THE STATE OF READINESS OF CRIMINAL JUSTICE AGENCIES IN AN ALL-HAZARDS EMERGENCY PREPAREDNESS WORLD

A Thesis by LISA ANN MARTIN

Submitted to the Graduate School Appalachian State University in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE

August 2012 Department of Government and Justice Studies

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ABSTRACT

THE STATE OF READINESS OF CRIMINAL JUSTICE AGENCIES IN AN ALL-HAZARDS EMERGENCY PREPAREDNESS WORLD. (August 2012)

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This exploratory research examines the presence of four key elements of disaster and emergency preparedness–sustainability, planning, training, and information dissemination– within local level criminal justice and supporting agencies. Data were gathered during interviews with personnel from 32 local level agencies in North Carolina. Findings reflect an overall propensity to equip, plan, train, and inform personnel for an agency's mission away from their specific worksite during the response or recovery phase of an emergency event rather than for the safety and security of personnel and facilities during and immediately following an event. This trend is revealed by the low to moderate number of organizations reporting (a) the presence of stockpiled disaster supplies, (b) written agency-specific emergency operations and continuity of operations plans, (c) training exercises incorporating those plans, and (d) the dissemination of information throughout their workforce regarding their agency's plans. This project suggests the necessity to investigate further the status of disaster/emergency management preparedness in the criminal justice system at the local level throughout the state and the country.

ACKNOWLEDGEMENTS

A very special thank-you is extended to the members of my thesis committee: Dr. Mullen, for his good-natured perspective and encouragement; Dr. Holcomb, the methods guru who offered countless pieces of advice to improve my work; and especially to my committee chair Dr. Robinson, whose editing, patience, support, and willingness to coach me through this process will never be forgotten.

Susan Triplett with the graduate school and Geri Purpur with the library deserve special recognition for their efforts to help me in so many ways. Susan and Geri, you will never know how special you are.

Finally, and most importantly, my utmost gratitude is extended to all the public service professionals who took their time and spent their energy participating in this project.

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CHAPTER 1:

INTRODUCTION

Government agencies, regardless of the department, exemplify the concept of public service. From educating youth, providing water and sewer for homes, regulating pollution, issuing drivers' licenses, to providing assistance for those less fortunate, government works to fill the needs of the community (Bowman & Kearney, 1999). When those services are compromised or thwarted in some way, it is the constituency that ultimately suffers. To ensure that agencies are operating to the best of their capabilities, there must be constant probing into their procedures and policies in order to identify and address areas of weakness that may hamper their altruistic mission of service to the people.

For some, the service provided by the criminal justice system is of utmost importance in society. According to Eegelko, California's Chief Justice Ronald George stated that "'the dispensation of justice is one of the most—if not the most—significant services provided by governments" (Pines, 2007, p. 61). This thesis is an exploration into the viability and sustainability of the local level criminal justice agency and workplace at a most vulnerable point—during and after an extraordinary disruptive event.

This research project is an extension of a previous work by this author. That work centered on the balance between the preservation of individual rights and privacy and the need for more stringent security and control of the environment and the population during and in the aftermath of a catastrophic event. The paper explored issues relevant to law enforcement, court administration, and corrections. Part of this involved presenting previous research that had examined the performance of different criminal justice agencies in the wake of actual historical disastrous events. Several articles suggested that a poor response to a crisis situation by those agencies was due in large part to the fact that they were ill-prepared to withstand such an event, much less help others in need or continue with their normal responsibilities within the criminal justice process. The purpose of this research is to inspect more thoroughly the state of local level criminal justice agencies with regard to disaster preparedness and emergency management practices.

The Nature of Disasters

This research is important for several reasons. First, disasters are increasing in frequency and intensity of socioeconomic impact demanding better mitigation and preparedness planning and implementation (The World Bank & The United Nations, 2010; Oliver-Smith, 1996; United Nations Environmental Programme, 2002). Boin (2009) and Oliver-Smith (1996) agree a consensus exists that catastrophic incidents are growing exponentially in terms of number of events, complexity of nature, and magnitude of consequences. According to Guha-Sapir, Vos, & Below (2011), the United States ranked fourth (with 13 reported events) among the top 10 countries reporting the most natural disaster events in 2010. The highest-ranking country was China with 25 reported events, while the lowest ranking was Vietnam with seven reported events. Interestingly, Rowling (2012) reported, "Disasters in 2011 stood out for the fact that events causing major human impact and economic losses hit wealthy and middle-income countries, inflicting record economic damage of \$366 billon" (para. 1) including "severe storms and tornadoes in the United States" (para. 2).

According to the Federal Emergency Management Agency (2010), disasters classify into three separate categories: natural, technological, and adversarial or human caused. However, Gundel (2005) points out that there has been, and will continue to be, a progression in the many different ways disasters have been classified over time as the interaction between society and environment has evolved.

Relatedly, Boin (2009) presents evidence that the increasing number and intensity of extraordinary events are resulting in ever-expanding consequences that lead to a new *transboundary crisis*. The global interconnectivity of our modern-day society creates an environment in which the consequences of one particular catastrophic event in a single specific physical or societal area may have a significant and far-reaching impact on a multitude of geographical and cultural settings in other areas (Boin, 2009). Both Boin (2009) and Gundel (2005) give evidence of the growing complexity of crises and crisis management. The recent events such as 9/11, Hurricane Katrina, the BP Oil disaster in the Gulf, and Japan's tragic earthquake induced tsunami and subsequent nuclear plant meltdown are stark examples.

Emphasis on Preparedness

Another reason for this type of research is that with the realization of devastating and proliferating outcomes from all types of hazards, there is an increased emphasis on emergency management, disaster preparedness, and vigilance against terrorist attacks as an essential element of the United States' government's role in protecting its citizenry. Dunne (2011) provides a timeline of important benchmarks that mark this country's progress in developing agencies, laws, and policies in the area of homeland security. In 2002, the Department of Homeland Security (DHS) became the first cabinet level department with the

sole mission of protecting this country from all possible dangers. Along with the creation of DHS, came a massive reorganization of 22 preexisting agencies and departments that would eventually be included under the DHS umbrella, including the Federal Emergency Management Agency (FEMA).¹ In direct response to the 9/11 attacks and the development of the DHS, most efforts regarding emergency and disaster preparedness took a turn toward terrorism, with resources and emphasis given to law enforcement and defense capabilities, and away from the intended all-hazards approach (Tierney, 2005). The catastrophic destruction of Hurricane Katrina in 2005, however, reminded the Department that it needed "to start focusing its work with federal, state, and local agencies, as well as the public, on the concept of preparedness" and its originally intended all-hazards approach (Dunne, 2011, p. 6). This endeavor can also be seen with the growth of FEMA's Higher Education Program which supports the efforts of outside academic institutions of higher learning to expand and grow their offerings in the areas of homeland security and emergency management programs, presently up to 253 from only 4 in 1994 (Cwaik, 2011; Johnson 2012).

The realization that the government cannot address all crises simultaneously and efficaciously has spawned an increased push for citizens, as well as public and private sector businesses, to take personal responsibility with regard to their own state of preparedness (Nickel & Eikenberry, 2007; Local, State, Tribal, and Federal Preparedness Task Force, 2010; West & Orr, 2007). Indeed, courts have ruled that private entities have an obligation to be prepared and that government agencies may be found liable for negligence in not taking appropriate measures to prevent certain catastrophes (Davis et al., 2006). In its 2010 report to Congress, the Local, State, Tribal, and Federal Preparedness Task Force stressed that

¹ A list of the agencies involved in this reorganization showing their former and present departmental locations can be found on the DHS website available at http://www.dhs.gov/xabout/history/editorial_0133.shtm

collaboration between the public and private sector on readiness is necessary and conceded that there is much left to do in order to facilitate and promote universal preparedness throughout the nation. The authors emphasized the need for the private sector to be prepared and to have realistic expectations about the government's capabilities in preventing and responding to catastrophic events. In fact, the DHS, as mandated by Congress, created the Voluntary Private Sector Preparedness Accreditation and Certification Program to encourage private entities to strive for and reach preparedness standards, intended specifically for them ("Voluntary Private Sector...," 2010).

Despite these initiatives to boost individual private sector accountability, however, Kemp (2003) asserts that governments will be held responsible by the public to provide for sufficient readiness in the face of impending doom. He states that "the public not only expects but also demands that city and county managers throughout the nation take the necessary steps to safeguard citizens' life and property during times of disaster, whether natural or man-made" (Kemp, 2003, p. 45). Likewise, this statement infers a certain expectation that local governments are taking the appropriate measures to protect citizens if disaster should occur while they are working, visiting, or being housed in a public facility or office. This is important because disasters can strike anywhere. Consider terrorism, for example:

Government facilities represent attractive and strategically important targets for both domestic and international terrorist groups, as well as criminals. These assets are often targeted because they provide unique services, often perform sensitive functions, and have significant symbolic value. Because of the high-profile nature of the sector, government facilities operate within a very dynamic risk environment requiring a variety of well-coordinated protective measures to ensure the safety and security of citizens and the continued availability of essential government functions. (Department of Homeland Security [DHS], 2009, p. 2)

Whether these initiatives have penetrated down to the local level government entity is especially important. There exists a truism that "'all disasters are local" (Barnett et al., 2005, p. 566) and "it is at the local level that disasters materialize" (Hardoy, 2010, p. 143). Kemp (2003) points out that "...the future of homeland security depends on preparedness initiatives at the local level" (p. 45). The government also acknowledges "that State and local governments must be the first line of defense against disaster and attack" (Department of Homeland Security, National Preparedness Task Force, 2006, p. 28). This is especially true with health-related incidents (Barnett et al., 2005). Furthermore, recovery from emergency events predominantly falls to the local government (Lindell, Prater, & Perry, 2007). If efforts at the local level are in place, many emergency situations can be controlled or mitigated, reducing their destructive consequences. The question that remains is, are government agencies, particularly criminal justice agencies, practicing preparedness initiatives at the local level workplace?

Social Justice Issues

A third reason to examine the readiness of governmental agencies has to do with issues of social justice, especially when lower level government facilities are not prepared for extraordinary events. One example of how social injustice occurs in this regard is when one group of individuals receives preferable treatment over another group in terms of health and safety concerns. For example, Wing and Schinasi (2007) noted the social justice imbalance between how different types of government workers were treated in response to a bioterrorism event. Recalling the anthrax attacks of 2001, they point out how precautionary evacuation measures were taken to protect high ranking government officials from possible contamination, while those of lesser prominence (postal workers) were told to keep working even though they were just as at risk, if not more so, because the anthrax was distributed through the mail (Wing & Schinasi, 2007).

The failure of a government institution to operate and perform adequately, for whatever reason, will also create negative ramifications for those constituents most dependent upon that particular institution. This can be especially detrimental with regard to those in the criminal justice system as a disproportionate number of defendants are of either a minority or lower socioeconomic background or both (Robinson, 2009, 2010). Walker, Spohn, & DeLone (2007) find this disproportionate representation in the system as compared to the general population particularly apparent among African Americans with respect to the rate of arrest for minorities, especially for more serious crimes. It follows that because our criminal justice system engages minorities and the poor at a disproportionately higher rate than the rest of society, any catastrophic event that directly affects a local jurisdiction's courthouse, law enforcement department, or correctional facility or services would have an excessively injurious effect on those particular populations.

Disasters tend to affect most significantly those of lesser means and minority races with more severe detrimental outcomes than the rest of society (Zack, 2009). The fact that "the most damage and highest human toll have been inflicted on the most vulnerable and the least affluent people in the affected areas" (Gopalakrishnan & Okada, 2007, p. 365) following a catastrophic event underscores this unbalanced reality. Hutchins, Fiscella, Levine, Ompad, and McDonald (2009) find that racial and ethnic minorities suffer healthrelated issues at a greater rate than Whites after a natural disaster. Maruschak, Sabol, Potter, Reid, and Cramer (2009) find that certain characteristics of jails and their populations make these organizations particularly susceptible to infectious diseases such as a pandemic flu. Couple this with the systemic bias that is built into the criminal justice system (Robinson 2009, 2010), and the degree of social injustice already present is magnified in the wake of a disastrous event when adequate readiness objectives are not met and certain populations are unduly affected (Maruschak et al., 2009).

Another area of concern with regard to social justice has to do with the right to challenge the legitimacy of confinement and other matters of due process during crisis situations, particularly as it pertains to infectious disease outbreaks or bioterrorism (Campbell, 2011; Gosten, 2002). Quarantine and isolation measures taken to prevent the spread of illness could unduly inhibit procedural matters of due process for those already in the system, affecting the entire criminal justice process, if prior mechanisms to deal with such situations are not in place beforehand (Public Health and Law Enforcement Emergency Preparedness Workgroup, 2008).

For all of the reasons thus considered, it remains prudent, if not imperative, that our criminal justice agencies at all levels of government are prepared to face and withstand the many types of emergency and disaster situations that may arise. To explore this subject, this thesis examines the presence of preparedness elements as they occur within a criminal justice agency's workplace environment, particularly those agencies at the local level in North Carolina.

First, chapter two presents related literature on emergency management and the concept of preparedness then turns to articles that specifically discuss preparedness of

criminal justice agencies as it applies to their local level worksite environment. Material pertaining to the supporting agencies of public health and emergency management is also included, as these two local agencies play important support roles in a jurisdiction's crisis management strategies. The remaining sections focus on the current study.

Chapter three outlines the operationalization of this current research project describing sample selection and methodology. Chapter four is a presentation of the findings from the study. Lastly, chapter five briefly summarizes the findings and closes out the discussion with implications and recommendations for future studies on this topic.

CHAPTER 2:

RELATED LITERATURE

The Concept of Preparedness

To understand the present use of the term "preparedness," an understanding of where the concept fits into the practice of emergency management and the emergency management cycle is in order. Emergency management is a recurring series of interrelated actions that comprise what is classically known in textbooks as the *emergency management cycle* (Alexander, 2002; Drabek, 1991; Lindell et al., 2007).

Also known as the *disaster cycle*, these actions fall into four major phases: mitigation, preparedness, response, and recovery (O'Leary, 2004). *Mitigation* refers to those activities that eliminate or lessen the impact of a hazardous event. This phase involves such things as the building of levees in flood prone areas, creating a designated disaster fund for a jurisdiction, or legislating building and planning code restrictions for certain vulnerable geographical areas. *Preparedness* refers to those activities carried out when a hazard is probable or imminent, such as acquiring resources, planning an evacuation route, and practicing an evacuation. Mitigation and preparedness efforts occur *prior* to a catastrophic event. Response and recovery refer to those steps taken *after* an event occurs. *Response* actions occur immediately after an event has begun and may continue for an extended period of time. These include actions such as putting out a fire, sending in supplies to an affected area, or asking for outside assistance from a neighboring jurisdiction. *Recovery* refers to those actions undertaken to rebuild and reconstitute structures, personnel, and processes

damaged or destroyed during a hazardous event (Alexander, 2002; Drabek, 1991; Lindell et al., 2007; O'Leary, 2004).

Emergency management professionals also recommend adopting an *all-hazards* approach when addressing crisis management (Alexander, 2002; Blanchard et al., 2007; Lindell et al., 2007). According to Blanchard et al. (2007), "there are similarities in how one reacts to all disasters. These event-specific actions form the basis for most emergency plans" (p. 5). When deviations or special provisions are called for to address a particular type of hazard, these may be included in an annex of the plan. This approach also allows a more comprehensive and effective use of available resources, contingency plans, and training opportunities (Blanchard et al., 2007). The phases of crisis management are fluid and fade into and out of each other as they transpire. For example, preparedness in general is part of an overall mitigation strategy that will directly affect subsequent response and recovery efforts (Quarantelli, 2003).

Kreps (1991) clarifies preparedness to mean:

...that various domains of responsibility (such as warning, damage assessment, and other emergency management functions) are identified and assigned to entities capable of performing them. It means that how these responsibilities are going to be performed has been worked out in at least a preliminary way. It means that the human and material resources needed to get the job done are available and can be mobilized quickly. Simply put, preparedness is clarity about what may be needed, what should be done, and how it will be done. (p. 34)

The author distinguishes this definition of preparedness from *improvisation*, the actual act of organizing the response with the onset of a disaster. He contends that preparedness is an

ongoing learning process that reduces unknowns and provides knowledge-based appropriate action choices during an event, when time is limited and decision-making is stressful (Kreps, 1991).

Likewise, the Department of Homeland Security (2008) defines preparedness as "a continuous cycle" of various activities that "ensure effective coordination during incident response" (p. 9). This cycle—usually referred to as occurring in a jurisdictional context such as a nation, state, county, or municipality (Alexander, 2002; Drabek, 1991; Lindell et al., 2007)—can also be applied to entities of different sizes such as individuals, households, schools, and businesses (FEMA, 2004; O'Leary, 2004).

Considered to be an "elusive concept" (Jenson, 2011, p. 8), Mike Cook (personal communication, August 5, 2011)—Western Regional Manager for the North Carolina Crime Control and Public Safety Division of Emergency Management—narrows preparedness down to this: "After an initial risk/hazard assessment, four key elements to crisis management preparedness are sustainability, planning, training, and information dissemination."

For the purposes of this present project, the focus will be on these four key elements of preparedness within an all-hazards approach context in relation to local level criminal justice agencies in North Carolina. First, however, the remainder of this chapter reviews previous literature that has specifically examined the intersection of the criminal justice system and crisis management preparedness.

The Criminal Justice System and Disaster Preparedness

Most of the available literature concerning criminal justice agencies and disasters involves historical recounts of the response and recovery phase after the fact. Such studies highlight the weaknesses and lack of preparedness from a "Hindsight's 20/20" perspective. Most conclude with recommendations for improving future response and recovery efforts by learning from past mistakes. Forward thinking literature offers a similar critique of preparedness and possible resulting vulnerabilities by presenting "what if" scenarios and suggesting improvements on how to prepare for certain catastrophes. Few studies, however, tackle the actual evaluation of preparedness and its assessment before a crisis situation occurs.

In general, the amount of disaster preparedness literature that specifically relates to the criminal justice system is slim. Additionally, most is usually agency-specific, focusing singularly on law enforcement, the judiciary, or corrections. This approach, however, minimizes the fact that each component of the criminal justice system works hand in hand with the other agencies in this field to fulfill the general objective of meting out justice in society. For this reason, the review opens with two discussions that give an overall perspective on disaster and emergency management as it relates to the three branches of criminal justice. A second group of studies follows and focuses more specifically on each particular branch of the criminal justice system and its state of readiness with regard to critical incident management and disaster preparedness. Lastly, research concerning the two supporting agencies—public health and emergency management—is covered.

Boland (2007) provides a sweeping account of ills that befell the criminal justice system from both the events of 9/11 and Hurricane Katrina. The major thrust of her report is to highlight issues that were unforeseen and pose theoretical questions for consideration in efforts to create a more prepared system going forward. Touching on all three components of the criminal justice system, her piece largely deals with contingency plans surrounding the judicial process and how continuity of operations with the other two branches, law enforcement and corrections, is maintained during a period of crisis management (Boland, 2007).

Louden (2006) also provides a comprehensive view of the relationship between emergency management and the criminal justice system. He highlights the complexity of the criminal justice system with regard to operations and process flow between the three different branches, as well as how local, state, and federal jurisdictional issues complicate matters even further. His main focus concerns the law enforcement aspect of criminal justice against a backdrop of historical disaster events, specifically those of 9/11 in New York City and Hurricane Katrina in New Orleans.

A key concern within these reports has to do with the interoperability of the various agencies to communicate with each other. Another concern was the conflict between law enforcement and other first responder agencies, such as the fire department, over which one was in command when responding to the same emergency incident. "Who's in Charge?" became the ultimate question. Louden (2006) highlights a lack of preparedness in the areas of mutual aid and communications. The author ends his piece with recommendations for future study in the area of criminal justice as it relates to the academic discipline of emergency management and the professional practice of emergency management (Louden, 2006).

The previous two articles point out the critical relationship between emergency management issues and all three arms of the criminal justice system. However, neither piece provides a clear method on how the three criminal justice agencies can assess their levels of disaster preparedness. Several of the following agency-specific studies provide some examples of efforts in this direction while others remain mostly instructional in nature, offering guidelines for consideration.

Law Enforcement

Historical event specific studies can provide the benefit of examining what actually happened during and after an event in efforts to ascertain best practices and make improvements going forward. Rojek and Smith (2007), however, point out the deficit of empirical research related to law enforcement and their experiences from which to evaluate and analyze this agency's first responder capabilities during an actual emergency. They contribute to filling this void in their descriptive analysis of the law enforcement response to Hurricane Katrina.

Through a process of personal interviews of law enforcement, county and municipal management personnel, and homeland security officials, Rojek and Smith (2007) found law enforcement agencies from the affected areas of Mississippi and Louisiana inadequate or severely lacking in terms of preparation for the storm. The authors concluded that response agencies were handicapped in the following areas: planning; command and control; mutual aid agreements and asking for assistance; communications; human and operational resources; and personal needs like food and water for the officers themselves. Collectively, deficiencies in these areas led law enforcement agencies of the affected areas to become overwhelmed. The net result was a partial degree of effectiveness in the performance of other duties such as the uneven and sporadic apprehension of looters. In addition to their crime control and first responder obligations, officers were also tasked with protecting valuable disaster relief goods and distribution sites further straining human resources (Rojek & Smith, 2007).

In stark contrast to the affected area's law enforcement agencies, this study, however, did highlight the superior preparedness, and thus the superior response capabilities, of law enforcement agencies from Florida that arrived to assist in the aftermath of Katrina. The major lesson to be learned from Katrina by other law enforcement agencies is that it is critical that local agencies plan, train, and equip themselves in anticipation of "the worst case scenario" (Rojek & Smith, 2007, p. 591) at the local level.. Also noteworthy, is that even though the authors focused on the response efforts of law enforcement during a catastrophic event, it was the preparatory steps taken, or not taken, prior to that event that directly determined the effectiveness of those same agencies' response efforts.

A non-disaster related study (Decker, Varano, & Greene, 2007) sheds some light on emergency preparedness of law enforcement by examining routine crime during times of widespread social disruption. The study compared official police initiated incidents, arrest rates, and calls for service before, during, and after a major socially disruptive event, in this case, the 2002 Winter Olympic Games. The authors found that both police initiated incidents and rates of arrest decreased during the event even as calls for service increased. This finding implies that the size and scope of the event, along with the required extra safety and security dedicated to the Olympics' venues, personnel, and visitors that officers had to maintain, depleted their ability to respond to service calls from the public relating to routine criminal activity. Further, the authors contend that measuring performance of the police before, during, and after such an event, albeit pre-planned, could be indicative of their ability to perform duties addressing routine crime during a large unplanned event such as an emergency management situation (Decker et al, 2007). If nothing else, this study illustrates the importance of being able to adequately measure and assess response capabilities of law enforcement prior to an event in order to prepare properly in terms of manpower.

Courts

Our court systems may also be unduly affected by catastrophic events. A perfect example of this is the total breakdown in the administration of justice in the wake of Hurricane Katrina in New Orleans. Ellard (2007) explores this particular situation in depth. She contends that court systems are obligated to protect a person's right to a speedy trial even in the event of a catastrophic event, and therefore should prepare accordingly. One court administrator, Pines (2007), concurs that the Bill of Rights applies directly to preserving our places of work along with the rights of those persons the government serves by maintaining continuity of operations within the criminal justice system even in the case of extreme adverse conditions brought about by a disruptive event.

Ellard (2007) recounts the results of and reasons for unreasonable delay in criminal proceedings after Hurricane Katrina. Defendants found themselves serving time in jail indefinitely with no method of redress to pursue their right to a speedy trial. Courthouses were destroyed and adequate alternate building space had not been addressed in contingency plans. Even as defendants were evacuated to outside jurisdictions, those court systems were not prepared for the overwhelming burden that trying to process extra cases would put on their system. The right to a trial before a defendant's peers was jeopardized as a result of alternate jurisdictions being so far away that social and cultural differences existed between where an offense occurred and where a case was adjudicated. The entire public defender's system collapsed as its source of funding—parking ticket fines—disappeared along with most, if not all, personnel. Furthermore, most private defense attorneys businesses were

completely wiped-out and witnesses were lost for both defense and prosecution as were court records and case files housed in the courthouse and private attorney's offices (Ellard, 2007).

The case of Katrina and subsequent total devastation of the local court system illustrate how the failure of government agencies within the criminal justice system to prepare adequately for such disasters can lead to the direct violation of a person's civil liberties. According to Ellard (2007), Sixth Amendment issues arose from the extreme delay defendants endured, jailed for months on end without the opportunity to confer with an attorney, and, even in some instances, without being formerly charged. She succinctly links the criminal justice system and the obligations of the government regarding emergency management: "The breakdown in New Orleans should serve as a lesson on the importance of preserving the criminal justice system and constitutional rights in case of a natural disaster or terrorist attack" (Ellard, 2007, p. 1207).

This study exemplifies why disaster preparedness is critical to the criminal justice system as a whole, but with focus down to the individual, local level agency. Ellard (2007) acknowledges that the above account is in direct contrast to the consequences experienced by the federal judiciary after the same event because of the disaster preparedness and contingency plans it had developed in the wake of 9/11.

The federal judiciary's recent history of response to catastrophic events serves as a testament to the benefits of having emergency preparedness procedures and continuity of operations plans (COOPs) in place prior to such an incident. Huff (2006) credits having occupant emergency programs (OEPs) and COOP plans previously established for the federal judiciary as the reason why they were back up and running in "record time" (p. 7) after both natural disasters (Hurricanes Katrina and Rita) as well as those made by man (the

terrorists attacks of 9/11 and the postal service's anthrax contamination incident). Huff (2006) defines an OEP as "a short-term emergency response plan that establishes procedures to safeguard lives and property during emergencies" (p. 7). Consistent with the aforementioned disaster plan or EOP, Huff (2006) details how the federal judicial system takes an all-hazards approach to disaster preparedness and that planning includes the courts' local facilities and day-to-day operations. The federal courts also developed and implemented a method to test the effectiveness of their emergency management plans in 2004. This initiative, dubbed Forward Challenge 2004, recognized the fact that not only was it important to have written emergency operations and contingency plans, but that it was also important to test them (Huff, 2006).

In his contribution to discussions on emergency preparedness and the criminal justice system, Pines (2007) underscores the importance and priority status of workplace security. He also criticizes the notion that tighter security in public places inhibits public access to those facilities as he holds local and state levels of government responsible for providing safe and secure court facilities, especially with regard to potential disaster of any type, not just terrorism. The author reviews progress in the realm of security measures undertaken by the courts and notes recommended guidelines offered by the National Center for the State Courts that agencies might follow. However, with respect to assessing the judicial branch's preparedness status, Pines (2007) also recognizes that a "severe disconnect" (p. 60) exists between the courts and other governmental agencies in terms of collaboration toward the goal of emergency preparedness planning.

A last example of court related disaster preparedness literature focuses on records preservation but is only instructive in nature. Lowell (1993) outlines some of the biggest

concerns to those charged with keeping important records and introduces the idea of taking an audit of "a court's facilities and procedures with an eye toward disasters" (p.7) as a starting point for the implementation of mitigation and preparedness measures. Potential hazards such as fire, flood, and those affecting electronic record keeping are discussed (Lowell, 1993). This article remains only speculative about what can happen and why precautions are necessary. While providing some concrete lists of preparedness items and procedures that would be useful to the protection and recovery of valuable records, this piece does not offer an evaluative study of a court's records safe-keeping procedures or how well they may have worked in the past.

Corrections

Most, if not all, of the available literature regarding crises and emergencies within the corrections branch of the criminal justice system focuses on correctional facilities such as jails and prisons. As Freeman (1998) points out, emergency management research in this field centers on historical recounts and response efforts after an actual event has occurred. His study provides a comparative analysis of certain elements of preparedness for correctional facilities.

Freeman (1998) conducted a national survey polling the heads of each state's Department of Corrections (DOC). The author examined evaluation methods used by different DOCs in their assessments of how knowledgeable prison facility staffs were in the area of emergency preparedness. Freeman contends that the Real Event Model (REM) of emergency preparedness evaluation (EPE) methodology is the best way to assess preparedness levels. As the name implies, the REM methodology utilizes a full-scale exercise in response to a simulated emergency event with which to test and evaluate staff knowledge and capabilities in this area. The author's questionnaire applied to the total lifecycle of an emergency but focused on the area of evaluation. Questions of most interest had to do with whether or not a correctional institution conducted full-scale simulation exercises, the planning and implementation of scenario simulations, and the evaluation of those exercises (Freeman, 1998).

According to Freeman (1998), for a full-scale scenario simulation utilizing REM methodology to be useful as an effective evaluation tool the exercise must occur by complete surprise to all those being evaluated. According to the author, this is the best way to gauge emergency preparedness knowledge and skills as most emergency situations are unexpected. Findings suggested, however, that the scenarios carried out were based more on the Organizational Convenience Model (OCM) of EPE methodology. OCM methodology advocates for less disruption, pre-knowledge and preplanning for the event by participants, less use of outside community emergency response resources, and for self-evaluation and internal debriefing. The author contends that these characteristics of OCM methodology thwart disaster and emergency management preparedness evaluation. He further contends that having foreknowledge of such simulated exercises subverts any efforts to establish the true readiness levels of participants (Freeman, 1998).

Two other studies stress the special interest correctional agencies have with regard to health related issues surrounding disaster preparedness and emergency management (e.g. healthcare and disease mitigation of the incarcerated populations). Maruschak et al. (2009) discuss the special vulnerabilities concerning disease mitigation found in local jail facilities because of the rapid turnover and transitory nature of their inmate populations. Many jail inmates are incarcerated for very short periods of time and then released back into the community. If infected while in jail, they run the risk of infecting those outside the facilities. Conversely, those who come into jail with an infection can easily spread it to other persons especially when not properly screened or symptoms have not manifested. Couple this with the daily in and out of staff that work at correctional facilities and you have a population that is inordinately at risk of infection. Along with this is the fact that the non-US citizen population in jails has increased by 40% since 2000. Diseases brought over the country's borders could potentially begin an epidemic if not caught in time. Characteristics of locally maintained jail facilities could exacerbate a disease or influenza outbreak not only in the jail itself but also in the local community (Maruschak et al., 2009).

Maruschk et al. (2009) emphasize the need for planning—in advance—for various actions that may have to be undertaken during the onset of an epidemic: designation of space or alternate facilities for the purpose of quarantine; protection of personnel working with infected inmates; transportation to and from hospital facilities; and filling in staffing shortfalls due to illness. Multiagency collaboration is a key consideration in addressing disease related health emergencies:

As corrections and public health officials align pandemic flu planning efforts with those of federal, state, local, public health, law enforcement, judiciary, and emergency management agencies, it is likely that their efforts would diminish the impact of a pandemic on correctional facilities and the surrounding communities. (Maruschk et al., 2009, p. 342)

The authors go a long way in detailing why preparedness needs to become a priority for the local level correctional facility and what needs to happen to get it there. They fall short, however, in assessing the actual status of our jails with respect to preparedness.

Another study in the area of corrections considers pandemic flu preparedness specifically with regard to the division of community corrections of probation and parole (Bancroft, 2007). This collaborative effort between the Bureau of Justice Assistance, the U. S. Department of Justice, and the American Probation and Parole Association (APPA) provides a succinct and simple example of a disaster preparedness assessment tool. The purpose of the questionnaire, distributed via email, was to obtain a status report on current preparedness measures undertaken by the division of community corrections with respect to pandemic influenza. The goal of the research was to gather information for the development of pandemic influenza preparedness guidelines for community corrections agencies, which were published two years later (Bancroft, 2009). This survey asked questions that covered areas such as the demographics of the agency's geographical area, COOP plans and coordination with other agencies, funding for pandemic flu preparedness, personnel needs and staffing issues during a health event, contingency plans for the supervision of offenders, and knowledge of other criminal justice agency's COOP plans within their jurisdiction (Bancroft, 2007). The 16-item survey allowed for both closed and open-ended responses. Sent to 3,500 APPA members, only 25 replies from 17 states were received, making generalizations impossible. The author speculates that one possible reason for such a low response rate was indicative of an overall lack of, or even consideration of, pandemic flu preparedness by these agencies. Table 1 is a summary of Bancroft's (2007) findings.

Bancroft (2007) notes that only seven of the 13 acknowledged having COOP plans addressing a pandemic flu outbreak. Collaboration with other various agencies ranging from first responders to the private business sector was noted by 15 of the respondents, mostly with public health (14 out of 15). Only six responding agencies worked with jails or prisons and, of those, only five worked with law enforcement agencies. Only nine respondents noted knowledge of stockpiled supplies and equipment. In terms of contingency plans for the handling of offenders, only two out of the 25 noted having one for violators if jails and prisons were not available to receive new inmates. Only four noted alternative measures to be in place for offender supervision. Space was given for respondents to make additional comments or clarifications to answers but few elaborations were noted (Bancroft, 2007).

Table 1

Community Corrections Agency Survey Findings

	Agencies Meeting Criteria	
Preparedness Criteria	n = 25	Percent
Collaboration with other agencies	15	60%
Has a COOP Plan	13	52%
Knowledge of stockpiled supplies/equipment	9	36%
Worked with jails/prisons	6	24%
Worked with law enforcement	5	20%
Alternate offender supervision plans	4	16%
Alternate inmate processing site	2	8%

Focusing on elements of preparedness, Bancroft (2007) offers a survey that could serve as part of an overall readiness assessment program that an agency could utilize prior to an event thereby allowing that agency to make adjustments before an actual learning experience occurs. This survey also provides for the comparison of different agencies to one another.

The major shortfall of this study, however, was its method of distribution. Emails are easily set aside, ignored, or deleted. A survey distributed via regular postal mail may have received more attention, although it would not have been as cost effective. Still, on a positive note, even though mainly geared toward gauging pandemic flu preparedness, this assessment schedule is modifiable and expandable to reflect an all-hazards approach (Bancroft, 2007).

The Role of Supporting Organizations

Just as each branch of the criminal justice system represents only one phase of this essential social institution, the system as a whole represents only one part of a community's larger social structure. Regardless of who is affected within a community, two other social institutions—public health and emergency management—play key roles in times of disaster and critical incident situations. Because of their critical roles and support during a community's larger coordinated response effort in times of crises, the disaster preparedness status and continuity of operations of these two agencies is equally important.

Public health. Healthcare concerns increase as disasters increase in terms of impact (Al Khalaileh, Bond, Beckstrand, & Al-Talafha, 2010). One important support, and sometimes frontline, response agency to any health-related event is the local public health department. Public health is called to assist or respond when any disaster or emergency incident poses a potential health risk to those affected by it or to those responding to the crisis (Public Health and Law Enforcement Emergency Preparedness Workgroup, 2008). Sponsored by the Centers for Disease Control and Prevention and the Bureau of Justice Assistance, members of the Public Health and Law Enforcement Emergency Preparedness Workgroup (2008) offer "what if" scenarios and a good outline on how law enforcement, the courts, and corrections intersect in their duties with public health during a health-related event. The workgroup found that even as these different public sector entities share the responsibility for safety and security of those they serve, more often than not, they work alone in efforts to address emergency preparedness efforts in their specific areas. They stress the importance of having roles and responsibilities of all criminal justice agencies during a health-related crisis worked out in advance. The resulting document from the workgroup lays out a framework of action steps for these four different sectors to take in order to build better coordination and collaboration among themselves and others during health-related crises (Public Health and Law Enforcement Emergency Preparedness Workgroup, 2008).

Richards, Rathbun, Brito, and Luna (2006) discuss the close working relationship between public health officials and law enforcement. The authors outline specific concerns that law enforcement should consider when experiencing and working during a public health emergency. Their specific duties under such circumstances will vary:

Depending on the threat, law enforcement's role may include enforcing public health orders (e.g., quarantines or travel restrictions), securing the perimeter of contaminated areas, securing health care facilities, controlling crowds, investigating scenes of suspected biological terrorism, and protecting national stockpiles of vaccines or other medicines. (Richards et al., 2006, p. 2)

Because of the unpredictability of such an event, it is important for the department and individual worker to be ready to handle interactions with others by having the proper personal protective equipment. Additionally, coordination and collaboration with public health and area hospitals is considered key in reducing the impact of health related incidents (Richards et al., 2006).

Emergency management. According to Kreps (1991), not all jurisdictions have dedicated emergency management agencies. Many jurisdictions have only part-time emergency managers. Even in those cities or counties that employ full-time emergency managers, the position sometimes falls under the umbrella of other organizations like the

sheriff's department, fire department, or city or county manager's office. The responsibility for coordinating a community's overall emergency management objectives is, nonetheless, the main function of the emergency manager (Kreps, 1991).

Because of this responsibility to the overall community, research regarding the local level emergency management agency concerning disaster preparedness was found only in literature that examines it in the larger context of the whole jurisdiction but not specifically with regard to the local level agency itself. For example, Simpson (2008) looks at the preparedness status of the emergency management office (EMO) as only one factor among 10 in a larger test case study in the development of a methodology for measuring disaster preparedness of a community. In his study, the unit of analysis is the city, not a particular agency. The indicators used regarding the EMO of two test communities included: (a) the existence of an EMO, (b) staffing levels of the EMO in relation to the community's population, (c) the presence of an emergency plan, (d) the presence of an emergency operations center (EOC) activation plan and its age, (e) the degree of training or practice simulation using the plan, and (f) the amount of funding available. The findings showed that one community, Sikeston, Missouri, did not have an EMO or an EMO staff. Sikeston did have an emergency plan, however, and a one-year-old EOC activation plan. Still, this community did not conduct training or simulations using the plan. The second community, Carbondale, Illinois, by comparison reported yes for all indicators, having 22 staff in their EMO and a two-year-old EOC activation plan. Each response received a preparedness measurement (PM) score. After tabulation, Carbondale, the city with the EMO, scored 216.99, comparatively better than Sikeston, which had a total PM score of only 145.20. The stated purpose of this study was "the conceptualization of creating a preparedness measure

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for communities" (Simpson, 2008, p. 658), not about evaluating a particular agency. Even so, this study remains relevant for purposes here by (1) illustrating how factors regarding an emergency management agency directly contribute to a community's overall preparedness status and (2) thereby signifies the importance of including it as a supporting agency when examining the preparedness of other entities within a jurisdiction.

The Present Research Study

In light of this overview of emergency management and disaster preparedness, the beneficial and necessary attributes integrating these concepts into societal institutions is obvious. We have just considered how criminal justice and supporting organizations have been, or could be, affected in a number of ways by a variety of disasters, thereby underscoring the need for them to be disaster ready. The question under scrutiny in particular here, then, remains, are emergency management and disaster preparedness principles (i.e. *sustainability, planning, training, and information dissemination)* being implemented by our criminal justice and supporting agencies at their local level worksites? The remaining chapters of this thesis explore this issue as it directly relates to local level agencies in North Carolina.

Table 2 is a summary of the previous literature with reference to the type of agency discussed in each piece and to the preparedness element(s) examined. The table categorizes the literature by those components considered most prominent within each article.

Table 2

Preparedness Element	Prior Studies	Agency of Focus
	Lowell (1993)	Courts
Sustainability Planning	Maruschak et al. (2009)	Corrections (Jails)
	Richards et al. (2006)	Public Health Law Enforcement
	Boland (2007)	Courts & other agencies
Planning	Ellard (2007)	Courts
	Louden (2006)	Law Enforcement & other agencies
	Pines (2007)	Courts
	Decker et al. (2007)	Law Enforcement
Planning Training	Public Health and Law Enforcement Preparedness Workgroup (2008)	Law Enforcement Courts Corrections Public Health
	Simpson (2008)	Emergency Management
Sustainability	Huff (2006)	Courts
Planning Training	Rojek & Smith (2007)	Law Enforcement
Planning Training Information Dissemination	Freeman (1998)	Corrections (Prisons)
Sustainability Planning Training Information Dissemination	Bancroft (2007, 2009)	Corrections (Probation/Parole)

CHAPTER 3:

METHODOLOGY

This study offers a snapshot depiction of local level criminal justice and supporting agencies with regard to their present condition on disaster preparedness and continuity of operations planning before an extraordinary event occurs. Four key elements of disaster preparedness were discussed with agency representatives from the government service areas of law enforcement, the courts, corrections, public health, and emergency management.

This project is for information gathering purposes only. No hypotheses are held going into this project. The exploratory nature of this research seeks to reveal the presence of the four elements of sustainability, planning, training, and information dissemination within the selected agencies' workplace environment. By nature of the informal face-to-face interviews, questions and discussions allowed the respondents to reveal thoughts as they came to mind, rather than by suggestion from predetermined lists. As such, a second purpose of this preliminary project is to allow subjects of interest to emerge that might be conducive to further, more detailed research in specific areas.

Sample and Participant Selection

The sampling selection process involved a combination of convenience and purposive sampling methods. Counties were chosen as a matter of convenience, whereas, agencies and participants were more purposively selected.

County selection. Due to time and financial restraints, research was limited to this researcher's home state. Therefore, the target population for this current study is the local

level criminal justice and supporting agency or department that lies within the geographical boundary of a county within the state of North Carolina. As this state is home to 100 counties, proximity, time, and travel expense made a true random sampling of all counties prohibitive for the face-to-face interview. However, in efforts to strengthen external validity, the selected agencies draw from two separate geographical regions in order to capture possible differences within the state. As such, a limiting factor in this sampling process is that the two groups of counties that were chosen were based solely on this researcher's accessibility to them for the amount of time needed to conduct the research. Still, one mitigating factor to this limitation is that the two groups of counties consist of criminal justice and supporting agencies within three adjoining counties from the eastern part of the state.

This conveniently selected sample pool conceivably provides units of analyses that are representative of populations, fiscal concerns, physical environments, as well as predispositions to certain types of disaster from the two different ends of the state. In each group of counties included in the study, two counties are classified as rural and one as urban (North Carolina Rural Economic Center, Inc., n. d.). County population and resident income have direct impacts on local level government funding of public service agencies. According to U. S. Census Bureau statistics for 2010, for those counties included in the study populations ranged from 37,239 to 203,341. The median county population was 95,602. Median income levels for these counties ranged from \$47,777 to \$62,827. North Carolina is ranked tenth in the nation for population, from highest to lowest. The median income level for North Carolina is \$55,529.

This study's focus is on the generalized issue of preparedness from an all-hazards perspective. This point is important, as no single area of the state is immune to any one specific type of disaster. However, with regard to natural disasters, the two ends of North Carolina do exhibit a propensity for certain weather-related events more than other parts of the state. For example, counties in the western part of the state are more likely to experience ice storms than the coastal region due to the overall lower temperature range from higher elevations. Conversely, the eastern part of the state is more likely to experience the effects of a hurricane than the rest because of its proximity to the coast.

Agency selection. The selection of agencies and participants involved a more purposive sampling procedure. The goal was to meet with one knowledgeable person from as many criminal justice agencies as was feasible, from each of these counties. Time limitations required lead agencies to be purposely targeted in order that the sample be as representative of each county as possible. Contact information for lead agencies was located on each county's website. Contact information for some agencies or respondents sometimes came from referrals made by those individuals interviewed earlier in the study.

Agencies from each of the three branches of the criminal justice system were included in the study. With regard to the law enforcement, the Sheriff's Department of each county was contacted. This category was supplemented when possible with a municipal agency from that same county. The choice of municipal agency was based on convenience and visibility of that agency within the county. Generally, it was the largest municipal law enforcement agency in the county.

The local county courthouse was the focus of the judicial branch of the criminal justice system. Original contact with the first court agency was with an assistant district

attorney's office, as referred by an earlier contact. That office identified the trial court coordinator for that county as the designated party responsible for compiling information from the various departments of the court for the *Courts-Continuation of Operations Plan* (C-COOP). In other counties, the Clerk of Court was the individual responsible for the C-COOP plan. Subsequently, the Clerk of Court's office from each county served as the starting point for referral of the individual who would ultimately be interviewed and, thus, serve as the respondent for the judicial branch of that county. This type of referral sampling, also known as *snowball sampling*, occurs when a targeted participant of the research project refers the investigator to another participant who also fits the study's sampling criteria and, then, in turn offers another referral (Singleton & Straits, 2005).

The type of correctional agency used for this study falls under the Department of Community Corrections – specifically, that of probation/parole. This area of corrections was selected because of its special charge of supervising individual offenders who, unlike those in a secured holding facility, are allowed varying degrees of freedom amongst the general population. This fact alone would pose unique challenges during a widespread crisis situation.

Finally, because of a community's interconnectedness, both the emergency management agency and the public health agency of each county were targeted for interviews. These two organizations play important roles during many critical incidents within their jurisdictions.

Of the 34 individual agencies contacted with a request for an interview, only one public health agency meeting could not be coordinated within the time available. A second agency contacted but not interviewed was a Clerk of Court's office. This office suggested

the best person to speak with was located at a second courthouse within an adjoining county, as they shared the same judicial district². Additionally, one county's probation/parole office was not contacted with a request for an interview because of time constraints. Another probation/parole agency represented two counties. In the end, the number of organizations interviewed included 11 law enforcement agencies, six courts, four community corrections agencies, six emergency management agencies, and five public health departments for a total of 32 agencies participating in the study.

The number of employees in each agency ranged from three to 360. Table 3 is a breakdown of each agency's size in terms of number of employees.

Table 3

County	LE	СТ	P/P	PH	EM
А	112	16	97 ^a	55	3
В	360, 400	11	97	0	9
С	31, 225	26	0	100	6
D	155, 170	46	27	150	4
E	72, 120	45	9	100	4
F	25, 100	0	12	42	3
G	0	40	0	0	0

Number of Employees per Agency by County

Note. LE = Law Enforcement; CT = Courts; P/P = Probation/Parole; PH = Public Health;

EM = Emergency Management.

^aRepresents the combined number of employees for Counties A & B.

Participant selection. The individuals selected for interviewing were personnel designated as most familiar with emergency preparedness plans from each agency. The targeted agency was contacted by phone and a request to speak with the specific individual

² This seventh county is represented as County "G" in Table 3. This particular court agency was the only agency included in the study from County "G" and served as a substitute for the court agency in County "F" from which it was referred.

responsible for disaster preparedness and continuity of operations plans was made. In a few cases, those contacted earlier in the process made recommendations as to whom I should request for an interview with at a different agency. In most cases, however, the appropriate individual to speak with was suggested by the agency itself. The head of the agency or other top level individual would be the responsible party in the preferred area of expertise, in most instances. In three cases, the individual designated as the best source of information was not available and an alternate, at the agency's suggestion, was interviewed. On four occasions, the respondent invited a second individual to supplement the conversation through part or all of the session. In those cases, responses were recorded as one interview.

The successful interviews included responses from various positions of each agency group. This resulted in securing 32 interviews, with a total number of 36 persons participating in the study. Table 4 is a summary of the participant's official titles. Table 4

Law		Probation/		Emergency
Enforcement	Court	Parole	Public Health	Management
Sergeant	Clerk of Court	Intensive Probation	Emergency	Emergency
		Officer	Preparedness	Management
Lieutenant	Trial Court		Coordinator	Specialist
	Coordinator	Chief		
Captain		Probation/Parole	Bioterrorism/	Emergency
		Officer	Preparedness	Management
Major			Coordinator	Coordinator
		Assistant Judicial		
Deputy Chief		District Manager of	Director	Assistant
		Community		Emergency
Sheriff		Corrections		Manager
				-
				Director

Positions Represented by Respondents within Agency Groups

Data Collection and Analysis

The interview process. The interviews began in May 2011 and were completed in July 2011. The appointments were set up to take place at the participant's workplace and convenience. In all cases, interviews were conducted during regular business hours at the respondent's office. In one instance a county law enforcement official was interviewed at that county's emergency management office. In one case, a copy of the interview guide was forwarded to the respondent upon their request prior to the interview. Upon arrival, the purpose of the interview was reiterated and that all respondent's identities would remain confidential. The length of the interviews varied from 30 minutes to 1.5 hours. The interviews were fairly informal and relaxed.

Singleton and Straits (2005) compare the methods for recording data from field interviews. They note that, although audio or video recording of sessions is ideal, knowledge that one is being recorded can be intimidating and result in the tempering of words or sensitive subjects by the respondent. Therefore, in order to promote sincerity and forthrightness from the participants, interviews were recorded by taking notes. Additionally respondents were assured their identities would remain confidential. The development of this method of approach and issues covered was influenced by previous research in this area (Fisher, 1998; Rojek & Smith, 2009). Additionally, the types of topics and questions covered in the interviews are particularly similar to those of Bancroft (2007).

An interview guide facilitated the discussion and directed the conversation. Some of the agencies shared copies of their written plans with this researcher. Some agencies did not have written plans to share. Some respondents stated their agency had written plans but declined to share them for security reasons. Still, others indicated that their agency's plans were included in the larger countywide plan and were accessible online. When a copy of a plan was received, it was accepted with the understanding that it would be used only as a reference for this researcher and would not be shared. On some occasions, this researcher was shown special equipment that is used during emergency situations and a tour of the facilities would be conducted.

The respondents were always thanked for their time and participation and were asked if a follow up would be permitted if there was a need for clarification on a certain point or the need for additional information. All were happy to participate and stated they would be available later if needed. All respondents were given contact phone number and/or email to use if they had any further information they wanted to share or if they had any questions. A follow up thank you letter was sent out to each respondent thanking them for their time and reiterating their identities would remain confidential throughout the project and they were free to withdraw their participation at any time.

Data analysis. Disaster preparedness of local level criminal justice agencies in North Carolina was explored using face-to-face personal interviews with agency personnel. The interview guide consisted of questions that addressed each one of the four preparedness elements of interest: sustainability, planning, training, and information dissemination. *Sustainability* focuses on those immediate to short-term issues that directly relate to surviving a critical incident. *Planning* is about having pre-thought-out guidelines for what to do in those moments during a disaster, immediately afterwards, as well as for the short-term through long-term time periods following an event. *Training* involves practicing those plans that promote the sustainability and continuity of operations of an agency in the hours, days, and weeks after a major event. *Information dissemination* involves communicating the

above information throughout the agency in order to provide staff with the ability to understand and implement the plan or procedures when necessary. The Appendix contains a list of questions covering these four elements that made up the interview guide.

After all the interviews were complete, each agency received an alphabetical and numerical label denoting the particular county and type of agency in order to keep track of responses. (For example, emergency management agencies would be labeled AEM1, BEM2, etc.). The responses were then sorted by agency type, resulting in the five separate groups of agency responses, those from law enforcement (LE), the courts (CT), probation/parole (P/P), public health (PH), and emergency management (EM). As the questions were open-ended, categories for coding the responses were generated from the responses themselves. Categories of responses were created as they appeared, with subsequent similar responses listed under that category as well. The resulting category labels and aggregated agency group responses would then be entered into an excel spreadsheet in order to tabulate, compare, and generate percentages. The agency groups formed the column labels of the spreadsheets, while the preparedness indicators were the row labels. This operation was performed for each of the four elements of preparedness. Tables for presentation were created from these spreadsheets.

The results section presents the findings according to each preparedness element. Tables comparing the five agency groups' responses are summaries of the data. Where appropriate, direct quotes from the participants are presented throughout the chapter in order to compliment the numbers and illustrate the diversity among agencies' approach to preparedness practices.

CHAPTER 4:

FINDINGS

The current exploratory research study provides a snapshot depiction of emergency management/disaster preparedness procedures implemented by local level criminal justice agencies in North Carolina. The four categories demonstrating participation of preparedness practices are sustainability, planning, training, and information dissemination.

The informal interview process allowed for variation in comments. Responses conducive to certain kinds of statistical analyses are limited. Thus, this research presents a general overall impression of the readiness status among participating agencies based on their reported preparedness practices. Comments pertaining to local jails came from interviews with law enforcement, specifically sheriffs' departments, as those correctional facilities are under the direct control of those particular law enforcement agencies.

Sustainability

Sustainability in the present context has to do with life safety and asset protection during and within the immediate aftermath of a critical incident. The criteria used to indicate this element of preparedness are the presence of stockpiled life-sustaining supplies, the ability to maintain communications during an event, and major concern and preservation of critical agency equipment and functions.

Stockpiled resources. The responses to whether or not agencies had stockpiled disaster preparedness items necessary to sustain personnel if sheltering in place were separated into three general categories of yes, somewhat, and no. Participants whose

responses fell into the somewhat category acknowledged a lack of provision for food and water onsite even though other items such as generators or first aid kits might be present. For those that did include time limits for in-house disaster supplies of food and water, sustainability ranged from 12 hours to 2 weeks. Because food and water are basic to survival, they were the only items specifically asked about if a participant did not mention them first. Table 5 is a comparison of the five different agency groups with regard to having disaster supplies on hand.

Table 5

Stockpiled Disaster	LE	СТ	P/P	PH	EM	Totals
Supplies	n = 11	n = 6	n = 4	n = 5	n = 6	n = 32
No	18%	67%	100%	80%	0%	44%
Somewhat	27%	33%	0%	20%	67%	31%
Yes	55%	0%	0%	0%	33%	25%
Totals	100%	100%	100%	100%	100%	100%

Stockpiled Disaster Supplies as Reported by Agency Group in Percentages

Note. LE = Law Enforcement; CT = Courts; P/P = Probation/Parole; PH = Public Health; EM = Emergency Management.

Overall, agencies reported lowest (25%) for having stockpiled supplies that included food and water with courts, probation/parole, and public health all at 0%. None of the probation/parole agencies reported having any stockpiled disaster supplies. The data show that most agencies in the courts (67%) and public health (80%) groups reported next highest for not having any stockpiled disaster supplies. Law enforcement had the highest number of agencies (55%) among all groups with stockpiled disaster supplies including food and water. Emergency management reported 67% of its agencies with stockpiled supplies, but these did not include food and water.

The question of whether the immediate facilities were equipped with disaster preparedness items that could sustain all personnel if it were necessary to shelter in place elicited mixed responses, particularly as it related to foodstuffs. For example, some comments from law enforcement were "each department has food and water to sustain itself 1-2 days," "each division has its own supplies," and "Yes, we are self-contained" reflecting complete self-sufficiency. Other respondents referred to the fact that they could tap into resources from another physically attached facility. One law enforcement official stated, "Yes, including food and water, for up to two weeks, because of the jail and its inventories" while another stated, "Some. We are connected [physically] with EM and they have supplies." This particular emergency management agency stored water and food in a trailer in their parking lot ready for deployment, if necessary.

Some agencies reported their food and water were actually stored in facilities at different geographical locations or that they relied on outside sources to bring food in. For example, one law enforcement agency stated they had "an agreement with the Department of Correction's county prison facility to make provisions for responders." Another noted, "We have everything except food and water...we have that sent in." Other agency groups reflected this same reliance on others. One court official acknowledged that "the EOC or Sheriff's department" had those provisions while one public health official stated that because their agency was "located on campus with emergency management and the jail...thoughts are food would be brought in if needed." Lastly, an emergency management official noted that even though they had some MREs (Meals Ready to Eat) and water, they "normally" have "food brought in by the caterers."

Many respondents noted other items, even though they did not have food or water, such as generators, batteries, and first-aid kits. One court official commented on personal protective equipment when asked about disaster preparedness supplies stating, "No, for food provisions...do not have generators. The AOC [Administrative Office of the Courts] sent some masks and gloves, etc. for the magistrates to use, like for a pandemic flu outbreak."

There were a few respondents who seemed unsure stating, "I don't think so" and "No, but staff has their own supply of food" but unclear for how long continued, asking rhetorically "up to four or five days?" The concept of rationing provisions arose when one public health official commented "Not for all personnel." One law enforcement official's statement epitomized the necessity of disaster preparedness and contingency planning in general when he said, "Not at this present time. They are in the process of remodeling and repairing the facility from flood damage."

Communications. The presence of backup communications systems demonstrated the ability to maintain communications during an event. All 32 agencies noted having several different types of communications backup systems. The types of communication backup systems reported by respondents included different combinations of phone landlines, cell phones, internet communications, various kinds of radio systems, and physical methods of communication. For example, and on a lighter note, one respondent included "hollerin" as a method of last resort. Table 6 is a summary of the different types of communications reported by agency group in descending order of prevalence.

The data show that law enforcement, public health, and emergency management were more likely to rely on state and county radio systems for communications, while courts and probation/parole agencies are more likely to rely on cell phones, landline phones, and computers. None of the court agencies had state or county radios. However, two court agencies (33%) did show awareness of radio systems accessibility, one mentioning "911 communications" and the other noting "the sheriff's department for the building" as a back-up communications option. Three law enforcement agencies (27%) also noted having their own communications towers. Overall, the law enforcement group reported the highest number of communication methods (nine); followed by the emergency management group (six); probation/parole and public health groups (five, each); and the courts group (four).

Table 6

Types of Communications	LE n = 11	CT n = 6	$\frac{P/P}{n=4}$	PH n = 5	EM n = 6	Totals $n = 32$
					•	
State wide radio	82%	0%	50%	100%	100%	69%
County radio	100%	0%	75%	80%	67%	69%
Cell phone	27%	100%	75%	60%	33%	53%
Landline phone	18%	100%	75%	40%	33%	47%
Computer	9%	83%	75%	60%	0%	38%
Amateur radio	0%	0%	0%	0%	33%	6%
Satellite phone	9%	0%	0%	0%	17%	6%
Talk/line of Sight	9%	17%	0%	0%	0%	6%
Walkie-talkie	18%	0%	0%	0%	0%	6%
Runners	18%	0%	0%	0%	0%	6%

Communication Types as Reported by Agency Group in Percentages

Note. LE = Law Enforcement; CT = Courts; P/P = Probation/Parole; PH = Public Health; EM = Emergency Management. Column totals exceed 100% because of multiple responses per agency.

Major concerns and backup procedures. This indicator of sustainability

dominated the majority of discussion during the interview sessions. Table 7 is a listing of reported major concerns in descending order of totals.

Table 7

	LE	СТ	P/P	PH	EM	Totals
Major Concerns	n = 11	n = 6	n = 4	n = 5	n = 6	n = 32
Records preservation	18%	83%	25%	60%	17%	38%
Safety/security of personnel and the public	27%	67%	50%	20%	0%	31%
Manpower depletion/staffing	45%	17%	25%	0%	50%	31%
Communications	55%	0%	25%	0%	50%	31%
Location and supervision of Offenders	0%	0%	100%	0%	0%	13%
Evacuation/transportation (of community)	9%	0%	0%	0%	50%	13%
Continuity of operations	18%	33%	0%	0%	0%	13%
Distribution of medications	0%	0%	0%	60%	0%	9%
Computer systems	9%	0%	25%	0%	17%	9%
Jail security	27%	0%	0%	0%	0%	9%
Emergency Operations Center (EOC)	0%	0%	0%	0%	33%	6%
Refrigeration of medications	0%	0%	0%	20%	0%	3%
Collaboration with other Organizations	0%	0%	0%	0%	17%	3%
Looters	9%	0%	0%	0%	0%	3%
Medical needs of inmates	9%	0%	0%	0%	0%	3%
Employees' families	9%	0%	0%	0%	0%	3%

Major Concerns as Reported by Agency Group in Percentages

Note. LE = Law Enforcement; CT = Courts; P/P = Probation/Parole; PH = Public Health; EM = Emergency Management. Column totals exceed 100% because of multiple responses per agency.

All agencies identified critical functions and the preservation of those functions as major concerns in the event of a catastrophe. Most respondents (97%) reported multiple concerns as important to their agency. Law enforcement and emergency management noted communications as a major concern more times than other agency group, at a rate of 55% and 50% respectively. Overall, records preservation was reported more times as a major

concern among all agencies (38%) than any other, but mostly by the courts (83%) and public health (60%) groups. Noted by 45% of law enforcement agencies and 50% of emergency management agencies, all agency groups cited manpower depletion/staffing issues as a major concern except for public health. One law enforcement official revealed the reason, in their case:

The biggest is staffing levels. It's for long shifts-you're asking employees to forget about their personal families. For example, with some past hurricanes, the last big one, Fran, wiped out the city. New people may not be familiar with how they have to realize that they can't jump ship.

The only group that listed any one item as a major concern across the board by all (100%) respondents was probation/parole with regard to location and supervision of offenders.

Most respondents elaborated on what mechanisms and procedures their agency had in place. Law enforcement's comments in this area reflected the use of "reserve officers" and mutual aid agreements for accepting "assistance from other agencies" when dealing with manpower sustainability. Several agencies noted jail contingency planning as well as procedures for backing up records. One agency, recognizing the employee's family as a distracting force to job performance during widespread crises, made allowance for "personnel to take stock of their personal family situation and make sure it is stabilized" before returning to the job. One official's interview elicited the particular concern the agency had for the well-being of their officers:

Those who are in command now and are in charge of scheduling were the ones who experienced the former frustrations, so they understand [speaking of staffing levels and burnout]. Now deployment is more common sense based. They take into consideration who is on duty and how long they have already been on duty at the time of the event.

This same official noted their new facilities incorporated special building features designed to mitigate an outside attack and could "withstand a F5 tornado and Level 5 hurricane."

Court respondents' remarks covered several strategies employed regarding their number one concern: records preservation. Paper and microfilmed records are stored on site while electronic copies of records are forwarded to the state's Administrative Office of the Courts (AOC) in Raleigh. North Carolina's AOC backup is New York. One official noted that the state AOC has a mobile unit with computers that can be sent to any location, if needed, and has the ability to "freeze-dry records within three days" if damaged by water.

Several of the courts backup plans addressed actions designed for implementation during a health-related crisis such as a flu pandemic. For example, agency respondents noted special procedures and guidelines for processing those charged with a crime such as emergency bond reductions to offset the need to house arrestees. One official stated that magistrates would be the "first ones designated as not allowed to leave" in order to keep them on site to do their jobs. Another agency reported that their staff was cross-trained on all jobs to allow for continuity of operations during staffing shortages, if needed.

Comments from the probation/parole group reflected the various forms of supervision and surveillance mechanisms they employ with offenders such as GPS monitoring and house arrest monitoring. Backup for this type of electronic monitoring is provided at the state level out of Raleigh. Agencies also have the ability to "check to see if they are in the path of a tornado to verify if there should be a reason for them to not call in or lose monitoring capabilities." One official elaborated that "if these go down, we can put the offender on curfew and maintain surveillance in which officers would just check on them." A special issue observed by a few probation/parole officials was their total dependence on electronic recordkeeping. One stated that "as all the history of a probationer is kept on computer by each officer, with no paper backup, it would be difficult to access those records without the officer's password if the officer became unavailable."

As for the public health group, recordkeeping and distribution of medications were major concerns. One agency noted several layers of backup for their records such as onsite storage, offsite storage within the county, and that "a lot of medical records are at the state." However, a different official from another county reported the lack of electronic recordkeeping capabilities stating there was "no backup for medical records" and that their agency was "currently in the process of scanning all the records until they can be kept electronically."

One respondent voiced concern over the simultaneous vulnerability of his county's local agencies in the case of a tornado, as they were all located in close proximity to one another in a "campus" setting. Lastly, one public health official expounded on the important task and contingency plans for distributing medications throughout the county if necessary.

The emergency management group focused mainly on evacuating residents under certain emergencies, maintaining communications, and summoning sufficient manpower when needed. Temporary housing was available in the case of evacuations. Continuity of communications was addressed by having several layers of backup, the "senior management group" having "equipment at their homes," or one agency could "flip a switch and go over to the next county over." With regard to manpower, agencies commented on the ability to "call on partners" and implement mutual aid agreements as well as make "use of volunteers."

Planning

The different areas explored to indicate preparedness planning have to do with written plans, psychological and medical care for employees, multi-agency collaboration, and projections for the future.

Written plans. An Emergency Operations Plan (EOP), sometimes referred to as a Disaster Plan, reflects the immediate actions and procedures an organization takes in the event of an emergency. The Continuity of Operations Plan (COOP) outlines the short to long-term contingency plans that an organization operates under until circumstances warrant the resumption of normal operations. Today, it is common, and suggested, that preparedness and continuity plans reflect an all-hazards approach in their development, with annexes for specific types of events added if appropriate to that organization (FEMA, 2010). Table 8 is a list of the types of written plans agencies reported having, if any.

Table 8

	LE	Courts	P/P	PH	EM	Totals
Type of Plan	n=11	n=6	n=4	n=5	n=6	n=32
Written plan totals	82%	100%	100%	100%	100%	94%
COOP with city, county, or district	64%	0%	100%	100%	100%	69%
Agency COOP	27%	100%	0%	0%	100%	47%
Agency EOP	36%	17%	25%	20%	0%	22%
In-process agency EOP or COOP	9%	0%	0%	0%	33%	9%
No written plan	18%	0%	0%	0%	0%	6%

Written Plans Reported by Agency Group in Percentages

Note. LE = Law Enforcement; CT = Courts; P/P = Probation/Parole; PH = Public Health;

EM = Emergency Management. Column totals exceed 100% because of multiple responses per agency.

Overall, most (94%) agencies noted having a written emergency operations plan (EOP) or continuity of operations plan (COOP), either in the form of an independent document specifically for that agency or as included in a wider municipal, county, district, or state COOP plan. The two (6%) that did not were law enforcement agencies.

Interestingly, written agency EOP plans were reported only 22% of the time. By the nature of emergency management's mission, each agency's COOP plan is also the county's COOP plan and therefore falls into both COOP with city, county, or district and agency COOP categories. Notes from one law enforcement agency interview reveal why that particular agency did not have any type of written plan:

We activate the ICS [Incident Command Structure] and follow that. Plans are too confining. Situations never go like you might plan for so it's better not to have a specific game plan to get hooked on. Flexibility is key, chain of command is strong, everyone knows their responsibilities.

Within the in-process agency EOP or COOP category, only one (9%) law enforcement agency was drafting an initial new plan, whereas the two (33%) emergency management agencies in this category were revising their older plans.

The majority (69%) of written plans were COOP plans included as part of a larger organizational body. Only the courts group showed no agencies in this category even though 100% of court agencies reported having agency COOP plans. Statements by respondents, however, indicate that when included in a larger jurisdictional plan, most addressed that agency's role in a particular type of response effort or an incident that may or may not have direct consequences for that agency's worksite. For example, several law enforcement officials made statements about training for "school shooters" or the evacuation of the

community. One law enforcement officer's statement was that his agency was only included in the county's plan (specifically addressing hurricanes) having to do with "response and recovery aspects" for that community. All public health agencies reported COOP plans in place but only as an annex to their respective county's larger EOP or COOP plans. These plans focused primarily on the agency's particular duties for responding to or recovering from a particular crisis. For instance, these plans addressed the distribution of the Strategic National Stockpile (SNS) in the event of bioterrorism, nuclear fallout, or a pandemic flu outbreak.

Medical and psychological care. All agencies provide medical and psychological care through their employees' benefits packages. However, several agencies commented on the availability of additional resources in this area. For instance, one law enforcement official and one probation/parole official spoke of having a "relationship" with local mental health organizations. An emergency management official noted that their agency could call in a critical incident stress group for their employees, if needed. A public health official stated that their employees trained in critical incident stress management. Finally, one sheriff's department official spoke of the exceptional resources available to his agency's employees. He stated that a number of his officers were trained as counselors. In addition, several members of his department were cross-trained as medics. Conversely, a number of the county's emergency medical personnel also had critical incident training which allowed them to be sworn-in as deputies if they were needed in that capacity. These last two cross-trained groups provided the agency with a team of "unique tactical medics" that were able to access situations that would otherwise be restricted solely to law enforcement personnel.

Multi-agency collaboration. Discussion covering this topic concerned mutual aid agreements, asking for assistance, the command structure when multiple agencies are involved in the same event, and the designation of alternate sites.

Mutual aid agreements. All agencies noted having mutual aid agreements with other outside organizations as a formal written document or verbal agreement. These included agreements between same type agencies from other jurisdictions as well as different type agencies either within or outside the same jurisdiction. One law enforcement official noted that the agency could call a nearby county for a bomb squad if needed. A court official reported, "Yes, and AOC would send a disaster team if local or regional resources were exhausted." Another relayed that when they were processing a high number of foreclosures in that area they "had extras come in and help from another county."

Command structure. All respondents acknowledged pre-planned lines of command or authority when involving outside agencies. Even so, several comments suggested there was room for flexibility in this area. For example, one probation and parole respondent stated that these were "not explicitly laid out" while another participant from the same agency group said they would "refer to law enforcement and the emergency response teams." One emergency management official noted, "It's situationally dependent."

Requesting outside aid and resources. With regard to specific procedures for requesting outside aid or resources, one (25%) probation/parole officer offered a flat "No" to this question and one (9%) law enforcement agent stated, "It would be up to the Incident Commander." The remaining 30 respondents (94%) noted various avenues for requesting assistance ranging from the informal phone call, to following preset lines of communication

within the larger organizational structure, to going through that county's Emergency Operations Center or local emergency management office.

Alternate site designation. The last component of multi-agency collaboration is the designation of an alternate site by an agency as it usually involves moving into someone else's facilities and requires working with other organizations to some extent. Only two (6%) of the total number of respondents, one (25%) probation/parole official and one (20%) public health official, noted that an alternate site from had not been designated for their agencies. Several agencies demonstrated flexibility on this point stating that the alternate site "could be one out of any of several different locations in the county" or that "certain buildings are designated to be used but no one specific agency is assigned to any specific building." Law enforcement and emergency management officials also noted the ability to have "mobile command units" or "mobile command centers." One probation/parole agency's officers were noted to have "the ability to work out of their homes."

Future projections. The topics explored in this area were plans for reorganization and rebuilding, preparedness improvements, and what was needed in order to accomplish improvement goals.

Reorganization and rebuilding. In general, agencies would be dependent on their jurisdictional governing bodies regarding decision of reorganization and rebuilding. However, just over half (56%) demonstrated that there had been some thought given to the issue. Responses from law enforcement indicated collaboration with other agencies, "following the chain of command," utilization of reserve officers, and pulling additional manpower from other jurisdictions. Other strategies involved debriefing to "assess needs" and for "learning and psychological benefits." Reorganization would also involve input from county commissioners.

Court agencies' responses were similar in assortment. Remarks from these officials noted the complexity of both state and county involvement stating that the "county is responsible for facilities of court" while the "state is responsible for personnel." Others spoke of the benefit of "cross-trained" employees and following pre-planned lines of succession. One court official simply stated, "Just come back to work."

Probation/parole officials noted a similar state/county situation with regard to personnel and facilities management. One agent said, "Mostly it will be left up to the state" while another commented that it "would be a matter of renegotiating with county commissioners. They are charged with supplying a facility for us." One agency remarked that they have an "armory that is stockpiled with reserve ammunitions." Two respondents from this group revealed their agencies had put no forethought to the particular issue, one acknowledging that there was "nothing" they were "aware of," while another respondent stated there had been "no real thought about this particular aspect."

Public health agencies' remarks noted collaboration with other agencies, as well, and that "lines of succession were already in place." One respondent summed up the general plan of action for all respondents: "We have prioritized our critical functions and services and these are listed in the COOP plan" and they "would work with those priorities in mind."

The emergency management group's statements referred to reconstitution procedures as outlined in their respective county's plan, the presence of county reserve funds, and that recovery would involve a collective effort of municipal and county governments with state and federal assistance if needed. As with other agency groups, pre-planned lines of succession were in place. However, one particular official from this group expressed concern in this area: "The question is, does the line of succession really involve people who know what is going on?" Another official disclosed that the agency was "a little weak" with respect to recovery initiatives stating that, "With regard to reconstitution of staff, for example, we use an online resource—all personnel communications and scheduling is through an online system" and it "could be an issue if systems were compromised." He did note, however, "There is a phone list, if needed." One participant revealed that there was "no recovery plan" for their county at this time, but that "the state was putting a template together for this" while another simply hoped for it "to be as smooth a transition as possible."

Plans for improving preparedness. Most (94%) agencies reported improvements that they have just completed, were currently working on, or wanted to address in the near future. Some agencies listed more than one improvement area. Table 9 is a summary of reported improvements. Only two (6%) agencies, one from the courts group and one from the probation/parole group, fell into the no improvements category.

The most reported improvement for all agency groups was new or expanding facilities (28%). This category for improvement was reported by the courts (50%) more than any other agency group. One court official noted that an "old law library was just converted into holding cells" and "the defendant is behind glass now." The two categories reported most by law enforcement were expansion of 800 VIPER system and conduct more training/drills (both at 55%). This agency group also noted improvements for facilities, alternate site designation, and a "new web-based COOP plan that will be easier to update."

Table 9

	LE	Courts	P/P	PH	EM	Totals
Improvement	n = 11	n = 6	n = 4	n = 5	n = 6	n = 32
New or expanding facilities	27%	50%	25%	20%	17%	28%
Create or update agency specific plans	18%	17%	0%	0%	83%	25%
Expansion of 800 VIPER System	55%	0%	25%	20%	0%	25%
Conduct more training/drills	55%	0%	0%	40%	0%	25%
Update records/computer Systems	18%	17%	0%	20%	50%	22%
Stockpile disaster supplies	9%	17%	25%	40%	0%	16%
Improve security/screening	0%	33%	0%	20%	0%	9%
No improvements	0%	17%	25%	0%	0%	6%
Increase staff	0%	17%	0%	0%	0%	3%
Establish preparedness interagency group	9%	0%	0%	0%	0%	3%

Improvements Reported by Agency Group in Percentages

Note. LE = Law Enforcement; CT = Courts; P/P = Probation/Parole; PH = Public Health; EM = Emergency Management. Column totals exceed 100% because of multiple responses per agency.

The probation/parole group's improvement responses were divided equally among four categories concerning the expansion of facilities (25%), expansion of the VIPER system (25%), stockpiling disaster supplies (25%), and no improvements (25%). Public health's main two improvements fell into the areas of stockpile disaster supplies (40%) and conduct more training/drills (40%). One agency was particularly ambitious listing several areas of improvement: "Work more with mental health and provide more access at POD [point of distribution] sites. Improve and develop better screening measures at community reception sites. Have the personal 3-day preparedness kit for employees. Have more training." This respondent acknowledged the need for practicing drills stating, "Until you actually practice, you do not see all the true vulnerabilities."

Emergency management agencies were most interested in improving and updating their plans (83%). One official wanted to "do a standalone recovery plan." Another official expressed concern for employees' families stating, "As part of finishing the COOP plan and tightening that up, we want to include a family welfare plan for employees—a specific plan for their families to follow." A different agency emergency management official wanted to "simplify" their EOP and COOP plans "into a user friendly set of action steps that would flow from one to the other in only about 2-3 pages." Half (50%) of the agencies in this group were also concerned with improvements regarding records and computer systems.

What is needed to accomplish "wished for" preparedness goals? In relation to the preceding topic on what had actually been planned by their department, agencies were asked that if they had a wish list for improving the preparedness status of their agency, what would they need in order to accomplish these goals. Table 10 is a summary of those needs.

Most (91%) of the law enforcement agencies reported needing additional or improved communications and computer systems. The courts and emergency management were most in need of additional space (33% and 50%, respectively). Probation/parole agencies reported the need for additional funding (50%) and additional personnel (50%). Forty percent of public health agencies reported the equal need for additional funding, additional personnel, and additional drilling/training of plans.

Table 10

	LE	Courts	P/P	PH	EM	Totals
Needs	n = 11	n = 6	n = 4	n = 5	n = 6	n = 32
Additional/improved						
communications/	91%	0%	25%	0%	33%	41%
computer systems						
Additional funding	36%	17%	50%	40%	17%	31%
Additional personnel	9%	0%	50%	40%	33%	22%
Improved/enlarged space/facilities	18%	33%	0%	0%	50%	22%
Additional training/ drilling of plans	0%	17%	0%	40%	0%	9%
Creation/improvement agency-specific plans	9%	17%	25%	0%	0%	9%
Replenish/expand stockpiled disaster supplies	9%	17%	0%	20%	0%	9%
Additional/improved tactical equipment	18%	0%	0%	0%	0%	6%
Improved multi-agency collaboration	0%	0%	0%	20%	0%	3%
Stronger community participation	0%	0%	0%	0%	17%	3%
No items needed	9%	0%	0%	0%	0%	3%

Needs to Accomplish Wished For Preparedness Goals by Agency Group in Percentages

Note. LE = Law Enforcement; CT = Courts; P/P = Probation/Parole; PH = Public Health; EM = Emergency Management. Column totals exceed 100% because of multiple responses per agency.

A few agencies elaborated in their responses to this topic. One law enforcement official noting budgetary concerns stated that the "budget had been frozen for the last four years...lot of people are looking for jobs. No upgrades are in the near future." Another respondent, a court official, reported that more training would improve preparedness, stating, "More drills...it would be good to actually go through setting up the system at a different location just to have a better idea of exactly what all it would involve." The same official also stated the need for "better updated maps for evacuation charts." A public health official stated that a "designated preparedness coordinator/trainer" and "larger local quantities of the Strategic National Stockpile medicines" would improve their agency's preparedness.

Training

Training has to do with actually learning about and practicing those steps and actions that EOP and COOP plans outline. Training can range from simple seminar/class settings to intellectual tabletop exercises to full-scale scenario simulation drills requiring actual physical implementation of the plan. Full-scale exercises usually range from disaster alert through activation and end with a debriefing of the exercise (Freeman, 1998). Table 11 is a breakdown of the training and drilling that the different agency groups indicated they participated in.

The type of training reported most often pertained to exercises that were not exclusive to the agency's worksite. These types of simulations and drills often involved multiple agencies usually conducted as countywide disaster scenarios (e.g. evacuation for a hurricane or the distribution of medicines in the event of a pandemic flu epidemic) but could also be smaller in scale (e.g. school shooting or missing person events). Law enforcement, public health, and emergency management reported 100% participation in this category. Of most interest here, however, is the prevalence of agency site-specific exercises. Only 50% of all agencies reported conducting site-specific drills or training. The three agency-specific types of training mentioned in this category are listed separately in Table 11 as well. The sole agency group indicating no reported training was the courts (67%).

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Table 11

Types of Training	LE n = 11	Courts $n = 6$	P/P	PH	EM	Totals $n = 32$
Types of Training	II - II	$\Pi = 0$	n = 4	n = 5	n = 6	II - 32
Exercises not agency site-specific	100%	0%	0%	100%	100%	69%
Agency site-specific exercises	45%	33%	100%	60%	33%	50%
Fire	36%	33%	100%	60%	17%	44%
Tornado	9%	17%	50%	20%	17%	19%
Lockdown	9%	17%	0%	20%	17%	13%
No agency site-specific exercises	55%	67%	0%	40%	67%	50%
Tabletop, seminar or in-service training	27%	17%	0%	20%	33%	22%
No reported training	0%	67%	0%	0%	0%	13%
Unplanned exercises	0%	0%	0%	0%	0%	0%

Types of Training as Reported by Agency Group in Percentages

Note. LE = Law Enforcement; CT = Courts; P/P = Probation/Parole; PH = Public Health; EM = Emergency Management. Column totals exceed 100% because of multiple responses per agency.

Several agencies described their types of drills and training. Of special interest is the inconsistency with which they are performed from one agency to the next. For example, with respect to law enforcement, one agency noted conducting fire drills "twice a year, but these involve just the alarms and no actual evacuation takes place." Another reportedly conducted fire, tornado, and lockdown drills twice a year and "all persons in the building are required to participate." A third agency reported conducting "fire drills during in-service training which is spread out through the department at different times."

Other training by law enforcement included "training once a year with all-hazards ICS [Incident Command System] training," "countywide scenario training," "a week long table-top" exercise, and "active shooter drills." One agency characterized training to be "constantly and ongoing."

Court agencies conducted the least amount of training and their statements reflected this. One did acknowledge that they had experienced an actual "bomb threat" and "the sheriff's department cleared the courthouse." Another stated that they "normally do not have drills because we get enough real life practice. One attorney did ask if we did tornado drills because of the recent history of tornados. We have not practiced a tornado drill." Two court agencies did acknowledge some drilling, one noting all three types of facility drill the other noted that they had "no actual practice except with fire drills" which would involve a "clean sweep" of the building.

All of the probation/parole agencies conducted agency site-specific exercises. One noted that they "just started tornado drills" and it "includes going to get offenders out of the lobbies." Another probation/parole official stated that they "try to do them [tornado drills] when there are not too many people at the office" because they "go into the bathrooms" and their bathrooms are very small. Additionally, this same official described how this particular office did "not have but one entrance and exit" because the building was shared with another agency that did not want offenders accessing their side. "The other agency keeps the doors locked from its side" and the situation was expressed as "an ongoing issue with the fire department."

One public health agency noted the variety of drills they had:

Three times a year conduct normal fire drills; once a quarter, have call down drills to test communications with EM [emergency management] and law enforcement (these involve limited personnel). Have weekend drills, after hour drills, working hour drills

using email and phones. There is a hard copy list of all contacts. Three years ago, it took four hours to complete the call-down...the last time we practiced it, it took less than an hour.

Other drills noted by public health were "Code Adam drills" (missing child drills) and medications distribution exercises. One public health official noted that virtue of exercising a plan stating that they "discovered that everyone [other agencies in that county] was going to the same place."

The bulk of emergency management agency drills had to do with incidents away from their facilities. For example, one agency stated that they conducted "a lot of small ones like missing person searches" which "usually involve one to two major agencies like Salvation Army or the Red Cross." These agencies also have "full-scale countywide exercises, lots of table tops, and regional exercises involving other counties." One respondent from this group also acknowledged the usefulness in actual training exercises stating, "One problem that comes up is that we're finding remote access to virtual records is a problem. IT security can be a problem because the systems are so locked down and protected it's difficult to get into."

Information Dissemination

Information dissemination here involves communicating the crisis management and disaster preparedness information throughout the agency in order to provide staff with the ability to understand and implement their agency's EOP and COOP plans and procedures when necessary. For those agencies that do not have written plans, however, this type of information may be communicated through training and drills. Table 12 is a summary of the different methods agencies used to disseminate crisis management and preparedness information ranked by prevalence.

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Table 12

Method of Dissemination	LE n = 11	Courts $n = 6$	$\frac{P/P}{n=4}$	PH n = 5	EM n = 6	Totals $n = 32$
Drills and exercises	100%	33%	100%	100%	100%	75%
Distribution of hard or electronic copy of plans	36%	33%	75%	40%	100%	53%
Supervisor review of plan w/employee	0%	33%	0%	80%	0%	19%
Have plan but do not disseminate to staff	0%	17%	25%	20%	0%	9%
Neither drill/training nor dissemination of plan	0%	33%	0%	0%	0%	6%
Only drill/train, but no written plan	18%	0%	0%	0%	0%	6%

Methods of Information Dissemination as Reported by Agency Group in Percentages

Note. LE = Law Enforcement; CT = Courts; P/P = Probation/Parole; PH = Public Health; EM = Emergency Management. Column totals exceed 100% because of multiple responses per agency.

Overall, the most common method of dissemination preparedness or continuity of operations information was through drills and exercises, with a 75% participation rate. Just over half (53%) of all agencies provided copies of their plans to their staff either through hard copy or electronically. Out of the four (36%) law enforcement agencies that stipulated that they make their plans available to their employees in hard copy or electronically, respondents from two (50%) specified that they had a way to monitor whether or not personnel were actively reading and signing off on agency policy and procedures with regard to preparedness issues. A respondent from another law enforcement agency, though, did note that they keep a spreadsheet of each officer's training with regard to the National Incident Management System (NIMS). No other respondents indicated that their agency tracked their employees' review of plans, if disseminated. Other comments from law enforcement

officials noted that their officers also relied on experience from past events one noting, "They know and understand what to expect if on 'hurricane duty.'" One law enforcement official commented that plans were made available to staff "but only to the individual's level of responsibility."

Four (67%) of the court agencies affirmed that staff were made aware of their particular COOP plans. Respondents from two agencies stated that they had not disseminated the information to staff. One of these followed up with, "But we know where it is" and that staff "would be notified by phone call in the case of an event." The other stated that "No, but will be because it has just been revised." Only one (17%) court agency reported any type of training of the COOP plan, that it was limited to select personnel, and involved only a tabletop exercise. This same agency was the only court agency that reported to have an emergency operations plan specifically for their agency.

Three (75%) of the probation/parole officials interviewed replied that plans were distributed. However, one respondent simply stated, "No" to the question concerning whether employees were made aware of or had access to the agency's disaster or COOP plans.

One public health official stated that their agency had only one hard copy in the building, but that it was accessible to anyone who needs it and "they know where it is." Other agencies took a more proactive stance and one described how information is always at the ready as "clipboards or code cards that have all the information about each drill are worn on their ID tags." Another spoke of changes to the plan being "disseminated at staff meetings that all employees must attend" and they are "given a job action sheet just in time so they know exactly what to do." With regard to the COOP plan, this same respondent

continued that the county was "not thinking big enough" because "schools and courts, both, are supposed to go to the same civic center."

Emergency management respondents noted that their plans, which serve as the emergency management plans for the county as a whole, are available online for anyone to access. However, one agency did describe how their county had an internet-based plan that "houses critical documents" and "lists of critical information to get each agency back up and running." The county requires all departments to use this system and "it's how all departments update their own specifics."

CHAPTER 5:

DISCUSSION

The purpose of this study was to get a sense of the extent to which local level criminal justice and supporting agencies participate in preparedness procedures and practices specifically concerning their agency's personnel and facilities. A second motivation for conducting this study was to determine specific areas conducive to further research that would serve to benefit and inform the overall administration of our criminal justice system, especially in times of crisis. The results show that while preparedness practices were present to some degree among the five different agency groups with regard to their particular agency worksite and staff, the bulk of an agency's preparedness efforts appeared to focus on its role in responding to or recovery from a critical incident after it has occurred rather than being able to withstand one. This general finding suggests several areas suitable for further research and exploration.

The main conclusion from these interviews is that criminal justice and supporting agencies appear to focus less on the internal aspects of their workplace environment regarding mitigation and preparedness activities implemented prior to an event that address issues of immediate safety and security. Instead, more attention is placed on an external focus toward disaster preparedness and crisis management issues related to response and recovery activities that occur after an event and apart or away from an agency's worksite. That is to say, the data reflect an overall propensity to equip, plan, train, and inform personnel for an agency's mission away from their specific worksite after an initial crisis

takes place. At the same time, they are less likely to have provided for, planned, trained, and

informed personnel of what to do before and during an event at their particular worksite.

Table 13

Major Areas of Lack of Readiness for Each Preparedness Element by Agency Type

Major Area of Lack of Readiness	LE	Courts	P/P	PH	EM
Sustainability: Stockpiled disaster supplies	•	•	•	•	•
Planning: Written plans for COOP w/city, county, or district	•	•			
Written agency-specific EOP plans	•	•	•	•	٠
Written agency-specific COOP plans	•		•	•	
Training: Agency site-specific drills for Fire	•	•		•	•
Tornado	•	•	•	•	•
Lockdown	•	•	•	•	•
Information dissemination: Distribution of plans of any type	•	•	٠	•	

Note. LE = Law Enforcement; CT = Courts; P/P = Probation/Parole; PH = Public Health; EM = Emergency Management. A dot represents the aggregate reporting of less than 100% by the agency group in the respective category.

This situation is demonstrated collectively for agency groups overall and across the spectrum of all four preparedness elements in Table 13 with regard to those indicators that apply, for the most part, directly to the workplace and agency personnel. A dot indicates that less than 100% of all agencies in that group incorporate or implement the corresponding preparedness element into their policies and procedures. A blank space indicates that all agencies within that group are participating in the designated preparedness element. For

example, only 100% of the agencies in the probation/parole group reported conducting workplace fire drills while less than 100% of the agencies from all other groups did not.

With respect to sustainability, a low percentage of agencies reported yes to having stockpiled disaster resources at agency worksites (25%). As to planning, a low percentage of agencies reported having written agency-specific EOP plans (22%) and only 47% had written agency-specific COOP plans. Concerning training, only a moderate number of agencies reported participation in emergency exercises and drills specifically for their facilities (50%). Lastly, with regard to the dissemination of preparedness information, only a moderate number of agencies reported the distribution of hard or electronic copies of plans of any type (53%). The literature review underscores and supports the significance of each of these findings.

Stockpiled Disaster Supplies

Only one-quarter of all agencies reported having stockpiled disaster supplies including food and water. Several studies note the value of having stockpiled disaster supplies at the ready. Bancroft (2007, 2009) addresses this in her survey of community corrections agencies and specifically calls for this provision in her guidelines. In particular, Staff Protection and Safety, Guideline III.5 states:

Identify, purchase, allocate, and store supplies and equipment essential to the continuation of mission-critical functions and to meeting the needs of staff who must shelter-in-place. (Bancroft, 2009, p.12)

Rojek and Smith (2007) found the absence of this provision to be a key factor for law enforcement's poor response during Hurricane Katrina. Richards et al. (2006) comment on the importance of stockpiled disaster supplies such as personal protective equipment to be included in emergency kits for law enforcement as well as the provision for temporary housing of working officers during a public health emergency to ensure the safety of their own families. With regard to the courts, Huff (2006) recommends that COOP team members have special disaster kits pre-packed with essential items such as copies of the COOP plan, food, water, and tools in the event staff have to relocate to an alternate facility. Without addressing sustainability needs for agency personnel, an organization is presuming that staff will not have to contend with sheltering in place or being stranded at work due to a catastrophic event. Additionally, as Richards et al. (2006) imply, without adequate supplies, employees will be less likely to volunteer to stay and work through a particular disaster, thus disrupting continuity of operations.

Agency-Specific Written Plans

The low percentage of participants reporting agency-specific written plans (22% EOP, 47% COOP) is a key vulnerability to criminal justice and supporting agencies. Planning is central to any preparedness strategy. However, without written plans (which have been practiced and disseminated throughout an agency), the individual is left with figuring out what to do and how to do it in times of emergency. Rojek and Smith (2007) found the lack of planning for the specific agency to be another crucial factor in law enforcement's inability to respond effectively to disaster. Maruschak et al. (2009) discuss how facility specific plans for isolation and personal protection from infection are key actions that would not only help limit contamination within a jail, but to the outside community as well. The authors state that "we must begin to think of jails not as separate from the community but as collections of workers and detained persons who have a constant connection with the surrounding community" (Maruschak et al., 2009, p. 343).

The ability to ensure consistent execution of such life saving precautions is lost without written communication prior to the event. The federal judiciary successfully mitigated tragedy with its agency-specific emergency and continuity of operations plans (Huff, 2006). Freeman (1998), however, best explains the necessity for having a formal written emergency operations plan:

Development of an effective emergency plan entails a complex process of ongoing analysis and evaluation that is designed to (a) establish the organization's vulnerability to each type of emergency, (b) rank the probability of occurrence of each type of emergency, (c) develop the inventory of internal and external resources critical to effective emergency response, (d) train staff to perform emergency response activities, (e) evaluate staff emergency management competencies, and (f) identify emergency management deficiencies and establish a time-specific deficiency correction schedule. (para.13)

Based on these beneficial aspects, the lack of agency-specific written EOP plans in NC for every criminal justice facility jeopardizes the safety and security of workers, clients, and visitors.

Training

The fact that only 50% of all agencies performed emergency operations exercises with regard to their specific workplace facilities is troubling. Equipment, supplies, and written plans are worthless without proper training. Employees need to know how to use equipment, locate supplies, or perform emergency functions before an event occurs. Emergencies breed chaos. Proper emergency training to the EOP and COOP plans familiarizes staff with what to do, when to do it, how to do it, and who will do it prior to having to do it. Lowell (1993) quotes a disaster specialist as stating that "a disaster can be considerably modified if you have made plans *and* have people trained to implement them" (p. 9).

Training also needs to occur on an ongoing basis (Rojek & Smith, 2007). Huff (2006) recommends court personnel attend training sessions regarding COOP plans, for instance. Freeman (1998) contends that training of emergency plans is important in order to discover deficiencies in the plan, personnel knowledge, and skills. New hires, changing circumstances and the recognition of new types of hazards all demand the regular practice of emergency safety and security procedures. The respondents indicated that the majority of drills, exercises, and training were not agency site-specific (69%). These training opportunities had more to do with community incidents, such as medications distribution for a health-related crisis, or incidents that would happen away from their workplace such as a school shooting. The implications are that much less practice is conducted concerning safety and security procedures at work during a disaster, while more emphasis is placed on the preparation of procedures and equipment that deal with responding to an event that happens away from an agency's location.

Dissemination of Information

Employee knowledge of what to do is the fourth preparedness element discussed. The strength of the moderate finding that 53% of all agencies provide hard copy or electronic plans of any type to their employees weakens with regard to worksite preparedness considering that not all agencies even have agency-specific written plans—either as COOP plans (47%) or as EOP plans (22%)—to disseminate. It is important that staff not only receive preparedness information but that they comprehend the information as well. Planning and training help with this. Three of the four questions Freeman (1998) recommends asking in order to properly evaluate the effectiveness of a plan are directly related to employee knowledge:

1. Does the emergency plan adequately structure staff response to the emergencies with the highest probability of occurrence?

2. Does every individual understand his or her role in specific emergencies?

3. Can individuals and groups effectively apply emergency plan knowledge in specific emergency situations? (para. 14)

Bancroft (2009) recommends that each agency "disseminate the formally adopted plan to all employees, including new hires" and to "designate a point (or points) of contact to authoritatively answer questions and address concerns raised by employees about the plan and their role(s) and responsibilities" (p.5).

Just over half (53%) of the agencies examined in this study responded in the affirmative to disseminating copies of any type of plan (agency-specific EOP, agency-specific COOP, or as part of a larger jurisdictional plan) to employees. Even though 94 % of all agencies had some type of written plan, only 22 % of all agencies reported having written agency-specific EOP plans to disseminate. Additionally, the low number (19%) of agencies that reported supervisors review their plans with employees suggests complacency in ensuring staff understand the plans they do read.

Implications

First, the low to moderate ratings for criteria related specifically to preparedness of an agency's worksite and personnel appear to indicate a lack of consideration by agencies that they themselves are as susceptible to the direct impact of a catastrophic event as others are.

Local criminal justice and supporting agencies are complacent in their outlook on disaster preparedness for their particular agency's worksite. This point is perhaps best inferred by the low percentage of reported preparedness improvements in those categories dealing specifically with safety and security of personnel and facilities during an event. There seems to be a lack of recognition that the areas agencies are most deficient in concerning worksite preparedness are the same areas that need improvement. For example, stockpile disaster supplies (16%), create or update agency-specific plans (25%), and conduct more training/drills (25%) are not areas noted as recent or planned improvements by 75% or more of agencies interviewed (see Table 9).

This inference is further supported by the low percentage of agencies recognizing these same areas as necessary to accomplish "wished for" preparedness goals. The corresponding categories of additional training/drilling of plans, create/improve agencyspecific plans, and replenish/expand stockpiled disaster supplies all rated very low at only 9% overall each (see Table 10).

A second implication is that perhaps agencies are thinking more toward improvisation than actual preparedness. This is consistent with the observed distinction made by Kreps (1991) concerning actions taken prior to an event. A possible reason for this type of lapse in readiness—particularly in the case of those agencies that deal with emergency response as part of their organizational mission such as law enforcement, public health, and emergency management—is the assumption that these organizations will automatically know what to do during a disaster or larger emergency (Kreps, 1991).

A final implication of the findings derived from the first two suggests that perhaps criminal justice and supporting agencies are not as prepared as they think they are. By not preparing an agency or its staff properly for the possibility of disaster at work and by not recognizing the need for improvement in this area, the impression is left that the agency is comfortable with it current preparedness status. This line of thinking can be dangerous and costly in terms not only of lives and property but also with regard to resiliency of the system in the face of a widespread disaster regardless of whether it is the result of natural phenomenon, a technological accident, or terrorist intent.

We need look no further than Hurricane Katrina to understand this. Roman, Irazola, and Osborne (2007) offer an account of how the criminal justice system suffered immediate devastation and continued to reap the consequences of inadequate planning and preparation years after the storm throughout the Greater New Orleans area. For example, one of the largest jails in the country that had not been evacuated subsequently suffered the ramifications for lack of preparation. The authors list those documented by the American Civil Liberties Union (ACLU) such as the lack of food and water, power, medical care, and the abandonment of many staff prior to the storm. Records and evidence were lost; equipment was stolen or ruined; facilities were destroyed. Low pay and inadequate preparations for workers to stay and serve in the immediate aftermath of the storm contributed to the abandonment of employees creating major shortages in staff when they were needed most. As probation/parole officers were pulled away from their duties to assist law enforcement, communications failed and monitoring systems of offenders broke down creating a lapse in supervision (Roman, Irazola, & Osborne, 2007).

Two years out, levels of violent crime had risen to above those prior to the storm even though the population was less than half of what it had been pre-Katrina. Agencies operated at a fraction of what they had been prior to the storm in terms of personnel and facilities throughout the system while the backlog of cases mounted. Relocating and accounting for those under community supervision programs proved arduous as offenders scattered across the country while "no estimates exist on the number of sex offenders who have not reregistered" (Roman, Irazola, & Osborne, 2007, p. 8).

This unprecedented degree of devastation and chaos in New Orleans and surrounding areas occurred despite previous warnings well in advance of the storm. The extent of what the destruction could have been if prior notice of the impending doom had not been available is tempered only by the imagination. What must be understood is that should an unexpected widespread event occur, those agencies that do not have written plans, adequate supplies, and knowledgeable, trained staff are more likely to be severely impacted than those with written, distributed, and practiced agency-specific EOP and COOP plans. Even as outside assistance and resources will be deployed to a disaster site eventually, the size and scale of large catastrophic events makes it impossible for relief workers and equipment to be everywhere at the same time. Events such as earthquakes, tornados, technological incidents (e.g. chemical spills, nuclear meltdowns, etc.), as well as terrorist attacks are unpredictable in terms of when they will happen and how large they will be. It can only be expected that should such an unanticipated incident affect a large region of the state, those caught up in the criminal justice system will be at the mercy of affected agencies' levels of disaster preparedness. Likewise, should only a single facility experience an emergency such as a fire, for example, those individuals who are working, visiting, or housed in that facility are similarly at the mercy of those from that agency who may or may not know what to do and how to do it.

Limitations of this Study

This project has several limitations. First, it sampled only a small and convenient group of agencies that were not randomly selected. Second, the request to speak to the most knowledgeable person concerning disaster preparedness did not provide a true representation of the whole agency's comprehension of disaster preparedness and continuity of operations. Relatedly, comments from respondents were for the most part unverifiable as to accuracy or truthfulness. Another limitation of this study is that it does little to explain why a more proactive stance toward agency worksite preparedness is not being taken or why differences exist between respondent agency groups.

Future Research

The current study and existing literature review raise several issues that are conducive to further exploration and study. First, a more precise and larger study of this same kind is in order to determine if these particular findings are prevalent throughout North Carolina and the rest of the country. Additionally, such a study would prove more accurate and telling of each organization if it involved a random selection of several personnel from all pay grades within each participating agency. Schwartz (1996) notes that "it is still frequent to find institutions where staff at the shift command level have almost no familiarity with the institution's emergency plans, with the contents of the armory, or with mutual aid agreements" (p. v) when speaking of correctional facilities. Nine years later, a second study concludes that:

Overall, the survey found a healthy level of emergency preparedness in the nation's prisons....but the two most general weaknesses reflected in these survey data are the failure of many departments to engage in a systematic program of emergency drills,

exercises, and simulations and the lack of adequate initial and refresher emergency preparedness training for front-line, supervisory, and management staff. (Schwartz & Barry, 2005, p. 200)

These two studies underscore the importance of including all personnel of an agency in the emergency management conversation.

A randomly sampled comprehensive study throughout the state could include selfaudit surveys/questionnaires based on categories derived from this exploratory project. Employees from all levels of various local criminal justice agencies would participate and be tested on their individual knowledge of emergency procedures, along with their facility's physical layout and available resources. Reliability of the research improves if this exercise is accompanied with a third-party emergency management audit from a professional outside the agency's jurisdiction. This third-party audit would include visual verification of certain components of preparedness such as stockpiled resources, written plans, and possible demonstrations of facility emergency operations exercises such as fire or tornado drills. This type of follow-up study would remain limited to showing only if elements of preparedness are being implemented or not; however, it would prove much more generalizable to the state. That is to say, results from a study of this nature, without agreed upon and uniform minimal standards for all agencies to follow, could show only if the extent of preparedness awareness and implementation in agencies throughout the state is similar to that demonstrated in this small sample. The actual effectiveness of preparedness activities and resources would only be able to be evaluated by conducting an unannounced simulated disaster exercise (Freeman, 1998).

A second line of research inspired by this exploratory study is to investigate reasons why some agencies are less prepared than others are and/or less concerned about being prepared than other agencies. According to Jensen (2011):

Preparedness varies. The plain fact is that, for a variety of reasons, not all jurisdictions are able or willing to undertake the same quantity or types of actions related to preparedness. These reasons include the different risks they face, salience of risks, types and resources available to prepare, and levels of knowledge about how preparedness can be achieved among others. (p.8)

As this study shows, and the literature review supports, there is a lack of consistency to approaching the implementation or enforcement of disaster preparedness procedures as they relate to the workplace environment. Currently, research that explores why this occurs proves difficult due to the absence of comparable guidelines and compliance standards different agencies follow. Still, to examine the reasons preparedness is or is not taking place would be beneficial in promoting policies and programs that successfully encourage or mandate specific preparedness objectives and standards be met by all public agencies in a uniform manner.

This last statement leads to a third area of future research that deserves particular emphasis—how disaster preparedness is measured. O'Leary (2004) states, "One of the best ways to improve disaster preparedness is to measure it" (p. ix). As recently as 2010, the Local, State, Tribal, and Federal Preparedness Task Force recognized the need for better assessment and measurement tools by which to gauge our preparedness levels. One of their future challenges reads, "While stakeholders across the Nation have been working to improve preparedness, specific measureable outcomes for these efforts have yet to be defined and assessed" (Local, State, Tribal, and Federal Preparedness Task Force, 2010, p. 36).

One recent development the federal government has made toward this end was the passage of the HR. 3980 Redundancy Elimination and Enhanced Performance Act in October 2010 (Jensen, 2011). The Act stipulates that FEMA and the National Academy of Public Administration (NAPA) collaborate to streamline and design a quantitative process to evaluate performance outcomes for Homeland Security grants. Jensen (2011), however, notes that this mission (which is still in process as of the writing of this thesis) does not apply to Emergency Management Performance Grants that are awarded by FEMA; and it is these match grants that make up the traditional funding awarded to a state or local government in reaching disaster preparedness objectives.

To fill this void, Jensen (2011) proposes a principle-based outcomes-driven approach to measure preparedness efforts on the part of recipient jurisdictions. It is designed to be used as a justification for the grant monies awarded based on Blanchard et al. (2007) eight principles of emergency management (Jensen, 2011). These principles specify that emergency management should be comprehensive—addressing all hazards, all phases, all impacts, and all stakeholders; progressive; risk-driven; integrated; collaborative; coordinated; flexible; and professional in nature (Blanchard et al., 2007). Jensen's (2011) proposal sets forth a measurement tool based on these principles and is designed to determine whether "we are getting a return on our investment" (p. 1) from these grants.

By contrast, O'Leary (2004) offers a quantitative method for measuring preparedness. The author notes that numeric measurements provide a "common language" (p. 32) about the subject, create "benchmarks" (p. 32) so that baselines and improvements may be ascertained, and help set priorities (O'Leary, 2004). She also states that measuring preparedness quantitatively provides more accurate data, focuses attention on those areas that need it most, creates buy-in from stakeholders on what needs to be done, and provides "milestones" (p.33) to aim for in the continuous process of improvement (O'Leary, 2004).

The importance of agreeing on a method to accurately measure preparedness is paramount to reliably gauging the status of criminal justice agencies in this area. Only then can researchers zero in on what deficiencies exist, why they exist, and how emergency preparedness deficiencies may be successfully overcome.

Regardless of how disaster preparedness is ultimately assessed, this study illustrates that consistent execution of preparedness procedures and practices specifically related to the workplace is currently not being implemented within the local level criminal justice system in North Carolina. The purpose of this project was to obtain a snapshot of the present status of criminal justice and supporting agencies concerning agency-specific workplace disaster preparedness. Findings suggest that less emphasis is placed on the internal planning and implementation of agency-specific workplace disaster and emergency preparedness actions which help workers survive an event, while more emphasis is placed on response and recovery actions that occur away from the agency worksite and/or after an emergency has begun or transpired.

Disaster preparedness is a growing responsibility of the organization and individual alike. An old adage says, "A chain is only as strong as its weakest link." Following this dictum's logic, the saying denotes that any organization is only as prepared as its least prepared member. Therefore, any local criminal justice system is only as prepared as its least prepared agency; and any agency is only as prepared as its least prepared employee. Disaster preparedness education and training must become a priority throughout the criminal justice system to ensure the safety and security of its workers, clients, and visitors as well as the continuity of such a critical social institution.

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APPENDIX

Interview Guide

Sustainability related questions

- Are the immediate/current facilities equipped with disaster preparedness items needed to sustain all personnel if it were necessary to shelter in place? If so, for how long?
- Discuss your agency's communication system and any backup systems you may have in place should the main one be compromised or deemed inoperable?
- What are the main areas of concern for your specific agency in the event of a catastrophe?
- What mechanisms/procedures does your particular agency/department have in place to address these concerns?

Planning related questions

- Does your particular agency have a written disaster plan and/or a written COOP plan specific for this particular agency and worksite?
- Has your agency made provision for medical/psychological care for your employees?
- Does the agency have a strong mutual-aid system with like organizations in other jurisdictions if their assistance were needed to maintain continuity of operations?
- If so, are there preplanned lines of command or authority if the situation necessitated involving outside agencies?

- Are there specific procedures in place for requesting outside aid or resources from sister agencies?
- Is there a designated back up site from which your agency could operate out of if your current facilities were destroyed or compromised?
- Discuss your agency's provision for reorganization or rebuilding after a catastrophic event?
- What are your agency's future plans to improve the current system or plan?
- If there were a wish list for such, what would you need or like to have in order to accomplish your goals for improvement?

Training related questions

• Does your agency conduct drills of any sort? If so, how extensive are they? Who do they involve? How often are the drills conducted or practiced?

Information Dissemination related questions

• Are all employees made aware of and have access to your agency's Disaster Preparedness and COOP plans? What is the procedure for dissemination of this information to your staff?

VITA

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Ms. Martin is a North Carolina private investigator with BlueLine Advantage in Hickory, NC. She also serves as a disaster services volunteer and instructor with the American Red Cross and CERT (Community Emergency Response Team). She is a current member of the Catawba County Citizens' Corp Council.