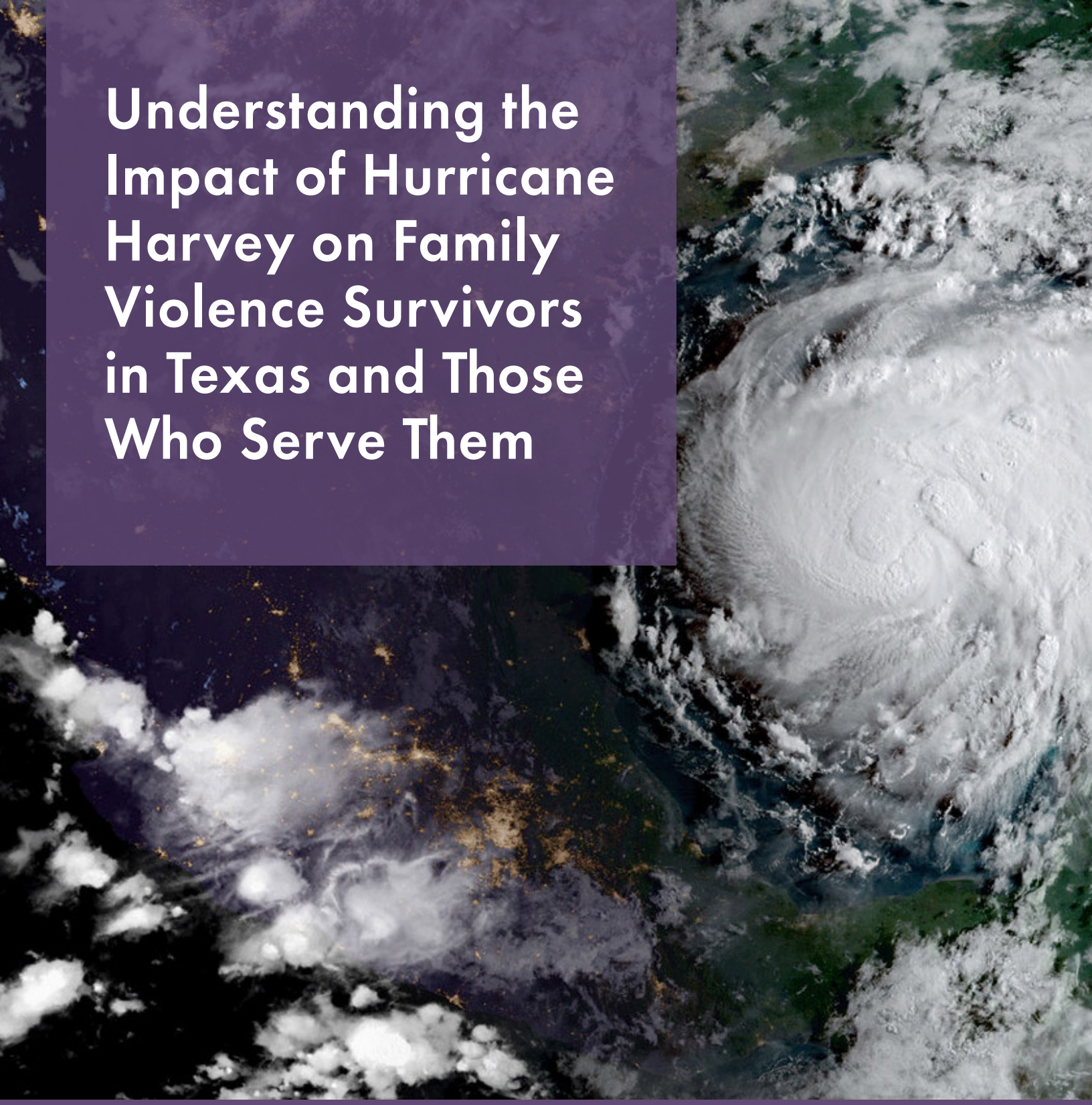
Understanding the Impact of Hurricane Harvey on Family Violence Survivors in Texas and Those Who Serve Them



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tcfv
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EXECUTIVE SUMMARY

During Hurricane Harvey, 19 trillion gallons of rainwater soaked Texas, triggering the largest disaster response in Texas history (FEMA, 2017). Over 100,000 people were rescued, and 80,000 homes each took on at least 18 inches of floodwater (FEMA, 2017). Forty-one counties were declared federal disaster areas (FEMA, 2017). Twenty-eight family violence organizations serve the 41 counties affected by Hurricane Harvey and little is known about how this event impacted survivors of family violence in Texas.

In order to better understand the issue and how Hurricane Harvey impacted family violence programs and the survivors they serve, the Texas Council on Family Violence (TCFV) commissioned the current research project.

Findings from original focus group and interview data, as well as secondary data, indicated surmountable short and long-term effects of Hurricane Harvey on survivors of family violence and the organizations who serve them.

KEY FINDINGS

Increased Vulnerability

"...community and those apartments looked like they was just going to come down at any minute. I just got on my knees and prayed, I was scared, though, I really was. I mean, I just got on my knees and prayed because, I mean, there wasn't nothing else I could do. I wasn't worried about the water getting that high because I had looked out in the parking lot and it was kind of okay but the streets were all flooded and just, I mean, it was horrible. I was scared, I mean, and my doctor was telling me, "Don't stress," well, I stressed, stressed, stressed." – Survivor

Survivor Impact

- Lack of information regarding the severity and duration of Hurricane Harvey limited the implementation of preparation plans, which led to yet another chaotic and traumatic experience for survivors of family violence.
- Increased vulnerability for family violence due to limited resources, pressures on community infrastructures, and the need for survival.
- Survivors were exposed to perpetrators who were also displaced and ended up in the same general emergency shelters and camps.
- Exposed to adverse effects of the hurricane in their communities, including experiencing and witnessing flooding and massive destruction.
- The most vulnerable communities of survivors continue to be displaced (e.g., homeless individuals, Spanish-speaking, monolingual individuals, and immigrant communities).

Organization Impact

- Although organizations had preparation plans, staff dealt with limited resources due to the length of the hurricane and misunderstandings about the severity of the storm.
- Staff experienced trauma exposure similar to that of survivors as, many staff lost their own homes and property.
- Staff reported trauma-related symptoms and burnout.
- Staff reported infrastructure damage that limited their ability to do their jobs in the aftermath of the storm.

Systems Impact

- Family violence organizations and critical community partners who support survivors were severely impacted in their abilities to provide services and safety to survivors (e.g., because a courthouse was destroyed and the ability to serve protective orders was hindered).
- District Attorneys in impacted areas reported that domestic violence rates escalated in frequency and in severity.
- Organizational disaster protocols were not up to par given the intensity of the storm and the damage that ensued.
- Lack of a statewide response for family violence organizations left programs scrambling to deal with the hurricane and its aftermath.
- Organizations continue to deal with the aftermath of the hurricane and its large impact on their funding structures, staffing, and community resources.

"They were equipped for a day or two and it turned into three, four and five days."
– TCFV Staff

Voluntary Evacuation

- Family violence agencies were left to identify open beds at various other shelters, which was inefficient and cumbersome due to the lack of organized coordination (e.g., two beds here, three beds there).
- Clients were separated to different locations breaking important connections between survivors.
- Agencies were left to pay for unplanned and unexpected expenses of fuel, meals, and transportation.
- Receiving shelters experienced capacity issues and incurred increased unrecoverable costs.

Shelter In Place

- Staff and survivors experienced unanticipated extended lengths of stay at shelters due to the severity of the storm and flooding.
- Staff worked four to five days without relief.
- Shelters ran low on supplies throughout the hurricane and immediately after.
- Shelters were land locked by water levels with no entry and no exit, which interfered with evacuation and receipt of supplies.

Mandatory Evacuation

- In some counties, survivors were moved to temporary emergency shelter, but as the hurricane unfolded other evacuation strategies had to be implemented.
- In some counties, eventually the temporary shelters were evacuated, requiring survivors to relocate a second or third time.
- Survivors scattered with other displaced populations with survivor safety repeatedly compromised as some never returned to the original shelter.
- Safety of survivors in temporary shelters compromised when exposed to perpetrators.

STRENGTH & RESILIENCE

- Despite challenges, there was increased sense of connection, support, and resilience among survivors and staff.
- Increased faith in community and nation – communities experienced record levels of giving of supplies and donations.
- Resiliency of family violence organizations doing an amazing job of continuing life-saving support and assistance to survivors, all while laboring under difficult circumstances with limited physical resources in times of increased need.

FUTURE NEEDS & PRIORITIES

Basic Support

- Support agencies with fuel and transportation funds for evacuating survivors.
- Support recipient agencies with flexible funds for increased expenses.
- Support survivors with displacement and legal issues.

Training

- Provide Intimate Parter Violence (IPV) training to local, state, and federal disaster responders
- Align and seek partnerships with disaster response experts with family violence organizations

Investment Needed

- To create a statewide coordination strategy plan for evacuation and preparedness keeping survivor safety at the forefront.
- To engage in future research on impact to children with dual experience in natural disaster and family violence.
- To facilitate justice system improvements to prevent future increased vulnerabilities to survivors.

"In the month following Harvey, [organization] saw the largest need for services in the organization's history. New clients in the month following Harvey increased by 68% with the need for housing more than doubling." – Organization Leader

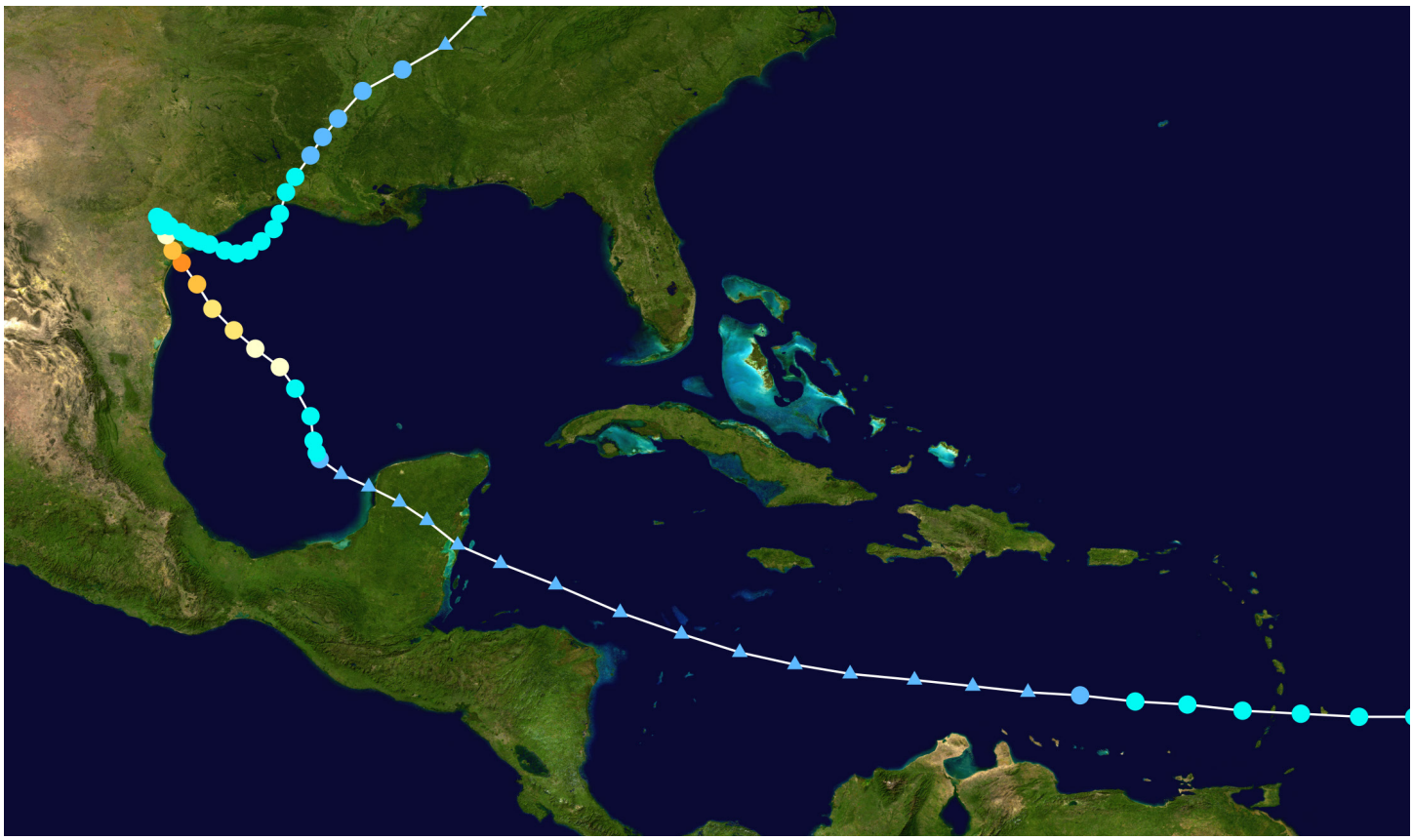
ACKNOWLEDGMENTS

The Texas Council on Family Violence (TCFV) would like to acknowledge and thank The Institute on Domestic Violence & Sexual Assault at The University of Texas at Austin, the Texas Health and Human Services Commission, and the United States Department of Health and Human Services for their collective support of this project. In addition, TCFV is grateful to the many survivors, staff, and program leaders who contributed selflessly to this research effort. Authors would like to thank all study participants who eagerly shared their experiences in the hope of informing future preparations and offer special acknowledgment to Drs. Lillie Macias and Gail Walton for their contributions.

INTRODUCTION

At the commencement of this project, slightly over a year had passed since Hurricane Harvey made landfall in August 2017 as a Category 4 hurricane at the Texas coast (See Figure 1). This was the first hurricane of this magnitude to hit Texas since 1970 (National Weather Service, 2017). During Hurricane Harvey, 19 trillion gallons of rainwater soaked Texas triggering the largest disaster response in state history (FEMA, 2017). Over 100,000 people were rescued, and 80,000 homes took on more than 18 inches of floodwater (FEMA, 2017). Forty-one counties were declared federal disaster areas (see Figure 2; FEMA, 2017). Twenty-eight family violence organizations serve the 41 counties affected by Hurricane Harvey and little is known about how this event impacted survivors of family violence in Texas. In order to better understand the issue and how Hurricane Harvey impacted the programs that serve them, the Texas Council on Family Violence (TCFV) commissioned the current research project. Researchers collected original focus group and interview data, as well as conducted analysis of secondary data provided by TCFV and their research partner, The Institute on Domestic Violence & Sexual Assault (IDVSA) at the University of Texas at Austin, in order to bring attention to lingering effects of Hurricane Harvey for Texas family violence survivors, staff that serve them, and organizational leadership.

Figure 1. Map of Hurricane Harvey's Path



Source: Image by OverlordQ

LITERATURE REVIEW

Natural disasters throughout the world have left indelible imprints on our societies, including increasing the risk for those affected to experience intimate partner violence (IPV). In an exploratory study after the Deepwater Horizon oil spill in the Gulf of Mexico, researchers found that study respondents directly impacted by the spill were more than twice as likely to experience physical and emotional IPV (Lauve-Moon & Ferreira, 2017). Similar findings were found in studies post Hurricane Katrina (Buttell & Carney, 2009; Harville, Taylo, Tesfai, Xiong, & Buekens; Schumacher et al., 2010), post Haitian earthquake (Campbell et al., 2016), and post Sri Lankan tsunami (Fisher, 2010). Experiences of violence after disasters appear to be gendered, in that women experience increased rates of violence when compared to men (Bell & Folkerth, 2015). One study showed an increase from 33.6% to 45.2% victimization rate for women and 36.7% to 43.1% for men after experiencing Hurricane Katrina (Schumacher et al., 2010).

In addition to understanding rates of violence post-disasters, researchers have significantly contributed to understanding outcomes for individuals who have histories of IPV. For example, researchers found that pre-victimization experiences predicted the likelihood of survivors to experience victimization post natural disasters (Schumacher et al., 2010). Additionally, researchers found that those who experienced IPV were at increased risk for developing post-traumatic stress disorder and depression post natural disaster (Schumacher et al., 2010; Bell & Folkerth, 2015). Research indicates that not only the direct trauma of experiencing a natural disaster may result in mental health disorders, but also that the experience of secondary stressors or trauma (e.g., death of a loved one, loss of property) also significantly contribute to mental health issues in survivors (Kesseler et al., 2012). Additionally, research indicates that individuals not directly affected by natural disasters, but directly linked to the devastated communities, can also develop mental health issues as was the case of a large Haitian community here in the U.S. They reported high rates of post-traumatic stress disorder (PTSD) after the Haitian earthquake in 2010 (Smith et al., 2014). Large scale natural disasters have long reaching consequences for those impacted directly and distally (e.g., family and friends).

CHILDREN, NATURAL DISASTERS AND TRAUMA

Victims of natural disasters and intimate partner violence were not the only group to experience trauma. Researchers have also looked at experiences of abuse and violence among children and adolescents. In a study of post-Haiti earthquake, researchers found that the majority of adolescent participants reported that physical, psychological, and sexual abuse had occurred both prior to and after the earthquake, by either a boyfriend or family member (Sloand et al., 2017). Another study surveying 2,000 adolescents who had experienced tornadoes in 2011 in Tuscaloosa, Alabama and Joplin, Missouri showed that prior IPV most robustly related to suicidal ideations post-disaster (Zuromski et al., 2018). PTSD and major depressive disorder were also positively associated with suicidal ideations but lesser in degree than IPV. Other research suggests that prior trauma exposure is related to increased risk of distress for children post-disaster (Sallouma, 2011). This finding is important given that children of survivors may be at increased risk of developing mental health issues following a natural disaster when compared to children who have no exposure. Moreover, child survivors from underserved communities may be at increased risk as one study found that socioeconomic status, race, and ethnicity were predictors of vulnerability in disaster situations (Becker, Turner, & Finkelhor, 2010).

IMPACT AND RESILIENCE OF PROFESSIONALS

As noted above, the impact of the trauma caused by natural disasters is far reaching. Professionals working to support survivors, especially those who are from the affected community and likely experience the natural disaster themselves, are not immune to developing mental health symptoms (Toson, McTighe, & Bauwens, 2015). Research has particularly shown that, like survivors, first responders and counselors with a history of trauma are more likely to experience compassion fatigue (Toson, McTighe, & Bauwens, 2015). However, research also indicates the tremendous resilience of helping professionals (e.g., those who reported greater resilience experienced less traumatization), especially those who also experienced the natural disaster along with the communities they serve. Tosone and colleagues (2015) found that volunteers who were also survivors fared better in the area of post-traumatic growth than volunteers who had not experienced the natural disaster. Lambert & Lawson (2013) found that self-care strategies were found to minimize burnout, compassion fatigue, and vicarious traumatization for professional counselors.

Current Study

The goal of the current study was to understand the multi-dimensional impact of Hurricane Harvey on family violence survivors and affected programs in Texas.

Table 1. Research Aims

RESEARCH AIM	RESEARCH QUESTIONS
1. Understand the experience and impact of Hurricane Harvey on survivors of family violence in the impacted area.	What preparations were made in advance of the hurricane and what role did the context of family violence play? What were survivors' experiences during the hurricane and what impact has it left on their lives?
2. Understand the experience and impact of Hurricane Harvey on staff members of organizations serving survivors of family violence in the impacted area.	What preparations were made in advance of the hurricane, both personally and professionally? What impact has the reality of experiencing Harvey, while also serving survivors of family violence had on their lives? Have there been lingering results on staff morale, vicarious trauma and/or traumatic growth?
3. Understand the impact on the operations of organizations and their partners (e.g., law enforcement, district attorney offices) serving survivors of family violence in the impacted area.	What has the impact been on the operations and sustainability of organizations serving survivors of family violence? How have organizations supported survivor staff?
4. Develop recommendations from research participants to funders and leaders for future planning.	What are lessons learned that would help in preparation for a future natural disaster?

This project entailed the collection of original data for the purposes of this study and secondary data analysis of data gathered by TCFV through site visits within one month of the hurricane, six weeks post-hurricane and at a one-year year follow up, in addition to a short survey three months following the hurricane, to assess the needs of programs. Additionally, researchers partnered with IDVSA, to conduct secondary data analysis on a subset of data that was collected during their large-scale research project on understanding the availability of services for survivors in Texas. Specifically, they shared de-identified data with researchers from survivors and staff where experiences of Hurricane Harvey were discussed (see Table 2 for data sources).

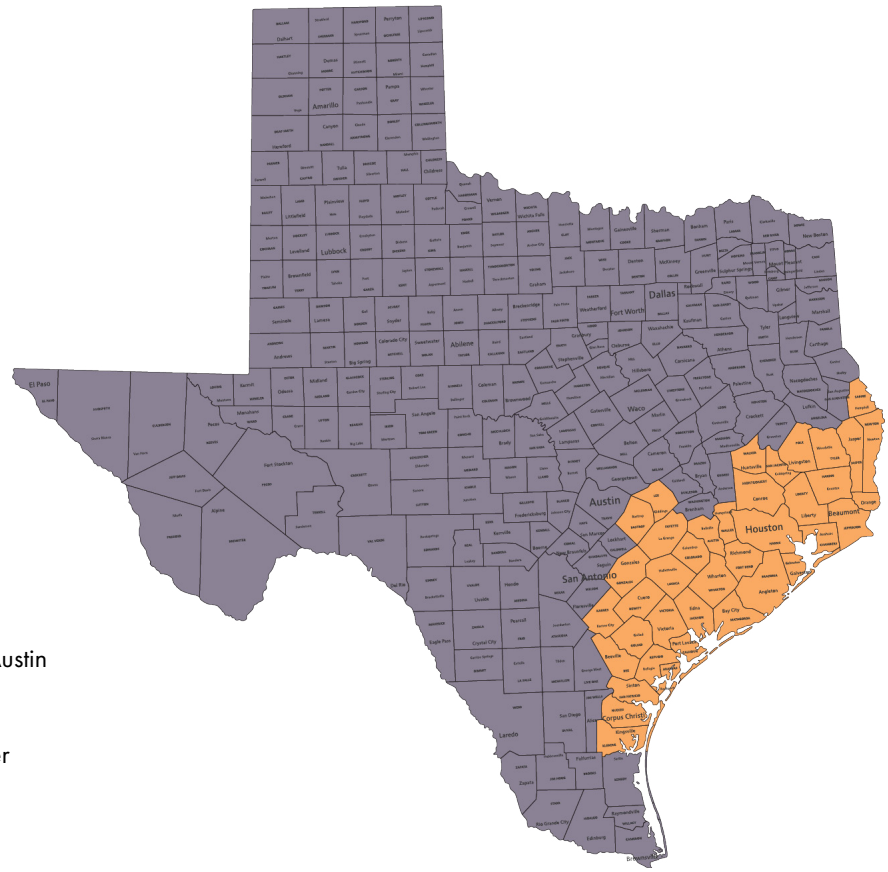
Table 2. Data Sources

ORIGINAL DATA COLLECTION	Focus groups with survivors of family violence and Hurricane Harvey Focus groups with staff serving survivors of family violence in the impacted area Virtual interviews with Executive Directors and participants
SECONDARY DATA COLLECTION	**Texas Council on Family Violence Data** Site visit documentation Survey collected immediately following Hurricane Harvey **Institute on Domestic Violence and Sexual Assault/TCFV Data** Interviews with survivors of violence Interviews with staff Available survey data on impacted sites

CURRENT STUDY

Forty-one counties were considered federal disaster areas (FEMA, 2017), in which 28 family violence organizations operated (See Figure 2). The affected family violence organizations serve from one to twelve counties in their geographic areas, with the majority serving up to five. The majority (n =18) of the 28 organizations identified their organization as a dual sexual assault and family violence agency. Twenty-six of the 28 organizations operate a 24-hour hotline. Twenty of the organizations offer shelter services and 25 organizations provide mental health services. Eighteen organizations provide housing assistance. Twenty-two organizations reported that they collaborate with law enforcement.

Figure 2. Area Impacted by Hurricane Harvey



Impacted Area

Family Violence Programs in the Impacted Area

Asian Family Support Services of Austin
Atascosa Family Crisis Center, Inc.
Aid to Victims of Domestic Abuse
Bastrop County Family Crisis Center
Bay Area Turning Point
BCFS Health & Human Services
Daya
Family Crisis Center of East Texas
Family Services of Southeast Texas
FamilyTime Crisis and Counseling Center
Focusing Families
Fort Bend County Women's Center, Inc.
Guadalupe Valley Family Violence Shelter
Hays-Caldwell Women's Center
Houston Area Women's Center
Katy Christian Ministries
Mid-Coast Family Services
Montgomery County Women's Center
Northwest Assistance Ministries' Family Violence Center
Resource and Crisis Center of Galveston County
SAAFE House
Shifa
The Bridge Over Troubled Waters
The Crisis Center of Matagorda and Wharton Counties
The Montrose Center
The Purple Door
Twin City Mission - Domestic Violence Services Program
Women's Center of Brazoria County

STUDY PARTICIPANTS

In total, this study analyzed data from 22 survivors, 29 staff members, 9 organizational leaders (including two from partner organizations), and 14 service providers in partner organizations, from the 28 family violence programs affected by Hurricane Harvey (see Table 3).

In addition, site visits to 15 counties were conducted by TCFV within one month of the hurricane, six weeks post-hurricane, and at one year post-hurricane. Notes from TCFV staff from the site visits were analyzed along with a needs assessment survey that was sent out to organizations within three months post-hurricane. The needs assessment survey collected information from 14 organizations on the immediate aftermath of Hurricane Harvey and immediate needs.

The group interviews were conducted with service providers with varied roles, including legal, family, housing, justice and survivor advocates, case managers, program directors, and mental health providers. Some survivors also participated in focus groups, while others completed individual interviews. Table 4 depicts the demographic information of the participants receiving services related to domestic violence.

Table 3. Data from Focus Groups and Interviews

DATA SOURCE	NUMBER OF PARTICIPANTS	COUNTIES REPRESENTED
Survivors:		
Focus Groups	16	Harris and Victoria Counties
Interviews (In-Person and Virtual)	6	Harris County
Staff:		
Focus Groups	28	Harris and Victoria Counties
In-Person Interviews	N/A	
Virtual Interviews	1	Harris County
Organization Leadership & Partner Organizations:		
In-Person Interviews	1	Victoria County
Virtual Interviews	8	Aransas and Harris Counties
Virtual Focus Group	14	Harris County

Table 4. Survivor Demographics

SURVIVORS	
Age	21-54
Gender	Female = 21 Transgender = 1
Employment	Employed Full-Time = 3 Employed Part-Time = 3 Unemployed =14 Retired =1 N/A = 1
Primary Language	English = 18 Spanish = 4

DATA ANALYSIS

The researchers engaged in a thematic analysis of the data which included initially reading through the transcripts grouped by membership (e.g., survivors, staff, organizational leaders) while listening to the recordings of the sessions (if available) and reading all documentation provided by TCFV to become familiar with the data. The researchers then re-read each transcript, notes, and qualitative survey responses to code the content based on the ideas being expressed. The codes were then organized into themes. Themes were synthesized and are presented in response to research aims and questions.

Hurricane Harvey intensified from a tropical depression to a hurricane in less than 40 hours, leaving very little preparation time for Texas residents. The immediate aftermath, as is the case with natural disasters of this magnitude, was utter chaos and survival. Over 100,000 individuals required rescuing, many spending up to several days on roofs waiting for assistance and exposed to toxic water conditions. Family violence organizations and staff were not immune to the crisis. Staff described having to be rescued, family being stranded in rising water only to be rescued several days later, and illnesses due to the water exposure. One domestic violence organization was completely surrounded by water with no way in or out of the area. Another organization had to put out a crisis call for critical supplies (e.g., diapers, food and over the counter medicine) that were ultimately delivered by raft. Another organization sheltered in place, but because of the rising water levels, staff and clients were forced to evacuate into a makeshift shelter until eventually the entire area came under mandatory evacuation orders. Another staff member reported sitting on her roof for three days where she waited for help, witnessed her livestock drown, and her house and all of her possessions destroyed, including a brand-new car. Extraordinarily, organizations' staff and leadership reported tremendous support and received help from their own communities and local businesses. Several staff reported receiving support from their own organization, such as shelter, food and other donations (e.g., clothes) that got them through the initial crisis.

"August 2017 was a month of devastation for our community and the survivors that we serve in an unforgettable way." – Executive Director

STUDY RESULTS

AIM 1: UNDERSTAND THE EXPERIENCE AND IMPACT OF HURRICANE HARVEY ON SURVIVORS OF FAMILY VIOLENCE

What preparations were made in advance of the hurricane and what role did the context of family violence play?

PREPARATIONS

Survivors described throughout the study that they underestimated the severity of Hurricane Harvey. Therefore, many of them did not feel a sense of urgency to do any preparation in the days and hours leading up to the crisis point. Survivors noted that they were able to buy some additional food, water, and battery supplies; however, they did not plan on having to take additional steps to secure their homes, possessions, or to be prepared for evacuation. Throughout the groups, survivors noted that their lack of urgency was partly due to previous occasions when the weather did not result in the severe impact predicted by news outlets. It was discussed that as people started to observe the intensity of the rain increase and the water continue to rise, they reached out to providers, family, and other community members.

"I don't think any of us expected the amount of damage that it caused." – TCFV Staff

For those who had been staying at home, they mentioned that the water slowly began to flood their houses, cars, and other possessions. Several of the survivors who participated in the groups noted that they had to be rescued from the flooding or knew of other community members who had to be rescued due to the level of water that had accumulated in their area.

EXPERIENCE LEADING UP TO HARVEY

For those individuals who were already at a family violence shelter, they developed a plan with staff to possibly evacuate or to stay at the facility depending on their present needs and the services available within their organization. Some survivors had prepared to stay with family members if they were living in an area where flooding was likely to occur. Unfortunately for some of the survivors who were interviewed, this resulted in an increased vulnerability for violence. For example, one survivor mentioned, "I had nowhere to go and I went to my mom's house and that turned out to be a really abusive situation that landed me in a hospital for seven or eight days..."

Most of the survivors who were interviewed noted that their experience as the hurricane took place was one of survival and crisis. For those who had the option to evacuate at the time and were able to do so, they were able to "get out." At that point, some survivors went to the Red Cross shelter, a domestic violence shelter, or the home of a friends or a relative. Others had to remain in the area because it was riskier to leave their location due to the depth of the water. Several survivors reported feeling scared about how Hurricane Harvey would impact them and the services available to them once the hurricane had passed.

CONTEXT OF FAMILY VIOLENCE

When answering the research question about the role of family violence in the way survivors experienced the hurricane, the theme that was identified across respondent groups was "increased vulnerability." These interviews reveal that family violence may present unique challenges for individuals living in rural areas outside of major cities with limited access to services. Natural disasters complicate a survivor's ability to cope with family violence (as is explored in later themes), and the aftermath may expose perpetrators displaced with their families in less private settings like hotels and camps. This may be because knowledge of domestic violence may be lower in rural counties and violence may be more easily hidden from health and social workers. Thus, individual screening may be urgently needed in these areas to prevent a surge in referrals following natural disasters.

What were survivors' experiences during the hurricane and what impact has it left on their lives?

PERSONAL IMPACT

After Hurricane Harvey had passed, survivors indicated that they were able to assess the damage it had done to their property. Frequently mentioned issues were the development of black mold throughout their house, the collapse of ceilings, windows, and walls, as well as loss of clothes, toys, and medication/medical equipment.

For those individuals who lost their homes, this meant that they had to find other places to live. For some, this resulted in living with family members, going to a shelter, or moving into a hotel. Survivors noted that FEMA provided some vouchers for hotel stays while reconstruction efforts were undertaken at their houses. This process, they described, could last for several months at a time. Several survivors were able to move into transitional housing at shelters in the Houston area while others had to relocate to other areas around the state.

"Our domestic violence rate went up a lot as expected but so did a lot of our mental health issues. Kids grades have had a harder time this year and those that were receiving services or needing services before the storm definitely have an elevated need now."
– Organization Leader

Several individuals noted that they had been worried about being assaulted or robbed by other members of the community. They described that they had witnessed others looting and taking items from stores. Another theme that was highlighted through the interviews was increased community violence. It was noted that community members would yell at each other or take items from people waiting in line at different stores. Additionally, it was mentioned that there were concerns about others coming into homes to take additional items to survive. Other survivors noted that they had been victims of vandalism and had several items stolen from their home while they were at a hotel or a shelter.

Survivors also described that there were limited options for services for physical and mental health. For example, some individuals noted that they had been discharged early from a hospital as the resources at that facility were very limited. They then sought services at the Red Cross shelter in order to continue to receive the medical attention they needed. Survivors also described the added trauma and stress of having experienced the hurricane and disclosed symptoms of PTSD and depression from some and physical health issues for others.

"They broke all the windows in the back of our house and vandalized it. And the house had flooded. That was hard." – Survivor

"We had some that emotionally were distraught and we're often still seeing people come forward that had PTSD from it. The first good rainstorm we had after Harvey was a nightmare because we had children crying as well as adults crying. It was just something that triggered a lot of memories and emotionally that's been hard." – Organization Leader

NEEDS OF SURVIVORS AFTER HARVEY

Most frequently reported by survivors was the barrier to, and need of, immediate and long-term housing solutions. All but one survivor stated that housing assistance was a continued need and that the time limits of housing and other services were a barrier in their ability to establish stability in their lives. The next most frequently mentioned needs (emphasized at similar rates by both survivors and staff) were transportation, immigration services, adjustment of insurance claims, and community outreach.

Survivors and other community members noted that transportation continued to be a significant challenge after Hurricane Harvey. They described a public transportation system that was limited and complex to navigate for those individuals who had lost their vehicles. Transportation is particularly important in times when government systems may be overwhelmed in the aftermath of natural disaster, because survivors may feel more vulnerable moving from place to place and accessing services.

Immigration services and outreach to hard-to-reach communities such as immigrant Latino adults, homeless individuals, and older adults can help address family violence following natural disasters, when space and housing resources are limited.

In addition, a common theme was the delay in the process to replace those things that were lost. Managing insurance policies was a taxing process as there were many hurdles to overcome, including providing relevant documents when those had been part of the flood losses.

Uniquely emphasized by most survivors was the need for employment services. Survivors reported that entering the workforce can be challenging for survivors who may have a limited work history. Women interviewed also pointed out that working could support their well being by reducing stress and giving them more to do with their time. This is a particularly important finding given the role of economic abuse in family violence and against survivors. Adding the experience of a natural disaster may exasperate circumstances for survivors.

COMMUNITY IMPACT AND SUPPORT

Survivors noted that there was an emotional toll in learning about the ways in which community members had been affected by Hurricane Harvey. They described that it was difficult to watch people in the community be rescued from homes, the destruction in the city's infrastructure, learn about the numbers of deaths and people missing in their respective towns. For example, one survivor described seeing her family members be rescued on national television. It was noted that watching news outlets was particularly distressing as every day there was information about how these issues had worsened.

A common theme that was highlighted by survivors was that despite the challenges that Hurricane Harvey created for the community, there was a sense of connection, support, and resilience among its members. Some participants of the focus groups noted that they were able to increase their faith in their community as people made donations (e.g., money, food, formula, diapers, clothing) as did people around the country. Survivors also described several other ways in which they felt supported, including emotional support provided by other women in the shelter, resources and services by staff members, and aid from neighbors.

"Everybody in my mom's neighborhood, I know, pulled together after the storm, they just really pulled together." – Survivor

Barriers to immediate and long-term housing

Limited and complex transportation systems

Impact and need for employment services

AIM 2: UNDERSTAND THE EXPERIENCE AND IMPACT OF HURRICANE HARVEY ON STAFF MEMBERS OF ORGANIZATIONS SERVING SURVIVORS OF FAMILY VIOLENCE

What preparations were made in advance of the hurricane both personally and professionally?

PREPARATIONS

Similar to the experiences described by survivors, staff members noted that they underestimated the potential impact of Hurricane Harvey. Most of the organizations had some pre-existing plans available for tropical storms. These protocols were reviewed at least once a year; therefore, staff members reported that they were familiar with the steps to take in the presence of a storm. This included reviewing evacuation and safety plans.

Some of the steps taken by staff members, as mentioned above, were to determine if individuals receiving services at the time would need to be evacuated. This allowed for providers to create safety plans collaboratively with their clients if this was needed. As part of the staff's preparation plan, there were also discussions to determine essential personnel during the storm and the roles that they would need to fulfill during their shifts.

Although staff described ensuring that there were enough batteries, flashlights, food, and water at the shelters, they also noted that in the days prior to the hurricane they believed flooding would likely not be a problem in the area. This contributed to staff returning home and planning to return to their place of employment the following day. However, the flooding occurred quickly, preventing several staff members from arriving to their assigned shifts.

EXPERIENCE LEADING UP TO HURRICANE HARVEY

Most of the providers shared that when the storm began, they monitored the news and the development of Hurricane Harvey with the purpose of determining any necessary next steps. They also described that throughout the day staff members continued with their regular tasks and overall routines.

Staff members throughout the interviews mentioned that as the weather began to shift, it became clear that they might need to enact the evacuation and preparation plans that they had previously reviewed. As part of these preparation plans, staff had to determine the safety of the building. If it was not feasible for survivors and staff to remain at their building, an evacuation plan was then enacted to ensure everyone's safety. For some organizations, this meant for both staff and survivors to remain in place. One provider noted that she had to remain at a domestic violence shelter for almost a week.

Some staff members noted that as they monitored the storm, it became apparent they would need more resources than those currently available at their location (e.g., food) and had to mobilize to be able to receive additional aid. It was highlighted throughout the interviews that it was helpful to reach out to organizations to collaborate in the sharing of available resources.

What impact has the experience of Harvey while also serving survivors of family violence had on the lives of staff members?

ORGANIZATIONAL IMPACT AND AID

Staff members identified different levels in which Hurricane Harvey impacted their organizations. Infrastructure damage was one of the main concerns that was expressed throughout the conducted interviews. Some of the examples included a collapsed ceiling, lack of phone services, and loss of power. Another identified theme was that staff themselves were affected by Hurricane Harvey. This had a significant impact on their ability to provide services and return to their jobs.

Organizational leadership was able to provide some resources and support for staff members. One of the main methods of support was through communication among staff members to ensure everyone's safety, coordinate tasks, and identify any additional resources that were needed or could be provided to staff members. The ability to communicate with one another also allowed for some staff members to work from home and continue to be paid for their services. Staff members mentioned that this made a significant difference in their lives as worrying about their job security and compensation was a main source of stress for them at the time.

NEEDS OF STAFF AFTER HURRICANE HARVEY

It was mentioned that several of the staff members continued to undergo significant stressors related to the damage caused by Hurricane Harvey for several weeks, even months after. This interfered with their ability to reintegrate to their regular routine and job tasks.

Infrastructure repairs were identified as one of the most immediate needs that staff had as this would limit their ability to provide services to survivors. For example, staff members described how it took several months to finalize repairs to their buildings, restore access to their electronic records and communication, and activate their phone services.

INCREASED VIOLENCE

Additionally, staff and advocates in the group interview noted an increase in the number of referrals for individuals affected by family violence. Many staff and advocates also struggled with the trauma of displacement following the storm. Service providers pointed out that affordable housing was quickly occupied following the storm, leading to

greater homelessness among survivors. District Attorney offices noted that at the onset of the Hurricane impact, they saw a decrease in their number of family violence cases. They attributed this to the fact that people could not reach or find their office. Staff members noted that as the days passed, they began to observe the same number of cases as before the hurricane; however, the cases were the more severe. Staff described that the affected individuals noted an increase on their overall level of stress following the hurricane related to their displacement and economic stress. The staff indicated that it is likely that this translated to higher rates of domestic violence. Staff also indicated that they observed an increase in the reports for felony-level domestic violence offenses, including strangulation. Additionally, they reported an increase in domestic violence-related murders in the months following Hurricane Harvey compared to the previous calendar year. Staff reported that county-wide filings for family violence charges increased after the hurricane. Table 5 shows the increase in the risk assessments conducted after Hurricane Harvey in order to determine the need for protective orders, briefs, and other types of necessary follow-up procedures. Law enforcement staff members noted that their ability to conduct assessments and serve protective orders to the respondents was impaired due to the damage to their infrastructure and displacement of their offices.

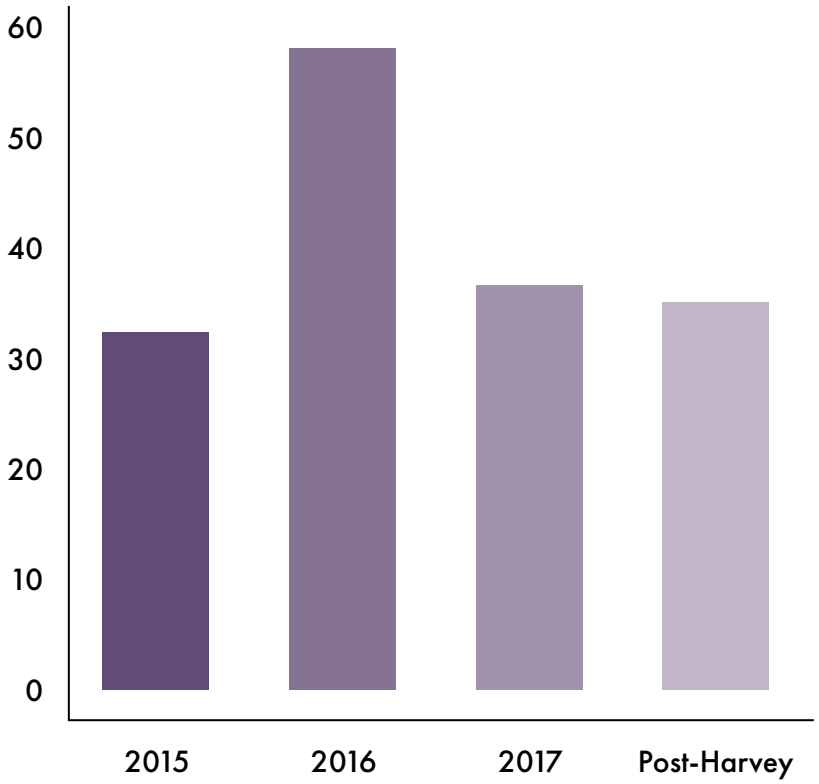
Table 5. Assessment Interviews Conducted in Harris County

INTERVIEW TYPE	2016	2017	2018
Protective Order	3,221	3,334	3,875
Criminal Case	2,310	2,375	2,282
Brief	244	590	910
Other	610	887	3,336
TOTAL	**6,385**	**7,186**	**10,403**

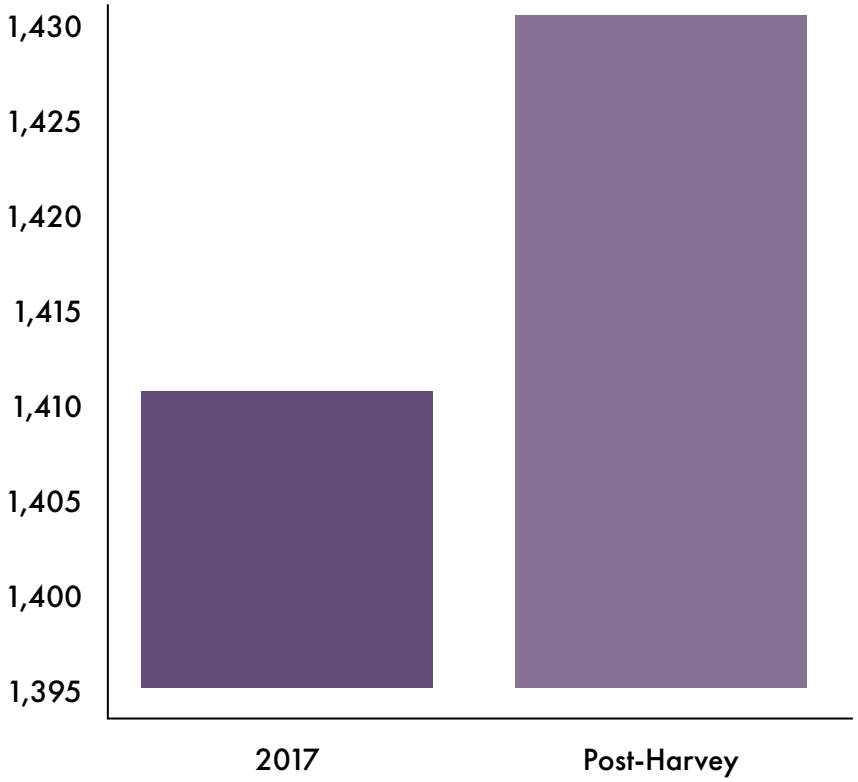
NOTE: Definition of Terms: *Protective Order:* Complainant was interviewed and assessed to determine whether or not to file a protective order application; *Criminal Case:* Complainant discussed pending criminal charges and desired case outcome; *Brief:* Complainant's case evaluated on need to return, appointments scheduled, safety and information provided; *Other:* Any type of follow-up with complainant, witnesses, and adult protective services or child protective services.

DOMESTIC VIOLENCE HOMICIDES + STRANGULATION

in Harris County



66% of Post-Harvey murders were women (23/25)



As of July 2018 Post-Harvey strangulation filings already surpassed 2017 yearly total

Source: Harris County District Attorney's Office-Domestic Violence Caseload Statistics, 2018

Have there been lingering results on staff morale, vicarious trauma and/or traumatic growth?

Throughout the focus groups and interviews, staff members described that they have noticed an increase in stress among their colleagues. They attributed this to having limited resources to fulfill their jobs, as well as those available to the clients that they serve. They also indicated that they have had to balance the needs of their clients and their job tasks, along with the stressors related to the personal impact that Hurricane Harvey had on their own lives (e.g., financial limitations, loss of housing and transportation).

In addition, most of the individuals interviewed provided examples of stories of trauma to which they had been exposed. Staff members noted they found themselves worried about the safety of their clients. They also described experiencing intrusive thoughts and feelings of hyperarousal related to the stories to which they were exposed. Many staff became emotionally distraught during the focus groups when discussing the impact on they felt and exhibited lingering effects of stress.

Frequently, staff commented on the lack of compassion from police and other service providers, possibly due to burnout. Lack of compassion or training can lead to poor or inadequate treatment from those systems designed to help, and a few staff noted the potential for re-victimizing individuals coping with complex trauma.

"You could just see the stress and the anxiety on survivors that I spoke to and in the staff that I spoke to" – TCFV Staff

"They were equipped for a day or two and it turned into three, four and five days." – TCFV Staff

AIM 3: UNDERSTAND THE IMPACT ON THE OPERATIONS OF ORGANIZATIONS AND THEIR PARTNERS (E.G., LAW ENFORCEMENT, DISTRICT ATTORNEY OFFICES) SERVING SURVIVORS OF FAMILY VIOLENCE IN THE IMPACTED AREA.

"I wasn't really nervous, I don't know, I just thought that it was just a normal routine for me. So from watching the news and everything on the news was saying don't leave and everything's fine. So to me it was just a normal routine, I'd never thought Harvey would have been as big as it was." – Staff

Due to the unexpected nature of the intensity of the hurricane, as well as it's landfall in a different area than was predicted, organizations were not prepared despite their best efforts. For example, TCFV staff did check in with organizations at the initial stages of the storm; however, many organizations that thought they were prepared ended up running low on supplies because the hurricane lingered longer than expected or because their facility was flooded. Staff and organizational leaders identified that the protocols in place were inadequate to address a natural disaster of the magnitude of Hurricane Harvey. Additionally, the lack of a coordinated statewide response plan for family violence organizations left agencies vulnerable for immediate, less than ideal solutions. This deficiency in an organized statewide approach created unnecessary complexities for both evacuating and receiving shelters. Of critical note, moving survivors from safe domestic violence shelter to temporary disaster-created shelters left survivors exposed and unsafe.

While most organizations decided to shelter in place, crisis situations unfolded over the course of the hurricane. For example, one organization had staff in place to ride out the storm in a shelter built to withstand a hurricane. However, an unexpected and last-minute mandatory evacuation "scared" staff and so the organization became unable to adequately staff the shelter resulting in needing to quickly evacuate clients. Organizational leaders discussed the very difficult decision to evacuate their residents.

"I think the hardest decision I ever had to make in any issue with Harvey and with the others is whether or not to evacuate because evacuating the clients who have already been evacuated [from their personal homes]so to say it's hard. Then we have a large shelter. We have 109 people in shelter so if we had to evacuate today at 109 people where are they going to go? That's probably the hardest decision, to evacuate or not to evacuate."
– Organization Leader

What has the impact been on the operations and sustainability of organizations serving survivors of family violence?

IMMEDIATE NEEDS

In the aftermath of Hurricane Harvey, organizations quickly experienced significant needs, such as repairing of infrastructure, replacing of vehicles, finding alternate housing options for their clients. In addition, staff and organization leaders described experiencing significant staffing issues due to increased demands for them being personally impacted by the hurricane.

"In the month following Harvey, [Domestic violence organization] saw the largest need for services in the organization's history. New clients in the month following Harvey increased by 68% with the need for housing more than doubling."
– Organization Leader

ORGANIZATIONAL AND COMMUNITY IMPACT

"We have seen that the number of family violence incidents in our community has risen" – Organization Leader

As time passed and domestic violence organizations (and their partner organizations) moved from crisis response and survival to assessment, they began to see the large-scale impact the hurricane had on their operations and in their communities. Organizations started to see increases in rates of violence and high risk-assessment scores (including increases in strangulation), resulting in a greater more need for services. Domestic violence organizations also realized some of their critical partner organizations were unavailable. For example, two distinct district attorney (DA) offices were destroyed and had to relocate. One office was utilizing paper files and all files were destroyed, thus, that DA office lost key information and status of their domestic violence cases. In the same counties, their respective courthouses experienced serious damage and were not operational. The impact to survivors resulted in the inability to request protective orders and lack of service of protective orders, increasing significant risk for survivors.

As discussed above, staff of organizations were impacted personally by the hurricane with one organization reporting that a third of their staff experienced a loss of property. In addition to staff being personally affected, organization leaders reported organizational trauma and burnout. For example, some organizations reported their staff were forced to remain at work and had extended work periods at the shelters. One organization reported some staff who were faced with managing the shelter operations for six days without relief.

Additionally, while staff reported that the incidents and reports of violence in the region increased, organizations and systems that respond to family violence reportedly suffered from the structural impact of the storm. One advocate noted going from having 60 beds to house survivors to 35 beds when their transitional housing units were displaced by the storm.

"Several staff persons were at the shelter around the clock during the six days the agency offices were closed. They needed to stay because flooding prevented most staff from coming in to work and keeping the shelter open and safe was a top priority." – Organization Leader

"The DA's office had to relocate for months. They could not do protective orders and so .... because the courts were in such tremendous disarray and had to be shut down for a few weeks, everybody's court case got pushed back. So, the protective orders got pushed back..."– Organization Leader

COMMUNITY SUPPORT

"The Galveston community rose to the occasion with Hurricane Harvey. With support from local individuals and organizations, we were able to make sure our client's needs were satisfied immediately"– Organization Leader

Organizational leaders discussed immediate response and generous support from their communities, as well as a nationwide response that was commendable. Although this support helped with immediate needs post-hurricane, sustainability remains an issue for many of the organizations for several reasons, including loss of revenue due to fewer donations and/or cancellation of significant fundraising events due to ongoing recovery efforts.

"As a result of the Hurricane, we have postponed our annual fundraiser, which was planned for January 2018. It was just too much to ask staff to help us raise funds for agency needs, while struggling with their own basic needs. It was a risky decision, since the fundraiser funds about 10% of our annual shelter costs. We were hopeful that our end-of-the-year donations would make up the difference. However, that's not been true, as many of our local donors gave to national recovery organizations. So, we are now in a position of having a $30,000 shortfall in shelter operations for the current fiscal year." – Organization Leader

Nevertheless, organizations reported resilience in their abilities to also support others despite their own circumstances. Several family violence organization leaders reported providing support to neighboring communities. For example, one organizational leader discussed taking items from their resale store and sending them to other organizations to be used for survivors of the hurricane. Other organizations took in survivors from other family violence organizations who had evacuated (e.g., Corpus Christi). Some family violence organizations served as community hubs for underserved communities and adapted to meet the needs of their populations including helping clients file FEMA applications (one reported filing over 1,000 applications with their clients) and learned rather quickly how to support survivors and staff who were being required to pay rent even though they no longer inhabited their homes.

"That we stayed working in the community and our mission. Even during the two days where I was evacuated it never stopped. I worked from where I was. We never left. We never gave up and because of the support we not only made it through, but the community made it through. That's pretty much who we are here. We live in a very unique area that seems to thrive as one when challenges hit."– Organization Leader

How have organizations supported survivor staff?

Organization leaders reported supporting organizational staff in a number of different ways. Some organizations provided shelter for staff who had nowhere else to go, others provided supplies for staff and families from donations. Other organizations offered access to free counseling, peer support, and clergy for their staff. In addition, staff supported one another by pooling vacation time to help those who lost homes and property. This allowed staff who were most impacted to take the time they needed for recovery. Leaders, in response to a question about what else could support their staff, overwhelmingly asked for mental health services and emotional support for their staff and trainings for themselves to make organizational changes to make sure their staff are continuously supported as the recovery continues.

"We have partnered with agencies and communities to offer assistance [to staff] with any trauma and stress experienced during the storm" – Organization Leader

AIM 4: DEVELOP RECOMMENDATIONS FROM RESEARCH PARTICIPANTS TO FUNDERS AND LEADERS FOR FUTURE PLANNING

What are lessons learned that would help in preparation for future natural disaster?

"A lesson learned for me is to be more direct about expectations of staff who are not impacted and to try and remain as productive as possible during that down time. Like yeah, we're limping but we're still walking. As long as we can do what we can, we should, our clients deserve that. Yeah. And I guess the other thing is just look for weaknesses in your system. Such as our file archives. So it still comes down to preparation. And to collaborate, to be very creative as a community in looking for opportunities to collaborate so that we all come out of this as best as we possibly can."– Organization Leader

Organizations who endured Hurricane Harvey learned many lessons through their experience. Organizations discussed learning about the strength, or lack thereof, of their policies and protocols that had outdated information or simply lacked information on things that were important. They also discussed not realizing that ways in which their facilities were set up caused some issues. For example, one organization described that their generator wasn't connected to their electronic fence, so although the generator engaged when the city's electricity went down, their fence wasn't functional because it wasn't properly connected. Other organization leaders discussed the inability to plan for such a crisis given the significant nature of the hurricane and subsequent flooding, as many noted that there is always going to be an aspect of response that one cannot plan for.

"Well, I think the main thing is that they need to do some better state and federal funding progress and to...because it's not funded [well enough]. Apparently, FEMA wasn't able to come through the way they needed to."– Staff

"FEMA... it should have been offered to everyone that lost things."– Survivor

Organization leaders, survivors, and staff discussed various recommendations for funders and other family violence leaders. For funders, quick response rates were recommended where flexible funding could be distributed as soon as possible to help with immediate needs like loss of income, transportation issues, etc. Additionally, survivors described difficult interactions with FEMA and denial of claims, particularly regarding rented housing. They suggested funders provide funding for family violence organizations to work with FEMA to prepare for future disasters. They also recommended providing funding for convening the organizations that were affected in Hurricane Harvey to share in future statewide planning.

"Make sure that your communication systems are in place both electronically for your data and your communication with staff and clients, you're well-prepared for that. And then you follow through with that. I think it's one thing to send people home with phone lists. It's another to make sure that your team are actively calling those people and saying, "Hey, are you okay?" People need to know; they need to know what's going on for the agency and they need to know that you really care about them as individuals. So, to help in a creative way, I think is really important."– Organization Leader

"With being the ED, having a budget, and that's solely for emergency repair, so that you don't worry about, "Oh my gosh, where I'm going to pull these funds, or how am I going to do this, or how am I going to do that?"– Organization Leader

For family violence leaders, participants recommended over planning, learning from experience with Hurricane Harvey to improve protocols and processes, improving communication systems, developing processes for using technology effectively, and leveraging their community coordinated response teams to do disaster planning. They also discussed the need to prepare staff, increase trainings, and clear communication for what is expected before, during, and after a natural disaster. It was also noted that it would be helpful to build collaborations with organizations that are not in at-risk locations, such as Austin and San Antonio, in order to relocate survivors who are currently living in shelters or transitional housing. In addition, these partnerships could also serve as a means to exchange available resources or services.

"And being prepared definitely. We were prepared, but man, you have to have some kind of plan B. Our plan was, "Hey, we're going to ride it out and this is a tropical storm." We have to have a plan B. What if it's a tropical storm and it turn into Harvey? Now, we're going to have a plan B. What are we doing with that?" – Organization Leader

Participants also discussed the need for coordinated response among crisis response organizations like FEMA and family violence programs. For example, it was recommended for family violence organizations and state level individuals to advocate for family violence training with FEMA staff, as well as safer practices with survivors so they are not housed with the general population. Other suggestions included developing a clearing house for shelter space information, having emergency gathering spots for family violence organizations and their clients, developing a network of shelters or partnerships for clear evacuation options in a time of crisis. All of this would contribute to a more cohesive plan, coordinated donation and distribution points, increased effective communication between TCFV and shelters, and a leveraging of the national domestic violence hotline for disasters.

"So, I think that would be great to have something that's guiding us as a state, and some best practices that we may not be aware of. I think that the Hurricanes happened so few in Texas in the last few years that I think we haven't really thought about the necessities for something like that. But I do think it's needed." – Organization Leader

"I guess, meeting and budgeting, I guess would come into that. Getting what you're doing now, victim's information, and utilizing that to come up with a better plan." – Survivor

CONCLUSION

In reaching its research aims, the current study found results that mirror what was found in the academic literature. Impacted communities reported increased rates of violence and severity (e.g., strangulation). Additionally, study participants reported negative mental and physical health consequences due to the compounding trauma after experiencing the hurricane and secondary stressors. These results continue to linger one year after experiencing the hurricane. Participants highlighted the compounding stressors especially experienced by survivors from marginalized communities where the natural disaster exposed unequal social structures for those who are most affected. Some survivor participants remain homeless and organizations continue to experience the effects of organizational trauma. Extraordinarily, study participants also reported significant strength and resilience as similarly found in the academic literature. Organizational leaders and staff spoke to the amazing strength and support of their communities and organizations to bond together and endure. Survivors spoke about the amazing circumstances they continue to experience and their hope and faith in continued growth and healing.

In addition to increasing understanding about violence and other consequences of natural disasters for the communities who experience them, academic literature has started to document considerations for practice that may be helpful as funders and leaders in Texas look to develop statewide disaster responses for family violence. First, First & Houston (2017) developed an empowerment-related framework regarding resources that are needed to promote safety and well-being prior to, during, and after a disaster (See Figure 3.; First, First & Houston, 2017). This framework captures many of the themes that were found in the current study about future preparedness and organizes these themes into phases from mitigation to recovery. This research study adds to the current framework with findings that show unique considerations for Texas after the experience of Hurricane Harvey (See Figure 4.; First, First & Houston, 2017). As recommended by participants, future planning is direly needed in Texas to ensure family violence survivors, staff that work with them and organizations, along with their partners, can continue to grow and heal from family violence and the trauma of the natural disaster experience.

Figure 3. Resilience IPV and Disaster Framework for Survivors and Practitioners (First, First & Houston, 2017)

Phase 1: Mitigation

OBJECTIVE:
Develop interagency connections

Strategies

- Solicit key partners such as disaster responders and providers, domestic violence organizations, health-care facilities, law enforcement agencies, and state and federal emergency and disaster policy makers to increase capacity to respond to IPV and disaster.
- Address challenges and barriers in disasters such as the lack of protocols for reporting IPV, enforcing protection.

Phase 2: Preparedness

OBJECTIVE:
Increase IPV and disaster awareness
Promote disaster safety planning

Strategies

- Provide IPV training and education for local, state, and federal emergency and disaster responders and providers.
- Create site-specific disaster plans and promote disaster preparedness awareness in IPV shelters and programs through communication efforts such as fliers, posters, announcements, meetings, and social media.
- Assist women in updating or creating safety plans for emergency and disaster situations.
- Ensure children and pets are included into disaster safety planning.
- Assess client vulnerabilities and the needs of marginalized women and families.

Phase 3: Response

OBJECTIVE:
Ensure basic needs are met
Provide comfort and support

Strategies

- Assist with crisis assessments and interventions that seek to identify a client's immediate needs, resources, and strengths.
- Ensure that clients and families have transportation, essential supplies (e.g., food, water, diapers, formula, medications), and information on post-disaster resources and alternative IPV contacts.
- Provide information on common reactions to traumatic events and on calming techniques to assist with managing overwhelming feelings.
- Provide parents with information about how to support their children following exposure to IPV and disaster, such as setting up safe play areas and normalizing and validating children's feelings.

Phase 4: Recovery

OBJECTIVE:
Connect to long-term resources
Promote psychosocial recovery

Strategies

- Connect IPV survivors to disaster case management services to obtain long term resources such as permanent housing, transportation, childcare, medical and legal advocacy, mental health services, and financial assistance.
- Connect IPV survivors with others who share common histories, issues, and barriers.
- Assist in constructing survivor narratives of strength and resilience utilizing therapeutic models that provide group support, strengths, and resilience.

Figure 4. Texas-Specific Considerations for IPV and Disaster Framework (adapted from First, First & Houston, 2017)

Phase 1: Mitigation

OBJECTIVE:
Develop interagency connections

Strategies

- Solicit key partners such as disaster responders and providers, domestic violence organizations, health-care facilities, law enforcement agencies, and state and federal emergency and disaster policy makers to increase capacity to respond to IPV and disaster.
- Address challenges and barriers in disasters such as the lack of protocols for reporting IPV, enforcing protection.

Texas-Specific Recommendations

- Many Texas-based family violence organizations are part of community task forces that are used to coordinate community responses to family violence. These response teams can be leveraged for disaster recovery for family violence organizations in Texas as they bring together key community responders.
- TCFV should convene a multi-disciplinary disaster planning committee.
- Family violence organizations should have leadership in local disaster planning committees.
- Funders must invest in more robust protocols and statewide coordination development.
- TCFV should lead investigating and assessing approaches that strengthens communication networks and leverages technology.

Phase 2: Preparedness

OBJECTIVE:
Increase IPV and disaster awareness
Promote disaster safety planning

Strategies

- Provide IPV training and education for local, state, and federal emergency and disaster responders and providers.
- Create site-specific disaster plans and promote disaster preparedness awareness in IPV shelters and programs through communication efforts such as fliers, posters, announcements, meetings, and social media.
- Assist IPV survivors in updating or creating safety plans for emergency and disaster situations.
- Ensure children and pets are included into disaster safety planning.
- Assess client vulnerabilities and the needs of marginalized women and families.
- Assist with crisis assessments and intervention that seek to identify women's immediate needs, resources, and strengths.
- Ensure that IPV survivors and families have transportation, essential supplies (e.g., food, water, diapers, formula, medications), and information on post-disaster resources and alternative IPV contacts.
- Provide information on common reactions to traumatic events and on calming techniques to assist with managing overwhelming feelings.
- Provide parents with information about how to support their children following exposure to IPV and disaster, such as setting up safe play areas and normalizing and validating children's feelings.

Texas-Specific Recommendations

- Specific to Texas, in response to survivors and staff elevating the difficulty with FEMA. Engage and expand FEMA's understanding of unique considerations for family violence survivors. Training efforts should be targeted to FEMA and other local disaster responders.
- Staff and organization leaders discussed having protocols but not having regularly updated them nor practiced them. TCFV could support programs across the state to regularly update and utilize their disaster protocols.
- Funders should incentivize disaster preparedness in family violence organizations.
- Drawing from the shared resilience framework for practitioners, Texas could develop interventions for supporting advocates who have shared a natural disaster experience along with their participants. Leveraging this experience could strengthen the empowering relationship between advocate/therapist and survivor and an important intervention for other organizations to learn from.
- Provide trauma-informed trainings to partners so that trauma-informed approaches can be integrated into disaster preparedness initiatives in Texas.
- Learn more about the needs of children in Texas in order to better support them in future disasters.

Phase 3: Response

OBJECTIVE:
Ensure basic needs are met
Provide comfort and support

Strategies

- Assist with crisis assessments and intervention that seek to identify women's immediate needs, resources, and strengths.
- Ensure that women and families have transportation, essential supplies (e.g., food, water, diapers, formula, medications), and information on post-disaster resources and alternative IPV contacts.
- Provide information on common reactions to traumatic events and on calming techniques to assist with managing overwhelming feelings.
- Provide parents with information about how to support their children following exposure to IPV and disaster, such as setting up safe play areas and normalizing and validating children's feelings.

Texas-Specific Recommendations

- Drawing from the shared resilience framework for practitioners, Texas could develop interventions for supporting advocates who have shared a natural disaster experience along with their participants. Leveraging this experience could strengthen the empowering relationship between advocate/therapist and survivor and an important intervention for other organizations to learn from.
- Provide trauma-informed trainings to partners so that trauma-informed approaches can be integrated into disaster preparedness initiatives in Texas.
- Learn more about the needs of children in Texas in order to better support them in future disasters.

Phase 4: Recovery

OBJECTIVE:
Connect to long-term resources
Promote psychosocial recovery

Strategies

- Connect IPV survivors to disaster case management services to obtain long term resources such as permanent housing, transportation, childcare, medical and legal advocacy, mental health services, and financial assistance.
- Connect IPV survivors with others who share common histories, issues, and barriers.
- Assist in constructing survivor narratives of strength and resilience utilizing therapeutic models that provide group support, strengths, and resilience.

Texas-Specific Recommendations

- As highlighted by staff and organization leaders in this study, the ongoing emotional support of staff in recovery is critical. Connect staff with long-term mental health care.
- Work with family violence organizations to integrate the understanding of natural disaster trauma into their work with survivors of family violence.
- Promote strengths and resilience among survivors and staff alike.

FUTURE RESEARCH

Future research should investigate understanding the needs of survivors of underserved communities and innovative strategies for supporting them in healing from natural disasters and family violence. TCFV could engage research to learn from other states who have been impacted by disaster, learning from their processes and strategies that have been successful in supporting their most vulnerable populations in recovery. One area of research that the current study did not capture is the experience of compounded trauma for children and adolescents. We can hypothesize based on the academic literature that children in Texas were also affected by their experiences of family violence and Hurricane Harvey. Anecdotal information from interviews merits the recommendation to conduct further research on impact of child exposure to family violence and Hurricane Harvey and inform best practices with children with dual /co-occurring experience in natural disaster and family violence. Importantly, future research could help to center the experiences and needs of marginalized communities who are disproportionately impacted by natural disasters (Jacobs, 2019) and who continue to be impacted in Texas (Hamel et al., 2018).

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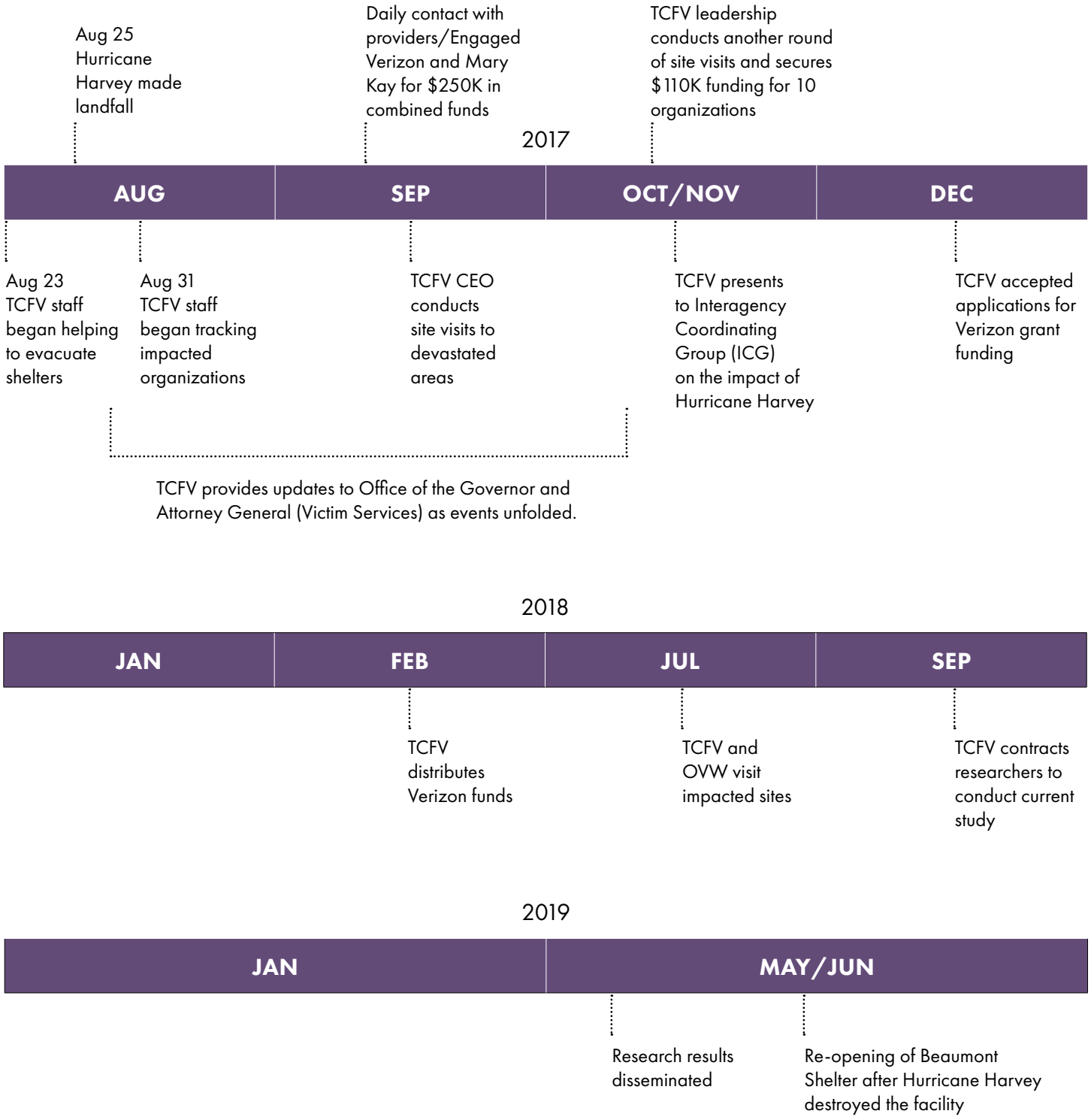
APPENDIX 1

TIMELINE OF TCFV'S ACTION DURING AND AFTER HURRICANE HARVEY



APPENDIX 2

LIST OF ORGANIZATIONS IN THE IMPACTED REGION

Asian Family Support Services of Austin
Atascosa Family Crisis Center, Inc.
Aid to Victims of Domestic Abuse
Bastrop County Family Crisis Center
Bay Area Turning Point
BCFS Health & Human Services
Daya
Family Crisis Center of East Texas
Family Services of Southeast Texas
FamilyTime Crisis and Counseling Center
Focusing Families
Fort Bend County Women's Center, Inc.
Guadalupe Valley Family Violence Shelter
Hays-Caldwell Women's Center
Houston Area Women's Center
Katy Christian Ministries
Mid-Coast Family Services
Montgomery County Women's Center
Northwest Assistance Ministries' Family Violence Center
Resource and Crisis Center of Galveston County
SAAFE House
Shifa
The Bridge Over Troubled Waters
The Crisis Center of Matagorda and Wharton Counties
The Montrose Center
The Purple Door
Twin City Mission - Domestic Violence Services Program
Women's Center of Brazoria County

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