



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



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



Nine specific challenges emerged from the discussion.





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

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 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

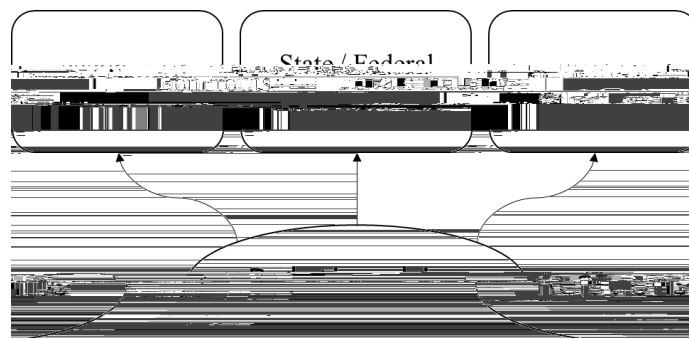
issue of recovery blended with response efforts, it became apparent that the area was made vulnerable because of contract competition with Houston area governments that have more money.

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 ggame ofrebut5tfa

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*



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