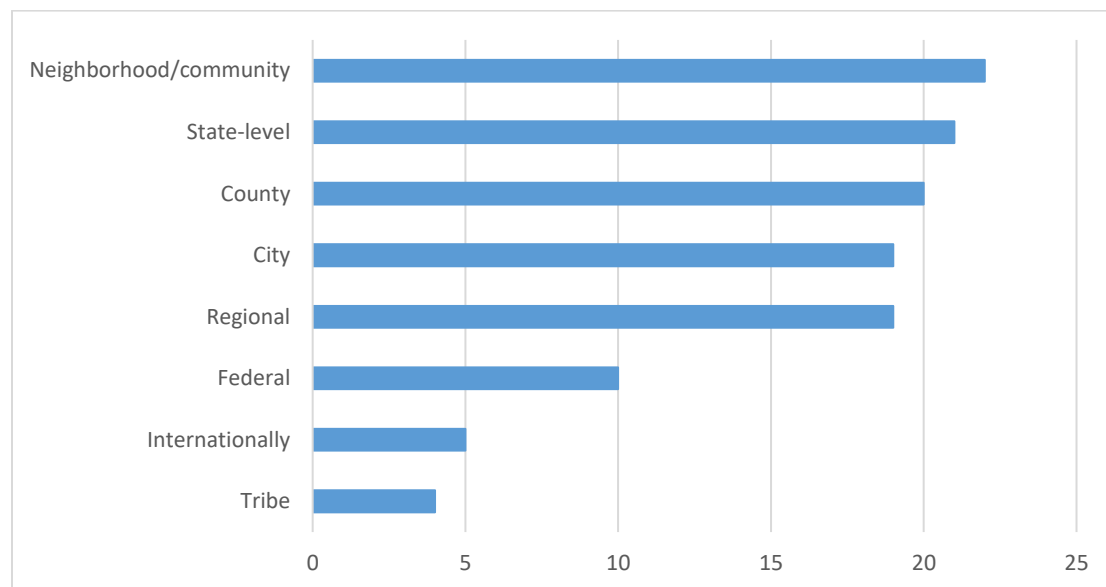
Most people don't rely on formal services, in my experience, if they can help it, you know, like, it's mostly family and extended family and kind of community like, informal community support.

Although mentioned infrequently, focus group members indicated that federal agencies may provide support through BRIC and the Small Business Administration (SBA). Respondents also cited those agencies could only provide support if a disaster is federally declared. Members noted that too many requirements and restrictions with federal grants often inhibit the ability to work with marginalized populations and support them immediately and effectively. One community member recalled an interaction with both FEMA and SBA. The member stated:

SBA is opaque, they are random, and their interpretation of policy can change person to person, same with FEMA's, individual assistance. It's a mess. It's actually a double traumatization of the people who are trying to navigate it. And they're often the most [marginalized] people who were trying to get a little bit of help.

As noted earlier, the research team sought out survey respondents who purposefully supported marginalized populations before, during, and after a hazardous event. We asked the survey respondents how to best describe their organization: 27 (54.0 percent) reported being a private non-profit, nine (18.0 percent) selected "other", five (10.0 percent) selected public charity or faith-based organization, three (6.0 percent) selected local government, and one (2.0 percent) selected political organization. Respondents who selected "other" represented funders, state agencies, public housing authorities, FEMA, private businesses, universities, and community foundations. The top three jurisdictions where organizations mainly worked were at the (1) neighborhood or community level, (2) state-level and (3) county level (Figure 4).

Figure 4. Jurisdiction of surveyed organizations



How are groups addressing inequalities?

Survey results showed consistency in the types of difficulties disadvantaged populations faced throughout an event. Respondents listed the following top five barriers to serving marginalized communities as (1) housing shortages, (2) infrastructure and transportation problems, (3) health effects (e.g., long-term impacts, mental health impacts), (4) employment disruptions and (5) food and water shortages. Those five topics comprised 82.5 percent of total responses.

Survey respondents also discussed various ways they addressed inequities within their communities. Thirty-eight surveyed respondents (88.4 percent) indicated being responsible for serving marginalized groups.² Roughly half of respondents were satisfied with their organization's ability to meet the needs of marginalized groups (51.2 percent) and effectively communicate with them (50.0 percent). However, 23 respondents (56.1 percent) reported that additional funding would allow them to better address inequities in the provision of natural hazard relief services. Fifteen respondents (34.1 percent) noted that emergency funds were essential in addressing the impacts of hazards felt by marginalized communities. In another instance, participants described hiring individuals connected to the community to help with understanding the overall communal needs. One respondent stated:

We have found that by our organization hiring members of these marginalized communities, we have a keen understanding of the current issues faced by this segment of the population. We understand how to work within the different systems to provide resolution to the challenges that arise for these marginalized people. We network regularly with groups that serve these segments of the population, so we engage with them regularly to provide risk reduction/mitigation, response and recovery assistance.

² The percentage represents respondents' selection of Likert scale items from 8 to 10, with 10 signifying strongly agree or extremely satisfying.

Focus group participants listed several ways to address inequities, such as incorporating cultural competency and compliance in emergency management, using Voluntary Organizations Active in Disasters (VOADS) as a platform for supporting unmet needs, investing in local people that know their community and providing federal funding that acknowledges and supports holistic necessities. They also suggested that the impact of an event could be improved with increased communication from all governmental agencies and improved preparedness, mitigation, and infrastructure plans at the community level. Local government advisory group members recalled that it was challenging to engage community members in disaster planning, as some groups (i.e., individuals who currently hold the power and do not typically represent marginalized communities) tend to dominate decision-making.

Additional strategies used to address inequities focused on using a social justice framework in meeting needs. A total of 34 survey respondents (79.1 percent)³ agreed that their organization incorporates equity considerations in their organization's formal process. One survey respondent stated,

After an event, we do our due diligence to understand the marginalized populations and how they were affected by the disaster. We then begin community engagement by talking to community organizations about the gaps in assistance and the community needs. Whenever possible, we fund a local, culturally aligned organizations that is BIPOC led or serving organization to provide grant dollars so they can serve their communities. If this isn't possible, we work with organizations that have a history of equitable work and have built trust with those marginalized populations disproportionately affected.

Overall, respondents provided information on strategies needed to assist with addressing inequalities. Survey and focus group respondents suggested the need for more mental and emotional health services that support the whole person, even years after the event. Focus group respondents suggested that actors (NGO personnel, government officials and researchers) should look to how an event impacts individuals and communities beyond the physical property destruction. One academic focus group member had this to say,

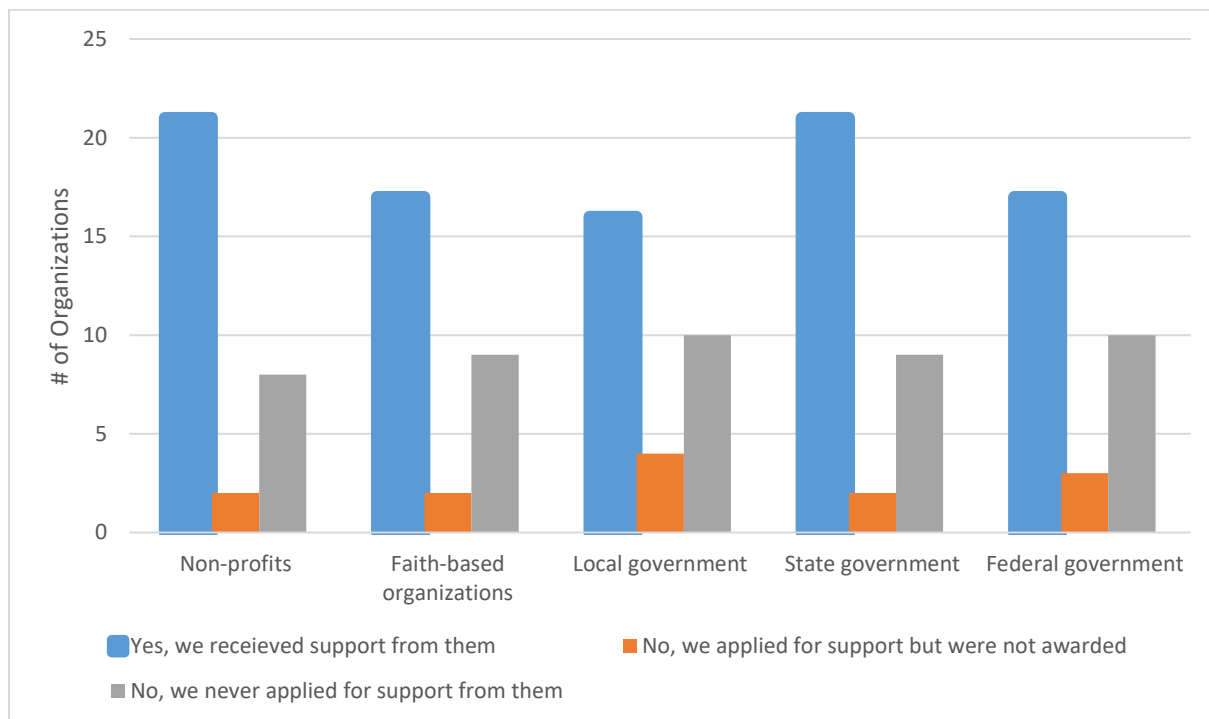
They are totally focused on the brick-and-mortar rebuilding, they're totally focused on what is visibly ruined. And they look at an environment that is ruined, and they have no idea what was there before, they don't put any effort into understanding the ghosts that are inhabiting that empty landscape or that ruined landscape. And it is so powerful to realize all the invisible needs of people. And they're not, they can't all be described at the individual level, there's so many collective kinds of needs, cultural needs, and needs for intergroup support. And part of the problem with thinking about, you know, what supports people need is this individualistic model that we have perpetuated, and that we can't seem to step out of, all the FEMA paperwork is based on individuals or individual households.

³ The percentage represents respondents' selection Likert scale items from 8 to 10, with 10 signifying strongly agree.

NGOs and governmental personnel receive support

When asked if they were aware of the FEMA – BRIC grant program, only 17 survey respondents (37.8 percent) were aware of the grant program. Only 1 of 17 (5.9 percent) who were aware of the grant program ever applied for BRIC support. Additionally, survey respondents applied to various places for support which ranged from non-profits, faith-based organizations to local government, state government and the federal government. Results show that surveyed respondents who applied to organizations were most likely to receive support from non-profits and state governments (Figure 5). Respondents also shared that they were least likely to receive funding from local and federal governments after they applied for support. Additionally, 16 respondents strongly agreed that their organizations had the capacity to apply and manage federal grants.

Figure 5. Where surveyed organizations received funding



When surveyed organizations were asked what they would spend money on if awarded a large sum, the top three responses were human resources with 25 responses (20.5 percent), supplies for home repair and rebuilding with 22 responses (18.0 percent) and selected administration costs with 21 responses (17.2 percent). Additionally, 20 respondents (16.4 percent) selected “other”, 16 selected (13.1 percent) supplies for the organization and 12 respondents chose (9.8 percent) professional development trainings.

For those that answered “other”, some specified what they would spend the money on including relocation costs, community recovery education, supplies for those affected (clothing, etc.), mental health resources, funding to help pay for utilities for those affected, medical equipment and purchasing a larger facility. One survey respondent stated they would use the extra funds for

“translation services for long-term recovery groups and community groups that can engage in formal coordination efforts but typically have a language barrier, as well as distrust.”

We also asked surveyed respondents to indicate what further resources are needed to improve their organization’s ability to serve marginalized groups through a hazardous event. Twenty-three respondents (56.1 percent) selected additional funding as the most important resource. The remaining categories were listed as the following – more staff, better visibility in the community and more training in working with marginalized populations. Some respondents indicated that all the categories were necessary, but that funding was their first choice.

As seen above, respondents agreed that their organizations lacked key resources. Specifically, 12 survey respondents (27.3 percent) strongly agreed that their organization needed help in providing supports for marginalized and disadvantaged groups. Eleven respondents (25.6 percent) strongly agreed that staffing shortages were a significant problem for their organizations.

Although respondents described the shortcomings around human resources and funding, many also indicated strengths in capacity to reach out to community members. Specifically, 19 respondents (45.2 percent) strongly disagreed that their ability to connect with marginalized groups had worsened over the past 10 years. Individuals also remarked that their ability to connect and support marginalized groups through the COVID-19 pandemic had remained consistent as compared to before the pandemic.

III. Building Relationships & Trust

Developing and maintaining relationships

Building relationships and trust were critical components named by advisory group respondents. Furthermore, respondents made several explicit suggestions for attaining a healthy relationship between actors and community members. Overall, actors should listen to the marginalized, follow up and follow through with promises, hire staff who are members of the communities they serve, and involve community stakeholders in all phases of the disaster cycle whenever possible. Participants recommended reaching out to local leaders, organizations, and residents to assess what works best for supporting and reaching the marginalized populations living in the community. Respondents listed several ways to reach marginalized populations, such as writing a letter, hosting monthly meetings, connecting with the formal and informal community leaders, and financing community grassroots initiatives and non-profits. Respondents encouraged governmental agencies to work hard to build relationships with community members. To start this process, agencies must speak with marginalized communities, make funding accessible to underrepresented groups and build trust. Community and academic focus group members agreed that tackling other crises like housing and food shortages will help improve disaster responses.

Survey and focus group respondents also listed a variety of crucial “ingredients” for a healthy relationship between the organization and the marginalized populations they serve. The most important themes were honesty, transparency, respect, empathy, trust, and communication. Additionally, respondents wrote that it was crucial to have connections with trusted community partners and maintain those relationships beyond the immediate disaster recovery phase. Survey

respondents also urged that organizations should provide access to multiple services in one place without enforcing a *quid pro quo*.

One community focus group member argued that the lack of communication hinders the ability to build relationships and ultimately meet needs. The respondent demanded communication and inferred how her NGO was stepping in to support families in places that other organizations were not. In the end, she wants to collaborate for the betterment of her community.

Respond to my people, and we want an answer right away. Make sure all of the community is safe and prepared for the 7 days. You need to be with the non-profits, we are doing it for free. We don't pay no one and they can come and feel welcome. We need to work hand to hand.

Participants noted that many prior approaches and practices that were aimed at supporting marginalized populations were often harmful, culturally inappropriate, or not useful services and supports. Respondents recommended that agencies and organizations who want to provide support to marginalized populations live or spend significant time in the community they serve to learn about the root problems and develop a thoughtful assessment of the community's needs.

Building trust

Overwhelmingly, respondents agreed that trust is crucial to support marginalized populations during a hazardous event. It is vital as groups intend to work with underserved populations. Focus group members argued that trust starts as a reciprocal relationship that is either transactional or mutually beneficial. Regardless, both are aware of their relationship and believe in the outcomes. Participants also noted that the ability to build trust is a slow-moving process that often conflicts with funding opportunities and research timelines, which make the process of carrying out trust-building relationships more difficult.

“...you need that relationship before the disaster, the emergency will not make it better.”

-Advisory group member

Although the process of establishing trust takes time, respondents also spoke of the power of deference. Focus group members discussed the importance of all actors being aware of the privileges they bring to interactions with community members; however, awareness is not sufficient. Individuals suggested action coupled with awareness led to deference. Oftentimes, underrepresented groups are left out of disaster mitigation and recovery conversations, giving the impression that their knowledge is deemed inferior or lacks expertise. According to focus group respondents, positioning oppressed individuals in a space that uplifts and highlights their voices allows for more thoughtful and intentional conversations. Respondents also agreed that humility and transparency were essential, even when a problem arises. One academic focus group member stated:

...one of the best things about trust is the grace and mercy that come with it... If you're consistently transparent, do what you say you're going to do, don't over promise. Then

people are more willing to give you the benefit of the doubt if something happens that was not anticipated.

Given the often-problematic treatment marginalized populations have received from outside actors and systems, it is essential that agencies and organizations looking to support marginalized communities are consistent and transparent in their communication and service. Another academic focus group member recalled entering a community and struggling to build relationships with the members based on past harm from actors who never fulfilled their agreements. The respondent stated,

I did work in Haiti, and it's like, they already know, they know the ins and outs of everything, you know, they have the cemetery of failed promises, and projects that never got fulfilled. And so...in some ways, you kind of feel bad for some of these groups that come in, because they're sort of like idle, they haven't done anything yet.

Survey and focus group participants provided vital strategies needed to build and improve trust between organizations and marginalized communities. First, they suggested reaching out to a variety of local leaders, organizations, and residents to see who or what organization(s) is supporting marginalized populations. As mentioned above, respondents recommended that actors live or spend considerable time in the communities they serve and learn from them. These actors should make a concerted effort to get to know the people in the communities, especially the informal and invisible leaders. According to focus group members, the informal or invisible leaders are often the ones who provide access to resources.

Another strategy focuses on building trust before a hazard impacts the community. Organizations and agencies can build trust through collectively establishing planning committees that center on risk mitigation training, preparedness toolkits and resilience building. Other strategies include partnering with organizations and residents who are already providing services to marginalized populations. One local government focus group member stated,

Trust building has to happen when nothing else is happening. We have a lot of communities that need a lot of healing. We need to find a way to bring it together block by block. It has to happen at that level to make that happen. I talk about the media and emergency management, the importance of Emergency, keeping them fed, timely information, you need that relationship before the disaster, the emergency will not make it better.

Thirty-eight survey respondents (88.4 percent) agreed that their organization does a good job in building trust with key stakeholders in the communities they serve.⁴ Even with great positivity around building trust with community members, respondents also listed multiple resources to improve their trust. These include mitigation funding for disaster programs, translators to assist with content, training resources (including internal racial equity work), funding for staff from the impacted community and funding for mental-health staff.

⁴ The percentage represents respondents' selection Likert scale items from 8 to 10, with 10 signifying strongly agree.

SUMMARY OF FINDINGS

The following section provides a summary of the overall findings from the advisory groups, online survey, and virtual workshops. Overall, the research team sought to learn how community members, local government officials and academics strengthen relationships with governmental agencies and build trust. Ultimately, the results can help inform decision makers on how to leverage relationships and improve strategies for disaster mitigation and recovery for marginalized groups. A brief overview of results can be found in Figure 6, followed by a description of each summary point.

Figure 6. Summary of Findings

| Explaining the long-term impacts for marginalized groups | Providing and receiving support | Building relationships and trust |
|---|--|---|
| <ul style="list-style-type: none">• Groups are excluded from disaster preparation and recovery• Exclusion exacerbates the impact of hazards for marginalized groups• The long-term inequities for marginalized groups are due to systemic forms of oppression | <ul style="list-style-type: none">• Confusion around who is responsible for supporting the immediate and long-term needs of marginalized groups• Voices of marginalized people are excluded from mitigation and recovery decision making• NGOs and governmental agencies are unaware of support and lack essential resources | <ul style="list-style-type: none">• Developing and maintaining relationships takes time• Accessing services beyond the hazard• Building trust requires living or spending significant time in the community being served.• Deference, clarity and consistency are essential attributes when communicating with community members |

1) Explaining the long-term impacts for marginalized groups

- *Marginalized populations are excluded from disaster preparation and recovery.* Advisory group members and survey respondents identified these populations as Black, Indigenous and People of Color (BIPOC), individuals from low-wealth communities, undocumented immigrants, children, women, the elderly, individuals from rural populations and unhoused individuals. This is not an exhaustive list, but one that encompasses the groups mentioned the most by respondents. Participants also stated that these marginalized communities are not typically included in disaster mitigation or recovery planning.
- *Exclusion exacerbates the impact of hazards for marginalized groups.* Advisory group members articulated that hazard events negatively impact marginalized groups due to not having access to disaster relief resources (e.g., broadband internet, food, or

housing), or crucial conversations that impact policy and community recovery. Members from the community advisory group stated that isolated, marginalized groups are more disadvantaged than their peers living in accessible communities connected to non-profits, faith-based organizations, or local government support.

- *The long-term inequities for marginalized groups are due to systemic forms of oppression.* Advisory group respondents were asked to discuss why marginalized communities are more likely to be impacted by hazardous events. Community and academic advisory group members overwhelmingly identified systemic and historical racism as the reasons for significant instances of disenfranchisement amongst marginalized groups. Also, advisory group members agreed that the outcomes of an event are closely correlated with an individual's and community's pre-disaster conditions. This suggests that if a community struggles with access to housing, food, health care and quality education before an event, the impact of a hazard will only widen pre-existing communal burdens. Ultimately, this calls into question the overall conceptualization of *recovery* and *resiliency* specifically for marginalized populations.

2) Providing & Receiving Support

- *Confusion around who is responsible for supporting the immediate and long-term needs of marginalized groups.* Overwhelmingly, community, local government and academic advisory group members agreed that non-profits, faith-based organizations, and residents are responding to the overall needs of marginalized groups before, during, and after a hazardous event. Where community members are frustrated that it has become their responsibility to support marginalized groups, even with a lack of outside resources, local government officials are pleased with depending on communities to lead recovery efforts. The conflicting perspective reflects an overall misunderstanding of the roles and responsibilities of government officials throughout a hazardous event. It also fuels the mistrust communities have for government officials when it comes time to provide aid throughout an event.
- *The voices of marginalized people are excluded from decision-making.* All three advisory groups agreed that government officials should identify the missing voices of those who are not present, especially during meetings that address infrastructure, communal recovery, and planning. Oftentimes, conversations around emergency management represent the same type of individual (i.e., White, male) and lack social, racial, and ethnic diversity. Additionally, advisory group members suggested that government agencies seek out the "invisible" leaders within communities and treat them as the experts and gatekeepers of their spaces. These *invisible* leaders are visible to their communities but are unseen by those who hold the power. Through a reciprocal relationship, both can learn from the needs and suggestions of the other to assist with disaster mitigation and recovery.
- *NGOs and governmental agencies are unaware of support and lack essential resources.* With limited funding, local government advisory group members expressed difficulty supporting communities after hazardous events. Community and

academic advisory group members described the difficulty accessing financial support through state and federal websites. Individuals also decried that gaining support felt “dehumanizing,” especially after navigating various online portals and speaking with numerous agents, that ultimately resulted in no financial support. Survey respondents from NGOs and governmental agencies indicated needing help in providing support for marginalized groups. Seventeen of 49 survey respondents were aware of the Building Resilient Infrastructure and Communities (BRIC) grant program, while only one applied for support. NGO and government survey respondents were least likely to apply for support from local and federal government agencies, noting frustration and confusion over governmental sites. Local government advisory group members expressed that local agency staff may not know how to define equity or be able to offer equitable tactics to groups in need. Surveyed respondents and local government advisory group members agreed that increasing funding and adding staff would allow organizations and agencies to effectively support marginalized groups.

3) Building Relationships & Trust

- *Developing and maintaining relationships takes time.* Advisory group members agreed that the development of relationships occurs over a period and should not be rushed. Respondents named the importance of following through with promises. Advisory group members noted that prior approaches to building relationships with marginalized populations could be harmful, especially when they are not culturally or socially appropriate for the community.
- *Accessing services beyond the hazard.* Advisory group members suggested that marginalized communities should have access to services without inferences of quid pro quo arrangements from actors (NGO personnel, government officials and researchers). Members argued that specific communities have poor access to services and facilities such as schools, stormwater infrastructure and healthcare facilities. Lack of access to these “opportunity assets” limits capacity of marginalized people to overcome social barriers that produce vulnerability.
- *Building trust requires living or spending significant time in the community being served.* Advisory group members agreed that actors should live in the communities they serve. This process would open opportunities for individuals to assess the community’s history and its connections to oppression, speak to community experts about their needs, identify the *invisible* leaders and help to build trust for one’s actions. However, just living in the community is not enough. One must spend time with community members and be involved in communal activities. Advisory group members also addressed mutually beneficial relationships between community members and actors that were either based on long-term commitments or short-term transactions. In both instances, both parties have an agreed-upon form of interaction that meets the needs of marginalized populations.
- *Deference, clarity, and consistency are essential attributes when communicating with community members.* Focus group members argued the importance for all actors to be

aware of their privileges and bring deference to their interactions with marginalized communities. Oftentimes, underrepresented groups are left out of disaster mitigation and recovery conversations, giving the impression that they are inferior or lack expertise. According to focus group respondents, positioning oppressed individuals in a space that uplifts and highlights their voices allows for more thoughtful and intentional conversations. Additionally, survey respondents agreed that honesty, transparency, respect, empathy, trust and communication are essential components of a healthy relationship. Being clear and consistent with messaging toward marginalized groups is essential when a problem arises.

RECOMMENDED POLICIES AND PRACTICES

Overall, we used the participatory action research framework to draw recommendations from advisory group members, survey respondents and webinar attendees. The following four policy recommendations are based on respondents' perceptions and the culmination of our research.

- 1) **Provide greater access to emergency funds.** Overall, advisory group members and survey respondents called for an improvement in the ease and access for marginalized communities to receive emergency funding. Respondents recommended developing a set-aside fund or some other mechanism to resolve the inequities faced by marginalized populations in gaining access to emergency funding. Additionally, individuals requested a waiver or reduced match requirements to overcome barriers posed by the nonfederal cost share for marginalized populations.
- 2) **Provide funding to hire more staff.** Local government and community advisory group members and survey respondents suggested employing more staff to assist with emergency management. For those at an NGO or faith-based organization, this means having the funds to support hiring more people to deal with the short- and long-term needs of marginalized groups impacted by hazardous events. For those within the local government, this means having the capability and funding to hire more individuals to assist with the overall logistics of emergency management. Both groups saw the growing number of climate-related events and were concerned with the current lack of paid human resources within their offices.
- 3) **Acknowledge and express value to marginalized groups and the organizations that serve them.** Overwhelmingly, advisory group members, survey respondents and workshop participants indicated that a way to improve trust and build relationships between communities and governmental agencies is through practices and approaches that value and listen to marginalized groups and the organizations that serve them. Respondents provided the following recommendations for governmental agencies: act on their agreements, alter policies based on feedback, allow communities to visualize an obtainable solution, listen without trying to fix it and follow up with questions.
- 4) **Build trust through respecting cultural and co-production.** To build trust, service providers should have a cultural understanding of the community, be transparent and accountable and be consistently involved in working with community members. Emphasis should be placed on co-production of programs and plans that account for lived experiences and perspectives of marginalized people.

NEXT STEPS FOR RESEARCH

The current project focused on collecting the voices of community members, local government officials and academics through focus groups, an online survey and workshop. Using this process, we were able to gather insight from 25 experts across the nation on the best ways to support marginalized communities impacted by hazardous events. We also gathered information about the best strategies to improve relationships and trust between community members and governmental agencies. Additionally, we piloted an online survey to targeted NGOs and local government officials who were purposefully working with marginalized groups impacted by hazards. A total of 49 respondents completed the survey and provided insight on how they support groups and identified existing gaps. Lastly, we hosted a workshop where 22 participants viewed our preliminary findings and provided insight on policy recommendations.

The next steps for research will be using our qualitative focus group data, preliminary data from the online survey, and responses from the workshop to draft a survey instrument we will validate and administer to a nationally representative sample. Our existing sample size of 319 was appropriate for a pilot test. Our next step is to expand the survey data collection to include a sample of 3,000 organizations. This stratified random sample will stem from a comprehensive sampling frame that consists of all tax-exempt organizations registered with the IRS (>1.7 million organizations). The new sample will include groups that are purposefully supporting marginalized groups and those that are not. Looking at both groups will give us an accurate depiction of how organizations nationwide are adapting and assisting individuals with the greatest needs after a hazardous event.

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APPENDIX A

Summary of Advisory Group Session One

1. Describe the overarching themes that emerged during the meeting.
 - Community group participants described several challenges they and their constituents encounter when working with FEMA, such as a lack of information, culturally inappropriate responses and difficulty navigating bureaucratic paperwork. Participants worked across a variety of community contexts and were willing to acknowledge how specific subgroups are marginalized (e.g., undocumented, Native Americans, rural populations). They were also willing to name the specific factors that contribute to marginalization, including access to broadband internet, food, housing, health, and a complicated history with the federal government.
 - Local government participants shared a great deal about the challenges their agencies and offices face in terms of funding and responsibilities. They do not have enough time and resources to necessarily anticipate or meet the needs of their communities, especially marginalized individuals, during a disaster. They would like to be culturally responsive and incorporate more voices into disaster planning, but they are unsure of the best approach for doing so and need more tools to feel they can do this effectively. While participants acknowledged that disasters exacerbate existing inequalities in their communities, they were very reluctant to identify race as an inequality that impacts their communities during a disaster.
 - Academic participants shared a great deal on the challenges to access aid when it comes to language. They found that framing is vital, because the way federal groups define words like vulnerable, resilient, preparation, mitigation, and others, have profound consequences for aid distribution. Participants also spoke of marginalized communities having a lack of sovereignty, due to the social and structural inequalities in place. This often left local community members and their priorities out of critical conversations that impacted their neighborhoods. Participants also noted the importance of not missing or ignoring the invisible people that are doing this work due to lacking the necessary language or for racist and sexist reasons.
2. List any remarks from participants that stood out to you regarding the following topics.
 - Inequalities in communities
 - Participants named various inequalities that affect communities before, during, and after a disaster, including access to food, stable housing, and reliable information. They identified marginalized groups they serve as including: BIPOC, undocumented, seniors, low-income families with children, Native Americans, refugees and immigrants and meat-packing plant workers. For these populations, participants said disasters are intersectional and exacerbate existing challenges.
 - Participants said that it is hard to quantify the risks different subpopulations experience during a disaster, but they recognized that individuals' and families' level of security and socioeconomic status affects their disaster outcomes.
 - Most participants talked about the structural and institutional inequalities in marginalized communities. One participant spoke on the inequality of school district resources between low income and high-income districts and how that affects children in the level of support they receive. They found that the issues are symptomatic because the systems are not created to serve the interests of marginalized groups.
 - Challenges communities faced after an event
 - Participants shared that there is a lot of variation and a number of dependent factors that influence the challenges communities face after a disaster. For example, one participant noted that individuals and families who live closer to an urban or suburban center will fare better after a fire.

- Participants shared that the outcomes of an event are closely correlated with individuals' and communities' pre-disaster conditions and that disasters exacerbate inequalities. They also shared a great deal about how disasters impact their work and their professions. One participant shared that their discipline has been forced to evolve at a much faster rate than any other given the volume and frequency of disasters in recent decades.
- The need of a cultural broker sometimes to help when talking to FEMA; No control over the decision-making process; Lack of structure of awareness, childcare and access to food; Continued existence of tribes in Bayou, sustainability at risk; Housing insecurity; Social class in terms of income and people's position in the occupational structure; Violence; Racism; Sexism; Lack of mental health resources especially for leaders in emergency management
- The impact of an event
 - They discussed how access to resources and information affect outcomes. They also described how the leaders in isolated areas take on a lot of responsibility for supporting their communities following a disaster, but they are often stressed or don't have the capacity to manage all the various components that factor into disaster recovery.
 - They noted that the impact of an event could be improved with increased communication from all government departments and better preparedness plans at the community level. They noted that it has been challenging to engage community members in disaster planning as some groups or individuals cloud decision-making.
 - Most participants found that disaster events had the most impact on marginalized groups like people of color, indigenous communities, children, and low-income households. They found the reasoning to be tied to existing structural challenges, disenfranchisement, systemic and historical racism, and colonialism.
- Services provided to their community(ies) following an event
 - Participants shared that services need to be culturally appropriate, and that reliable information is often lacking in their communities. Participants discussed that disaster recovery lasts far longer than most organizations are willing to commit to, which often leaves people with incomplete support.
 - Participants stated that recovery takes a long time and involves everybody who is willing. They named some groups that are often not involved but should be, including service organizations, disability advocates and young people.
 - Participants found that disaster-related services are lacking in planning, response, and recovery. FEMA has a planning group that is supposed to work for the long-term recovery for communities, but because of the lack of awareness, no one is accessing those resources. In addition, many groups are left out of the planning process that should be involved including lay people, young people and those who do not have time and/or access. The role of local organizations and churches is critical in first response and recovery. Considering that people are left to fend for themselves in recovery, local organizations and churches provide dire support and resources. In terms of response, information is key in preparation and mitigation. However, there are often not enough people to give out important information, leaving some communities clueless on how to support themselves and move forward.
- Definitions of words
 - Vulnerability/ marginalization: individuals and families who are most at risk, people who don't have voice, undocumented; it's situational, may affect low SES people after impact, being exposed of a potentially greater level in comparison to the general population, history of marginalization; Vulnerability and marginalization means different things to different people; not an accurate term – blanket of oppression, lack of sovereignty, agencies and options, power groups/structures that are perpetuating inequalities for particular groups, unprotected not by one's own doing but by structures, people are more

resilient than the term vulnerable offers, a person is not vulnerable but a situation can be, marginalization means being impinged upon by an external force.

- Disaster preparedness: not always done or followed; means different things to different people; not explicitly defined.
- Mitigation: avoiding, what can be done to ensure the least impact: nobody notices because, if done right, bad things don't happen, doesn't get funded, focus is on fiscal and physical impact mitigation, but mitigation isn't looked at from an educational component and increasing community knowledge, building communities up economically can be a form of mitigation; Not explicitly defined.
- Resilience: something that you achieve and learn through a lot of hardship, attitudes of strength, ability to bounce back; are you resilient because you were prepared or recovered despite lack of preparedness; is building back better and recovery is the baseline; Resiliency means different things to different people; resilient means not needing resources, childhood resilience as ordinary magic, "You can be vulnerable and resilient."
- Recovery: long, safe housing, helping people be safe, difficult; back to same level or stronger, most often means survived; Varying definitions; what is needed to get back to normal and survive.

3. Illustrative quotes

- "When I think of disaster preparedness, I think of the second time around."
- "Someone who's poor who lives near the town my organization is and will fare better than someone who's equally as poor who lives 30 minutes away."
- "We have an epidemic of disinformation. I think we all are, and it affects our health and wellbeing. Especially in our rural communities, it's rampant."
- "If you are undocumented, forget it. Undocumented have access to absolutely nothing"
- "We could talk a lot about FEMA."
- "All the systems of aid were created for people who are white, good at technology, and can make the ask again and again until it gets done."
- "[FEMA] tell us we have to compare cities and risk apples to apples, and I say we're an orange. I think all communities would say they're an orange. This cookie cutter approach doesn't work"
- "Mitigation is like a bodyguard. It's in the background. We don't want to know it's there, but we're grateful it's there when we need it."
- "When all you have is a hammer, every problem looks like a nail, so I need a bigger, wider, toolbox to better respond to any given situation. I can hammer a nail with a wrench, but it's not ideal. I'd rather have a tool that's appropriate to the situation"
- "Health is relative to your wants and needs and to those around you"
- "Can we ever really be prepared for everything?"
- "The people in power have always made sure their voice is heard. There is a long history of people in power make sure their voice is in power. That intentionality is not happening. Intentionality in keeping these things in place"
- "The people who show up are the people who can show up. In the social movement literature, this is often referred to as biographical availability. This is part of why there are only a handful of people who do everything in small rural places that the community leaders discussed in their focus group."
- "It's not that people aren't doing the work, we may not be seeing them. The metrics of success may be different than what we are seeing. I often encounter people who are doing work who is doing small things and it looks very invisible. Just trying to help people pay the gas bill. I share the gas bill...it's possible that we are missing stuff. There are racist and sexist reasons why we can't see the success"

- “Recovery doesn't mean much. It often means cleanup and possibly infrastructure replacement/renewal and fails to employ a social work model of case management or following the affected vs. the visible physical renewal of "place." This often comes with profiteering so, like [advisory group member], I avoid conversations about "recovery" because I have great distrust for the idea.”

APPENDIX B

Summary of Advisory Group Session Two

1. Describe the overarching themes that emerged during the meeting.
 - Many mentioned that non-profits and faith-based organizations are quicker to support marginalized populations than government forces despite the vast difference in money and resources. There are too many requirements and restrictions with federal grants that often inhibits the ability to work with marginalized populations and support them immediately and effectively. Government agencies should have more diverse representatives and be honest and upfront about what they can and cannot do.
 - Local government participants shared that building relationships with marginalized populations requires them to get to know who the informal leaders in a community are. They are often short on time and resources, however, which makes carrying out this vital work more difficult.
 - A key theme that emerged during this meeting was that trust is vital for working with underserved populations. Participants also noted that the ability to build trust is a slow-moving process, which often means it conflicts with funding opportunities and research timelines.
2. List any remarks from participants that stood out to you regarding the following topics.
 - Types of relationships needed to support marginalized populations
 - Sometimes informal leaders are overlooked for not having the right pedigree, but tend to know a lot about their community, are super resourceful and know how to solve issues and or find the right people for the job. Informal leaders look like the grandmas that work at the community center, the religious leaders, the “Dads” of general corner stores, etc. Access to financial support from FEMA and other federal agencies is challenging with rules, requirements and documentation.
 - Participants said that less and less funding is being allocated for the disasters they experience every year. Local governments have to rely on outside organizations to provide key resources because they don’t have the funding and there is no one in the state and federal governments that is lobbying to increase their funding.
 - Long-term relationships with vulnerable communities that are built in non-disaster times can unlock access and meet needs during a disaster.
 - How are relationships maintained and achieved?
 - Lots of internal motivation – letter writing, coalition building and monthly meetings, talking to all leaders (formal and informal), financing community grassroots initiatives and non-profits.
 - Participants recommended reaching out to a variety of different local leaders, organizations, and others to see what works best for supporting and reaching marginalized populations. They said that they often have success building relationships with disability organizations, faith-based organizations and trusted leaders and organizations. They noted that figuring out who is a trusted leader often requires out-of-the-box thinking and not always looking to who might be perceived as an obvious leader.
 - Participants pointed out that outsiders often face difficulties in building relationships because they are not trusted. One participant said that marginalized populations often mistrust systems because the systems are not designed to work for them.
 - What is needed for two parties to trust each other?
 - Local leaders should share institutional knowledge to help with the adjustment of rising grassroots leaders post the next disaster. Additionally, parties must be honest and transparent about what they can and cannot do. This way, people are more receptive to

honesty and can be realistic in their asks when they are aware of your capacity and resources.

- For trust between local governments and marginalized populations, local government officials should live in the same community and learn about the community. Local governments should be consistent and accountable.
- Transparency; honesty; cultural sensitivity; pressing needs are being addressed
- In terms of what trust looks like when thinking about providing support, it includes transparency and communication on grant requirements, being able to negotiate grants with an Memorandum of Understanding (MOU), honesty on organizational capacity and resources and being able to rely on non-federal donors for financial support.
- Local governments need to do better to document institutional knowledge because it gets lost when people move on from jobs or when things haven't been written down. Trusted leaders in a community are important for building relationships with the community.
- Funding sources and research grants often have conflicting goals with the needs of marginalized populations about disasters. Sometimes, it's easier to have transactional relationships with marginalized populations.

3. Illustrative quotes

- “What we see is the same is not around disasters, it's non-profits really taking up the gantlet, the draw of social work was to fill in the gaps that the government is not able to do. The government is relying on the community to fill these needs. The state government has helped out. But it's still not enough...”
- “Listen to the population you are serving and aspire to look like the communities you are serving.”
- “I think trust comes from having a history together.”
- “When I go into Louisiana or New Jersey or other places like California, I bring a lot of stuff, but before I go there, I do the logistics of what their needs are. And sometimes when I go back the needs change.”
- “Trusted leaders are especially important in communities with a lack of trust.”
- “Build relationship during the ‘blue skies’”
- “Red Cross is over tapped”
- “Money, funding is absolutely key, a consistent decline, you are going to have [to] replace volunteers with paid people.”
- “They are looking at the brick and mortar and don't know of the people/ghost that are holding in that landscape.”
- “Everyone is dealing with a disaster and a trauma of their own. Cultural brokers, people in the community who can help with outsiders and communicate with people understand the needs. Not just the individual needs, but at the community level.”
- “Trust is at the center for everything needed to perform [during] a disaster.”
- “Feeling like you are understood, it is a sense that someone has your back, understanding of trust and exploitation and sensitivity. It's a two-way thing.”
- “The cemetery of broken promises.”

APPENDIX C

Summary of Advisory Group Session Three

1. Describe any overarching themes that emerged during the meeting
 - An overarching theme discussed was that disasters are becoming more frequent, especially considering recent tornadoes and wildfires throughout the United States. Participants said that communities, organizations, and local governments must not underestimate disasters because a lack of awareness leads to a lack of preparation. Participants also discussed the need for local leaders to be more active participants in disaster response.
 - Participants also said that systemic issues that exacerbate the impact of disasters need to be addressed. These issues include things like housing and food insecurity. Participants said that it is challenging to fight systems of oppression when they are built into organizations that provide disaster response relief. Governmental agencies need to work hand-in-hand with communities to increase resources and to give marginalized groups a chance to rebuild.
2. List any remarks from participants that stood out to you regarding the following topics.
 - Topic from our last conversation that you have thought about since we last met
 - Participants reflected on the ongoing humanitarian and climate-based crises affecting people around the globe. Many participants talked about the war between Russia and Ukraine. Other participants noted that disasters are becoming more frequent with tornadoes in Florida and New Orleans and wildfires increasing in Texas and Oklahoma.
 - Ultimately, participants said more on-the-ground staff need to be trained to support the communities in need and keep up with continuous disasters. Disaster response needs to be locally led or designed. One participant stated that their county was getting a disaster response program but would be led by a big company that does not have the community knowledge that local leaders do. The participant said, “They don’t need big companies to come in and save the day.”
 - How to build a risk-free disaster community
 - Participants listed a number of methods to build a disaster-free community: scaling up communication systems and having backups (e.g., some firefighters are unable to communicate with each other); training and funding your local community (e.g., distribute grants to increase emergency response, relief and staff, listen to the minor community players); encouraging communities to take more responsibility and put less blame on the government; and meeting marginalized populations and building relationships before the disaster happens.
 - Define systems of oppression
 - Participants defined systems of oppression in disaster management as a lack of trust in government systems of support, not having the resources (money, transpiration, etc.) to respond to disasters in the same way as those with resources and money, the lack of focus on the people who have less time and limited budgets and no attempts are made to address systemic approaches like the inaccessibility to housing, welfare, etc.
 - One participant stated that systems of oppression relate to disaster management because it's built right in with FEMA and HUD. Communities that have more resources can lobby and apply for more grants and have the opportunity to rebuild. Certain factors can set groups back from rebuilding back to pre-disaster state like a small county budget, lack of insurance and undocumented status that would result in no relief at all. In white

communities it is the haves vs the have nots as oppression is viewed through a class lens and the availability of resources rather than race.

- What is needed for governmental agencies and communities to build relationships before, during, and after a disaster?
 - Non-profits and community organizations must be funded adequately, and governments need to work hand-in-hand with communities. Emergency response workers need mental health training for disaster victims that are struggling and contemplating suicide. Additionally, people need disaster case management more quickly.
- Policies needed to better support marginalized populations
 - Transparency, the need to protect against fraud is understandable but FEMA needs to consider system delivery as well
 - Simplify the process by updating systems and processes to the current age of technology
 - Present policies and programs that communities can access, recognize that disasters prohibit organizations and people from meeting documentation quotas, not everyone has home insurance
 - Improve public housing, grant universal healthcare, and put together pathway for citizenship
 - Create a dashboard for non-profits and what they are eligible for to limit confusion and time wasted on applications
 - Develop policies based on the community, consider the various languages of a community and the need to distribute information in those languages through documentation or have translators on hand so that everyone is informed.
 - Offer aid to people who need it
- Useful way to share these documents
 - Participants recommended that methods include infographics to tell the story, electronic reports, 30 pages or less and guidance documents and tool kits.

3. Illustrative quotes

- “The government response will always be time limited, that the non-profits do the long-term, NYC emergency management, giving them grants to do that work. Trusted messengers...fund existing staff more, hire more staff.”
- “The Haves vs the Have nots. I live in a mostly white area, the oppression we see is more with class vs. race and ethnicity. We have towns that are not that far apart, everything is different. Wells vs. non-wells.”
- “Built right in with FEMA and HUD, we know they are trying to do better. If you are a well-resourced community, you can write grants and have lobbyists, you will get the money to rebuild. If you are not, because your tax base is low, it’s much harder.”
- “Respond to my people, and we want an answer right away. Make sure all of the community is safe and prepared for the 7 days. You need to be with non-profits, we are doing it for free. We don’t pay no one and they can come and feel welcome. We need to work hand to hand. They are the non-profits – I prefer to do it my way...papers through papers, you know clap clap, it’s done. We are resolving their issues, right away.”
- “We created a volunteer – senior people who are in their house, how are they going to move. One building could have 300 seniors, we want to meet them before the situation happens. When the tornado hits, we are providing them with an emergency backpack. A bag for 7 days. You won’t have assistance from the government- 7 days won’t be active until after that

- point. We are trying to take care of the population. I don't want my group to suffer since the government won't be there."
- "The big pictures don't change without the ability to range."
 - "Thinking about Ukraine and thinking about preparing for a war and a disaster are two different things."
 - "We don't have a mass evacuation like they do in Europe. After Katrina they explained that all places needed an evacuation, but we wouldn't be able to evacuate the community even if we were told three days from now."
 - "Not mitigating risk, but more of 'what would healthy system look like.' What comes to my mind is if we have a crisis, we respond to the crisis timely, with enough people, supplies, and enough emergency housing, to re-stabilize the people in the community, on the heels of that disaster. It doesn't create an extra burden. We have it all there and that our plan is solid enough that our communication is in place. When our firemen are responding to a fire, that's how we are responding to disasters."
 - "There will never be enough staffing, that will always be an issue."
 - "Trust building has to happen when nothing else is happening. We have a lot of communities that need a lot of healing. We need to find a way to bring it together block by block. It has to happen at that level to make that happen. I talk about the media and emergency management, the importance of Emergency, keeping them fed, timely information, you need that relationship before the disaster, the emergency will not make it better. It's the same thing that we see. The programs that we offer with our limited funds."
 - "When you look at how FEMA tells us how to – the edict is to fix things to pre-disaster standards. There is a mindset in that response and recovery, that that is our job to get it back to what it was, 5 minutes before it happened. Those there before might not be able to leverage. That is a fact. I am not sure about that level of "mission shift" – we can't even do what we can with the resources we have. It's not in our bailiwick."
 - "Every policy needs a procedure, so every policy needs a procedure. Policy without procedure is grandstanding."
 - "We are going to bring DHC to the table in response though COVID, we had to rely on DHS about the homeless. From an agency policy, I can write a policy and put it in place, I can change it together. Agency level policies set your expectations and directions to your team. They should be in your procedures as well. An agency could certainly do that. The most effective policy change...no one remembers policy when the sh@t hits the fan."
 - "When I think of systems of oppression, systemically and historically, the operations have led to certain groups prosper, where different groups are not exposed to different groups not able to thrive. If you are already set behind in society if you are not prepared. So we could all be hit with the same hurricane, and I don't have money or transportation compared to a person with high income and I am put at a disadvantage. And how it can be perpetuated, it doesn't matter if you have the resources, you will be stuck in a cyclical nature."

APPENDIX D

Content of Survey

The team constructed a survey based on the literature and responses from advisory group members. The content of the survey exhibited the following items.

- (1) Demographics of organizations,
- (2) Strategies to address inequalities,
- (3) Awareness of programs that support marginalized groups and
- (4) Strategies on how to build trust between communities and agencies.

We asked respondents to describe what type of organization they are, at what level they work and where in the U.S. they are located. Respondents were also asked who their target populations are, what services they provide and which forms of communication they employ.

The largest category of survey questions was related to addressing inequalities. Respondents were asked to what degree their organization takes equity considerations into account in its formal processes, what strategies they already employ to address inequities for marginalized populations, what issues they face in trying to better serve marginalized populations in their communities and what resources they still need to better address these inequalities.

Awareness of programs was a smaller portion of the survey; respondents were asked if they were aware of FEMA's Building Resilient Infrastructure and Communities (BRIC) grant program and whether or not they have ever applied for this support. Respondents were also more generally asked if they were aware of any organizations (non-profits, faith-based organizations, local government, state government or federal government) that provided grants, fellowships, or programs to assist organizations in providing disaster recovery assistance to marginalized groups.

In terms of building and maintaining healthy relationships with their communities and the marginalized populations they serve; respondents were first asked what they felt were crucial "ingredients" for this relationship. A follow-up question asked respondents what additional resources are still needed to build trust with the marginalized populations they serve.

Finally, while policy recommendations were discussed in more detail during the focus groups, survey respondents were asked what they believed the most successful solutions were for addressing the impacts of natural disasters on the marginalized communities they support. They were also asked which resources were still needed for their organization to improve their ability to address inequities in natural hazard relief provision.

APPENDIX E

Open-ended Responses from Workshop Participants



ABOUT THE AUTHORS



Cassandra R. Davis, Ph.D., is an Assistant Professor in the Department of Public Policy at UNC-CH. Dr. Davis's research focuses on environmental disruptions to schooling communities, specifically low-income communities of color.



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Evan Johnson, Ph.D. is a Research Assistant Professor at UNC-CH. He previously served as a Research Fellow at the U.S. Environmental Protection Agency. His research focuses on innovation and public policy, with specific foci including energy innovation, climate stabilization and the impacts of Federal R&D funding on firms.



Megan Griffard, Ph.D., was a doctoral candidate from the School of Education at UNC-CH. She has transitioned to an Assistant Professor at the University of Nevada, Las Vegas in the School of Education. Her research primarily focuses on principal leadership during disruptions to schooling, including natural disasters and COVID-19.



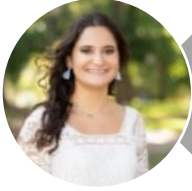
Simona Goldin, Ph.D., is a Research Associate Professor in the Department of Public Policy at UNC-CH. Dr. Goldin attends to issues of equity and access in U.S. public schools, drawing from her training in the social foundations of education, sociology and public policy.



Nathan Dollar, Ph.D., was a doctoral candidate from the Department of Sociology. He has transitioned to a Research Associate in the Carolina Population Center at UNC-CH. His research lies at the intersection of migration, labor and population health.



Ruth Fetaw, was a member in the UNC Public Policy Capstone Team. Ruth majored in Public Policy, minored in Global Health and received a certificate in Community Preparedness and Disaster Management.



Gigi Cloney was a member of the UNC Public Policy Capstone Team. Gigi was a double major in Public Policy and German with a concentration in Art, Media and Culture.



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