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Hood County Disaster Recovery Year 1

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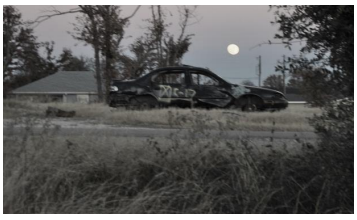
December 15, 2014

Contents



EXECUTIVE SUMMARY

In May 2013, Hood County, Texas experienced a deadly tornado primarily affecting the Ranchos Brazos neighborhood just outside of the city of Granbury. Following this disaster and the fertilizer plant explosion in nearby West, Texas, a team from the Hazards Reduction and Recovery Center (HRRC) at Texas A&M University developed a strategy to study the first year of recovery in both communities. We were awarded a Rapid Response Grant from the National Science Foundation to follow the first year of recovery in West and Hood County, Texas.

Our overarching goal was to explore differences and similarities in early post-disaster recovery efforts following technological and natural disasters in these two Texas communities. Our specific goals included: 1) Gathering an overall picture of the nature of post-disaster recovery planning, processes, and activities occurring in these two communities; 2) Collecting qualitative data on household perceptions on repair, rebuilding, and/or relocation; and 3) Collecting systematic data on and from informal and formal community organizations and groups engaged in response and recovery activities. This report includes information on what disaster researchers know about disaster recovery, the data collection methods, demographics of the area, findings from the data collection, and recommendations.

Data Collection

We used qualitative methods to collect the data. Qualitative research focuses on gathering in-depth detail of processes, events, and discussions. In other words, we worked to develop a thorough depiction of experiences in disaster recovery. Qualitative research allows us to showcase the perspectives of those involved in the disaster recovery. Thus, we present information from the participants' perspective more so than the scientists' perspective. Three specific qualitative data collection activities were undertaken by the team to understand recovery in Hood County and West.

1) Observed 15 public meetings and recovery events
2) Interviews with 18 impacted residents
3) Interviews with 32 representatives of formal and informal groups and organizations involved in response and recovery

Findings

We used an inductive approach to the data analysis, allowing participants' words to speak for themselves. Thus, below is a discussion of successes and concerns *as identified by interview participants*. We organize the results around those themes that are known to be best practices or common challenges in disaster recovery and those issues that were unique to either Hood County or this specific tornado.

We identified several successes known to be best practices in recovery that occurred during tornado recovery efforts. These included:

- The quick speed of organizing the recovery committee,
- The trust in leadership of the recovery committee,
- Drawing together of a diverse network of organizations to participate in recovery,
- The leadership of existing local organizations for the recovery committee,
- The creation of standard prioritization rules for distributing funds
- High amount of communication and weekly recovery meetings
- Transparency of recovery processes

We also identified successes that seem to be unique to this tornado or Hood County. These included:

- Uniqueness of the impacted population (majority Spanish-speaking, low-income, undocumented residents)
- Prominent connections with political and economic leaders among members of the recovery committee
- The overwhelming charitable nature of Hood County residents

Some concerns were expressed in the interviews that are common concerns in many disaster recovery efforts. These included:

- Uncertainty over ability to institutionalize these efforts to be better prepared for next disaster
- Division and debate over recovery goals, especially related to the modular housing
- Limited intimate knowledge of the affected population beyond formal aid mechanisms
- Limited survivor participation in recovery decision-making processes
- Limited awareness among residents and non-emergency management organizations as to disaster plans

Other concerns discussed were unique to Hood County or this particular tornado. These included:

- Lack of federal designation and thus reliance completely on community resources and donations
- Limited governmental involvement past the immediate response period
- Debate over modular homes

Finally a few topics created a varied response among participants. Particularly, interviewees varied in their assessment of the interaction between churches and the long-term recovery committee. Some felt the process was smooth, while others felt that churches did not have a large enough role in the committee or that funding mechanisms and mandates contradicted, limiting the involvement of churches.

RECOMMENDATIONS

1) *Increased connection and collaboration between emergency management and nonprofit organizations* can support institutionalization of recovery planning processes, ensure that emergency response agencies know where to direct immediate resources, as well as assist organizations in maintaining a focus on disaster issues.
2) *Development of mechanisms for affected residents' voice in recovery processes* will support social inclusion, generate trust throughout the recovery processes, and support decisions about community spending that are developed from grassroots participation.
3) *Discussion of funding mechanisms and money management* to account for different organizational and church-related missions and mandates, while also building on different capacities for speedy distribution to more bureaucratic procedures and reaching various populations.
4) *Encouraging Continuation of Operations Planning for all nonprofits in community* would ensure that supporting agencies can continue operations if affected by disaster themselves.
5) *Creating redundancy for recovery leadership positions* will help prevent fatigue during recovery processes as well as ensure that essential knowledge and communications are not lost with the loss of one or two people from the recovery process.

ACKNOWLEDGEMENTS

Special thanks to all those who supported this project, especially the interviewees who shared their lives, trauma, and recovery with us. We thank the many community members who provided valuable discussion as to a first draft of this report. Also, we thank the National Science Foundation for their financial support of this project through the RAPID research grant (#1348070), but all thoughts and conclusions in this report are the authors alone.

BACKGROUND

In May 2013, Hood County, Texas experienced a deadly tornado primarily affecting the Ranchos Brazos neighborhood just outside of the city of Granbury. Following this disaster and the fertilizer plant explosion in nearby West, Texas, a team from the Hazards Reduction and Recovery Center (HRRC) at Texas A&M University developed a strategy to study the first year of recovery in both communities. We were awarded a Rapid Response Grant from the National Science Foundation to follow the first year of recovery in West and Hood County, Texas.

This research aimed to understand how communities recover from different types of disasters (one natural—a tornado— and one technological—an explosion). Previous disaster research has found that technological disasters may affect communities differently than natural disasters. Technological disasters, such as oil spills, explosions, or chemical accidents, have been shown to cause community fracturing, disagreements, and longer-term emotional trauma than natural disasters. Yet, no previous studies had looked at both types of events within the same state or occurring at similar times.

Thus our overarching goal was to explore differences and similarities in early post-disaster recovery efforts following technological and natural disasters in these two Texas communities. Our specific goals included: 1) Gathering an overall picture of the nature of post-disaster recovery planning, processes, and activities occurring in these two communities; 2) Collecting qualitative data on household perceptions, as well as their early decisions related to repair, rebuilding, and/or relocation and involvement in community recovery planning efforts; and 3) Collecting systematic data on and from informal and formal community organizations and groups engaged in response and recovery activities.

The team of researchers was led by Michelle Meyer, Ph.D. a postdoctoral researcher in the HRRC (hrrc.arch.tamu.edu). The Co-Principal Investigators included John Cooper, Ph.D., Shannon Van Zandt, Ph.D., David Beirling, Ph.D., and Walt Peacock, Ph.D. Graduate students Sara Hamideh, Marccus Hendricks, and Joel Mendez conducted interviews and participant observation.

In this report, we provide information from disaster research that provides context for our findings and information for community leaders. We discuss in detail findings from our research in Hood County, and review information from West that can be useful for both communities. We hope that this information will support Hood County in future mitigation efforts.

Disaster Recovery: What we know

There are four generally agreed upon "phases" of disaster, although they are not perfectly delineated in time:

1. **Mitigation**: Activities taken in advance of a disaster to reduce the loss of life and impacts to the community. These include structural mitigation, such as levees, and non-structural mitigation such as developing plans and implementing building code or land use policies. Mitigation often includes mapping and understanding both physical and social-economic risks in the community.
2. **Preparedness**: Activities taken in immediate preparation for an event. These can include activities such as emergency management exercises, collecting supplies, evacuation, or creating Memorandums of Understanding between organizations for the response and recovery.
3. **Response**: Activities during and immediately following a disaster, from life-saving strategies, search and rescue, to debris removal.
4. **Recovery**: The differential process of restoring, rebuilding, and reshaping the physical, social, economic, and natural environment through pre-event planning and post-event actions.

Figure 1. Disaster phases, courtesy http://mjcetenvsci.blogspot.com/2013/11/diasater-management-cycle.html

As shown in Figure 1, these phases form a cycle and activities in one phase can improve the overall resiliency of the community. In other words, well-done mitigation can reduce the need for preparedness, response, and recovery by decreasing the impacts of the event.

No matter the type of event, recovery is the least studied of the four phases of disaster whereas the majority of disaster research focuses on preparedness and response, especially among emergency response organizations. As Olshansky and Chang (2007: 200) described, disaster recovery and the corresponding management of reconstruction across various social systems remain important challenges for urban planners and scholars particularly because "time compresses, stakes increase, additional resources flow, and

public interest is heightened." This is felt in the community through vocalization of the need for speedy reconstruction, the increased media presence, and flow of money and physical donations that can overwhelm unprepared communities.

We know from research that poorly executed recovery can become a "second disaster" for individuals and communities that experience population loss, stagnant economies, and uneven and inequitable rebuilding and reconstruction. Lack of plans for supporting individuals to return to New Orleans following Hurricane Katrina, demolition and subsequent protesting of affordable housing reconstruction in Houston following Hurricane Ike, slow reimbursement processes for fishers following the Exxon Valdez and more recently the BP Oil Spill, are only a few of the numerous disasters in which the recovery efforts failed affected communities and individuals and thus created more strife than the actual disaster impact. That said, recovery is an important, but albeit difficult task.

A complication in disaster recovery is the influx of various actors into the community. Numerous governmental and nongovernmental organizations and emergent groups at multiple levels undertake the multitude of recovery activities. In other words, the network of organizations involved in the recovery goes far beyond governmental structures at the local level. Indeed, nongovernmental organizations can be central to these processes. Nongovernmental entities distribute aid, provide advice and material and human capital as well as fund, organize, and undertake long-term recovery planning efforts while emergent citizen organizations undertake their own recovery activities and influence formal organizations plans and processes. We know from research and firsthand experience that social services organizations promote volunteerism and resource redistribution more so than emergency management organizations, and these organizations provide a link between individuals and federal disaster assistance in an attempt to reduce inequities in assistance.

Yet, there has been little research on how these organizations operate together in disaster recovery. The federal government recently put forth guidelines for supporting nongovernmental involvement in all phases of disaster. FEMA (2011) encourages all local communities, regardless of resources or capacity, to collaborate with their "whole community" (including individuals, businesses, nonprofits, civic groups, recreational groups, and emergency management) to increase disaster resilience. This directive is based in the general understanding that collaboration among community members, organizations, and government can support disaster resilience, yet the document provides few actual practices community organizations can undertake.

We know that collaboration, broadly defined, can reduce duplication of services, increase services provision, reduce confusion among disaster survivors in how and where to receive aid, and promote speedier recovery processes. Research by Meyer prior to this study showed that collaboration among social services organizations and community emergency management organizations in the form of a COAD (Community Organizations Active in Disaster) network can also importantly support:

1. **Everyday resilience**: Incorporate mitigation and preparedness activities into general service provision for at risk populations, such as "Go Kits."
2. **COOP planning**: Provide continuation of operations advice and support to nonprofits so that they can survive a disaster themselves.
3. **Focus on at-risk populations**: Incorporate the needs and capacities of at risk populations into emergency management plans, for example by identifying the location of individuals with disabilities for priority evacuation assistance.
4. **Community resource knowledge**: Allow all involved community organizations to know where community resources are located, such as tables and chairs for setting up Service Centers or cots for evacuation or volunteer committees.
5. **Recovery role education**: Help nonprofit organizations understand the role they could and would play during and following a disaster.
6. **Risk communication**: Spread information about the disaster risks within a community.

While these efforts can be somewhat accomplished through informal mechanisms of socializing, an official network of collaboration allows for more precise planning of needs, especially in rural communities. Informal socializing not specifically directed towards disaster preparedness or failing to include official mechanisms and meetings among organizations on this topic did not identify all the needs or capacities of the community.

METHODS

We used qualitative methods to collect the data. Qualitative research focuses on gathering in-depth detail of processes, events, and discussions, and aims to generate "thick description." In other words, we worked to develop a thorough depiction of individual experiences in disaster recovery. Qualitative research allows us to showcase the perspectives of those involved in the disaster recovery. Thus, we present information from the participants' perspective more so than the scientists' perspective.

Three specific qualitative data collection activities were undertaken by the team to understand recovery in Hood County and West.

1) Participant observation of public meetings and recovery events

- Between July 2013 and July 2014, we attended and conducted observation at 17 community recovery meetings and information centers in West and 15 in Hood County. Following each event we took notes about participation, discussion, and general activities taking place.

2) Interviews with impacted residents

- In Hood County, we interviewed 18 residents of impacted households regarding their perceptions of risk and community response and their likely recovery decisions related to rebuilding or relocating and 27 individuals in West, Texas. We used convenience and referral sampling to gather interview participants. We did convenience sampling with residents who attend community meetings and we asked these interviewees to suggest other residents whom we could interview. We spoke with men and women, single individuals and married families, young and elderly, and displaced and those who have stayed.

Qualitative research focuses on gathering in-depth detail of processes, events, and discussions, and aims to generate "thick description." Qualitative research allows us to showcase the perspectives of those involved in the disaster recovery. Thus, we present information from the participants' perspective more so than the scientists' perspective.

3) Interviews with representatives of formal and informal groups and organizations involved in response and recovery

- In Hood County, we performed 24 interviews with 32 key informants of both formal and informal organizations involved in response and recovery in and 27 in West to understand their perceptions of community recovery, collective efficacy, and participation in recovery planning and processes as well as to gain insight regarding the nature of groups/organizations involved and the processes involved in conducting recovery. We used targeted and referral sampling to recruit 1) local government leaders, i.e., the mayors, council members, and emergency managers, 2) members of the recovery committees, and 3) leaders of businesses, churches, and community organizations.

All interviews were semi-structured, qualitative interviews to draw out emergent findings as well as address the topics of the research. These interviews ranged from 15 minutes to 3 hours in length. In total, we closed out the first year of data collection with 44.5 hours of interviews or over 70 hours of observation. Members of the research team transcribed all interviews and analysis involved reading and coding each interview and notes. Two members of the research team reviewed the interviews three times each in order to draw out themes and conclusions.

FINDINGS IN HOOD COUNTY

Because our qualitative research is time consuming, involving travel and analysis of numerous perspectives, this report contains findings from mostly the first nine months to a year following each disaster. These findings should be taken as a window in time, as many facets of the recovery have changed following the end of data collection for this part of the project. Further, these results speak to the *recovery* phase of the tornado. We had many interviewees discuss the amazing skills of the first responders and local government in their immediate response to the tornado. We commend this effort and note that without the skilled and precise response, the recovery we discuss would have been much different and likely slowed tremendously. At this time, we focus on the recovery, which constitutes the funding and organization of rebuilding efforts, post-tornado cleanup.

Demographics of Hood County and Granbury

One aspect of disaster planning is to identify both the physical disaster risks and the potentially socially vulnerable populations in order to understand how and where resources will be needed. Disaster scholars often look at "social vulnerability" which describes how some people in our communities are more at risk of being impacted by disaster and have less capacity to recovery on their own. Individuals living in poverty, children and the elderly, minority, non-English speakers, and those with disabilities are commonly considered potentially more vulnerable to disaster effects. To understand the impacts in Hood County, we reviewed U.S. Census data on demographics of the city and county.

The current population of Granbury is approximately 7,500 people while Hood County has over 50,000. In Granbury, 30% of the population is over 62 years old and 19% are under 18. Together this results in half of the population being potentially more vulnerable to disaster impacts and slower recovery. Hood County has similar age demographics. Granbury and Hood County are majority White communities, with little racial and ethnic diversity. Granbury is 94% White, only 0.7% Black, and 9% Hispanic. Similarly, the County is 93% White, 0.5% Black, and 10% Hispanic. The diversity in both is much less than national averages.

As discussed further below, Granbury and Hood County have both wealth and poverty. In both, the mean household income is $62,000 and the median, of which half of the population lives below and half above, is $46,000. The poverty rate is 9%, which is lower than the national average of 15%. The impact of this tornado on a low-income neighborhood was unique, and future planning

should be prepared to work with more high income populations, who may not be familiar or comfortable with accessing services through charitable organizations as discussed more below.

One aspect of this disaster recovery that can be expected in the future is the prevalence of renters among those affected. Renters are often overlooked in disaster plans as the focus is on rebuilding primary residences. Over 53% of households in Granbury are renters.

QUALITATIVE THEMES FROM INTERVIEWS AND OBSERVATION

Below we discuss several themes from the data collected in Hood County. We used an inductive approach to the data analysis, allowing participants' words to speak for themselves. Thus, below is a discussion of successes and concerns *as identified by interview participants*. Where appropriate we include information on whether these findings are or are not supported by research in other disasters.

To aid in understanding how this tornado, this town, and thus the recovery are similar or different from other disasters, we organize our themes into two categories: 1) those known to be best practices and 2) those unique to Hood County or this tornado. This organization, we hope, will allow the community to see what areas they can build on and how to plan for future events. We use quotes as illustrative of broader points discussed by numerous interviewees and observed by the team. In the conclusion, we connect participant perspectives with our understanding of disaster planning and recovery to describe strengths, challenges, and opportunities for the community moving forward.

Section 1: Successes known to be best practices in disaster recovery

Through the interviews and observations, we noted several best practices. Those involved in the recovery in Hood County described several successes that are known to be best practices in disaster recovery. Some of these successes participants specifically implemented based on that knowledge, while others emerged organically without participants knowing these were best practices. We describe these successes as they relate to the formation of the Long-Term Recovery Committee (LTRC) and operations undertaken in long-term recovery.

1. Organizing the LTRC

Three key themes of success related to the initial organization of long-term recovery in Hood County: a) the quick speed that recovery committees were formed, b) trust in county leadership in early recovery, and c) incorporating a diverse network of organizations into long-term recovery committees.

a. Speed of committee organization and operation

The disaster recovery in Hood County was set up and began quickly, even as debris clean up was ongoing. Within days of the event, Stephanie Parker of the County Emergency Management and Fire Marshall office was credited with bringing together all the nongovernmental organizations in town and using her recently acquired knowledge of the numerous committees in disaster to solicit volunteers for each committee. Many interviewees described this quick recognition of the need for nongovernmental involvement and the corresponding speed with which community organizations fulfilled this need as a key strength in the recovery.

> *"Yeah. It started with this huge room with questions goin' everywhere. There was no organization. It took her sayin', "OK, this is the core. Here's the core, right here. But now off of this core, we need construction. We need health people, finance people, case management. All these little satellites off of it. Let's divide up. Pick one you'd like to work with." And literally, that's what [Stephanie Parker] did. She said, "These are your areas. Where would you like to work? Where do you think your expertise is?"*

We know from the disaster literature that decisions made in the immediate response period can support or hinder recovery. Within weeks the coordination of organizational leadership and committee meetings allowed for funds and recovery activities to coordinate early. As recovery continued, the committees coalesced into one headed by the Finance Committee. Participants viewed this as a good move to allow for increased communication.

b. Trust in leadership

The speed of recovery development was attributed to the large amount of trust placed in both the Fire Marshall office and Sheriff's Office at the onset of the disaster. Both organizations were described as competent leaders. Trust is a core element to generating collaboration. Yet, following the completion of many of these interviews, Stephanie Parker was no longer with the county.

There was also trust in the core organizations involved in the recovery that continually increased during recovery. As described by members of the long-term recovery committee in the second quote to the right, they worked to build trust.

c. Diverse network

One challenge to overcome in disaster planning is finding ways to successfully encourage involvement from a diverse set of organizations and community participants. Pre-disaster, especially, and in some cases post-disaster, many community organizations without a disaster-related mission lack understanding of how they can or would contribute to disaster response and recovery. Further, a common misconception is that government at all levels is the central organization in charge of disaster recovery. This is not true and it was recognized early in Hood County that a diverse set of participants were needed to lead and contribute to long-term recovery. The participation of individual churches, faith-based disaster organizations, community organizations, regional organizations, and experts in law and finance were key to moving the recovery forward both practically and for continuing the trust from the community in the recovery. The participation of many, diverse voices allowed for organizations to work within their area of expertise whether that be construction or donations or case management, in the realm of recovery. For example, lawyers, financial experts, and those involved in property management are often overlooked as important to recovery planning, but the Hood County group was able to recognize these needs early and incorporate expertise from within the community to fulfill these needs. As one interviewee described, knowing one's expertise and role greatly helps in the recovery, *"I'd always encourage anybody in a natural disaster, don't just run down there and go, "What can I do? What can I do?" Know your strengths. Know where your talents best fit, and then apply that. Don't just run down there because you can, but help where you know you're needed."*

Trust in Leadership Quotes:

"Just knowing, Stephanie Parker is there if a tornado happens tomorrow and would be the one to say ok let's get reorganized, at least that would be a start and that would be a plan. To have a designated community disaster response person."

"I knew most of the people, but I'd never worked with 'em, because I don't work. So what I did is, I tried to just spend individual time with them, and I think that it paid off in that I made myself available, I made phone calls, I went over, I visited. I continually sent out messages to everybody. "This is what's happened today. Thought you-all need to know. Great job," that kind of stuff, and I think that built some more trust."

Hood County was able to generate this quick and diverse network through their use of informal and formal networks already existing in the community. The Ministerial Alliance was one formal network in which local churches were active and worked together on various community needs. This alliance was able to coordinate church-based assistance to the recovery and communicate both needs and capacities among the community to disaster leadership. Further, interviewees discussed how they used their informal networks from church, social ties of family and friends to populate the recovery group, or board-interlocks (participation on numerous organizational boards) to identify organizations and individuals to invite to the recovery process. Building on informal ties allows for greater trust within in a recovery group. One aspect unique in Hood County was the speed with which these informal ties became formalized into a recovery committee. Researchers often argue for pre-event establishment of recovery networks to speed recovery processes, but Hood County was able to quickly initiate and distribute funding.

2. Operations of long-term recovery

Several successes were noted with the ongoing operations of long-term recovery. These related to: a) strong leadership, b) prioritizing needs of survivors and developing aid thresholds, c) communication and weekly meetings, and d) transparency

a. Leadership of existing organizations known to Hood County

"All disasters are local." This is the common mantra of disaster management. This mantra was put into practice in Hood County both because of the existence of strong community capacity within town and the lack of a federal disaster declaration for broader involvement. Using local organizations to lead recovery allows for greater trust among organizations and from the public as well as the ability to maintain ties throughout long-term recovery and post-recovery when some individual needs remain. In comparison to West, the largest difference between the two disasters was the lack of community social service organizations in West. This resulted in West's need for external support, further prevented the input of local community members into recovery activities and left the needs of the community at the mercy of external groups determining recovery priorities.

In contrast, the large existing social service capacity of Hood County aided the recovery tremendously and allowed different local organizations to contribute to all aspects of recovery. For example, Mission Granbury was viewed as an appropriate choice for case management and the centralization of recovery processes for the public to access. Mission Granbury's previous involvement with many affected households and their everyday case management allowed for them to transition their expertise to the disaster situation.

Importance of Local Leadership

"*The United Way agencies that came together are the ones that came together, they are the local ones, the local faces. They are the resources that should be out in the community, getting the recognition, letting people know that they're here to help, and I think that is one of the great things about Granbury, because there is help for almost anything that you need."*

Strengthening Organizational Ties

"Prior to the tornado, everyone kind of had their own groups. Many organizations benefits from different organizations and networks, but now you see people in town working together, and instead of having this little group that serves this kind of people or this kind of need, and this group that does this, you see people working together. So with the other boards I'm on in town, I hear a need, and I can call and say, 'Hey, someone needs therapy. I found out from this organization.' So it's opened some new doors and an avenue in talking and helping people."

United Way was viewed as a source of expertise in community nonprofit knowledge and networking as well as finance by providing grants within the community. Research by PI Meyer in Florida highlighted the importance of these connecting organizations that had knowledge and relationships with many other internal and external community organizations to support communication of disaster-related information. Grantee organizations such as United Way, local foundations, and volunteer centers have been commonly used as leadership in disaster response and recovery networks.

Habitat for Humanity was highlighted as a trusted organization involved in the impacted Rancho Brazos community already. They had relationships with many affected families and were able to use these relationships to assist their homeowners during the recovery.

One external organization highlighted as important by numerous respondents was UMCOR (United Methodist Committee on Response). UMCOR's expertise in construction, their early arrival to the community, their continued presence for long-term recovery, and their ability to take a role in recovery rather than attempt to institute their own leadership supported the admiration of interviewees for the efforts of UMCOR in an area – nonprofit construction - that was unknown to most individuals in town. On the other hand, the American Red Cross was heavily criticized in the early recovery period for their lack of cooperation and ability to fit within the organizational context already existing in Hood County, along with their use of donations outside of Hood County. The American Red Cross did later become more involved in recovery, however the slow implementation of their programming and funding was critiqued as a result of their national, rather than community focus. The use of community-based organizations was viewed as a key instrument in successfully keeping donated dollars local for this disaster.

These are only a few of the examples of how different organizations used their expertise to provide leadership within the recovery group. Every organization involved in recovery was described by other organizational representatives as experts in their area and key to many recovery processes. No organization alone can handle all aspects of disaster recovery and be expected to simultaneously act as a place for affected individuals, volunteers, and donors to interact, a necessary function in disaster recovery.

Using existing organizations is known to contribute to maintenance and seamless transitions between response, early recovery, and long-term recovery. Long-term recovery can last upward of ten years in some disasters and many survivors have continued needs that last long after rebuilding is complete. The use of community organizations means that survivors do not have to transition among many service providers throughout the long-term recovery process. One theme from the interviews was belief in the commitment of the long-term recovery committee organizations to the "Long-haul." While there was concern the public may forget and move on from the disaster before recovery was complete, there was little doubt that the community organizations involved in recovery were not committed to the process, continuing their collaboration, and working until recovery was complete. As described in this quote to the right, the disaster strengthened informal networks of aid.

b. Prioritizing needs and developing aid thresholds

A key decision point in the recovery described by many interviewees was the implementation of a mechanism for prioritizing the needs of survivors and discussing cases openly by number. Because many organizations involved in long-term recovery were unfamiliar with case management, the large influx of need from the community, and an undetermined amount of aid available, a standardized method for determining which cases received first priority was considered a major success that allowed the recovery to continue more smoothly. This interviewee succinctly described the importance of prioritizing needs, *"We created a point system. It was a quantitative way to prioritize needs. Because we're not going to help all 250 families off the bat. We'll help all of them, but we're going to try to get those homeless people taken care of first."* The discussion and active debate about the details of the prioritization was viewed as open and accepting of a variety of voices. This prioritization and systematic review process took longer to implement in West, Texas.

Also, the determination of an aid threshold for Mission Granbury to provide aid without approval of the larger recovery group was seen as a way to facility quick recovery and deal with small needs, while maintaining the full participation of all recovery members to discuss larger needs.

c. Communication and weekly meetings

Up until nearly the first anniversary of the event, the long-term recovery committee was meeting weekly and discussing needs and recovery processes. Clear and consistent communication among a network is central to disaster recovery. Communication reduces duplication of services, incorporates capacities in the community to match needs, as well as fosters greater trust and participation in the processes. Communication, communication, and more communication in a formalized meeting committee setting are a best practice in disaster recovery and are a component that again differentiates Hood County from West. While both small towns used informal social ties to communicate throughout the county, Hood County was able to formalize their recovery communication within one network and one major set of meetings. While all members of the committee did not attend every meeting, all participants knew when and where these meetings were held. In contrast, West operated at different times four different unofficial meetings, none of which had formalized participation or communication processes.

Importance of Communication and Regular Meetings

"The way the meeting's being run, the others are saying, 'Hey, we want to be a part of this' and they just kind of talk about it and move on it - All that has a lot to do with leadership, and I don't know when you will write this up, but leadership to me is the key to this thing."

"There have been glitches, but it's been people willing to sit down at the table and say, 'Hey, we need to resolve this. We need to have another meeting and kind of work our way through it.'"

d. Transparency of recovery processes

The continued communication was described by interviewees as a method for transparency in recovery processes. Members expressed a desire to both support survivors while also understanding their responsibility to the broader community to use recovery funds appropriately. Throughout the processes the recovery group focused on transparency with each decision and providing back to the community a report that would show how well the local community could use donor funds for community betterment. Open meetings, discussion of cases, and discussion of funds is considered to be the best practice in recovery, despite being much more difficult to implement in practice. However, Hood County accomplished this. The following quotes from two recovery committee members show the importance felt by the committee to be transparent in the recovery funding.

> *"It's a big job. When the community gives you money for a specific use, you have to make sure that it is used for that specific use. And we have to have accountability."*
>
> *"We can tell anyone, 'Yes, this is what we have spent of the money and this is how we've spent it', I mean down to the nails and screws, everything. That's very important. It's important to us, but it's also important to [other organizations involved], because it gives them even more credibility in the community…. I think we'll be able to show people that we did the right thing with the money, and I think that later on that will translate. One of the things we don't want to do is we don't want donors not to believe that they can trust our organizations to do what they want us to do."*

Section 2: Successes unique to Hood County and this tornado

The above successes related to formation and operation of the long-term recovery committees are viewed as best practices in disaster recovery and can be applied across disaster situations and across communities. There were some successes that were viewed as unique to Hood County or this tornado. These included: a) the population affected, b) prominent connections, c) Hood County's charitable nature

1. Uniqueness of the affected population

Because the tornado's main path of destruction went through Rancho Brazos, a known impoverished community, the recovery in Hood County was highly specialized and targeted. The uniqueness of this affected area include how a portion of the survivors were already receiving services from Mission Granbury, nearly half of affected houses were Habitat for Humanity homes.

Mission Granbury became an easy choice for leading case management because of their connections with the community and the reputation of their representatives as being well known and trusted by survivors. This meant that survivors knew how to operate the system of aid, already had case managers, and their general needs were already known to what would become the recovery committee. Often recovery is slowed as individuals must figure out how to operate the complicated aid process, however that was not the case with many Hood County survivors. Further, the involvement of Habitat for Humanity is an extremely unusual situation for disaster recovery. The process in which Habitat for Humanity supports homeowners obstain insurance and as well as their involvement in any mortgaging of the homes allowed this organization to have valuable knowledge and become an

"I felt like that was the easiest, best answer to do it, 'cause they're all about helpin' people. That subdivision out there was made up of low-income families that were already clients of Mission Granbury. So it worked out. That came to me and it seemed to be the best way, and it definitely was the best way."

immediate support network for this portion of disaster survivors. Both organizations were able to provide emotional support to survivors, financial and case management support, as well as protect survivors from fraudulent contractors or other fraud activities that occur post-disaster.

In other disasters, survivors come from various social classes and communicating the recovery process then involves helping middle and upper class individuals understand how charitable and governmental aid operates. For example in West, affected middle class homeowners were humbled and distrusted the complicated processes. This is a common reaction in disasters, as middle class survivors are embarrassed to ask for social services they associate with lazy or unworthy welfare recipients. Low-income populations are accustomed to the processes of receiving charitable aid, such as providing detailed financial documents, and thus there were few complaints about the aid processes in Hood County. Should another disaster occur, the Hood County community may need to be ready for serving a more financial diverse group of survivors who may or may not agree with or be compliant with the usual social assistance process.

Also, in other disasters community-level resources are often affected, such as nonprofit offices, church buildings, businesses, and potentially community leaders own homes and families. The lack of impact to these community-level resources allowed for the operation and focus on needs of survivors quickly. As discussed in the conclusion, this is a highly unusual circumstance and Granbury and Hood County should prepare for future events in which main resources are down and various leaders are unable to assist due to responsibility for their own recovery. Creating redundancy in leadership and organizational roles is important to prepare for wider impacts, as discussed below.

2. Prominent connections

Several members of the long-term recovery committee had connections to prominent business and political figures. These connections proved invaluable to collecting resources and knowledge for the community recovery. These direct connections are unique to Hood County in terms of recovery for a relatively small disaster. While these cannot be discounted or underemphasized, planning for future recoveries should consider potential for these ties to be unavailable.

3. Hood County's charitable nature

A common myth of disaster is the prevalence of looting and anti-social behavior that is often portrayed in the media following disasters. Yet, the strongest finding in all disaster research across decades and disasters and locations is the *lack* of looting and criminal activity following disasters. This has been termed the "altruistic community" by disaster scholars, because disasters tend to bring together community members to help and support each other in ways that are less common in everyday life. Actually, more fraudulent activity occurs within organizations and corporations trying to take advantage of disaster funds (such as contractors attempting to get aid) rather than individuals stealing from others.

Charitable Nature of Hood County

"Very giving community. We used to do for many years Love Granbury, and all the churches used to get together. It's a huge community-wide service project. All the kids from these churches would get together and we would go do something to love on Granbury, whether it be hand out bottled water at stores, pump gas for people, hand out cookies. All kinds of things. Once a year we'd do this community-wide thing, and then we would come together and worship together, all the denominations. It has always been very giving and close that way."

"This is the most generous community you'll ever see, hands down. Many of the churches have food pantries and clothing, and then there's a couple of organizations that have resale shops. That's Central City culture. Lord, this is a giving community!"

Hood County epitomized this altruistic nature to such a great extent, that we categorize this as a unique success. It is unique in the sense that the charitable nature of Hood County residents was already operating for other events and through formal organizational channels. The altruistic community thesis commonly references informal support between neighbors, but Hood County has a culture of formalized giving and volunteering as groups, rather through churches or nonprofits. Interviewees commonly described this characteristic of the community as an outcome of the community's strong religious faith. From volunteering time to donating money, Hood County residents' best charitable heart came forth in this disaster to support Rancho Brazos. It would take a book to highlight each story of generosity from small-scale fundraisers to the hundreds of individuals doing debris removal. The long-term recovery committee recognized this potential in the community and was able to utilize both donations and volunteers effectively so that all needs could be met. The following quotes are illustrative of what every interviewee, organizational representative and survivor alike stated.

Section 3: Concerns common across disasters

Interviewees discussed some of their major concerns or challenges in the recovery process. We also found some concerns that we recognized based on our expertise in disaster research. Again, we organize these as concerns that are common across disasters and concerns that were unique to Hood County and this tornado.

The main concerns found in the research in Hood County can be categorized into five themes: a) institutionalization for disaster preparedness, b) division over recovery goals, c) limited neighborhood knowledge and interaction d) lack of survivor participation and voice in recovery, and e) lack of awareness of disaster plans and planning needs

1. Institutionalizing processes for next event

While interviewees felt that organizational networks were strengthened and relationships between various groups increased because of the disaster, as discussed above, interviewees did express concern that this connection might eventually wear off as recovery finished. There was a particularly strong concern for keeping up the momentum to do full recovery planning when the disaster is over. Many wondered if the knowledge gained here would disappear post-event. While no organizational interviewee felt they would no longer be involved themselves, they continued to express concern over the issue, seeing as it took a disaster to generate these collaborations, However, all interviewees, expressed desire to continue working on disaster issues and institutionalize a network or organizational structure to be prepared for the next event, "*I guess a couple things could happen. The further along you get, it becomes less urgent and some people care more about getting things taken care of than others. So I hope we continue to meet and get things taken care of. So far it seems everybody is pretty committed."*

One area in which this will be a challenge is the fatigue expressed by volunteers and organizational staff involved in the recovery this first year. Because of the urgency disaster recovery creates in organizational operations, some interviewees expressed fatigue and a desire to draw back to normal operations, if possible, without losing the knowledge and connections gained during recovery processes. It is noted that there was turnover in staff within the case management group as they were charged with both continuing case management for all their clients and the increased caseload of disaster survivors. If so many of the survivors had not already become integrated into the social services system with case managers, the work load would have been much greater. It is recommended that future planning include how to expand organizations with more case managers and staff to prevent increasing fatigue and stress.

Both recovery fatigue and a general slacking of disaster readiness are common across communities and disasters. In actuality, the researchers have been unable to find institutionalization of recovery processes outside the incorporation of community level COAD networks (Community Organizations Active in Disaster). Most recovery organizations created transition to general community foundations and lose the disaster response and recovery focus as years pass.

2. Division over recovery goals

Common across disasters is disagreement about the goals of recovery. In Hurricanes Katrina and Ike, these disagreements involved blocking the rebuilding of public housing. In fact, Galveston just broke ground on the first affordable housing to be rebuilt since the Hurricane that destroyed a majority of their affordable housing in 2008. Various factions that protested the return of low-income housing stalled recovery and generated debate over what the community should look like after recovery. While the Galveston case is extreme, it is not unusual. The altruistic community discussed above is a common finding for the response and early recovery periods only. But once the immediacy of the event has worn off, debates over recovery funding, spending, and how to restructure physical assets increase.

This debate was manifested in Hood County surrounding the issue of modular homes. Because of their presence in the community, Habitat for Humanity desired to avoid modular homes whereas other members of the recovery group felt that newer modular homes was an improvement to the previous homes in the neighborhood. This debate resulted in the loss of Habitat for Humanity from continued participation in the long-term recovery committee weekly meetings.

While the modular home aspect of this debate is unique and discussed below, division over recovery goals is expected in every disaster. Recovery is a process of economic and community renewal, which in and of itself tends to ignite controversy. Yet, continuing dialogue is key to maintaining trust in recovery processes, and the recovery group should be prepared for future debates and strive to keep all organizations involved in the dialogue instead of pulling out. Our research indicated that some of the contention over this issue was not just about the modular homes themselves, but the need to have a voice and participate in the community. Organizations with previous ties to Rancho Brazos expressed feelings that they were not heard in the process by organizations that despite being located in Hood County had less experience with this neighborhood itself. Which brings us to our next concern and challenge.

3. Limited intimate involvement with Ranchos Brazos prior to tornado

Several organizations involved in the recovery processes had previous experience and ties to Rancho Brazos, which did speed recovery. But, a majority of organizational representatives interviewed expressed a lack of sustained involvement with the community as a whole. Some interviewees expressed their only knowledge was through rumor and perceptions about that area. While services are provided to many impoverished residents of Ranchos Brazos by organizations involved in the recovery, the community as a whole was still shrouded in some mystery.

Common in disasters is an awakening of community leadership to what researchers call "social vulnerability". Disasters, no matter the cause, can uncover social differences such as economic and cultural differences. Disasters are studied by social scientists because they can "lay bare" the fundamentals of a community or society when the veil of normality is pulled back. Often community members suddenly recognize how many of their neighborhoods are living on the edge of poverty after a disaster strikes.

Because of the uniqueness of this disaster striking mainly one marginalized neighborhood, the community knew that there would be great needs, but many lacked true interaction with many of the individuals and community processes out in Rancho Brazos. As mentioned above, only a few members of the recovery committee had previous involvement with this neighborhood. The lack of interaction with the neighborhood resulted in descriptions of Rancho Brazos as being both part of Hood County and "out there" separate from the main community. Based on interviews, committee members often indicated that they had less than optimal understanding of who lived in Ranchos Brazos beyond general ideas.

The lack of knowledge about the community pre-event affected some of the contention around the modular issue as discussed above. The lack of knowledge and debate took place at the community level, which highlights our next concern common across disasters: lack of survivor voice in recovery processes.

4. Limited survivor participation

Most disasters and many planning processes outside of disaster times call for voice and participation but are often left to a few community members to undertake. The recovery process in Hood County was especially separated because of the nature of the neighborhood affected – low-income and many undocumented residents. Yet, pushing for greater participation and voice of resident needs and wants in a formal manner can improve trust and ensure that recovery aid is going to the most needed areas. During our time in Hood County, the researchers witnessed little interaction between residents and the recovery processes outside of case management. Some interviewees expressed that case management was a legitimate channel for understanding resident needs. Yet, the case management process, focused on providing aid, is not an empowering process that allows survivors to express their desires and broader needs for the community.

It was noted that there was a lack of Spanish-speakers in the recovery leadership and a lack of focus on renters even as they make up a large minority of Hood County and Granbury residents. As one interviewee expressed, the recovery process became another charitable process in which there were assigned roles of "givers" who get to feel good and be acknowledged for their generosity and "receivers" who are expected to express gratitude for the gifts, whether or not these were gifts they desired. One interviewee expressed the desire for more participation by those affected, "*Rancho Brazos residents need to be more active participants. I still see that there's a big gap between those to be done to and those who are doing monetary donations all got put in one area, and that's a greater trust in the outside community, because this neighborhood doesn't really have a lot of say. They're at the discretion of the outside agencies."*

While talking with residents, we found no residents who could identify the leadership organizations of the long-term recovery process. They were able to identify a couple of places where they could receive assistance, but were unaware of where the larger decisions were made. We saw no survivors participating in the recovery meetings we observed, though we did not attend all meetings. It was noted that the Catholic Church, Habitat for Humanity, and Mission Granbury were the main conduits of information on survivor needs. As noted above, Habitat for Humanity and the Catholic Church had limited involvement with the recovery committee as recovery progressed.

Even while living in poverty and as disaster victims, individuals want to feel some form of independence and control over their lives. Participation in community-level processes, however limited, aids in this and develops increased trust in recovery processes and decisions. While organizational interviewees attempted to convince individuals to come for aid, this independence is a strength among disaster survivors and should be highlighted and encouraged rather than taking away individual power, as described in this quote, "*We keep telling them, 'Come to the food pantry and get food." They just don't want anything. They don't want—I think there's pride, "We need to take care of ourselves. There are other people more in need than we are.' And this is coming from people who have no home, no clothing, but there are people more needy."*

Lack of participation can increase the social distance and exclusion of socially marginal populations. Low-income

Pre-Disaster Community Engagement

"And since it was almost total devastation out there, the maps helped to know what used to be vacant lots. You know, most of us sitting at the table, other than [one case worker], didn't really know what was there. 'Now we know they're here. Now we know there's various issues out there.'"

"You have a very large amount of poverty in Granbury, and then you have a very high economic culture, too. There's not a lot of in-between. That's been the hardest struggle. You're either at the bottom or at the very top. We're talking one of the wealthiest communities in Texas. It's a hidden wealth, but it's here, and there's not a lot of in-between. So when you're saying you talked to this client about this, they don't understand. People of low-income here are having a problem with people coming into their neighborhood. Prior, you didn't go to Rancho Brazos, you didn't. You had to earn their trust to go into that community."

populations often lack voice in processes involving their lives. Lack of Rancho Brazos resident participation in the recovery process in Hood County allowed middle class residents to showcase their generosity and maintain the social distance between themselves and the low-income and undocumented residents of Rancho Brazos. This distance should not be expected in other events as neighborhood associations and groups in higher-income neighborhoods more commonly demand voice in processes that affect them. Thus, future disaster may have more contentious debate between affected individuals and recovery leadership.

5. Limited awareness of disaster plans and planning needs

A final theme found in our research was a lack of knowledge about community disaster plans and planning needs within organizations. It is a common finding in disaster research that community organizations and members often ignore disaster planning until it is too late. But further, this lack of awareness can continue post-disaster as people view the disaster as a one-time event. We found evidence of both pre-event lack of awareness and a continued general lack of awareness of the need for disaster planning to be incorporated throughout organizations in the community during our research in Hood County.

Interviewees admitted they had little knowledge of the county emergency management plans. They trusted the city and county were planning for the nuclear plant, but were unaware of specifics of these plans, as this quote shows, "*I'm not aware if anybody had plans for this. There might have been plans I'm not aware of. We all just learned as we went forward. It's my understanding that they do want to meet with everyone involved after we settle down and come up with a plan."* Interviewees commonly expressed that they never expected something this large to happen here. Also, organizations lacked internal disaster plans on how they would respond. Instead, as one church representative described in the quote to the right, the plans focused on much less likely events of terrorism.

> *"Our church emergency response plan was, what if there's a bomb in church? What if there's a fire in church? What if somebody comes in with a gun? It was church-related. It wasn't community-related disaster. We truthfully were not prepared for this. We were not prepared for the media being here and calling constantly, for having people here around the clock. We were just kind of learning on the fly."*

A lack of pre-event planning and networking for disaster specific concerns often leaves community organizations unaware of disaster plans and how they would incorporate these into their operations and contribute to broader community recovery. Continuing a network of communication specifically targeted to disaster can increase organizational resilience to survive events themselves as well as resilience in their ability to respond to community needs.

Section 4: Concerns unique to Hood County and this tornado

While the above concerns are noted across different disasters and communities, the following three concerns were more limited to the context of this event: a) Lack of federal disaster declaration, b) lack of emergency management involvement after response, and c) issues with modular homes.

1. Lack of federal disaster declaration

While many disasters across the country do not receive federal disaster declarations, the lack of a declaration in Hood County did create a unique environment for the recovery to operate. First, FEMA was not present which had positive and negative aspects. For one, this allowed the local community to truly lead recovery processes. Without FEMA, survivors were not required to go through two bureaucratic aid processes and instead could operate directly with Mission Granbury. On the other hand, the lack of FEMA limited access to federal recovery funds for individuals and larger community grants. In considering the possibility of a future event, the recovery group should prepare for more bureaucratic hoops and lengthy processes to gain access to federal aid.

Second, interviewees expressed concern about the lack of awareness from outside Hood County to this tornado. It was regularly mentioned that attention and external aid left Hood County when the Moore, Oklahoma tornado hit. Also, interviewees were concerned about the lack of Texas state involvement and unfulfilled promises because the disaster was considered relatively small. Again, this had positives and negatives. Hood County was able to operate recovery with little media scrutiny. In comparison to West, this allowed Hood County to avoid the need for focusing on public relationships during recovery. Yet, the lack of external attention again limited potential aid and donations to the community

As disaster scholars, we must add that the lack of a federal declaration in Hood County was evidence of a well-operated FEMA process. Federal aid is meant to only contribute when local capacity and state capacity is overwhelmed. Based on the evidence of the tremendously quick recovery from this tornado, local capacity was not overwhelmed in Hood County. Also, the researchers noted that while this was a concern expressed, the lack of outside assistance became a sense a pride in Hood County for how well the community itself truly can take care of its residents during tragedy. This capacity and the lack of a declaration should be seen as a community strength and success.

2. Limited county involvement after the initial response period

Past the initial response and really recovery period, the county had little involvement in disaster recovery. This is an unusual finding not because local government general runs recovery, but because there was limited desire to run to the county for assistance from both organizations and residents. Often city and county government officials must stay involved in recovery efforts because of desire from the populace for governmental accountability.

The lack of their involvement was a concern expressed by organizational interviewees involved in the recovery. Particularly they felt that emergency management should at least continue regular attendance at recovery meetings. Because of the ability of recovery planning to be integrated with mitigation and future disaster response coordination and collaboration, this concern about the lack of government is warranted. Local government and emergency management often serve as catalysts and not the leaders in planning and thus their involvement is necessary.

> "*I was surprised that the county wanted to push this out to the nonprofits so quickly. I understand, there are a lot of financial reasons for that. But if there is another tornado are we starting from scratch again?*"
>
> *"It would be helpful if the state had a coordinated system that maybe could be pulled into the counties, and I keep thinking about the county government system because we kinda look to county government and government for safety issues. That seems to be the natural pace it could reside."*

3. Issues with modular homes

As discussed at different points above, the modular homes issue was a contentious and extremely unique situation for disaster recovery. Few recovery efforts have the capacity to provide new modular homes for uninsured residents. Based on the complications with the process discussed by interviewees, it will likely not be an option used in future disasters.

> *"Putting these modulars, that was a nightmare. And it turned out to be—we wouldn't have gotten 'em one minute sooner than what we did because of the whole process that they had to go through, but boy, we were strung along for so many months. It was just agonizing. We probably should have made a decision sooner to drop the modulars than we did. We probably should have made that decision back in July or August that we weren't gonna do that, just started building homes."*

Section 5: Points of contention

Through our qualitative research, we look for themes, which can be found across interviewees. For the successes and the concerns, there was general agreement across different interviewees that corresponded to our experiences in observing the recovery processes. One theme that was discussed as positive and negative by different respondents was the collaboration between individual churches and the long-term recovery committee. Some interviewees described this interaction as positive and well organized, while others felt there was a lack of central involvement of the churches. The researchers did notice this issue as church members were the least consistent presence at long-term recovery meetings and activities, often taking a secondary role to the social service organizations.

This complicated relationship between churches and long-term recovery is common across disasters. First, emergency management organizations have commonly worried that churches may proselytize to survivors or require church membership and other religious acknowledgement to receive aid. Thus, churches are commonly involved, but not central organizations in disaster recovery groups. Instead, the faith community is commonly represented in these groups through their charitable arms, e.g., UMCOR, Texas Baptist Men, Catholic Charities.

Secondly, a concern highlighted in the interviews was the difference in mandates and funding mechanisms between individual churches and nonprofit organizations. Churches have more freedom and a mission to provide aid to all individuals who seek it, whereas social service aid is need-based and thus requires bureaucratic processes before aid can be distributed. Some interviewees expressed that the call for contributing all recovery funds to one pool, a pool held by a nonprofit, would prevent the churches from fulfilling their missions in aid and prevent supporting those individuals who trust only their churches in receiving aid. The lack of bureaucratic procedures to receive aid from churches allows them to assist individuals more quickly, and some churches discussed how they were able to meet needs quickly and then communicated their support to the long-term recovery group, as one interviewee explained, "*And while I think it's good to funnel money through one organization, I think it's also good to have your own money. Because then we are not held by the same restraints with those committees that have to decide."*

In particular, because many survivors were undocumented immigrants involved in St. Francis Cabrini Catholic Church, the church provided a trusted organization to assist individuals who may never seek aid from other organizations that require detailed personal information. Even with assurances of lack of interest in immigration status, it is common across all disasters for these populations to be less likely to seek support. We witnessed this process when attending the anniversary events. The

first event held at the Rancho Brazos community center was attended by many White families, whereas the event in the evening at the Catholic Church was attended by mostly Hispanic, Spanish-speaking families. While these two events could be viewed as competing, together they allowed for all community members to participate in an anniversary event where they felt comfortable.

Moving forward, it was learned from this recovery that attempting to manage all recovery funds in one place is a noble but impossible reality. Further, allowing organizations and churches to manage their own funds and contribute a portion of funds to the larger pool creates these mechanisms that can cover immediate needs that are ill fitting to the bureaucratic nature of centralized long-term recovery. This is not to say that a local community organization should not be identified as the main donation hub, but that an understanding that gathering *all* money into one organization will be impossible to accomplish and may limit reaching some clients.

CONCLUSION: STRENGTHS AND OPPORTUNITIES

During recovery, social and economic conditions that exacerbate inequality and inequitable development can continue and result in further inequality. On the other hand, well-designed recovery can provide opportunities for increased mitigation, incorporation of sustainability, and increased resiliency to all types of future hazards. Yet, focusing on the immediate needs in recovery and working to rebuild as quickly as possible means that opportunities for incorporating resilience are often lost.

A lack of pre-event organizational coordination results in inefficient delivery of disaster services and resources, even when policies and plans for collaboration exist. For example, Meyer (2013) found that pre-disaster networks of community organizations that focused on disaster issues improved information sharing, organizational disaster planning, and planning for vulnerable populations, such as the homeless and persons with access and functional needs.

We note several recommendations built upon the strengths and concerns identified in this report.

1) **Continued networking and institutionalization of recovery lessons**

   a) *Increased connection and collaboration between emergency management and nonprofit organizations* can support institutionalization of recovery planning processes, ensure that emergency response agencies know where to direct immediate resources, as well as assist organizations in maintaining a focus on disaster issues. Currently, there is no research on the ability of a recovery formed 501c3 to continue disaster planning for another event. However, research on collaboration has shown that networks on numerous organizations can create a best practice of incorporating disaster management into grassroots organizations, address needs of vulnerable populations, and ensure that donors and residents will have greater voice and trust in recovery processes.

   b) *Development of mechanisms for affected residents' voice in recovery processes* will support social inclusion, generate trust throughout the recovery processes, and support decisions about community spending that are developed from grassroots participation.

   c) *Discussion of funding mechanisms and money management* to account for different organizational and church-related missions and mandates, while also building on different capacities for speedy distribution to more bureaucratic procedures and reaching various populations.

2) **Organizational planning for disaster recovery**

   a) *Encouraging Continuation of Operations Planning for all nonprofits in community* would ensure that supporting agencies can continue operations if affected by disaster themselves. Many nonprofits may not even survive an event to support their community as Auer and Lampkin (2006) reported that more than half of the nonprofits in hard hit parishes shut down following Hurricane Katrina and yet post-disaster also represents a fertile time for the emergence of new nonprofits and community groups. Both their capacity and ability to remain operational through a disaster affect which nonprofits participate in recovery activities and thus affect which segments of the population may be represented (or not) in recovery processes.

   b) *Creating redundancy for recovery leadership positions* will help prevent fatigue during recovery processes as well as ensure that essential knowledge and communications are not lost with the loss of one or two people from the recovery process.

RESEARCH TEAM

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