Totally Familiar Yet Completely New: Opportunities for and Challenges to Integrating Disaster Risk Management in Community Development

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Executive Summary

In the United States, many community-based organizations (CBOs) are key actors in efforts to both prepare for and respond to environmental disasters. Because they are commonly deeply embedded in communities and neighborhoods, local residents often recognize them as reliable sources of information and resources. Moreover, because they are rooted in affected communities, CBOs are often uniquely positioned to carry out the longer-term recovery and preparedness efforts that take place well after other groups move on.

While CBOs have been engaged in preparing and responding to disasters for decades, there has been little research on this work. Nor has there been much research on how this disaster-related work affects the organizational capacity of community organizations. This paper contributes literature to this gap by examining disaster-related work carried out by four community-based organizations: Self-Help Enterprises in Visalia, California; Chinatown Community Development Center in San Francisco, California; the Tejano Center for Community Concerns in Houston, Texas; and Avenue Community Development Corporation, also in Houston.

I find that disaster-related work had significant impacts on all four organizations. Leaders of each organization have incorporated environmental resilience into the narratives they use to describe their work. Leaders also saw changes in the organizations' core competencies (both as they were defined and as they related to one another). Lastly, each organization experienced a change in organizational capacity as a result of engaging in disaster work. While many of these shifts were identified as positive changes by interviewees, I also identify a series of challenges to the organizations' continued engagement in disaster-related work. Most notably, the leaders of the case-study organizations continue to grapple with insufficient funding, inadequate access to local governmental decision-making processes, and incomplete documentation and training about the best ways to prepare for and respond to natural and environmental disasters.

Overview: Contextualizing Disaster and the Role of Community-Based Organizations

Late in the summer of 2017 Hurricane Harvey passed through Barbados, Saint Vincent, and the Caribbean Sea as a tropical storm before making landfall in Texas as a Category 4 Hurricane on August 25th.¹ The storm, widely considered to be the costliest tropical cyclone in recorded U.S. history, caused substantial damage in the Houston Metropolitan Area.² While Harvey's impact was, in some ways, unprecedented, 2017 was a year marked also by the record-setting number and magnitude of high-damage, high-cost disasters, which included wildfires, drought, floods, and other severe storms.³ Moreover, global-climate experts predict that in the coming years, these high-impact, low-probability (HILP) disaster events will increase in size and scale. The prospect of increasingly frequent HILP incidents requires that a variety of key institutions must adapt to a reality in which constant hazard exposure is a more integral part of daily life.

Although disaster services in the United States became increasingly federalized over the last century, the importance of community- and neighborhood-level collaboration has consistently been central to federal visions for response. In this time, however, the concept of "local" has shifted from a basic reliance on local governments to a multi-actor, multi-nodal understanding. The 1950 Federal Disaster Relief Act (FDRA), for example, stated that the law stood "to provide for an orderly and continuing method of rendering assistance to the state and local governments...in supplementing whatever aid the state or local governments can render themselves."⁴ Echoing this sentiment during the unveiling of what ultimately became the 1974 FDRA, President Richard Nixon noted in 1970 that "our present arrangements also encourage constructive and cooperative efforts among individuals, local communities, the States and the Federal government."⁵ More recently, in 2011, the Federal Emergency Management Agency (FEMA) published a document calling for a "whole community approach to emergency management" wherein a diverse and decentralized group of actors are called upon to assess needs and engage with local communities to better prepare for and respond to disasters.⁶

¹ Eric S. Blake and David A. Zelinsky, *National Hurricane Center Tropical Cyclone Report: Hurricane Harvey* (NOAA, 2018), www.nhc.noaa.gov/data/tcr/AL092017_Harvey.pdf.

² Chris Mooney, "Hurricane Harvey Was Year's Costliest U.S. Disaster at \$125 Billion in Damages," *The Texas Tribune*, January 8, 2018. www.texastribune.org/2018/01/08/hurricane-harvey-was-years-costliest-us-disaster-125-billion-damages/.

³ NOAA National Centers for Environmental Information, "U.S. Billion-Dollar Weather and Climate Disasters" (2018). Accessed on September 21, 2018. <u>www.ncdc.noaa.gov/billions/</u>.

⁴ Quoted in Rutherford H. Platt, *Disasters and Democracy : The Politics of Extreme Natural Events* (Washington, D.C.: Island Press, 1999), 17.

⁵ Richard Nixon, "Presidential Statement to Congress: Nixon on Disaster Relief, 1970," in *CQ Almanac 1970*, 26th ed., 11-42-A-11-44-A (Washington, DC: Congressional Quarterly, 1971), http://library.cqpress.com/cqalmanac/cqal70-1290778.

⁶ From FEMA, A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action (2011). As a concept, Whole Community is a means by which residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and

Even though federal policy acknowledges the importance of local engagement, in practice, it is quite difficult to make needed connections at the neighborhood and community level. As economists Christopher J. Coyne and Jayme S. Lemke have noted, a significant challenge posed by the increased prevalence of HILP disasters is that preparation and response must occur simultaneously at multiple organizational levels.⁷ From a disaster services point of view, long-range, multi-stakeholder, and neighborhood-scale community engagement is still a prodigious challenge. However, this type of deep local-level engagement is intrinsic to community development work. Most notably,

- CBOs are often on the ground first, whether they have planned to be or not.
- CBOs have years, sometimes decades, of knowledge about their constituent communities. Trust and local knowledge are often difficult to build in disaster planning. Long-term community work has the potential to bridge this gap.
- CBOs, like churches and community centers, often have well-known facilities in affected communities, so they can serve as distribution nodes for larger networks of goods and services.

Of equal importance to short-term recovery is the work that is done over long (sometimes multigenerational) periods of time to increase community and individual response capacity to both slow- and rapid-onset hazards. These endeavors are much less visible, more amorphous, and more difficult to evaluate. As facilitators of long-term resilience, community-based organizations are effective for many of the same reasons listed above. Most notably, they have both local expertise and a network of local connections—assets that not only can be very useful in immediate disaster response but also are critical in long-term preparedness work.⁸ Additionally, it is difficult to disentangle damages stemming from environmental hazards brought on by environmental disasters from damages wrought by long-term poverty and systemic inequality. The work that CBOs have been doing an ongoing basis already addresses many of the sub-issues that underlie disaster vulnerability (like persistent poverty, inadequate housing, lack of civic and political engagement, and structural inequality).⁹

Research Questions and Methodology

This paper seeks to build on existing scholarship by using case studies to understand how large-scale environmental disaster events impacted the work of four community-based organizations. For the purposes of this research, both "disaster" and "natural disaster" were utilized in interviews colloquially

assess the needs of their respective communities and determine the best ways to organize and strengthen their assets, capacities, and interests. By doing so, a more effective path to societal security and resilience is built. In a sense, Whole Community is a philosophical approach to conducting emergency management.

⁷ C. J. Coyne and J. S. Lemke, "Polycentricity in Disaster Relief," *Studies in Emergent Order* 4 (2011): 40–57.

⁸ Fran H. Norris et al., "Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness," *American Journal of Community Psychology* 41, no. 1-2 (2008): 127–50.

⁹ For an overview of how two CBOs have tried to explicitly make these links, see Caroline Lauer, "Bounce Forward, Not Back: Leveraging Resiliency to Promote Equity" (Joint Center for Housing Studies and NeighborWorks[®] America, 2018), <u>www.jchs.harvard.edu//research-areas/working-papers/bounce-forward-not-back-leveraging-resiliency-promote-equity.</u>

to refer to catastrophe arising from environmental hazard exposure.¹⁰ Correspondingly, "disaster work" refers to multidisciplinary efforts that span the disaster continuum from preparedness to recovery. The discussion of the history of the term "natural disaster" falls outside of the purview of this research, but an important body of literature exploring its complex history exists on the topic.¹¹

This research is guided by two main questions:

- How are community-based organizations tying new challenges posed by environmental disasters to their existing community development work?
- How has this work affected the group's traditional roles and organizational capacities?

These questions emerged out of a literature review, discussions with community development practitioners across the country, and conversations with mentors at both NeighborWorks® America and Harvard's Joint Center for Housing Studies. Through these same conversations, we identified four NeighborWorks Organizations (NWOs) whose activities and experiences were especially relevant:

- **Self-Help Enterprises in Visalia, California** whose mission is "to work together with low-income families to build and sustain healthy homes and communities."¹²
- Chinatown CDC in San Francisco, California, "a community development organization with many roles – as neighborhood advocates, organizers and planners, and as developers and managers of affordable housing."¹³
- Tejano Center for Community Concerns in Houston, Texas, whose mission is "to develop education, social, health, and community institutions that empower families to transform their lives."¹⁴
- Avenue CDC in Houston, Texas, whose mission is "building affordable homes and strengthening communities."¹⁵

Using interviews, internal and external document review, and stakeholder observation, I developed four short case studies exploring how each organization has been challenged by and now approaches

¹⁰ Susan L. Cutter, Bryan J. Boruff, and W. Lynn Shirley. "Social Vulnerability to Environmental Hazards *." (*Social Science Quarterly*, 2003).

¹¹ See L. Comfort, B. Wisner, S. Cutter, R. Pulwarty, K. Hewitt, A. Oliver-Smith, J. Wiener, M. Fordham, W. Peacock, and F. Krimgold. "Reframing Disaster Policy: The Global Evolution of Vulnerable Communities." (*Environmental Hazards*, 1999); E. L. Quarantelli. *What Is a Disaster? : A Perspectives on the Question*. (Routledge, 1998); and Anthony Oliver-Smith and Susannah M. Hoffman. *The Angry Earth : Disaster in Anthropological Perspective*. (Routledge, 1999).

¹² Chinatown CDC, "Chinatown CDC Impacts in 2018," www.chinatowncdc.org/2018-accomplishments#pdf.

¹³ Chinatown CDC, "Our Mission," www.chinatowncdc.org/about-us/our-mission.

¹⁴ Tejano Center for Community Concerns, "Mission, Vision, History," 2018, www.ryss.org/domain/55.

¹⁵ Avenue CDC, "Our Work," 2018, www.avenuecdc.org/about-us/our-work/.

environmental disaster.¹⁶ This set of cases is deliberately diverse, spanning disaster types, onset timelines, geographies, and scale. It is the intent of this research to illustrate an array of experiences and contexts in the hopes that lessons can be learned from analysis across cases.

Case Study Organizations

The case study organizations profiled in this paper self-identify as engaging in environmental disaster work and link (or are considering linking) these efforts to their ongoing programming in different ways. The cases are divided by region and by experience level. Chinatown Community Development Center and Self-Help Enterprises, which are both located in California, serve areas that experienced an environmental disaster more than one year ago, which places them in the long-term recovery and preparation phases of the disaster continuum. Further out from these events, the group's leaders have (1) situated their organizations as crucial actors in the disaster cycle, (2) utilized their organizations' preexisting expertise to deliberately contribute to community adaptation, and (3) created additional opportunities to increase their organizations' capacity and expand their influence through disaster engagement. The leaders of these organizations therefore provide useful examples of how disaster can be conceptualized as a long-term factor in community development decision-making. The two organizations described in the Texas case studies, Tejano Center for Community Concerns, and Avenue Community Development Corporation, recently responded to Hurricane Harvey and are currently engaged in immediate and mid-range recovery. Their leaders are, in many ways, still grappling with how they might integrate disaster work into their long-term plans. Their experiences thus provide insight into post-disaster organizational decision-making.

Each of the case study organizations is contextually unique. The following profiles briefly describe each organization, its core work, and its role to-date in disaster response.

Chinatown CDC

Located in and serving one of the oldest Chinatowns in the country, Chinatown Community Development Center (CCDC) was founded in 1977 as an organizing effort to fight eviction and advocate for tenant rights in Chinatown. The preservation and nurturing of San Francisco's Chinatown is one of CCDC's imperatives. The neighborhood is home to a large community of monolingual residents speaking Mandarin, Cantonese, Filipino, and Spanish. In a 2014 Socio-Economic Profile compiled by the San Francisco Department of Planning, Chinatown was reported to be 80 percent Asian with 76 percent of residents reporting Asian or Pacific Island languages spoken at home.¹⁷ The report also found that 62 percent of Chinatown residents were linguistically isolated, compared to 15 percent of residents in San Francisco overall.¹⁸ In addition, the median age of the neighborhood's residents was 50.4, which was 15

¹⁶ For additional information about methodology, please refer to Appendix I.

¹⁷ San Francisco Planning Department, "San Francisco Neighborhoods Socio-Economic Profiles (American Community Survey 2010-2014)," 2017.

¹⁸ Ibid.

years older than the median resident of the entire city.¹⁹ Finally, a large share of the population is lowincome and over 50 percent of the housing stock is Single-Room Occupancy (SRO) units (Figure 1).²⁰



Figure 1: Median Household Income in Areas Served by the Chinatown CDC

Source: Median Household Income (ACS 2017)." Map. Social Explorer. Social Explorer, n.d. Web. Accessed on Feb. 8, 2019. (Based on data from U.S. Census Bureau)

Working with an aging, largely non-English-speaking community of renters, most of the Center's organizing work continues to focus on mobilizing older, monolingual adults living in SROs for tenant rights. Along with community organizing, Chinatown CDC owns and operates over 3,700 units of affordable housing in 32 developments and runs several youth leadership programs.²¹

Many of CCDC's programs intersect with their disaster preparedness work. After the 1989 Loma Prieta earthquake, the organization began an earthquake preparedness and fire safety education program in San Francisco. For almost 20 years, these workshops have run continuously (in Chinatown and beyond). Under the initiative, which began with funding from the City's Department of Building Inspection, Chinatown youth train SRO residents on earthquake preparedness.²² The program, which has grown and become a nationally recognized model, has become integral to the organization's efforts to bring together key stakeholders and get them to engage with Chinatown CDC's core work. CCDC's Executive Director, Norman Fong, explained:

¹⁹ Ibid.

²⁰ Chinatown CDC, "Our History," Accessed on September 21, 2018. <u>www.chinatowncdc.org/about-us/our-history</u>.

²¹ Chinatown CDC, "Chinatown CDC Impacts in 2018."

²² Chinatown CDC, "Chinatown CDC – Awards," Accessed on September 21, 2018. www.chinatowncdc.org/aboutus/awards.

We do community organizing to preserve the community, to preserve affordable housing, and to empower the residents themselves...to organize and to fight back. It started, though, gelling better with new buildings because of education. So, we went into these SROs with the fire department to teach safety. Of course, we stayed in touch with them and got them engaged in our resident associations.²³

Self-Help Enterprises

Self-Help Enterprises (Self-Help, S.H.E.) was founded in 1965 to provide housing and advocacy resources to seven out of the eight counties that make up the San Joaquin Valley.²⁴ The Valley is a center for agricultural production in California and is comprised of several large cities and many more small, unincorporated rural communities with limited government infrastructure. Per the 2017 American Community Survey (ACS) 5-year estimate, 49 percent of the San Joaquin Valley's population was estimated to be Hispanic or Latino (of any race).²⁵ In addition, compared to surrounding areas, people in the region do not live as long and have lower median household incomes.²⁶ Moreover, the eastern part of S.H.E.'s service area includes many census tracts where a large number of adults did not finish high school (Figure 2).

One of the country's largest farming regions, the San Joaquin Valley is historically prone to prolonged periods of low rainfall.²⁷ From 2011 to 2017 much of California experienced a severe drought, and Self-Help Enterprises was deeply involved in efforts to respond to that crisis. In 2014, after the state declared a drought emergency, the organization's leaders worked closely with county government officials in the valley to provide technical assistance to people affected by the drought.²⁸

While their participation in drought mitigation during this time was crucial, Self-Help had been engaging in work around the issue for years prior to the emergency declaration. In 2011 and 2012, homeowners in the valley began calling the organization's rehab hotline to request assistance with wells that were running dry.²⁹ What began as a few well replacements carried out through the organization's housing rehabilitation program quickly grew into a project providing temporary tanks to households that was driven largely by entrepreneurial staff members who learned about tank-system construction on the go.³⁰ S.H.E.'s temporary tank program enabled the organization to develop a relationship with officials in the California Office of Emergency Services (Cal OES). As a result, by the time the drought crisis was

²³ Norman Fong, personal interview, 11 July 2018.

²⁴ Tom Collishaw, personal interview, 2 July 2018.

²⁵ U.S. Census Bureau, *Race and Hispanic or Latino Origin, 2017 American Community Survey 5-Year Estimates,* factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtmlAmerican Factfinder!.

²⁶ Self-Help Enterprises, "Service Area," www.selfhelpenterprises.org/about-us/#service-area.

²⁷ Gerrit Schoups et al., "Sustainability of Irrigated Agriculture in the San Joaquin Valley, California," *Proceedings of the National Academy of Sciences of the United States of America* 102, no. 43 (2005): 15352–56.

²⁸ Collishaw, personal interview.

²⁹ Collishaw, personal interview.

³⁰ Jessi Snyder, personal interview, 26 July 2018.

officially declared, the organization had developed a reputation in the area for being experienced with drought mitigation work. After the declaration, county officials, who had decades of experience working with Self-Help Enterprises on a variety of issues, turned to S.H.E. to run their newly-funded drought-response programs.³¹

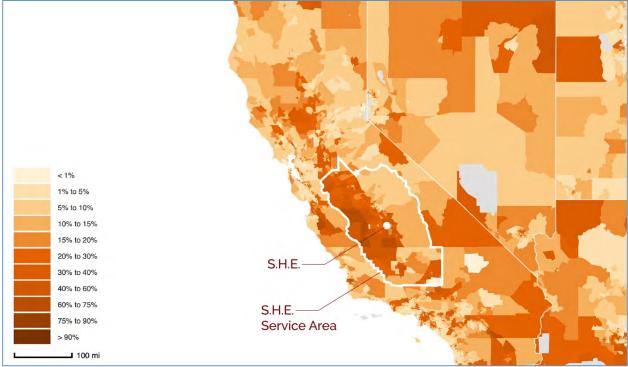


Figure 2: Share of Adults Who Did Not Finish High School in and near S.H.E.'s Service Area

Source: ACS 2017 via Social Explorer. Social Explorer, n.d. Web. Accessed on Feb. 8, 2019.

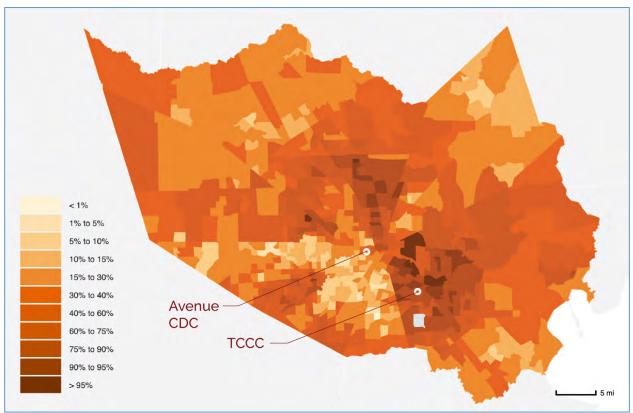
As of the end of 2018, the organization has replaced over 1,600 wells with temporary tanks, reestablished over 280 wells, connected more than 950 homes to permanent water distribution systems, and distributed over 11,000 water conservation kits. ³² These successes are due, in large part, to the deep knowledge that S.H.E.'s staff developed over time. They translated into increased exposure at county and state levels which, in turn, has enabled S.H.E.'s parallel objective of promoting more equitable water management in the region. Illustratively, S.H.E. has begun to deploy "permanent solutions" as a next step in its drought mitigation work. Such "permanent solutions" include offering residents who are currently reliant on water tanks the option of connecting to existing municipal water sources or drilling new wells if municipal water connectivity is not available. In tandem with this work, S.H.E. advocates for groundwater restoration as a more permanent long-term solution at the state and county level.

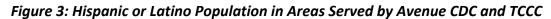
³¹ Kern County, "County Signs Agreement With Self-Help Enterprises To Provide State Funded Drought Relief Assistance," March 5, 2015. Accessed on March 28, 2019. www.kerncounty.com/artman2/main/uploads/1/drought-aid.pdf.

³² Tom Collishaw, email to the author, 25 February 2019.

Avenue CDC

Avenue Community Development Center (Avenue, Avenue CDC) is located in Houston and serves the Old Sixth Ward, First Ward, and Near Northside. The organization began its work in the Old Sixth Ward in 1991, expanding the geographical scope of its programming in 1999 and again in 2002.³³ The population of Avenue's newest focus neighborhood, Near Northside, was estimated to be 81 percent Hispanic or Latino in 2015 (Figure 3).³⁴





Source: "Total Population: Hispanic or Latino (ACS 2017)." Map. Social Explorer. Social Explorer, n.d. Web. Feb. 8, 2019. (Based on data from U.S. Census Bureau)

Since its inception, affordable housing has been central to Avenue CDC's work. To this end, the organization has built over 180 affordable single-family homes and created over 740 affordable rental units.³⁵ In addition to the large amount of work done by Avenue in the realm of affordable housing, the organization also engages in programs that enable family asset building, comprehensive community

www.houstontx.gov/planning/Demographics/docs_pdfs/SN/51_Near_Northside.pdf.

³³ Mary Lawler, personal interview, 12 July 2018.

³⁴ City of Houston Planning and Development Department, "Near Northside, Super Neighborhood Resources Assessment." Accessed on September 21, 2018.

³⁵ Avenue CDC, "Avenue Fact Sheet 2018," May 2018, www.avenuecdc.org/wp-content/uploads/2018/05/Avenue-Fact-Sheet-2018.pdf.

revitalization, and economic development.³⁶ These programs include resident supportive services, leadership development, and education in asset building. Many of these offerings are centered in the Near Northside.³⁷

The organization's efforts in the aftermath of Hurricane Harvey served as Avenue CDC's first major foray into providing disaster recovery services. Before the hurricane, the organization engaged sporadically in home repair, but Hurricane Harvey served as a major organizational catalyst, transforming the organization internally and dramatically shifting its everyday work.³⁸ In the immediate aftermath of the hurricane, Avenue CDC established an emergency service center and began offering post-disaster debris removal and demolition services to residents of the communities that it serves. Realizing the scale of the region's immediate housing need, Avenue's leaders also quickly launched into the process of adding a new Rehab and Recovery arm to its programming. To accommodate this new work, the organization increased in size by about one third and created a new physical office, the Housing Recovery Center, which offered financial, home repair, and legal assistance.³⁹ As of August 2018, the Housing Recovery Center had provided one-on-one counseling for over 360 families, returned over 100 families to their homes, and distributed home goods to over 460 households.⁴⁰

Tejano Center for Community Concerns

The Tejano Center for Community Concerns (Tejano Center, TCCC), which also is located in Houston, primarily provides services to people in Houston's East End and Denver Harbor neighborhoods. More than 60 percent of the residents of the former neighborhood identify as Black or African-American while almost 90 percent of those in the latter are Hispanic or Latino (Figure 3). Median household incomes in both neighborhoods were more than \$10,000 lower than the median income of Houston overall.⁴¹

Founded in 1992, the Tejano Center engages in comprehensive community empowerment through several intersecting avenues. These include affordable housing, adult education, primary school education, youth shelter and foster care, and juvenile justice diversion.⁴² Like Chinatown CDC, TCCC focuses partially on asset- and community-building for adults while also offering capacity-building

www.houstontx.gov/planning/Demographics/docs_pdfs/SN/56_DenverHarbor_PortHouston.

³⁶ Ibid.

³⁷ City of Houston, "Near Northside Complete Community Data Snapshot," 27 Oct. 2017, www.houstontx.gov/completecommunities/docs_pdfs/NN/NN_DataSnapshot_10_27_17.pdf.

³⁸ Lawler, personal interview.

³⁹ Ibid.

⁴⁰ Avenue CDC, "Avenue Fact Sheet 2018."

⁴¹ City of Houston Planning and Development Department, "East Houston, Super Neighborhood Resources Assessment," Accessed on September 21, 2018.

www.houstontx.gov/planning/Demographics/docs_pdfs/SN/49_East_Houston.pdf; and City of Houston Planning and Development Department, "Denver Harbor/Port Houston, Super Neighborhood Resources Assessment," November 2017, Accessed on September 21, 2018.

⁴² Carr Riggs and Ingram, LLC. Financial Statements, Supplementary Statements, and Single Audit Reports for Tejano Center for Community Concerns, 2018.

programs for children and young adults. The organization operates the Raul Yzaguirre School for Success (RYSS), a pre-K-through-12th grade charter school that serves 1,330 local students and focuses on addressing such issues as violence and high dropout rates.⁴³ The Tejano Center's Homeownership Center, which sits on the same property as the school, provides homeownership services including counseling, placement, and education to people from throughout greater Houston. To date, the organization has helped over 2,000 individuals in the metropolitan area become homeowners.⁴⁴

Unlike Avenue CDC, the Tejano Center had some experience in environmental disaster before 2017. The organization had carried out some recovery efforts after Hurricane lke struck Houston in 2008. Following lke, TCCC's leaders and county officials worked together to install a large-scale back-up generator on the site of the school and homeownership center, which meant that TCCC's campus could be a shelter and place of refuge during subsequent disasters.⁴⁵ Immediately after Hurricane Harvey, the Tejano Center opened a distribution center on this site that provided food, goods, and services to those affected by the storm.⁴⁶ While TCCC used the center to distribute home and personal goods during the first few weeks of recovery, over time TCCC's leaders transformed it into a long-term recovery resource center. The center is a key part of the organization's current efforts in the mid-term aftermath of Hurricane Harvey, which are focused on both repairing homes and investigating the possibility of taking measures to retrofit homes for rain and wind resistance.⁴⁷ TCCC has also been crucial (along with the Houston office of the Local Initiatives Support Corporation) in coordinating the formation of a collaborative of community-based organizations, including Avenue CDC, focused on seeking recovery funding and resources together.⁴⁸

Findings

It is difficult to disentangle individual successes achieved by a single organization from their contexts and, correspondingly, it is hard to understand which lessons from these organizations are broadly applicable for others involved in community development. Nevertheless, taken together, the four cases suggest important lessons for community-based organizations in other places that are at risk of environmental disaster. The findings detailed below fall into two main categories:

- 1.) <u>Shifting Ground</u>: Ways in which leaders of the case study organizations redefined the terms of community development to accommodate disaster work both temporarily and long-term.
- 2.) <u>Challenges to Continued Disaster Work</u>: Obstacles facing people in community-based organizations interested in making disaster part of their long-term planning and programming.

- 45 Ibid.
- ⁴⁶ Ibid.
- 47 Ibid.
- 48 Ibid.

⁴³ Ibid.

⁴⁴ Adriana Tamez, personal interview, 29 June 2018.

Each of these categories is discussed in more detail below.

Shifting Ground

Leaders of the four case study organizations adapted to the introduction of disaster work into their dayto-day operations in a variety of ways. Some of these adaptations were inevitable, while others were opportunistic. Some are considered by the organizations' leaders and staff to be temporary deviations, while others were seismic in scale and permanent in nature. The shifts articulated by leaders of the case study organizations and others fall into three broad categories: incorporating environmental narratives, realigning practices, and changing organization capacity.

Incorporating Environmental Narratives

The last two decades have seen a growing national interest in the concept of resilience and an increased focus on adaptation to large-scale environmental upheavals.⁴⁹ Leaders of the case-study organizations each noted the importance of both contributing to environmental narratives and utilizing environmental narratives to frame their work. This point is most clearly illustrated by Self-Help Enterprises. In the context of S.H.E.'s work, engaging in drought mitigation was, in many ways, a logical step for the organization to take. As noted above, the organization has historically engaged in both the technical and the organizational aspects of advocating for clean and accessible water. This work lent itself to involvement in providing services before and during the drought.⁵⁰ Self-Help Enterprises' leaders utilized their multi-decade water advocacy and housing rehabilitation experience to position S.H.E. as a central expert in the continued response to the drought affecting the San Joaquin Valley. However, S.H.E.'s leadership team did not initially think of its drought work as integral to the organization's "daily" work, nor did they have an initial strategy for tying the narrative of drought into ongoing advocacy work. As Tom Collishaw, S.H.E.'s president and CEO, observed, "We called it 'emergency services.' We didn't think of it like this, though, at the time. We thought about it as helping folks out, no different from the rest of the work that we do."⁵¹

As the drought became more pronounced on the ground and more prominent in regional and then national media outlets, the organization's leaders found that voters and stakeholders had an increased interest in the precarious water situation not only in the valley but also in the state as a whole. This focus made possible many related conversations of interest to S.H.E.'s leaders, particularly after 2014 when voters approved Proposition 1, which authorized the issuance \$7.545 billion in general obligation bonds to fund ecosystems and watershed protection and restoration and water supply infrastructure projects.⁵² According to Collishaw, "with the passage of Prop 1 in 2014, the voters recognized how precarious our water situation is in California, and specifically how vulnerable our disadvantaged

⁴⁹ Donald Nelson, W. Neil Adger, and Katrina Brown, "Adaptation to Environmental Change: Contributions of a Resilience Framework," *Annual Review of Environment and Resources* 32 (2007): 395-419.

⁵⁰ Collishaw, personal interview.

⁵¹ Ibid.

⁵² California Natural Resources Agency. "Proposition 1 Overview." Accessed on March 28, 2019. http://bondaccountability.resources.ca.gov/p1.aspx.

communities were."⁵³ The organization's leaders used conversations about long-term drought resilience to shed light on the underlying socio-political factors affecting drought vulnerability. Situating its work within conversations about resilience allowed them to tie S.H.E.'s advocacy priorities to larger, broad-base current issues.

In a similar vein, Avenue CDC's leaders reported that some of the organization's communication work in the aftermath of Hurricane Harvey revolved around messaging, particularly because they were in a position to counter potentially inaccurate narratives about the hurricane's impacts on different socioeconomic groups. Jenifer Wagley, Avenue CDC's deputy director, noted that "when you have a narrative that it was an equal-opportunity flood, you are also pushing the narrative that people have an equal path to recovery."⁵⁴ Moreover, Wagley said, the work done by Avenue CDC to address the topic of disaster resource access helped spark an important conversation within the organization about the role of socioeconomic inequality in disaster recovery. As a result, as of July 2018 when this fieldwork was conducted, the organization's leaders were considering ways to link the group's comprehensive community development work with arguments about environmental resilience as a narrative tool in broader fundraising efforts.⁵⁵

Like Avenue CDC, the Tejano Center for Community Concerns acted as a community hub in the immediate aftermath of Hurricane Harvey. While providing initial relief to communities following the hurricane, Adriana Tamez, the executive director of TCCC, observed that many of the volunteers were individuals who had benefited from TCCC's ongoing programs in the past and/or from the organization's previous relief effort in response to Hurricane Ike. She noted that this investment and commitment could be seen as evidence of TCCC's success in empowering community members to assist their neighbors and neighborhoods. In framing the aftermath of Hurricane Harvey, Tejano Center staff members indicated that they found it useful to mobilize the narrative of TCCC as a social capital-creator and, therefore, an environmental resilience-building actor. Utilizing the example of "clients becoming volunteers" also allowed the organization's leaders to simultaneously discuss TCCC's impact on disaster recovery in both immediate and long-term ways. As Tamez noted, "We mobilized volunteers [and] we created these volunteers through investment in social-capital building."⁵⁶

Realigning Practices

In addition to linking disaster narratives to community capacity-building work, leaders of the case study organizations also each sought out ways to align disaster recovery interventions with their organizational missions. In the case of Chinatown CDC, the organization's disaster programming has become deeply embedded in its other, more "traditional" community development work. On its face, CCDC's disaster training program accomplishes a series of objectives. It better prepares a community

⁵³ Collishaw, personal interview.

⁵⁴ Jenifer Wagley, personal interview, 27 July 2018.

⁵⁵ Ibid.

⁵⁶ Tamez, personal interview.

with a high proportion of elders, families with small children, and monolingual individuals for disasters that might otherwise be very challenging (Figure 4). The youth leaders teaching the workshops gain valuable knowledge about preparedness, community organizing, and public speaking while also building community connections (especially to older people in the community).



Figure 4: Chinatown CDC YSRO Photo and Emergency Guide

In addition, according to Norman Fong, CCDC's executive director, "In a way, going into communities to build safety led to us building a network of communication and leadership" that has strengthened resident associations.⁵⁷ Moreover, increased resident participation has helped strengthen connections with city-wide entities like the San Francisco Fire Department and Department of Building Inspection (DBI). As a result, CCDC's disaster education program is much more than just a preventative safety measure. Rather, Fong said, it is a tool CCDC can use to build "people power, or neighborhood power."⁵⁸

After Hurricane Harvey, leaders of the two Texas case study organizations initially responded by establishing distribution nodes at one of their facilities. Both subsequently expanded to helping people repair and rebuild their homes. While leaders of both TCCC and Avenue are still formulating their organizations' roles in the post-Harvey field, they already have tentatively identified ways in which they hope to engage with disaster over the long term. Adriana Tamez, the Tejano Center's CEO, for example, noted that the hurricane shed light on the condition of the housing stock within the organization's service, which "solidified our resolve to get back into construction work" with an eye to disaster-

⁵⁷ Fong, personal interview.

⁵⁸ Ibid.

resistant design.⁵⁹ Similarly, Avenue CDC's leaders see its role in the disaster continuum as centering on replacement housing, rebuilding assessments, and housing counseling.⁶⁰

Changing Organizational Capacity

Leaders of the case study organizations also described meaningful shifts in their organizations' makeup and capacity. As noted above, before Hurricane Harvey, Avenue CDC did not engage in disaster preparedness or response in any meaningful way. When the storm occurred, the organization's staff mobilized quickly to create a resource hub, an undertaking that required an increase in staffing as well as the creation of an additional space. To meet this need, the organization's staff grew from about 33 people before the storm to 44 employees in about a year.⁶¹ Moreover, several people working in the Housing Recovery Center that Avenue CDC opened after the storm came to that work from other organizing-related jobs in the organization.⁶² While these moves occurred largely in response to immediate staffing needs, leaders say they also produced significant cross-programmatic and crossdisciplinary interactions.

The Tejano Center and Self-Help Enterprises also grew and changed in the wake of natural disasters. The former was already a large organization, with approximately 200 employees. After Hurricane Harvey, it hired new employees and changed roles so it could provide housing recovery services. Similarly, during the peak drought years, S.H.E., which previously had less than 80 employees, added "a whole new 'business line' in emergency services" that, at its peak, had eight full-time employees.⁶³ (Although these eight people accounted for about 10 percent of S.H.E.'s overall staff population, Collishaw, its head, hesitated to attribute staffing growth during this time specifically to the drought.⁶⁴)

in the case of Chinatown CDC, it is similarly difficult to attribute growth directly to the organization's disaster planning activities. The organization has grown substantially since earthquake and fire safety trainings were first implemented. However, because the organization's disaster work is so intrinsically linked with other avenues of intervention, it is difficult to determine how this growth is specifically linked to the organization's investment in preparedness.⁶⁵

⁶¹ Ibid.

⁵⁹ Tamez, personal interview.

⁶⁰ Lawler, personal interview.

⁶² Angela Guerrero, personal interview, 27 July 2018.

 ⁶³ Tom Collishaw, email to the author, 13 August 2018.
 ⁶⁴ Ibid.

⁶⁵ Norman Fong, email to the author, 14 August 2018.

Challenges to Continued Disaster Work

Intertwined with the shifts listed above are significant challenges to continued disaster-related work by community-based organizations, including:

Emergent Community Needs

Leaders of the case study organizations identified a collection of community- and event-specific needs that emerged out of their groups' disaster-related work. These gaps were identified on the ground and in the field and are largely anecdotal, but they represent the challenge of maintaining nimbleness in the face of unexpected demands for services and resources. For example, in the immediate aftermath of Hurricane Harvey, leaders of Avenue CDC and the Tejano Center for Community Concerns discovered a few unexpected issues, including:

- A significant need for financial readiness education specifically focused on disaster planning, such as keeping ownership information up-to-date and preparing for the financial burden of either relocation or reconstruction;
- The need to move quickly after a major hurricane or flood. Most notably, mold remediation is an ongoing, expensive and immediate problem that has to be addressed as housing units are cleaned and repaired.
- The need to provide large quantities of critical household items in a short period of time. Notably, residents interviewed during a listening session at the Tejano Center for Community Concerns stressed the challenge of replacing damaged mattresses after Hurricane Harvey.⁶⁶ Subsequent interviews with organization staff (both at the Tejano Center and at Avenue CDC) reinforced the importance of making affordable mattresses available to affected households after water-related environmental disasters.

While some of these issues are event- and location-specific, they illustrate a need for a system that ensures that such issues are not ignored or forgotten until the next large environmental disaster occurs.

Funding and the Question of Staffing

Leaders of the case-study organizations all cited a lack of funding as a crucial obstacle to carrying out effective efforts to prepare for and respond to disasters. Moreover, while opportunities to link disaster and traditional community development work were seen as valuable by these individuals, they noted that resources to pursue these paths were not readily available.

Leaders of community organizations that take on new roles in the wake of rapid-onset disasters must also reckon with the fact that both community needs and the resources needed to carry out disasterrelated work are likely to ebb, flow, and change. Leaders of the Avenue CDC, for example, are grappling

⁶⁶ Group interview (names withheld), 26 July 2018.

with significant questions about the organization's size and structure in the coming years. Should they – and can they – sustain a staff of more than 40 people? Should they continue to focus heavily on housing recovery, or should they start shifting staff focused on post-Harvey disaster recovery efforts back to organizing?⁶⁷

Access to Relevant Resources

Many of the individuals interviewed for this paper identified access to information – including documentation of best disaster planning practices for community organizations, lists of available funding sources, model recovery program plans, and sample intake forms – as an unexpected challenge. There is a wide array of resources produced specifically for community-based organizations to use during and in preparation for disasters.⁶⁸ However, leaders of the four case-study organizations said relatively few of these resources have proven to be useful.

This disconnect raises the question of how disaster recovery resources geared toward community development practitioners can be produced and disseminated. NeighborWorks® America (NWA) is attempting to fill this gap, at least for its member organizations. For example, it provides frequently utilized technical assistance and well-attended professional development training opportunities for member organizations. NeighborWorks has also co-published "Navigating the Road to Housing Recovery," a comprehensive guide that catalogs housing-recovery resources and highlights potential recovery pathways for families and individuals.⁶⁹ Given this investment and demonstrated effectiveness in acting as a recovery resource hub for organizations affected by environmental hazard events, NWA is well-positioned to further meet resource needs by providing assistance with post-disaster documentation and by creating a larger database of sample documents and resources.

Getting a Seat at the Table

While leaders of each of the case study organizations possess crucial knowledge about their service areas, they are not always included in local-level formal decision-making processes related to disasters (for example, deciding how to allocate funding for disaster prevention and relief). It is difficult to pinpoint the reason why this is the case. Collishaw, the head of S.H.E, suggested that a lack of interest in local expertise could stem from the fact that risk-averse public officials are often wary of bringing outside groups into the formal decision-making processes.⁷⁰ Tamez, head of TCCC, noted the difficulty of gaining legitimacy for smaller, grassroots groups engaged in productive work. In Houston, she and other leaders of community groups have tried to address this issue by bringing together leaders of similar

⁶⁷ Jenifer Wagley, personal interview, 19 July 2018.

⁶⁸ Susan Ude, "Disaster Preparedness and Recovery For Community Development Organizations" (NeighborWorks America, August 2013).

⁶⁹ NeighborWorks America, "Navigating the Road to Housing Recovery: A Step-by-Step Guide for Individuals and Families," Accessed on September 21, 2018.

www.neighborworks.org/Documents/Community_Docs/Revitalization_Docs/NaturalDisasterRecovery_Docs/Navig atingtheRoadtoRecovery-DisasterGuide.aspx.

⁷⁰ Collishaw, personal interview.

organizations to lobby for more access to decision-making processes and also to carry out joint fundraising efforts.⁷¹

Need for Repeated, Ongoing Engagement

Both Avenue CDC and the Tejano Center for Community Concerns conducted door-to-door outreach immediately following Hurricane Harvey. While this was done out of necessity (as most other forms of communication were unreliable for weeks after the storm), leaders of both groups also found it was particularly effective. As a result, leaders of Avenue CDC have begun to consider the possibility of scaling down their comprehensive community development work to engage with residents on an individual level (what they call micro-community development).⁷² Chinatown CDC has engaged in this sort of organizing over decades. An organizer for CCDC noted in an interview that disaster engagement needs to be constant and ongoing as community members often transition out of urban SRO housing and individuals regularly forget their training or allow their preparation efforts to lapse.⁷³

Evaluation and Documentation

While leaders of the case study organizations were able to anecdotally articulate the importance of their disaster work, they also noted that actual impacts were difficult to measure and evaluate, especially because the groups do not have the staff needed to identify, collect, and analyze relevant data. Leaders of Avenue CDC, for example, saw that residents of the Near North Side, an area that where the group has long carried out a host of place-based comprehensive community development activities, organized very rapidly after the hurricane.⁷⁴ They believe this rapid response suggests a strong correlation between community development activities and environmental resilience.

Similarly, leaders of the Tejano Center for Community Concerns reported that many of their former clients came out to volunteer during and after Hurricane Harvey. They believe this suggests that proactive community development activities can create social ties that will prove to be important during emergencies.⁷⁵ Leaders of both organizations expressed a desire to conduct an in-depth study on these anecdotal observations but noted they do not have the funding or access to researchers needed to do so.

⁷¹ Tamez, personal interview.

⁷² Wagley, personal interview, 19 July 2018.

⁷³ Marie Lim, personal interview, 1 August 2018.

⁷⁴ Lawler, personal interview.

⁷⁵ Tamez, personal interview.

Conclusion

In many ways, disaster work is an uncanny parallel to normal community development work. As Jessi Snyder, a community development manager at Self-Help Enterprises, observed, "[this work] is, in some ways, nothing like what we do on a normal day and, in other ways, it [is] the culmination of everything that we do."⁷⁶ Her comments highlight the fact that community-based organizations fill a unique niche in domestic disaster response and recovery. As neighborhood-level actors they are nimble, possess local-level knowledge, and are accustomed to acting in moments of uncertainty. CBOs are also specifically positioned to bridge gaps in current systems for preparing for and responding to disasters, particularly the current void between funding for short-term emergency responses and long-term post-disaster recovery efforts.⁷⁷

However, CBOs also face a series of unique challenges that limit their ability to fill these needs. To a large extent, many of these challenges could be addressed through greater ongoing local collaboration as well as through increased financial and educational resources. While significant gains on these fronts have occurred over the past few years, environmental disaster work is still often seen as ancillary to community development. Recognizing its centrality is key to supporting the work of CBOs that can and should continuously engage in local disaster risk management.

⁷⁶ Snyder, personal interview.

⁷⁷ Laura M. Hammett and Katy Mixter, *Adaptive Finance to Support Post-Disaster Recovery* (Yale Center for Business and the Environment, 2017).

Works Cited

- "Avenue Fact Sheet 2018." Avenue CDC, May 2018, www.avenuecdc.org/wpcontent/uploads/2018/05/Avenue-Fact-Sheet-2018.pdf.
- Blake, Eric S., and David A. Zelinsky. *National Hurricane Center Tropical Cyclone Report: Hurricane Harvey*. NOAA, 2018. www.nhc.noaa.gov/data/tcr/AL092017_Harvey.pdf.
- California Natural Resources Agency. "Proposition 1 Overview." Accessed on March 28, 2019. http://bondaccountability.resources.ca.gov/p1.aspx.
- Carr Riggs and Ingram, LLC. Financial Statements, Supplementary Statements, and Single Audit Reports for Tejano Center for Community Concerns. 2018.
- Chinatown Community Development Center. "Chinatown CDC Awards." Accessed on September 21, 2018. www.chinatowncdc.org/about-us/awards.
- _____. "Chinatown CDC Impacts in 2018." Accessed on September 21, 2018. www.chinatowncdc.org/2018-accomplishments#pdf.
- _____. "Our History," Accessed on September 21, 2018. www.chinatowncdc.org/about-us/our-history.
- City of Houston. "Near Northside Complete Community Data Snapshot." October 27, 2017. Accessed on September 21, 2018. www.houstontx.gov/completecommunities/docs_pdfs/NN/NN_DataSnapshot_10_27_17.pdf.
- _____. "Near Northside, Super Neighborhood Resources Assessment." Accessed on September 21, 2018. www.houstontx.gov/planning/Demographics/docs_pdfs/SN/51_Near_Northside.pdf.
- City of Houston Planning and Development Department. "Denver Harbor/Port Houston, Super Neighborhood Resources Assessment." Accessed on September 21, 2018. www.houstontx.gov/planning/Demographics/docs_pdfs/SN/56_DenverHarbor_PortHouston.pdf
- _____. "East Houston, Super Neighborhood Resources Assessment." Accessed on September 21, 2018. www.houstontx.gov/planning/Demographics/docs_pdfs/SN/49_East_Houston.pdf.
- Comfort, L., B. Wisner, S. Cutter, R. Pulwarty, K. Hewitt, A. Oliver-Smith, J. Wiener, M. Fordham, W. Peacock, and F. Krimgold. "Reframing Disaster Policy: The Global Evolution of Vulnerable Communities." *Environmental Hazards* 1, no. 1 (1999): 39-44.
- Coyne, C. J., and J. S. Lemke. "Polycentricity in Disaster Relief." *Studies in Emergent Order* 4 (2011): 40-57..

- Cutter, Susan L., Bryan J. Boruff, and W. Lynn Shirley. "Social Vulnerability to Environmental Hazards *." *Social Science Quarterly* 84, no. 2 (2003): 242-61.
- FEMA (Federal Emergency Management Agency). A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action. 2011.
- Hammett, Laura M., and Katy Mixter. *Adaptive Finance to Support Post-Disaster Recovery*. Yale Center for Business and the Environment, 2017.
- Kern County. "County Signs Agreement With Self-Help Enterprises To Provide State Funded Drought Relief Assistance." May 5, 2015. Accessed on March 28, 2019. www.kerncounty.com/artman2/main/uploads/1/drought-aid.pdf.
- Lauer, Caroline. "Bounce Forward, Not Back: Leveraging Resiliency to Promote Equity." Joint Center for Housing Studies and NeighborWorks America, 2018. <u>www.jchs.harvard.edu//research-</u> <u>areas/working-papers/bounce-forward-not-back-leveraging-resiliency-promote-equity</u>
- Mooney, Chris. "Hurricane Harvey Was Year's Costliest U.S. Disaster at \$125 Billion in Damages." *The Texas Tribune*, January 8, 2018. www.texastribune.org/2018/01/08/hurricane-harvey-was-years-costliest-us-disaster-125-billion-damages/.
- NeighborWorks America. "Navigating the Road to Housing Recovery: A Step-by-Step Guide for Individuals and Families." Accessed on September 21, 2018. www.neighborworks.org/Documents/Community_Docs/Revitalization_Docs/NaturalDisasterRecove ry_Docs/NavigatingtheRoadtoRecovery-DisasterGuide.aspx.
- Nelson, Donald, W. Neil Adger, and Katrina Brown. "Adaptation to Environmental Change: Contributions of a Resilience Framework." *Annual Review of Environment and Resources* 32 (2007): 395-419.
- Nixon, Richard. "Presidential Statement to Congress: Nixon on Disaster Relief, 1970." In *CQ Almanac 1970*, 26th ed., 11-42-A-11-44-A. Washington, DC: Congressional Quarterly, 1971. <u>http://library.cqpress.com/cqalmanac/cqal70-1290778</u>.
- NOAA National Centers for Environmental Information. "U.S. Billion-Dollar Weather and Climate Disasters." Accessed on September 21, 2018. www.ncdc.noaa.gov/billions/.
- Norris, Fran H., Susan P. Stevens, Betty Pfefferbaum, Karen Wyche, and Rose L. Pfefferbaum. "Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness." *American Journal of Community Psychology* 41, no. 1-2 (2008): 127-50.

- Oliver-Smith, Anthony., and Susannah M. Hoffman. *The Angry Earth : Disaster in Anthropological Perspective*. New York: Routledge, 1999.
- Platt, Rutherford H. *Disasters and Democracy: the Politics of Extreme Natural Events*. Washington, D.C.: Island Press, 1999.
- "Population Over 25 Less Than High School (ACS 2017)." Map. Social Explorer. Social Explorer, n.d. Web. Feb 8 2019. (based on data from U.S. Census Bureau)
- Quarantelli, E. L. *What Is a Disaster? : A Perspectives on the Question*. London ; New York: Routledge, 1998.
- San Francisco Planning Department. "San Francisco Neighborhoods Socio-Economic Profiles (American Community Survey 2010-2014)." 2017.
- Schoups, Gerrit, Jan W. Hopkins, Chuck A. Young, Jasper W Vrugt, Wesley W. Wallender, Ken K. Tanji, and Sorab Panday. "Sustainability of Irrigated Agriculture in the San Joaquin Valley, California."
 Proceedings of the National Academy of Sciences of the United States of America 102, no. 43 (2005): 15352-56.
- Ude, Susan. "Disaster Preparedness and Recovery For Community Development Organizations." NeighborWorks America, August 2013.
- U.S. Census Bureau. *Race and Hispanic or Latino Origin, 2017 American Community Survey 5-Year Estimates.* Accessed on February 3, 2019. <u>https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml</u>.

Appendix I : Interviews

This research was conducted primarily through stakeholder interviews with four sets of interviewees, including:

- 1. Case study organization Executive Directors/CEOs
- 2. Case study organization staff members
- 3. Residents living within the service areas of the case study organizations
- 4. Topic experts and practitioners outside of case study organizations

Five residents were interviewed during one listening session held, facilitated, and interpreted by the Tejano Center for Community Concern on July 26th, 2018. Three unstructured interviews were conducted in July 2018 with topic experts to build a contextual framework. Seventeen semi-structured interviews (10 on-site and 7 by phone) were conducted over the course of three months, from June 2018 to August 2018, with individuals representing NeighborWorks Organizations, including:

Noel Baldovino	Business Development Manager, Avenue CDC, July 27, 2018 (in person)
Donna Blaze	CEO, Affordable Housing Alliance, July 20, 2018 (phone)
Tom Collishaw	President/CEO, Self-Help Enterprises, July 2, 2018 (phone)
Norman Fong	Executive Director, Chinatown CDC, July 11, 2018 (in person)
Victoria Garcia	Housing Recovery Counselor, Avenue CDC, July 27, 2018 (in person)
Angela Guerrero	Client Services Manager, Avenue CDC, July 27, 2018 (in person)
Gabby Hernandez	Housing Counselor, Tejano Center for Community Concerns, July 26, 2018 (in person)
Mary Lawler	Executive Director, Avenue CDC, July 12, 2018 (phone)
Marie Lim	Community Organizer, Chinatown CDC, August 1, 2018 (in person)
Kathy Payton	President/CEO, Fifth Ward CDC, July 5, 2018 (phone)
Blanca Saldana	Director of Family and Community Engagement, Tejano Center for Community
	Concerns, July 26, 2018 (in person)
Jessi Snyder	Community Development Manager, Self-Help Enterprises, July 26, 2018 (phone)
Adriana Tamez	Interim President/CEO, Tejano Center for Community Concerns,
	June 29, 2018 (phone)
Jessica Villarreal	Executive Administrative Assistant, Tejano Center for Community Concerns,
	July 26, 2018 (in person)
Jenifer Wagley	Deputy Director, Avenue CDC, July 19, 2018 and July 27, 2018 (phone, in person)

Appendix I-A: Interview Protocol

The following interview script was utilized for initial semi-structured interviews with organization Executive Directors and CEOs.

I am a graduate student conducting research as part of a fellowship offered by NeighborWorks America and the Joint Center for Housing Studies at Harvard University. My research is centered on understanding the role of community development organizations in disaster risk management: how the work that you do and the relationships that you build contribute to longterm resilience and how disaster work has changed your definition of business-as-usual.

Can you tell me a bit about the work that your organization does and the communities that you serve?

How were the communities that you serve immediately affected by [insert hazard event]?

And long-term?

How was your organization, specifically, immediately affected by [insert hazard event]?

And long-term?

Before [insert hazard event], did your organization engage in any explicit disaster preparedness work? If so, please describe.

Do you think that any of your organization's existing programs (other than explicit disaster preparedness programs) affected how your community responded to [insert hazard event]? How and why?

How do you define your role as a community development organization with respect to natural disaster?

How has this role evolved over time?

What role has your organization play in preparedness/relief/response in the past?

Are there things you would change about this? What would you do differently and what are the barriers to achieving this?

Do you work with other organizations and/or public institutions? How does your work fit into the larger disaster response landscape?