

# **Building Community Resilience: Best Practices of Harvey 2017**

## **Part One**

### **Uncharted Territory in the Southeast Texas Region: Local Government Perspectives on the Challenges of Harvey**

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#### **Introduction**

Preliminary discussions with logistic representatives, volunteers, city officials, and the South East Texas Regional Planning Commission (SETRPC) and the Sabine Neches Chiefs Association (SNCA) reveal a critical need to understand the needs of volunteer organizations during Harvey's rescue and recovery phases in order to maintain an ongoing volunteer involvement. Effective coordination, task identification, and communication between government officials and emergent volunteers are identified as necessary elements to mitigate future events and ensure safety and security for citizens, volunteers, and responders. National broadcast news reports during the event provided a narrative of amazement and bewilderment that so many in Southeast Texas, and from across the nation, would put themselves at risk to help stranded residents during the massive flooding as government struggled to communicate with non-government organizations.

The purpose of this research is to conduct needs assessment focus groups to better understand community needs and how local government can improve communication and coordination across public, private, and healthcare industries and reduce the unknown during an event. This project will investigate the best practices of maintaining communication and

coordination between local government and non-government organizations before during and after a disaster to reduce the government capabilities – community needs gap. Specifically, the balance between community response and government response will be investigated in Southeast Texas.

The goal is to provide the needed information to sustain training practices that effectively mitigate disaster in Southeast Texas and serve as a model for other regions. This study uses a modified grounded theory. While grounded theory requires an unbiased analysis that is intended to understand all of the possible realities that exist, this study does make some assumptions based upon prior research in the geographical area on this topic. This paper covers the first of three parts: local government – local industry – and hospital / special populations. A key take away is that relationships with local industry, other government personnel, and volunteer organizations is vital to successfully address that challenges of Harvey in South East Texas.

### **Coordination and Communication**

Hoetmer (1991) reminds us that the purpose of emergency management is to reduce risk, reduce hazard impact, and restore normality in the wake of disaster. However, in order to carry out these responsibilities, Comfort (1988) proposes that emergency managers face a major continuing challenge to create the right mix of command and control with communications and organizational learning. Schneider (1992) proposes that there is a relationship between the expected actions of government institutions and the actions of mass human behavior in the community. One perspective is that there is always a gap between government capabilities and community needs, which can impact the strategies required to address the unexpected (Schneider 1992).

Therefore, regardless of the strategy employed, Schneider (1992) proposes that disaster

management effectiveness will increase as the capabilities - needs gap decreases. To accomplish this, Dynes (1994) proposes a strategy that incorporates coordination rather than command and cooperation rather than control into planning. We also know from scholarly studies that altruism can result from the idea that everyone is suffering from a force regardless of the social system (Barton 1970, Fritz 1961) and those directly affected by an event are, on average, the first ones to respond and help others as their social roles adapt during extreme events (Kendra, Wachtendorf, and Quarantelli 2003, Kreps and Bosworth 1993, Webb 2004).

Williams (2017) conducted research in the Southeast Texas and Houston – Galveston regions to better understand how emergency management practitioners understand social vulnerability as well as the strategies employed to reach and meet the needs of vulnerable populations. The findings revealed two key aspects of emergency management in the two South East Texas Gulf Coast regions. First, Williams and Webb (2019a) propose that while the term social vulnerability is rarely part of the vocabulary, the overarching concept of social, political, and economic policy contributes to the vulnerability in the region. Second, Williams and Webb (2019b) propose that the need for control is a common factor in the strategies that emergency management professionals employ to reach the most vulnerable in the community.

Williams and Webb (2019a) report that four themes emerge in vulnerability as poverty and culture, a lack of security, a moral imperative, and a lack of awareness or knowledge. Williams and Webb (2019a) propose that vulnerability in the area is rooted in social choices, economic capacity, political motivations, and a lack of buy-in. Economic and social influence guide the choice to continue to live in the path of a hurricane or in a flood plain. Culture also produces barriers to communication while economic capacity reduces that ability to provide personal mitigation efforts. A lack of security adds to the social choice for the elderly, and

others, to not evacuate or report needing help out of fear of being targeted by opportunistic crime. A lack of buy-in is wide spread across other municipal departments, elected officials, and the public while political motivations can direct who gets what and when.

Williams and Webb (2019b) report that four themes emerge in strategy as leaving it to the professionals, bringing in volunteers, leveraging protocols to build buy-in, and fostering flexibility. The study proposes that control is a common factor where different situations may result in a need for control, but for different reasons. Leaving it to the professionals advocates the need to control, but inability to completely control, spontaneous volunteers where the negative externalities of good intentions of uncontrolled volunteers results in increased vulnerability, while bringing in volunteers advocates for identifying every group that may emerge and bring them into the planning phase. Leveraging protocols to build buy-in relies on federal and state protocols and mandates to force the political levers in favor of preparedness and mitigation efforts while requesting more protocols to alleviate unfunded evacuation mandates without mandates for someone to accept evacuees. Others report the ability to operate within the spirit of protocols such as ICS (Incident Command System) while incorporating past experiences tailored to the specific needs of the community within the needs of the context at hand.

Academic knowledge and practical knowledge tells us that emergency management policy must acknowledge that emergent groups are inevitable. Though it may exist for short periods, there is a relationship between the expected actions of government institutions and the actions of mass human behavior in the community. A more effective response can result as the gap decreases between government response plans and how the community reacts.

## **Data and Methods**

The South East Texas Regional Planning Commission jurisdiction is chosen to study because the region was isolated from all outside resources. Additionally, municipalities were isolated from each other within the region which resulted cities relying solely on internal resources for response activity. Figure 1 displays the political jurisdictions within the South East Texas Regional Planning Commission jurisdiction.

A series of focus groups are conducted with leaders from across the Southeast Texas community. Focus group members are recruited from large cluster categories: Government, Health and Special Populations, and Local Industry. For each large cluster, three focus groups are conducted. This provides a total of nine focus groups for this project.

The government cluster consists of leaders and emergency management professionals from city, county, and regional government political jurisdictions. Specifically, the sample includes city manager, emergency management coordinator, chiefs of police, and corrections. The Health and Special Populations cluster includes local hospital, nursing home, hospice, and nonprofit organization. Specifically, the sample includes administrators, nurses, and doctors. The local industry cluster brings together large and small business leaders.

Each of the nine focus groups are small in size to encourage discussion (between 4-6 participants). Two coordinators facilitate each focus group. The focus group sessions are recorded for transcription. All recordings and transcriptions will be stored on a thumb drive in a locked cabinet on Lamar University grounds for one year and subsequently destroyed.

For participants working at a large stakeholder agency (such as a hospital, prison, or government office), a letter of agreement has been signed by each agency prior to conducting research. Individual participants have been approached through email or by phone to request

participation in the research. Informed consent was obtained from participants on the day of the focus participation.

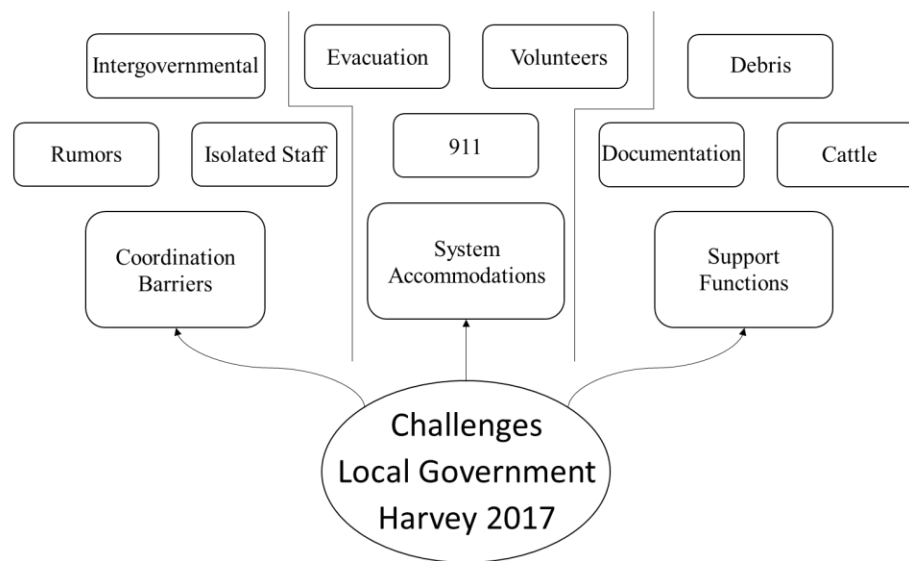
This study will focus on the results of the government cluster of three focus groups. The three focus groups include local government administration and law enforcement personnel. While others had been asked, the law enforcement community and administrators from local and regional governance responded. The final sample includes municipal police personnel, sheriff's department personnel, emergency management coordinator, city manager, and regional representatives. In Southeast Texas, municipal emergency management coordinators are staffed by local law enforcement or fire and rescue leadership. For this sample, the emergency management coordinators that responded were all from law enforcement. The makeup of the sample allowed us to combine the law enforcement / corrections focus group with the city manager / emergency manager focus group. This combination was necessary to accommodate the schedules of participants.

## **Findings**

The focus group sessions allowed for each participant to give their perspective on each question and then opened to conversation about each question. One common thread to the conversation is that each subsequent response began by saying that they had experienced some of the same challenges as previous participants during Harvey. For example, every participant experienced geographical isolation with cities cutoff from each other, counties cutoff from each other, and the region cutoff from the rest of Texas and from Louisiana. However, each participant emphasized certain challenges from a passionate position which accentuated the impact in their communities during the same event.

Nine specific challenges emerged from the discussion. As displayed in Figure 1, the challenges are grouped here in three clusters of three. Cluster one is coordination barriers and includes the challenges of a lack of coordination and communication within and between levels of government, rampant rumors over social media, and isolated staff with everyone being a victim. Cluster two is system accommodations and includes the challenges of sheltering in an evacuation city, spontaneous volunteers, and an overwhelmed 911 communication system. Cluster three is support functions and includes the challenges of debris management, documentation, and cattle management.

Figure 1  
Challenges to Local Government



### *Coordination Barriers*

Williams (2017) found that emergency management professionals in the Southeast Texas Region, before the event of Hurricane Harvey, reported that the job of the emergency management coordinator is to coordinate a response effort. Coordination deals with knowing who to get rather than knowing how to put out a fire or stop and clean up an environmental spill. For example, one respondent equated the emergency management coordinators' job with that of

an orchestra conductor. Participants in the focus group study at hand reported that coordination efforts was a major challenge during Harvey for three main reasons.

First, coordination was a challenge during Harvey because of state and federal agencies, initially, responding without coordination through local government. Participants did not name specific agencies. However they did say that there were many three letter state and federal agencies with helicopters that were conducting rescue operations and dropping rescues off at the first dry land, rather than coordinate locations that local government could access to process and track rescued people. Some participants also talked about local coordinators that may not have been prepared and political interests drove some efforts and provided barriers for other areas that were dependent upon support efforts. For example, one respondent stated:

I mean the pilots were dropping at the first dry land... We were getting phone calls saying, Hey, I just got dropped off and I really do not know where I am at...

And Another:

There were probly five or six three letter agencies that we have no control over what they do... we had to position vehicles so where they could not land their aircraft in dangerous spots because they just would not listen.

And Another:

It was a complete breakdown of how the process was working. Things were not being pushed up for requests because, like I said, I think it was a lack of knowledge of how to work... by the emergency management...

Second, while most participants agreed that social media was an important tool in communicating to affect rescues, rumors over social media produced a significant barrier in the response effort. However, the impact of rumors were not limited to public posts. Some reported that elected officials had put bad information out over social media. For example, rumors were



spread about the jails being flooded with no food or water and damn and levee breaks to the north of the region. One participant stated:

Rumors began to break after the damn or levee broke... After that day, that we knew that the levy was going to break and (city) was going to get hit with 6 feet of water. We do not have a levee. There is no levee here.

And Another:

We would send buses from Louisiana (to us)... They were redirected to evacuate a nursing home that had already been evacuated because they heard rumors...

Third is a lack of ability to communicate with large numbers of staff that were isolated and unable to respond. Participant reported that as much 40 to 90 percent of response personnel were isolated and could not get to work. This lack of personnel created an issue with the ability to respond as well as the ability to coordinate the mass numbers of volunteers and outside agencies that responded. As one participant stated:

We, a shelter, we actually had a ride out crew that was set up with two officers per shift... working 12 hour shifts, and we did not get relief for 18 days, I think, total.

And another:

... but we could not communicate to anyone because everyone was under water...

### *System Accommodations*

One major aspect to the events of Harvey in South East Texas, is that the region is an evacuation city. This means that the major threats to the area relegates the region to evacuate in response to hurricanes, chemical plant explosions, and hazardous material spills rather than to shelter in place. This results in an area that is not prepared to handle mass sheltering needs in an areas that are cut off from outside resources with a large portion of municipalities under water.

As one participant stated:

We are not used to sheltering people because we are an evacuation place, and usually when we have to shelter people, it is very small scale... the actual act... because there were nearly 1,500 people...

Dealing with volunteers is not a new challenge for the South East Texas Region.

Williams and Webb (2019a, b) have found that, before Harvey, volunteer management was already a major challenge for the area. Volunteer management is one aspect that has guided the need for this research as many have reported the impact of uncoordinated volunteers on creating more vulnerability than did the actual hazard event. As one participant stated:

Anytime, you're in the role of emergency management, when you start directing and accepting help from volunteers, you take on liability at the same time.

While volunteers were necessary in the initial stages because of the large numbers of isolated staff, some vulnerability was created as rescued individuals were evacuated to unknown locations unable were unable to be tracked.

The 911 system is listed under this section because it is a system failure though it is related to other challenges. Many participants talked about the inability for the 911 system to handle the large number of calls for rescue in the region. The 911 system is also related to the rumors category with some reports of refusal to call 911 because of rumors that calls were being answered in Canada. However, the overloaded system required communication over social media. As one respondent stated:

Phones were overwhelmed and they were rolling from one agency to another. The requests came in so quickly that we were quickly overwhelmed... and they started reaching out to us on social media and Facebook.

### *Support Functions*

Debris management, documentation, and cattle management covers issues of indirect impacts (non-human) of Harvey. Cattle management became an issue with economic impacts to the area. In light of the large numbers of cattle lost during Hurricane Ike in 2008, county entities began to coordinate livestock rescues and hay drops. As the event of Harvey progressed and

issue of recovery blended with response efforts, it became apparent that the area was made vulnerable because of contract competition with Houston area governments that have more money.

Political decisions made before Harvey impacted recovery efforts as some areas around Houston had disposable money to attract contractors for debris management. While municipalities in the South East Texas Region had contractors to complete debris management, the subcontractors that actually complete the task were attracted to other areas that could pay up front. As one participant stated:

The contractors were willing to do something, but they could not get somebody to work for them. Some of it is their fault, but most of it is not.

Participants report that some areas around Houston were not concerned with being reimbursed from FEMA. This means that they were not concerned with completing the required documentation for reimbursement. These are municipalities with large budgets that offered high incentives to attract contractors and subcontractors. Other events such as occurred in Florida and Puerto Rico soon after Harvey also attracted contractors with higher payouts.

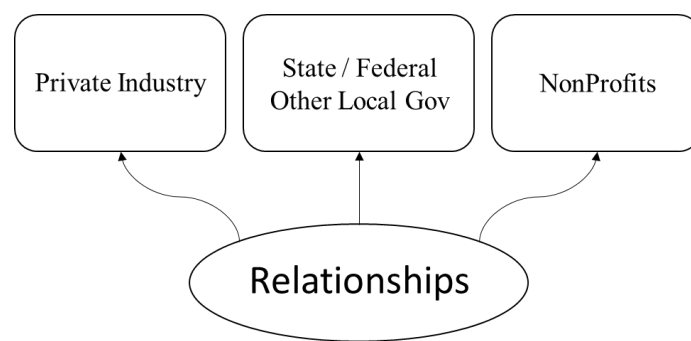
While many challenges have been discussed here, the majority of these challenges produced significant impact in the initial stages of the Harvey event. After evaluating the challenges faced by government during the 2017 Harvey event, the next step is to examine how government coped with these challenges. Most participants agreed that some of the same challenges that were faced, also were viewed as strengths as the event progressed and relationships across private industry, other governments, and nonprofits came together.

### **Successful Strategies and Implications**

When asked about the things that went right, participants were in agreement on one major factor of success. While coordination was reported as a significant challenge faced during

Harvey, coordination became a significant point of success near the end of the deluge. All participants agreed that prior existing relationships was key to overcoming the challenges faced during the 2017 Harvey event, especially the challenges of coordination. Figure 2 displays the types of relationships that contributed to the successful strategies of local government in addressing the challenges of Harvey.

Figure 2  
Successful Strategies



Williams (2017) found that many emergency management professionals in the Southeast Texas Region report the need to network to solve the problems they face. When personal experience does not help, one must have a source to turn to so that we are not reinventing the wheel and that those most vulnerable populations can be reached. This supports the findings that participants in this focus group study report relationships being the key to success in Harvey. However, this study expands the network pool to private industry and nonprofit organizations.

#### *Private Industry*

Private industry was instrumental in bringing municipal water, communications, and electrical systems back on line. These include local petroleum, engineer, and electrician partnerships. Local industry also provided volunteers for food kitchens and the use of shower trailers. As one participant stated:

I do not know if we could have done it without private industry, actually.

### *State / Federal / Other Local Government*

The initial stages of Harvey exposed failures in coordination between local governments as well as between local, state, and federal government agencies. However, as the event progressed and local government staff were able to take advantage of pre-existing relationships, intra- and inter- government coordination improved. For example, the National Guard established a portable pharmacy, state and federal law enforcement coordinated with local law enforcement to protect during times of high possibility for opportunistic crime, and state law enforcement assets were able to supplement the coordination breakdown between local governments.

Leaders from throughout the region are accredited with forging and leveraging these necessary relationships to circumvent politicians asking where someone lives when asking for help. Emergency Services Districts (ESD) and School Districts were instrumental while self-dispatched law enforcement officers are credited with working with ESD's to help in the communities where they live since they were cut off from being dispatched by their actual authority.

As one said:

If it were not for the leadership in this region, I do not know that we would have recovered as well as we did.

### *Nonprofits*

Churches and religious organizations such as the Baptist Men's Association have been credited in the area for providing instrumental and vital support during an event (Williams and Webb (2019b). Participants in this focus group study also credit churches and religious organizations with self-dispatching with the ESD's in their communities. While spontaneous

volunteers are discouraged due to the unintended consequences of good intentions (Williams and Webb 2019a), this study also finds that the benefits of volunteers bringing watercraft and high water vehicles to help were instrumental in saving lives.

As one said:

We really probly need to work closer with some of these volunteer organizations for that immediate aftermath as to what we can expect and what they should be prepared to provide for themselves.

## **Conclusion**

Harvey presented an unexplored hazard for the Southeast Texas Region. An area that is accustomed to evacuate, was caught in a situation where the signs did not point to a need to evacuate, until it was too late to evacuate. The implications of this portion of the study suggests that the relationships made before an event are vital to addressing the unexpected. As Williams and Webb (2019b) find, emergency management professionals in the South East Texas Region understand the necessity to be flexible and plan for the unexpected. This study reveals that networking and relationship building is perceived by emergency management professionals in South East Texas to be the key to successfully confronting the unexpected, and in this case, the uncharted territory of new experiences.

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