

LEVERAGING THE POWER OF RELATIONSHIPS: A CASE ANALYSIS OF THE  
CITY OF TUSCALOOSA AND THE AMERICAN RED CROSS' RESPONSE TO THE  
APRIL 27, 2011 TORNADO

Lieutenant Scott A. McBride  
U. S. Coast Guard

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Approved by:

Lois Boynton, Ph.D.

Queenie Byars

LT Joseph Klinker, USCG

## **ABSTRACT**

LIEUTENANT SCOTT MCBRIDE, U.S. COAST GUARD: Leveraging the Power of Relationships: A Case Analysis of the City of Tuscaloosa and the American Red Cross' Response to the April 27, 2011 Tornado  
(Under the Direction of Lois Boynton, Ph.D., Queenie Byars, LT Joseph Klinker)

On April 27, 2011, an EF-4 tornado, larger than a mile wide in diameter, touched down in Tuscaloosa, Alabama resulting in 53 fatalities, 1,200 injuries and widespread damage and destruction throughout the city. In less than six minutes, the storm destroyed over 12 percent of the city and left 7,000 people unemployed. This study is a comprehensive case analysis that investigates the role inter-organizational relationships played between the City of Tuscaloosa and the American Red Cross during the pre-crisis, crisis, and post-crisis phases of the disaster response.

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## **CHAPTER I: Introduction**

If you were to open a newspaper, turn on the television or surf the Internet, you will not have to look hard to find any number of organizations that are experiencing some form of crisis. Whether it is caused by human-error or “acts of God,” crisis can come in all types, be unpredictable, and have potentially irreparable effects on an organization’s reputation and existence. Organizations willing to invest time, energy, resources, and preparation into crisis management may mitigate the effects of a crisis or potentially prevent one from even occurring in the first place (Hoffman, 2011). However, despite an organization’s best efforts, in some cases, such as natural disasters, crisis can be difficult to avoid.

In recent years, a string of natural disasters such as hurricanes, earthquakes, droughts, floods, and tornadoes have devastated communities and regions across the country, leaving an indelible mark on those who were affected. Because of the unpredictability and severity of some of these events, disasters have costs in lost lives and resources spent. Additionally, disasters have created crises and tested emergency management capabilities for local, state, federal, and non-government organizations. In the spring of 2011, one such event gave the ultimate test of emergency preparedness, crisis management, and disaster response to the City of Tuscaloosa, Alabama, and its population more than 90,000 residents (“Facts,” n.d.).

At approximately 5:13 p.m. on April 27, 2011, an E-4 tornado, larger than a mile in diameter, touched down in the city of Tuscaloosa, Alabama, and carved out a six-mile path of destruction (Lynch, 2011). In less than six minutes, 12 percent of the city was destroyed and more than 7,000 people became unemployed. The deadly storm destroyed or damaged over 5,000 residences, damaged over 600 businesses, injured over 1,200 people, and resulted in 53 fatalities. In addition to the costly damages experienced by the citizens and residents of Tuscaloosa, the city's emergency management resources were greatly impacted in the wake of the storm. Several elements of Tuscaloosa's infrastructure were severely damaged or destroyed including the facility that housed the county's Emergency Management Agency (EMA), communication towers, over 50 vehicles from the Environmental Services Department, a fire station, police station, and numerous other response equipment and resources. On April 27, 2011, the City of Tuscaloosa was experiencing a crisis.

The purpose of this study is three-fold: to advance the scholarly literature in the discipline of crisis management and crisis communication; to provide an informative, practical, and in-depth case-study for crisis managers, academics, and public relations practitioners; and to conduct a research-based study to advance the U.S. Coast Guard's and Department of Homeland Security's (DHS) corporate knowledge in the discipline of crisis communication and crisis management. Specifically, this study will investigate the role inter-organizational relationships played between the City of Tuscaloosa and the American Red Cross during the pre-crisis, crisis, and post-crisis phases of the disaster response.

Although the crisis in Tuscaloosa may be over, rebuilding efforts are ongoing and continue today. What lessons can emergency managers take away from this terrible and tragic event? How did inter-organizational relationships affect internal and external coordination and communication with stakeholders? How can future organizations strengthen relationships and cultivate partnerships internally and externally so that they are better prepared and equipped when faced with a crisis of similar or greater magnitude? What are some key takeaways about the role partnerships and inter-organizational relationships can play in non-disaster related crises? In order to answer these questions and others, this study will provide a case analysis using Coombs (2012) three-stage approach to crisis, to examine the relationships between the City of Tuscaloosa and the American Red Cross and their response efforts, from the time of the initial tornado warning to the conclusion of post-crisis operations. This study will consist of:

- An overview of crisis management, crisis communication, and relationship management literature related to theory, organization, methods, and phases
- A background of the National Incident Management System (NIMS)
- A background of the Red Cross and the City of Tuscaloosa
- A statement of research questions and methods used to evaluate the local response
- A comprehensive narrative of the City of Tuscaloosa's and the American Red Cross's response during the aftermath of the tornado

- A discussion and evaluation of the decisions and actions of the City of Tuscaloosa and the American Red Cross during all three phases of the crisis
- Recommendations for the future regarding inter-organization cooperation and relationships

### *Coast Guard Advanced Education Requirement*

In the aftermath of 9/11, Hurricane Katrina, Deep Water Horizon, and countless other events, the Coast Guard continually seeks best practices and lessons learned so it can better respond to future crises. Part of my requirement as a Coast Guard-funded graduate student is to conduct research that not only advances my own professional and educational development, but also benefits the service as a whole.

Because the Coast Guard is relatively small, with a little more than 40,000 active duty and reserve personnel, the service understands the importance of relationship building and inter-organizational partnerships. The Coast Guard continually seeks to cultivate relationships around the country with its port partners, industry, and other government agencies in order to effectively execute its missions. In a time of shrinking budgets and limited resources, partnerships between agencies play a crucial role in the Coast Guard's ability to interdict drugs, prevent pollution, save lives, and defend the homeland. Despite limited resources, the Coast Guard is expected to do its job professionally, efficiently, and effectively. In ports where interagency relationships thrive, the Coast Guard as well as its port partners, are better prepared and equipped to respond to potential crisis events.

Despite the many benefits of inter-organizational relationships and the myriad lessons learned from recent events, some organizations have yet to realize the importance of partnerships or have failed to see that a need even exists for cooperation. Many organizations fail to realize how relationships can act as a “force multiplier,” especially in times of crisis. As Coombs (2000) points out, "crisis managers must be shown how they can apply a relational approach to crisis management" (p. 77).

In an attempt to illustrate the importance of relationship management and inter-organizational cooperation to potential partners and crisis managers, the Coast Guard has requested that I conduct research related to this topic. Because of the Coast Guard’s intimate familiarity of maritime-related incidents and crises, I chose to conduct a study involving a non-maritime event with the hope of expanding our overall corporate knowledge. Fink (1971) states that, “no organization is immune to encounters of disappointment or failure.... Far from being a prelude to failure as an organization, such crises may actually be occasions for renewed growth and the beginning of truly outstanding success” (p. 16). The willingness to observe and learn lessons, both from within our own organization, and externally by observing the actions of others, will only strengthen our service as we move ahead to better serve the public.

## **CHAPTER II: Literature Review**

The field of crisis communication has grown over the past decade or so in both the professional and academic communities due to an increased demand for effective crisis management within organizations (Coombs, 2010). As an applied discipline by nature, crisis communication research is designed to employ theory to solve real-world problems for crisis managers and organizations. From a managerial perspective, crises cost money, which provides plenty of incentive for organizations to invest resources in order to avoid, respond, and mitigate the potential threat (Heath, 2010). Therefore, Coombs (2000) states that, “crisis managers want tools they can use in the heat of crisis” (p. 77).

In order to understand the importance of the role of inter-organizational relationships in crisis management and crisis communication, a thorough review of the scholarly literature is required to provide a solid foundation and background for this study. This literature review will focus on the relevant theories related to crisis management, crisis communication, and relationship management in hopes of illuminating any gaps in the extant scholarly works.

### *Crisis Defined*

Before proceeding, there needs to be a definition of crisis that is both broad and categorical (Klinker, 2010). Unfortunately this could be a difficult task. According to Coombs (2010), there is no single universally accepted definition of crisis. In fact,



Adkins (2010) states that, “establishing clear and distinct definitions for the term crisis has been a problematic issue in communication scholarship for many years” (p. 96). Scholars such as Shaluf, Ahmadun (2003), and Said have a similar assessment stating that the definition of crisis differs from one organization to another. One potential reason for a lack of universality of a crisis definition is because those who have defined the term come from a variety of academic and professional disciplines and backgrounds, some of which include public relations, management, and organizational communication (Coombs, 2010).

Despite the variety of definitions, conceptual similarities do exist for how of crisis is defined (Coombs, 2010). For example, Weick (1995) describes crisis as low probability-high impact events that place severe demands on sense-making for both participants and decision-makers. Similar to Weick’s definition, Pearson and Clair (1998) define crisis as “low probability, high-impact situations that [are] perceived by critical stakeholders to threaten the viability of the organization and that [are] subjectively experienced by these individuals as personally and socially threatening” (p. 66).

According to Ulmer, Sellnow, and Seeger (2007), the definition of crisis is dependent on the unexpected nature of the event, non-routine demands of the organization, production of uncertainty, and the threat to high-priority goals. Hoffman’s (2011) definition of crisis includes a problem of great magnitude that comes at a critical juncture. Hoffman further states that a crisis interrupts an organization’s ability to conduct business, which could ultimately affect the way it is perceived by its stakeholders and the public. Lastly, Ruff and Aziz (2003) define crisis as “any incident or situation,

whether real, rumored or alleged, that can focus negative attention on a company or organization internally, in the media or before key audiences” (p. 3).

Although many definitions exist on how researchers and professionals define the term “crisis,” Coombs and Benoit account for the primary research stream as well as the majority of published studies on crisis management and communication in public relations (Avery et al. 2010). According to Coombs (2012), crisis is defined as the “perception of an unpredictable event that threatens important expectancies of stakeholders and can seriously impact an organization’s performance and generate negative outcomes” (p. 2). Although crises are considered to be anomalies and difficult to predict in most cases, Coombs (2010) states that they are to be expected. The key point to Coombs’ (2012) definition is that crisis is perceptual and the perceptions of stakeholders are what define an event as a crisis. Like Coombs, Benoit also points to the relevance of perception. According to Benoit (1997), when it comes to the image of an organization, regardless of whether or not they are responsible for some unfavorable action, “perceptions are more important than reality” (p. 178).

It should be noted that practitioners believe a distinction exists between incidents and crises. According to Coombs (2010), practitioners believe that “crisis should be reserved for serious events that require careful attention from management” (p. 19). When the term “crisis” is used, organizations tend to allocate additional time, attention, and resources to the situation (Billings, Milburn, & Schaalman, 1980). Coombs’ broad and categorical definition of crisis as an unpredictable threat that affects organizations and their stakeholders, will be the baseline used for the remainder of this study as I

discuss the theories of crisis management, crisis communication, and relationship management.

### *Crisis Management Framework*

As previously mentioned, the discipline of crisis communication has witnessed tremendous growth over the past decade due to an increased demand for effective crisis management and crisis communications. As we move forward to understand crisis communication, it is important that we understand its relationship with crisis management. Coombs (2010) explains this relationship by stating that, “crisis communication is a critical element in effective crisis management” (p. 21).

Furthermore, Coombs (2012) states that, “crisis communication is the lifeblood of crisis management” (p. xi). When an organization’s crisis communication efforts are ineffective, their crisis management efforts become ineffective as well. Lastly, Coombs (2010) states that any discussion of crisis communication cannot be conducted without fully understanding and exploring crisis management and its processes. For these reasons, I will begin to explore the crisis management process by briefly discussing its roots, defining the terms, and reviewing the process.

Crisis management gets its roots from the field of emergency and disaster management, where it focused on how organizations cope with incidents (Coombs, 2010). In addition to providing ways on how to cope with situations, emergency and disaster management detailed incident prevention and response. It was not until 1986, when Steven Fink published his seminal work: *Crisis Management: Planning for the Inevitable*, that the field of crisis management began to emerge and take form (Coombs,

2010). Unlike disaster management, which focused on incident prevention and response, crisis management became a field of study focused on organizational crises.

### *Definition of Crisis Management*

According to Coombs (2010), crisis management is defined as “a set of factors designed to combat crisis and to lessen the actual damages inflicted” (p. 20). In other words, crisis management protects organizations and stakeholders from harm by attempting to prevent or mitigate the negative outcomes of crisis (Coombs, 2012). Crisis management comprises of four interrelated factors of prevention, preparation, response, and revision to either address the crisis or mitigate the damage inflicted.

Coombs (2012) defines prevention as the steps that are taken to avoid a crisis. These steps might include the creation of a crisis management plan (CMP), which is an organizational document that contains important information needed to manage a crisis. Preparation also includes diagnosing vulnerabilities, choosing and training spokespersons and crisis management team members, creating a crisis portfolio, and refining the crisis communication system.

The response factor, often considered the most public and critiqued, involves the actual response to the crisis (Coombs, 2012). The response factor not only applies all the preparation components, it uses all the crisis management resources as well. One element that can help organizations become more effective during the response is to test the preparation components regularly, which through simulated exercises, helps “determine the fitness” of crisis team members and the CMP. Coombs points out that an organization with a diversity of exercise scenarios will be better prepared to handle future

crises. The final step to the response factor is the recovery, where organizations return to normal operations and business continuity is achieved.

The fourth factor in crisis management is called revision. During revision, organizations evaluate the crisis response and create a set of lessons learned for future events (Coombs, 2012). Organizations thoroughly review positive and negative aspects of the response in order to develop insight into how to better prepare for future crises. When revisions are utilized by organizations, past mistakes can be avoided and the crisis management ability and response capacity become improved.

### *Publics and Stakeholders*

Before I explore Coombs' three-stage approach to crisis management, it is important to define the terms 'publics' and 'stakeholders.' These terms will be used throughout this case analysis, so it is important to define them now. The distinction between 'publics' and 'stakeholders' can be difficult to differentiate. According to Mackey (2006) the term 'stakeholder' has "become ubiquitous throughout business and political literature and is also common in public relations textbooks and journal articles" (p. 1). Cutlip, Center, and Broom's (2000) definition of 'public' involves people who are interdependent with organizations.

According to Mitroff and Pearson (1993), stakeholders consist of institutions, individuals, and groups who either affect or are affected by an organization. Coombs (2012) defines stakeholders as "persons or groups that have interest, right, claim, or ownership in an organization" (p. 37). According to Coombs stakeholders can be primary or secondary. Primary stakeholders consist of individuals or groups, "whose actions can be harmful or beneficial to an organization" (p. 37). Examples of primary

stakeholders include investors, employees, customers, suppliers, and the government. Coombs defines secondary stakeholders as “those people or groups who can affect or be affected by the actions of an organization” (p. 37). Examples of secondary stakeholders include activist groups, media, and competitors. Because stakeholders are linked economically, socially and politically to an organization, one cannot underestimate the importance of their roles in crisis management. Because the definitions of publics and stakeholders both involve interdependence with organizations, I will use the terms interchangeably throughout this study.

### *Three-Stage Approach to Crisis Management*

According to Coombs (2010), fields of research develop when models are used. Models not only help people understand processes but they also assist with comprehension of key concepts. Coombs also points out that, “examining the crisis management process allows us to understand better the critical points where crisis communication enters the equation” (p. 22). For these reasons, it is entirely appropriate to explore Coombs’ three-stage approach to crisis management.

According to crisis management literature (Coombs, 2012; Gonazales-Herrero & Pratt, 1995; Sturges, 1994), crises have identifiable life cycles. It is incumbent upon managers to be familiar with the life cycles because the different phases require specific actions (Gonzalez-Herrero & Pratt, 1995; Sturges, 1994). Coombs (2012) translates the crisis life cycle using a staged approach to crisis management. His three-stage approach grew from the influential crisis management models developed by Fink (1986) and Mitroff (1994).

In his book, *Crisis Management: Planning for the Inevitable*, Fink (1986) uses a medical illness metaphor to illustrate his four-stage crisis lifecycle. Mitroff (1994) followed up Fink's model by creating a five-phase model of crisis management. According to Coombs (2012), both crisis management models were similar and valuable, noting that the biggest difference between the two is the prescriptive nature of Mitroff's model compared to the descriptive nature of Fink's model. Out of these two models came Coombs' simplified three-stage model, which used insights from Fink and Mitroff as well as additional information from crisis management experts. Coombs' model defines the crisis life cycles in three distinct phases: pre-crisis, crisis, and post-crisis. Coombs' (2012) model is not only simplified and provides a "macro-level generality" to analyze crisis management, it also accommodates the dominant models in the field and allows for integration of ideas from crisis management experts.

### *Pre-crisis*

It is fair to state that each step of the three-stage crisis management approach is important to crisis managers. Decisions and actions made during each stage will ultimately determine the outcome and perception of overall success of the organization's response to a crisis. The first step in this process is what Coombs (2012) calls the pre-crisis stage. During the pre-crisis stage, Coombs suggests that members of the organization take proactive measures to ensure that a crisis is prevented. The pre-crisis stage consists of actions that should be conducted prior to a crisis and is made up of three sub-stages that are: (1) signal detection, (2) prevention, and (3) crisis preparation.

During the signal detection sub-stage, crisis managers look for warning signs with hopes of preventing a potential crisis (Coombs, 2012). Signal detection includes

scanning both the internal and external environments for crisis warning signs. As information is collected during this stage, it is important that analysis is also conducted on incoming data to ensure potential warning signs are detected.

Following signal detection is the prevention stage. During crisis prevention, crisis managers take proactive measures in attempts to prevent or avoid a crisis (Coombs, 2012). The crisis prevention stage is a five-step process that includes scanning sources, collecting and analyzing information, taking preventative action and evaluating the effectiveness of threat reduction. The last sub-stage in the pre-crisis phase includes crisis preparation. During this stage, organizations make preparations for “inevitable crises”. Organizations prepare for “inevitable crises” by diagnosing vulnerabilities, assessing crisis types, choosing and training crisis team members, selecting and training a spokesperson, creating a CMP, and reviewing the crisis communication system (Coombs, 2012).

One important element that occurs between the pre-crisis and crisis response stages is crisis recognition. Crisis recognition is not considered one of the formal stages of Coombs’ three-stage approach, but the importance of its role is worth mentioning. According to Coombs (2012), not all crises are obvious and easy for organizations to recognize. Recognition of a crisis can be difficult for organizations because crisis is dependent on the perception of their stakeholders. As previously mentioned, a situation becomes a crisis when stakeholders perceive that one exists. Even when stakeholders perceive a crisis within an organization, some members of management may deny that one exists (Fink, Beak, & Taddeo, 1971). Fink et al. attribute this denial to a psychological alarm, which he calls defensive retreat, when anxiety caused by crisis is



followed by a fight-flight pattern. Finally, once a crisis is recognized, information must be collected and synthesized to ensure successful management of the crisis (Coombs, 2012).

### *Crisis Response*

The next stage to Coombs' three-stage model consists of the crisis response. According to Mitroff (1994), during this stage, an organization's crisis team works to "contain the effects of a crisis from spreading further and, hence, from infecting other uncontaminated parts of an organization or the environment" (p. 106). It is during this stage when the first statements are made to the public regarding the crisis and first impressions are formed regarding the organization's response and communication efforts (Coombs, 2012). Messages are typically communicated to stakeholders and publics through some sort of mass media such as the television or Internet.

Coombs (2012) emphasizes that organizational responses to a crisis should be quick during the crisis response stage. Quick responses not only fill the information void, but they also ensure that the organization maintains control of the message and the public receives the "organization's side of the story" (p. 141). According to Barton (2001), as technology advances, the window of opportunity that crisis teams have to respond to the crisis will continue to decrease. Lastly, Coombs (2012) emphasizes the importance of open, two-way communication with stakeholders. Continuous, open, two-way communication between the organization and stakeholders is not only the lifeblood of a favorable organizational-stakeholder relationship, it is also essential to the crisis management team's ability to contain, mitigate, and recover from the crisis.

### *Post-crisis*

According to Coombs (2010) the Chinese characters for crisis represent threat and opportunity. It is fair to state that Coombs' final stage of the three-stage approach represents the optimum time for opportunity for crisis managers. During the post-crisis stage, the situation is considered to be resolved and operations are able to return to a normal state for businesses and organizations. Even though the crisis may appear to be resolved, it's important for crisis managers to continue to manage the after-effects, even after response operations have ceased.

Two important elements of the post-crisis stage include continuation of crisis communication and organizational learning (Coombs, 2010). According to Coombs, post-crisis communication consists of keeping stakeholders up-to-date on business continuity efforts. Like organizations, stakeholders desire a need to return to a state of normalcy. To satiate stakeholder needs, it's important that crisis managers provide regular updates to their publics regarding the status of operations. Updates create a sense of calm and balance as well as give the perception to stakeholders that operations are back to normal.

Another important aspect of the post-crisis stage involves organizational learning (Coombs 2010). According to Pauchant and Mitroff (1992), a crisis creates excellent opportunities for organizations to learn valuable lessons. Organizations learn through data collection, analysis, and evaluation of their crisis management efforts (Coombs, 2012). Evaluations allow for organizations to review the decisions and actions made by crisis managers, in an effort to improve the overall crisis management process. Unfortunately, many organizations remain reluctant to review their actions post-crisis out of fear of finger pointing, blame, and potential repercussions for past errors and mistakes

(Coombs, 2010). For this reason, organizations miss out on a tremendous opportunity to improve their crisis management processes for the future. However, organizations that are willing to take the time and energy to learn from past crises will reap the benefits of improved performance during future events (Coombs, 2012). Now that there has been a thorough review of the crisis management process, which included Coombs' three-stage approach, we can discuss the relevant theories of crisis communication.

### *Crisis Communication*

It was mentioned earlier that crisis communication is an essential element of crisis management. Coombs (2010) takes this a step further by stating that, "communication is the essence of crisis management" (p. 25). Because a crisis creates a demand for information by stakeholders and publics, communication plays a crucial role in the crisis management process. Communication allows information to be collected, processed and shared by organizations.

Coombs (2010) emphasizes the importance of differentiating between the two "basic types" of crisis communication: (1) crisis knowledge management, and (2) stakeholder reaction management (p. 25). Crisis knowledge management is the internal process that identifies potential sources of crisis, information collection and analysis, knowledge sharing, and decision-making. Crisis knowledge management is the type of crisis communication that takes place "behind the scenes" and involves the creation of public responses by the crisis team. On the other hand, stakeholder reaction management consists of external communications efforts, through actions and words, to influence the stakeholder's perception of the crisis.

### *Reputation Management*

One important element of crisis communication that needs to be discussed involves the concept of reputation management. According to Allen & Caillouet (1994), one of the main goals of crisis communication is to protect an organization's reputation. Coombs (2010) further states that, "reputations matter because it is an important intangible resource for an organization" (p. 38). However, an organization's reputation can be damaged and its legitimacy threatened during any crisis, regardless if the organization is at fault or not. For these reasons, public relations and marketing research began to investigate how crisis response strategies could be utilized to protect an organization's reputation during a crisis. In order to determine which crisis response strategies were appropriate for certain situations, researchers turned to attribution theory as a useful framework for matching the correct crisis response to the crisis situation (Coombs, 2012).

Coming from the research of Bernard Weiner (1986), attribution theory is based on the idea that people will attribute responsibility for negative and unexpected events (Coombs, 2012). According to Coombs, because crises tend to be negative and unexpected, they also tend to "provoke attributions of responsibility" (p. 153). Consequently, these attributions ultimately frame how stakeholders view and behave towards an organization.

Coombs and his colleagues developed Situational Crisis Communication Theory (SCCT), in 1995, under the same premise of attribution theory, which held that stakeholders make attributions about crisis responsibility, and that these attributions ultimately affect how stakeholders interact with these organizations (Coombs, 2010). According to Coombs (2012), SCCT uses attribution theory to diagnose the threat to an

organization's reputation. Once the threat is diagnosed, SCCT recommends crisis response strategies, which are determined by the reputational threat level. Reputational threat levels are determined by crisis type, crisis history, and prior reputation of an organization.

The first step in assessing the reputational threat to an organization is to identify the crisis type (Coombs, 2012). Crisis types can range from accidents and earthquakes to terrorism and whistle blowing (see Figure 1). The next step in evaluating reputational threat is to conduct an assessment based on an organization's prior crisis history and reputation.

Two theoretical tenants in crisis communication involve the *Velcro* and *halo* effects. According to Coombs and Holladay (2001), organizations with a history of crises or prior negative reputation will tend to attract additional reputation damage, like Velcro. This is known in the field of crisis communication as the *Velcro effect*. Whereas organizations without any prior negative performance history will be given the benefit of the doubt by its stakeholders.

Contrary to the *Velcro effect*, the *halo effect*, stemming from Ledingham and Brunig's (1998) relational management perspective, posits that an organization's favorable relationship history with its stakeholders along with its crisis history, will protect it from reputational damage during a crisis. Despite this common-sense hypothesis, Coombs and Holladay (2001) came up with a different conclusion. Coombs and Holladay concluded that a positive performance history or halo and a neutral or nonexistent performance history actually have no effect on an organization's reputation during and after a crisis. Regardless of an organization's past history, its reputation is

important and selecting the appropriate response to counter the threat will play a crucial role in their ability to survive a crisis. Once an organization assesses the reputational threat, crisis management can select the appropriate crisis response strategy (see Figure 2).

Figure 1: Crisis Typologies (Coombs, 2012, p. 73)

Crisis Type	Definition
Natural disasters	When an organization is damaged as a result of the weather or “acts of God” such as earthquakes, tornadoes, floods, hurricanes, and bad storms.
Workplace violence	When an employee or former employee commits violence against other employees on the organization’s grounds.
Rumors	When false or misleading information is purposefully circulated about an organization or its products in order to harm the organization.
Malevolence	When some outside actor or opponent employs extreme tactics to attack the organization, such as production tampering, kidnapping, terrorism, or computer hacking.
Challenges	When the organization is confronted by discontented stakeholders with claims that it is operating in an inappropriate manner.
Technical-error product harm	When the technology utilized or supplied by the organization fails and results in a defect or potentially harmful product.
Technical-error accidents	When technology utilized or supplied by the organization fails and results in a defect or potentially harmful product.
Human-error accidents	When human error causes an accident.
Human-error product harm	When human error results in a defect or potentially harmful product.
Organizational misdeeds	When management takes actions it knows may place stakeholders at risk or knowingly violates the law.

Figure 2: Situational Crisis Communication Theory Recommendations for Crisis Response Selection (Coombs, 2012, p. 159)

	Recommendations
1.	Provide instructing information to all victims or potential in the form of warnings and directions for protecting themselves from harm.
2.	Provide adjusting information to victims by expressing concern for them and providing corrective action when possible. Note: Providing instructing and adjusting information is enough of a response for victim crises in an organization with no crisis history or unfavorable prior reputation.
3.	Use diminishment strategies for accident crises when there is no crisis history or unfavorable prior reputation.
4.	Use diminishment strategies for victim crises when there is a crisis history or unfavorable prior reputation.
5.	Use rebuilding strategies for accident crises when there is a crisis history or unfavorable prior reputation.
6.	Use rebuilding strategies for any preventable crisis.
7.	Use denial strategies in rumor crises.
8.	Use denial strategies in challenges when the challenge is unwarranted.
9.	Use corrective action (adjusting information) in challenges when other stakeholders are likely to support the challenge.
10.	Using reinforcing strategies as supplements to the other response strategies.
11.	The victimage response strategy should only be used with the victim cluster.
12.	To be consistent, do not mix denial strategies with either diminishment or rebuilding strategies.
13.	Diminishment and rebuilding strategies can be used in combination with one another.

Now that we've addressed the relevant theories associated with crisis communications, we can move ahead to talk about the final piece relevant to this case analysis, the relational perspective of crisis management.

*Crisis Management: A Relational Perspective*

Because this case analysis will examine the role of relationships between the American Red Cross and the City of Tuscaloosa during the tornado of 2011, it is important to review crisis management from a relational perspective. It also makes sense to examine the relational perspective because crises are “episodes in the ongoing

relationship between an organization and its stakeholders” (Coombs, 2000, p. 73).

According to Coombs, understanding the relational perspective not only provides crisis managers with valuable insights regarding the crisis, but also allows them to develop effective responses.

### *Relationship Defined*

Before approaching the relational perspective to crisis management, it is important to define the term “relationship.” Merriam-Webster’s online dictionary defines relationship as “the state of being related or interrelated” or “the relation connecting or binding participants in a relationship” (Relationship, 2012). Coombs (2012) defines relationships as the “interdependence of two or more peoples or groups” (p. 36).

Coombs’ (2000) definition is a modification of O’Hair, Fridrich, Wiemann, and Wiemann’s (1995) definition that stated that relationships were the “interdependence of two or more people” (p. 74). The key to both definitions is the notion that groups and individuals are interdependent of one another and therefore linked to each other in some form or fashion.

### *Relationship Management Theory in Public Relations*

According to Ledingham (2006), the relational perspective has been applied to several public relations functions to include issues management, crisis management, media relations, and public affairs to name a few. The relational perspective emerged from the work of Ferguson, in 1984, when it was suggested that a paradigm shift was needed that focused on relationships as the “unit of study” — and “not the organization, nor the public, nor the communication process” (Ledingham, 2006, p. 467). Ferguson’s notion paved the way for the shift in how public relations was conceptualized, thus



establishing the idea of relationships between organizations and their stakeholders as an organizing concept for the relational perspective. Ledingham echoed this sentiment and stated that, “The notion of relationship management represents a fundamental change in the function and direction of public relations, a movement away from traditional impact measurements, such as the quantity of communication messages produced or the number of stories placed in the mass media, and toward evaluation of public relations initiatives based on their impact on the quality of the relationship between the organization and the publics with which it interacts” (p. 466).

In 1994, Grunig, Grunig, and Ehling concluded that public relations contributes to overall organizational effectiveness when it helps to reconcile expectations between “strategic constituents” and organizational goals (Grunig, 2000). According to Grunig, research of more than 300 organizations in the United States, Canada, and the United Kingdom revealed that public relations has value when good relationships were developed between the organization and its strategic publics. Center and Jackson (1995) capture the essence of the relational perspective by observing that, “The proper term for the desired outcome of public relations practice is public *relationships*” (p. 2). Furthermore, Center and Jackson conclude that organizations achieve positive public relationships when they have effective public relations. It is clear that the relational approach to public affairs is important; however, the key element to relationships is the impact it has on the organization’s stakeholders.

#### *Stakeholder Theory and Neo-institutionalism*

According to Coombs (2006), one must discuss stakeholder theory and neo-institutionalism in order to understand the role of relationships in crisis management.

One of the main tenants of stakeholder theory rests on the idea that corporations do not only affect stakeholders, but stakeholders also affect corporations (Elliot, 2010).

Stakeholder management addresses how relationships between organizations and their stakeholders are managed, as well as explains how organizations interact with various groups within their environment (Carroll, 1989; Donaldson & Preston, 1995; Coombs, 2006).

Neo-institutionalism, on the other hand, helps conceptualize how relationships develop between organizations and their stakeholders and where crises fit in the relational history. Allen and Cailouet (1994), breaks down neo-institutionalism as the organization's ability to meet the social rules and expectations of their stakeholders. In short, neo-institutionalism focuses on an organization's legitimacy and it's right to continue operations.

As previously mentioned, a crisis occurs when stakeholders perceive that one exists and important expectations are not being met (Coombs, 2012). Because primary and secondary stakeholders are interdependent with organizations, and they can be bound together by social, economic, and political issues, it is important to talk about their relationships with organizations (Coombs, 2006).

To review, Coombs (2012) defines stakeholders as "persons or groups that have interest, right, claim, or ownership in an organization" (p. 37). According to Donaldson and Preston (1995), "all stakeholders have intrinsic value" (p. 67). Coombs (2006) divided stakeholders into two distinct groups of primary and secondary stakeholders. It is worth mentioning that organizations would likely cease to exist if they did not interact with their primary stakeholders. Lastly, from a managerial perspective, stakeholder

management involves managing the relationship between an organization and its various stakeholders.

According to Coombs (2006), neo-institutionalism helps us understand how stakeholder-organization relationships are managed. One of the key elements to neo-institutionalism is the concept of organizational legitimacy.

According to Bedeain (1989), organizations are perceived to be legitimate by their stakeholders when they conform to certain social rules or expectations. Allen and Caillouet (1994) state that organizations that are perceived to be legitimate by stakeholders have the right to continue operations. On the contrary, organizations that lack legitimacy lose their right to continue operations. Therefore, the stakeholder-organization relationship history, or reputation, becomes dependent on the social rules and expectancies established by stakeholders (Coombs, 2006). Lastly Coombs points out that crises can threaten or challenge an organization's legitimacy, which can ultimately lead stakeholders to question whether an organization is meeting its social responsibilities and expectations. From the research described in stakeholder theory and neo-institutionalism, it is fair to state that relationship management is important to an organization's success in avoiding or mitigating crisis. However, what role do relationships play in organization-stakeholder relationship? The next section will briefly explore this question from a corporate governance context.

#### *Corporate Governance Context to Crisis Management*

There is no disputing that relationships between organizations and stakeholders are important (Alpaslan, Green, and Mitroff, 2009). From a corporate governance context, Pearson and Clair (1998) argue that the success of crisis preparation and

response is dependent on an organization's established relationship with its stakeholders. Pearson and Clair also argue that organizational success is determined by the level of accuracy of an organization's understanding of how their stakeholders will behave during a crisis. Successful crisis management results when organizations build alliances, achieve coordination, and share information with their stakeholders. Alliance building and information sharing is important to an organization's success because stakeholders have "intrinsic value" and their perceptions can threaten an organization's legitimacy.

Part of the relationship building aspect to crisis management is ensuring that stakeholders get involved with organizations. Nathan and Mitroff (1991) state that "the more efficient approach to crises requires the inclusion of as many stakeholders as possible during the crisis preparation and response stages, and allowing them to bring their perspective, identity, and knowledge to the analysis" (p. 164). In order to successfully accomplish this level of stakeholder involvement, Alpaslan et al. (2009) argue that treatment between both parties must be "sincere" and the relationship should be based on mutual trust and cooperation.

Because of globalization, the interdependent nature of relationships between organizations and stakeholders is on the rise (Alpaslan et al., 2009). With increased interdependence comes the higher potential that organizations will be affected by a crisis (Alpaslan et al., 2009). For this reason, Alpaslan et al. argue in favor of applying the stakeholder theory to crisis management.

### *Conclusion*

After a thorough review of the scholarly literature, it is apparent that much research has been conducted in the fields of crisis communication, crisis management,

and relationship management. By exploring crisis communication using Coombs' (2012) three-stage approach to crisis management, crisis managers have a good prescription for how to prepare, handle, and recover from a crisis. In reviewing the crisis management literature from a relational perspective, one can conclude that strong relationships between organizations and stakeholders play a crucial role in the outcomes of crises.

Despite the depth and breadth of the scholarly literature, gaps do exist. Much of the crisis communication research speaks to relationships between stakeholders and organizations from a reputation management perspective. None of the literature found addresses how organizations can work together alongside primary and secondary stakeholders to get through a crisis. Although some literature does address the importance of relationship building pre-crisis, the field in general is lacking.

In a highly globalized world, where organizations are more interdependent, it will become more difficult to remain isolated when a crisis strikes. A great example that illustrates this point is the recent grounding of the Costa Concordia in January 2012 (CNN, 2012). Although the cruise line was under fire as a result of the ship's grounding, the entire cruise ship industry as well as the U.S. Coast Guard fielded questions regarding the safety of the cruise ship industry. Because of the apparent lack in research on this topic, and increased globalization and interdependence of organizations, this topic should be scrutinized further. Ultimately, this study will end up contributing to the extant crisis communication literature. With this foundation laid, the following chapters will provide some background information and context for this case analysis as well as identify research questions to explore regarding the role of relationships during a crisis or disaster.

### **CHAPTER III: Background**

The American Red Cross was chosen for this study not only for its national and international reputation as a humanitarian organization, but also because of the accessibility and availability of key members, who were involved in the tornado response. Furthermore, conducting a case analysis involving both a non-government organization such as the American Red Cross, and a government organization such as the City of Tuscaloosa, might provide some valuable insight in how two organizations such as these, through relationships, can leverage each other's strengths and resources, especially during times of crisis.

#### *The American Red Cross*

Founded on May 21, 1881 by Clara Barton, the American Red Cross is one of the nation's premier disaster relief organizations ("Our History," n.d.). Registered as a 501(c)(3) nonprofit organization, this mostly volunteer agency responds to approximately 70,000 natural and man-made disasters in the U.S. annually ("Disaster relief," n.d.; "Donate funds," n.d.).

From its beginnings in the late 19<sup>th</sup> century, the Red Cross has conducted domestic and international disaster relief, aided the U.S. military during times of war by providing nurses, supplies, and blood, as well as conducted peacetime relief work. Since then, the organization has expanded its services to areas such as civil defense, CPR/AED training, HIV/AIDS education, as well as providing emotional care and support in the

aftermath of disasters. The Red Cross partnered with the Federal Emergency Management Agency (FEMA) in 2006 to help organizations and communities to plan and coordinate for disasters. In addition to disaster preparation, FEMA and the Red Cross have worked together to provide feeding, sheltering, and family reunification services for communities affected by disasters. Because the Red Cross has a history of interagency coordination, it will be a perfect organization to assess for this study.

Today, volunteers and employees of the Red Cross carry out a variety of missions, and provide care and relief in five primary areas. Primary Red Cross support areas include:

1. People affected by disasters in America
2. Support for members of the military and their families
3. Blood collection, processing and distribution
4. Health and safety education and training
5. International relief and development

### *Disaster Relief*

The Red Cross and its cadre of volunteers and employees respond to myriad natural and man-made disasters annually. Disasters run the gamut from fires, hurricanes, earthquakes, tornadoes, and floods to hazardous material (HAZMAT) spills, transportation accidents, and explosions (“Disaster relief,” n.d.). In the wake of a disaster, the Red Cross primarily focuses on the immediate emergency needs of individuals such as providing shelter, food, as well as health and emotional health services. Assisting immediate needs of individuals and families affected by disaster is important because it helps people get on the path to resume their daily lives as soon as

possible. In addition to addressing the immediate needs of individuals, the Red Cross also feeds first responders and emergency workers, such as fire fighters and police, provides blood and blood products to disaster victims, assists family members outside the disaster area with inquiries, and helps victims access additional available resources.

### *City of Tuscaloosa*

The City of Tuscaloosa is located in Tuscaloosa County along the banks of the Black Warrior River in west-central Alabama (“City of tuscaloosa,” n.d.). Deriving its name from the Choctaw words “tushka” meaning warrior and “lusa” meaning black, the city was founded on December 1819 (“History of tuscaloosa,” n.d.). Tuscaloosa is the state’s fifth most populous city, is the county seat for Tuscaloosa County, and home to more than 90,000 residents (“Encyclopedia of Alabama,” 2012). As an education center, Tuscaloosa has three universities and colleges, the largest of which is the University of Alabama. In addition to its educational infrastructure, Tuscaloosa’s industrial base is supported by the Mercedes-Benz international assembly plant, which employs approximately 4,000 employees.

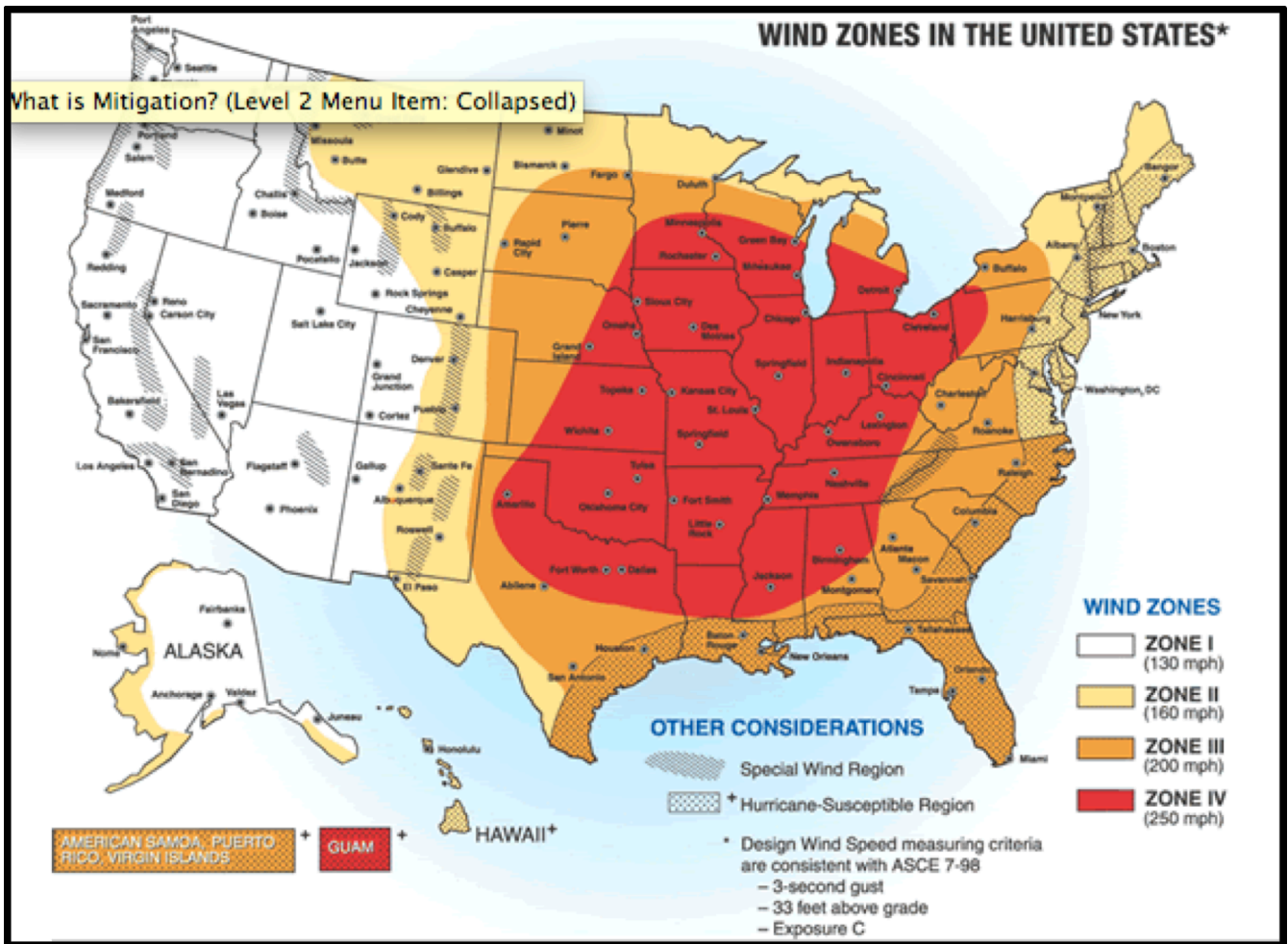
### *Tuscaloosa County Tornado History*

Tuscaloosa County is no stranger to severe weather events. According to the FEMA designated wind zones in the U.S., Tuscaloosa County is located in Zone IV (see figure 3), which is known not only for its frequency of tornadoes but also its deadly tornado history (“Tuscaloosa county hazard,” 2009). For this reason, it is no surprise that Tuscaloosa ranked tornadoes as the second highest prioritized threat to the city, second only to thunderstorms and wind. Despite the city’s familiarity with severe weather events, nothing could have prepared Tuscaloosa and its residents for what they



experienced on the afternoon of April 27, 2011. A rare EF-4 tornado, considered to be one of the fiercest and most devastating tornadoes, because of its destructive force and what little it leaves behind in its aftermath.

Figure 3: FEMA Wind Zone Map  
 Based on *FEMA Wind Zones*. Information available at <http://www.fema.gov/safe-rooms/wind-zones-united-states>



Considered to be one of nature’s most-violent storms, tornadoes can spawn from powerful thunderstorms and cause complete devastation and destruction to cities, towns, and communities in a matter of minutes (“Tornado,” n.d.). Appearing as rotating funnel

clouds that can reach winds in excess of 200 miles per hour, tornadoes often result in lost or damaged property, injuries, and fatalities, thus forever altering the lives of those individuals and communities that were affected by the storm's aftermath.

Tornado season in Alabama typically commences in March and ends in early June, with April and June being peak months for observed tornado activity ("Tuscaloosa county hazard," 2009). Observation of tornado data from January 1, 1997 to December 31, 2006 revealed that Tuscaloosa County experienced 27 tornadoes, ranging from F0 to F5 on the Fujita Tornado Scale, and three funnel clouds, which resulted in twelve deaths, 164 people injured and more than \$19 million dollars in total damage. Two of the twisters, including an F2 and an F1 tornado, directly affected the City of Tuscaloosa in 1997 and 2003, respectively. From 2007 to April 2011, Tuscaloosa County experienced nine more tornadoes ranging from F1 to F3 on the Fujita Tornado Scale ("Alabama tornado occurrences," 2013).

#### *Fujita Tornado Scale*

Prior to the adoption of the Fujita Scale, no formal method existed to differentiate one tornado from another ("A guide to," 2003). In an effort for standardization, the Fujita scale became the benchmark for estimating the intensity of tornadoes. According to the National Weather Service, the "original" Fujita Scale, created by Dr. Ted Fujita of the University of Chicago in 1971, gave ratings of F0 to F5 based on the type and severity of damage that a tornado produced ("The enhanced fujita," n.d.). Due to a lack in ability to accurately measure tornado wind speeds, Fujita created approximate wind speed ranges for each damage category by estimating through "after-the-fact examination of damage" that each tornado produced. After 2007, the National Weather Service

adopted the Enhanced Fujita Scale (EF-Scale) to rate tornadoes (see Figure 4). Created by a group of engineers, meteorologists, and experts at the Wind Science and Engineering Research Center at Texas Tech University, the EF Scale has revised wind speed ranges and is used today to categorize tornadoes.

Figure 4: Enhanced Fujita Scale  
 Based on the Enhanced Fujita Tornado Intensity Scale, 2013.  
 Information available at <http://www.weather.com/safety/tornadoes/enhanced-fujita-tornado-scale-20120330>.

EF Scale	Wind Speed
EF 0	65-85 mph
EF 1	86-110 mph
EF 2	111-135 mph
EF 3	136-165 mph
EF 4	166-200 mph
EF 5	Over 200 mph

### *Disaster Management*

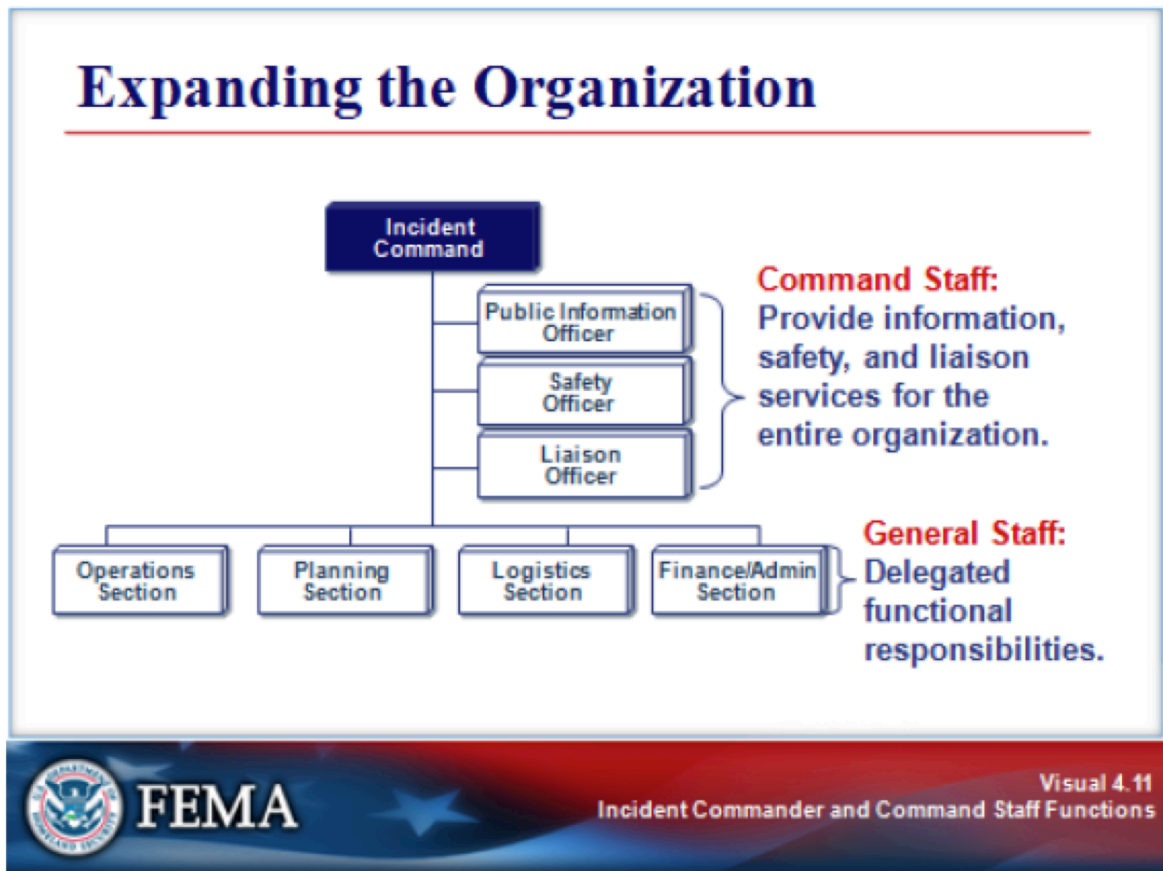
When analyzing any crisis or disaster, it is important to review the emergency management structures of the organizations involved. Understanding organizational structures will help shed light on how agencies and organizations respond during an emergency or disaster.

The City of Tuscaloosa utilized the Incident Command System structure during their response to the tornado. Developed in the 1970s, following a series of catastrophic fires in California, ICS is a standardized management system that is used at all levels of government, and also has been employed by nongovernment organizations and the private sector to address any potential hazard or emergency that might arise (“Incident command system,” n.d.). Used as a management tool to respond to natural hazards, technical hazards, human-caused hazards, and planned events, ICS provides an integrated

management structure, which enables managers to seamlessly coordinate an emergency response across multiple jurisdictions, and functional agencies. Due to its flexible nature, ICS can also be integrated to match the complexities and demands of any incident, regardless of size or scope.

Every incident requires management functions to be performed (“Incident commander and,” 2010). When a disaster strikes and ICS is initiated, management functions are performed by a cadre of individuals, which include, Incident Command, Operations, Planning, Logistics, and Finance and Administration (See Figure 5).


Figure 5: Incident Command Structure  
Based on *IS-100.b – Introduction to the Incident Command System (ICS)*



The Incident Commander, who is overall responsible for managing the incident, sets objectives, and develops strategies on how to handle incidents. As incidents grow in size and scope, the Incident Commander may delegate his or her authority for certain responsibilities to either the Command Staff or the General Staff. A brief description of other key management function descriptions can be found in Figure 6.

Figure 6: Incident Command Management Function Descriptions  
Based on *IS-100.b – Incident Commander and Command Staff Functions*

<b>Management Function Descriptions</b>	
<b>Function</b>	<b>Description</b>
Incident Command	<ul style="list-style-type: none"> <li>• Establishes incident objectives, strategies, and priorities.</li> <li>• Assume overall responsibility for the incident.</li> </ul>
Operations	<ul style="list-style-type: none"> <li>• Determines tactics and resources for achieving objectives.</li> <li>• Directs the tactical response.</li> </ul>
Planning	<ul style="list-style-type: none"> <li>• Collects and analyzes information.</li> <li>• Tracks resources.</li> <li>• Maintains documentation.</li> </ul>
Logistics	<ul style="list-style-type: none"> <li>• Provides resources and needed services.</li> </ul>
Finance/ Administration	<ul style="list-style-type: none"> <li>• Accounts for expenditures, claims, and compensation.</li> <li>• Procures needed resources.</li> </ul>


FEMA

Visual 4.3  
Incident Commander and Command Staff Functions

Although it is well practiced in emergency management and ICS, the Red Cross does not utilize the ICS structure during every response (S. Horsley, personal communication, November 30, 2012). Instead, the Red Cross uses its own internal

organizational structure to respond to emergencies and disasters, although it closely mirrors the ICS system (See Figure 7). One reason for the different structure is that the Red Cross maintains a certain level of autonomy when responding to various crises. Autonomy allows for a faster organizational response, as well as faster access and delivery of resources if required. Despite some of its differences, the Red Cross organizational structure is in many ways similar to ICS, with many of its positions fulfilling parallel functions. For example, the Incident Commander is the title for the person who manages and runs the operation in an ICS structure. However, during a Red Cross response, management responsibilities are given to the Job Director. Despite having different organizational structures and nomenclature, individuals from both organizations are trained in ICS, which allows responders to have a common knowledge and understanding when it comes to emergency management. Now that a thorough background regarding the Red Cross and the City has been conducted, the next section will be dedicated to the research questions and methods used for this analysis.

Figure 7: Sample Red Cross Organizational Chart for Disasters  
 Based on *Red Cross Toledo Chapter Organizational Chart (2007)*

Group / Activity / Position Definitions										
Click on the <a href="#">Red</a> link to jump to the full description – click on the <a href="#">Blue</a> heading link to return to the chart										
Operations Management <a href="#">(OM)</a>		Chapter DRO Director <a href="#">(CD)</a>			Multi-Chapter DRO Director <a href="#">(MD)</a>			National DRO Director <a href="#">(ND)</a>		
Individual Client Services <a href="#">(CLS)</a>	Mass Care <a href="#">(MC)</a>	Partner Services <a href="#">(PS)</a>		Information Management Support Services <a href="#">(IMS)</a>	Material Support Services <a href="#">(MSS)</a>		Staff Services <a href="#">(SS)</a>	Organization Support <a href="#">(OS)</a>		
Client Casework <a href="#">(CC)</a>	Bulk Distribution <a href="#">(BD)</a>	Community Relations <a href="#">(LCR)</a>	Government Liaison <a href="#">(LG)</a>	Disaster Assessment <a href="#">(DA)</a>	Facility Management <a href="#">(FAC)</a>	RT Communications <a href="#">(RCM)</a>	Staff Relations <a href="#">(SR)</a>	Public Affairs <a href="#">(PA)</a>		
Welfare Information <a href="#">(WI)</a>	Feeding <a href="#">(FE)</a>	Voluntary Agencies <a href="#">(LYA)</a>	Emergency Support Function 6 <a href="#">(ESF6)</a>	Information Dissemination <a href="#">(ID)</a>	In-Kind Donations <a href="#">(IKD)</a>	RT Networking <a href="#">(RNT)</a>	Workforce Planning & Acquisition <a href="#">(WP)</a>	Fund Raising <a href="#">(FR)</a>		
Health Services <a href="#">(HS)</a>	Sheltering <a href="#">(SH)</a>	Labor <a href="#">(LL)</a>		Analysis & Planning <a href="#">(AP)</a>	Warehousing & Supply <a href="#">(WHS)</a>	RT Computer Operations <a href="#">(RCO)</a>	Staff Support <a href="#">(SM)</a>	Response Investigations, Compliance, & Ethics <a href="#">(RICE)</a>		
Disaster Mental Health <a href="#">(DMH)</a>	Community Programs <a href="#">(CP)</a>			Financial & Statistical Information Management <a href="#">(FSI)</a>	Transportation Management <a href="#">(TRA)</a>	RT Customer Service <a href="#">(RCS)</a>	Training <a href="#">(TR)</a>			
Recovery Planning & Assistance <a href="#">(RPA)</a>					Life Safety & Asset Protection <a href="#">(LSAP)</a>		Staff Health <a href="#">(SW)</a>			
					Procurement <a href="#">(PRO)</a>					
				Invoice Review <a href="#">(IR)</a>						
Positions										
Service Associate <a href="#">(SA)</a>	Supervisor <a href="#">(SV)</a>	Manager <a href="#">(MN)</a>	Administrator <a href="#">(AM)</a>							April 2007

## CHAPTER IV: Research Questions & Method

This study aims to answer the following two research questions:

**RQ1:** What relationship did the City of Tuscaloosa have with the American Red Cross prior to April 27, 2011?

**RQ2:** How did the relationship between the City of Tuscaloosa and the American Red Cross affect their ability to conduct crisis communication and disaster response?

### *Case Study Method*

According to Wimmer and Dominick (2006), the case study approach to research allows the researcher to garner “as many data sources as possible to systematically investigate individuals, groups, organizations, or events” (p. 137). According to Yin (2009), case study research can be used in many different situations to “contribute to the overall knowledge of individual, group, organizational, social, political, and related phenomena” (p. 4). Yin also argues that case study methodology allows investigators to “retain the holistic and meaningful characteristics of real-life events — such as individual cycles, small group behavior, organizational and managerial processes, neighborhood change, school performance, international relations, and the maturation of industries” (p. 4).

### *Interviews*

The long form interview is considered to be one of the most powerful methods used in qualitative research (McCracken, 1988). Long form interviews not only reveal to



the investigator the mental world of an individual, they also offer an opportunity for researchers to experience the world through the eyes and mind of another person. Furthermore, long form interviews also take investigators “into the lifeworld of the individual, to see content and pattern of daily experience” (p. 9).

### *Communications Audit*

According to Hargie and Tourish (2000), a communications audit can help gauge the success or failure of a campaign or process because it gleans information from multiple sources of information. Coffman (2004) states that strategic communications audits are “systemic assessments, either formal or informal, of an organization’s capacity for, or performance of essential communications practices” (p. 2). Communications audits are also evaluative and help organizations determine what works and what doesn’t work with regards to their communication efforts. Lastly, communication audits help illuminate areas where organizations could strengthen their performance.

### *Method*

This study used a mixed-method approach to answer the aforementioned research questions, specifically, Wimmer and Dominick’s (2006) critical incident technique. According to Wimmer and Dominick, “The critical incident technique is a combination of in-depth interviewing and the case study approach. Its chief value is that it allows the researcher to gather in-depth information about a defined significant incident from the perspectives of those who were involved in it” (p. 406). An advantage to the critical incident technique is that it provides a picture of a significant event through the eyes of those who were directly involved. However, the information provided is only as reliable as the memories of those who experienced the incident. For this reason, multiple data

sources were considered as part of this case analysis to enable a deeper examination of the relationship and interagency coordination between the City of Tuscaloosa and the American Red Cross. Primary and secondary data sources included qualitative semi-structured interviews with members of the City of Tuscaloosa and the American Red Cross, a review of the City's Crisis Action Plan, the Tuscaloosa County Hazard Mitigation Plan, organizational websites and documents, and any relevant news articles and documents from the National Weather Service, the National Oceanic and Atmospheric Administration, and FEMA (see Appendix A).

Using Coombs' (2012) three-stage approach as the crisis management model to examine the actions of both organizations during the pre-crisis, crisis, and post-crisis phases, qualitative semi-structured interviews were conducted with key response personnel. In addition to semi-structured interviews, a communications audit was conducted on the City of Tuscaloosa's Crisis Action Plan. The American Red Cross did not provide a Crisis Action Plan or a Crisis Communications Plan. Neither the city nor the American Red Cross provided any other communications materials relevant to this case study. Both qualitative methods helped to answer the research questions in order to shed light on the nature of the relationship between the City of Tuscaloosa and the American Red Cross.

Six semi-structured interviews were conducted with key members from the City of Tuscaloosa and the American Red Cross. All six participants played an active, contributing role with their respective organizations during the tornado response on April 27. Participants were initially recruited via email to invite them to participate in the research. Follow-up phone calls were made to each individual for introduction purposes

and rapport building. All participants were given written consent forms that were signed and returned to me prior to commencement of the interviews.

Primary interviews were conducted over a three-week period and set up at times convenient to all parties. Interviews varied in length anywhere from 20 minutes to two hours in duration, with the majority lasting about an hour. Interviews were conducted with the Mayor of Tuscaloosa, the Incident Commander for the City of Tuscaloosa, the Public Relations Coordinator for the City of Tuscaloosa, a Public Information Officer (PIO) for the American Red Cross, Regional Communications Officer for the American Red Cross, and the Executive Director of the West Alabama Chapter of the American Red Cross. Follow-up interviews were conducted with participants when additional information was required for the research. Follow-up interviews were conducted via phone call. Out of respect to some of the more sensitive comments regarding the response, some of participant's quotes will remain confidential. The only identifiable information will be the agency that they are from.

Participants were deliberately selected not only for their experience and expertise during the tornado response, but also due to their varying degrees in level of responsibility. For example, the City of Tuscaloosa's Public Relations Coordinator would have similar tactical responsibilities and duties as the PIO for the American Red Cross. Additionally, the Mayor of Tuscaloosa would have similar strategic responsibilities and duties as the Executive Director of the West Alabama Chapter of the American Red Cross. All interviews were conducted via phone and digitally recorded using appropriate phone recording software. All content from the interviews were transcribed verbatim for qualitative analysis.

In order to answer the research questions, indicators were identified after the interviews were conducted to help ascertain both the nature of the relationship (did it exist or not), as well as relationship strength. Additionally, indicators were identified to determine how the relationship between the city and the Red Cross affected crisis communication and disaster response efforts during the storm.

In order to answer RQ1, interview questions focused solely on the pre-crisis phase of the disaster. The pre-crisis phase included any inter-organizational actions taken between the city and the Red Cross before the tornado struck on the afternoon of April 27. If interview participants mentioned any actions that involved inter-organizational disaster planning, preparations, or training, then these might be good indicators that a relationship existed prior to the storm. Other indicators might include any evidence of formal agreements between the two organizations, such as memoranda of agreement (MOAs) or memoranda of understanding (MOUs). Lastly, any internal documents such as crisis communications plans or crisis action plans that specifically identify each organization can also be a good indicator of a pre-existing relationship between the Red Cross and the city.

In order to determine the strength of the relationship during the pre-crisis phase, interview participants were asked questions that focused on how well they knew their counterparts at the other agency. Additionally, questions were asked regarding frequency of interaction. For example, how often did they interact or communicate with members of the other organization? If participants knew people by name and or communicated frequently with members of the organization, then these answers are good indications that

the relationship was strong. If participants had little to no interaction with the other organization, then this would be a good indicator that the relationship was weak.

In order to answer RQ2, interview questions focused on the crisis and post-crisis phases of the storm. The crisis and post-crisis phases included any inter-organizational actions taken between the city and the Red Cross from the moment the tornado struck until the time when both organizations returned to normal operations. The city and the Red Cross entered the post-crisis phase at different times, which were determined by their respective policies and procedures. Regardless of when the post-crisis phase began for each organization, questions during the crisis and post-crisis phases remained focused on interagency coordination and interaction. For example, if Red Cross and city personnel communicated and coordinated frequently during the response, then this might be a good indication that the impact was positive on their crisis communication and disaster response efforts. Other indicators might include whether or not messages and press releases were drafted jointly. If there was little coordination or there were indications of confusion or conflict between the two organizations, then this might reveal that the relationship negatively affected their performance. Lastly, if the Red Cross and the city came together in the post-crisis phase to share lessons and develop best practices for future storms, then this would be a good indication that the relationship had a positive impact.

Interview questions were divided into three sections, using Coombs' three-stage crisis management model, which included the pre-crisis, crisis, and post-crisis phases. Questions that were asked in the pre-crisis phase were designed to ascertain the nature and strength of the relationship between the City of Tuscaloosa and the American Red

Cross prior to the tornado on April 27, 2011. Examples of questions asked during the pre-crisis included:

1. What relationship (formal/informal) existed between the City of Tuscaloosa and the American Red Cross prior to April 27, 2011?
2. If a relationship existed, was the relationship formal or informal? For example, did formal memorandums of understanding (MOUs) or memorandums of agreement exist in writing between the two organizations?
3. If a formal/informal relationship existed, how frequently did you interact or communicate with each other prior to April 26, 2011?
4. What type of interaction took place between the City of Tuscaloosa and the American Red Cross prior to April 27, 2011 (email/phone correspondence, meetings, exercises etc.)?

Questions that were asked during the crisis phase were designed to ascertain the level of coordination and cooperation during the tornado response. Examples of questions during the crisis phase included:

1. Did you use an Incident Command Center (ICC) or Emergency Operations Center (EOC) during the response?
2. Was the City/American Red Cross represented in the EOC/ICC?
3. Was a Joint Information Center (JIC) established?
4. Did the City of Tuscaloosa/American Red Cross have representatives in the JIC?
5. Did you ever conduct joint press conference with the American Red Cross/City of Tuscaloosa?

Questions that were asked during the post-crisis phase were designed to ascertain the level of coordination and cooperation during the post-crisis phase. Examples of questions during the post-crisis phase included:

1. What were some important lessons learned from the crisis response?
2. What things could you improve on in a future crisis?
3. What is the most important take away for future crises regarding your relationship with the City of Tuscaloosa/American Red Cross?
4. Has your relationship strengthened from this experience?
5. How do you think it will help you during the next crisis?

For the complete interview guide, please see Appendix C.

#### *Limitations*

No matter how simple or complex a study can be all research seems to be constrained by time and resources. Therefore, limitations are unavoidable fact of life for researchers. Despite the valuable information and lessons provided from this study, limitations do exist. Addressing these limitations in future studies will only make this research more rich and fruitful for others to use.

One limitation from this study involves the timing of the research. Because the tornado affected Tuscaloosa almost two years ago, interview participants had to rely on memory to recall information from the response. Additionally, some participants no longer work with the city or are in new positions with other organizations, making it difficult to assess the nature of the relationship between the two organizations following the crisis. Obviously, the opportune time to conduct interviews would have been immediately following the storm, while the information was fresh in everyone's minds

and participants still worked at their respective organizations.

This study is also limited because it only observes the relationship between the City of Tuscaloosa, the American Red Cross, and the participants involved in those organizations. It would have been useful to interview response personnel from other organizations who were familiar with the Red Cross and city officials. These individuals might have been able to shed an outside observer's perspective on the relationship between the two organizations.

To make this a more comprehensive study regarding inter-organizational relationships, it would have been useful to examine the relationships between the City of Tuscaloosa with other NGOs and nonprofits such as the Salvation Army, and other religious organizations that all were involved in the response. Additionally, it would have been useful to see how the city, local NGOs, and nonprofits coordinated with county and state officials during the response.

In 2009, officials from both the Red Cross and the City of Tuscaloosa participated in a full-scale exercise at FEMA's Emergency Management Institute in Emmitsburg, Maryland. Observing participants in any exercise can be useful, when attempting to ascertain the nature of the relationship prior to the crisis event. Lastly, it would have been useful to get access to key internal documents of both organizations in order to get a better picture of their relationships prior to April 27, 2011.

A rare EF-4 tornado devastated the City of Tuscaloosa and its citizens on April 27, 2011. Because the city and the Red Cross were both greatly affected by the tornado, and members from both organizations played key roles during the response and recovery phases of the crisis, this event provides a perfect case to analyze and provide lessons



learned for organizations that are preparing for future potential disasters. The following sections of this case study will provide a review of the results, as well as provide recommendations for future first responders and organizations as they prepare for potential disasters and crises.

## **CHAPTER V: Tuscaloosa Tornado**

A thorough narrative describing the events and crisis management actions involving the City of Tuscaloosa and the Red Cross throughout the crisis is one method to facilitate analysis for this case study. The following narrative will provide an overview of the crisis using the aforementioned three-stage model of crisis management as proposed by Coombs (2012), as well as provide detailed results from the qualitative interviews, written in narrative form.

Before I discuss the events leading up to the tornado, it is important to observe how interview participants defined the characteristics that constitute a good relationship. When interview participants were asked how they would define a strong relationship, most individuals mentioned similar themes. Some of the common themes included the importance of having strong personal relationships. Additionally, interview participants stated the importance of having a mutual understanding of each other's capabilities and limitations. Lastly, organizations should understand each other's roles and responsibilities. A full description of common themes can be found in Figure 8.

When asked whether informal or formal relationships or agreements were more important, most participants agreed that both were important; however, they were more inclined to prefer the informal relationships in lieu of the formal relationships. Participants stated that formal agreements are legally binding to both organizations, thus making them beneficial. However, the majority of participants believed that the informal

relationships or agreements were more important, because they involved personal relationships and human interaction. Chris Osborne, the Regional Communication’s Officer for the Red Cross, detailed the advantages of both formal and informal agreements:

You know, obviously formal agreements are binding in a lot of cases and you can see it on paper. So, people don’t have the opportunity to forget any promises that were made. So, I would always encourage formal agreements. But the informal agreements mean in a lot of cases that you have built those relationships, which are often times built through communication, built through face-to-face meetings and rapport building. (C. Osborne, personal communication, December 4, 2012)

Oscar Barnes, who was the Executive Director of the West Alabama Chapter of the Red Cross, detailed his opinion regarding the importance of formal and informal agreements:

Formal agreements are just a piece of paper. Informal agreements are when you get together collectively and do the things you need to do because of the need to provide a service to your community. So you do whatever you can to strengthen it [agreement]. Formal [agreements] just makes it kind of official. It’s something we ought to do all the time. (O. Barnes, personal communication, December 19, 2012)

After a brief review of the results regarding traits of strong relationships according to interview participants, I will move forward with the case analysis framing the disaster using Coombs’ (2012) three-stage approach to crisis management.

Figure 8: Common themes that define a strong relationship  
Based on responses of interview participants

Having a strong personal relationship	Having someone’s name
Knowing what each party has to offer	Face to face interaction
Strong lines of communication between organizations	Knowing people on a first name basis
Strong connection with the other organization	Trust
Having a phone number of someone from the other organization	Having knowledge of how to get in contact with someone from the other organization
Having a strong personal relationship	Having a good relationship at multiple

	levels of the chain of command
Knowing each other's capabilities and limitations	Sharing resources
Understanding roles and responsibilities	Having a strong informal relationship

*Pre-crisis Phase*

Knowing when and where a natural disaster will strike can often be difficult to predict. However, having little to no warning doesn't mean that organizations are helpless when it comes to these events. Careful foresight, planning, preparation, training, and coordination are some actions that organizations can take in advance in order to prepare for a natural disaster. Furthermore, lessons learned from each experience can be valuable when helping organizations plan and prepare for the next disaster.

*ICS Training and Emergency Management*

The City of Tuscaloosa experienced its fair share of severe weather events prior to April 27, 2011, some of which included tornadoes and other natural disasters ("Tuscaloosa county hazard," 2009). In order to be better prepared to handle emergency situations, Tuscaloosa's Mayor, Walter Maddox, identified a need in 2009, for city officials as well as other organizations in the community to be trained in emergency management, specifically ICS (R. Edgeworth, personal communication, November 30, 2012). Tuscaloosa's fire chief, who having already completed training and incorporated the ICS structure within his own organization, strongly encouraged the mayor and his staff to send city representatives and other organizations within the community to attend as well. According to Edgeworth, having a common management structure and doctrine in place would only help facilitate city managers and first responders as they respond to future emergencies or crises. Additionally, the ICS structure is what FEMA and state

EMA would likely use during a disaster, so it made sense to receive the same training and institute a similar disaster management system.

Heeding the fire chief's advice, the City of Tuscaloosa sent 60 representatives to FEMA's Emergency Management Institute, located in Emmitsburg, Maryland, to receive community specific incident management training (W. Maddox, personal communication, November 26, 2012). The purpose of the training was to not only educate city officials on ICS and emergency management, but also assist Tuscaloosa response personnel and city managers on how to prepare for and respond to a potential crisis or emergency in the future. When describing the value of exercises and training, Mayor Maddox detailed:

They [exercises] establish protocols. They [exercises] give you an awareness of the issues that you are going to typically face, in our case during a tornado. ICS gave us a global perspective of what was happening in our city. We can set goals and objectives and move forward to the next problem in a fairly quick manner. ICS also allows us to operate more efficiently. (W. Maddox, personal communication, November 26, 2012)

Training participants included the mayor, members of the mayor's staff, and individuals representing a dozen other community organizations and first responders, such as local law enforcement, fire departments, and county emergency management. In addition to local city and county personnel, representatives from the Red Cross also attended the training (R. Edgeworth, personal communication, February, 1, 2013).

The weeklong training session consisted of classroom lectures, which ultimately culminated in a full-scale exercise involving multiple crisis scenarios (R. Edgeworth, personal communication, December 3, 2012). To ensure as much realism as possible for the trainees, FEMA made sure that the training was tailored specific for the city of Tuscaloosa. FEMA studied the city and created scenarios based on incidents that would

most likely occur in Tuscaloosa and its surrounding areas. Examples of crisis scenarios specific to Tuscaloosa included a train derailment, a water line break, a bus accident, a building fire, and a university riot. FEMA also provided simulated local news feeds specific to the City of Tuscaloosa to add to the realism of the scenario.

During the time of the training exercise, City officials did not realize that the lessons learned at Emmitsburg would be put to the test on the afternoon of April 27, 2011. Robin Edgeworth, who served as the City's Incident Commander during the storm, provided some interesting hindsight. She detailed:

We were very fortunate in that the Mayor, a couple of years ago, had seen a need for training. So that [the training] had us well prepared. I remember that they [ICS instructors] were talking about debris removal and how several of us made jokes, like do we really need to listen to this? Why would we need to know how many cubic yards of debris needed to be moved and things like that? As it was over, they [ICS instructors] were laughing, telling us that the bad part about going there [Emergency Management Institute] is that every group that attends the program ends up having a disaster within a few years. I guess we proved them right. (R. Edgeworth, personal communication, December 3, 2012)

As previously mentioned, the Red Cross responds to a number of incidents annually, and its members are intimately familiar in emergency management and ICS procedures. However, when responding to disasters or emergencies, the Red Cross typically uses its own internal management structure (S. Horsley, personal communication, November 30, 2012). In an effort to ensure its personnel are prepared to work in a joint environment during a disaster, Red Cross personnel continually receive ICS training.

In 2009, the Red Cross sent two of its members to Emmitsburg, Maryland to attend the same community specific incident management training as the city (O. Barnes, personal communication, December 19, 2012). Despite the fact that the training was

useful and relevant to most attendees, Red Cross participants felt more could have been done. According to one individual who attended the training, the Red Cross played a minimal role during the full-scale exercise. For example, one of the primary responsibilities of the Red Cross following a disaster is to set up shelter for individuals who have lost their homes. Instead of going through the actual process of establishing a shelter, which includes interagency coordination and logistical planning, the scenario only required Red Cross personnel to simulate the process. The following insight was provided by one of the training participants:

Well, we did go to Emmitsburg, Maryland, and did a town drill. There were about 70 or 80 of us that went up there [Emmitsburg]. It was kind of like they [the city] did their thing and we [Red Cross] were present. We were a minor part of the sheltering operation and that is not all that the Red Cross does. And I don't think the whole group [exercise participants] knew all of the roles we play. We sat in the EOC and answered phone calls about where the shelter, but it was still a minor role when it came down to it. We weren't involved at the level that it would have improved our ability to interact a lot. (Red Cross representative, personal communication, December 2012)

The training received at Emmitsburg would be the last formal large-scale exercise and training evolution that the city would participate in before April 27, 2011 (R. Edgeworth, personal communication, December, 3, 2012). This training would also be the last coordinated exercise and training event conducted between the city and the Red Cross before the tornado struck. According to Edgeworth, there were no federal or state mandates in place that required the City of Tuscaloosa to conduct any formal exercises or training events. Although the city and the Red Cross did not participate in any coordinated exercises between the two agencies, each organization was able to conduct some training prior to April 27, 2011.

Despite an absence of mandates, the city still managed to put its ICS training to

good use. In addition to requiring city employees to receive ICS qualifications at various levels, Mayor Maddox utilized the ICS structure as much as possible during routine city events, such as Alabama home football games (R. Edgeworth, personal communication, December, 3, 2012). Because the city was still relatively new at using ICS, putting it to practice during routine evolutions was a good method to help personnel better understand the response process as well as improve their capability to respond to a potential emergency. During the times that ICS was initiated, the city neither involved nor required interagency coordination or assistance.

Like the city, the Red Cross also continued to train and prepare for potential disasters (O. Barnes, personal communication, December 19, 2012). Because of its established relationships with the local fire and police departments, the Red Cross worked closely with them to respond to emergencies such as single-family home and apartment fires. In addition to its partnerships with local fire and police departments, the Red Cross had a long-standing relationship with the Tuscaloosa County Emergency Management Agency (EMA) (W. Maddox, personal communication, November 26, 2012). According to Chris Osborne, who was the Regional Communications Officer for the Red Cross, this relationship not only involved participation in joint exercises, but it also involved mutual agreements between the county and the Red Cross regarding sheltering operations (C. Osborne, personal communication, December 4, 2012). He detailed:

I can't really speak to a specific relationship because obviously there was an executive director in place. From a 30,000 foot level, I can tell you we worked very closely with not only the city government, but county municipalities, emergency management associations or agencies, I should say EMAs. Certainly we have agreements in place for sheltering and things like that. It [agreements] has to be done in non-disaster times, way ahead of time.



Those are formal agreements. They are signed documents that say hey, you are going to allow the Red Cross into your facility for X amount of time to shelter people that have been affected by emergencies. (C. Osborne, personal communication, December 4, 2012)

### *Disaster Planning and Interagency Coordination*

When it came to disaster planning and preparation, there was little evidence to suggest from interview participants that the city and the Red Cross worked together prior to April 27, 2011. In fact, there was little evidence to suggest that Red Cross and city officials interacted much with each other prior to the tornado. When asked about the nature of the relationship between the city and the Red Cross prior to April 27, 2011, one city official replied that they were aware of the Red Cross' presence in the city, but they never interacted with them. Additionally, this individual did not personally interact with the Red Cross prior to April 27. This individual detailed:

For the city of Tuscaloosa, I guess, I can't really say that we had a relationship other than knowing that they [Red Cross] were always there and were always apart of our community. But for our county EMA, the Red Cross always played a role when the county EMA established their structure. So I think it's been a long time relationship as far as how they [Red Cross and EMA] responded in disasters, but as far as the City of Tuscaloosa itself, they [Red Cross] are not, which would not be that unusual. They [Red Cross] are a partner to our county, as opposed to a partner to our city. (Personal communication, December 2012)

Meredith Lynch, who was a graduate student at the University of Alabama and an intern with the Mayor's office, filled the position of public relations coordinator for the City of Tuscaloosa after the storm on April 27, 2012 (M. Lynch, personal communication, December 13, 2012). Prior to her arrival, the city did not have an actual public relations coordinator or PIO. According to Lynch, she had no interaction with the Red Cross prior to April 27, while she filled the position of public relations coordinator.

When members of the Red Cross were asked the same question, they responded in

a similar fashion to city officials regarding their relationship prior to April 27, 2011. Dr. Suzanne Horsley, who was the Red Cross PIO during the tornado response, also had no interaction with her counterpart at the city, mainly because the city did not have an actual person filling the PIO position until Lynch's arrival (S. Horsley, personal communication, November 30, 2012). Horsley was also new to Tuscaloosa and busy teaching at the University of Alabama, which occupied most of her time. When asked if members of the city were familiar with the Red Cross' missions prior to April 27, one Red Cross member detailed:

Maybe the higher ups know that the Red Cross is available. Maybe a few of the other departments know that the Red Cross is available. I think they [city officials] generally know what we do, but they don't know all the different aspects of what we do. I think if there is any lesson learned out of this, they've [City of Tuscaloosa] got to know what the Red Cross can do and can't do. (personal communication, December 2012)

Despite such little interaction between the two agencies prior to April 27, there was some evidence to suggest that a relationship existed between the city and the Red Cross among some senior level officials. According to Mayor Maddox, a personal relationship had existed between him and Oscar Barnes for several years (W. Maddox, personal communication, November 26, 2012). Mayor Maddox detailed:

I had a personal relationship with Oscar Barnes, who was the American Red Cross Executive Director at the time. Oscar reached out to me when he arrived here. I can't give the exact date. I knew from our disaster management training the role the Red Cross would play in terms of sheltering. I understood their role, but I think the personal understanding was with Oscar's arrival. (W. Maddox, personal communication, November 26, 2012)

Chris Osborne echoed similar sentiments regarding the relationships between the Red Cross and the city. He detailed:

They [the city] know how to contact us and we know how to contact them. If there is a need that we can supply, they [the city] don't hesitate to pick up the

phone or shoot us an email or however those communications avenues are in place (C. Osborne, personal communication, December 4, 2012).

Despite the apparent lack of established interagency coordination between the City of Tuscaloosa and the Red Cross, relationships did exist with other organizations. The Executive Director of the West Alabama Chapter, Oscar Barnes, served as the chair of the Alabama Volunteer Organizations Active in Disaster (AL VOAD). AL VOAD is a network of nonprofit and faith-based organizations that was established to work together in an effort to reduce the effects of disasters (“About Alabama VOAD,” n.d.). According to Barnes, members of AL VOAD got together and met periodically to discuss different disasters scenarios. Specifically, the group discussed the allocation of resources during disaster response. Barnes detailed:

It’s [AL VOAD] different agencies that bring different resources to the table to help out in situations like this [tornado aftermath]. The Salvation Army, Catholic Social Services, and Senior Citizens Group were some of our members. All those that came together would say that they have certain resources available if there was a disaster. Then we would talk amongst ourselves and build relationships. And when the time comes, we know what each other can provide and be able to help out and respond. (O. Barnes, personal communication, December 19, 2012).

According to Barnes, the city did not have a representative that participated in AL VOAD prior to the storm.

Like the Red Cross, the City of Tuscaloosa also established relationships involving other organizations (R. Edgeworth, personal communication, December 3, 2012). According to Edgeworth, mutual aid agreements were in place between the city and other municipalities prior to April 27. Mutual aid agreements were in place to assist Tuscaloosa if additional resources, such as fire fighters and law enforcement, were needed during the aftermath of a disaster. In addition to mutual aid agreements, Mayor Maddox had established strong personal relationships with neighboring mayors in

Alabama as well as with the governor (W. Maddox, personal communication, November 26, 2012). Despite having established relationships with other organizations, the city's disaster planning and preparation was mainly internalized and did not include outside agencies such as the Red Cross (R. Edgeworth, personal communication, December 3, 2012).

### *Crisis Action Plan*

It is important for any organization to have a crisis management plan (CMP) or crisis action plan (CAP). A CMP or CAP should contain information needed to manage a crisis (Coombs, 2012). According to members of the Red Cross and the city of Tuscaloosa, both organizations possessed a CAP or CMP. However, the city was the only organization that provided their CAP for review.

After conducting a communications audit of the city's CAP, it was evident that the mayor, his staff, and his various departments had a well-thought-out plan to handle a disaster or emergency. The city's CAP provided guidelines for how the city would coordinate and respond during a disaster or large-scale event ("City of Tuscaloosa," 2008). The CAP also outlined specific instructions and information regarding when to stand up city's Crisis Management Center (CMC) and EOC, and where they would be located. Lastly, the CAP outlined the city's unified command structure to include the various roles and responsibilities that people would hold during the response. It is noted that city personnel referred to the CMC as the Incident Command Center (ICC) when responding to interview questions regarding their command center.

According to the CAP, the Mayor would not act in the capacity of a traditional Incident Commander during a disaster or emergency ("City of Tuscaloosa," 2008).

Instead, the Mayor would delegate this responsibility to Robin Edgeworth, the city's Legal Affairs Administrator, while he oversaw the Policy Group (see Appendix B for CMC Unified Command Structure). The responsibility of Incident Commander was delegated to Robin so the Mayor could oversee the response and handle any policy issues that came up. The Incident Commander's responsibility during a response would be to manage the incident or the emergency (R. Edgeworth, personal communication, December 3, 2012). However, according to the CAP, the mayor or a designee would act as the lead spokesperson for the city.

According to the CAP, the city would have a Liaison Officer, who was responsible for working and coordinating with any outside agencies associated with the event ("City of Tuscaloosa," 2008). Specifically, the CAP mentions that the Liaison Officer "coordinates with Tuscaloosa County EOC for assistance needed from agencies such as Red Cross, Salvation Army, the Coroner's Office, Alabama Power Company, ALGASCO, etc." (p. 9). Furthermore, the Liaison Officer was responsible for providing a point of contact for assisting mutual aid agencies, identifying and communicating with all agency representatives, and providing information to agencies and key crisis management positions. When asked if the city had a Liaison Officer prior to and during the storm on April 27, 2011, Edgeworth stated that they did not have an individual who filled this role (R. Edgeworth, personal communication, December 3, 2012).

#### *Full Dress Rehearsal*

As previously mentioned, April and June are typically the peak months for observed tornado activity in Alabama ("Tuscaloosa county hazard," 2009). April 2011 proved to be an extremely active month for storm activity as evidenced by the 108

tornado occurrences that were recorded throughout the state of Alabama (“Alabama tornado data,” 2012). On April 15, 2011, a storm system that had already caused devastation across the eastern half of the U.S., spawned a tornado outbreak that affected central Alabama (“Tornado outbreak of,” 2012). On that day, an EF-3 tornado touched down southwest of Tuscaloosa, in Greene County, and continued on a northeasterly path before it lifted near the city (“Black warrior green,” 2011). Although the tornado did not result in any injuries or fatalities for Tuscaloosa and Greene County residents, it did leave an 18-mile path of uprooted trees, damaged homes and businesses, and caused widespread power outages and flooding.

At the time of the storm, city officials believed that this incident was going to be the weather event of the Mayor’s time in office (W. Maddox, personal communication, November 26, 2012). What they did not realize is that the storm would be a dress rehearsal for April 27, 2011. Mayor Maddox detailed:

The April 15<sup>th</sup> storm produced an EF-3 tornado that damaged and destroyed around 100 homes. It created around 30,000 cubic yards of debris. This storm created a lot of flooding and tree damage around the city, which required a lot of city assets. We did not realize at the time, but I thought it [the tornado] would be the natural weather event of my tenure as mayor. (W. Maddox, personal communication, November 26, 2012)

Both Red Cross and city officials responded, albeit separately, after the storm. Mayor Maddox stated that during the response, he visited Oscar Barnes at the Red Cross facility to check on their relief efforts (W. Maddox, personal communication, November 26, 2012). Despite the visit from the Mayor, there was little mention from interview participants regarding any coordinated relief efforts between the city and the Red Cross, after the tornado. Participants shared lessons learned from this tornado that were focused primarily on their respective organization’s performance instead of from a unified

command or interagency response perspective.

Although there appeared to be little or no coordination between the city and the Red Cross following the storm, the tornado did prove to be beneficial to both organizations for several reasons. According to Mayor Maddox, the tornado response provided an “outstanding practice” in the ICS process for city officials (W. Maddox, personal communication, November 26, 2012). The response not only improved the city’s internal coordination between its representatives in the field and members of its Incident Command, it also provided ideas on debris removal procedures. Lastly, the storm provided the city an idea of how to conduct humanitarian assistance. The Mayor did not mention anything in regards to interagency coordination with the Red Cross, other than his visit to the shelter.

For Dr. Horsley, the storm on April 15 was her first experience responding to a tornado event in Tuscaloosa as a PIO for the Red Cross (S. Horsley, personal communication, November 30, 2012). From her perspective, the April 15 tornado provided an opportunity to learn how the local Red Cross chapter and state members respond in the wake of a natural disaster. Additionally, Dr. Horsley learned about local Red Cross policies and procedures, such as how and where to establish a shelter if one was needed. Since Tuscaloosa had not been through a recent disaster, this storm was a good way to polish off some of the rust that often comes from a lack of emergency responses. Like Mayor Maddox, Dr. Horsley did not mention anything regarding any interagency coordination between the city and the Red Cross during the April 15 tornado.

For the Regional Communications Officer, Chris Osborne, the April 15 storm proved that tornadoes could happen anywhere and at any time (C. Osborne, personal

communication, December 4, 2012). According to Osborne, one of the big lessons learned from April 15, was the importance of partnerships. He detailed:

One thing I remember so vividly was the [Red Cross'] cooperation with service animals. One of our partner organizations brought in service animals for the children. The kids just loved it. The dogs seemed to take their mind off what was going on for a while. Seeing the kids happy seemed to brighten up the parents too. Obviously partnerships were an important part and are an important part of a response. (C. Osborne, personal communication, December 4, 2012)

All the valuable lessons learned from April 15 would be put to the test less than fifteen days later on April 27.

### *Crisis*

On April 26, 2011, the chief meteorologist at FOX6 News, located in Birmingham, Alabama, forecasted that northern and central Alabama would experience “historically severe weather” (“April’s fury,” 2011). According to FOX6 News Chief Meteorologist J-P Dice, northern and central Alabama was in store for a “high-impact weather event,” which included a threat for tornadoes. Dice’s on-air colleague ominously stated that residents could be “expecting some long hours.”

According to the weather channel, a tornado warning is issued when a tornado has been spotted, or an indication of a tornado exists on radar (“Tornado Watches &,” n.d.). Once a warning has been issued, the tornado is either occurring or imminent in the tornado warning area. At approximately 3:30 a.m. on April 27, 2011, the National

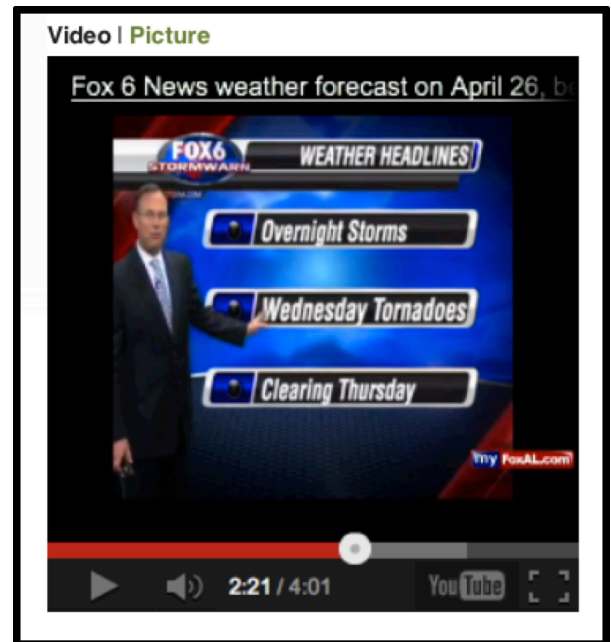


Figure 9: FOX6 News Weather Forecast on April 26



Weather Service issued a tornado warning for Pickens County, which is located due west of Tuscaloosa County (“April’s fury,” 2011). Within an hour, at approximately 4:16 a.m., an EF-2 tornado touched down in Aliceville, Alabama, which is located approximately 45 miles west of Tuscaloosa (“April’s fury,” 2011). By daybreak, a total of three twisters, which included two EF-2 and one EF-3 tornado had touched in Pickens County, Birmingham, and Tuscaloosa County causing damage to homes and trees in all affected areas. By 11:00 a.m., Alabama’s governor had declared a state of emergency.

As tornadoes continued to affect parts of northern and central Alabama, city officials in Tuscaloosa closely monitored the weather from the ICC, located at City Hall, and made preparations as the storm approached the city (W. Maddox, personal communication, November 26, 2012). As the storm approached, the city decided to stand up its ICC at around noon on April 27 (R. Edgeworth, personal communication, December 3, 2012). Although most of the equipment required to operate the ICC, such as phones and computers were already in place, it took about three hours to get the command center up and running.

Command center personnel consisted of staff members and colleagues that Edgeworth had worked with on numerous occasions and events over the years (R. Edgeworth, personal communication, December 3, 2012). Although the command center consisted mainly of city officials, some outside organizations such as the Alabama Forestry Commission, had personnel who operated in the ICC. The Red Cross had none of its members represented in the command center during response. Additionally, none of the city officials mentioned in their interviews about any prior coordination with the Red Cross as the storm approached the city.

Red Cross personnel also monitored storm activity throughout the day (S. Horsley, personal communication, November 30, 2012). Unlike the city, which had already initiated its ICS process, the Red Cross had its personnel on standby, waiting to respond once the storm had passed (O. Barnes, personal communication, December 19, 2012). 25 Red Cross personnel from around the country, who had responded to the previous tornado on April 15, were already operating out of the local Red Cross chapter building. According to Barnes, the local Red Cross chapter building was a mostly metal structure that would not adequately protect personnel in a storm of this magnitude. Fearing for safety of his volunteers and heeding the local weather reports of the potential dangers of this storm, Barnes had Red Cross personnel return to their hotels and other safe locations until the storm had passed. Barnes detailed:

Everybody was carefully watching the weather system. They [news] were reporting a strong system that was located in Mississippi. I guess it convinced me that it [the storm] was definitely going to be a strong system that was going to impact our area as the way it [the storm] was described by our weather people. The weather people did a good job of emphasizing the fact that this would be a dangerous storm (O. Barnes, personal communication, December 19, 2012).

According to Horsley, local Red Cross members waited in their homes as the tornado approached Tuscaloosa. She detailed:

This storm had been predicted for weeks, so everybody was on standby. I don't believe anyone had been deployed to Alabama because you don't know where it [tornado] was going to go. So I would say for several days prior, everyone was on standby. And Oscar certainly had verified things, and made sure that resources were available...make sure that he knew where all the trailers were. You know to haul cots and blankets. Um, it was unusual for a tornado, since we actually did have some notice. But no one had any idea that it would hit much of Alabama. There were 60 some tornadoes that day, just in our state, and nobody of course knew where it would land. (S. Horsley, personal communication, November 30, 2012)

As Red Cross members continued to wait for the tornado, Horsley used social media,

such as Twitter, to share information throughout the day in order to warn Tuscaloosa residents of the imminent storm. Horsley coordinated with the National Weather Service and Emergency Management to keep abreast of storm information and updates. None of the Red Cross members mentioned any interagency coordination with the city, as the tornado approached.

At approximately 5:13 p.m. on April 27, an EF-4 tornado, larger than a mile in diameter, touched down in Tuscaloosa and began a six-mile path of destruction (Lynch, 2011). According to the National Weather Service, the tornado had maximum sustained winds of approximately 190 mph (“Tuscaloosa-Birmingham EF,” 2012). As the tornado touched down, Mayor Maddox and the unified command sought shelter in the basement of city hall until the storm passed (W. Maddox, personal communication, November 26, 2012). After about five minutes, Mayor Maddox and his staff returned to the command center and watched the tornado on traffic cameras as the twister continued to devastate the city.

Once the storm passed, Barnes jumped into his vehicle and headed for the Red Cross chapter building (O. Barnes, personal communication, December 19, 2012). Based on what he saw on television, Barnes knew that there would be lots of damage and that

Figure 10: FOX6 News Video of Tornado



this response would be large. He also knew that this response would require a large number of response personnel to assist the residents of Tuscaloosa.

Once Barnes arrived at the chapter building, he noticed that all the windows were blown out, the roof was partially damaged, and water was inside the structure (O. Barnes, personal communication, December 19, 2012). In addition to the chapter building being severely damaged, Barnes noticed that all the windows of the Red Cross emergency response vehicles had been blown out as well. A tree also fell onto one of the Red Cross supply trailers that held blankets and cots for the shelter. Barnes knew that he had to get supplies to the shelter, which was located at the Belk Center, as quickly as possible, so it could get set up and opened.

Based on the magnitude of this storm and his earlier observations of tornado damage and debris, Barnes assumed there would be large numbers of people who potentially lost homes who would need a shelter to go to (O. Barnes, personal communication, December 19, 2012). The location of the shelter was selected in advance of the storm based on mutual agreements with the city and county. The city and the Red Cross chose the Belk Center as a good location for a shelter because it had a back-up generator in case the city lost power, and it had communications capability for Red Cross members. Additionally, the facility had the capacity to shelter a lot of people, as well as provide shower and restroom facilities for its inhabitants.

Like the Red Cross, the City of Tuscaloosa also experienced significant damages as a result of the storm. In addition to the costly damages experienced by the citizens and residents of Tuscaloosa, the city's emergency management resources and capabilities were severely reduced in the wake of the storm. Several elements of Tuscaloosa's

infrastructure were severely damaged or destroyed, including the Richard Curry facility that housed the county’s EMA (see Figure 11). The city also lost some communication towers, more than 50 vehicles from the Environmental Services Department, a fire station, police station, and numerous other response equipment and resources (Lynch, 2011). Like the Red Cross and the county EMA, the Salvation Army also lost its shelter during the storm (W. Maddox, personal communication, November 26, 2012). Within six minutes of touchdown, 12 percent of Tuscaloosa had been destroyed by the tornado and more than 7,000 people became unemployed (Lynch, 2011). The deadly storm also destroyed or damaged more than 5,000 residences, damaged more than 600 businesses, injured more than 1,200 people, and resulted in 53 fatalities (Pow, 2011). The city of Tuscaloosa was in a crisis.



Figure 11: Photo of Tuscaloosa County EMA Facility following the tornado  
Based on *Tuscaloosa tornado: Tragedy to triumph* [PDF Document].

*Crisis Communication*

Handling the volume of information required during emergencies and disasters can be extremely challenging. According to FEMA, the Joint Information System (JIS) provides a mechanism that allows for agencies to organize, integrate, and coordinate information in a timely manner (“Lesson 3: Joint,” n.d.). Within a JIS, Joint Information Centers (JICS) are established

to facilitate information coordination among various agencies, by utilizing the resources of co-located PIOs (“Lesson 5;” n.d.).

Despite the magnitude of this catastrophe, a Joint Information Center (JIC) was not established in Tuscaloosa for a couple of weeks (M. Lynch, personal communication, December 13, 2012). Instead, the city handled all of its communication and media inquiries at its command center at City Hall, while the Red Cross conducted its press events at the Belk Center. The city eventually set up a JIC inside the press box, which was located at the University of Alabama’s football stadium, about two weeks after the storm hit (M. Lynch, personal communication, December 13, 2012). Setting up a JIC so late in a response did not make any sense to Lynch and other responders, because communications had already been established at City Hall. Because of its ineffectiveness, the JIC was shut down soon after it was established. Although Lynch and Horsley did not operate out of the JIC when it was operational, both the city and the Red Cross had at least one representative there to coordinate information.

Mayor Maddox acted as the city’s spokesperson throughout the crisis response (M. Lynch, personal communication, December 13, 2012). According to Mayor Maddox (2012), the city’s communication’s strategy involved five points, which included:

1. Communicate calm and hope
2. Transparency
3. Express the needs of the city and its residents
4. Leverage social media
5. Focus on local media coverage

During the first two weeks of the response, the Mayor held two to three daily press conferences at City Hall. The press conferences were a joint effort, which allowed the mayor and other government officials to answer media inquiries, as well as provide updates on response efforts (R. Edgeworth, personal communication, December 3, 2012). Although the press conferences were considered to be joint, because there was coordination among various local and state government agencies, non-government agencies and nonprofits, such as the Red Cross, were not involved or included to participate in the communication process during the response. Additionally, the city made no efforts to coordinate command messaging regarding the response with the Red Cross throughout the crisis. Personnel who regularly attended the press conferences included Edgeworth, who was the Incident Commander, the County EMA Director, the sheriff, and Mayor Maddox.

In addition to the city's daily press conferences, information given to the public regarding response operations was done via press releases and social media (R. Edgeworth, personal communication, December 3, 2012). All Unified Command press releases were drafted internally by the city without input from any outside organizations such as the Red Cross. According to Edgeworth, when the city needed to coordinate with first responders in the field, or other government agencies such as the County EMA and local and state law enforcement, coordination would be done via email correspondence and voice communication, using devices such as hand-held Southern Link radios.

While the Mayor acted as the city's spokesperson throughout the response, Meredith Lynch handled media inquiries, set up press conferences, and transmitted the Unified Command messages over social media, using Twitter and Facebook (M. Lynch,

personal communication, December 13, 2012). Despite familiarity with her colleagues on the mayor's staff, Lynch had no personal interaction with members of the Red Cross prior to April 27 (M. Lynch, personal communication, December 13, 2012). Although Lynch did not personally interact with the Red Cross before the storm, she interacted frequently with them through social media, in order to transmit information to the public. Lynch's interaction on social media was limited to the organization's social media sites and not personal interaction with specific individuals.

Unlike many organizations who fail to use social media before a crisis, the City of Tuscaloosa used Facebook and Twitter prior to April 27, 2011, to pass general information to the public (R. Edgeworth, personal communication, December 3, 2012). Early in the response, the city used its website to pass information to the public (M. Lynch, personal communication, December 13, 2012). However, city officials quickly realized that its website became ineffective when Tuscaloosa residents were actively engaged in social media to receive and share information. Additionally, the website was too difficult to maintain and social media provided a faster avenue to communicate to a mass audience.

During the response, Lynch not only used the city's Facebook and Twitter accounts to transmit Unified Command messages to the public, but she also used them as a method to receive information from Tuscaloosa residents during the crisis phase (M. Lynch, personal communication, December 13, 2012). Twitter users reported real-time information such as road closures, the location of debris and downed trees, as well as the location of residents that experienced injuries and fatalities (R. Edgeworth, personal communication, December 3, 2012). In addition to real-time data and information,



Twitter enabled the Unified Command to share interagency information with the public (M. Lynch, personal communication, December 13, 2012). For example, when the Red Cross tweeted information regarding where people could go for shelter or get food and water, Lynch re-tweeted the information on the city's Twitter account. Lynch felt that Twitter was the fastest method to get information to the broadest audience regarding response efforts. Lastly, the city utilized its digital billboards to pass information to Tuscaloosa residents. Lynch tweeted information to a company, which would display the message on various digital billboards around the city to get information to Tuscaloosa residents. According to Lynch, the digital billboards were utilized only by the city.

When asked if she ever picked up the phone to speak with her counterparts at the Red Cross to collaborate, coordinate, or verify information passed over social media, Lynch stated that she did not (M. Lynch, personal communication, December 13, 2012). Lynch assumed that information tweeted from large reputable organizations such as the Red Cross or the Salvation Army was accurate and correct.

Like the city, the Red Cross ran its own communications operation, which was located at the Belk Center (S. Horsley, personal communication, November 30, 2012). The Belk Center was not only a shelter for disaster victims, it also acted as the local Disaster Operations Center (DOC) for the Red Cross. According to Horsley, her immediate priority as a PIO was to speak with national media regarding the crisis. As a credentialed Red Cross spokesperson at the national and international levels, Horsley knew that she had to get the Red Cross story out to the national media. She wanted to make sure that people around the country knew how they could help the Red Cross out and how they could send resources. Although she worked closely with local media,

Horsley knew that most of the support that the Red Cross needed would come from a national audience.

In her role as PIO, Dr. Horsley had very little interaction with first responders from other organizations (S. Horsley, personal communications, November 30, 2012).

She detailed:

I didn't work in a JIC because I didn't have time. I literally put in 12- to 14-hour days just to keep up with the media who was showing up at the shelter. And because it was a Red Cross shelter and not a government shelter, I was the spokesperson. I've been on other deployments where I worked with PIOs from EMAs and other organizations, but this one was pretty limited because of the sheer amount of the media. So I had my place where I was doing media. EMA had their place where they were doing media. The city had their place. Salvation Army had their place. We didn't really interact much on this case. (S. Horsley, personal communication, November 30, 2012).

Dr. Horsley conducted the majority of her press conferences and media interviews at the Belk Center. Her press conferences did not involve any representatives from the city. Because the JIC had not been established and there was no central location for media to congregate, reporters spread out throughout the city to get their stories. The majority of media outlets went to the Belk Center because many of the storm survivors were temporarily sheltered there. According to Dr. Horsley, if the EOC and the Salvation Army had not been destroyed, then she would have operated out of one of those locations to conduct her press conferences and media interviews. Because the media kept showing up at the shelter, Dr. Horsley continued to conduct her interviews there.

Running crisis communications from the Belk Center had its advantages and disadvantages (S. Horsley, personal communication, November 30, 2012). Because the facility was large, it had the space and the infrastructure required to support an emergency operation. Additionally, media interviews at the Belk Center allowed the

press and public to witness first-hand how the Red Cross handled the response. However, using the Belk Center as the primary location to conduct media interviews presented some challenges for Dr. Horsley and her colleagues. For example, the facility doubled as the local operations center and a shelter, simultaneously, which made it a difficult and distracting environment to conduct media interviews. Dr. Horsley mentioned that it would not be out of the ordinary to conduct a media interview outside the facility as an ambulance was pulling up to take away a sick or injured citizen. Additionally, the people who owned and operated the facility locked all the office doors prior to the storm, thus rendering all the offices, computers, and phones to be inaccessible.

Like the city, the Red Cross also relied on press conferences, press releases, and social media to transmit messages to the public and the media (S. Horsley, personal communication, November 30, 2012). Because cell phone towers had been destroyed in the storm, the Red Cross relied heavily on its mobile communications vehicles to boost their communications capabilities. The mobile communications vehicles, which were provided by national Red Cross resources, operated in a similar capacity as a satellite trucks or cell towers would, which gave the first responders the ability to transmit and communicate, when local cell towers were not operational or damaged.

Before the communications vehicles were available, Red Cross responders relied heavily on personal cell phones and text messaging to communicate with one another until they got access to Southern Link hand-held devices (S. Horsley, personal communication, November 30, 2012). Additionally, personal cell phones enabled Horsley to provide information updates via Twitter to the media, Red Cross

Headquarters, and the public. It was not uncommon during the early stages of the response to coordinate media availabilities and press conferences with reporters over Twitter, while interviews were conducted over a cell phone.

Throughout the response, Dr. Horsley relied on the regional Red Cross DOC in Birmingham to provide PIO support (S. Horsley, personal communication, November 30, 2012). As the main Red Cross' hub and central processing point for information throughout the state, the DOC provided Dr. Horsley with consistent daily messaging, talking points, and news releases to keep her and other first responders abreast of response operations. The DOC also provided information regarding how many shelters were open in the region, or where the food trucks were located. Since Dr. Horsley primarily relied on the DOC for messaging, she did not coordinate with the city before making any statements or releasing any information to the media. According to Dr. Horsley, the Red Cross stayed in its lane during interviews. She detailed:

In terms of what we did with the Red Cross, we only answered Red Cross questions. We stayed in our lane. We never answered questions about the number of fatalities or number of injuries. None of that was our purview. We stuck to Red Cross things. (S. Horsley, personal communication, November 30, 2012)

According to Edgeworth, the city did not request any resources from the Red Cross during the response (R. Edgeworth, personal communication, December 3, 2012). Instead, the mayor coordinated with neighboring cities and the state, via cell phone and text message, when requesting additional assistance with resources such as extra law enforcement, firefighters, and National Guard troops (M. Maddox, personal communication, November 26, 2012). Throughout the response, when cell towers were down, Mayor Maddox relied heavily on text messaging to communicate and coordinate

with the Governor and other mayors. Because text messaging did not require the same bandwidth as a normal cell phone call, the mayor used this tool as his primary means to communicate and coordinate resources throughout the response.

The Red Cross also relied on its own resources throughout the response (C. Osborne, personal communication, December 4, 2012). According to Osborne, local Red Cross members and volunteers typically respond to routine emergencies such as house fires and local incidents. Once the emergency crosses a certain dollar threshold, then it becomes a regional response when the Red Cross can mobilize additional resources to assist. Once the regional threshold is surpassed, the emergency becomes a national Disaster Response Operation (DRO), where the Red Cross can pull in all available human and equipment resources to respond to the disaster. Most of the supplies such as computers, tables, chairs, etc., are housed in warehouses around the country and can be shipped immediately when needed. Because of the Red Cross' internal logistics system, it did not request additional resources from the city for this response.

One of the challenges in any disaster is accounting for all the displaced persons who need a shelter after a storm hits. The ultimate goal is to ensure that people who need temporary shelter can move into something more permanent as soon as possible (R. Edgeworth, personal communication, December 3, 2012). Because the storm destroyed the Salvation Army's shelter, which normally provides housing for the chronically homeless, and the Red Cross shelter, which supplies housing for displaced families, both groups of people were forced to share the same facility at the Belk Center (O. Barnes, personal communication, December 19, 2012). Additionally, people who did not necessarily need the shelter, such as contractors who came from other towns to help out

with the response, also occupied the shelter (R. Edgeworth, personal communication, December 3, 2012).

The City of Tuscaloosa, the Red Cross, and the Salvation Army faced logistical challenges regarding the placement of the chronically homeless and residents who had lost their homes during the storm. Under normal circumstances, the Salvation Army Shelter provides shelter for the chronically homeless, whereas the Red Cross provides shelter for those residents who lost their home due to a disaster. Since the Salvation Army's shelter was destroyed in this storm, the chronically homeless were forced to share the shelter with people who lost their homes during the storm. At its peak, the Belk Center provided shelter for approximately 500 people. Since there was no tracking system in place to monitor who was coming and going from the shelter, it became difficult to determine which people actually needed the shelter and which people did not. Additionally, it created confusions regarding jurisdictional responsibility over the homeless and the displaced Tuscaloosa residents. One Red Cross member detailed:

The Salvation Army's homeless shelter was gone. They [the city] could not understand why we couldn't do anything for them [the homeless]. That was not our mission. Our mission was to take care of the people that were affected by the disaster. You know some of the homeless people were impacted, but we weren't a homeless shelter. But, we weren't going to turn anybody down and tell anybody to leave. (personal communication, December, 2012)

To rectify this problem, the city coordinated with the Red Cross to send case officers to the shelter. The case officers assisted in keeping track of who actually belonged in the shelter and who did not.

### *Post-Crisis*

Every crisis eventually comes to an end, allowing for organizations to return to a state of normalcy (Coombs, 2010). During the post-crisis phase, organizations can take

the opportunity to reflect and learn from their experiences. Organizations learn from crises by collecting data, conducting analysis, and evaluating their crisis management efforts (Coombs, 2012). Additionally, organizations that are willing to take the time and energy to be honest and open about mistakes that were made during past crises will reap the benefits of improved performance during future events (Coombs, 2012).

The city of Tuscaloosa transitioned into the post-crisis phase approximately one year after the tornado struck the city (R. Edgeworth, personal communication, December 3, 2012). Unlike the city, whose crisis phase lasted significantly longer, the Red Cross transitioned into the post-crisis phase in a little over two months (S. Horsley, personal communication, November 30, 2012). According to Horsley, the Red Cross made its transition from crisis to post-crisis once media attention dissipated.

Like in any disaster or emergency, this storm created opportunities for the city and the Red Cross to learn many valuable lessons regarding its emergency management and response efforts. As evidenced in previous sections, this storm created unprecedented challenges for both the city and the Red Cross. For example, despite its redundant systems, the city still faced the challenge of dealing with the loss of the majority of its emergency management and environmental service capabilities (W. Maddox, personal communication, November 26, 2012). Another challenge that the city faced involved the handling of its volunteers (W. Maddox, personal communication, November 26, 2012). Mayor Maddox detailed:

We struggled a long time with volunteers. When we lost the Red Cross, Salvation Army, and the Tuscaloosa EMA [facilities], those were three legs of our stool that supported those [volunteer] services. When their facilities and resources were wiped from the map, we struggled. It took us 72 to 96 hours to really understand how to organize our volunteers. How to coordinate them in such a manner to be effective. (W. Maddox, personal communication, November 26, 2012)

The city also struggled with identification of its missing persons. Because Tuscaloosa is a college town, the city was overwhelmed with locating missing persons. The fact that cell towers were also down exacerbated the situation, because family members could not contact their sons or daughters at the university. Instead, family members called the local police departments, which quickly overwhelmed the system.

Once this storm wiped out much of the emergency management and response infrastructure for both organizations, it became clear that primary disaster management plans were no longer effective or useful. Because no one had imagined that a storm of this magnitude would strike Tuscaloosa, coupled with the fact that there were no contingency plans that were prepared to handle the loss of the EMA, Salvation Army and Red Cross facilities, and communications capabilities were severely limited or unavailable, both organizations were forced to be create plans on the fly to deal with this response. For these reasons, both organizations really struggled during the early stages of the response.

One of the important lessons that the mayor highlighted involved preparation (W. Maddox, personal communication, November 26, 2012). According to the mayor, much of the groundwork for this response had been done through the FEMA training at Emmitsburg. Additionally, the April 15 storm also provided an excellent opportunity for first responders practice a real response before April 27. Both events helped train city officials and first responders in disaster preparedness, but they also put emergency protocols in place, which helped facilitate response efforts on April 27. The mayor also highlighted the importance of personal relationships. He detailed:



The attorneys will tell you that formal [relationships] are more important, but I will argue that the personal are more important. When you know someone, you get an understanding of what they are experiencing. You have a heart to make sure you provide resources immediately. Let me give you a quick story. The mayor of North Fork, which is a community next to us, that wasn't damaged by the storm, could not reach me by phone. But he sent a text message and said, "Walt, we are coming across the bridge." And that night, North Fork sent dozens of police officers, and every bit of their public works into the city. That is because Mayor Herndon and I are friends and colleagues. That is a personal relationship. The personal relationships, whether it was the superintendents of the schools or whether it was the Red Cross or the governor, those things [relationships] are extremely important in a crisis. Making sure bonds are there are very important. (W. Maddox, personal communication, November 26, 2012)

Mayor Maddox did not discuss any lessons learned regarding coordinated response efforts between the city and the Red Cross during his interview.

According to one city official, one area that did cause some challenges involved the national Red Cross response to the storm (personal communication, December, 2012). According to this individual, once the Red Cross lost its facility after the storm, local Red Cross members turned to people from the region and national headquarters to assist with the response. Being unfamiliar with regional and national Red Cross protocols on handling responses, roles and responsibilities became less clear to city officials. This individual detailed:

I think for me personally, understanding better everyone's role in the response of what they actually do as opposed to what maybe I expected them to do. I feel that is something that an ongoing relationship or improved relationship could help. (Personal communication, December 2012)

Like the Mayor, the city's public relations coordinator, Meredith Lynch, mentioned the importance of relationships, specifically with outside organizations and the media (M. Lynch, personal communication, December 13, 2012). She detailed:

I think having a stronger relationship with all my media outlets and other organizations that were trying to get messages out to the city and from the city would have really increased the amount of value for all things that we reiterated to

the citizens. It [response] really was about relationships, which I wish could have been stronger. I think now everyone knows exactly who to talk to because they had to work with each other constantly after the tornado to find information. And now, they are always going to have that name and number that they can go to if something else heaven forbid happens again. (M. Lynch, personal communication, December 13, 2012)

The Red Cross also learned valuable lessons from this disaster. According to Horsley, one organization can't do it all (S. Horsley, personal communication, November 30, 2012). Because this was such a large response, the Red Cross relied on many other nonprofit organizations as well as the private sector to help out in other non-Red Cross mission areas. For example, the Red Cross contacted local optometrists to help residents who had lost their eyeglasses in the storm. The Red Cross also reached out to local dentist and other people who could help residents with denture replacements. They also coordinated with groups that offered babysitting services so that parents could handle any administrative issues or conduct salvage operations at their homes.

Dr. Horsley also echoed the importance of establishing relationships during non-disaster times (S. Horsley, personal communication, November 30, 2012). She detailed:

We have also have learned that we need to develop these relationships during non-disaster times. That was pretty obvious to me. I was a new comer. I really wasn't a part of the community, but I am now. You know, that was another thing that we all had to learn. How important it is to develop those relationships. I think at least for now that everybody still is in that [building relationships] mode. You know, we are still very much recovering and it [the tornado] is still very much in people's minds. I think we knew this before, but it really brought home the fact that we can't do this by ourselves. (S. Horsley, personal communication, November 30, 2012)

Like Dr. Horsley, Osborne also stressed the importance of partnerships during any crisis (C. Osborne, personal communication, December 4, 2012). Osborne echoed the same sentiment as Dr. Horsley when he stated that, one organization can't handle a large-scale disaster by itself. He also added that it is beneficial to a crisis response when

organizations know each other's roles and they understand each other's capabilities. He detailed:

I think again that partnerships are key. Staying in your lane is key. There are certain things that are in the parameters of every organization. You know, building those relationships whether informal or formal, ahead of time, will let you know what a particular agency is capable of or what a particular government entity can and cannot do. And so, you can manage your expectations when something happens, if you know, up front, what those parameters are. So I would say relationship building is key. (C. Osborne, personal communication, December 4, 2012)

Osborne admitted that the Red Cross needed to do a better job of educating the public and "officials" on the day-to-day roles and responsibilities of the Red Cross. The education process also included informing the public on how the Red Cross, at all levels, responds during emergencies and disasters. In the end, Osborne believes that this disaster resulted in a better mutual understanding of the missions, roles, responsibilities, capabilities, and limitations that both the city and the Red Cross possess.

According to Barnes, one of the most difficult challenges during this disaster involved the lack of communication between the city and the Red Cross (O. Barnes, personal communication, December 19, 2012). Barnes stated that the city had a hard time knowing what the Red Cross was doing and vice versa. Although the Red Cross had a representative working at the EOC, Barnes still had a difficult time knowing the city's response plan. One way to resolve this challenge is to foster better relationships and improve interagency coordination (O. Barnes, personal communication, December 14, 2012). However, he emphasized that relationships and coordination alone were not enough for successful interagency coordination. Instead, for organizations to be successful during a crisis, all echelons of the organizations needed to have established

relationships with one another. Additionally, all echelons of the organizations also needed to understand everyone's roles and responsibilities. Barnes detailed:

Leaders depend on their people to report information to them as well as providing information on what other agencies are doing. However, if the person doing the reporting doesn't have a clear understanding of what our agency is doing, then the leadership is not going to get a good report. (O. Barnes, personal communication, December 14, 2012)

Lastly, he emphasized the importance of conducting joint meetings before and during a crisis (O. Barnes, December 14, 2012). According to Barnes, the city probably held its own disaster planning meetings before and during the crisis. However, outside organizations such as the Red Cross neither participated in these meetings nor were invited to them. Barnes believes it would have been beneficial for everyone, if outside organizations like the Red Cross, were allowed to participate in some of these meetings, so issues could be addressed and resolved before a crisis happened. After a thorough narrative detailing the crisis management actions during the three stages of this crisis, the following sections will provide some analysis and recommendations for future disasters.

## **CHAPTER VI: Discussion, Recommendations, & Conclusion**

Although every crisis is different, each one has an identifiable life cycle (Coombs, 2012; Gonazales-Herrero & Pratt, 1995; Sturges, 1994). The crisis that spawned from the Tuscaloosa tornado proved to be no different. It's important for decision makers and managers to be familiar with the crisis life cycle, because the decisions and actions made during all three phases of pre-crisis, crisis, and post-crisis, will not only affect the outcome of the response, but it will also help determine whether or not the response was a success in the eyes of the stakeholder.

Another equally important aspect to crisis management revolves around relationships. According to Coombs (2000), understanding the relational perspective not only provides managers valuable insights regarding the crisis, it also allows them to develop effective responses. Successful crisis management also results when organizations build alliances, achieve coordination, and share information with their stakeholders (Pearson & Clair, 1998). Alliance building and information sharing is important to an organization's success because stakeholders have "intrinsic value" and their perceptions can threaten an organization's legitimacy.

It is fair to say that relationships alone are not enough to be successful in a crisis. Obviously, relationships centered on mutual trust, involvement, and cooperation, ultimately help organizations perform better during a crisis. According to Nathan and Mitroff (1991), it is important that relationships and crisis management focus on

stakeholder involvement. To be more effective during a crisis, organizations should not only involve as many stakeholders as possible during the crisis preparation and response stages, they should also allow stakeholders to share their own “perspective, identity, and knowledge to the analysis” (p. 164). In order for this to be accomplished, Alpaslan et al. (2009) argue that treatment between both parties must be “sincere” and the relationship should be based on mutual trust and cooperation.

As previously mentioned, the first step in Coombs’ (2012) three-stage approach to crisis management is the pre-crisis stage. During the pre-crisis stage, Coombs suggests that members of the organization take proactive measures to ensure that a crisis is prevented. The pre-crisis stage is also the optimum time to establish interagency relationships, because it gives organizations an opportunity to get to know each other, establish roles and responsibilities, and share strengths and weaknesses under less stressful conditions.

#### *Pre-crisis Relationship Status*

In order to answer RQ1, which focused solely on the pre-crisis stage, I first examined interagency actions taken between the Red Cross and the city prior to the storm to determine whether a relationship existed or not. As a review, Coombs (2012) defines relationships as the “interdependence of two or more groups” (p. 36). For the purpose of this study, the organizations met the definition of a relationship when evidence suggested that personal or formal relationships existed. Personal relationships existed if individuals from the Red Cross and the city interacted with one another. Interaction could be accomplished through informal or formal meetings, face-to-face interaction, email correspondence, personal communication, and others involving disaster planning,

preparations, or training. Formal relationships existed if there were any documents such as memoranda of agreement (MOAs) or memoranda of understanding (MOUs) in place between the two organizations regarding disaster planning and emergency management.

If a relationship existed, I also attempted to determine the strength of the relationship between the two organizations. Relationship strength was determined by observing the frequency of interaction between the Red Cross and city personnel, prior to the storm. Frequency of interaction was based on the amount of personal contact between individuals during actual responses or training exercises, informal or formal meetings, face-to-face interaction, email correspondence, personal communication, and others involving disaster planning and preparation. Lastly, a review of the city's crisis action plan (CAP) was conducted to see if there was evidence to show any intent regarding potential interagency coordination during a disaster response.

Based on the results of the qualitative interviews, there is some evidence that suggests that both formal and informal relationships existed between the city and the Red Cross prior to April 27. Despite this finding, there is also evidence that suggests that the relationship strength can be classified as weak or not fully developed based on the little interaction between the two organizations. This will be explained further in the following paragraphs. But before I proceed, it is worth mentioning the discrepancy between how interview participants defined the characteristics of a strong relationship and their lack of coordination throughout the crisis.

When asked to define the elements that make up a strong relationship, interview participants said all the right things, such as strong relationships require communication, trust, sharing resources, and face-to-face interaction. However, there was little to no

evidence by the interviewees that showed that relationship building actions were taken prior to and during the response. Several factors could explain why this is so. For example, interview participants could be satisfying me as the interviewer to tell me what I wanted to hear, whether they believed in the definitions or not. The possibility also exists that these definitions were lessons learned from their experiences and the elements interview participants talked about describe the actions that they should have taken to ensure better coordination before, during, and after the response. The third possibility could be that normal day-to-day operations or other organizational requirements prevented participants from establishing strong relationships with their counterparts.

The majority of interviewees mentioned that they had no prior contact with their counterparts before April 27, 2011. Similarly, interview participants rarely contacted members of either organization during the crisis response and post-crisis phases as well. Despite the fact that there was little contact between the two organizations, the majority of participants all stated that they could get in touch with their counterparts if needed. It is interesting to note that the majority of interview participants did not possess the name, phone, or email contact information of their counterparts prior to the storm. However, they could get this information from a supervisor or another person within their organization if they needed it. Despite interviewees not having contact information of their counterparts, other members within his or her organization had this information, which was an indicator that a prior relationship existed between the two organizations.

Regarding personal relationships, interviews revealed that they existed at the strategic management level between Mayor Maddox and Oscar Barnes, who was the Executive Director of the West Alabama Chapter of the Red Cross (W. Maddox, personal



communication, November 26, 2012). Mayor Maddox mentioned that he and Oscar Barnes had a personal relationship for “some time” and thus attributed much of his knowledge of the Red Cross’ missions and capabilities based on this relationship. Unlike the personal relationship at the strategic management level, there is little evidence to suggest that relationships existed at subordinate levels such as PIO, Incident Commander, and Regional Communications Officer. The majority of interview participants holding these positions described that they had little to no interaction with their counterparts before April 27.

There are several reasons that may explain why personal relationships were lacking between Red Cross and city personnel at the subordinate levels. One reason that explains this absence is the fact that vacancies existed with the city’s key emergency response positions, such as PIO and the Liaison Officer, prior to the storm. Therefore, there was no counterpart to contact. As previously mentioned, the city did not have a full-time public relations coordinator, PIO, or Liaison Officer prior to the storm. Meredith Lynch eventually filled the position of public relations coordinator or PIO; however, the Liaison Officer remained vacant.

Another reason for a lack of personal relationships may be based on the fact that the Red Cross is made up mostly of volunteers. During non-crisis times, Red Cross volunteers usually hold other full-time jobs or live in other parts of the country, so the availability of its members can be fairly limited. It’s not until a crisis that readily available volunteers show up to respond to an emergency.

At the time of the tornado, the local Red Cross chapter in Tuscaloosa only had four full-time employees. The Red Cross members who responded to the storm consisted

mainly of volunteers and national members. Dr. Horsley, who fulfilled the role of PIO during the storm, was a Red Cross volunteer, who also happens to live in Tuscaloosa. During non-disaster times, Dr. Horsley is a full-time professor at the University of Alabama. Also contributing to Dr. Horsley's lack of established relationships with other first responders from the city was the fact that she was new to the area, having only lived in Tuscaloosa for a year and a half prior to April 27. During that time period, Dr. Horsley and the Red Cross had not responded to any major disasters or emergencies prior to the tornado that hit on April 15, thus giving her little opportunity to coordinate, respond, and establish relationships with other first responders from the city.

Another contributing factor that explains the lack of relationship building between the two organizations is the preexisting policies and agreements regarding disaster management between Tuscaloosa County Emergency Management Agency (EMA) and the Red Cross. As one interviewee explained, it is not unusual that the Red Cross played a role in the county EMA structure and not with the city (Personal communication, December 2012). For this reason, the Red Cross was a partner with the county and not the city.

According to Mayor Maddox, the Red Cross and the county EMA had a long-standing formal relationship (W. Maddox, personal communication, November 26, 2012). Because of this formal relationship, the Red Cross and the county EMA shared mutual agreements regarding disaster planning, which included discussions about sheltering operations and coordinated training exercises. Additionally, during disaster response, policy and procedures dictated that the city and the Red Cross coordinate their emergency response through the county EMA and not with each other. In the case of this

disaster, the pre-established relationship and agreements proved to be beneficial for several reasons. First, a suitable shelter location and facility was already pre-determined before the storm struck, which facilitated first responders and managers from both organizations on where to send people who needed it. Second, because of the pre-established relationship, the shelter was able to open quickly following the storm, allowing for Tuscaloosa residents to immediately access and use the facility.

When asked if the city requested any Red Cross resources during the storm, the answer was no. However, the city had mutual agreements in place with the county EMA as well as with other towns within the state (W. Maddox, personal communication, November 26, 2012). Some mutual agreements were formal, but many were informal because of the friendships Mayor Maddox had developed with his colleagues. Because of these informal relationships, the mayor knew that Tuscaloosa would receive human and material resources if needed during a disaster by other municipalities. This proved to be the case in this storm as evidenced by the resources the city received from its neighbors after April 27. This reason might be one explanation why the mayor did not reach out to the Red Cross for any additional resources during the storm.

Although the city and the Red Cross did not take advantage of training exercises or actual responses to improve relationships with one another, other opportunities existed for them to grow their relationship. One example is the aforementioned Alabama Volunteer Organizations Active in Disaster (AL VOAD). AL VOAD is a network of nonprofit and faith-based organizations that was established to work together in an effort to reduce the effects of disasters (“About Alabama VOAD,” n.d.). According to Barnes, this group met periodically to discuss different disasters scenarios (O. Barnes, personal

communication, December 19, 2012). AL VOAD would have provided an excellent opportunity to build alliances, coordinate disaster planning, discuss the potential for sharing resources, as well as discuss roles and responsibilities between the two organizations. Unfortunately, the city did not have a representative in the organization and no interviewees explained why they did not participate in this group. AL VOAD was a missed opportunity for city officials that might have helped them prepare and coordinate for the tornado on April 27.

### *Relationship Strength*

Another important aspect regarding the relationship between the city and the Red Cross is centered on its strength. After all, what good is a relationship if it is not a strong one? It is evident in this case that the relationship strength between the city and the Red Cross can be classified as weak or barely developed, based on the little interaction between the two organizations before April 27. During the signal detection phase of the pre-crisis, Mayor Maddox recognized nearly two years prior to the storm the importance of interagency coordination and ICS training. However, despite having an interagency presence at Emmitsburg, there was little evidence to suggest significant levels of coordination or interaction between the Red Cross and the city as evidenced by the comments made by interview participants.

Although city officials sang the praises of the FEMA training for its realistic scenarios and interagency coordination aspects, Red Cross representatives did not share the same sentiment. The Red Cross felt it was underutilized during the full-scale exercise. Instead of developing a scenario that used a wider range of Red Cross missions and capabilities during an emergency or disaster, the Red Cross' role was limited to

sheltering operations. Not only was the Red Cross limited to sheltering operations, the scenario did not require exercise participants to go through the steps required to establish a shelter, which eliminated any opportunity to practice interagency coordination and planning. The lack of the FEMA training to fully utilize the Red Cross' full spectrum of capabilities during the full-scale exercise was another missed opportunity prior to the storm to work out any coordination issues in a safe and sterile exercise environment. Additionally, lack of Red Cross involvement in the disaster scenario was a missed opportunity to discuss capabilities, limitations, roles and responsibilities between the two organizations in a non-disaster environment. Of note, lack of Red Cross participation during the full-scale exercise was solely a function of the FEMA scenario and not due to the city failing to use the Red Cross or the Red Cross failing to participate in the exercise. If the Red Cross had a greater role in the full-scale exercise in 2009, lessons learned from that experience might have resulted in improved interagency coordination during the tornado response in 2011.

Pearson and Clair (1998) argue that organizational success is determined by the level of accuracy of an organization's understanding of how their stakeholders will behave during a crisis. Based on the observation of Red Cross member opinions, it is clear that some members of the city's response team did not fully understand how the Red Cross would behave in a crisis. For example, some Red Cross members felt that certain city officials at various levels of the chain of command were not aware of the full scope of the Red Cross' capabilities and missions. City officials also admitted that they struggled to understand Red Cross operational protocols and procedures once regional and national assets became involved with the response (personal communication,

December, 2012). Despite this perceived lack of understanding of the Red Cross' missions and capabilities, according to the mayor, he was fully aware of the capabilities of the Red Cross (W. Maddox, personal communication, November 26, 2012).

This apparent discrepancy regarding the Red Cross' capabilities is another indication that the relationship strength between the two organizations was weak. If the relationships were strong between the two organizations, there would be no misunderstanding from either party of what their roles and responsibilities would be during a disaster. Additionally, there would be no misunderstanding of what their capabilities and limitations are during a disaster response. Unfortunately in this situation, the Red Cross' main mission was perceived to be sheltering by some city officials. As one individual mentioned in the interview, sheltering is just a small part of the Red Cross' mission (Red Cross representative, personal communication, December 2012). In defense of the city, the Red Cross admitted that they needed to do a better job of educating the public and other organizations about their missions. Improved communication and education regarding their missions might help the Red Cross prepare for future disasters as it continues to develop and build relationships with other organizations.

Another indication that the relationship between the city and the Red Cross was weak was evidenced by the lack of interagency coordination during training exercises following Emmitsburg, as well as a lack of coordination during actual emergencies, such as the tornado of April 15. Although the Red Cross routinely coordinated responses with local fire and police departments during apartment and home fires, as well as conducted emergency management training with county EMA, there was no evidence of joint

training or exercises between it and the city. Despite receiving FEMA training at Emmitsburg, the city was still relatively new at using ICS. In order to hone their skills, the mayor utilized the ICS structure as much as possible during routine city events. However, these routine city events did not involve organizations such as the Red Cross, which might have proved beneficial during an actual emergency response. One has to wonder, if the city fully understood all of the Red Cross' capabilities and limitations, would they have invited them to participate in the more routine events?

Although at the time, the EF-3 tornado from April 15 was thought of as a significant event to Tuscaloosa residents, there was little to no evidence to suggest that the city and the Red Cross coordinated the response effort or shared any resources. When interview participants were asked questions regarding lessons learned from April 15, most discussed how the storm gave each of their respective agencies an opportunity to practice their own emergency management procedures. The interviewees did not mention anything regarding interagency coordination between the Red Cross and the city. The only mention of any interaction occurred when Mayor Maddox visited with Oscar Barnes at the Red Cross shelter to check on relief efforts (W. Maddox, personal communication, November 26, 2012). Not inviting other organizations to participate in coordinated ICS events as well as the lack of coordination between the two organizations during the April 15 tornado, were other examples of missed opportunities by the city and the Red Cross, which might have facilitated any interagency coordination during the April 27 tornado response.

After reviewing the city's crisis action plan (CAP), it is evident that the city had the intent of facilitating interagency coordination through its Liaison Officer. According

to the CAP, the Liaison Officer is responsible for coordinating all communications with agency representatives as well as providing information to key crisis communications positions during an emergency (“City of Tuscaloosa,” 2008). Despite identifying a need for a Liaison Officer during an emergency, as outlined in the CAP, the city did not actually fill the position. One explanation could be that the city did not have a full-time employee to fill the position before the storm hit on April 27. Another explanation could be that the Liaison Officer was no longer needed once the county EMA facility was destroyed after the storm. When the EMA facility was destroyed, agencies no longer had a central location to coordinate operations. Regardless of the reason, utilizing a Liaison Officer during a crisis of this magnitude would likely have been beneficial to response efforts. The Liaison Officer would also have facilitated any interagency coordination issues that might have arose during the crisis.

Lastly, the lack of interagency coordination between the Red Cross and the city resulted in the absence of an effective interagency contingency plan. Because the storm destroyed the county’s EMA facility along with the Red Cross and Salvation Army facilities, some of their initial response plans were rendered useless or ineffective, resulting in the struggle of all three organizations during the early phases of the response. Additionally, the Red Cross and the Salvation Army were forced to share the same shelter facility which caused some challenges for both organizations. A well coordinated and thought out contingency plan might have addressed these issues and mitigated any potential conflicts or challenges between the organizations before the storm hit the city.

Successful crisis management results when organizations build alliances, achieve coordination, and share information with their stakeholders (Pearson & Clair, 1998). It’s



also important organizations involve one another when preparing for a disaster. In this case, the city showed intent towards interagency coordination as evidenced by the joint FEMA training at Emmitsburg, and the description of the Liaison Officer position in their CAP. Additionally evidence shows that relationships existed at various levels in both organizations. However, a closer examination revealed that neither organization took the time to develop this relationship before the storm hit on April 27. The old sports adage goes that “teams play like they practice.” In the case of the city of Tuscaloosa and Red Cross, the lack of interaction and coordination between the two organizations during the FEMA training was evident during follow-on training exercises as well as the tornado response on April 15. Ironically, the same lack of coordination was also evident during the response following the April 27 tornado. Lastly, there was no evidence of any interagency contingency plans. If a coordinated contingency plan had been in place, both the city and the Red Cross might have mitigated some of the early challenges they faced during the initial stages of the response once their initial plans were rendered useless.

#### *Crisis Communication Performance*

To answer RQ2, analysis focused on the crisis phase of the response. Specifically, I looked at how each organization communicated with the public and with each other during the response. During the crisis stage, an organization’s crisis team works to contain the effects of the disaster (Mitroff, 1994). Additionally during this stage, organizations need to develop effective crisis response strategies, which are made up of words and actions that illustrate the command’s response efforts (Coombs, 2012). Coombs emphasizes that organizational responses should be quick, because they not only fill the information void, but they also ensure that the organization maintains control of

the message and the public receives the “organization’s side of the story” (p. 141).

Lastly, open two-way communication with stakeholders is important in any crisis.

Continuous, open, two-way communication between the organization and stakeholders is not only the lifeblood of a favorable organizational-stakeholder relationship, it is also essential to the crisis management team’s ability to contain, mitigate, and recover from the crisis.

Another important aspect that crisis managers should consider is based on reputation management theory (Coombs, 2012). Specifically, crisis managers need to be aware of how the crisis will affect the organization’s reputation. It is also important for crisis managers to understand Situational Crisis Communication Theory (SCCT), which posits that stakeholders make attributions about crisis responsibility (Coombs, 2010). Stakeholder attributions are important because they eventually shape how stakeholders behave toward an organization.

During the initial stages of any response, operations are oftentimes chaotic as first responders attempt to get control of the situation. What played in the favor of the city and the Red Cross was the fact that this crisis was caused by a natural disaster. According to Coombs (2012), when evaluating reputational threat, natural disasters fall into the victim category, which means that organizations are victims of the crisis and not the cause. Because the city and the Red Cross had no control of this storm, and they also were victims of this crisis, they did not have to spend resources defending their reputation. Instead, they could focus on communicating with their stakeholders regarding their response efforts.

As one can imagine, the tornado on April 27 created unprecedented challenges for the city and the Red Cross. Neither the city nor the Red Cross had any adequate coordinated contingency plans that addressed the issues that resulted from this storm. Because the majority of their emergency management facilities, infrastructure and resources were destroyed by the storm, both organizations were forced to improvise on how they would conduct their crisis response. Despite these challenges, the Red Cross and the city were both able to communicate their messages to the media and the public.

Throughout the response, each organization operated independently of each other, with the city running its response operation out of its command center located at City Hall, and the Red Cross operating its response out of its shelter, which was located at the Belk Center. Since City Hall had not been damaged by the storm, the mayor and his staff were able to capitalize on its existing infrastructure, thus giving emergency management personnel the capability to communicate command messages and updates regarding response efforts to the public and the media. City Hall also provided Mayor Maddox a suitable location to conduct daily press conferences to discuss the city's response efforts. The city was also able to utilize its electronic billboard system to pass information to people who did not have phones or the Internet. They were able to tweet information regarding water, food, and shelter onto the billboards so people could receive this information.

Despite having far fewer resources during the initial stages of the response, Red Cross personnel were also able to communicate their message to the media and the public. Unlike the city, which had communications resources such as landline telephones, computers, televisions, and printers, Red Cross personnel relied on personal

smart phones during the initial phase of the response to coordinate and conduct media interviews. Red Cross members also utilized smart phones to pass sheltering information via Twitter and text message to each other and the public. Because Red Cross personnel did not have access to televisions, computers, or printers, they relied heavily on their Disaster Operations Center (DOC) in Birmingham to pass command messages and draft press releases for them. If the Red Cross and the city had developed a stronger relationship prior to the storm, they might have had better coordination during the response. Better coordination would have resulted in the potential sharing of each other's resources, such as computers, landline telephones, and televisions during the initial stage of the response, while they waited for additional organic resources to be provided to them by their respective agencies.

According to Coombs (2012), another vital tool in a crisis manager's tool box during a crisis is the Internet. The Internet, which includes organizational webpages and social media sites, not only allows stakeholders to access organizational information, it allows organizations to "communicate their side of the story" (p. 112). However, having an online presence during the crisis is not enough. It is also important that organizations establish an online presence before the crisis. A pre-crisis online presence not only builds credibility with stakeholders, but it also gains followers.

In the case of this disaster, both the city and the Red Cross had already established an online presence through their respective websites and social media pages. Through its website, the city passed routine information to the residents of Tuscaloosa (R. Edgeworth, personal communication, December 3, 2012). Additionally, the city established a Facebook page and a Twitter account prior to the storm, recording 100 fans

and 1,200 followers respectively. Because of the city's established online presence, much of the public knew where to look to get information regarding the response, which facilitated their response efforts. Like the city, the Red Cross also communicated through online media sources to communicate their response efforts. As the storm approached Tuscaloosa, Dr. Horsley coordinated with weather agencies and local residents via Twitter to pass along updates and storm information (S. Horsley, personal communication, November 30, 2012).

One important takeaway from this disaster was how vital a role social media played in facilitating the Red Cross' and the city's ability to communicate with the media and the public. Because the public used Twitter and Facebook as primary methods to communicate information regarding the disaster with one another, social media became a crucial tool that the Red Cross and the city utilized to communicate to a mass audience. Through social media, the public was able to receive important response information about sheltering and where to receive food and water, despite the fact that there were widespread power outages and limited to no phone communication. Based on the lessons learned from this disaster, one can not overemphasize the importance of utilizing social media during a crisis. As this case proved, social media might be the only method of communication available to first responders to communicate with the public, when other traditional communications mediums such as phone lines and cell phones are limited or nonexistent.

Despite getting their respective messages out to the media and the public, both organizations ignored one important stakeholder, which was each other. There was little to no involvement or exchange of information evident throughout the crisis response.

According to Lynch, “the Red Cross did their thing and we did our thing” (M. Lynch, personal communication, December 13, 2012). When interview participants from the Red Cross and the city were asked if they reached out to their counterparts via email, phone, or other method, to coordinate information throughout the response, the majority said that they had not. Additionally, when asked if they had coordinated any press releases or conducted any joint press conference, the majority also said that they had not. Instead, each organization ran its own separate press conferences and media interviews. In order to prevent confusion or conflicting information, interview participants stated that each organization stayed in its lane and only answered questions that were specific to its area of expertise during the response. When asked if any information that was passed to the media by either organization conflicted with one another, the majority of the participants said that the information did not conflict.

In the case of this disaster, both organizations were very fortunate that conflicting information was not released to the media during this response. Especially, considering that there was no prior coordination between the organizations before the information was released to the public. If the organizations had coordinated with each other prior to releasing any information to the public, they might have guaranteed that no conflicting information was being released to the public regarding response efforts.

Although both agencies were able to communicate to the public, they did experience some information management challenges throughout the response. For example, both organizations struggled to communicate early in the response due to the lack of operational phone lines and limited cell phone capabilities. Lack of phone capabilities made it difficult to verify the number of fatalities within Tuscaloosa. It also

made it difficult to determine how many people remained missing. Additionally, both organizations had difficulties communicating with first responders in the field to get information regarding local aid stations. Oftentimes, the city would have to send a “runner” to an aid station to get information or status updates. Sending people to the field to get information was difficult and time consuming due to closed roads and scattered debris. According to Lynch, many of the organizations involved in this disaster ran their own responses with little to no coordination, thus making it difficult for the city to get accurate information about the overall response. Better resource sharing and inter-agency coordination might have resolved some of these challenges that both organizations experienced during the initial stages of the response.

Additionally, establishing a JIC would have helped with information coordination with all agencies involved in this response. A JIC would have provided a central location for information to be collected, analyzed, coordinated among the different PIOs, and disseminated to the public. Additionally, it would have provided a one-stop-shop for media to get all their questions answered by the various agencies and organizations involved in the response. If a JIC had been utilized properly, joint press conferences could have been conducted to communicate information to the public. Lastly, any messages passed via social media could have been easily coordinated and verified, instead of the blind “re-tweeting” of Twitter messages that occurred during the response. Because no JIC had been established, media spread out throughout Tuscaloosa to find information regarding the disaster, and thus making it more complicated for PIOs to do their job.

Despite the lack of resources and extenuating circumstance caused by this storm, the Red Cross and the city were both able to communicate their messages to the public and the media throughout the response. They were able to get their messages out to the public in a timely manner as well as get their side of the story out. Although the organizations did an effective job communicating with the public, they did a poor job communicating with each other. It is fair to say that internal communications issues and interagency communications issues posed the greatest challenge during the response. Both organizations struggled early in the crisis due to their lack of communications capabilities after the storm. Some of these challenges might have been resolved if the two organizations coordinated better before the crisis, as well as communicated better with each other during the crisis.

#### *Post-Crisis Lessons Learned*

According to Coombs (2012), the final stage in the crisis life cycle is the post-crisis phase. In this stage, crises are considered to be resolved and operations return back to a normal state. Additionally, crisis managers continue to keep stakeholders up-to-date on business continuity efforts and organizational learning takes place (Coombs, 2010). Based on the responses of interview participants, both organizations can take away many lessons from this experience, which will only help them plan and prepare for future crises. Both organizations also have a chance to develop their relationship before the next storm or disaster strikes. According to some of the interview participants, the lessons learned from this experience have already borne fruit and strengthened the relationship between the two organizations. Based on the results of this case analysis,



below are some valuable lessons and takeaways that organizations can use to plan and prepare for future crises:

1. Develop relationships early and often.
2. Personal and formal relationships are both important.
3. Strengthen existing relationships.
4. Don't discriminate and be inclusive of all organizations during all stages of the crisis life cycle. You never know which organization you will need help from during a disaster or emergency.
5. Know your colleagues and counterparts at other agencies. This establishes mutual trust. Share a cup of coffee with one another and invite each other to organizational meetings. The more comfortable you are with each other; the better off you will be during a crisis.
6. Know how to get in touch with your counterparts.
7. Coordinate and collaborate before, during, and after the crisis.
8. Make sure to maintain open two-way communication with other agencies throughout all stages of the crisis life cycle. This ensures that expectations are managed, roles and responsibilities are understood, and capabilities and limitations are understood. Besides, it is difficult to do it all by yourself.
9. Never be the senior person with a secret. Ensure all levels of management and the chain of command are aware potential inter-organizational issues or challenges.
10. Create an online presence. Make sure your colleagues and counterparts are aware of your online presence. Make sure your public is aware of your

online presence.

11. Social media will play a vital role in a disaster or crisis. Use it. Social media might be your only means to communicate to a mass audience when cell phones and land lines are limited or unavailable.
12. Ensure first responders in the field such as PIOs have the capability to send and receive information. Smart phones or tablets can be a difference maker in the field.
13. Have primary and backup plans. Coordinate your plans with other agencies. Make sure you study and rehearse them before the crisis. Make sure your plan allows room for flexibility. There is no catch all plan for every crisis. Also ensure all positions are filled per your CAP before the crisis strikes.
14. Practice, Practice, Practice. Practice like you fight! The best way to improve coordination is to practice together.
15. Utilize similar emergency management structures.
16. Utilize the JIC. This will provide a one-stop-shop for the public and media to get information. It also allows agency PIOs to de-conflict and coordinate information before it gets disseminated.
17. Establish formal agreements. This keeps organizations accountable during a crisis.

### *Conclusion*

The tornado of April 27, 2011 was a once in a generation event that tested the emergency response capabilities of the city of Tuscaloosa and the Red Cross. Despite their best efforts to prepare for a natural disaster or emergency, none could have

imagined the devastation that followed this storm. Despite having their resources and emergency response capabilities severely limited by the storm, both organizations as well as others throughout the community performed heroically as they responded to help their fellow citizens.

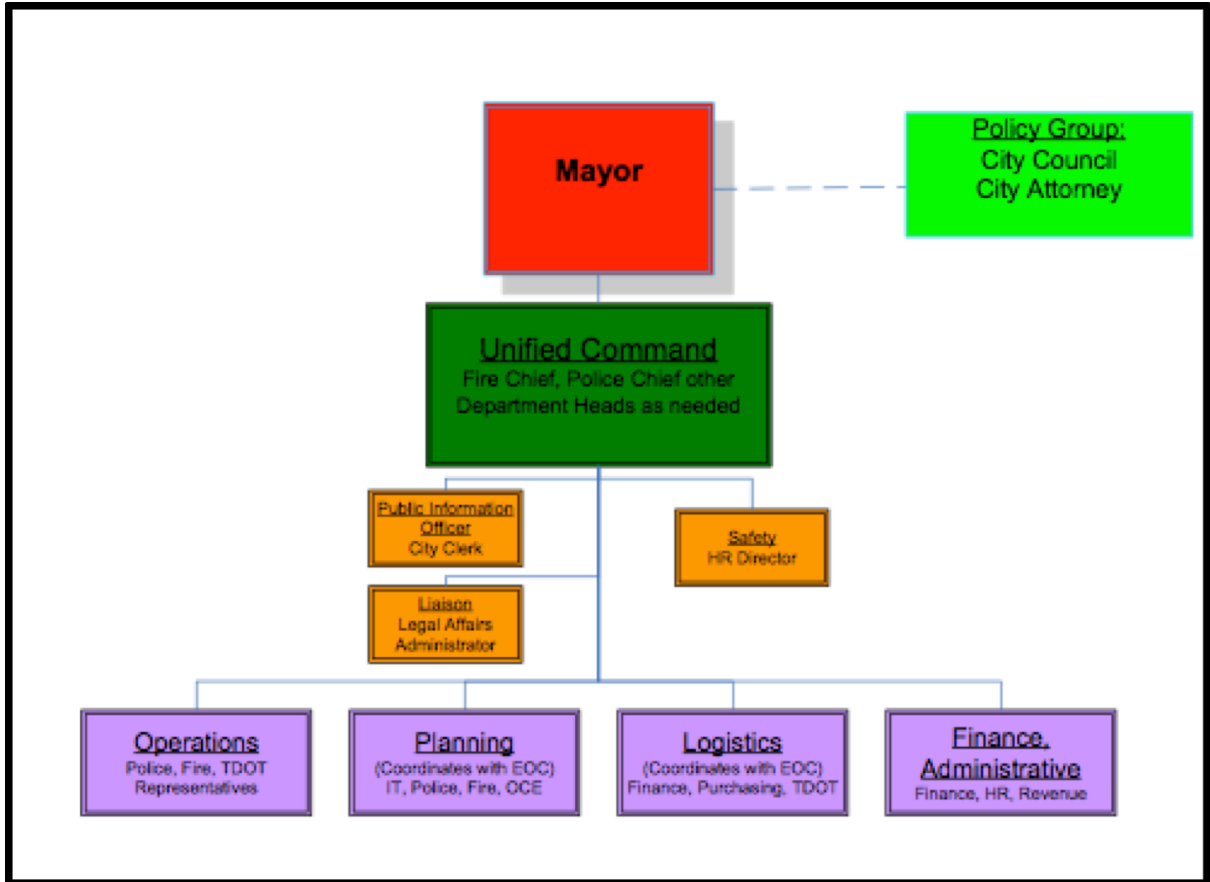
The purpose of this case analysis was to analyze the relationship between the Red Cross and the City of Tuscaloosa so that other organizations might be better prepared to handle a disaster of any magnitude. This study revealed that organizations cannot handle crises or emergencies by themselves. Additionally, relationships alone are not enough to succeed in a crisis. Strong relationships that are developed over time before a crisis strikes will ultimately help facilitate any interagency coordination during a disaster response. Interagency coordination allows for coordinated planning, the sharing of resources as well as a thorough understanding of roles, responsibilities, capabilities, and limitations, which ultimately leads to more effective crisis management. Also, relationship establishment and interagency coordinating is best done during the peace and calm of non-disaster times. Waiting to establish relationships during the chaos and confusion of a crisis is too late because organizations and crisis managers are often times juggling multiple items that require their full and immediate attention. In the end, the relationships that organizations establish and develop prior to a crisis, will ultimately lead to improved interagency coordination and improved crisis management.

**APPENDIX A, Data Sources**

<b>Primary and Secondary Data Sources</b>	
<b><i>Primary Data Sources</i></b>	<b><i>Secondary Data Sources</i></b>
<p>Telephone interviews with City of Tuscaloosa representatives:</p> <ul style="list-style-type: none"> <li>• Mayor Walter Maddox <i>Mayor, City of Tuscaloosa</i></li> <li>• Robin Edgeworth <i>Incident Commander, City of Tuscaloosa</i></li> <li>• Meredith Lynch <i>Public Relations Coordinator, City of Tuscaloosa</i></li> </ul>	<p>Tuscaloosa County Documentation</p> <ul style="list-style-type: none"> <li>• Tuscaloosa County Hazard Mitigation Plan (2009 Plan Update)</li> </ul> <p>City of Tuscaloosa Documentation</p> <ul style="list-style-type: none"> <li>• City of Tuscaloosa Crisis Action Plan (July 16, 2008)</li> <li>• City of Tuscaloosa Tornado Recovery Efforts (FAQ)</li> </ul> <p>American Red Cross Documentation</p> <ul style="list-style-type: none"> <li>• Red Cross Annual Report (2011)</li> </ul> <p>Online resources</p> <ul style="list-style-type: none"> <li>• Websites (Tuscaloosa Forward, City of Tuscaloosa, American Red Cross, Federal Emergency Management Agency (FEMA), National Oceanic and Atmospheric Administration (NOAA), National Weather Service)</li> </ul>
<p>Telephone interviews with American Red Cross representatives:</p> <ul style="list-style-type: none"> <li>• Oscar Barnes <i>Executive Director of the West Alabama Chapter, American Red Cross</i></li> <li>• Chris Osborne <i>Regional Communications Officer, American Red Cross</i></li> <li>• Dr. Suzanne Horsley <i>Public Information Officer, American Red Cross</i></li> </ul>	<p>Books and scholarly publications</p> <ul style="list-style-type: none"> <li>• Crisis communication literature</li> </ul>

**APPENDIX B, CMC Staff Positions and Responsibilities**  
**Section of Chapter IV of the City of Tuscaloosa Crisis Action Plan**

**City of Tuscaloosa Unified Command Structure**



## APPENDIX C, Interview Guide

This interview guide consists of 21 primary questions that are distributed into three sections (Pre-crisis, Crisis and Post-crisis phases). The majority of questions have probing questions that will be asked if needed. The probing questions can be found under the primary questions. I plan to interview individuals from the City of Tuscaloosa and the American Red Cross for my research. All of the questions below will be asked in all interviews.

### Pre-crisis phase

1. What was the most recent crisis or disaster that you experienced prior to April 27, 2011?
  - a. What lessons learned came from that experience?
  - b. Did you incorporate lessons learned prior to April 27, 2011?
  - c. How did the experience from previous disasters help prepare you for the tornado that hit Tuscaloosa on April 27, 2011?
2. What relationship (formal/informal) existed between the City of Tuscaloosa and the American Red Cross prior to April 27, 2011?
  - a. How long has your relationship existed with the American Red Cross prior to April 27, 2011?
  - b. If a relationship existed, was the relationship formal or informal? For example, did formal memorandums of understanding (MOUs) or memorandums of agreement exist in writing between the two organizations?
  - c. Did your relationship involve disaster preparedness or response?
  - d. If they did not have a relationship, ask them to define what a relationship means. What does it mean in a crisis perspective?
3. How would you characterize your relationship with the City/Red Cross prior to April 27th?
4. How did you initially establish your relationship with Mayor Maddox?
5. What challenging issues did you face during the response between the Red Cross and the City?
6. How did your relationship help your through your challenge?
7. If a formal/informal relationship existed, how frequently did you interact or communicate with each other prior to April 27, 2011?
  - a. What type of interaction took place between the City of Tuscaloosa and the American Red Cross prior to April 27, 2011 (email/phone correspondence, meetings, exercises etc.)?
  - b. How frequent were these meetings, exercises etc.?

8. During your training at Emittsburg, how closely did you work with City personnel?  
How did that training help you during the tornado.
9. What formal/informal relationships existed between the City of Tuscaloosa/American Red Cross and other organizations (non-government organizations, private, industry) prior to April 27, 2011?
  - a. How long has your relationship existed with these other organizations prior to April 27, 2011?
  - b. Was the relationship formal or informal? For example, did formal memorandums of understanding (MOUs) or memorandums of agreement exist in writing between the two organizations?
  - c. Did your relationship involve disaster preparedness or response?
10. What sort of command structure did you have in place for emergency management or disaster response prior to April 27, 2011?
  - a. Did your organization use the National Incident Management System (NIMS) prior to April 27, 2011?
  - b. If so, why was NIMS the preferred structure to use prior to April 27, 2011?
  - c. Were there any requirements in place to ensure that your organization conducted exercises with other agencies/organizations in your community/city/county?
  - d. Did your organization have meetings with the City of Tuscaloosa/American Red Cross to discuss disaster response?
  - e. How frequent are these meetings?
  - f. Did your organization conduct training exercises with the American Red Cross prior to April 27, 2011?
  - g. If so, what type of exercises (orientation seminar, drill, tabletop, functional exercise, full-scale exercise)?
  - h. How frequent did you conduct these exercises?
  - i. Where did you conduct these exercises?
  - j. When did you conduct these exercises?
11. Did your organization have a crisis/disaster management plan prior to April 27, 2011?
  - a. Did your organization have a crisis communication plan?
  - b. Did your crisis communication plan involve other organizations including the City of Tuscaloosa/American Red Cross?
  - c. What positions are considered critical during crisis response for your organization?
  - d. What positions make up the crisis management team?
  - e. How frequent do personnel turnover or change jobs or positions within your organization?
  - f. How often do personnel in critical crisis response positions turnover or change jobs or positions within your organization?

## Crisis phase

12. What was your role during the response?
  - a. How well did you know your team members at your organization?
  - b. Did you work with emergency responders from other organizations?
  - c. How well did you know emergency responders from other organizations?
  - d. Had you conducted any exercises with other emergency responders in the past that you worked with during the response?
  
13. Did the City of Tuscaloosa/American Red Cross use NIMS during the crisis response?
  - a. When did you initiate NIMS?
  
14. Did you use an Incident Command Center (ICC) or Emergency Operations Center (EOC) during the response?
  - a. When did you establish the IOC/EOC?
  - b. Where was it located?
  - c. How long did it take to set up?
  - d. Was an alternate location for the IOC/EOC established in the event the primary one was not functional/unavailable/damaged/destroyed?
  - e. Where was the alternate location of the IOC/EOC?
  - f. What critical resources were required to have a functioning IOC/EOC?
  - g. Were all resources (personnel, equipment, food etc.) available at the time the IOC/EOC were established?
  - h. What additional resources were needed?
  - i. Where could you get additional resources?
  - j. What organizations operated in the IOC/EOC?
  - k. Did the City of Tuscaloosa/American Red Cross operate in the IOC/EOC?
  
15. How was information disseminated to the City of Tuscaloosa during the response?
  - a. Was a Joint Information Center (JIC) established?
  - b. When was the JIC established?
  - c. Where was the JIC located?
  - d. Did the City of Tuscaloosa/American Red Cross represented in the JIC?
  - e. Who was the PIO for the response?
  - f. What organization was he/she from?
  - g. How was information disseminated between agencies and responders? (Email, phone, other method)
  - h. What methods did you use to communicate Incident Command messages to the residents of Tuscaloosa during the response?
  - i. Were messages jointly drafted or individually released?
  - j. Did you hold press conferences?
  - k. Were the press conferences held jointly with other organizations?



16. Were any critical resources or facilities damaged or destroyed, beyond use, due to the tornado?

- a. Did you seek additional resources or assistance from the City of Tuscaloosa/American Red Cross to help with damaged or destroyed resources or facilities?
- b. Did you seek additional resources or assistance from other organizations to help with damaged or destroyed resources or facilities?
- c. What critical resources were provided by the City of Tuscaloosa/American Red Cross, which helped you during the response?
- d. How did you receive critical resources?
- e. Were pre-existing agreements already in place prior to the storm?
- f. Did you have to create ad-hoc agreements?

Post-crisis phase

17. When did you transition from crisis to post-crisis phase?

18. What are some important lessons learned from the crisis-response?

- a. What were some of the resource challenges that you experienced during the crisis response?
- b. What was your biggest challenge between the Red Cross and the City?
- c. What were some of the interagency communications challenges that you experienced during the crisis response?
- d. What were some of the logistical challenges that you faced during the crisis response?

19. What things do you do really well during the response?

- a. What factors contributed to your success during the response?

20. What things could you improve on in a future crisis?

- a. What factors contributed to missteps or failures during the response?

21. How did established relationships affect all three phases of the crisis?

- a. Did your established relationships with the City of Tuscaloosa/American Red Cross negatively or positively affect your performance during the crisis?
- b. How did it affect your performance?
- c. What is the most important take away for future responses regarding your relationship with the city?
- d. Have you implemented any changes since the tornado to ensure that you are working more closely with the city?
- e. In what ways did established relationships positively affect or detract from your response efforts?
- f. Has your relationship strengthened from this experience?
- g. How do you think it will help you during the next crisis?
- h. Have you discovered new relationships that need to be established to help you get through a crisis?

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