Assessing Community Capacity for Disaster Response: The Pandemic Version

Teshanee Williams and Margaret F. Henderson

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While any year might bring unique challenges to North Carolina in terms of the type, timing, and impact of natural disasters, the coronavirus disease (COVID-19) has forced a new focus on concerns to be addressed in planning and response efforts.

During 2014–19, just as an example of one kind of natural disaster, the state was struck by nine hurricanes.[1] As of 2020, many counties have not fully recovered from past storms and must now plan for an overly active hurricane season in the midst of a pandemic.[2] Voluntary organizations and local governments continually develop new strategies, protocols, and partnerships to cope with the ongoing threat that is COVID-19. At the same time, community resources are likely changing as a direct or indirect result of the pandemic.

Teshanee Williams is a Carolina Postdoctoral Faculty Diversity Fellow at the UNC School of Government. Her research agenda spans the areas of public management, nonprofit and local government partnerships, and public participation.

Margaret F. Henderson directs the Public Intersection Project, teaches in the Master of Public Administration program at the UNC School of Government, facilitates public meetings, and provides training about human trafficking for local government audiences.

1. National Oceanic and Atmospheric Administration, "Historical Hurricane Tracks," accessed August 13, 2020, https://coast.noaa.gov/hurricanes.

2. "Forecasters Predict Active Hurricane Season," *Coastal Review Online*, May 22, 2020, https://www.coastalreview.org/2020/05/forecasters-predict-active-hurricane-season/.

The purpose of this bulletin is to offer strategies for reassessing community resources before they are needed and for strengthening collaborative relationships that are used intermittently. These strategies are informed by the networking literature, which conceptualizes the carrying capacity of a community as a function of the relationships among diverse stakeholders and the activities that support the exchanges among them.[3] This bulletin offers community leaders a simple checklist for assessing how they can enable and maximize the exchange of mutually supportive resources in the community. It is not intended to be a technical guide for how to conduct a systematic assessment of community carrying capacity. Instead, it offers guidance to prompt community leaders to think preemptively as they generate plans for continued response and recovery efforts.

This bulletin should be especially useful to local government leaders as they face the reality of their own capacity constraints, which requires them to rethink organizational processes, consider potential strategic cutbacks, remain responsive to community needs, prioritize economic-recovery initiatives, and maintain accountability. It provides insights for understanding which of these needs can be met by coordinating with organizations that are already involved in COVID-19 response efforts. It also provides succinct strategies that encourage readers to take inventory of beneficial exchanges of resources, expertise, and access within their communities.

Examining Carrying Capacity: Challenges and Strategies

The term *carrying capacity* can be described in many ways. Generally, it is the ability of organizations in the community to exchange value in the form of tangible or intangible resources to produce positive outcomes.[4] These valuable resources can be in the form of information, human capital, financial capital, social capital, or physical resources. The first step in examining the carrying capacity of the community is to understand the conditions affecting exchanges between organizations involved in response and recovery. To gain a better understanding of these exchanges in North Carolina, we interviewed thirty-six North Carolina emergency county managers and individuals associated with voluntary organizations. These conversations revealed the following challenges and strategies for improving community carrying capacity.

Challenge: Capacity for Sustained Collaboration: Managing a Crisis within a Crisis

As organizations engage in prolonged response and recovery efforts across North Carolina, the economic and social costs of the long-term recovery phase may far outweigh the financial burden of the immediate response. The response phase of a disaster can span from a few days to many months. However, COVID-19 has presented a unique situation in which organizations engaged in disaster response are already operating at the brink of capacity, as they then try to attend to both response and recovery actions. Research findings indicate that organizations

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3. Laurie E. Paarlberg and Danielle M. Varda, "Community Carrying Capacity: A Network Perspective," *Nonprofit and Voluntary Sector Quarterly* 38, no. 4 (August 2009): 598, https://doi.org/10.1177/0899764009333829.

4. Paarlberg and Varda, "Community Carrying Capacity," 597–613.

acting independently do not have sufficient knowledge or capacity to continuously thrive in such a complex and dynamic sociopolitical environment.[5] Organizations must intentionally seek out diverse partnerships to deal with these insufficiencies.

Such prolonged recovery efforts necessitate sustained collaboration that can maximize the benefit from the combined resources of all of the organizations involved. However, managing one crisis taking place within another crisis presents multiple challenges to the collaborative effort. In the case of COVID-19, recommendations for social distancing and other preventive strategies complicate implementation of traditional protocols. The community's ability to collaborate effectively is especially important now to resdesign and sustain prolonged response efforts. Therefore, it is important to understand the carrying capacity of a community by examining its collaborative habits: What enables or inhibits continuous collaboration? How can organizations clearly articulate the benefit received from collaborative arrangements to ensure that those benefits outweigh the cost of collaborating?

The following strategies assume that, while community response to natural disasters will primarily be driven by governmental and nonprofit organizations from local, state, and federal levels, other stakeholders might have important perspectives and resources to contribute to the effort.

Strategies

Before the next disaster hits your community:

- Enable sustained efforts through interorganizational arrangements of stakeholders that extend beyond local, state, and federal governments.
- Take stock of prior or current partnerships to ensure that they can still function to serve the intended benefit.
- Convene a meeting with all stakeholders to discuss how community capacity has changed and how service delivery will need to be modified due to the pandemic. Assume that changes will need to be worked into the community plan.
- Share knowledge about established interorganizational arrangements with stakeholders and organizations. Where possible, clarify who holds which kind of authority to make decisions. Where does the pandemic bring new or different authority into the planning effort?

> *My approach is, Let's bring everybody to the table and see what everybody brings and . . . hear all sides of the story.*
> *—Insight from the field*

- Develop and implement reporting systems for the purpose of sharing timely information among collaborators. Phone trees and in-person meetings have now evolved into cloud-based informational systems and online team sharing.
- Take a new inventory of local assets that can modify or support disaster-response and disaster-recovery efforts in the pandemic setting.
- Identify measurable metrics that can quantify the success of response efforts, then evaluate to identify areas of improvement.
- Clearly outline and communicate the expectations for exchanging resources for the end goal of producing specific positive outcomes.

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5. Wei-Ning Wu, "Disaster-Resistant Community: An Examination of Developmental Differences," *Natural Hazards* 101, no. 1 (March 2020): 125–42, https://doi.org/10.1007/s11069-020-03865-5.

- Some connections may not generate an equal exchange of resources, but the utility of the exchange can be strategically important.
- Partnerships based on informal agreements should still be clearly articulated so that all organizations involved understand the value generated by the resources being exchanged
- Draft a memorandum of understanding to ensure that interactions continue as expected when there are leadership changes.

Challenge: Identifying Available Resources

During disaster response, the focus is typically on the nearby resources that are known to victims. However, resources need not originate within a specific geographical area to meet the needs of that area's citizens. Emergency managers we interviewed described situations in which rural organizations were not aware of resources being distributed within their county.[6] As a result, these organizations first sought resources outside of their counties. They felt unsupported by their local county emergency management which, in turn, created a level of distrust. This breakdown in trust originated from gaps in interorganizational communication, resulting in duplicated efforts, wasted resources, erosion of interpersonal relationships, and accumulated distrust among community members. To avoid a similar challenge, communities should take time to proactively and collectively inventory the resources available to support victims, identify any limitations on their exchange, clarify roles and responsibilities, and develop a protocol for coordinating tasks.

Strategies

- Increase communication efforts and connection points that extend beyond jurisdictional boundaries.
- Exchange and share basic contact information. Describe the services offered by each organization. Identify the mutual benefit that will be created through partnerships.
- County-level emergency management should invite nonprofit and private-sector leaders to emergency-operation-control trainings. Both voluntary and private organizations can inform scenario planning. Involving these stakeholders in training events can begin to clarify the scope and limitations of each organization's contributions, maximize the benefit of their communication networks, and build interpersonal relationships.
- Assess existing connections between organizations to understand where additional connections should exist. Map how organizations are connected. Consider whether these relationships are based on reliable exchanges or have been unpredictable over time. Evaluate how often and to what benefit these connections have been used.
- Clearly outline the roles, capabilities, and responsibilities of each organization. Identify potential gaps in carrying capacity of the community, and address any potential problems.

> *We've developed a regional training and exercise plan to holistically address the needs for private-sector partners . . . nonprofits, faith-based organizations, all the beach municipalities, the city and the surrounding localities. It's to identify the gaps. . . . [D]isasters don't respect jurisdictional boundaries by any stretch of the imagination. So, we've leveraged a lot of regional partnerships and regional planning.*
>
> —*Insight from the field*

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6. Interviews with community-based responders, July 9, 2020.

- Seek out funds for a data-management system to quickly align needs and resources.
- Identify the appropriate structures based on the needs of the community. How do you ensure that all stakeholders are being represented through the organizations? Review your current list of stakeholders to specify what each group contributes to disaster-volunteer management.

The following list provides examples of groups that should be considered in the equation of coordinated community response.

Special Populations
- Homeless shelters
- Cultural and ethnic community representatives
- Schools and school systems
- Disability-community representatives
- Representatives of vulnerable populations, such as the elderly or disabled
- Nursing homes
- NC Human Trafficking Commission

Nonprofits
- Faith-based groups
- Local food banks
- Universities and colleges

Government
- State and federal emergency management
- First responders
- County emergency management
- Parks-and-recreation departments
- NC State Commission on Volunteering
- NC Department of Human Services

Key Communicators
- Communication providers
- Public-information officers
- Media organizations

Sources of Volunteer Effort
- Community-based organizations and coalitions
- NC Voluntary Organizations Active in Disaster
- NC Community Emergency Response Team
- National service programs and participants
- Corporations involved in community engagement

Challenge: Managing Volunteers and Multiple Stakeholders

Due to the expansive needs of a pandemic, the organizations managing response efforts include public organizations, nonprofits, and local, state, and federal governments. Private-sector organizations also engage in response efforts by donating or providing resources and support to their communities. According to the North Carolina Emergency Operations Plan, specific voluntary organizations should be incorporated into county-level emergency-management

response.[7] However, while guidance is specific about the types of organizations that should be involved, voluntary organizations may or may not always be strategically included in response efforts. A recent study found that North Carolina local governments were less likely to partner with nonprofits in the area of emergency management than in any other area.[8] Through our interviews, members of smaller community and faith-based organizations reported feeling underutilized.[9] Larger community organizations are more readily included in response efforts because they are seen as more legitimate and easily accessible. Larger organizations might also have significant experience with managing both paid and unpaid staff.

Another complexity involved with managing both paid and unpaid staff involves "organizational egos." As stated before, larger organizations might be considered more legitimate because of their historical presence, common recognition, and affiliation within a national network. However, smaller community organizations might have stronger connections with unique communities. Engaging smaller organizations enables a better-informed understanding of local conditions, vulnerabilities, and capacities that can, in turn, lead to improving allocation of resources.

> *We can't do it by ourselves. Local government cannot do it by itself, . . . the private sector cannot do it by itself, . . . and the nonprofits can't do it by themselves. We have to come together and collaborate.*
> *—Insight from the field*

Volunteers are critical to response and recovery efforts. The majority of individuals involved in disaster-response and disaster-recovery efforts are unpaid volunteers. They are a tremendous asset when they supplement the efforts of governments and organizations. They also provide an economic benefit to local governments. The assistance provided by volunteers represents an offset cost of the disaster. Therefore, donated resources and hours logged by local volunteers represent the total cost of the disaster that can be reimbursed by the Federal Emergency Management Association.[10] Despite these benefits, there are downsides if these resources are not managed adequately. Volunteers and voluntary organizations can detract from the overall response effort by duplicating efforts or overwhelming the community with unnecessary resources.

Managing such a diverse system of multiple stakeholders requires focused attention and willingness to cultivate relationships, which might be a different skill set for some in the field.

Strategies

- Volunteer management should not be an afterthought. Develop a structured approach prior to a disaster to ensure that skills and needs are matched adequately. Consider using volunteer-matching software to better connect the offered skills with community demands.
- Specify and recruit for the skill sets needed of volunteers. Create job descriptions for the various volunteer roles. While basic volunteer orientation might be generic, other segments might be based on particular work functions.

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7. North Carolina Division of Emergency Management, *North Carolina Emergency Operations Plan*, (Raleigh: North Carolina Division of Emergency Management, 2019), 7, https://files.nc.gov/ncdps /documents/files/NCEOP_2019-FINAL-Entire-Plan-468-pages.pdf.

8. Todd Collins and John David Gerlach, "Bridging the Gaps: Local Government and Nonprofit Collaborations," *Journal of Public and Nonprofit Affairs* 5, no. 2 (August 2019): 118–33, https://doi.org /10.20899/jpna.5.2.118-133.

9. Interviews with community-based responders, June 25, 2020.

10. "Donated Resources," FEMA.gov, last modified February 4, 2020, https://www.fema.gov/appeal /donated-resources.

- Use a registry to track the number of volunteers involved, the hours they contribute to response efforts, and donated resources. Report this information to local emergency-management personnel or the North Carolina Office of Volunteerism. The offset costs of volunteer labor will help the county calculate the total cost of the disaster.
- Creating partnerships with small community-based organizations can enable volunteer recruitment and inform problem-solving on behalf of unique populations.
- Go beyond sharing information with voluntary organizations by involving diverse community leaders to attend trainings and to inform decision making.
- Recognize that the hierarchical, top-down-management approach that is the norm for many public agencies might need to be adjusted to enhance trust and collaboration within interorganizational arrangements.
- Mistakes will happen. Use them as lessons. Be willing to exchange and consider constructive criticism across organizations.
- Incorporate the perspectives of various types of organizations regardless of size or assumed reputation. Smaller community-based organizations may be better suited for meeting the needs of rural and high-risk populations.
- Volunteer staff should be considered just as valuable as paid staff. Volunteer appreciation should be periodically expressed by offering encouraging words, providing updates on progress, celebrating completed work, and thanking volunteers for their contributions.

> *Every meeting starts with leaving our egos and logos at the door.*
> *—Insight from the field*

> *Just because somebody doesn't get a paycheck doesn't make them any less valuable or have any less input.*
> *—Insight from the field*

Challenge: Proactive Planning

A community's sustainable carrying capacity should resemble a network of teams with nerve centers that support continuous exchanges. This can be accomplished when organizations take the time to identify and assess the value of their partnerships, coordinate, make commitments, communicate, and continuously cooperate. Sustaining the relationships that build trust and share all relevant information about the types and duration of available support is challenging to do when the call to action happens intermittently. Moreover, motivating people to meet and plan together during "blue skies" can be challenging. The nature of disaster response and recovery is that both staff and volunteers of various responding organizations bring very different resources and skills to the problem-solving. Some stay in the community; others move in and out for short-term response. This usually leads to connections being formed as a result of a disaster. Studies show that connections formed as a result of a disaster are not likely to persist.[11] A proactive approach to emergency management requires emergency personnel to focus energy and time into building new relationships while in the midst of response efforts.

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11. Naim Kapucu, "Public-Nonprofit Partnerships for Collective Action in Dynamic Contexts of Emergencies," *Public Administration* 84, no. 1 (2006): 205–20, https://doi.org/10.1111/j.0033-3298.2006.00500.x; Steven Curnin and Danielle O'Hara, "Nonprofit and Public Sector Interorganizational Collaboration in Disaster Recovery: Lessons from the Field," *Nonprofit Management and Leadership* 30, no. 2 (2019): 277–97, https://doi.org/10.1002/nml.21389.

Strategies

- Recovery efforts should take a holistic approach to include all of the organizations within a geographical area that are involved in emergency-response and recovery efforts.
- There are costs associated with the effort of coordination. Plan for including these expenses adequately in the budget, rather than as an afterthought.
- Partnerships should be oriented around the goals, resources, and limitations of each organization.
- Consider whether achievement of desired outcomes is better enabled by transitioning an informal relationship to a more formal partnership.
- Share the contact information of all key stakeholders and a plan for communication in case phone lines, cell towers, or internet are down.
- Identify and cultivate the potential bridging capabilities of organizations that help to connect with particular populations isolated by geography, language, disability, or other unique characteristics.
- Exchanges should also be organized by a central organization that has strong connections with the private, public, and nonprofit sectors. A central organization can help to improve communication between local agencies and smaller organizations.
- Ensure that leadership changes do not disrupt an established network. Review existing memorandums of understanding to assess changes in personnel, resources, or commitment to defined expectations.
- Cross-train service providers about each other's functions and processes for handling referrals.
- Make an agreement to meet periodically to identify how changing community circumstances may have created gaps in services and to assess and learn from recent successes and challenges.

> *By empowering them through blue-sky-day planning, . . . we're going to make the community better set, . . . [and] it's a waste for any [emergency management] officer to not take advantage of having these partners that are here . . . to help.*
>
> *—Insight from the field*

Overall, these strategies are not a panacea for improving community carrying capacity. Given the challenges of responding to an overly active hurricane season—while in the midst of a pandemic—local governments and voluntary organizations should pivot their attention to the benefits that are associated with sustained exchanges of resources, expertise, and access within interorganizational arrangements. There are many examples throughout the literature on disaster response that emphasize the benefits of collaboration and communication among diverse stakeholders.[12] However, focusing on the carrying capacity of the community underscores the function of the relationships among diverse stakeholders and the activities that support the exchanges among them. Concentrating on these exchanges can also function to identify gaps in other areas.

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12. Carter T. Butts, Ryan M. Acton, and Christopher Steven Marcum, "Interorganizational Collaboration in the Hurricane Katrina Response," *Journal of Social Structure* 13, no. 1 (February 8, 2012), https://www.cmu.edu/joss/content/articles/volume13/ButtsActonMarcum.pdf; Namkyung Oh, "Collective Decision-Making for Developing Emergency Management Capabilities," *International Journal of Emergency Services* 9, no. 2 (2020): 179–202; Edwin J. Benton, "Local Government Collaboration: Considerations, Issues, and Prospects," *State and Local Government Review* 45, no. 4 (December 2013): 220–23.

The COVID-19 pandemic has unveiled alarming gaps in North Carolina's social safety net. The current crisis response to COVID-19 exemplifies the need for local governments to understand, promote, and build the capacity of community partners that may not be operating within an interorganizational arrangement. Without this relationship, the vital services they provide, such as emergency food assistance in the short term or community development in the long term, will eventually become a larger economic issue. The challenges of COVID-19 emphasize the need to identify those gaps and improve community capacity. When organizations come together and proactively plan for disasters, it diminishes the impact of the loss and helps to restore prior economic and social conditions.

Resources for Pandemic Planning

- North Carolina Voluntary Organizations Active in Disaster (NC VOAD) facilitates coordination between different organizations that respond to disasters at the county level. The group describes itself as a forum for sharing knowledge and coordinating resources while developing partnerships between actors to support effective disaster response. Identify your county's VOAD and become a member before the next disaster. VOADs provide a means to formalize existing partnerships, incorporate new members, and empower organizations to actively plan for disaster, even if their daily operations are not focused on disaster response. NC VOAD's official website is at https://www.ncvoad.org/cms/.
- The North Carolina Commission on Volunteerism and Community Service is the oversight organization for volunteer service in North Carolina. It provides a wealth of resources on how to volunteer or donate to disaster-response needs and general needs across North Carolina. https://www.nc.gov/agencies/volunteer/disaster-assistance.
- The Coordinated Assistance Network (CAN) focuses on ways to best apply resources to serve those in need following a disaster. CAN-Recovery agency participation is available to nonprofit case-management agencies and service providers with a demonstrated role in community long-term recovery. More information can be found at https://redcrossrecovery.communityos.org/.
- The New Hanover Disaster Coalition has posted a memorandum of understanding that can serve as a model for other memorandums at https://www.newhanoverdisastercoalition.org/uploads/2/4/5/3/24536530/nhdc_partner_mou_11.26.pdf.
- National VOAD Volunteer Management Committee, *Managing Spontaneous Volunteers in Times of Disaster:The Synergy of Structure and Good Intentions* (Washington, DC: Points of Light Foundation, n.d.), https://www.fema.gov/pdf/donations/ManagingSpontaneousVolunteers.pdf.
- Mobilizing for Action through Planning and Partnerships (MAPP) is a community-driven strategic-planning process for improving community health. This framework helps communities apply strategic thinking to prioritize public-health issues and identify resources to address them.
- The North Carolina Center for Nonprofits has collected a list of resources to help nonprofits navigate the impacts of the pandemic. The list can be found at https://www.ncnonprofits.org/resources/pandemicresources.
- The North Carolina Community Emergency Response Team (CERT) program educates individuals about disaster preparedness for hazards that may impact their area, and it trains them in basic disaster-response skills. More information on CERT is available at https://www.nc.gov/agencies/volunteer/cert.

- The National Response Plan (NRP) is the all-hazards plan to domestic incidents including man-made and natural disasters. The NRP is a blueprint on how multiple agencies can work together to respond to an incident. It mandates that the National Incident Management System (NIMS) be used in all national incidents to help ensure the consistency and continuity of disaster-assistance programs. You can learn more about the NRP by taking the FEMA independent-study course IS-800, which is available at http://training.fema.gov/EMIWeb/IS/is800.asp.
- NIMS was created to provide a comprehensive, national approach to incident management. It establishes standard incident-management processes, procedures, and protocols so that all responders can work together with maximum effectiveness. NIMS is based on the Incident Management System (ICS). You can learn more about NIMS by taking the FEMA independent-study course IS-700, which is available at http://training.fema.gov/EMIWeb/IS/is700.asp.
- ICS is the management system that is used to identify the objectives for a specific incident and oversee the resources needed to achieve those objectives. The ICS structure can be applied to all incidents. It can be expanded or contracted to meet the demands of a particular incident. You can learn more about ICS by taking the FEMA independent-study course IS-100, which is available at http://training.fema.gov/EMIWeb/IS/is100.asp.

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