DISSERTATION

The Changing Paradigm of Emergency Management: Improving Professional Development for the Emergency Manager

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DISSERTATION APPROVAL

The abstract and dissertation of Robert Edward Grist for the Doctor of Philosophy in Public Administration and Policy were presented June 19, 2007, and accepted by the dissertation committee and the doctoral program.

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ABSTRACT

An abstract of the dissertation of Robert Edward Grist for the Doctor of Philosophy in Public Administration and Policy presented June 19, 2007.

Title: The Changing Paradigm of Emergency Management: Improving Professional Development for the Emergency Manager

Throughout its short and remarkable history, emergency management has been subjected to a vast array of fast-moving and radical changes which have presented significant challenges to the men and women in this profession. This study was designed to help determine the adequacy of their professional development to meet those challenges.

The study is framed within an environment where emergency managers face the pressure to professionalize; explore the world of risk, trust, and the distribution of power; confront revolutionary changes; and concern themselves with the social impact of disasters in their own communities. This study asks: "Do Emergency Managers feel confident their education, training, and practical experiences enable them to meet the challenges taking place in the emergency management profession in a post-9/11 world?" A 49-question survey was mailed to a stratified, random sample of 500 emergency managers from the 2005 membership roster of the International Association of Emergency Managers during the first week of September, 2005. Ironically, this was the same time Hurricane Katrina came ashore. Any fears a catastrophe of that magnitude would somehow result in a less-than-ideal response rate were quickly calmed when 240 responses were received, a 48% response rate. Emergency managers wanted to be heard on this issue!

The analysis of findings reveal emergency managers are confident in their training and experiences, which are directly related to their job responsibilities, but have mixed feelings about the value of their formal education, which may not have been in a field even remotely connected to their present employment. The data explicates recommendations for education, training, and experience for anyone seeking a career in emergency management. The analysis also explores the changing demographics of the members of the profession. In the view of current emergency managers, emergency managers of the future will have to be better educated, better trained, and better able to learn from their experiences.

The study concludes with a list of future studies to consider and recommendations for current emergency managers to be more active in higher education, enhancing future professional development with the skills they possess.

THE CHANGING PARADIGM OF EMERGENCY MANAGEMENT: IMPROVING PROFESSIONAL DEVELOPMENT FOR THE EMERGENCY MANAGER

by

ROBERT EDWARD GRIST

A dissertation submitted in partial fulfillment of the
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+

In Loving Memory

of

My Mom and Dad

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I. INTRODUCTION

> *"Emergency Management is the process of making public officials think about things they don't want to think about, spend money they don't have, and prepare for something they don't believe will ever happen" (Selves, 1996)*[1]

A. Context of the Study

Throughout its short and remarkable history, traditional emergency management has been subjected to a vast array of fast-moving and radical changes which have presented significant challenges to the men and women in this emerging profession. Many of these individuals assumed their current job responsibilities after completing careers in other disciplines, notably law enforcement, fire service, and the military. Some are beginning to see the need to increase their expertise not only by pursuing other academic disciplines with advanced education but also by intensifying their training and varying their experiences in emergency management-specific areas to insure they are adequately prepared to meet any new requirements and challenges presented to them.

The Federal Emergency Management Agency (FEMA), the federal agency developed to administer the Nation's emergency management program, defines the discipline of emergency management as "the protection of the civilian population and property from the destructive forces of natural and man-made disasters through a comprehensive program of mitigation, preparedness, response, and recovery" (FEMA, 2006, p. I-5). Most people are familiar with the natural hazards, including floods, fires, earthquakes, tsunamis, hurricanes, and tornados and are becoming more aware of such disastrous events as droughts, vector infestations, and natural manifestations of disease and illness. Man-made hazards are generally classified under one of two distinctive types. "Technological" hazards are primarily accidents resulting from a more industrialized and complex society. Included in this group are such incidents as hazardous materials spills, traffic accidents, and railway derailments. "Social-Impact" hazards are the deliberate attempts to disrupt daily life by advancing a social agenda or capitalizing on the ideological differences between people. These include war, the many forms of terrorism, and civil disobedience. But seldom does a disaster occur under a single category. The "cascading effect" of one disaster promulgating others often compounds a single event into a complex array of disassociated problems. For instance, an earthquake may destroy a city's sewer system causing disease outbreaks. This may be followed closely by economic destabilization resulting in delays in the recovery activities meant to return the community to an acceptable level of normalcy.

An earlier perspective offered from the field of Sociology sees emergency management as the combination of science, technology, planning, and management to prevent injury, loss of life, damage to property , or disruption of community life (Drabek & Hoetmer, 1991). The subtle differences between these definitions help

explain some of the variation existing in the various models of emergency management. Two such models are offered by Michael D. Selves, Director of Emergency Management for Johnson County, Kansas. His "Emergency Services" model emphasizes the coordination of first responder resources to maximize the ability of the community to respond to major emergencies and disasters. The emergency manager performs his craft through a series of tasks and work responsibilities, some requiring specialized skills and knowledge. These tasks are often learned on the job and mastered by experience (Selves, 1997). His "Public Administration" model emphasizes emergency management's role as an element of the overall administration and governance of a community. Its intent is maintaining the continuity of operations in an effective and integrated manner in times of crisis. This model views emergency management more as a profession than a craft or skill (Selves, 1997).

Individual emergency managers are often asked to bring their talents to situations requiring them to rely more on instinct than a prescription of actions to be taken since seldom do emergencies occur in precisely the same manner they are predicted. A generous measure of flexibility is required and a good imagination is a definite asset. They often find trust and interpersonal communications build cooperation and insure calm and competent responses in times of crisis, characteristics which will be subjected to testing and evaluation at times communities are not experiencing disasters. Testing heightens the additional reliability necessary in disasters because cooperation is found to be easier to advocate than it is to practice (Weiss, 1987). Stumbling blocks need to be identified as early in the process as possible. Cooperation is also a characteristic of the professional and collaborative nature of emergency management. No one could possibly solve all the problems associated with a widespread disaster nor could he or she work without sleep for longer than a day or two. Developing a rapport with peers and subordinates will insure continuity and sustainability where instructions can be carried out without question.

Contrary to the generally held belief that managers can delegate authority but never the responsibility of their office, emergency management practitioners generally have all the responsibilities and little, if any, of the authority to implement policies and practices (Rhodes, 2005). Authority is often retained by the person holding the statutory authority in the jurisdiction. Emergency managers in all communities rely on their abilities to form cohesive, collaborative management organizations as well as the ability to develop the complementary skills to provide an extra measure of flexibility and adaptability.

Since the events of September 11, 2001, many emergency managers have left the "comfort zone" of their previous models and have pursued new and different models in response to the sudden jump in knowledge and experience they have received, placing concerns for natural and technological hazards in a secondary position behind the "homeland security" issues associated with terrorism, bioterrorism, and weapons of mass destruction. At the same time, mainstream public administrators have sought information and guidance from these men and women to advise them on the course of action that is needed in confronting new challenges which allow them to consult with other department managers and make contributions to the improvement of intergovernmental operations. This has not come without concerns and an over-

simplification of the traditional ways emergency management is conducted. Individuals or groups should acknowledge the dynamic nature of the emergency management field and avoid the personal preference to rely on "textbook solutions" to confront the cascading dimension of disasters in the United States today (Barton, 1969).

B. The Historical Perspective of Emergency Management

Emergency management as a separate discipline was virtually non-existent prior to World War II. This does not mean people who suffered loses prior to this time were left alone or did not receive needed care. Services were provided by a variety of emergency service agencies, church groups, community social welfare programs, volunteer or non-profit organizations, and neighbors caring for neighbors. Emphasis was placed on responding to the victims' immediate needs. Mitigation measures were only implemented after a devastating event such as the 1906 San Francisco earthquake. After this event, seismic-resistant building codes and construction standards were implemented. Fire-resistant materials, fire escapes, and zoning restrictions can be traced to the mitigation efforts following the 1871 Chicago and 1872 Boston fires (Sylves, 1998).

Emergency management in the United States is rooted in the establishment of the Office of Civil Defense in May 1941. The programs developed by this new government agency intended to mobilize the civilian population for self-protection as well as to preserve the community infrastructure and industrial manufacturing capabilities of the nation. Like many programs at the cessation of hostilities, Civil Defense was "mothballed" and remained inactive until the explosion of the first Soviet nuclear weapon in 1949. While the nation was obsessed with the fear of nuclear war, the federal government realized the same level of preparedness they had developed to escape the potential disaster of a nuclear blast could be used to protect communities from other hazards such as hurricanes, tornadoes, and severe winter storms. Emergency management began to emerge as a separate concern of government, primarily developed in response to specific major natural disasters (Waugh, 2000). By 1979, with the creation of the Federal Emergency Management Agency (FEMA) to manage the nation's disaster response, the concerns for "mutually assured destruction" promised by global thermonuclear war were less important in people's minds than recurring natural hazards. Many of the early positions in the new emergency management agencies were filled with civil defense directors who were either volunteers or worked only part-time. Since many of them were already retired from other jobs, they brought lifelong experiences with them, starting a tradition which has continued into the present. Assistance for communities still remained on an incident-by-incident basis and was never guaranteed. Unfortunately, even when assistance was provided, it never arrived quickly and many people faced financial ruin as a result. Through a series of Congressional actions culminating with the 1988 Stafford Act, disaster assistance became a responsibility of the President and a cost-sharing plan was devised with the states (Sylves, 1998). When money became available to fund programs which would reduce the effects of future disasters, emergency managers began to be hired by communities desiring to use these new mitigation funds.

Managing the programs soon became a full-time job, requiring very specialized training and demanding the various agencies within a jurisdiction work together to minimize the threat of the specific hazards unique to them. Training programs were developed, first as simple instructions on filling out forms to home-study courses that explained some of the background necessary to fill the new positions. Soon however, regional training sessions and the new Emergency Management Institute in Emmitsburg, Maryland began offering week-long courses in all four phases of emergency management – mitigation, preparedness, response, and recovery – as well as simulation and role playing. When the FEMA Director position was raised to a cabinet-level position during the Clinton administration, a plan was adopted to "encourage and support the dissemination of hazard, disaster, and emergency management-related information in colleges and universities across the U.S." (FEMA, 2007, p. 1). That plan is well underway toward completion and many college-level courses have been developed under FEMA's sponsorship.

Paralleling the development of programs in local communities has been the development of state, national, and international associations of emergency managers where one, the International Association of Emergency Managers (IAEM), has developed a certification and recognition program to help promote the career field as a profession.

Since 1989, the United States has seen a significant increase in events that are classified as disasters. Some, like hurricanes (with names like "Andrew," "Camille," and now "Katrina") or earthquakes (with names like "Loma Prieta," "Northridge," and "Nesqually") are considered natural events but others, such as an oil tanker ("Exxon Valdez") running aground, airplane crashes, or nuclear reactor emergencies (like the "Three Mile Island" incident) add a different dimension to the definition of disaster. The impact of such events always has a personal component but when fueled by unprecedented media access, public interest in such events has increased. Monetary losses continue to increase as well despite improvements in construction and local ordinances to increase safety. No matter how much money individuals, organizations, and the business community invest in mitigation, prevention, and preparedness, disasters and major emergencies require a governmental response (Sylves, 1998).

And then, the United States experienced the events of September 11, 2001. While terrorism had always been a concern in an "all hazards" disaster plan, it was always considered a very remote possibility. Now, with the creation of the Department of Homeland Security, terrorism is not only the primary concern of many jurisdictions but also the sole purpose of many new offices as well as new employment opportunities in others. Consequently, the backgrounds and qualifications of the men and women currently occupying emergency management positions in local communities are subject to intense scrutiny.

Since beginning this research project, the events in the city of New Orleans and all along the Gulf Coast in response to hurricanes "Katrina" and "Rita," the flooding in the New England states, the devastating tsunami in Indonesia and the Indian Ocean region, and the horrible loss of life as a result of the earthquake in Pakistan sharpen the concerns of not only the policy makers and decision makers throughout the world who

ultimately must take responsibility for their community's preparedness but also the men and women who serve as emergency managers.

C. Research Question

To explore potential concerns communities may have regarding the qualifications of those who are entrusted with their safety, this study asks: "Do Emergency Managers feel confident their education, training, and practical experiences enable them to meet the challenges taking place in emergency management in a post-9/11 world?"

D. Intent and Implications of the Study

Emergency management also presents challenges to many traditional theories in public administration. The discussion of the challenges to these theories presented in this study are expected to increase the overall knowledge of them even though the challenges may sometimes appear as direct contradictions, creative interpretations, and unusual applications. Emergency management certainly questions one thought in organizational theory of only one effective organizational structure for a particular organization. Emergency management practitioners might insist their organizations be more flexible than what this tenant would allow. When acting in a non-crisis mode, a typical emergency management organization operates in a mostly horizontal structure to bring many players together as equal partners. This collaborative arrangement permits a flexible preparedness organization and the ability to draw on the personnel and logistics resources of each of the partners. A horizontal structure develops a high degree of confidence in the partners while insuring competence and understanding continues to develop between them. In the crisis mode, however, the structure of emergency management becomes vertical, allowing for the quick and determined response of a hierarchical, traditional command structure. This structure relies on trust and dependency where each component is doing the job required of it. The role of the emergency manager includes facilitating the activities of both modes, triggering the transformation from the horizontal structure to the vertical at the start of an incident and expediting the return from the vertical structure to the horizontal during the demobilization process.

This offers more than several complications to organizational theory and actually confounds it. Either the theory fails to include the structure emergency management must operate in or emergency management is simply too fluid in application to be held by such a theory. In either case, the emergency management practitioner plays an important role in the success of its mission. Consider, for the moment, that the emergency management structure exists much like a black box. The size and the shape of the structure are determined by policy-makers and decision-makers – often not the same individuals. The box is entrusted to the Emergency Manager for safekeeping, training, coordination of its pieces, and evaluation of its capacities to do the work of government being asked of it. The needs of the community and its citizens are the concerns of the policy-makers, the decision-makers, and the emergency manager. The output from the black box structure is intended to satisfy these community needs. However, the needs are often neither clearly defined nor

formally expressed before the anticipated event because even the best planning document cannot foresee every contingency or every need. The range of potential responses and needs could extend from simple information for the citizenry to make decisions for themselves to the complete dependency for food, shelter, and clothing as well as the replacement of homes, community, and way of life. Once the box has been shaped and oriented to provide the services determined by the policy makers and others, pour in the necessary components and responders into the structure, and then, shake the box. A community-wide disaster – either a non-routine expected event or one whose severity has never been tested – might be sufficient to alter the structure of the box. From the postings of the lessons learned and the volumes written in the aftermath of previous events, no organization has ever proved itself up to every task asked of it nor has any community ever escaped without changes being implemented almost immediately to its black box structure.

The discussion of organizational theory serves only to introduce the actual subject of this study: The evaluation of the professional development of emergency managers. The study seeks to discover whether or not these men and women feel they are properly equipped with the skills necessary to meet the growing expectations of the communities they serve rather than focusing on the changes which may take place during their tenure. A representative sample of emergency managers throughout the United States has been surveyed to determine their confidence level with their professional development programs.

Emergency managers also realize their education, training, and experience are what they bring to the job and each of these components of their professional development program is a necessary part of the whole person who has accepted enhanced responsibilities as a result of the tragedy of September 11, 2001 for the benefit of their communities. One traditional reason given for individuals entering the emergency management career field after completing another career is their reluctance to retire from active participation in community affairs while seeking ways to continue utilizing their knowledge and skills in a constructive manner.

A certain amount of time, financial support, personnel assets, and encouragement from the entire community – through its leadership – are necessary to ensure the community's needs are met during an emergency. A plan of action must be tailored to those very specific requirements. Too often plans are borrowed from another jurisdiction without sufficient local input, meeting the letter of the law but certainly not the spirit of it. Some jurisdictions even keep their plans in draft mode, exercising their right to change them as needed and allowing their leadership to micro-manage an event should it ever occur. But even this is preferred to not doing anything at all. A "truism" in emergency management – a saying everyone seems to use but no one knows who to credit as the original author – is "The only thing more difficult than planning for an emergency is explaining afterwards why you didn't." The individual who wrote this should step forward and take the credit he or she so richly deserves! And even though everyone agrees with this truism, it is difficult for the policy-makers and decision-makers in many communities to commit precious funds to projects which – thankfully – are rare when so many other needs are more visible and require the

same, if not more, immediate attention. Consequences are, however, what you face when your plans don't work – or don't exist.

E. Significance of the Study

Much of the literature and the research conducted in emergency management is either episodic or anecdotal in nature, attempting to discover what went wrong during a particular event, identifying corrective action, and recommending its immediate implementation. This study is different. Its intent is explore the complexity of the roles emergency managers play and allow them to express the level of confidence they have in achieving the goals of their programs. It relies on responses submitted by the emergency managers themselves, reflecting on their qualifications and most certainly, reacting to the recent events around the world.

The study should show how emergency managers are very involved in their work and how they are reacting to the proposed changes affecting it. Since the conclusions presented here will be drawn directly from their input, this study should either indicate a new direction their career should take with respect to education, training, and experience or simply confirm their satisfaction with its current progress.

As an academic paper, it is hoped it will make a contribution to not only the theories surrounding public administration and emergency management but also to their practice.

F. Information from the Author/Researcher

I am an emergency manager with over twenty years of experience in various aspects of this career field from search-and-rescue and disaster response with the Civil Air Patrol, wildland fire suppression personnel management with the Army National Guard, and employment as the Emergency Services/SAR Coordinator with the Josephine County Sheriff's Office, Grants Pass, Oregon. I hold the prestigious Certified Emergency Manager® credential from the International Association of Emergency Managers and have recently completed my second recertification since initially receiving this honor in 1996. I also hold the Oregon Certified Emergency Management Specialist designation from the Oregon Emergency Management Association.

This experience gives me not only substantial insights, understanding, access, and ability to interpret materials provided by my colleagues in this emerging profession but also creates the problematic opportunity of introducing personal bias into this project. Bios may influence the interpretation of the results of analysis. I have followed a careful research methodology to maintain objectivity throughout the study. Revealing this information to those who read this dissertation may help them understand why I selected it as a topic. I have participated in many discussions over the years of the issues presented here and felt it was important to investigate them formally as a starting point for future discussions as well as identify them as legitimate subjects for scholarly inquiry. Hopefully, this information helps the readers understand the recommendations I make are a result of a careful analysis of the data and not simply my personal bias.

G. Definition of Terms

Community: A jurisdictional or organizational unit which might utilize the expertise of an emergency management practitioner in some capacity. This includes private sector businesses, non-profit organizations, churches, and private schools as well as public sector cities, towns, counties, states, the federal government, agencies, public schools, and institutions of higher education.

Decision-makers: The elected and appointed public officials entrusted with the governance of a specific community, especially those responsible for community safety and security. This term may also be applied to influential members of the community serving in an advisory capacity to elected and appointed department heads. They may also hold positions as "policy-makers."

Emergency management practitioner: The community decision-makers responsible for the formation and implementation of the community's emergency management program. The exact title varies between jurisdictions. Most commonly, they refer to themselves as "emergency managers." When this term is used to designate anyone else, such as a statutory title, it will be specified as such.

Emergency Services model: A model of emergency management emphasizing the coordination of resources to maximize the ability of the community to respond to major emergencies and disasters. The emergency manager performs his craft through a series of tasks and work responsibilities, some requiring specialized skills and knowledge. These tasks are often learned on the job and mastered by experience. This is adapted from the definition offered by Michael D. Selves, Director of the Johnson County, Kansas, Office of Emergency Management and the 2007 President of the International Association of Emergency Managers (IAEM). (Selves, 1997)

Public Administration model: A model of emergency management emphasizing its role as an element of the overall administration and governance of a community and its interest in maintaining the continuity of operations in an effective and integrated manner in times of crisis. This model views emergency management as a profession with a supporting academic foundation that is subject to academic research and debate. This, too, is adapted from the definition offered by Michael D. Selves. (Selves, 1997)

Risk: The exposure to the chance of loss. It is a combination of the probability of an event occurring and the significance of the consequence, known as impact, of the event occurring. (Risk = probability x impact). The term "risk" comes from the early Italian "risicare," meaning "to dare" (Bernstein, 1996). Risk, therefore, must be considered a choice rather than a fate.

Hazard: An event or physical condition that has the potential to cause death, injury, destruction of the environment, property damage, interruption of business, or other types of harm or loss. Additionally, a hazard can be thought as a potential for danger or adverse conditions. (FEMA 2006). "Hazard" comes from the Arabic word "al zahr," meaning "dice" (Bernstein, 1996).

Disaster: The occurrence of a natural, technological, or social event, or as a consequence of such an event, causing intense human suffering or significant needs in a community which cannot be alleviated by the victims without assistance. "Disaster" comes from the 16th century Italian "disastro," based on the Latin "dis + astrum,"

meaning "ill-starred" (Neufeldt, 1988). Emergency management practitioners often use the words "emergency" and "disaster" interchangeably. While even in their own minds there are differences, the responses at the community level often may only refer to the urgency, duration, or intensity of the event. Most would also freely admit that what is simply a "routine response" for one agency could very well be "catastrophic" for another.

9/11: Refers to the events of September 11, 2001 when the World Trade Center in New York City, the Pentagon outside Washington, DC, and the aircraft destined for another target – probably in the Washington, DC area – occurred as a result of foreign terrorist activities within the United States.

H. Outline of the Study

Chapter 1: Introduction – This chapter provides an overview of the entire research project, its context, the historical background on which the study unfolds, and the research question which forms the basis of the study as well as the intent and implication of the research to the field of public administration. A definition of terms used in the study and its subsequent analysis are also included. The significance of the study concludes this chapter by describing how this study differs from other published works within the discipline of emergency management.

Chapter 2: Literature Review – The classic and contemporary contributions in the literature which have led to the research question and the formulation of the study are reviewed in this chapter. The literature forms a picture of the environment in which emergency management practitioner must operate. The discussion of various themes used in public administration provides a sound foundation for the study and the subsequent recommendations resulting from it.

Chapter 3: Methodology – This chapter introduces the survey instrument utilized for the study, explores the questions which comprise it, and describes how the principal concepts are measured. The study design describes the construction, pilot testing, institutional approval, and distribution of the survey as well as the subsequent collection of its responses.

Chapter 4: Findings – The results of the survey are revealed in this chapter in narrative, tabular, and graphic forms.

Chapter 5: Analysis of the Findings – Using several techniques, the research question introduced in this study is answered and its significance determined.

Chapter 6: Conclusions and Recommendations – From the preceding analysis, the implications of the findings and the significance of the results will be considered, conclusions will be drawn, and recommendations made. The recommendations include a strategy for change and implementation within the limitations of the study's findings. The chapter concludes with suggestions for future research in emergency management.

II. LITERATURE REVIEW

A. Introduction

This literature review provides insight into four theoretical and practical environments in which the field of emergency management operates. Much of the literature in the emergency management field is episodic or anecdotal and while it tells a great story from which lessons may be learned, it lacks the scientific study, analysis, and scrutiny to raise knowledge in emergency management to the same level of professional development many emergency service providers, i.e., police fire, emergency medical services, experience. This is unfortunate because the world of emergency management is highly complex, requires familiarization with several other disciplines to grasp basic concepts, and deserves to receive attention from the academic community because it impacts human life and community quality of life as much as other occupations entrusted with the community's well-being. However, I also find it fortunate at this point of my career to find such study is beginning to emerge and it provides me a wonderful opportunity to study and simultaneously apply the thoughts and practices of exceptional men and women from many varied disciplines with the styles, techniques, and talents they are beginning to develop and share.

While emergency management personnel may find the learning process associated with some of these skills to be long and arduous, many of the topics have been addressed by other public administrators who have processed them effectively in other circumstances. Such topics as the unique applications of organizational theories, the conditions where revolutionary change theory – especially its punctuated equilibrium paradigm – is tested; and the concerns raised in risk management can contribute not only to their further individual development as topics for discussion and academic contribution but also provide a basis for a mutual understanding of coworkers, community decision-makers, and academic practitioners. If these incentives might be found inadequate, the ongoing struggles of emergency managers with their own professional development would round out any discussion. As with other dissertation literature reviews and their subsequent study, the intention here is to advance and contribute to the body of professional literature and theory providing the basis for further study and review.

By exploring professionalization; risk, trust, and power; revolutionary change; and the social impact of disaster while linking them to emergency management, I will establish a clearer picture of emergency management as a field of academic study within public administration and detail the contributions this study will make to its body of knowledge. The invitation is to experience the world in which emergency managers operate through the insights provided by the following topics.

B. The Pressure to Professionalize

The field of emergency management has advanced toward professionalization closely parallel to the general direction most emergency managers have witnessed in their personal professional growth. This is a process not unlike other occupations have experienced in their development into recognized professions. Many individuals

in emergency management are concerned about this movement. Others feel such a movement will help stem the surge of instant experts who suddenly appear in the aftermath of a disaster with their view of the right questions, criticisms, and solutions. Many people, including practitioners themselves, believe emergency management has been a "profession" since the creation of positions and organizations distinct from the established emergency services provided by police, fire, and emergency medical personnel (Britton & Lindsay, 1995; Crews, 2001).

One of the earliest studies of the question of "what does it mean to professionalize?" was the 1933 book published in England by Carr-Saunders and Wilson titled "The Professions." Their findings helped to define the professions and give insights into the process of professionalization other such studies would imitate and build on. These findings, called the *functionalist* concept of professions, were summarized as:

> Professions were organized bodies of experts who applied esoteric knowledge to particular cases. They had elaborate systems of instruction and training, together with entry by examination and other formal prerequisites. They normally possessed and enforced a code of ethics or behavior. (Abbott, 1988, p.4)

Other views, such as the one advanced by the *structuralists*, who include Millerson (1964), Wilenski (1964), and Caplow (1954), see a profession as merely a form of occupational control where the process of professionalization explains why a profession would display diverse properties, including why some individuals were still in the process of becoming professionals. The *monopolists* promote a similar structural growth but attributed it to the desire for dominance or authority in building status and power for the professionals as explained in the writings of Larson (1977), Johnson (1967), and Freidson (1984). The *culturalists* view, advanced by individuals as Ben-David (1963) and Bledstein (1976), attributes the growth of professionalism to external social pressures to become more functional (Abbott, 1988). From the success each opinion has received among the groups studying and promoting their views, each is correct from its own perspective and each contributes to a better understanding of the process as a whole.

The development of emergency management into a recognized profession can be examined first by looking into the more popular functionalist's concept of the professions. In nearly every state and in many regions, associations have formed, formal and informal, where emergency managers, their staff members, students, and associates come together for meetings, training, social engagement, and recognition of accomplishments. Even on an informal basis, emergency managers find themselves "talking shop." Several of the local organizations have published guidelines and criteria of their own, resulting in state certification and recognition from the governor's office for a certain level of achievement (Green, 1999).

National and international associations bring emergency managers together across the country and around the world in a similar manner. The International Association of Emergency Managers (IAEM) established a program for designating those who meet its rigid criteria in professional development as a Certified Emergency Manager® (CEM®). Other associations provide forums for discussion involving the problems

emergency managers face on the job. These include the National Emergency Management Association (NEMA), an association of the 50 state directors of emergency management, and the Section for Emergency and Crisis Management of the American Society for Public Administration (ASPA).

While someone may be a practitioner in a certain field of study, he or she may not be recognized even among his or her peers as an expert. However, it is a self-proclaimed expert who does not have the support and recognition of others in the field of study who may legitimately have his or her "credentials" questioned. In seeking expert opinions, therefore, it is necessary to understand an expert is someone who is very well skilled in a particular field and who, having completed the necessary training and education, achieves professional status and may not only speak with a certain authority on the subject but also submit his or her opinions to the successful scrutiny of his or her peers at whatever time and place they may require.

The acquisition of knowledge in the field of emergency management is not difficult but must be understood to represent very specialized knowledge. An expansive list of courses and training programs in emergency management exists and the changes in technology that include DVDs and CDs have made even more courses available to the general public. The list of conferences, trade shows, and meetings available to strengthen a community's response grows every year. With the addition of homeland security issues since the 9-11 events, it would be possible – although quite expensive – to spend every day of every year on the road attending all of the commonly offered training. Education will always be found at the core of any discussion of the profession (Britton & Lindsay, 1995). Furthermore, professionals would insist knowledge and skill of a particular specialization requires a solid foundation in abstract concepts and formal learning as well as the exercise of discretion (Freidson, 2001). The push for higher education has begun . . . and there is good reason for this:

> What one usually associates most closely with the ability of professionals are the knowledge and skills which they are assumed to have acquired through their special education. This ability is expected to let them know what is going on and what is to be done. Knowledge of theories and theoretical perspectives, concepts, classifications, models, figures of thought, connections, instances, and criteria of relevance. These are resources which often lie unexpressed as a background to what the professionals offer. (Svensson, 1990, p. 56)

As with other positions of public trust, some emergency managers must meet other formal prerequisites. Some are sworn officers or take an oath of office. Generally, emergency managers undergo background investigations including driving and credit histories. Many positions require an emergency manager to complete FEMA's Professional Development Series (PDS) within the first year of appointment. For the CEM designation from the International Association of Emergency Managers (IAEM), a series of requirements including contributions to the profession, publications, speaking engagements, and community service are required in addition to an extensive list of education and training requirements in emergency management and business management. As the principal association of emergency managers,

IAEM has published its code of ethics and encourages not only its members but also all members of the profession to live according to its provisions (Appendix G).

The structuralists are less concerned with functions of a profession and more concerned about how they get there – a process. Three prominent writers – Millerson (1964), Wilenski (1964), and Caplow (1954) – offer three distinct methodologies but have in common the sense until all the processes are complete, an individual cannot and should not declare himself a professional. He or she certainly will not be considered one by his or her associates. Associations often develop to exclude those who are not qualified from the practice of the profession and have the responsibility to seek legal recognition for the title while criminalizing unlicensed work as charlatanry (Abbott, 1988). However, such action has not occurred so far in the history of emergency management. What is distinctive about these three authors and others who follow the same vision is that none can agree on a single path to achieve the status of professional. Their experiences vary and there is still no indication which will dominate in the development of emergency management as a profession.

The *monopolist's* vision is problematic for emergency management practitioners. The information emergency managers possess should not be held only by them but rather distributed to the entire community. For the writers of this vision – Larson (1977), Johnson (1967), and Freidson (1984) – dominating the field provides control of the information, control over the structural process of becoming a professional, and control of the authority over the practice of the profession. They feel this will bring the professional status and power. For these writers, belonging to a profession means belonging to a group of elites. Few in emergency management support such a vision. When developing plans to protect people's lives, the release of as much information as possible without overwhelming them should be regarded as good. A community's emergency operations plan – except for phone numbers and other contact information protected under the privacy act – should be readily available to anyone as well as the means by which the conclusions were made. It is a living, transparent document and should be able to be re-worked as circumstances change. This exclusive access to information would be worrisome for policy analysts, organizational designers, and the general public. An emergency manager unwilling to share his or her knowledge is of no value to a community or its leadership. So much of this occupation depends on the reliability and the credibility of the information source and individuals willing to share what they know with others.

The *culturalist* vision sees professionalization as a means to protect certain individuals – the professionals – from the structured, rigid employment constraints which emerged with capitalism. Professionals became an independent, protected class. If the professional could not be constrained then they were free to pursue their profession in accordance to the guideline the profession elected for itself. This provides the professional with individual control over the external consequences of status, power, and money (Abbott, 1988). Culturalists, like Ben-David (1963) and Bledstein (1976), examined the external consequences of professionalism at the level of the individual rather than strictly on the profession.

An emergency manager free to make observations independently based on the standards of his or her occupation might be more willing to reveal shortcomings and

legitimate concerns he or she might have regarding the preparedness posture of his or her jurisdiction than someone who is employed by a jurisdiction as a staff or team member. Honesty, candor, reliability, and sensitivity would more likely guide this individual more than the directives of politically-motivated elected officials. A measured response does not have to be a lie any more than always telling the truth about something is always a virtue. This is the ethical dilemma of "vanity over virtue" (Ross, 1908) When the truth needs to be told emergency managers should have no problem expressing it. The community is still dealing with the potential of risk before an incident occurs. It is up to the emergency manager to calculate an accurate, believable risk assessment. Others, including the general public, will be acting on it and assuming it to be as accurate as the emergency manager can make it.

From any of the four visions regarding professionalism, emergency management would appear to meet most of the external criteria. What remains, however, is an evaluation of the impact such development will have on the emergency managers themselves, the public they serve, and the public and private officials with whom they work. This process of external scrutiny challenges both the individual and the emerging profession.

> While many disciplines may claim to have that special type of professional knowledge and skill which is given official recognition, the particular substance or content of each and the institutional requirements for the performance of the tasks it claims as its own have critical bearing on its success in gaining the full political, economic, and social recognition and support necessary for establishing and consolidating professionalism. (Freidson, 2001, p. 152)

Joining an organization is only one way to express interest in or support for the aims of an organization. However, an individual may be a practitioner, i.e., they may hold a job within the career field, without being recognized as either a professional or an expert.

As with many emerging professions, the increased presence of women in the emergency management occupational field is not unusual either. More positions in the career fields once thought to be male-dominated are attracting women. Emergency management should be included in the list. In the twenty year period between 1960 and 1980, women gained almost a half-million more new positions in all professions than men did (Sokoloff, 1988). When considering this in light of the 1986 Bureau of Labor Statistics study showing for the first time women were a majority of those in the nearly 50 professional occupations regularly surveyed by the Census Bureau (Greer, 1986), women are found to be doing better in the elite, more powerful, higher paying, white male-dominated professions (McCrum & Rubin, 1987). However, during this 20-year period when white men in all professional fields declined from just under three-fifths (57.5%) to about one-half (49.8%), they still maintained an average between eight and nine of every ten of the most highly-valued and best-paid positions (Sokoloff, 1988).

Emergency management practitioners are challenged to present their knowledge for the benefit of their community, their state, their country, and their occupational field. This means nearly full disclosure of information which might benefit others and

emergency managers may actually be judged on their ability to disseminate information in not only as clear a format as possible but also as widely as they can. Such a plan of action would be useless, however, if it is not understood by those who must use it and those whose lives will be impacted by its utilization.

The designation of Certified Emergency Manager® offered by the International Association of Emergency Managers is held by only 1000 persons (IAEM 2006) and while many job offerings around the country have this certification as a preferred attribute, less than one percent of employers of emergency managers actually require it (IAEM 2003). This includes positions in federal, state, and local governments; in the military; with NGOs; and in private businesses. In positions where certified emergency managers are in place, certification does not appear to provide additional compensation for the effort required to become certified. Several different reasons for this may apply. First, the recognition is not widely known and emergency managers are reluctant to "blow their own horns." Secondly, those who actually qualify are outnumbered by those who do not. Emergency management is still a young career field and just beginning to emerge, attract new members, and establish its place in the community. Thirdly, communities have relied on less than adequate service for some time now and many are reluctant to upset the status quo. Many may not even know a difference in performance is now available or will be in the future. And finally, with so few certified emergency managers available, there simply aren't enough to go around.

But it is the general public who may actually benefit the most from being served by a professional. The purpose of a position in the first place is to create a safe community and if the presence of a professional can do that, there is benefit to them. The "asymmetry of expertise" requires the client to trust the professional and the professional to respect both client and colleagues. This is one of the hallmarks of the process of professionalization (Abbott, 1988).

So far the process of determining whether or not emergency management is moving toward professionalization seems to favor such a movement. Whether it is able to capture the title of "profession" or not will be argued among the various parties for years but none can doubt the advancement which has occurred to accept the ideals and standards of conduct of a "professionalized" career field. Other groups – some of which are readily now acknowledged as professions because their training programs include a university-taught, theory-based education – have proceeded along the same path as emergency management is attempting in this regard:

> A group of new professions who claim to the status of doctors or lawyers is neither fully established nor fully desired . . . . [Their] training is shorter, their status is less legitimate, their right to privileged communication less established, there is less of a specialized body of knowledge, and they have less autonomy from supervision of societal control than "the" professions. (Etzioni, 1969, p. v)

Emergency management appears to meet the criteria established by most of the different visions of the process and at least one group – the general public – anticipates some potential benefit, asking the question "what value is placed on competence?"

(Siegrist, 1990). If the process of professionalization can ultimately provide community emergency management practitioners who place an emphasis on the application of their knowledge, skills, and judgment based on their experiences for a significant benefit to the general public, emergency management's value will be realized (Britton & Lindsay, 1995; Patten, 2000).

C. The World of Risk, Trust, and the Distribution of Power

Every community faces a multitude of hazards but it is the human capacity to perceive and then alter them which measures their capacity to do harm (Slovic, 2000). Hazards are predicted, measured, and calculated through a systematic application of science, technology, and mathematics (Bernstein, 1996) into what we call "risks." Nothing defines the environment in which emergency managers must work more than the concept of risk.

Others (Van Loon, 2002) would have us see risks as not "real" but only having the potential of "becoming real." Once an event occurs it takes on a different character – emergency, disaster, or catastrophe – and the impact on the community may be measured. Thus known, it may no longer be considered a "risk." Risk, therefore, is always in the process of becoming "something else." The hazard posing the risk may continue to exist but its capacity to do harm has been exposed and experienced. The social impact in the United States is greatly tempered by the disconnection and misunderstanding among the various terms "hazards," "risk," "incident," and "disaster." Simply regarding it as a hazard beforehand (Mileti, Drabek, & Haas, 1975) when it only has the potential to do harm allows it to be forgotten quickly. Even afterwards when the possibility of recurrence is heightened and its further capacity to do harm is determined by additional calculations, the reality of the danger to the community is often forgotten long before the debris from a recent event is collected, removed, and placed in a distant landfill.

Very few hazards are regarded with sufficient interest or concern until actual losses in life, property, and tangible goods are experienced on a personal level. This is especially true in urban areas where the social environment has made it possible for people to die in a disaster and have both them and the circumstances surrounding their deaths be quickly dismissed and forgotten (Langer, 2004). As individuals, people worry about different things with different levels of concern (Douglas & Wildavsky, 1983; Harris & Associates, 1980). Since people see the same potential event with different possible outcomes creates the multidimensionality of risk (Stern & Fineberg, 1996). Through a process called "risk assessment" individuals will often determine for themselves the consequences they will face if and when a disaster occurs (Otway, 1973; R.W. Perry, 1979). The result is often a lack of common vision to facilitate an effective response and provide necessary safeguards competing for the limited resources in a community. The combination of time and location of the hazard potentials may alter actions and reactions of those who may become the victims of future disasters because they receive conflicting information from decision-makers who attempt to balance the competing interests in the community. Even when people have previously experienced a disastrous event, more often than not, they choose to overlook the potential of a recurrence until the final few minutes. When they do, they

react by exhibiting the symptoms of both individual and collective stress from the breakdown of their normal systemic and social environments. An "individual's perspective of risk is usually dependent upon a social representation, which can be defined as a culturally conditioned way of viewing the world and the events that take place there" (Kirby, 1990, p. 282). These breakdowns may manifest themselves as damage to the community's infrastructure or massive social disorganization such as economic losses and job relocation. Stress occurs not so much from the events themselves but more from the changes in the expected conditions under which they have grown accustom – their normal way of life (Barton, 1969).

Despite the individual and collective denial of the potential to do harm raised by the identified risks and hazards in the community, emergency management practitioners are tasked with putting a system in place to respond appropriately to the particular hazards the community must face and inform them about the specific risks associated with them. Much of the actual decision-making process in emergency management, however, is left to elected and appointed senior officials who rely on the jurisdiction's emergency manager only for advice. His or her advice may be easily dismissed or conveniently filed away by these decision-makers when other domestic pressures and problems compete for their time. Two reasons for this apparent neglect are the uncertainty presented in the information available about the risks and the inadequacies in the risk analysis techniques used to determine the potential to do harm (Stern & Fineberg, 1996). Another reason is the economic consideration called "time discounting" (Cropper, Aydede, & Portney, 1994; Viscusi & Moore, 1989). This practice reduces the consideration of risk over several generations to near-zero (Stern & Fineberg, 1996) since it is very unlikely certain events will occur on a regular basis.

Among all the varied approaches taken regarding the nature of risk, two separate it into widely diverse camps of understanding. The "technico-scientific" group has a strong background in science, engineering, psychology, economics, medicine, and epidemiology and treat risk as a "taken-for-granted" objective phenomenon (Lupton, 1999). These are the individuals who spend their time in the identification of risks, mapping of the causal factors, formulating plans, and proposing ways to limit the exposure to risks. Risk analysis and assessment is, therefore, a technical procedure undertaken to gain a "comprehensive understanding and awareness" (Hertz & Thomas, 1983) through a "rational calculation of ends and means" (Fox, 1991) before serious damage occurs (Gotham, 1999). The "cultural-symbolic" group conceptualizes risk differently (Douglas, 1966/1969). While they are interested in how hazards develop in a community and who is affected, they are equally concerned with responsibility, expert opinion, and the conflict resulting from different aesthetic, moral, and political assumptions as well. When taken to an extreme, however, the tendency here is to blame certain individuals for the effects of risk in their community, separate various social groups from one another, and construct cultural barricades (Lupton, 1999).

Contemporary western society may be characterized as the "risk society" (Beck, 1994; Stoecker & Beckwith, 1992) where risks must be open to social definition and construction, or as found with beauty, risk may only be in the eye of the beholder (Gotham, 1999). Regardless of which approach we choose, risks must be faced for what they are and both the scientific information detailing the facts of what can

happen and the effects such risks can imprint on our society must be researched and studied because we know that "the 'knowledge gaps' in risks cannot be converted into 'certainties' by religious or magical knowledge" (Giddins, 1990).

The actual study of risk is a new phenomenon. Early humans were seemingly too busy reacting to their environment and had neither the means nor the inclination to attempt much control over it. Gambling was one way they found to tempt the fates (Bernstein, 1996). Mankind's winnings and losings were the products of the "favor of the gods" and was, of course, secured by the many sacrifices and offerings made to these gods. Some may feel luckier than others and are not ashamed by good fortune when it shines on them. They are eager to have others see they are singularly "blessed" by the gods and show it through "the overweening conceit which the greater part of men have of their own abilities and their absurd presumption in their own good fortune" (Smith, 1976, p. 80). While some may still enjoy such delusions, a product of the age of enlightenment – the minds of Blaise Pascal, a mathematician, and Pierre de Fermat, an attorney, as well as the introduction of Arabic numbers to Western Europe – created a rich environment for change. Thus, the theory of probability was born and the age of risk as we know it had begun (Bernstein, 1996).

Early in the Age of Man, another phenomenon began. Relationships started between individuals, individuals and their families, individuals and their society, and groups within one society in relationship with groups in another society. The entire concept of how this can happen successfully surrounded by overwhelming risks is summed up in one word – Trust. But, unfortunately, trust is not the entire story of relationships and not all relationships are successful. Power and politics find their place in the emergency manager's lexicon as well, especially dealing with the relationships within organizations. While this does not reside exclusively in emergency management, emergency management practitioners must develop the tools to balance trust, power, and politics in their very risky environment. There are certainly many philosophical routes to deeper understanding of relationships.

If the promise of liberalism "to protect equal and universal human rights, to foster self-government, and provide everyone with the ever-expanding benefits of modern science and cosmopolitan culture" (Lutz, 1997, p. 1128) is used to help limit this discussion, the organizational roots in the Socratic virtues of talking, listening, and deliberating in common may be applied. As Richard Rorty explains, the "social glue" which holds us together is "a consensus that the point of social organization is to let everybody have a chance at self-creation to the best of his or her abilities" (Rorty, 1989, p. 84).

The writings of Jurgen Habermas and Michel Foucault show a distinct difference in the concept of power and from this base, other concepts under consideration develop. Jurgen Habermas addresses a 1959 discussion between C.P. Snow and Aldous Huxley on the relationship between literature and science in *Toward a Rational Society*, and quotes a work by Huxley, called *Literature and Science*, where Huxley claims that "Knowledge is power" (Huxley, 1963, p. 9). Habermas claims that Huxley is mistaken. "Information provided by the strictly empirical sciences can be incorporated in the social life-world only through its technical utilization" (Habermas, 1968, p. 400).

Habermas is committed to the Enlightenment project, where a democratic and just social order is a product of the modern world. Accordingly, people today will come to understand what is meant by the public good and will work to obtain it without the use of the coercion of self-interest or the misapplication of power.

Michel Foucault sides with Huxley and believes just the opposite of Habermas: you cannot break the link between knowledge and power. He explores how the human sciences have become tools of those who shape the behaviors of others in his works on *Discipline and Punish* (1977), *Madness and Civilization* (1988), and *The History of Sexuality* (1978). Foucault takes the notion of power and includes it in the socialization processes of everyday life in what he terms the "carceral society" (Foucault, 1977). He feels the real manifestations of power are not in the relationship of citizens to the impersonal state but rather in their relationship with people, those in their lives – the teachers, doctors, social workers, and emergency managers – who are part of the knowledge elite. This is further discussed by Miller and O'Leary in "Accounting and the Construction of the Governable Person" where modern society and its emphasis on knowledge and education has changed the dominion of power from sovereign power to discipline power.

> Sovereign power is identified as a diminished form of power. Its ultimate recourse is seizure – of things, of bodies, and ultimately of life. Disciplinary power is much richer and entails penetrating into the very web of social life through a vast series of regulations and tools for the administration of entire populations and of the minutiae of people's lives (Miller & O'Leary, 1987, p. 238)

The position espoused by Michel Foucault will prevail if the lack of discipline experienced in the freedom of modern society is linked directly to many of the problems and consequences currently faced. Many people, unable to develop a social discipline on their own, would benefit from a term of service in the military, sentence at a prison, time spent in a penal colony. When Foucault looked at the facility at Mettray in detail, he found the principal punishment was isolation. "Isolation is the best means of acting on the moral nature of children" (Foucault, 1977, p. 409).

Human social nature allows individuals to enter into relationships which advance personal and common good. Organizations are composed of people in relationship to one another who assemble with some purpose – hopefully, a common purpose – and have the desire and the means to accomplish their aims. Key to this notion is the relationship of people and it is here the concepts of power and politics have real impact.

Power is defined as the ability to influence the decision making process. In the realm of organizations power molds interests and overcomes obstacles threatening a particular course of action. Power is "the basic energy to initiate and sustain action translating intention into reality, the quality without which leaders cannot lead" (Bennis & Namus, 1985, p. 6).

How power is distributed in organizations may be predicted by exploring how individuals protect their own self-interests. Power is an attribute of different positions in a network structure observable in the occupant's behavior (Cook & Emerson, 1978). By viewing an organization as an exchange network, where a social structure

is formalized, the distribution of power becomes a process where assumptions regarding the outcome can be made. Several theories of distribution have been studied and represent the current view of leaders in the field of research. The way organizations are structured influences the distribution of power while the nature of the connections between the various elements of the organization – positive, negative, or mixed – will determine the centers of power (Yamagishi, Gillmore, & Cook, 1988). Knowledge without power is of little use just as power with the skill to employ it is wasted (Pfeffer, 1992). An in-depth evaluation by John Skvoretz and David Willer attempts to determine the strengths of four leading theoretical methods with hopes of determining which does the best job of it. Another intent is to show how location in a network provides an advantage for an individual or even an organization in its dealings with others. In this case, power is defined by a division and distribution of a pool of resources, termed "profit points," as if these points were a commodity, in each of eight different networks, varied along three dimensions:

- Shape as defined by the connections among positions
- The number of exchanges available to each position
- Number of exchanges per connection

The game-theoretic core analysis model utilizes game theory in a cooperative N-person setting focusing on the individual, the coalition between members of each subgroup, and the group rationality. It is a strategic theory because it emphasizes the purely strategic character of the focus areas.

The equidependence theory places one individual opposite another and evaluates the interplay between the elements based on their dependency. Observed earnings from the exchanges are relative to the position of the individuals.

The exchange-resistance theory focuses on the power potential of each position and looks for differences between individuals. Individuals with equal power are not interested in an exchange while those with a measurable difference create a potential for a power exchange.

The expected value theory considers all the potential combinations of exchange and determines the probability of such occurrences based on the interaction potential between the individuals in the organization (Skvoretz & Willer, 1993).

Politics, in a similar manner, may be defined as a process by which one part of the relationship will exercise its power to influence the other. This could be one individual seeking to influence another or seeking to influence many. It could be one group working to promote its interests or values to a single person or many as individuals or groups. This can occur as a result of coercion or force; introducing fear into the relationship; or it may occur as a result of education, training, bargaining, or compromise. It may be as simple as a handshake over the hood of a car or as complicated as a formal pact with the strength of law behind its enforcement. It measures one individual's ability to contract with another.

In the modern democratic state, the exercise of politics is everywhere. In the United States, the rule of law was established by a group of men who certainly must be regarded as members of both the power elite and the knowledge elite of the country at the time of the drafting of the Constitution. Among today's leadership there is an understanding their continued actions on behalf of populous are dependent on the

limits of their behavior imposed by law and the will of the people. Their position is neither absolute nor isolated:

> Because democratic survival requires that political officials observe limits on their behavior – for example, abiding by election results, rules governing policy choice, and a set of political rights of citizens – democracy is a form of limited government. (Weingast, 1997, p. 245)

Personal discretion still plays a large part in the lives of those in relationships and within organizations they serve. Leadership operates with the same measure of discretion and as Anthony Downs, in *Inside Bureaucracy*, has said:

> The fundamental premise of the [public choice] theory is that bureaucratic officials, like all other agents in the society, are significantly – though not solely – motivated by their own self-interests. (Downs, 1967, p. 132)

Even in the complexity of current society, substantial decision making ability still exists, exercised individually or in a group. It is the one thing setting mankind apart from other creatures – the ability to reason through the choices available and form opinions with others.

> If there is no consensus within society, there can be little potentiality for the peaceful resolution of political differences that is associated with the democratic process (Almond & Verba, 1963, p. 358).

Maintaining democracy is part of the responsibility of the people. They are the ones who set the limits on their leadership and express their concerns to them. This is neither natural nor automatic. Some means of mass coordination of opinions, such as periodic elections of the leadership, is necessary to prevent violation of the basic democratic rights of the people (Weingast, 1997). Without such protections, we might find the leadership focusing on their own personal interests and seeking to maximize their own security (Peters, 1981). While individuals have personal issues, one of the strengths of the American system of government and one of the principal means of decision-making in organizations – that is, the ability to negotiate – continues to exist within the framework of society because Americans are willing to take risks within the parameters of their basic trust of human nature.

Risk involves the chance of being wrong. Realizing no one is right all of the time leads us to stay in relationships with one another and serve in organizations which lead forward to achieving good as broadly defined by the parties involved, even when frustration occasionally happens. As Rosabeth Moss Kanter establishes in her 1968 study, *Commitment and Social Organization*, the notion of commitment to an organization can be thought of as one of three types (Kanter, 1968, pp. 500-501):

> Continuance or Instrumental Commitment: based on the perceived costs of leaving the relationship. It is a commitment to the role.
>
> Cohesion or Affective Commitment: the emotional or cathectic attachment to the collective. It is a commitment to the social relationship.
>
> Evaluative or Normative Commitment: the moral obligation to uphold group rules. It is a commitment to norms.

Individuals come to organizations with the prospect of achieving some benefit, either for themselves or others and will make decisions based on the likelihood of finding an acceptable solution. If a solution is not available to a particular problem, the choices are limited. Generally, these choices are "flight or oversight" (Cohen, March, & Olsen, 1972). Flight refers to the individual or the problem leaving the organization. Someone else may resolve it at a different location at a different time. The oversight alternative allows time to present other solutions or the problem to find its own solution. In either case, the individual is less involved and allows the organization to set the agenda for problem resolution. The degree of commitment of the individuals in an organization can also affect the decision to resolve the problem with an available solution, allow the problem to pass, or give it more time. This presents another opportunity to exercise power in the organization.

One impact of the various types of commitment as well as their hierarchy of values is the unequal power distribution in an organization. The greater the commitment of any type will certainly promote a greater urgency to respond to the challenge of a problem. Different bargaining techniques are required to address individual concerns. Distributive bargaining occurs when issues are zero-sum, where agreements involve mutual concessions and converge along a fixed contract zone. Integrative bargaining occurs over variable-sum issues and encourages "logrolling tactics" where there is a trading off over several issues (Lawler & Yoon, 1993). Integrative bargaining can produce more joint benefits than compromises on individual issues (Neale & Bazerman, 1991; Pruitt, 1981; Walton & McKersie, 1965). Studies have shown "when power is unequally distributed among actors in a network, females form stronger commitments to their exchange partners than do males" (Cook & Emerson, 1978, p. 721), which introduces yet another factor into the equation to determine the political distribution of power. Other studies show gender plays a role in setting policy priorities (agendas) and policy preferences (legislative voting behavior) among decision makers in legislative bodies (Thomas, 1994). While women see power, influence, and leadership differently than men, the effect of institutional norms of behavior would help explain the similarities in the use of power among men and women (Reingold 1996, 464-465). In true stereotypical fashion, though, men tend to see a "power-over," hierarchical relationship while women tend to see a more equal, "power to," integrated relationship (Deutchman 1996). The male construct produces a "zero-sum," win-lose positioning while the female tends toward a "non-zero-sum," cooperative venture. What is misleading in developing this stereotype is the individual's free movement across the "gender divide" to utilize whatever technique is needed to achieve personal goals – the politics of decision making. Both men and women, including those employed in emergency management, know how to use power. The 1991 study by Debra Dodson and Susan Carroll found both men and women, by adopting the "feminine" power/leadership model, developed a greater sense of mission, fostered a concern with providing leadership opportunities for others, learned to convince others to do something they initially might not be inclined to do (persuasion), encouraged everyone involved in a decision to express their views, and expressed a willingness to share recognition while showing a concern with how

those affected by a decision felt about the decision (Dodson & Carroll, 1991). This is characteristic of the horizontal component of the emergency management model.

Classic exchange theory in Sociology explores risk and trust in relationships. All forms of social exchanges, including those in organizations, involve a certain amount of risk although it may not be clearly defined. Until all factors are known and evaluated, risk will dominate relationships. Risk might be considered in this instance as the potential for exploitation and the threat of occurring a net loss in an exchange. How the individual reacts to the threat of loss will determine the level of risk he or she is willing to take.

Peter Blau and other theorists view social exchanges as reciprocal acts of benefit which foster trust and commitment to the process through the inherent nature of risk and uncertainty present in such exchanges (Blau, 1994; Ekeh, 1974; Levi-Strauss, 1969). Others, like James Coleman, attempt to find the differences occurring between the reciprocal and negotiated exchanges common among organizations (Coleman, 1990). Negotiated exchanges are those where the terms of a strictly binding agreement are developed. The work of Yamagishi and Yamagishi explores the distinction between "trust," which they describe as the expectation of benign behavior based on the partner's personal traits and intentions, and "assurance," which they describe as the expectations based on knowledge of an incentive structure encouraging benign behavior (Yamagishi & Yamagishi, 1994). "Negotiated exchanges with binding agreements provide assurance, while reciprocal exchanges enable trust" (Molm, Takahashi, & Peterson, 2000, p. 1397). An entire culture has developed around assurances rather than trust because some individuals fear the risk of loss:

> Mechanisms that provide assurance include legal or normative authorities that impose sanctions for violations of agreements or failure to fulfill one's obligations, guarantees such as collateral that protect against loss, warranties that assure certain standards of quality, and so forth. As long as an "assurance" structure is present, there is little opportunity for trust to develop, because there is little opportunity to learn about the partner and the partner's own dispositions and intentions. (Molm, Takahashi, & Peterson, 2000, p. 1403)

Assurances would be expected in casual and single-instance negotiations but most people would hope to find trust present in long-term and sustained relationships even when the "paperwork" assurances are required by business practices. Trust develops when the only assurance is an expectation of future interaction (Molm, Takahashi, & Peterson, 2000). Russell Hardin prefers the terms "trust" and "reliance" (Hardin, 1991) while Partha Dasgupta uses "trust" and "confidence" (Dasgupta, 1988).

When looking at the risks in any relationship, including organizations, it is wise to realize an entire branch of sociology has emerged to address its nature and application in social relationships (Clarke & Short, 1993). Several theories explain human reactions to the risks which present themselves every day. The perspective of risk – or it might prefer to be considered as the threat of risk – is a highly subjective matter. Risk has a way of increasing the fears associated with itself through the interaction of people (Kasperson, Renn, Slovic, Brown, & Emel, 1988).

While power and politics are essential ingredients in the conduct of business in organizations, an individual's degree of risk taking will depend on the trust he or she places in the organization's ability to meet his or her needs. The subjective nature of individual "comfort zones" will increase as trust is developed and reliance on greater assurances of success are transformed into confidence in those in control of the organizational power. Inappropriate or gross misuse of power reverses the trend and creates an atmosphere of fear and discontent, increasing the amount of time and energy necessary to re-stabilize the power structure of the organization. Emergency managers extend their influence through the information they provide, many times through informal networks. Essential qualities in these relationships might be transparency, integrity, and reliability.

D. Revolutionary Change

The history of the world has been divided into convenient pieces to aid in the study of geography, geology, anthropology, and other earth sciences. Such terms as "ice age" or "Pleistocene age" (Harland et al., 1990) draw our attention to specific changes scientists have cataloged during these and other time frames. Human history is categorized in other such periods, such as the "stone age," "bronze age," and "iron age" and recently by mankind's intellectual achievement with such terms as the "age of discovery," or the "nuclear age." The current technological advances define the "information age" and the "computer age." In each case, a study of these historical periods of time reveals the changes seemingly result in shiny new technology with a near-total sacrifice to obsolescence of the previous technology.

In a similar way, changes are taking place in careers and career fields, described with the same language indicating changes elsewhere. If an examination of emergency management from a change perspective is attempted, the language to explain it will be familiar to those with a background in change in these other areas.

Change is a natural piece of life and time itself is described as "the measure of change." The same anxiety an individual confronts when faced with changes in his or her personal life is faced yet again when changes take place in the life of an organization or within the profession in which he or she is employed. Thankfully, most people find even when the changes are radical they are generally survivable. The role of a professional, therefore, in any occupational area is to be the instrument of change and not its victim. Non-professionals may be regarded among those who are the victims of change or among those whose non-professional behavior caused change to occur unnecessarily or without a purpose. The alternative is far less satisfying. "A world without change would be dismal and untenable to the modern mind" (Macy, 1969, p. 501). And so, Macy offers a program for executives and managers including education, training, and experience coupled to flexibility, mobility, and greater recognition (1969). This must have been in response, certainly, to the challenge tossed his way a year earlier by Dwight Waldo who said: "Any institution that doesn't adjust to the rapidly changing milieu of the contemporary revolutions will not be effective in terms of its purpose or assignment" (Waldo, 1968, p. 367). Change occurs – or it is anticipated – in emergency management much like it is in other occupations which will experience change in policies, in personnel, and in organizational

development. Each of these subjects is a study in itself but at the foundation, change is taking place and its effects are far-reaching.

The timeframe for change may measure the need for change, anxiety confronting those who are experiencing change, or such practical matters as process, procedure, and bureaucracy. But even change in emergency management will generally occur in a gradual and predictable manner, easy to determine and manage, but resisted by the "status quo." One change paradigm found in the biological world and taken from the works of Charles Darwin is gradualism which describes the process of evolution as a "slow stream of small mutation, gradually shaped by environmental selection into novel forms (Gersick, 1991, p. 10). This same gradual approach might describe the small adjustments a person would make while driving a car to stay in the appropriate lane until the final destination is reached. So, too, are many of the changes when the expertise of emergency managers is finally recognized in a community and he or she begins to play a greater role in decision-making. Changes may be so slight they could easily be overlooked. If conventional change methods are applied effectively, there is no need to modify the historical, cultural, and emotional structure which has sustained the community's process through normal maturity and change. "Systems in equilibrium also make incremental adjustments to compensate for internal or external perturbations without changing their deep structures" (Gersick, 1991, p. 16; Wake, Roth, & Wake, 1983). Emergency management, as a defined program, may be so new it does not yet possess a deep enough structure on which that form of change can occur. What is experienced as change could simply be a structure-building phenomenon. There is, however, a rigid structuralism which attempts to establish the view only one particular method of change is applicable or only one way of seeing a situation is possible. Since two people cannot occupy the same space, the possibility they can have the same perspective is ruled out.

But what are the alternatives to these views and what does it take for change to be "revolutionary"? When systemic problems are encountered, what is sometimes needed is a good overhaul, requiring massive undertakings to shake its foundation, assuming, of course, a sound foundation exists. Revolutionary change is fueled by innovation, powered by real problems with real urgency, and not simply by opportunity alone. What brings about this innovation is continuous learning and adaptation (Libbey, 1994). Revolutionary change always seems to be the force by which all else will be measured in its wake as one author – a scientist and theologian – addresses it:

> "Someday after mastering the winds, the waves, the tides, and gravity, man will harness for God the powers of love and then, for the second time in the history of the world, man will have discovered fire" (Teilhard de Chardin, 1934).

There is no guarantee that the individual, organization, or jurisdiction will survive the process. The same inertia that resists change in them is now used against them, creating an atmosphere of radical and total upheaval. Maybe in the evolution of a system it is time to eliminate a part of it. Revolutionary change does not support the "status quo."

It may be too early to describe the changes taking place in the short history of emergency management as "revolutionary." It may be more appropriate to reserve

that privilege for historians several generations away and let them make such a claim if it is warranted. The upheaval so characteristic of emergency management at the present time might simply be reactionary and valid only within the narrow spectrum of a particular loss phenomenon or disaster experience. If something is learned from the experience and that learning can be applied to the potential of future events, then it might be considered a needed and revolutionary change. Only when it can be evaluated against the change which might have occurred as part of the natural change process can it be properly characterized.

But if the change is revolutionary, emergency management might be a good candidate for classification under the punctuated equilibrium paradigm where change occurs in marked steps. "Systems evolve through the alternation of periods of equilibrium, in which persistent underlying structures permit only incremental change, and periods of revolution, in which these underlying structures are fundamentally altered" (Gersick, 1991, p. 13; Marlowe, Nyhan, Arrington, & Pammer, 1994, p. 309). Gersick adds precautions to the process of trying to apply this paradigm too widely, however. It does not explain every change experience even if it does provide insights into many of them. If the paradigm is to work, emergency management would have to experience its "deep structure" period to "form a stable platform from which (it) would operate" (Gersick, 1991, p. 15). Emergency management in the United States has had little time to stabilize and often undergoes severe alterations at not only the individual jurisdiction or state level but also with each successive Presidential administration or directors at the federal level, whose level of support helps determine the field's "best practices" for a given period of time. This deep structure period with its incremental adaptations would be followed by periods of equilibrium and intense change (Marlowe, Nyhan, Arrington, & Pammer, 1994).

Because the punctuated equilibrium is such a radical methodology, some caution should be applied before it is attempted. A question that might be asked could be: "If we were to start over, what would the system look like?" The punctuated equilibrium paradigm makes such a question possible – not only for emergency management but across a broad spectrum of groups, organizations, systems, and jurisdictions. This form of revolutionary change is not without its drawbacks, though, and the biggest is its unpredictability. The flexibility requirements of emergency managers, the organizations they serve, and communities in various risk environments are perfectly suited for unpredicted upheavals. Although the intentions may be the best and the limits clearly defined, the paradigm can take on a life of its own and create changes where and when they were not expected. The punctuated equilibrium paradigm does not explain every phenomena of change because it allows for change outside itself as well. It does not place change into specific categories and limit its potential or its scope. It might be considered a "black box" method of organizational change – except it doesn't have the box. "The 'historical' path along which the system evolves . . . is characterized by a succession of stable regions, where deterministic laws dominate, and of instable ones . . . where the system can 'choose' between or among more than one possible future" (Gersick, 1991, p. 13; Prigogine & Stengers, 1984, pp. 169-170).

Personal stress and other disorders speak of radical, but survivable, changes nearly everyone encounters and individual emergency managers may experience the

same anxiety in their personal lives as they do when there is change on the job. The principles of the punctuated equilibrium model might just as easily be applied to any field or experience where "things just aren't the same as they used to be." It explains the occurrence of natural disasters whether we choose to look at them as natural phenomena of realignment or as revolutionary change. Certainly an earthquake or tornado could have much the same effects on a community as the overnight reorganization of a company with a new management team would have. In fact, one of the terms used for the application of the paradigm talks about "cleaning house."

This paradigm can be used to balance – or counterbalance – the fears people have that things will never change for the better. While not extending any guarantees of success, it gives hope not only is such change possible but also it is an acceptable form of change and one which can and should be used if it is needed.

The fear of change or by what means it will take place is a failure to see beyond the potential of the current day. Since emergency management is founded on the principle of flexibility, the emergency manager should prepare for change, safeguard what is important to be safeguarded, and accept the changes necessary to improve the community's quality of life. The ability to help others see this type of change as good is an asset worth cultivating.

E. Social Impact of Disaster

Sociologists have long debated the nature and impact of disasters and their role in understanding the effect of such events on the people and societies they study (Barton, 1969; Dynes, 1970; Fritz, 1961; Ronald W. Perry, 1982). In doing so, modern sociologists have built on these past efforts in proposing core properties of disasters: Disasters are *events* that can be observed in time and space with *impacts* on *social units* that enact *responses* related to the impacts. "Disaster," as it turns out, is a rather vague term, of course, and one that defies simple interpretation (Kreps, 1984). A modern revision of Charles Fritz's definition (1961) yields a workable alternative for consideration:

> Disasters are events in which societies or their larger subunits (e.g., communities, regions) incur physical damages and losses and/or disruptions of their routine functioning. Both the causes and effects of these events are related to the social structures and processes of societies or their subunits. (Kreps, 1985, p. 50)

A more generic category for describing a disaster, i.e., the collective stress situation, is used to describe where "many members of a social system fail to receive expected conditions of life from the system" (Barton, 1970). Disasters interfere with everyday life and disrupt social systems in a particular geographic area (Barton, 1969; Taylor, 1989; Tierney, 1989). This description is much broader than defining hazards and disasters by their origins, i.e. natural, technological, or social-impact. For some, the social disruption and social changes brought about by the physical agent of the event and the resulting impact in the aftermath of the event are far greater than the disruption occurring during the event (Dynes, 1970).

There have been major attempts to use groups rather than individuals as the basic unit of study in an attempt to merge the collective behavior and complex

organizational approaches in disaster studies to develop a focus on the long-range functionality – from pre-impact to trans- and post-disaster responses – rather than relying on individual losses and shortcomings in preparedness (Quarantelli & Dynes, 1977). What researchers have found is the "effectiveness and efficiency of disaster response is dependent more on the viability of the emergency organizations involved in the crises than it is on the psychological state or readiness of individual victims" (Dynes, 1975). Except where disasters occur frequently, individual citizens generally perceive a low probability of a loss associated with hazards and disasters (Larsson & Enander, 1997; Tierney, Lindell, & Perry, 2001) and therefore, show very little interest in disaster planning (Cigler, 1988; Henstra & McBean, 2005). Even in the aftermath of a disaster, the opportunity to address important mitigation, preparedness, or recovery issues is a very narrow window. Emergency managers are often the victims of their own expertise at returning their communities to "status quo ante" when the community has moved on with other challenges on their agenda and has put the recent disaster event behind them. There just never seems to be an adequate opportunity to address emergency management issues at the community level outside the "window."

Emergency managers function within the social order of the jurisdiction or agency where they work. Among the concerns raised are the socio-economic concerns present prior to an event and, of course, what the jurisdiction is able to secure during and after the event occurs. Previous studies have shown that families who have sufficient incomes, adequate housing, and good insurance prior to a disaster are more likely to recover more fully and more quickly than those who are lower on the socio-economic scale (Bolin, 1982) and communities who are better prepared respond more quickly and recover at a faster rate than communities who have not prepared. Studies have also shown the importance of the family unit in understanding the effects of disasters on individuals, their abilities to handle stress, and their coping mechanisms. The family is the primary source of most people's emotional, psychosocial, physical, and material resources (Edwards, 1998). Consequently, FEMA, the American Red Cross, and other disaster agencies direct many of their planning and preparedness materials at the family unit. FEMA's "Are You Ready? An In-depth Guide to Citizen Preparedness" is used extensively in many community training programs as is the Red Cross publication "Together We Prepare." It seems a natural extension for sociologists to focus many of their studies on families as one of the principal social units in disaster studies (Kreps, 1985).

Recent sociological studies have focused on the ways social, economic, and political factors contribute to hazard-related behavior. In her review of "Hurricane Andrew," Kathleen Tierney explores how the various authors of the chapters add pre-disaster economic, racial, ethnic, and gender inequities into the formula to explain the differences in disaster experiences and uneven patterns of recovery for individuals, families, and entire communities. She is particularly interested in the chapters addressing gender issues which she believes have been under-theorized and under-researched in disaster studies:

> Gender is a source of disaster vulnerability and . . . women [have] experiences as caregivers and providers of social support, links in complex kin networks,

> heads of households struggling to reconstitute their badly disrupted lives, suppliers of needed but unpaid labor, and activists mobilizing to have a voice in community recovery decisions. (K. J. Tierney, 1997, p. 1559)

Maybe it is necessary to take disasters to the classrooms and research centers of colleges and universities. Disasters provide an opportunity to explore and expand the depth of knowledge of human circumstances. Because they are real events happening to real people, the study of disasters gives social scientists the opportunity to improve their understanding of what is regarded as "calamitous events," minimizing what is seen as undesirable consequences (Stallings, 2002). This understanding is necessary to develop mitigating measures in the community and the formulation of strategic goals and objectives on which to base the community's Emergency Management Plan (EMP). An emergency manager with a background in sociology would be able to enter into discussions and dialogue with those in the academic environments of his or her jurisdiction. The study of disasters and their effects on a particular community would provide the opportunity to examine certain aspects of the local social structures and processes hidden in everyday activities and not revealed anywhere else (Turner, 1967). "Disaster studies provide rich data for addressing basic questions about social organization – its origins, adaptive capacities, and survival" (Kreps, 1984). Although emergency managers may feel like the "white mice" of disaster studies and experiments, a disaster is a "natural laboratory" for challenging and advancing existing theories in sociology (Dynes & Drabek, 1994). (As tempting as it might first appear, this study is not advocating the creation of conditions under which such an experiment might take place! There are far too many opportunities in the world to examine without inventing another.)

One misconception that disaster studies have been able to clarify is community response to a disaster event. The popular idea of mass panic and the loss of concern for others with large numbers of people permanently deranged has been reinforced in films and other media bent on sensationalism for many years (Wallace, 1956). While some lawlessness does happen, sociologists have shown disasters will often result in a phenomenon called "social solidarity" where the sharing of a common threat to survival, common loss, and suffering breaks down previous social distinctions between people. Bringing people together in the aftermath of a disaster is often accompanied by an outpouring of love, generosity, and desire to help those unable to help themselves (Fritz & Williams, 1957). This experience is also a rich source of emergent and spontaneous volunteers who perform heroic services in their communities. While most of these feeling are short-lived and individuals quickly return to concerns for their own personal well-being, a certain element of the community will always attempt to profit from the misfortune of others or the outpouring of assistance from relief organizations. Such cases are generally isolated:

> Assuming that a supply of "necessity goods" survives the disaster in usable form, these must be distributed in such a manner as to allow the victims to subsist without being forced to evacuate the disaster zone. . . . A means of nonprice rationing is probably required, since many of the victims are likely to be without accessible liquid assets. The desire to see a continuance of the community leads to the development of such a rationing system and causes

> social pressure to be brought to bear on possessors of "necessity goods" who are attempting to "extort" high prices from the victims. (Douty, 1972, p. 585)

Emergency managers must also deal with feelings of hostility and blame leveled at them for failures of the system or delays in recovery as personal responsibility is often the first victim of disasters. Since there are few ways to overcome such feelings, emergency managers are left with coping mechanisms to get them beyond systemic failures, missed communications, and resource shortfalls to focus on the community's real needs and the prioritization of activities. Since most human problems in disaster originate from a lack or breakdown of coordination among individuals, families, and disaster agencies – each seeing its own needs and capabilities from its own perspective – the challenge for the future lies in the development of realistic plans which will incorporate and utilize the integration and coordination of the actions, abilities, and needs of all parties working for a common good (Fritz & Williams, 1957). Emergency managers should encourage the elected representatives in the community to assume the role of integrators and preservers of the vision of the common good.

F. Summary

Emergency managers face many challenges but the individuals entering this career field seem to enjoy their work even though the hours are long, the stress is intense, and tempers flare from all sides. They also may find the pay is poor and support for their program lacking. They are often misunderstood or blamed depending on the point in the cycle their community or agency seems to be stuck. The strength of the emergency manager must, therefore, come from within.

Exploring the pressure to professionalize; facing the world of risk, trust, and power; witnessing not only evolutionary change but also revolutionary change; and sensitizing the entire community to the social risks which are present around them are only four components of the environment in which emergency managers operate. For many, it is overwhelming. An emergency manager is expected to act in a professional manner, i.e. an individual with specialized knowledge equipped with special abilities and the power to act (Grovier, 1997). This occurs many times even when his or her career field has yet to be regarded as a profession and when the needed empowerment has yet to be given. An emergency manager is a dedicated individual who identifies with the risks facing his or her community from various perspectives, some in the private sector and many more from the public sector. He or she utilizes his or her education, training, and experience ("knowledge, skills, and abilities") as the agents of and for change taking place around family, friends, and co-workers. Often with few resources and supporters, the emergency manager is faced with the tasks associated with forming an efficient and effective organization with a comprehensive management plan to face the hazards in his or her community. The plan must include actions in mitigation and prevention to include hazard identification and the assessment of risk. It must also address what preparations must be made for events that cannot be prevented. This includes overseeing the equipping and training of others who may render assistance as well as conducting drills and exercises to focus on coordination and communications among responders. Once an event occurs, the emergency manager becomes a coach, liaison between agencies and governmental

agencies, a subject matter expert, interpreter, and resource provider – generally in an around-the-clock environment. And, of course, once the incident is over, the emergency manager is the one who straightens out and completes all the paperwork, secures the facilities, arranges for the notes of appreciation, and computes all the final tallies in addition to serving as one of the principal players in the return to normalcy and a continuity of business, operations, and quality of life activities. An emergency manager must be an idealist first, followed quickly by the metamorphosis into a tireless perfectionist!

III. METHODOLOGY

A. Introduction

The primary data for this quantitative study was obtained through a survey, consisting of 49 questions in the three categories of interest: demographics, study-specific questions, and opinions of the participants. The survey was mailed to 500 emergency management professionals throughout the United States. The choice to conduct a written, mailed survey as opposed to an on-line internet survey was made because it was felt emergency managers would be more likely to respond to an "in hand" survey than "another e-mail request." Since several other surveys were conducted during this same timeframe by other researchers, the choice to conduct a "by mail" survey added some variety to their schedule and allowed the participants to take it home and complete the survey at their leisure. The intent was to have the physical survey package stay before their eyes until they could complete the survey and return it by mail. Apparently, this strategy worked well – the response rate was 48%.

B. Survey Design and Pilot Testing

Ordinary demographic information was requested from the participants (Appendix B: Survey Instrument). In addition to the routine questions about their age, gender, education, racial or ethnic group, the region of the United States where they live, and salary range; questions pertaining to their emergency management employment were posed. This information included the number of years of employment in emergency management, the type of employment, the level of their training in the emergency management field, the type of jurisdiction or agency where they are employed, potential and actual threats to their communities, and the level of professional certification they might hold.

For each of the study-specific interests – education, training, and practical experience – participants were asked to consider the value each of these subject areas has provided to their current position and the additional value each might provide if the individual was pursuing a promotional opportunity. For each question, the participants had the opportunity to select one or more of these attributes as their most important asset in the performance of their job responsibilities (Appendix B: Survey Instrument).

The opinions of the survey participants provided additional insights the previous questions simply opened for consideration. Participants were asked if they anticipated additional education, training, and experience in their immediate future and the value it would add to their careers. They were also asked how their jurisdiction would react to these new activities. Participants were also asked if they had any recommendations to anyone entering the profession of emergency management.

Ten individuals from the local area, five from the emergency management community and the other five from the Portland State University student body, were asked to read through the survey and simulate their responses to the questions as a pilot test of the survey. They provided comments to improve the quality of the survey instrument, which were subsequently incorporated into the final design. None of the

individuals who participated in the pilot testing were in the actual group of those selected to participate in the survey.

C. Selection of Participants

The names of the individuals selected for participation in the survey were obtained from the 2005 Membership Roster, provided on CD, of the International Association of Emergency Managers (IAEM), the primary professional emergency management organization in the United States. The random selection of the names was proportionately stratified by region to obtain a representative sample of the membership and, therefore, of emergency managers throughout the country. This process insures external validity by identifying the population that will be generalized and drawing what would be considered a "fair sample" (Trochim, 2001).

While not all emergency managers in the United States belong to the IAEM, the organization attracts a greater number of those who consider themselves professionals in emergency management than any other organization. Many state organizations affiliate themselves with the IAEM and many individuals employed as emergency managers who do not belong to the organization still subscribe to the IAEM Code of Ethics. Membership in the IAEM is not, however, a requirement for certification by the organization in its Certified Emergency Manager (CEM®) program.

D. Timeline for Preparation, Distribution, and Return of Surveys

An application was submitted to the Portland State University Human Subjects Research Review Committee (HSRRC) on March 15, 2005, seeking approval of this research proposal. Approval was granted on May 24, 2005, and proposal # 05102 was assigned to the project. Subsequent renewals of the study were granted on June 20, 2006 and May 24, 2007. A copy of the application, approval letter, and renewal letters are included in Appendix A. The research project was formally presented to the dissertation committee at a Colloquium on July 26, 2005, and the research began following their approval. A total of 500 survey packets were prepared during August, 2005. During the two-week period prior to the survey mailing, postcards were sent to each of the selected survey participants, utilizing similar mailing labels as those which would be on the survey packets and informing the participants of the pending receipt of the survey materials. The packets consisted of the survey; a survey security envelope to protect the identity of the survey participants; a slightly larger, addressed, and stamped mailing envelope; an adult informed consent release form; and a cover letter explaining the survey with the packet checklist printed on the reverse side. The survey security envelope allowed the sealed surveys to be separated from the mailing envelope with the postmark location and date until all surveys were collected. Except for those individuals who chose to add their names to the survey – only a few chose to do so against the instructions provided to them – no further match-up or revelation of the actual identity of any participant could be made. A copy of the survey instrument is included as Appendix B and the cover letter and the Adult Informed Consent Form (release form) are included in Appendix C. The return address for the survey was Post Office Box 183, Portland, Oregon 97207-0183. This post office box is located at the University Station Post Office at 1505 SW 6th Avenue, Portland, Oregon 97201.

The surveys were mailed on September 1, 2005. Reminder/Thank You postcards were sent to the selected survey participants on September 16, 2005, to encourage their participation. No set cut-off was established when the surveys were mailed but it was anticipated the majority of returned surveys would arrive between 45 and 90 days from the original mailing. Some concern was raised because Hurricane Katrina came ashore near New Orleans, Louisiana, at approximately the same time as the survey mailing and some delay in receipt, completion, and return mailing was anticipated. This concern was unfounded as 240 returned surveys were received. This constituted a 48% return rate. November 11, 2005, was established as the last reception date (cutoff). Only a few surveys were received after the cutoff date, none earlier than a month after cutoff and the latest arriving in April, 2007, more than 17 months after the data was compiled. While the information in this handful of surveys was not used for this study, the survey instruments have been afforded the same level of security from disclosure as the other survey instruments are receiving.

E. Data Input, Coding, and Re-coding of Variables

Survey questions were formatted in multiple-choice and mark-all-that-apply formats. The coding of the responses allows them to be input into the database of the computer program, *Statistical Package for the Social Sciences (SPSS)*, for analysis. A preliminary review of the data revealed three surveys were unusable and their data was set aside and not used, providing a final count of 237 survey participants (n = 237) or a 47.4% net return rate.. The key to the coding is located in the tables of Appendix E.

Some material was re-coded to allow additional comparisons, subsequent analysis, and insure the data conforms to previously existing conceptualizations (Sweet, 1999). This re-coding was a simple procedure in SPSS which allows the creation of new variables without disrupting the information retained in the original variables. The re-coding of the variables strengthens the external validity of the study. Each of the generalizations in the nominal variables is supported by the ordinal variables and, in some cases, by interval variables extracted directly from the study database. The results of the re-coding are included in the Analysis of the Findings (Chapter V). The key to the re-coding and the identification of the new variables is Appendix F.

F. Data Analysis Strategy

The survey results provide a rich source of data on the demographics and opinions of emergency managers who participated in it and are more than what is actually required to answer the questions posed in the study. The questions are basic and did not require complex analysis. For the purpose of this dissertation research, i.e., to answer the study question, the analysis of the measures of central tendency was appropriate and therefore, selected. More complex analysis is possible with this data and such strategies may be used in subsequent studies. Analysis of any kind is an effort to understand the various experiences of individuals – in this case, emergency managers – in relation to the complex flow of actions from others – their jurisdictions or communities – in a social environment (Mills, 1959). Descriptive statistics present quantitative descriptions of these experiences in a manageable form through various, recognizable measures of association (Babbie, 2001). In this study, these measures are

the various tools of social research, i.e., individual nominal, ordinal, and interval variables (Baker, 1999). Only a few ratio variables are utilized. In Chapter IV, Findings, the results of the survey questions forming the variables are generally presented in tabular form, narrative form, and a graphic form. The study questions are answered very effectively at the nominal variable level and appropriate re-coding of the ordinal variables from the survey as part of Chapter V, Analysis of the Findings, accomplishes the task. The graphic forms highlight the relationships between the values and are effective measures of association to support the conclusions drawn because they clearly display the opinions of the responders in a way this study can answer its questions.

Since the variables used in this study are primarily nominal or ordinal, whether they come directly from the survey or from the re-coding, the measure of central tendency used most frequently is the mode, i.e., the most frequently occurring value. In some case, the median value, the numerically central value, provides additional information about the dispersion of the responses. The mean, or average, is seldom used because there are only a few integral variables in this study when the average value would make sense.

Among the concerns raised in the first days after the surveys were mailed as a result of the southern states experiencing the devastation of Hurricanes Katrina and Rita was the issue about the reliability of the survey. The concerns centered on deciding if emergency managers might respond to the questions in a "reactive" manner rather than a "reflective" manner and in some way, skew the data. Since surveys produce a "snapshot" of reactions at any given moment, the circumstances surrounding any survey produce some effect but do not invalidate the results which are generated. Consequently, the concerns over reliability issues relating to the hurricanes were dismissed. Wanting to insure their voices were heard at a time of distress may have contributed more to the number of respondents than to any measure of concern they would raise regarding the reliability of their response. When another survey is sent and the answers compiled, the question of "reaction vs. reflective" may be a measure worth evaluating but would not determine if one survey was more reliable than the other. Any time is an appropriate time to ask questions in a survey but the answers are the responses for that given moment. The questions, however, are not the kind of questions which would be greatly influenced by current events. They are foundational in nature and something emergency managers might think about and discuss among themselves frequently.

Validity measures "the crucial relationship between concept and indicator" (Carmines and Zeller, 1979, p. 12: Baker, 1999, p.110). The questions specific to the study ask about the level of importance education, training, and experience have in the performance of the tasks emergency managers are asked to do and how those assets would support them if they sought a promotion. Their responses to these questions are used as the indicators of the level of confidence they place in them. Seemingly, the greater importance placed on them, the greater the confidence emergency managers have in continuing to rely on them. The validity of establishing this relationship is confirmed when their responses are further measured against the recommendations the individual emergency managers would make to others new to the profession.

Once the historical, academic, and functional foundations were set and the surveys were mailed, all that remained was waiting for the return of the completed surveys, inputting of the data into the SPSS database according to the established coding, and exploring what the data would present.

IV. FINDINGS[2]

A. Introduction

The results of the survey follow the three specific divisions addressed in the methodology. First, the demographic information of the survey participants is presented, establishing a profile based on the measures of the central tendency of a typical emergency manager who participated in this study. Second, the study-specific data, collected to answer the research question, are presented. And finally, the views and opinions of the respondents to questions about their status and concerns for their occupation are presented to explain in greater detail many of the factors that influenced the study participants to answer the questions the way they have. While each division offers insights into the individuals who participated in this study in slightly different ways, each is meant to contribute to the overall perceptions and understanding of the study's results.

B. Demographics

The range of variation in the demographics alone from the sampled group shows how volatile the emerging profession has become and indicates the diversity of those attracted to the emergency management field. While seeking the central tendencies provides a picture of the "typical" or "average" emergency manager, the cross tabulations of this data show the changing character of those who are employed, those who have set standards for the profession, and those who will be the instruments of change in the future.

1. Age:

Survey participants report a wide variation in age. A summary of their responses is shown here in Table 1. Age is not only one of the principal demographic markers in this study but also the primary dimension impacting all other study factors now and in future studies in this area. Unlike most other demographic data, age will change. Subsequent study data may be the same or different depending on the circumstances but age will always change. Age is a basic characteristic of a personality representing a stage of physical development with a certain measure of wisdom associated with the likelihood of having experienced more than someone younger.

Q: Age			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Under 25	1	0	0
25-34	2	12	5.1
35-44	3	47	19.8
45-54	4	89	37.6
55 and older	5	89	37.6

Table 1: Age

There are no responses from anyone under the age of 25. Among the groups with responders, there are 12 responders in the 25-34 age group (5.1%) and 47 in the 35-44 age group (19.8%). The 45-54 age group and the 55 and older age group have 89 responders each (37.6%). As shown in Figure 1, this produces a negatively skewed ($z_{skewness}$ = -3.80) but slightly platykurtic ($z_{kurtosis}$ = -1.57) distribution curve with a mean of 4.08 and a standard deviation (s) = .880.

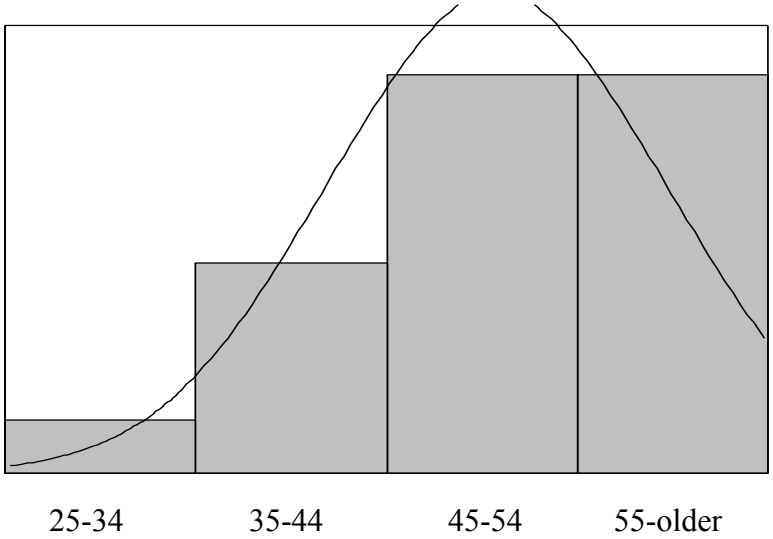

Figure 1.
Age
(GRAPH)

2. Gender:

The distribution of survey participants by gender is shown here in Table 2. The results here should come as no surprise to anyone because Emergency Management has been considered a career field open to both men and women for quite some time, reflecting overall changes in the national employment picture.

Q: Gender			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Female	1	49	20.7
Male	2	188	79.3

Table 2: Gender

There were 49 participants that respond their gender is female (20.7%) while 188 participants respond they are male (79.3%). Figure 2 shows the distribution by gender in graphic form.

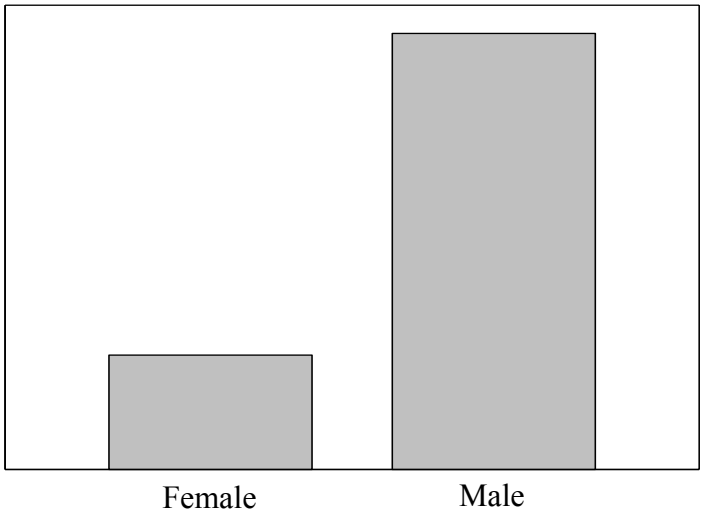

Figure 2.
Gender
(GRAPH)

3. Race/Ethnic Group:

The distribution of survey participants by race or ethnic group identification is shown in Table 3.

Q: Race/Ethnic Group			
RESPONSE	**CODE**	**FREQUENCY**	**%**
White	1	224	95.3
Hispanic	2	2	.9
Black	3	6	2.6
Native American / Eskimo	4	3	1.3
Asian / Pacific Islander	5	0	0
Other	6	0	0
Do not wish to answer	0	2	--

Table 3: Race/Ethnic Group

There are 224 participants that identify themselves as white (95.3%) and two participants that identify themselves as being of Hispanic origin (.9%). Among the other participants, six identify themselves as Black (2.6%) and three as Native American/Eskimo (1.3%). No other groups participated in the survey but due to the random selection of participants in the survey, they should not be considered non-participants in the profession. Two participants elected not to answer this question and their numbers are not reflected in the percentage calculations here.

Disasters know no racial barriers. Regardless of racial or ethnic identity, all members of the community may seek information prior to an event or assistance in the immediate aftermath.

Figure 3 shows the distribution by race or ethnic group in graphic form as described above.

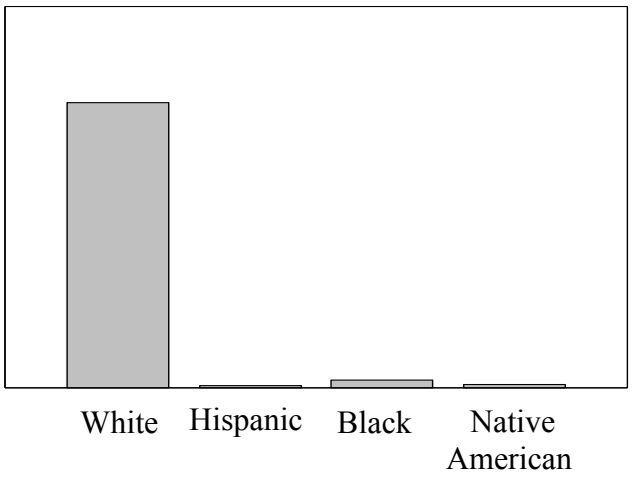

Figure 3. Distribution by Race/Ethnic Group (GRAPH)

4. Education Completed:

Survey participants report a wide variation in education completed and their responses to this question forms one of the principal interests of this study. A summary of their responses is shown in Table 4.

Q: Education Completed			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Less than a high school diploma	1	0	0
High school diploma / GED	2	25	10.5
2 yrs of College / Associates degree	3	54	22.8
4 yrs of College / Bachelor's degree	4	89	37.6
Master's degree / Doctorate	5	69	29.1

Table 4: Education Completed

No participants report in the Less than a High School Diploma category while there are 25 (10.5%) who report completion of high school or a General Education Diploma (GED). There are 54 (22.8%) who report completion of at least two years of college or an Associate's Degree. Completing four years of college or a Bachelor's Degree are 89 survey participants (37.6%) and 69 more (29.1%) have completed graduate education at either the Master's Degree or Doctorate level.

As shown in Figure 4, this shows the modal value is a 4-yr college education and by calculation, this is also the median value.

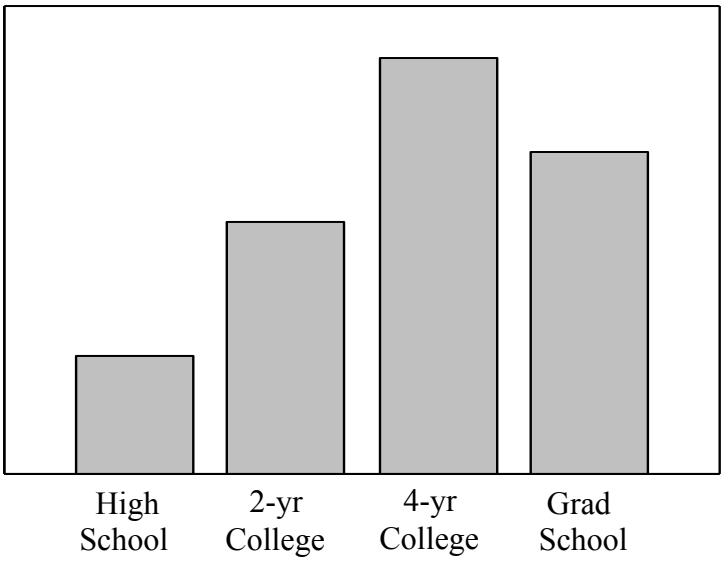

Figure 4. Distribution by Education (GRAPH)

5. Years in Emergency Management:

Survey participants indicated various years of employment in the emergency management field. A summary of their responses is shown here in Table 5.

Q: Years in Emergency Management			
RESPONSE	**CODE**	**FREQUENCY**	**%**
0 – 4	1	27	11.4
5 – 9	2	42	17.7
10 – 14	3	41	17.3
15 – 19	4	50	21.1
20 – 24	5	34	14.3
Over 25	6	43	18.1

Table 5: Years in Emergency Management

There are 27 survey participants who indicate they have been employed in the emergency management field for four years or less and there are 42 with from five to nine years experience. There are 41 participants in the 10-14 year category and 50 participants in the 15-19 year category. There are 34 participants in the 20-24 year category and 43 participants with over 25 years in the emergency management profession. As shown in Figure 5, this produces a nearly-symmetrical ($z_{skewness}$ = .215) but platykurtic ($z_{kurtosis}$ = -3.63) distribution curve with a mean of 3.64 (s = 1.630).

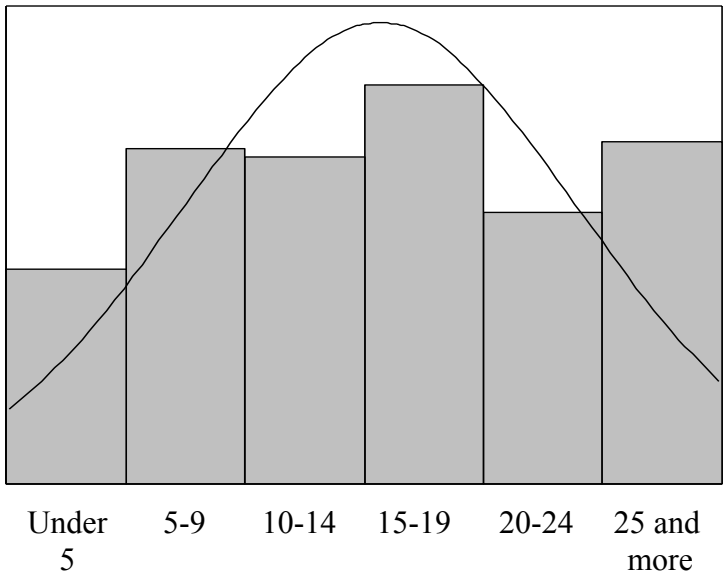

Figure 5. Years in Emergency Management (GRAPH)

6. Emergency Management Certification:

Survey participants responded to the question about their certification status in emergency management. A summary of their responses is shown here in Table 6.

Q: Do you hold any emergency management certifications			
RESPONSE	**CODE**	**FREQUENCY**	**%**
No	1	79	33.3
Yes, State-level certification only	2	69	29.1
Yes, IAEM CEM only	3	56	23.6
Yes, both State-level and IAEM CEM	4	33	13.9

Table 6: Emergency Management Certification

In response to this question, 79 participants (33.3%) indicated they held no certifications while 158 (66.7%) hold certification from either their individual state or from the IAEM: 69 indicate they hold only state-level certification (29.1%), 56 indicated they hold only the International Association of Emergency Managers (IAEM) certification as a Certified Emergency Manager® (CEM®) (23.6%), and 33 survey participants indicated they hold both state-level certification and the CEM designation (13.9%). If the numbers who hold both state-level certification and the IAEM CEM designation are added to the numbers holding only one or the other, the resulting data would show while those who hold no certifications does not change (33.3%), state certification is held by 112 survey participants (47.2%) and IAEM CEM certification is held by 89 participants (37.7%). Note, however, the percentages will exceed 100% to permit the overlap caused by those who hold both state-level certification and the IAEM CEM designation. Figure 6 shows this distribution of the various levels of certification in a graphic form.

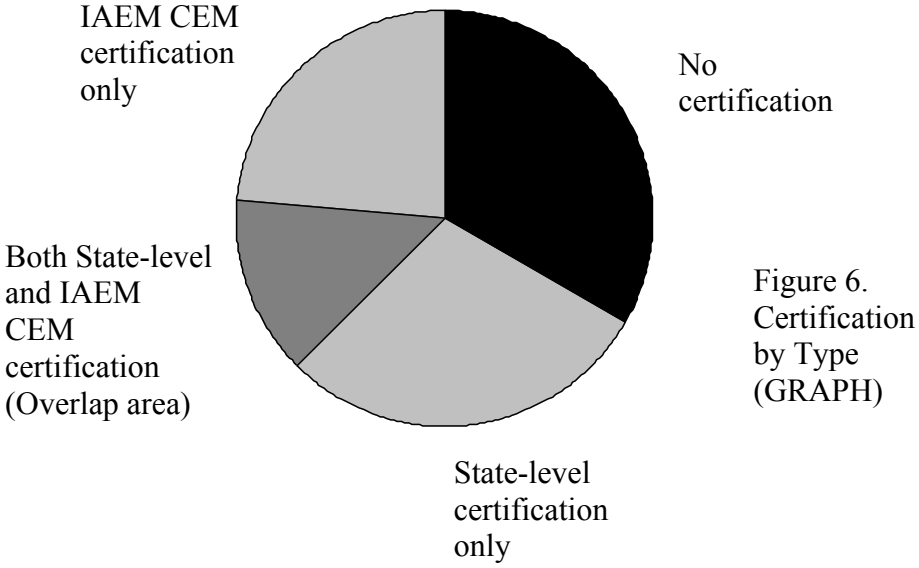

Figure 6. Certification by Type (GRAPH)

7. Yearly Salary:

Survey participants provided a wide range of responses to the question concerning their annual salary taken at a FTE rate. A summary of responses is shown in Table 7.

Q: Yearly Salary (Full-time Equivalent)			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Less than $25,000	1	7	3.0
$25,000 – $34,999	2	9	3.8
$35,000 – $44,999	3	28	12.0
$45,000 – $54,999	4	42	17.9
$55,000 – $64,999	5	37	15.8
$65,000 – $74,999	6	35	15.0
$75,000 – $84,999	7	25	10.7
$85,000 and above	8	51	21.8
(Missing – did not specify)	0	4	--

Table 7: Yearly Salary

Only seven participants (3.0%) reported an annual salary of less than $25,000 and nine participants (3.8%) reported an annual salary of $25,000-$34,999. There were 28 participants (12.0%) who reported a salary between $35,000-$44,999, another 42 participants (17.9%) reported a salary between $45,000-$54,999, and 37 participants (15.8%) reported their salary between $55,000-$64,999. Additionally, there were 35 participants (15.0%) reporting a salary of $65,000-$74,000, 25 participants (10.7%) reporting a salary of $75,000-84,999, and 51 participants (21.8%) who reported an annual salary of over $85,000. Four participants elected not to respond to this question and are not included in the percentage totals. A summary of these responses is shown graphically in Figure 7. This produces a negatively skewed ($z_{skewness} = -1.23$) but platykurtic ($z_{kurtosis} = -2.89$) distribution curve with a mean of 5.36 ($s = 1.96$).

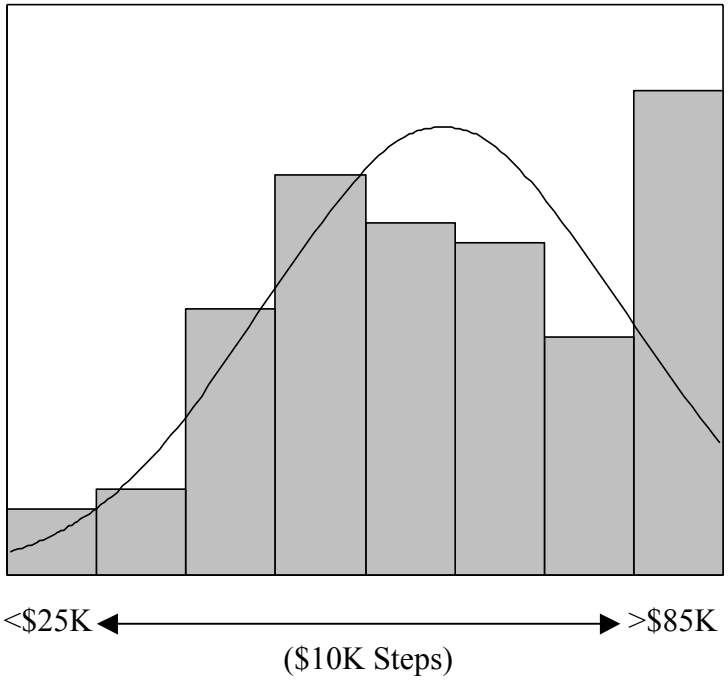

Figure 7.
Yearly Salary
(GRAPH)

8. Emergency Management Training:

The survey asked the participants to mark all levels of emergency management training they had completed. Table 8 shows their responses. All 237 participants indicated they had completed at least a basic course in emergency management (100%). A majority, 183 (77.2%), have completed the Federal Emergency Management Agency Professional Development Series (FEMA PDS) and 137 participants (57.8%) have completed an advanced course. A large number of participants, 201 (84.8%) have completed a home-study course from FEMA's Emergency Management Institute (EMI) while 150 (63.3%) have completed an EMI resident course in Emmitsburg, Maryland. A larger number, 209 (88.2%), indicated they had attended another formal or a state-sponsored course.

Q: Emergency Management Training (Mark all that apply)			
RESPONSE	**CODE**	**FREQUENCY**	**%**
None	1	0	0
Some / Basic Course	2	237	100
FEMA PDS-Series Completion	3	183	77.2
Advanced Course(s)	4	137	57.8
Other EMI home-study course(s)	5	201	84.8
EMI resident course(s)	6	150	63.3
Other formal / State-sponsored course(s)	7	209	88.2

Table 8: Emergency Management Training

9. Actual Emergencies:

Survey participants were queried regarding their participation in actual emergencies and the level of disaster declaration they received during their tenure. Their responses are shown in Table 9. There were 172 participants (72.6%) that indicated they had experienced a local emergency or disaster declaration, 155 participants (65.4%) indicated they had experienced a state-level emergency or disaster declaration, and 176 participants (74.3%) indicated they had experienced a federal-level emergency or disaster declaration.

Q: Actual Emergencies during your tenure (Mark all that apply)			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Local Emergency / Disaster Declaration	1	172	72.6
State-level Emergency / Disaster Declaration	2	155	65.4
Federal-level Emergency / Disaster Declaration	3	176	74.3

Table 9: Actual Emergencies

The second part of this question identified the number of each type of emergency or disaster declaration. Table 10 shows the results for those 172 participants who experienced a local declaration. There were 72 participants (41.9%) who had experienced from 1-5 local declarations, 33 participants (19.2%) who had experienced from 6-10 local declarations, and 67 participants (39.0%) who had experienced more than 10 local declarations.

Local Emergency / Disaster Declaration		
RESPONSE	**FREQUENCY**	**%**
1 – 5 Declarations	72	41.9
6 – 10 Declarations	33	19.2
More than 10 Declarations	67	39.0

Table 10: Local Emergency / Disaster Declarations

Graphically, this is shown in Figure 8.

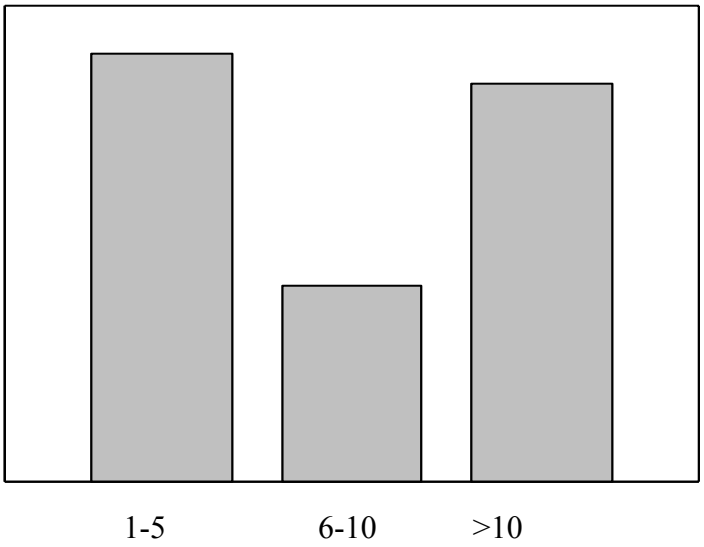

Figure 8. Quantity of Local Disaster Declarations (GRAPH)

Table 11 shows the results for those 155 participants who experienced a state-level declaration. There were 77 participants (49.7%) who had experienced from 1-5 state-level declarations, 33 participants (21.3%) who had experienced from 6-10 state-level declarations, and 45 participants (29.0%) who had experienced more than 10 state-level declarations.

State Emergency / Disaster Declaration		
RESPONSE	**FREQUENCY**	**%**
1 – 5 Declarations	77	49.7
6 – 10 Declarations	33	21.3
More than 10 Declarations	45	29.0

Table 11: State Emergency / Disaster Declaration

Graphically, this is shown in Figure 9.

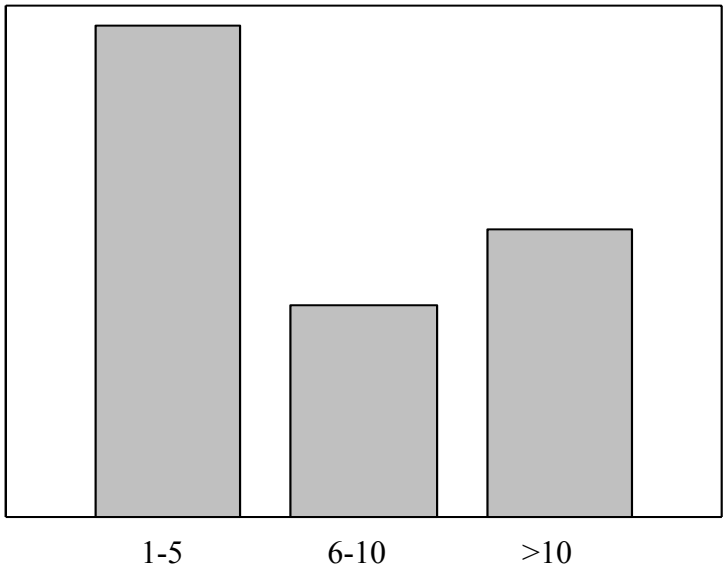

Figure 9. Quantity of State-level Disaster Declarations (GRAPH)

Table 12 shows the results for those 176 participants who experienced a federal-level declaration. There were 91 participants (51.7%) who had experienced from 1-5 federal-level declarations, 43 participants (24.4%) who had experienced from 6-10 federal-level declarations, and 42 participants (23.9%) who had experienced more than 10 federal-level declarations.

Federal Emergency / Disaster Declarations		
RESPONSE	**FREQUENCY**	**%**
1 – 5 Declarations	91	51.7
6 – 10 Declarations	43	24.4
More than 10 Declarations	42	23.9

Table 12: Federal Emergency/Disaster Declarations

Graphically, this is shown in Figure 10.

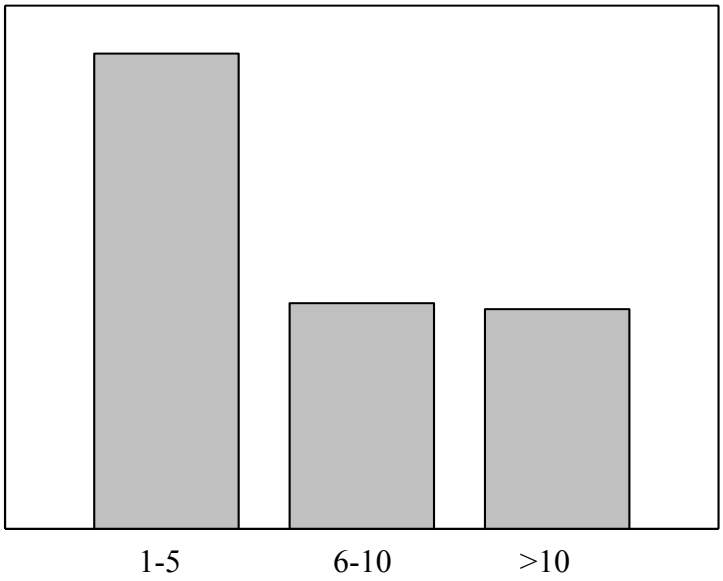

Figure 10. Quantity of Federal-level Disaster Declarations (GRAPH)

10. Full-Scale Exercises:

An integral part of all emergency management programs is the conduct of full-scale exercises to simulate a response to actual occurrences likely to happen in the community. Table 13 shows the results of this query of survey participants.

Q: How often do you have full-scale exercises?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
At least every year	1	124	52.3
At least every two years	2	57	24.1
At least every three years	3	28	11.8
Four or more years apart	4	19	8.0
Never	5	9	3.8

Table 13: Frequency of Full-Scale Exercises

Among the survey participants, 124 of them (52.3%) conduct a full-scale exercise every year. Another 57 (24.1%) do so every two years. A group of 28 (11.8%) indicated they conduct full-scale exercises at least every three years and 19 participants (8.0%) said theirs are four or more years apart. A group of nine participants (3.8%) never conduct full-scale exercises. These responses are shown graphically in Figure 11.

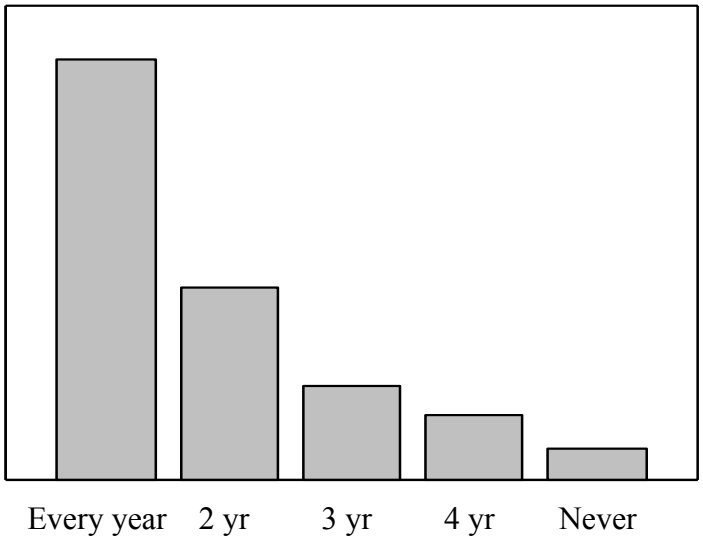

Figure 11. Frequency of Full-Scale Exercises (GRAPH)

11. Type of Jurisdiction:

Emergency managers serve in every level of government as well as the private and non-profit sectors. While the county/parish level is the most common, other venues contribute to the potential for further growth of the job market and greater protection in all facets of the community. Survey participants reported a wide variety of jurisdictional/employment types, reflected in Table 14.

Q: Type of Jurisdiction			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Federal	1	11	4.7
State	2	14	6.0
County / Parish	3	123	52.6
Large City / Metropolitan Area	4	20	8.5
Mid-sized City	5	22	9.4
Small City / Township	6	23	9.8
Private Sector	7	14	6.0
Organization (Red Cross, etc)	8	2	.9
Other	9	5	2.1
(Missing – did not specify)	0	3	--

Table 14: Type of Jurisdiction

Among the survey responders, 11 participants (4.7%) are employed by the Federal government, 14 participants (6.0%) work at the state level, and 123 participants (52.6%) work at the county or parish level. Among those who work at the city level, 20 participants (8.5%) work for large cities or metropolitan areas, 22 participants (9.4%) described their city as mid-sized, and 23 participants (9.8%) work for small cities or townships. Other responses include 14 participants (6.0%) in the private sector, two participants (.9%) who indicated employment with organizations, and 5 participants (2.1%) in the "Other" category. Three individuals elected not to specify.

These responses are shown graphically in Figure 12.

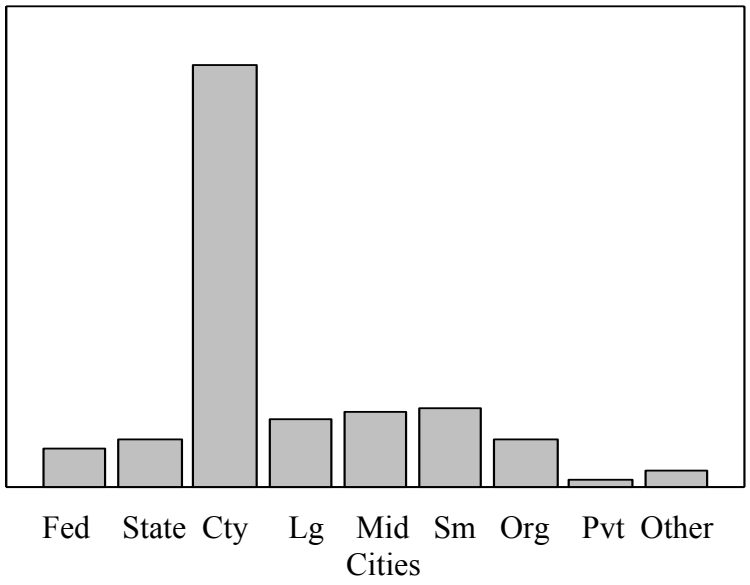

Figure 12. Employment by Jurisdiction Type (GRAPH)

12. Region of the United States:

Participants for the survey were selected by a regionally-stratified, random sampling. Consequently, all regions of the country (and U.S. territories/possessions) are represented in the response. The regions do not necessarily conform to either the FEMA regions or the IAEM regions. There are 18 responses (7.6%) from the New England states and 41 responses (17.4%) from the Mid-Atlantic states. The South/Gulf Coast region contributed 44 responses (18.6%) and the Great Lakes region contributed 28 responses (11.9%). Mid-America provided 20 responses (8.5%) and the South-West provided 25 responses (10.6%). The Mountain states contributed six responses (2.5%) while the Pacific states provided 49 responses (20.8%). The U.S. territories and possessions provided an additional 5 responses (2.1%). This is summarized in Table 15, and shown graphically in Figure 13.

Q: Region			
RESPONSE	**CODE**	**FREQUENCY**	**%**
New England (ME, NH, VT, MA, CT, RI)	1	18	7.6
Mid-Atlantic (NY, PA, NJ, DE, MD, WV, VA, KY)	2	41	17.4
South / Gulf Coast (TN, NC, SC, GA, FL, AL, MS, LA)	3	44	18.6
Great Lakes (OH, IN, IL, WI, MI, MN)	4	28	11.9
Mid-America (IA, MO, AR, OK, KS, NE, SD, ND)	5	20	8.5
South-West (TX, NM, AZ)	6	25	10.6
Mountain (CO, WY, MT, UT, ID)	7	6	2.5
Pacific (CA, NV, OR, WA, AK, HI)	8	49	20.8
Other (GU, PR, VI, Others)	9	5	2.1

Table 15: Region of the United States

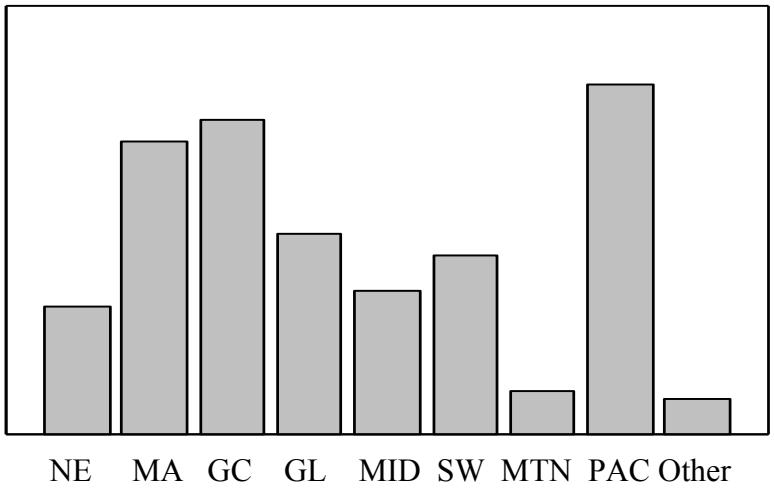

Figure 13. Employment by Region (GRAPH)

C. Study-Specific Data

This section focuses on the purpose of the research study – to determine how emergency managers feel about their level of formal education, emergency management training, and practical experiences they bring with them to the positions in their communities and their places of work.

1. Education:

Survey participants report a wide variation in their responses about the role education has played in their current employment. A summary of their responses is shown here in Table 16.

Q: With respect to my current position, my formal education:			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Has played no role	1	4	1.7
Has very little significance	2	29	12.2
Might be considered an asset	3	79	33.3
Is an important asset in my position	4	114	48.1
Is my most important asset	5	11	4.6

Table 16: Importance of Education to Current Position

Without reference to the completion of a particular educational level, four individuals (1.7%) report that education has played no role in their current position and 29 (12.2%) respond that their formal education has very little significance in their current position. These two groups are followed by 79 respondents (33.3%) who report that education might be considered an asset in their current employment but they do not place any importance on it. The 114 respondents (48.1%) who consider their education an important asset in their current employment and the 11 respondents (4.6%) who consider their education their most important asset in their current position finish the reflection of the importance of education for current employment success. As shown in Figure 14, the modal value indicates education plays an important role in emergency manager's current position. By calculation, this is also the median value.

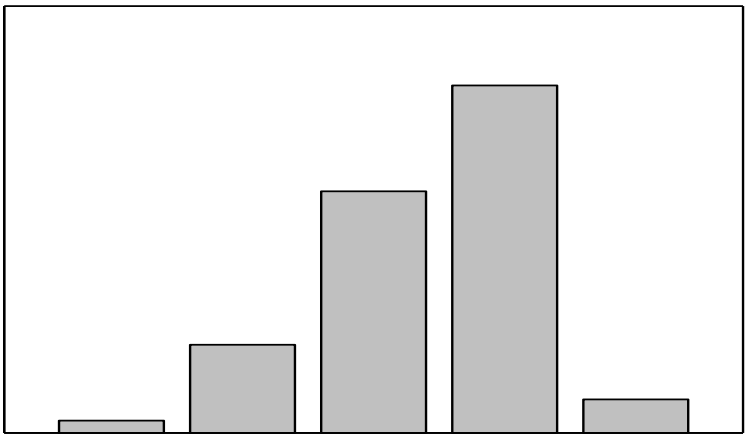

Figure 14. Importance of Education to Current Position (GRAPH)

A second important opinion about education was asked of the emergency managers regarding how much their formal education would assist them if they were seeking a promotion. The survey participants also differ widely in their responses to this question and a summary of their responses is shown in Table 17.

Q: If I were seeking a promotion, I think my formal education:			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Would play no role in the selection process	1	6	2.5
Might hurt my chances in the selection process	2	13	5.5
Would neither hurt nor help my chances . . .	3	33	14.0
Might help my chances in the selection process	4	102	43.2
Would significantly help me in the selection process	5	82	34.7
(Missing: did not specify)	0	1	--

Table 17: Importance of Education in Seeking a Promotion

Without reference to the completion of a particular educational level, the usable responses include six participants (2.5%) who feel education would play no role in the selection process for a promotion while 13 (5.5%) feel their education might actually hurt their chances at a promotion. A group of 33 participants (14.0%) remain neutral, saying their level of formal education would neither help nor harm their chances at a promotion. The 102 (43.2%) participants who indicated their level of educational achievement might actually help them when seeking a promotion and the 82 (34.7%) participants who feel certain their education would significantly help them in the selection process for a promotion complete the data for this reflection. One individual elected not to respond to this question. Figure 15 graphically shows the majority of emergency managers feel their education would help in seeking a promotion (modal value) and by calculation, this is also the median value.

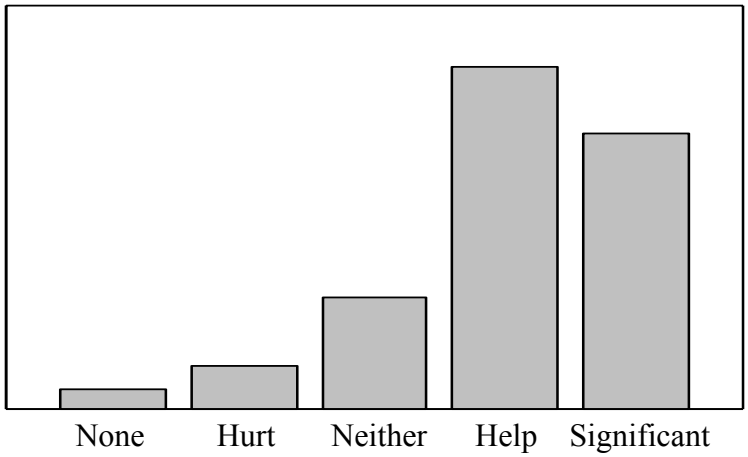

Figure 15. Importance of Education in Seeking a Promotion (GRAPH)

2. Training:

Survey participants report a slight variation in their responses about the role emergency management training has played in their current employment. A summary of their responses is shown here in Table 18.

Q: With respect to my current position, my emergency management training:			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Has played no role	1	0	0
Has very little significance	2	1	.4
Might be considered an asset	3	20	8.4
Is an important asset in my position	4	174	73.4
Is my most important asset	5	42	17.7

Table 18: Importance of EM Training to Current Position

Without reference to the completion of a particular training program, all participants indicate their level of emergency management training has contributed to their current employment. However, one individual (.4%) says it has very little significance. For 20 individuals (8.4%), emergency management training might be considered an asset but they do not place any additional importance on it. The next group, which comprises the largest group of participants at 174 (73.4%), believe their emergency management training is an important asset in their current position and another 42 (17.7%) consider it their most important asset at this point in their careers. As shown in Figure 16., the modal value indicates training plays an important role in emergency manager's current position. By calculation, this is also the median value.

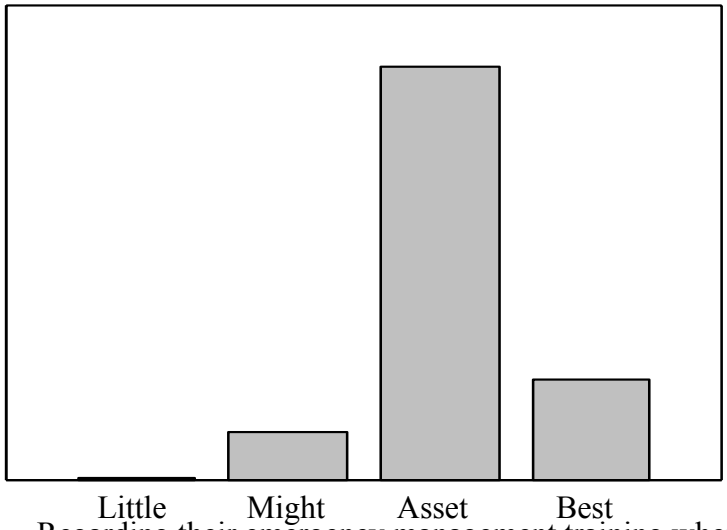

Figure 16. Importance of EM Training to Current Position (GRAPH)

Regarding their emergency management training when seeking a promotion, the survey participants respond across the entire list of options available to them. A summary of their responses is shown in Table 19.

Q: If I were seeking a promotion, I think my emergency management training:			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Would play no role in the selection process	1	3	1.3
Might hurt my chances in the selection process	2	1	.4
Would neither hurt nor help my chances . . .	3	13	5.5
Might help my chances in the selection process	4	113	47.9
Would significantly help me in the selection process	5	106	44.9
(Missing: did not specify)	0	1	--

Table 19: Importance of EM Training in Seeking a Promotion

Without reference to the completion of a particular training program, the usable responses include three participants (1.3%) who feel their training would play no role in the selection process for a promotion while only one (.4%) thinks it might actually hurt his or her chances for a promotion. A group of 13 participants (5.5%) remain neutral, saying their level of training would neither help nor hurt their chances at a promotion. The vast majority select the next two categories. A group of 113 participants (47.9%) respond their level of training might actually help them when seeking a promotion and another group of 106 participants (44.9%) feel certain their training would significantly help them in the selection process for a promotion. One individual elected not to respond to this question. Figure 17 graphically shows the majority of emergency managers feel their training would help in seeking a promotion (modal value) and by calculation, this is also the median value.

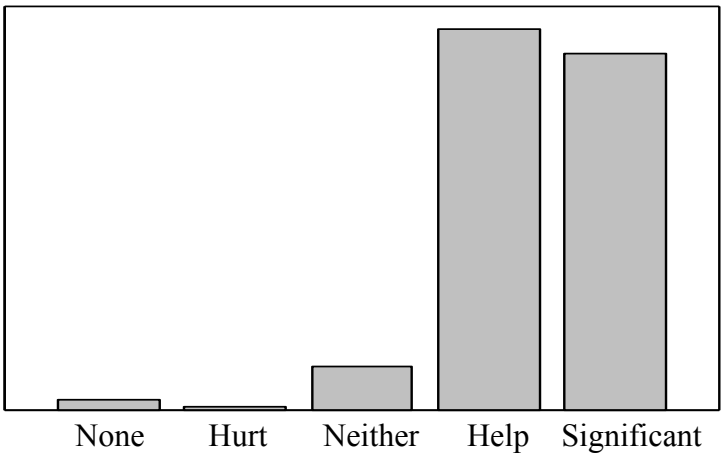

Figure 17. Importance of EM Training in Seeking a Promotion (GRAPH)

3. Experience:

Survey participants have a variety of responses about the role their practical experience has played in their current employment. A summary of their responses is shown here in Table 20.

Q: With respect to my current position, my practical experience:			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Has played no role	1	0	0
Has very little significance	2	2	.8
Might be considered an asset	3	13	5.5
Is an important asset in my position	4	99	41.9
Is my most important asset	5	122	51.7
(Missing: did not specify)		1	--

Table 20: Importance of Practical Experience to Current Position

Without reference to the completion of a particular number of years, participation in actual disasters, or participating in full-scale exercises, the participants who responded to this inquiry indicate how their level of experience has contributed to their current employment. Only 2 individuals (.8%) say their level of experience has very little significance in their current position. For 13 individuals (5.5%), practical experience might be considered an asset but they do not place any additional importance on it. The next group, 99 participants (41.9%), believe their practical experience is an important asset in their current position and another 122 (51.7%), the largest group of participants, consider it their most important asset at this point in their careers. As shown in Figure 18, the modal value indicates experience plays an

important role in emergency manager's current position and is regarded as his or her most important asset. By calculation, this is also the median value.

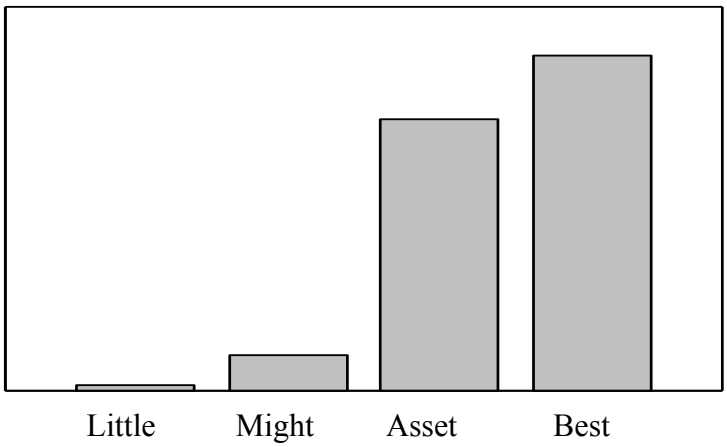

Figure 18. Importance of Practical Experience to Current Position (GRAPH)

Regarding their practical experience when seeking a promotion, the survey participants respond across the entire list of options available to them. A summary of their responses is shown in Table 21.

Q: If I were seeking a promotion, I think my practical experience:			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Would play no role in the selection process	1	2	.9
Might hurt my chances in the selection process	2	1	.4
Would neither hurt nor help my chances . . .	3	6	2.6
Might help my chances in the selection process	4	70	29.8
Would significantly help me in the selection process	5	156	66.4
(Missing: did not specify)		2	--

Table 21: Importance of Practical Experience in Seeking a Promotion

Without reference to the completion of a particular number of years, participation in actual disasters, or participation in full-scale exercises, the usable responses include two participants (.9%) who feel their experience would play no role in the selection process for a promotion while only one (.4%) thinks it might actually hurt his or her chances for a promotion. A group of 6 participants (2.6%) remain neutral, saying their level of experience would neither help nor hurt their chances at a promotion. The vast majority select the next two categories. A group of 70 participants (29.8%) respond their level of experience might actually help them when seeking a promotion and another group of 156 participants (65.8%) feel certain their experience would significantly help them in the selection process for a promotion. Two individuals elected not to respond to this question. Figure 19 graphically shows the majority of

emergency managers feel their experience would significantly help them in seeking a promotion (modal value) and by calculation, this is also the median value.

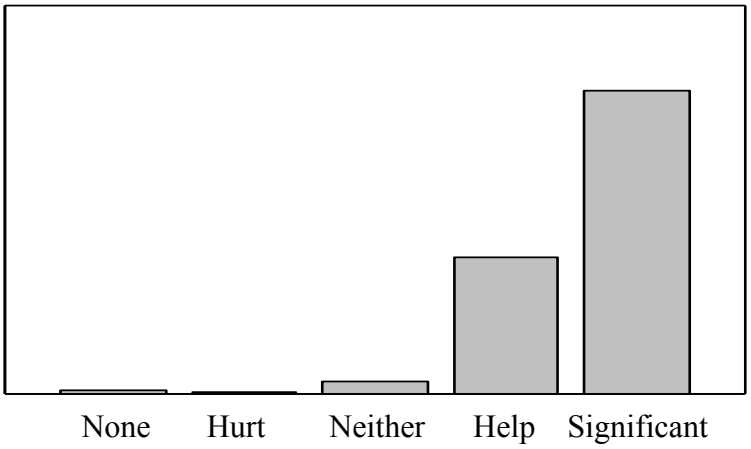

Figure 19. Importance of Practical Experience in Seeking a Promotion (GRAPH)

D. Recommendations, Opinions, and Views of Survey Participants

This series of questions was added to the survey to provide additional depth to the understanding of emergency managers and insight into the responses they gave to the study-specific questions. The understandings developed in an analysis of these questions may also further guide the changes in the professional development programs for future emergency managers. In some instances, individual responders added responses to what was listed on the form. Whenever possible, these responses were added to the Tables and Figures and will be mentioned in the discussion. When more than one question was asked on a single topic the questions are grouped together.

1. Recommendations for Education:

This is the first of the specific recommendations tied directly to the study-specific questions in the previous section. It represents the level of formal education emergency managers recommend for those entering the emergency management field. A summary of their responses is shown in Table 22.

Q: Recommendations for Education			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Not concern themselves	1	7	3.0
Two-year degree	2	83	35.2
Four-year degree	3	136	57.6
Graduate degree	4	10	4.2
(Missing: did not specify)	0	1	--

Table 22: Recommendations for Education

Seven survey participants (3.0%) feel those entering emergency management should not worry about their educational level while 83 participants (35.2%) feel a two-year degree is sufficient. A much larger group of 136 survey participants (57.6%) recommend a four-year degree and a group of 10 participants (4.2%) even recommend a graduate degree. One individual elected not to make a recommendation regarding education. Figure 20 graphically displays these responses and shows a 4-year college education is the recommendation from emergency managers (modal value) and this is also the median value.

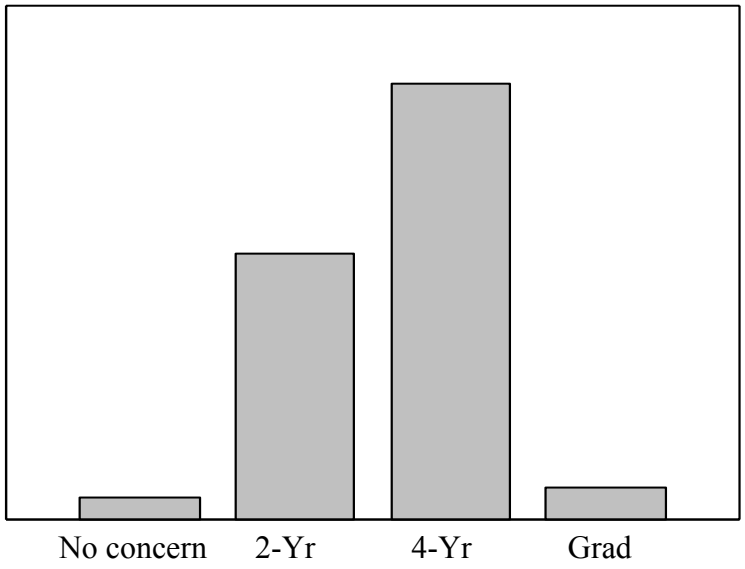

Figure 20. Recommendations for Education (GRAPH)

When it comes to recommending a particular course of study, the survey participants provide a list of possibilities. Their responses are shown in Table 23.

Q: Recommended Education Curriculum			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Not focus on specific academic discipline	1	20	8.7
Focus on an integrated academic program	2	148	64.3
Focus on a scientific discipline	3	4	1.7
Focus on a technical discipline	4	12	5.2
Focus on a business discipline	5	23	10.0
Focus on a social science discipline	6	21	9.1
(Focus on an emergency services discipline)	7	2	.9
(Missing: did not specify)	0	7	--

Table 23: Recommended Education Curriculum

From the choices provided on the survey, 20 participants (8.7%) feel those entering the emergency management field should not focus on a specific academic discipline. The largest group, 148 participants (64.3%), recommend an integrated academic program. Four participants (1.7%) recommend a scientific discipline, 12 participants (5.2%) recommend a technical discipline, and 23 participants (10%) recommend a business discipline while 21 participants (9.1%) recommend a social science discipline. Two participants (.9%) added and selected an emergency services discipline to those choices on the survey. Seven individuals elected not to make a recommendation about the course of academic study. These choices are shown graphically in Figure 21.

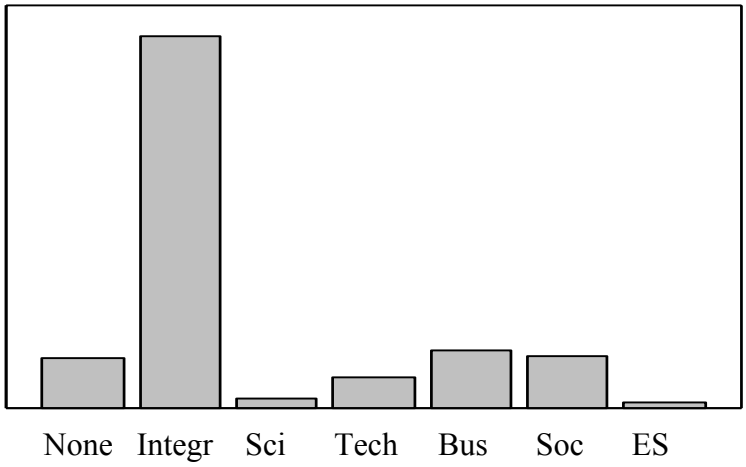

Figure 21. Recommendations for Course of Study (GRAPH)

2. Recommendations for Training:

In a similar manner, survey participants were asked to make specific recommendations for the level of emergency management training necessary for those entering emergency management in an entry-level position. A summary of their responses is shown in Table 24.

Q: Recommendations for Training			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Not concern themselves with it	1	2	.8
Should have a basic understanding of ICS	2	74	31.2
Should complete at least the Prof Dev Series (PDS)	3	78	32.9
Should complete several advanced courses	4	83	35.1
Missing: did not specify	0	0	--

Table 24: Recommendations for Training

Two survey participants (.8%) feel it is not necessary for new members of the occupation to concern themselves with specific training while 74 participants (31.2%) feel a basic understanding of ICS is necessary. Another 78 participants (32.9%) feel the completion of the FEMA Professional Development Series is also recommended while 83 participants (35.1%) feel completion of several advanced courses in addition to ICS and the PDS series is necessary. Figure 22 graphically shows the majority of emergency managers recommend those entering the field should complete several advanced courses (modal value) while the median value shows the PDS series is at the mid-point of the recommendation (median value).

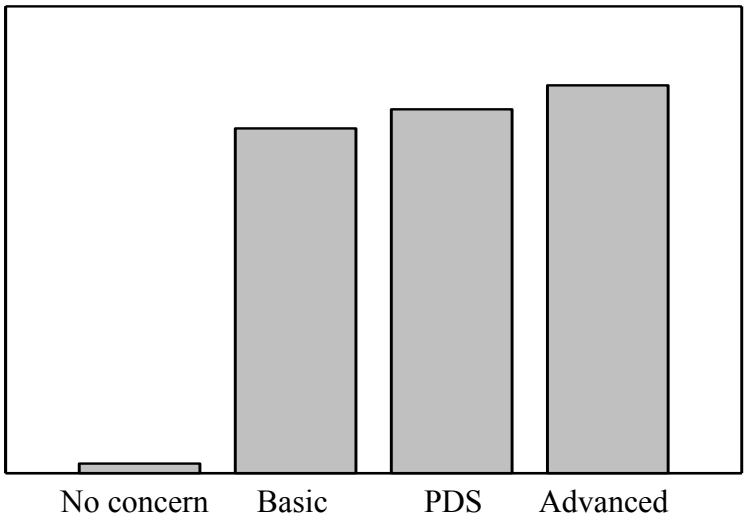

Figure 22. Recommendations for Emergency Management Training (GRAPH)

Another facet of emergency management training is the degree of specialization survey participants would recommend to anyone entering the profession. A summary of their responses is shown in Table 25.

Q: Recommendations for Training Focus			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Specialized training	1	17	7.4
Generalized training	2	214	92.6
(Missing: did not specify)	0	6	--

Table 25: Recommendations for Training Focus

Only 17 participants (7.4%) recommended specialized training in an emergency management discipline while the vast majority, 214 participants (92.6%), recommends generalized training. Six individuals elected not to respond to this question.

Graphically, this is shown in Figure 23.

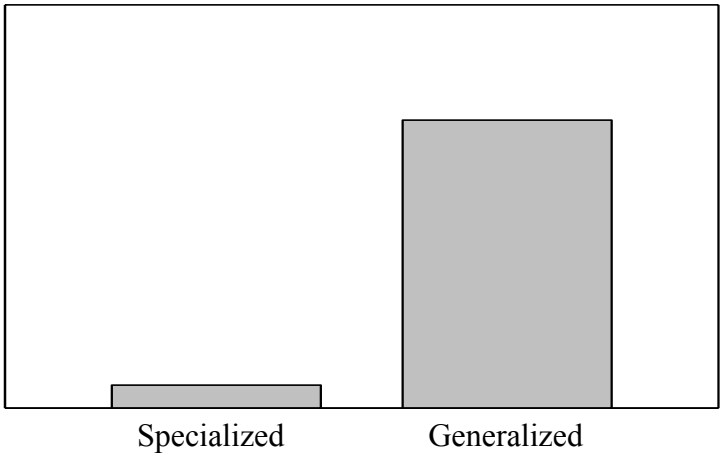

Figure 23. Recommendations for Specialized vs. Generalized EM Training (GRAPH)

3. Recommendations for Practical Experience:

This is the last of the specific recommendations tied directly to the study-specific questions in the previous section. It represents the level of emergency management practical experience gained through participation in actual emergencies; tabletop, functional, and full-scale exercises; and service in the emergency services or emergency management-related occupations that the survey participants recommend for those entering the emergency management field. A summary of their responses is shown in Table 26.

Q: Recommendations for Emergency Management Experience			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Not concern themselves with it	1	23	9.8
Should have at least one year of experience	2	65	27.8
Should have at least three years of experience	3	75	32.1
Should have at least five years of experience	4	37	15.8
Should complete a related career before EM	5	34	14.5
(Missing: did not specify)	0	3	--

Table 26: Recommendations for EM Experience

Regarding emergency management experience, 23 participants (9.8%) recommend those entering the field for the first time not concern themselves with it. A group of 65 participants (27.8%) feel at least one year of experience would be sufficient while another group of 75 participants (32.1%) recommends at least three years. There are 37 participants (15.8%) who feel at least five years is necessary and a group of 34 participants (14.5%) feel it is necessary to complete a related career before stepping into the emergency management field. Three individuals elected not to make a recommendation. Figure 24 graphically shows the majority of emergency managers recommend those entering the field should complete three years of related experience (modal value) prior to seeking an emergency management position. This is also the median value.

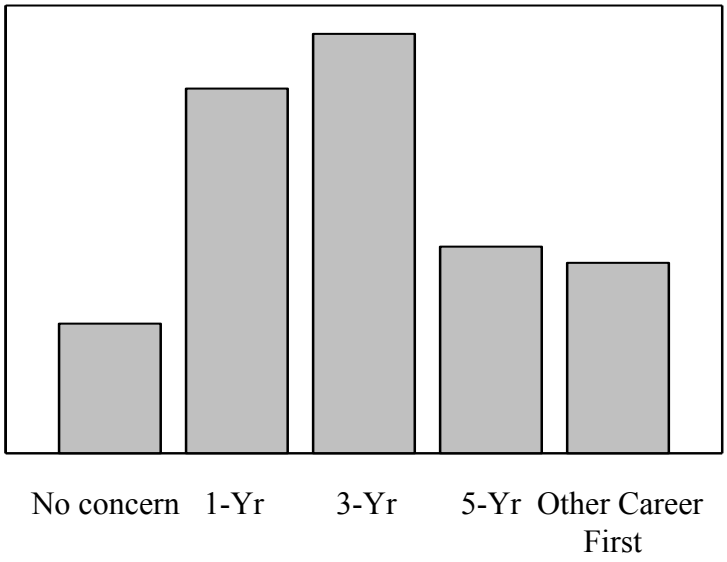

Figure 24. Recommendations for Practical Experience (GRAPH)

4. Changes in Duties since 9/11:

There are two questions in this section dealing with changes in the workplace since the tragic events of 9/11. One question deals with individual duties and the other addresses the workplace itself. The summaries are presented separately. The information for the individual is shown in Table 27.

Q: Have your duties substantially changed since 9/11?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Yes	1	153	64.8
No	2	45	19.1
New position since 9/11	3	38	16.1
(Missing: did not specify)	0	1	--

Table 27: Change of Duties since 9/11

When asked if their duties had changed since 9/11, 153 survey participants (64.8%) said "yes" and 45 participants (19.1%) said "no." Another 38 participants (16.1%) said they were in a new position since 9/11. One individual chose not to respond to this question. The responses are shown graphically in Figure 25.

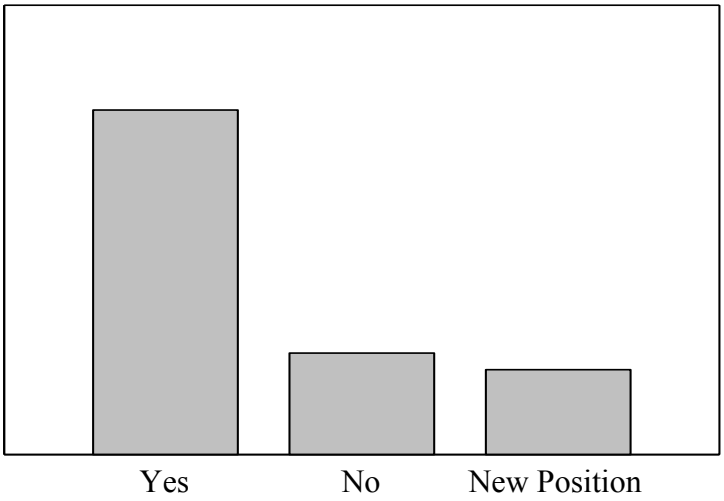

Figure 25.
Change in Duties since 9/11
(GRAPH)

The other potential for change is in the organization, i.e. the workplace. The summary of the survey participants is shown in Table 28.

Q: Has your organization substantially changed since 9-11?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Yes	1	143	60.6
No	2	90	38.1
New position since 9/11	3	3	1.3
(Missing: did not specify)	0	1	--

Table 28: Organizational change since 9/11

When asked if their organization had changed since 9/11, 143 survey participants (60.6%) said "yes" and 90 participants (38.1%) said "no." Another three participants (1.3%) said they were in a new position since 9/11. One individual chose not to respond to this question. The responses are shown graphically in Figure 26.

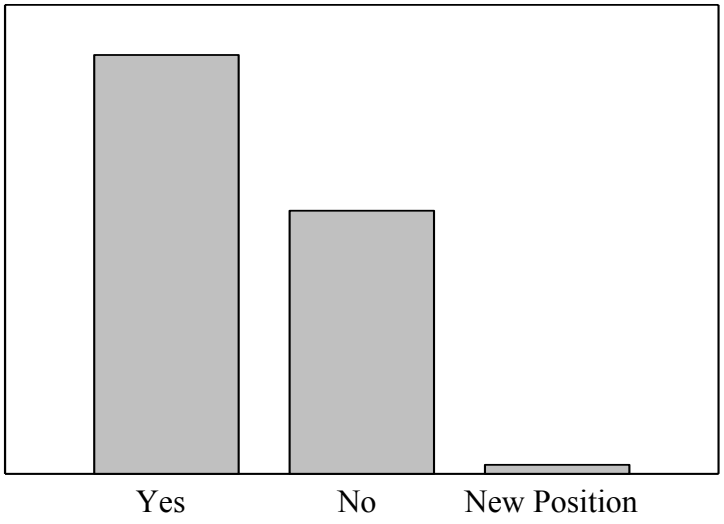

Figure 26. Changes in Organization since 9/11 (GRAPH)

5. Changes in Status since 9/11:

The next series of questions will help determine how emergency managers perceive their role in their communities, how they feel their communities perceive them, and whether or not these perceptions result in a feeling of confidence in their abilities, especially in the period since the tragedy of 9/11. There are seven questions in this series. The first asks the survey participants to identify how they view themselves. The summary of their responses is in Table 29.

Q: Are you the "Go To" person?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Yes	1	220	93.6
No	2	15	6.4
(Missing: did not specify)	0	2	--

Table 29: Reflection on status as the "Go To" person

When asked if they consider themselves the "Go To" person for emergency management, 220 survey participants (93.6%) said "yes" while only 15 participants (6.4%) said "no." Two individuals elected not to answer this question. This is shown graphically in Figure 27.

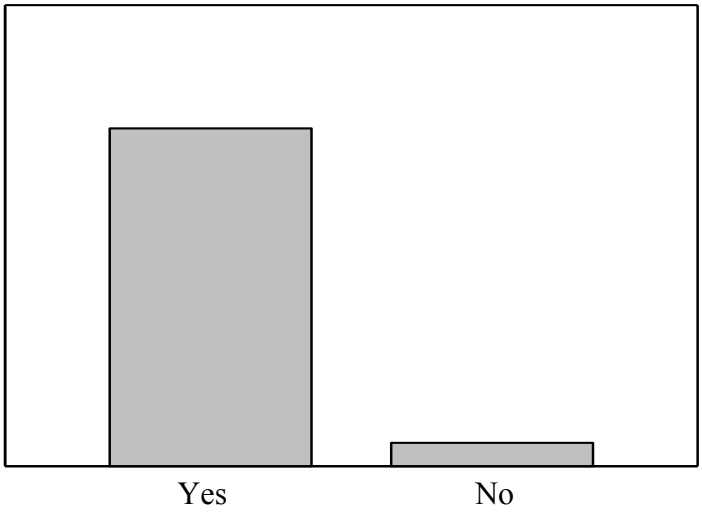

Figure 27. Individual View of "Go To" Person (GRAPH)

The second question of this series is similar. It asks if the survey participant's jurisdiction consider him/her to be the "Go To" person for emergency management. The summary of their responses is shown in Table 30.

Q: Does your jurisdiction consider you the "Go To" person?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Yes	1	213	91.4
No	2	20	8.6
(Missing: did not specify)	0	4	--

Table 30: Jurisdictional consideration of the "Go To" person

When asked if their jurisdiction considers them to be the "Go To" person for emergency management, 213 survey participants (91.4%) said "yes" while 20 participants (8.6%) said "no." Four individuals elected not to answer this question. This is shown graphically in Figure 28.

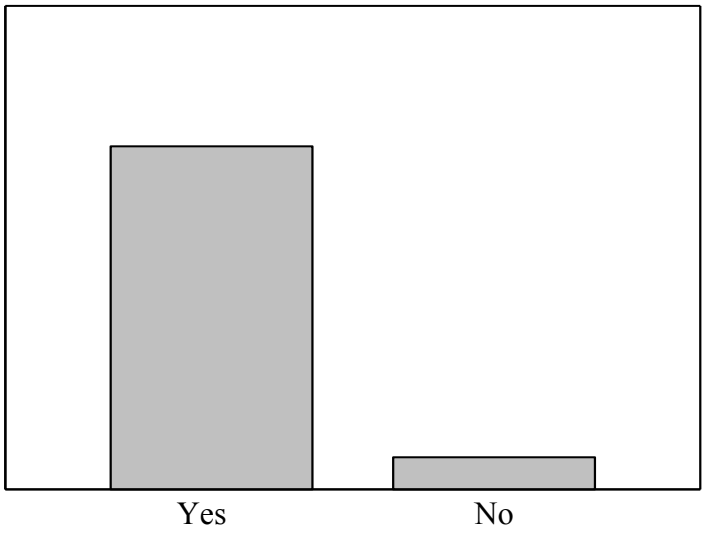

Figure 28. Jurisdictional View of "Go To" Person (GRAPH)

Third in this series is a question about the specific effect of the 9/11 tragedy on the view of the jurisdiction toward the survey participants. The views of the survey participants are summarized in Table 31.

Q: Has this been altered in any way by the events of 9/11			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Yes	1	88	37.8
No	2	105	45.1
New position since 9/11	3	40	17.2
(Missing: did not specify)	0	4	--

Table 31: Effect of 9/11 experience on status

When asked if 9/11 altered the view of the jurisdiction toward the survey participants, 88 participants (37.8%) answered "yes" but 105 participants (45.1%) answered "no." There are also 40 participants (17.2%) who are in new positions since 9/11. Four individuals chose not to respond to this question. The responses are shown graphically in Figure 29.

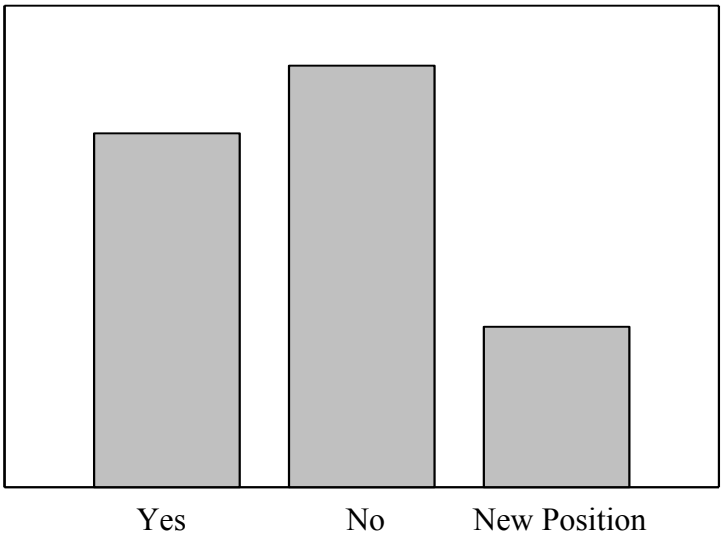

Figure 29.
Change of View
Since 9/11
(GRAPH)

Another effect of the 9/11 incident was an increase in training for many emergency managers to familiarize with potential risks not previously considered. The creation of the Department of Homeland Security also introduced many new subjects for emergency managers to familiarize and integrate into their programs. The next question addresses the training changes taking place following 9/11. A summary of the responses of the survey participants is shown in Table 32.

Q: Have you increased your training since 9/11			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Yes	1	159	67.1
No	2	53	22.4
New position since 9/11	3	25	10.5
(Missing: did not specify)	0	0	--

Table 32: Effect of 9/11 on training requirements

When asked if their training had changed since 9/11, 159 survey participants (67.1%) answered "yes" while 53 participants (22.4) answered "no." A group of 25 participants (10.5%) indicated they were in a new position since 9/11. The responses are shown graphically in Figure 30.

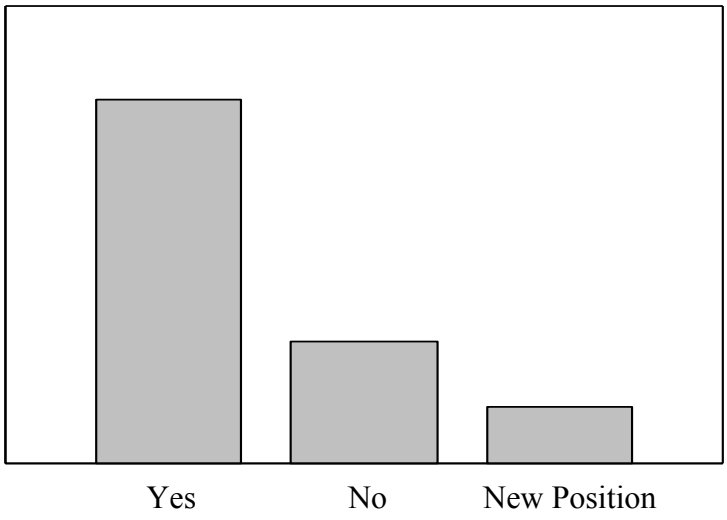

Figure 30. Training Changes Since 9/11 (GRAPH)

The last three questions of this section ask about the status effect of increased education, training, and experience for emergency managers. As emergency management moves toward becoming a profession, these three areas will endure additional scrutiny, even among emergency managers themselves. The first question asks the survey participants if they feel their status would increase with more education, training, or experience. The summary of responses to this question is shown in Table 33.

Q: Would your status be increased by more education, training, or experience?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Yes	1	74	31.5
No	2	95	40.4
Not sure	3	66	28.1
(Missing: did not specify)	0	2	--

Table 33: Effect of Education, Training, or Experience on Status

When asked if they feel their status would be increased by more education, training, or experience, 74 survey participants (31.5%) say "yes," 95 participants (40.4%) say "no," and 66 participants (28.1%) are "not sure." Two others chose not to respond to this question. These responses are shown graphically in Figure 31.

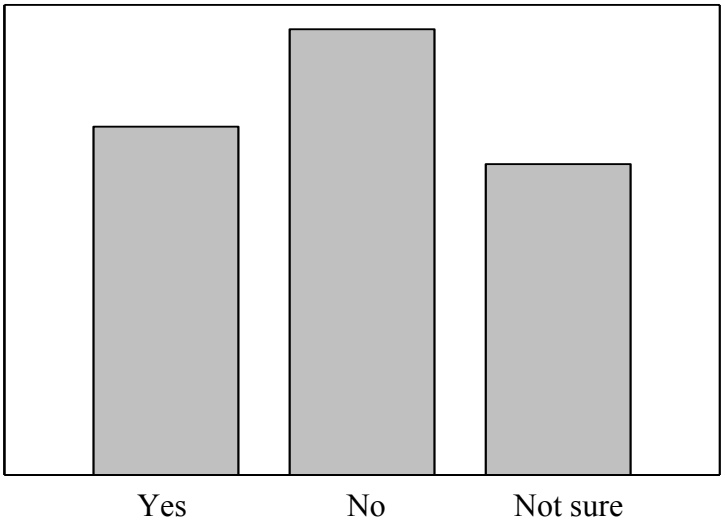

Figure 31.
Status Change by Education, Training, or Experience (GRAPH)

The next question addresses how the survey participants feel about their current levels of education, training, and experience by asking if they feel threatened, limited, or pressured by them. Their responses are summarized in Table 34.

Q: Do you feel threatened, limited, or pressured by your education, training, or experience?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Yes	1	30	12.8
No	2	205	87.2
(Missing: did not specify)	0	2	--

Table 34: Threat presented by Level of Education, Training, or Experience

When asked if they feel threatened, limited, or pressured by their education, training, or experience, 30 survey participants (12.8%) respond "yes" while most participants, 205 responders (87.2%), say "no." Two individuals chose not to respond to this question. This is shown graphically in Figure 32.

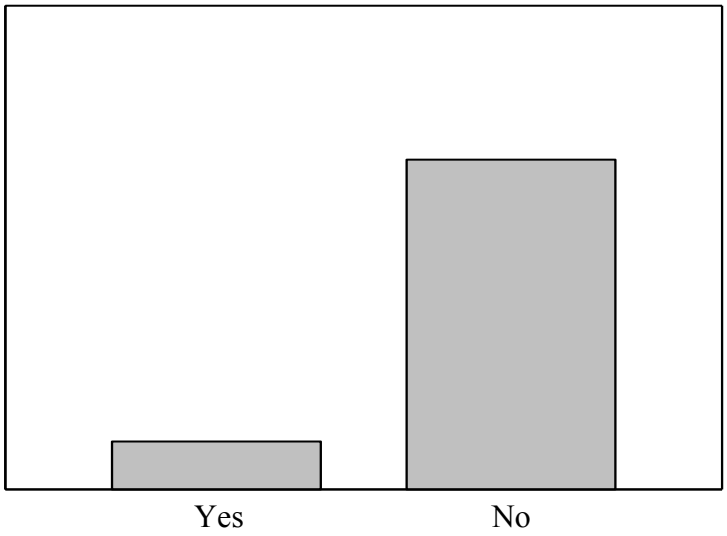

Figure 32. EM Feeling Threatened, Limited, or Pressured (GRAPH)

The last question of this series addresses the potential effect of more education, training, and experience on any thoughts of being threatened, limited, or pressured by any deficiencies in them. A summary of the responses of the survey participants is shown in Table 35.

Q: Would additional Education, Training, or Experience decrease these feelings?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Yes	1	36	17.8
No	2	166	82.2
(Missing: did not specify)	0	35	--

Table 35: Effect of additional Education, Training, or Education on potential threat

When asked if additional education, training, or experience would lessen any feelings of being threatened, limited, or pressured, 36 survey participants (17.8%) answer "yes" but 166 participants (82.2%) answer "no." A group of 35 participants chose not to respond to this question. These responses are shown in graphic form in Figure 33.

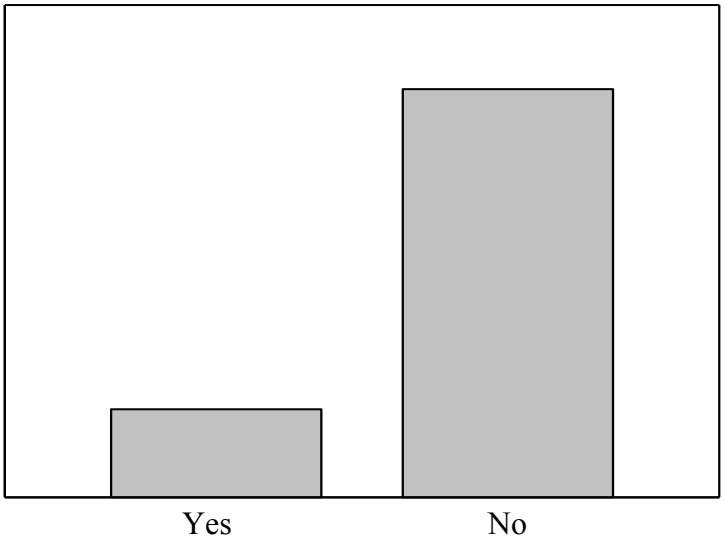

Figure 33. Effect of Education, Training, and Experience on Feelings (GRAPH)

6. Views and Opinions about Emergency Management:

Among the survey responders there are several views of how Emergency Management should be considered in the workplace. In this first group, two views are expressed with this next question. A summary of the responses is shown in Table 36.

Q: Do you consider emergency management to be . . . ?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Professional occupation	1	214	93.9
Skill occupation	2	13	5.7
(Both)	3	1	.4
(Missing: did not specify)	0	9	--

Table 36: Opinion regarding the status of Emergency Management

A group of 214 survey responders (93.9%) feel Emergency Management should be considered a profession while only 13 responders (5.7%) feel Emergency Management should be considered a skill occupation. A single individual (.4) feels it should be considered both and marked both responses. There are 9 responders who elected not to respond to this question. This is shown graphically in Figure 34.

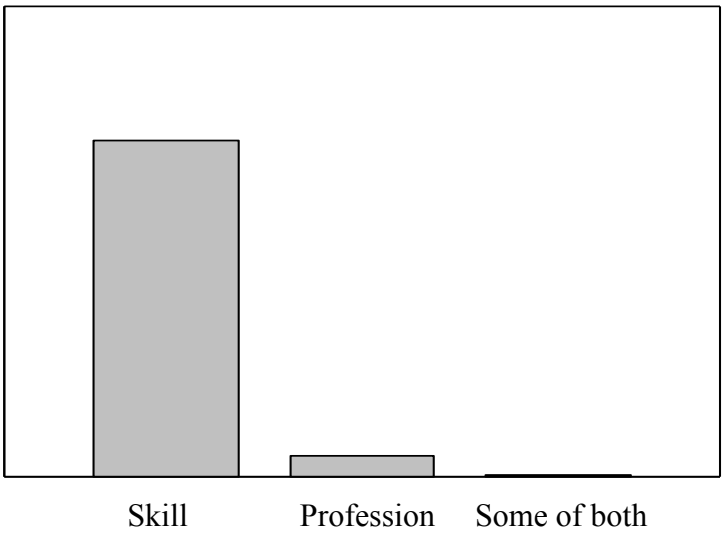

Figure 34. Profession or Skill occupation (GRAPH)

The second part of this subsection asks if the survey responders support the efforts to define Emergency Management as a profession. The responses are similar to the previous question but not exactly the same. The summary of their responses is shown in Table 37.

Q: Do you support efforts to define emergency management as a profession?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Yes	1	227	95.8
No	2	4	1.7
I am undecided	3	6	2.5
(Missing: did not specify)	0	0	--

Table 37: Support for professionalization

There are 227 survey responders (95.8%) who lend their support to defining Emergency Management as a profession while only 4 responders (1.7%) would not. Additionally, a group of 6 responders (2.5%) are undecided. This is shown graphically in Figure 35.

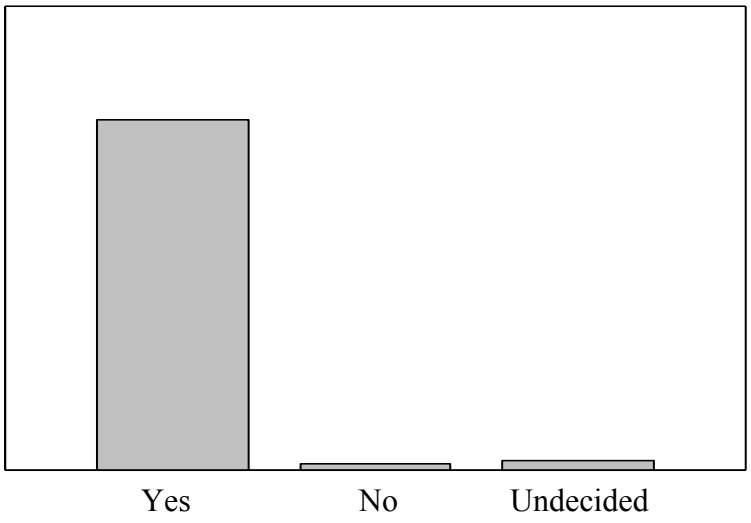

Figure 35. Support Efforts to Professionalize (GRAPH)

Since the 9-11 events and the creation of the Department of Homeland Security, emergency managers have expressed their feelings about the relationship between the Department and the Federal Emergency Management Agency (FEMA). The timing of the survey presented this question to the survey participants just as Hurricane Katrina was approaching the Gulf Coast. A summary of their responses at that time are shown in Table 38.

Q: What is emergency management's relationship to homeland security?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Totally separate	1	27	11.4
Joined	2	93	39.2
Some of both	3	117	49.4
(Missing: did not specify)	0	0	--

Table 38: Relationship between Homeland Security and Emergency Management

A group of 27 survey responders (11.4%) feel the Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA) should be totally separate. Another group of 93 responders (39.2%) think the two should be joined together. The largest of the groups, 117 responders (49.4%), feel some missions are shared between them and others are separate. These responses are shown graphically in Figure 36.

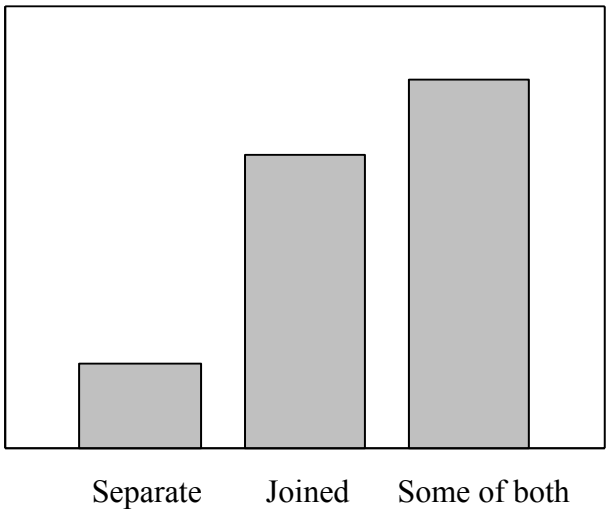

Figure 36. Relationship between DHS and FEMA (GRAPH)

7. Opinion about Emergency Management Funding:

Funding questions always gather opinions. This subsection consists of three separate questions about funding levels and where emergency managers feel additional funding should be applied.

First, survey participants were asked about the level of support they have for their programs. Their responses are summarized in Table 39.

Q: What is the Level of Support for Your Emergency Management Program?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Under-funded	1	152	64.7
Funded appropriately	2	81	34.5
Over-funded	3	2	.9
(Missing: did not specify)	0	2	--

Table 39: Level of Support for Emergency Management

This table shows 152 survey participants (64.7%) feel their programs are under-funded. Only 81 participants (34.5%) feel their programs are funded appropriately while two participants feel their programs are over-funded. Two individuals elected not to express an opinion. This data is expressed graphically in Figure 37.

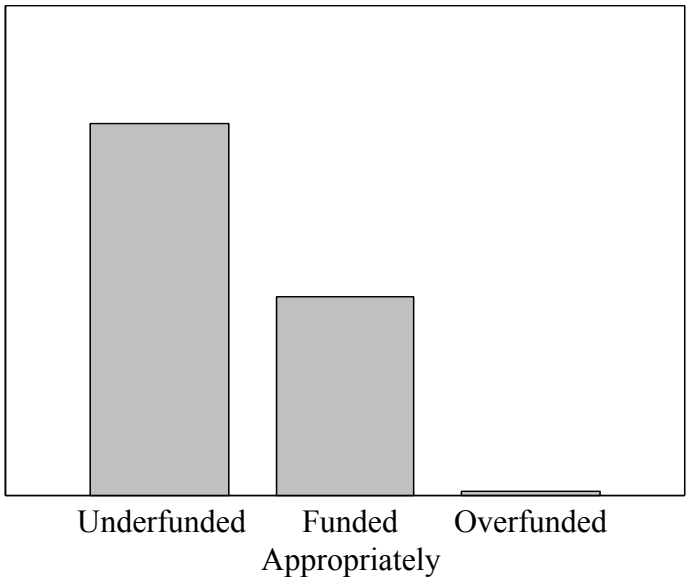

Figure 37. Program Financial Support Level (GRAPH)

Secondly, survey participants had the opportunity to indicate which parts of their programs could benefit from an increase in funding. Their responses are summarized in Table 40.

Q: Which of these areas would IMPROVE with additional financial support?		
RESPONSE	**FREQUENCY**	**%**
Personnel	198	83.5
Equipment	149	62.9
Training	163	68.8
Other needs	40	16.9

Table 40: Program improvements with additional funding

From the survey population group of 237, 198 survey participants (83.5%) indicate personnel could benefit from increased funding, 149 participants (62.9%) feel equipment purchases could be made, and 163 participants (68.8%) see an increase in training support. A smaller group of 40 participants (16.9%) feel the additional funding could support other needs in their programs.

Similarly, the survey participants were asked what parts of their programs would not benefit from additional financial support. Their responses are summarized in Table 41.

Q: Which of these areas would NOT IMPROVE with additional financial support?		
RESPONSE	**FREQUENCY**	**%**
Personnel	25	10.5
Equipment	35	14.8
Training	37	15.6
Other needs	11	4.6

Table 41: Program components not improved with additional funding

From the survey population group of 237, only 25 survey participants (10.5%) indicate personnel would not benefit from increased funding, 35 participants (14.8%) feel equipment would not be an area to benefit, and 37 participants (15.6%) cannot see an increase in training support. Only 11 participants (4.6%) feel additional funding would not provide the support for other needs in their programs.

8. Opinion about New Positions in Emergency Management:

Survey participants were asked their opinion about potential growth of their occupation. A summary of their responses is shown in Table 42.

Q: Do you anticipate new positions for Emergency Management personnel?			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Yes	1	52	22
No	2	57	24.2
Desirable but isn't going to happen	3	126	53.4
Not desirable but likely to happen anyway	4	1	.4
(Missing: did not specify)	0	1	--

Table 42: Potential for new Emergency Management positions

In response to this question where emergency managers were asked their opinion about new positions opening for an increasing number of new personnel, 52 participants (22% of those who responded) answer "yes" while 57 participants (24.2%) answer "no." The majority, however, a group of 126 participants (53.4%) feel it is desirable for new positions to be created but do not feel it is likely to happen. A much smaller group, 4 participants (.4%) don't find the prospect desirable but feel it is likely to happen anyway. This data is presented in graphic form by Figure 38.

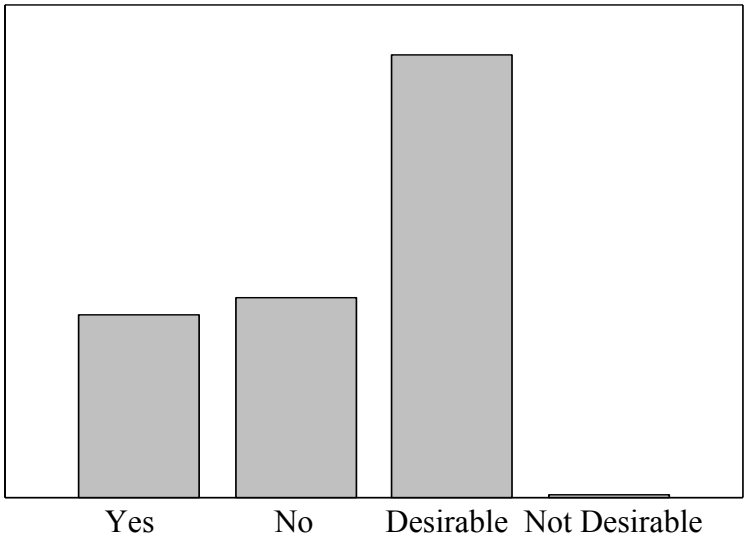

Figure 38. Anticipation of EM Personnel Increases (GRAPH)

E. Summary

The source data for the information presented in this chapter is afforded the protections from disclosure outlined in Appendix A (Human Subjects Review) as is the database where the information is compiled. Participants were assured their identity would be safeguarded and their responses would remain anonymous. Their voluntary completion of the survey and its subsequent return constitutes their informed consent to participate. This agreement is contained in Appendix C (Survey Packet Materials).

The information presented should be generalized across the sample population of survey participants without any attempt to determine either the identity or the responses of any individual emergency manager.

V. ANALYSIS OF THE FINDINGS

A. Introduction

The analysis is an opportunity to explore the meanings of the findings and to interpret them in the context of the study. For this study, the analysis provides the answer to the research question "Do Emergency Managers feel confident their education, training, and practical experiences enable them to meet the challenges taking place in emergency management in a post-9/11 world?" as expressed by the 237 responders to the survey and as a representative sample of emergency managers across the county, reflects the opinions of the occupational field. There are four components of this chapter, looking first at a demographic portrait of a typical emergency manager and followed by individual reflection toward experience, training, and education in the career of the typical emergency manager. Additionally, cross-tabulations of specific variables from the survey will provide a forecast of potential changes expected as the population group is altered due to age, retirement, and career enhancements.

The emergency managers who participated in this study responded in the aftermath of one of the most devastating series of events in United States history: the impact of Hurricane Katrina on the Gulf Coast, the subsequent breach of levees around the City of New Orleans, and the following impact of Hurricane Rita a short time later. Undoubtedly, even if they were half a continent away, many emergency managers may have approached the survey while considering for themselves what they might do if such a series of events were to occur on "their watch." Of course, for many of them, it did. However, the events did not prevent even these emergency managers from completing the survey and returning it so their responses could be included in this study.

B. A Typical Emergency Manager

The self-portrait "painted" by the survey respondents is insightful. A typical emergency manager is characterized below and the reported data round out the description and give this individual some dimension and character with the corresponding variables and codes from the database. The mode is the primary measure of central tendency, since most of the demographic variables are categorical, with occasional use of median and mean where appropriate

The typical emergency manager in the United States is a 46-year old (age = 4.08 <mean age>), white (race = 1) male (gender = 2) with a Bachelor's degree (school = 4) who has been employed in emergency management for 15 yrs (yr_svc = 4) at the county or parish level (jur_type = 3). He holds a state-level certification in emergency management but has nearly completed the requirements for the CEM® designation from the International Association of Emergency Managers (cert = 2+4 and 3+4 <bi-modal>). He makes just under $60,000 per year (salary = 5.36 <mean salary>).

His training in emergency management includes the FEMA Professional Development Series (em_tng = 3), some advanced courses (em_tng = 4), and several FEMA Independent Study courses (em_tng = 5). Additionally, he has made a trip to the Emergency Management Institute in Emmitsburg, Maryland (em_tng = 6).

The typical emergency manager lives and works in a community with a history of emergency and disaster incidents. The community has experienced events when only local disaster declarations (actual = 1) have been made but have also experienced state-level (actual = 2) and federal disaster declarations (actual = 3) during his tenure. Among the events his community prepares itself for are: natural hazards, such as floods, fires, tornados, and other severe weather (natural = 1,2,5,6 <natural hazards>); technical hazards, such as hazardous materials spills, transportation accidents, infrastructure collapse, power failures, and water contamination (tech = 1,2,3,4,5 <technological hazards>); and social-impact hazards, such as terrorism and bioterrorism (social = 3,4 <social-impact hazards>). Among the preparedness measures his community conducts are full-scale exercises. These are scheduled every other year (fs_ex = 2) to insure critical actors understand their roles in emergency response and their responsibilities during times of need.

Since the experience on 9/11, the typical emergency manager has seen his duties increased (ch_duty = 1) in an updated and modernized organizational structure (ch_org = 1) but he does not feel threatened, limited, or pressured to improve his community's preparedness posture beyond what has already been accomplished (status = 2, limits = 2, pdeffect = 2).

The typical emergency manager feels strongly he belongs to a profession (proskill = 1) making a difference and feels strongly his occupation should be recognized as a profession (emprof = 1). And yes, he feels the pressure of being under-funded (em_spt = 1) and under-staffed but does not think either condition is going to change anytime soon (more_ems = 3).

There is one characteristic shared by all survey participants and a characteristic no one can avoid: age. This characteristic provides a method to separate the survey participants into manageable groups for analysis of their characteristics. While the cross-tabulation of age with any study variable could be a worthwhile project, it is beyond the scope of this research project to do all of them. However, those cross-tabulations providing greater insight to understanding the responses to the study question are conducted.

For instance, when gender is considered by age group, the results are summarized as shown in Table 43.

Gender Distribution by Age Group							
25-34		35-44		45-54		55 and over	
F	M	F	M	F	M	F	M
7	5	11	36	21	68	10	79

Table 43: Gender Distribution by Age Group

In the 25-34 age group, there are 7 females and 5 males. In the 35-44 age group there are 11 females and 36 males. The 45-54 age group presents the ratio of 21

females to 68 males while the 55 and over age group has 10 females to 79 males. These numbers are presented in graphic form by Figure 39.

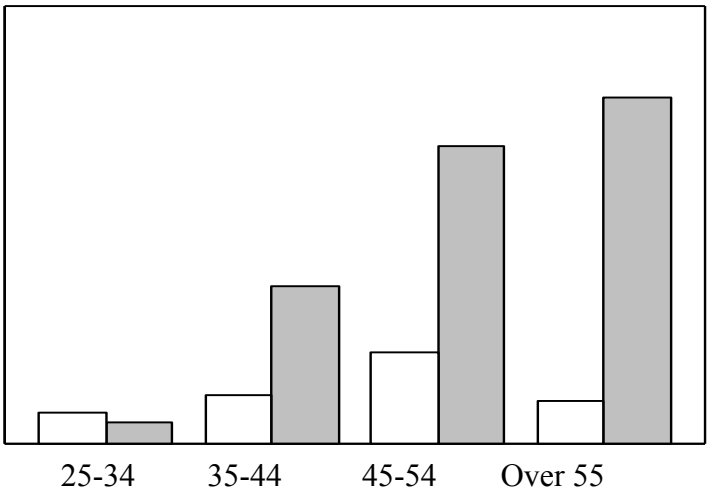

Figure 39. Gender Distribution by Age Group (GRAPH)

The ratio of men to women is no surprise for an occupation where men have dominated the field for many years and where many emergency managers were selected from retirees from one of the emergency services or from the military. But a subtle change has been taking place. The ratio is reduced in each of the age groups chronologically and has not only reached equality but also within the youngest group in this study, women now lead men in number. If gender equality has been reached and since gender is no longer a consideration during hiring, hiring or promotion selections can be based – as it should be – on the best qualified applicant. This is certainly an issue to address and review in subsequent studies.

As with gender, race or ethnic background is considered in this study. The cross-tabulation of race/ethnic groups by gender is often sought in studies where one group has held a dominant position for an extended period of time. Table 44 shows the results for this study.

Race/Ethnic Group distributed by Gender						
Race/Ethnic Group	No.	%	Male	%	Female	%
White	224	95.3	179	76.2	45	19.1
Black	6	2.6	6	2.6	0	0
Hispanic	2	.9	0	0	2	.9
Native American/Eskimo	3	1.3	1	.4	2	.9

Table 44: Race/Ethnic Group Distributed by Gender

There are 179 white males in the largest segment of this group (76.2%), followed by 45 white females (19.1%). The remaining segments show 6 black males (2.6%), 2 Hispanic females (.9%), 1 Native American or Eskimo male (.4%), and 2 Native American or Eskimo females (.9%). As with gender, the extension of the emergency

management field provides incredible growth potentials among racial and ethnic minorities. As with gender, since race would not be considered in the selection process for a new emergency manager or for promotion opportunities, selection is made on qualifications. Realization of this potential should serve as encouragement for everyone – male and female, ethnic or racial minorities, or members of any group – to seek employment in emergency management if they have such an interest.

Another grouping is achieved by recoding the years of service in emergency management (yr_svc) variable to reflect stages of a career (carlvl) and performing a cross-tabulation with age. This gives insight into the point in a person's career when he or she is drawn to emergency management.

The recoding of the responses into these groups distinguishes those who are in the early phase of careers in emergency management, those who are at the mid-point of their careers in emergency management, and those in the latter phase of their career in emergency management. The recode produces the data in Table 45:

Stages of Career			
RESPONSE	**CODE**	**FREQUENCY**	**%**
Early Stage (Less than 10 years)	1	69	29.1
Mid-Career Stage (10 years but less than 20)	2	91	38.4
Latter Stage (Over 20 years)	3	77	32.5

Table 45: Stages of Career

This table shows that 69 of the survey participants (29.1%) have less than 10 years of service in the emergency management field and may be considered in the early stages of their emergency management career, 91 participants (38.4%) are in the mid-range of their careers, and 77 participants (32.5%) are in the latter stage of their careers. This latter group would also tend to indicate those who are approaching retirement and whose positions would be available for continued growth of the career field. Figure 40 shows this distribution by Career Stage in graphic form.

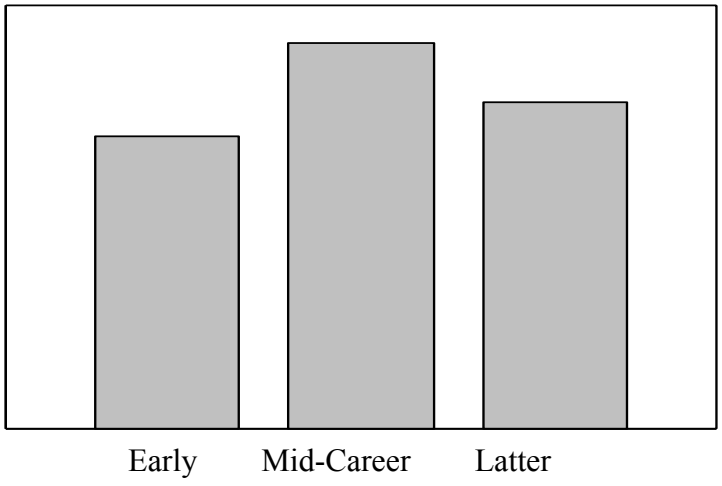

Figure 40.
Stages of Career in Emergency Management (GRAPH)

When Stage of Career is considered by age group, the results of the cross-tabulation are shown in Table 46.

Stage of Career in Emergency Management by Age Group											
25-34			35-44			45-54			OVER 55		
<10	10-20	>20	<10	10-20	>20	<10	10-20	>20	<10	10-20	>20
10	2	0	24	17	6	21	34	34	14	38	37

Table 46: Stages of Career in Emergency Management by Age Group

The 25-34 age group includes 10 survey participants who have less than 10 years of career service in emergency management and 2 participants with service in the 10-20 year category, although due to age alone it is probably closer to the 10 year mark than the 20 year mark. The 35-44 age group includes 24 survey participants in the less than 10 years of career service, 17 participants in the 10-20 year category, and 6 in the over-20 year category. The 45-54 year age group has 21 participants in the less than 10 year category, 34 in the mid-range, 10-20 year category, and another 34 in the over-20 year category. In the over-55 age category, 14 participants have less than 10 years of career service, 38 have from 10-20 years of career service, and 37 have over-20 years in service as emergency managers. This data is presented in graphic form by Figure 41.

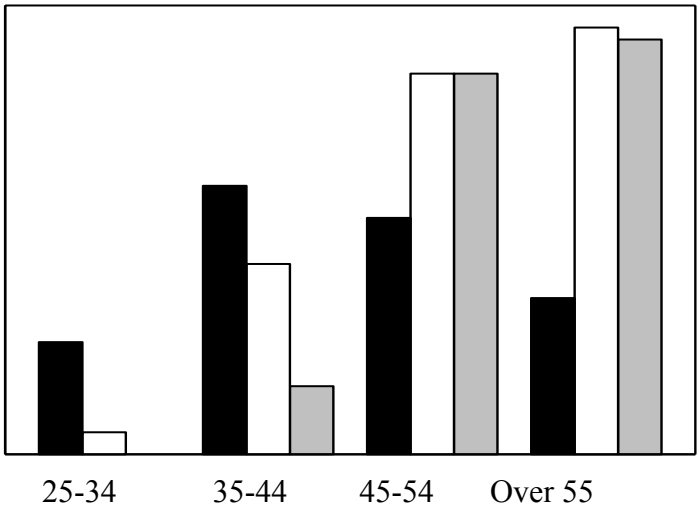

Figure 41. Years in Emergency Management by Age Group (GRAPH)

The graph displays several important characteristics. The black columns represent those who have recently (within the last ten years) have begun a career in emergency management. Even though it shows a declining rate after the initial surge, the graph does show individuals entering the field at all ages. The same can be said of the white columns, only these individuals made the switch earlier in their careers. The increase over time indicates those who are drawn to the profession at some mid-point

in their career path and remain in emergency management over an extended period. The individuals represented by the gray columns are most likely those who selected emergency management very early in their careers and who are now leaders in the profession. Many of these individuals, however, are reaching retirement age and will take a large piece of the occupational history with them. It becomes imperative on those who follow to capture this history and not only preserve it but also pass it on to the new generation of leaders.

This section has described the typical emergency manager who has responded to a series of questions regarding his professional development and his feelings about his career field. The identified "he" shares them in the remaining parts of this chapter.

C. Confidence with Practical Experience

Confidence with practical experience is the comfort level emergency managers feel about the contribution their experience has made to their careers in their current positions combined with how much it would contribute toward achieving a promotion if one were offered. Practical experience reflects the years of service, the participation in actual disaster events, and the conduct of full-scale exercises.

Two survey questions and findings (cur_pex and pro_pex) provide the raw data regarding the practical experience factors which are now recoded to reflect either enthusiasm or concern about the contribution they make to the current careers of emergency managers (curpex2) and possible promotion opportunities (propex2). The first recoding shows a group of 15 (6.4%) who do not place much importance on their practical experience and a larger group of 221 (93.6%) who enthusiastically feel practical experience is an important contributor to their current position. Figure 42 displays the division between the two groups.

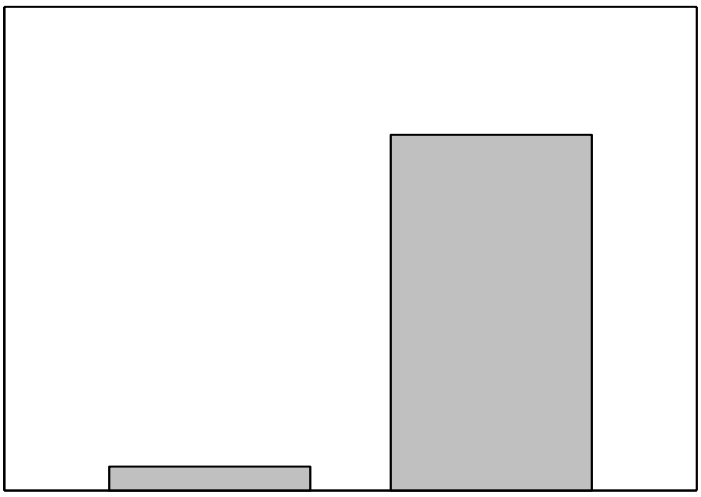

Table 42. Importance of Practical Experience to Current Position (SUMMARY)

In a similar way, the second recoding divides the values about a promotion opportunity into two groups to distinguish between those who feel their experience would not help them and those who feel their experience would help produces the

results shown in Figure 43 and is detailed here: 226 of those that responded (96.2%) say their practical experience would help them while only 9 (3.8%) say it would not.

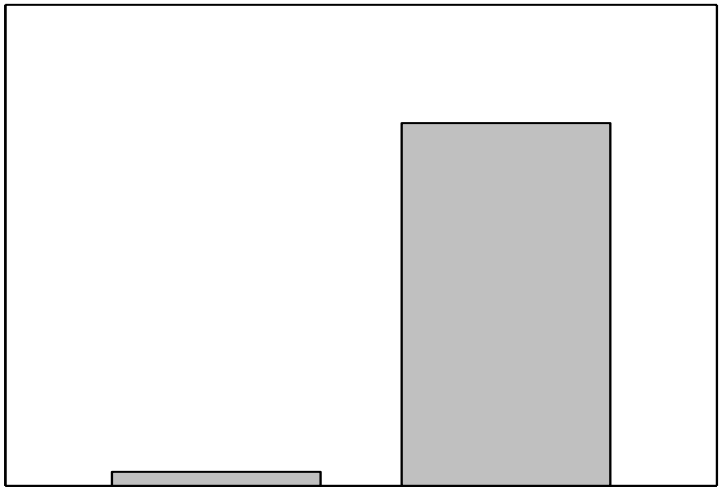

Figure 43
Importance of Practical Experience in Seeking a Promotion (SUMMARY)

The confidence in practical experience by nearly all survey participants would not be substantially enhanced by any cross-tabulations or further recoding. Overall, emergency managers express great confidence in their practical experience. From the group of 237 survey participants, 122 consider their practical experience to be their most important asset and 156 feel their practical experience would significantly help them in the selection process for a promotion.

Regarding practical experience, the typical emergency manager recommends anyone looking at emergency management as a career field should complete three years of related experience prior to seeking a position as an emergency manager (rec_pex = 3). This experience could be in one of the emergency services, in the military, or in an agency such as the American Red Cross or a local search-and-rescue group, which typically participate in local emergency exercises. This service could be paid or volunteer but would provide a valuable learning experience.

D. Confidence with Training

Confidence with emergency management training is the comfort level emergency managers feel about the contribution their training has made to their careers in their current positions combined with how much it would contribute toward achieving a promotion if one were offered. Training includes resident and non-resident FEMA courses, state or locally sponsored courses and workshops, and home-study courses.

Two survey questions and findings (cur_tng and pro_tng) provide the raw data regarding the emergency management training factors which are now recoded to reflect either enthusiasm or concern about the contribution they make to the current careers of emergency managers (curtng2) and possible promotion opportunities (protng2). The first recoding shows a group of 21 (8.9%) who do not place much importance in their training and a larger group of 216 (91.1%) who enthusiastically feel training is an important contributor to their current position. Figure 44 displays the division between the two groups.

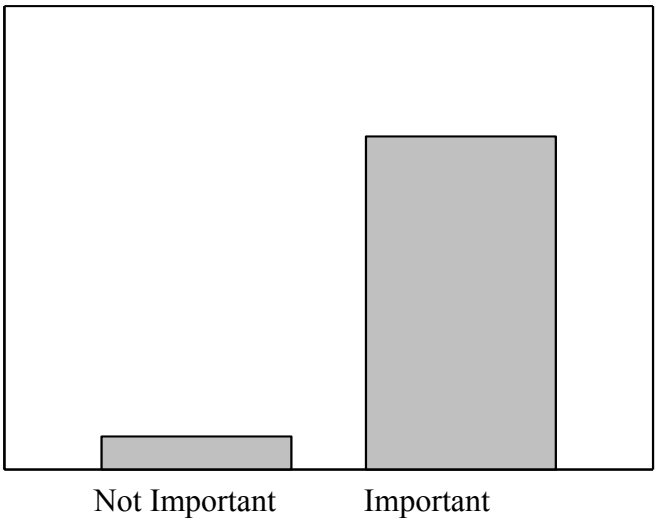

Figure 44. Importance of EM Training to Current Position (SUMMARY)

In a similar way, the second recoding divides the values about a promotion opportunity into two groups to distinguish between those who feel their emergency management training would not help them in seeking a promotion and those who feel their training would help in seeking a promotion produces the results shown in Figure x45and is detailed here: 219 of those who responded (92.8%) say their emergency management training would help them while only 17 (7.2%) say it would not.

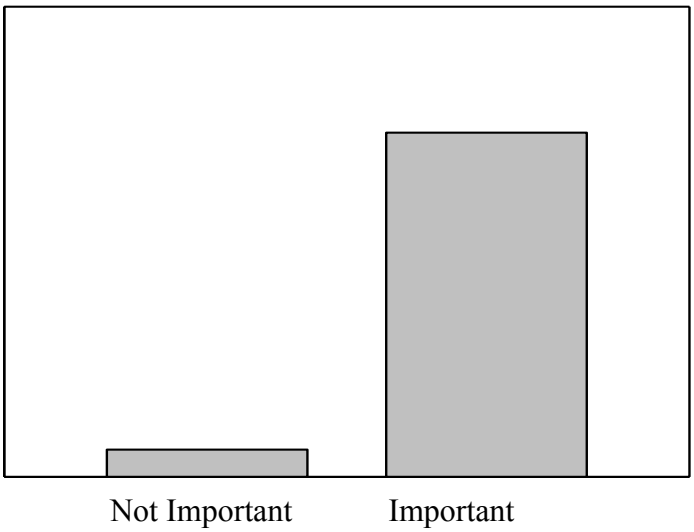

Figure 45. Importance of EM Training in Seeking a Promotion (SUMMARY)

The confidence in training by nearly all survey participants is nearly as strong as the confidence they feel about their practical experience and would not be substantially enhanced by any cross-tabulations or further recoding. Overall, emergency managers express great confidence in their training, just as they have in their practical experience. From that same group of 237 survey participants, 174 consider training to be their most important asset and 106 feel their training would significantly help them in the selection process for a promotion. Some survey

participants marked two areas as equally important which accounts for the high numbers in two categories.

Regarding emergency management training, the typical emergency manager recommends completing FEMA's Professional Development Series (median value) and taking several advanced courses as an introduction to the profession (modal value).

E. Confidence with Education

Confidence with formal education is the comfort level emergency managers feel about the contribution their education has made to their careers in their current positions combined with how much it would contribute toward achieving a promotion if one were offered. Formal education reflects the achievement of a diploma or academic degree from an accredited school.

Two survey questions and findings (cur_ed and pro_ed) provide the raw data regarding formal education which are now recoded to reflect either enthusiasm or concern about the contribution it makes to the current careers of emergency managers (cured2) and possible promotion opportunities (proed2). The first recoding shows a sizable group of 112 (47.3%) who do not place much importance on their education and only a slightly larger group of 125 (52.7%) who enthusiastically feel education is an important contributor to their current position. Figure 46 displays the nearly-equal division between the two groups. This is in sharp contrast to the graphs of both practical experience and emergency management training.

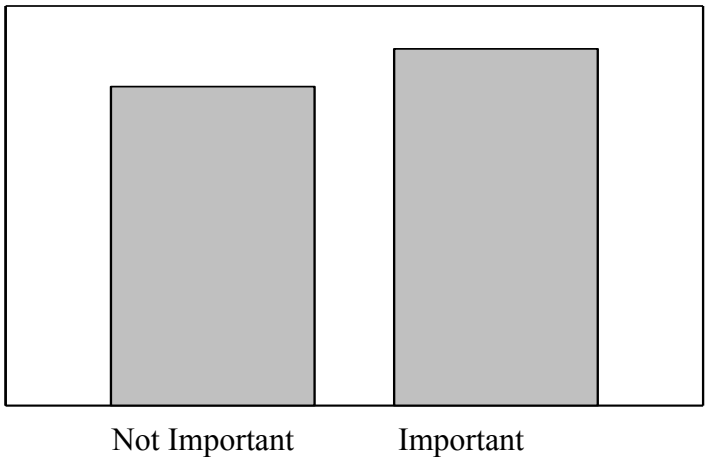

Figure 46. Importance of Education to Current Position (SUMMARY)

Secondly, the values for promotion opportunities were recoded into two groups to distinguish between those who feel their education would not help them in seeking a promotion and those who feel their education would assist them with a promotion opportunity. This, too, produces a different result from either training or experience: 52 participants (21.9%) feel their education would not assist them in seeking a promotion vs. 184 participants (77.6%) who feel it would. Figure 47 displays this sharp division between the two groups.

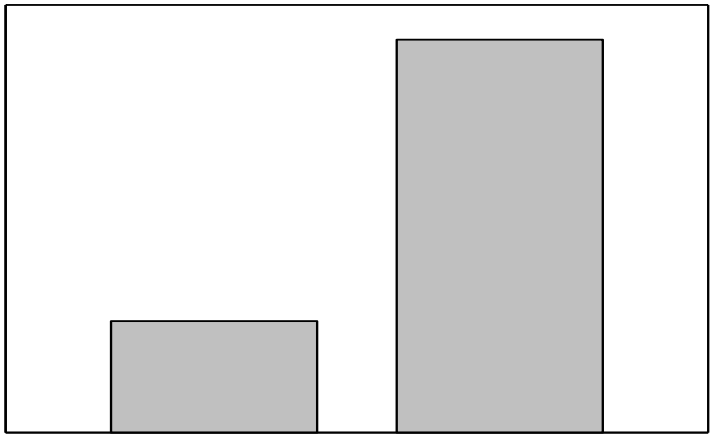

Figure 47. Importance of Education in Seeking a Promotion (SUMMARY)

The confidence in formal education by the emergency managers who participated in this study is substantially less than what they feel for either training or experience. The use of cross-tabulation and recoding of the study variables helps to explain some of the reasons this occurs.

When education level is considered by age group, the results are summarized as shown in Table 47.

Education Level Distribution by Age Group															
25-34				35-44				45-54				OVER 55			
HS	AA	BA	MA	HS	AA	BA	MA	HS	AA	BA	MA	HS	AA	BA	MA
0	1	3	8	7	11	21	8	8	18	34	29	10	24	31	24

Table 47: Education Level Distribution by Age Group

In the 25-34 age group, 1 participant indicates 2-yrs of college, 3 participants indicate 4-yrs of college, and 8 participants indicate graduate-level education. In the 35-44 age group, 7 participants indicate a high school education, 11 indicate 2-yrs of college, 21 indicate 4-yrs of college, and 8 indicate graduate-level education. In the 45-54 age group, 8 indicate a high school education, 18 indicate 2-yrs of college, 34 indicate 4-yrs of college, and 29 indicate graduated-level education. In the Over-55 age group, 10 replied they have completed a high school education, 24 have completed 2-yrs of college, 31 have completed 4-years of college, and 24 have completed graduate-level education.

This is presented in graphic form by Figure 48.

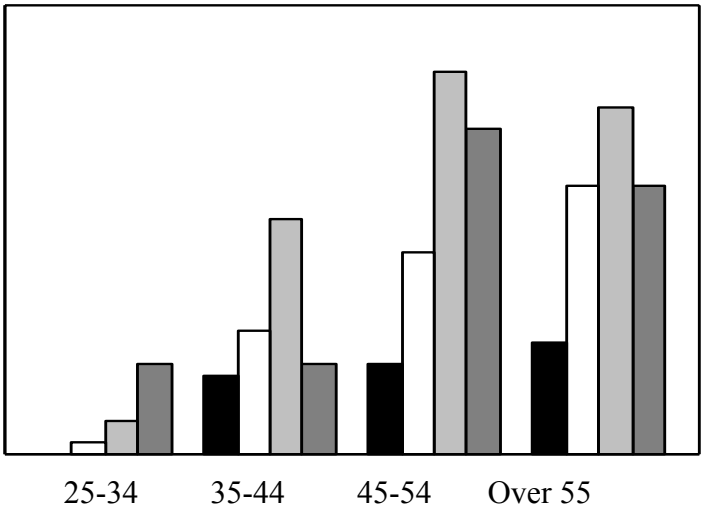

Figure 48.
Distribution of Education by Age Group (GRAPH)

Recoding the education level (school) responses into two groups to distinguish between them shows a 2-to-1 advantage for those who have (67%)completed a 4-yr degree program over those that have not (33.3%). This is shown in Figure 49.

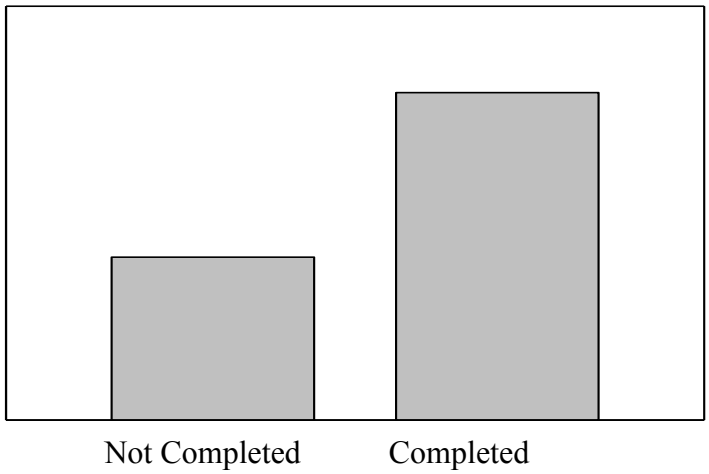

Figure 49.
Completion of 4-yr College (GRAPH)

When summarizing this educational achievement difference and distributing it by age group, the results shown in Table 48 show a distinctive pattern. In the 25-34 age group, only 1 participant had not completed a 4-yr degree but 11 participants have for a percentage ratio of 8.3% to 91.7%. In the 35-44 age group, 18 participants have not yet completed a 4-yr degree but 29 participants have for a percentage ratio of 38.3% to 61.7%. In the next group, the 45-54 age group, 26 participants have not completed a 4-yr degree while 63 have for a percentage ratio of 29.2% to 70.8% and in the over-55 age group, 34 have not completed a 4-yr degree and 55 have for a percentage ratio of 38.2% to 61.8%. While those in the youngest age group comprise the fewest number of individuals, they show the highest ratio of those who have achieved a 4-yr degree over those who have not.

4-yr Degree Awarded by Age Group							
25-34		35-44		45-54		OVER 55	
NO	YES	NO	YES	NO	YES	NO	YES
1	11	18	29	26	63	34	55
Percentage by Age Group							
8.3	91.7	38.3	61.7	29.2	70.8	38.2	61.8

Table 48: 4-yr Degree Awarded by Age Group

As with many other fields, especially those desiring to professionalize, the value of a college education is beginning to unfold. In every other age group in this study, there are large numbers of survey participants who have completed 4-yr degree programs and many with advanced degrees as well as a large number of individuals who have achieved their level of success without pursuing a degree. But in each case, there are more degree holders than non-degree holders. This is presented in graphic form by Figure 50.

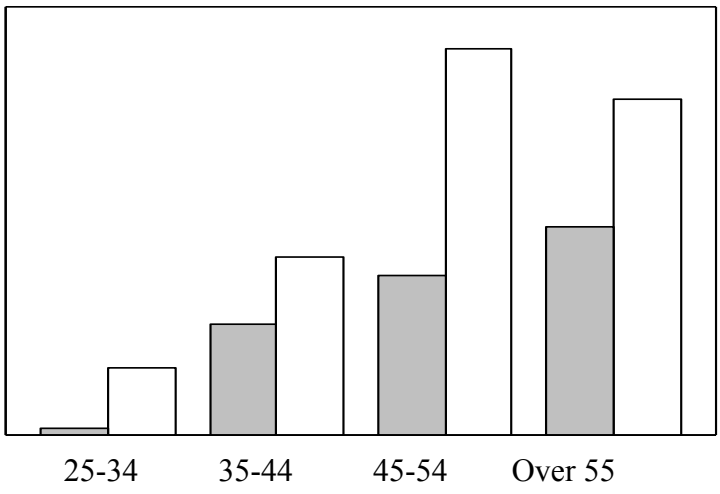

Figure 50
Distribution of 4-yr Degree by Age Group
(GRAPH)

Overall, emergency managers fail to express the same level of confidence in their education that they expressed about the other two considerations. From that same group of 237 survey participants who felt so good about their training and experience, only 11 consider education to be their most important asset. Even with this lack of confidence, 82 survey responders still feel their education would significantly help them in the selection process for a promotion.

Analyzing the value of education is more difficult than analyzing either experience or training because those factors tie directly to the field of emergency management whereas education, until recently, has not focused on specific emergency

management topics. What this study did not examine was the fields of study the responders pursued in college prior to their appointments in emergency management and this limited the scope of the study to the broad aspect of education in general. However, one glimpse into what emergency managers feel about education comes in their recommendations as presented by the typical emergency manager. He recommends to those who are just entering the field of emergency management to complete a 4-yr degree (rec_ed) and overwhelmingly, suggests they select an integrated academic curriculum (crs_wk).

F. Summary

The way communities view their emergency managers is changing, just as emergency managers, themselves, are changing. Communities may find themselves integrating emergency management into mainline public administration and governance while schools of public administration are beginning to present courses in disaster management, continuity of government, mitigation, and personal preparedness with concerns for liability, protection of life and property, and "doing good works." Questions are being asked and answers are provided in many different venues.

The changes emergency managers must face in the future include those brought about by the question asked in this study: "Do Emergency Managers feel confident their education, training, and practical experiences enable them to meet the challenges taking place in emergency management in a post-9/11 world?" which offers a challenge to them individually and as a group. As their responses to the survey reveal, the emergency managers who participated in this survey might say to their communities: "We are prepared to meet the challenges presented in a post-9/11 world, a post-Katrina world, or a post-any hazard world and we are getting better all the time. We are pursuing higher education and better training as well as learning more from events as they occur and we are recommending those who follow us in this emerging profession to do the same. We know what we have to do to mitigate from, prepare for, respond to, and recover from the hazards our communities face but we need your help and support to do so more effectively and efficiently."

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Introduction

With the findings made and the analysis presented, what remains are the conclusions drawn from the research, thoughts on the potential impact this study will help generate, and any personal recommendations for further investigations and studies of the emerging profession of emergency management. This includes the recommendations to students and academics who desire to look deeper into the position emergency management has taken as a discipline within public administration and those who wish to study the practice of emergency management as a separate field of academic pursuit. Since beginning this study, events around the world have focused attention on individual and governmental response to catastrophic disasters, increased terrorism around the globe, and even trends in the natural world, such as global warming and the continued loss of animal habitat precipitating changes in perceptions, procedures, and policies. The changes taking place – and the improvements implemented – will occur with the whole world in "high gear."

B. The Study Question

To explore the potential concerns the community may have regarding the qualifications of one of the groups entrusted with their safety, this study has asked: "Do Emergency Managers feel confident that their education, training, and practical experiences will enable them to meet the challenges taking place in emergency management in a post-9/11 world?"

Mostly, the study says "Yes" but in degrees of affirmation. It is not the field isn't changing, or individuals in their individual jobs aren't growing and becoming more capable all the time, or even the jurisdictions where these individuals work aren't adding additional challenges to their workload. These factors define the dynamic world of emergency management, a situation this study has emphasized several times. The participants in this study are much clearer about the role their training and experience have contributed compared to their education but these factors have been focused on emergency management subjects. Their education probably hasn't been to the same degree of intensity and concentration and another study and more discussions will, undoubtedly, discuss whether it should be.

Another study may also wish to ask the question: "Do the jurisdictions have the same measure of faith in the talents of their emergency managers that the emergency managers have in themselves?" Some jurisdictions have learned the hard way how much they must rely on their emergency managers. For many other locations, they are just becoming aware of an emergency management practitioner in their community with the knowledge, skills, and abilities to lead them through various calamities – and how committed these individuals are to doing so. It seems to be equally divided among those jurisdictions who had developed strong ties with emergency management in the past, those who are now learning the steps slowly, and those who have yet to take their first giant steps that direction. What has often been lacking in many jurisdictions and among the emergency managers themselves is the outside validation

of their status and the public recognition of that status by title, position, qualification, and monetary compensation.

To avoid further confusion about who we are talking about, the title of "emergency manager" needs to be reserved for an emergency management practitioner, an individual actually performing the duties and responsibilities in a jurisdiction, not by someone assigned or elected to a position who has traditionally been held accountable for the duties and has neither the inclination nor the qualifications to hold the position. A person placed in that situation needs to be properly informed of their responsibilities and seek the services of an emergency manager who is educated and trained to handle the actual responsibilities. This is similar to a budget manager in a community who will prepare the budget and pay the bills while the elected council spends the money. To accomplish this performance recognition, emergency managers must be properly educated and trained to a level acceptable to an outside organization willing to acknowledge and certify the individual's competence. Self-declarations of "expert" or "professional" status are generally regarded with the same level of confidence a community would have with "rain makers," "fortune tellers," or "snake oil salesmen." And maybe such accusations have merit.

If emergency managers want to professionalize their field, they must be willing to submit their credentials to the scrutiny of others as other professions do routinely. Emergency management practitioners should be required to become certified by an outside organization prior to receiving an appointment of responsibility. Individuals who are not competent enough to receive such outside certification probably do not deserve an appointment to a position of such impact. This certification should acknowledge the individual's completion of specific levels of formal education, appropriate training, and sufficient experience to justify their appointment and a peer evaluation by examination of their expertise. Political appointments are worthless if they are not based on the competence needed to formalize a program and perform the tasks demanded by it. In the same light, however, anyone appointed to such a position should assume the position as an "at will" assignment, willing to step down if they haven't maintained the trust and confidence of their community or the trust and confidence of the elected officials who rely on them.

Looking at the challenges presented in the Literature Review (Chapter II), emergency management practitioners may be well on their way toward professionalizing their career field and may wish to have a separate study determine where along the path they are. Formal education at the college level will certainly be under close scrutiny as one of the defining characteristics of a professional. As the academic programs develop and become better identified, the development of a specific curriculum will become necessary. Topics will include organizational dynamics and leadership for change, risk and cost analysis, and certainly, the sociological impact of disasters on individuals and communities. Certification is one way to acknowledge the achievements of individual practitioners along the path to professionalization but it falls short of licensing required of other professions. Without it, however, emergency management practitioners fall into the collective category of "pseudo-professionals," i.e., those occupations which are not recognized

as professions but have a strong desire to appear as such (Horn, 1978). With so many different definitions of the word "professional" around, it would not be difficult to find one to fit the emergency management career field but it would not substantially increase either the prestige or the recognition for the practitioner or the organizational bodies encouraging greater professional behavior. Emergency management practitioners should strive for the highest possible criteria in moving toward professional status.

Emergency managers need access to the primary decision-makers in the organization or jurisdiction being served as well as serving as a visible presence to the general public. Because the primary goals of emergency management are life safety, resource preservation and protection, community or organizational stabilization, and security, programs to inform the general public in these areas of concern should be encouraged and properly funded. The emergency management positions cannot exist in a vacuum or kept in a downstairs closet until they are needed. They should be clearly displayed on every organizational chart or directory and the emergency management personnel should be included in policy decision-making discussions. It would be appropriate, as well, if achievements and honors received by the emergency management personnel or their programs could be publicly announced and acknowledged.

To attract and retain an individual with the appropriate education, training, and experience, an appointment should come with an appropriate monetary compensation for the responsibilities the individual has accepted. This appointment should not be an "afterthought" or an "additional duty" placed on full-time employee with other responsibilities. An emergency manager should be paid sufficiently to allow him or her to live in the community he or she serves, not commute from somewhere else. Their loyalties should not be divided between where they live and where they work.

But where are these new emergency managers going to be coming from and are they as qualified as or better qualified than their predecessors? This question poses yet another direct challenge to the question first asked in this study. Confidence and competence will have to go hand-in-hand when the pressure to professionalize becomes more than just an organizational goal. Demands on newer emergency managers will be as new as the conditions they face have become. Since 9/11, emergency managers have had to focus on terrorism much more than they did in the past and in, literally, the wake of Hurricane Katrina, their attention was directed to mass evacuations. Disasters of varying degrees of intensity occur on a regular basis around the country and around the world, providing opportunities for future emergency managers to study their impacts and learn from experts in real-world situations.

One area of concern voiced among emergency managers is the relevance of their formal education. Is the academic world willing to take on an additional challenge as well? More college-level educational opportunities are needed to provide greater insights into the way people react to disaster conditions, their need for safety and security, and the desire to know what is going on around them. This may mean emergency managers must earn higher degrees and bring their experience into the classrooms, studying not only the practice but also the theories of their relationships

with their communities. Likewise, more social scientists need training and experience with emergency management subjects, such as preparedness, land use, response psychology, crisis management, and management of people and resources under extreme stress.

C. The Study Impact and Its Contributions

Not only will this study impact the profession in emergency management and the field of public administration as previously described but also the communities, agencies, and corporations where emergency managers are developing programs. There is already sufficient data to show places where successful emergency management programs exist have a lower exposure to risk and are able to return quickly to a normal way of life following a disaster than those who choose otherwise. This is measured in lower insurance costs, fewer personnel and monetary losses, greater peace of mind, and improved community quality of life.

As with any research project, the question should be asked: "Has this particular study advanced an understanding of its field of study?" Some may argue it has opened as many new questions as it has attempted to answer but, even then, asking new questions is advancement over not asking them at all. Still, this study has pointed out a weakness some of its practitioners have acknowledged in their own professional development and the study has encouraged the greater implementation of college-level courses and programs to help remedy the deficiency. In this way, it validates the decisions made by many schools of public administration and other academic disciplines to launch degree programs in emergency management and the further validates the support given to these programs by the Higher Education Project at FEMA's Emergency Management Institute in Emmitsburg, Maryland. The study has helped define the environment emergency managers are most familiar with and has reported their confidence in their existing, incident-specific training programs and experienced-based familiarity with disasters of all kind. In an uncomplicated manner, this study has explored some of the elements in the environment in which emergency management takes place and has reviewed the opinions of a representative sample of those who have made that environment their career.

This study has certainly addressed the practice of emergency management but what about the theory behind emergency management? Has this study added anything to the body of knowledge existing in the fields of public administration and emergency management or has it, perhaps, merely "opened the door" to such potential? The study has announced changes are taking place in the field, how it is perceived, and how the individuals employed in the field view their professional development so maybe encouragement is all that is needed. The pressure to professionalize; the world of risk, trust, and power; revolutionary change; and the potential of social impact – the four elements of the environment where emergency management was placed for this study – have been expanded simply because an effort has been made to include them in the process. But any study reaches further into the academic world than what it frames for itself. Identifying a new player in an organizational setting, one who understands the impacts and effects at the extreme ends of the operational cycle and who understands the needs and implication driving the organization to resume its

"normal operations" as quickly as possible, could add a different dimension to organizational theory. Other theories worth investigating at the farthest reaches of imagination could include public choice theory. Are emergency managers focusing their professional development solely to advance their own careers, i.e., their selfish best interests, or is their professional development a necessary requirement to assume their enhanced responsibilities and the benefit of their communities? And does such pursuit reach a point where no additional benefit to either the individual or the community justifies any additional effort or cost?

D. Recommendations for Further Study

Many features of this study can be viewed as baseline information for further academic research. In this way, a subsequent study, even one that uses the same or similar survey instrument, may be able to track changes taking place over the course of time. In five or ten years when emergency management has further matured, such a study will enable researchers to chart revisions or further enhancements including the presence of more women in the field, new courses of instruction, new training opportunities, and new experiences to improve the performance of current emergency management personnel and to train even newer members of this exciting career field.

The survey instrument provides information far in excess of what could be exhausted in a single study. However, one substantial part is missing from it and the recommendation to include the field of study of the practitioner's education would be encouraged. If it were known before the survey was sent out that such a difference in attitude regarding the level of confidence emergency managers placed in their education it would have been asked. Since the recommendation of the survey participants for new members joining the field is an integrated program, with such a low level of confidence they express in their own programs it can only been assumed their programs did not provide them the necessary level of integration they feel necessary to include.

Beyond what the current study suggests and the survey instrument provides, other researchers might also ask: "Will the practice of emergency management advance particular theories in organizational development, personnel management, or governance or will it contribute to new theories?" Or maybe the question will be: "Will bringing a fully-capable emergency manager to the decision-making table impact organizational theory applied in the public sector?" Someone else might ask: "Are they prepared to take a greater leadership role in their communities?" Future studies may address these questions or raise similar issues and if researchers are encouraged by what they find here, it is hoped this study may support them in their endeavors.

This study may also offer encouragement to other fields of study who desire to move toward professionalization. The model of emergency management less than a generation ago is very different from the model applied now and the outlook is for the current model to change once again to meet newer challenges. New occupations are developing and technology is expanding to create new ones all the time. This study should encourage inquiry into these fields as well – in their own way and facing their own challenges.

ENDNOTES

[1] Michael D. Selves, CEM, is the Director of Johnson County Office of Emergency Management (Kansas) and the 2007 President of the International Association of Emergency Managers. Mike is one of the leaders in promoting the profession and making changes to benefit individual emergency managers. He uses this particular observation often when speaking to groups to bring their attention to the uphill challenges emergency managers face everyday.

[2] Posting the "Findings" into the database was similar to conducting an interview with each of the individuals who participated in the survey. While they remain anonymous and for the most part, refrain from additional comments on the survey form, some individuals felt compelled to add responses beyond what was provided. When appropriate, these entries were added to the commentary. Many additional comments encouraged and supported the conduct of the research project and many appreciated the opportunity to participate.

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Appendix A

Human Subject Review Documentation

HSRRC Application Proposal for

THE CHANGING PARADIGM OF EMERGENCY MANAGEMENT: IMPROVING PROFESSIONAL DEVELOPMENT FOR THE EMERGENCY MANAGER

by
Robert E. Grist
Public Administration & Policy Doctoral Student
May 17, 2005

I. Project Title and Prospectus

The Changing Paradigm of Emergency Management: Improving Professional Development for the Emergency Manager

The purpose of this project is to determine the impact of the changes in the professional development of emergency managers and how it is correlated to the restructuring of emergency management program models throughout the United States. Since emergency management is regarded as the profession that provides the oversight in the community to insure the safety of individuals and their families as well as the continuity of the community's quality of life, the intent of this study is to demonstrate the importance of education, training, and practical experience in the professional development of emergency managers to the establishment and conduct of the programs. Public administrators, emergency management professionals, and the general public will benefit from the results of this research.

The means of collecting data will be a scientific survey of the men and women of the profession. From this data, the study will identify the principal concerns of emergency managers regarding their expertise to guide their communities through each phase of the emergency management process. These concerns will be matched to one of two existing program models currently in use in various jurisdictions throughout the United States. The views of emergency management practitioners regarding their own education, training, and experience as well as the recommendations they would make to incoming members of the profession will reveal their opinions regarding the changes they face in meeting the responsibilities of their profession.

II. Exemption Claim for Waiver or Review

Exemption is not claimed.

III. Subject Recruitment

The survey will be issued to a random list of 500 emergency managers, stratified by region, throughout the United States. The list of names of emergency managers is provided by the International Association of Emergency Managers (IAEM) from its membership roster.

The surveys will be conducted anonymously. Surveys will be processed in a manner similar to how mail-in ballots are processed in Oregon, using a second unmarked envelope which will be separated without review from the other materials returned. A second round of surveys or reminders may be required to maximize the response.

Mr. Grist recognizes that some emergency managers may designate a staff member to respond to the survey in this research project. He will make every effort to encourage the emergency manager to participate but he acknowledges that this is beyond his control.

IV. Informed Consent

The study will limit the research participants to adult subjects 21 years of age and older. The consent form will notify the recipients that their participation in this study is strictly voluntary, anonymous in nature, and the return of the completed survey instrument will constitute an implied consent to their participation. A copy of the survey instrument is included in the Appendix of this application.

There will be several items enclosed in the packet of information sent to prospective survey responders in addition to the consent form:

1) A cover letter will introduce Mr. Grist to other emergency managers, tell them the purpose of the survey, explain how the information will be used, and encourage their participation. He will also explain how he obtained their names, what steps he has taken to insure their privacy, and emphasize their participation is strictly voluntary. Mr. Grist's contact information will be included to allow any responder to ask for clarification or to confirm the legitimacy of the research project.

2) The survey instrument.

3) A plain, unmarked security envelope will allow respondents to complete the survey and seal it for its return.

4) An oversized, self-addressed, stamped envelope for the return of the survey materials will also be provided.

After approximately 30 days, Mr. Grist will send reminder cards to each individual who was originally sent a survey to ask them again to participate. Everyone will receive such a reminder since the surveys will be returned anonymously and there will not be a way to distinguish between those who have responded and those who have not. At the end of another 30 days, the survey instruments will be processed and analyzed. When a survey is returned, the security envelope will be separated from all other materials. These materials will be shredded to preserve the anonymous nature of the survey instrument.

V. First-Person Scenario

"I received a packet in today's mail, asking me to participate in a research project in emergency management. I reviewed the materials and found that it was a subject that I could make a significant contribution to for my jurisdiction so I decided to participate. I read the consent form which told me that my anonymous return of the survey instrument would constitute my implied consent to participate in this study. I proceeded to answer the questions on the survey and sealed it in the blank security envelope according to the directions I received.

I placed the sealed security envelope containing the completed survey into the self-addressed, stamped envelope that was addressed to Mr. Grist at Portland State University. This process took me approximately 25 minutes to complete.

I'm looking forward to learning the results of his study."

VI. Potential Risks and Safeguards

Participation in this research opens the research participants to two forms of risk: (1) damage to personal and professional reputation and political standing; and (2) emotional distress. Any harm from these two risks is expected to be rare and of minor impact. The data collection activities and the data analysis methods will include proactive steps and safeguards to eliminate and reduce these risks. With protections in place, the results of the research should provide benefits that outweigh the risks to the participants.

Damage to personal and professional reputation and political standing:

Expected Risk Level: A minor risk because of the public nature of government processes and the anonymous nature of the survey instrument.

As an unintended by-product of gathering data, the researcher could gather data of a sensitive nature. This data may present adverse descriptions of

- the performance and professional reputation of a government agency
- the performance and professional reputation of an organization or interest group
- the personal or professional performance and reputation of an individual

In another situation, a participant may purposefully manipulate or attempt to manipulate the researcher to further an agenda or to damage other members of the emergency management community.

Primary Safeguards: Mr. Grist will:

- Actively and aggressively ensure the anonymity of the research participants
- Clarify with the participants the researcher's active and deliberate use of anonymity and confidentiality in presenting information in the final report
- Carefully use public records to avoid using materials that might damage personal or agency reputations
- Use discussion sessions with the dissertation advisor to provide perspective and insights to maintaining the confidentiality of research participants.

The anonymity and confidentiality of the research materials (survey responses and public documents review) must be viewed as the primary antidote to prevent damage to institutional or personal reputations and political standing. Mr. Grist will only retain a list of the names, parent agencies, and addresses of those to whom surveys were sent. There will not be any listing of individuals who have responded.

To further assure confidentiality, the names of the parent agencies or organizations of the participants will not be identified on any data collection forms or in any transcripts, analysis, or research reports. Any information collected subsequent to the survey by any other means including interviews, anecdotal insights, or a direct quote from any individual, will require obtaining a separate release.

The researcher will make every attempt to not impugn the reputation of any agency, organization, interest group, or individual. If necessary, the researcher will carefully confirm any allegations of inadequate performance through data sources in the public and historical record. Discussions with the dissertation advisor will provide the perspective to understand the potential sensitivity of data and the situation.

While it is imperative to maintain the anonymity of the research participants, official records are in the public domain and may provide a major source of

documents for the research data. This information will never be linked to any responses or survey information.

Mr. Grist expects to make full use of official records but is quick to remind everyone that it will never be linked to information he has gathered through his own research instruments. To prevent misunderstandings of the limits of confidentiality, the researcher will remind the research participants in the informed consent form of this use of official records. Even with this reminder, the researcher will take great care in the presentation of quotes and other attributions drawn from the public record.

Emotions generated from recollections of experience:

Expected Risk Level: A minor risk that is rarely encountered. In exceptional cases intense embarrassment, anger, or other emotional distress may occur.

While the intent of the research is not to generate a particular emotional response, research participants may demonstrate responses with varying degrees of intensity. The anonymous collection of survey data should render no more embarrassment than voting.

In the vast majority of cases, the intensity of the emotions will be contained within the bounds of professional office conduct and public behavior. These emotional responses should have a short duration.

Primary Safeguards: The research will take several steps to protect research participants from negative and intense emotional reactions. In the instructions, Mr. Grist will stress:

- the voluntary nature of their participation
- that the participant may pass on any question

VII. Potential Benefits of the Proposed Study

The proposed research should benefit three groups: the survey responders, those who read the completed study regarding the importance of emergency management in their communities, and those members of the profession who desire the further development of an enhanced model of emergency management.

For the survey participants, the research provides a tool to examine their assumptions regarding their professional development, the future of their emergency management programs, and the day-to-day inter-agency agreements and relations brought into consideration with other professions and disciplines. Non-governmental participants may be able to use the results of this research to assess their relationships with government agencies and to review their perceptions and behavior during emergency operations.

This research is not designed to develop what might be a list of normative or universal recommendations for improved government and governance practices regarding professional development. However, it will provide a first step in a research program that could possibly provide some generalized recommendations. The survey analysis will provide some insights into the patterns of change in the conduct of emergency management programs and development programs for practitioners. With careful consideration of the framing, context, and situation presented in this study, practitioners and researchers in other parts of the country may be able to recognize similar or contrasting conditions in their own work. They might then be able to judge the applicability of this study's findings to other situations.

The most powerful benefit of this research may be in building evidence for a more complete model of emergency management, resulting in a more confidence in its leadership that encourages an effective practice of citizen involvement and community governance. If continued, this type of research could spark major changes in both administrative practice and academic curricula.

VIII. Records and Distribution

During the periods of data collection, data analysis, and writing, Mr. Grist will store project materials in a secure manner to ensure their confidentiality.

All physical forms of data will be stored in locked file cabinets at Mr. Grist's home, including the completed survey instruments provided by research participants. All electronic forms of data will be stored in password protected computer files and data bases. Copies of data on hard drives and on removable discs will use password protection. Back up copies of data files made on a periodic basis will be stored off site in Mr. Grist's bank safe deposit box.

Following the close of the study and the completion of the dissertation, all data gathered from the research participants will be stored in confidence by the principal researcher.

All transcribed data, analysis materials, project notebooks, and other study materials will be stored for three years beyond the defense date of the dissertation project in a locked file cabinet in Mr. Grist's home. At the completion of the dissertation project, all electronic documents will be transferred to CD-writable format. All hard drive versions of the collected data and analysis documents will be deleted from the hard drive. The CD-writable disks will be stored in locked cabinets or a safe deposit box.

In the event that the collected data is used in subsequent research, the collected data, analysis materials, and project notebooks will be retained for an additional three years beyond the date of publication of the subsequent research. After any subsequent storage periods, all recordings, field notes, computer files, and analysis with confidential information will be destroyed.

The partial and completed results of this research project may be presented at professional and academic conferences, and published in professional and academic journals. Alternatively, the results of this research may contribute toward the development of a book length manuscript. Additionally, the research findings may be presented to students as elements of instructional materials. In all reporting and writing the researcher will maintain the identity of the individuals who were asked to be research participants in confidence.

(Approval Letters and other correspondence with the HSRRC are not included in this file – they were kept in a separate file and scanned for inclusion in the final document – available for review at any time on request)

Appendix B

Survey Instrument

SURVEY QUESTIONNAIRE

This survey will help examine the relationship between the changes taking place in emergency management programs and the changes in the professional development of emergency managers. You are invited to complete the following questions as candidly as you wish. Please mark your answers clearly to each of the questions. Thank you. Bob Grist, CEM

AGE:
- ☐ Under 25
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55 and older

GENDER
- ☐ Female
- ☐ Male

EDUCATION COMPLETED
- ☐ Less than high school diploma
- ☐ High school diploma/GED
- ☐ 2 yr of College/Assoc. degree
- ☐ 4yr of College/Bachelor's degree
- ☐ Master's Degree/Doctorate

RACIAL/ETHNIC GROUP
- ☐ White
- ☐ Hispanic
- ☐ Black
- ☐ Native American/Eskimo
- ☐ Asian/Pacific Islander
- ☐ Other
- ☐ Do not wish to answer

TYPE OF EMPLOYMENT
- ☐ Full-time
- ☐ Part-time (Half-time or more)
- ☐ Part-time (Less than half-time)
- ☐ On-call (paid)
- ☐ Volunteer

YEARS IN EMERGENCY MANAGEMENT
- ☐ 0-4
- ☐ 5-9
- ☐ 10-14
- ☐ 15-19
- ☐ 20-24
- ☐ 25 and over

DO YOU HOLD ANY EMERGENCY MANAGEMENT CERTIFICATIONS?
- ☐ No
- ☐ Yes, State-level certification
- ☐ Yes, IAEM CEM®

YEARLY SALARY (Full-time equivalent – if I worked full-time, I would make:)
- ☐ Less than $25,000
- ☐ $25,000 to $34,999
- ☐ $35,000 to $44,999
- ☐ $45,000 to $54,999
- ☐ $55,000 to $64,999
- ☐ $65,000 to $74,999
- ☐ $75,000 to $84,000
- ☐ $85,000 and over

EMERGENCY MANAGEMENT TRAINING COMPLETED (Mark all that apply)
- ☐ None
- ☐ Some/Basic course
- ☐ FEMA PDS-series
- ☐ Advanced
- ☐ Other EMI home-study course(s)
- ☐ EMI resident course(s)
- ☐ Other formal/State sponsored course(s)

Jurisdictional Information (Employer)

TYPE OF JURISDICTION
- ☐ Federal
- ☐ State
- ☐ County/Parish
- ☐ Large City/Metropolitan Area
- ☐ Midsized city
- ☐ Small city/township
- ☐ Private employer
- ☐ Organization (Red Cross, etc)
- ☐ Other

REGION
- ☐ New England (ME, NH, VT, MA, CN, RI)
- ☐ Mid-Atlantic (NY, PA, NJ, DE, MD, WV, VA, KY)
- ☐ South/Gulf Coast (TN, NC, SC, GA, FL, AL, MS, LA)
- ☐ Great Lakes (OH, IN, IL, WI, MI, MN)
- ☐ Mid-America (IA, MO, AR, OK, KS, NE, SD, ND)
- ☐ South-West (TX, NM, AZ)
- ☐ Mountain (CO, WY, MT, UT, ID)
- ☐ Pacific (CA, NV, OR, WA, AK, HI)
- ☐ Other (GU, PR, VI, others)

PRINCIPAL NATURAL THREATS (Mark all that apply)

- ☐ Flood
- ☐ Fire
- ☐ Earthquake
- ☐ Hurricane
- ☐ Tornado
- ☐ Severe Weather
- ☐ Volcanic Eruption
- ☐ Drought
- ☐ Others _____

_____

PRINCIPAL TECHNOLOGICAL THREATS (Mark all that apply)

- ☐ Transportation (air, rail, auto, ship)
- ☐ HAZMAT
- ☐ Infrastructure collapse (bridge, roadway, buildings)
- ☐ Power Grid failure
- ☐ Water Shortage/Contamination
- ☐ Infrastructure inadequacies (storm sewers, roadways, etc)
- ☐ Others _____

_____

PRINCIPAL SOCIAL THREATS (Mark all that apply)

- ☐ Illness outbreak
- ☐ Civil Disobedience/Lawlessness
- ☐ Terrorism
- ☐ Bioterrorism (incl. agricultural)
- ☐ Others _____

_____

ACTUAL EMERGENCES DURING YOUR TENURE (Mark all that apply)

- ☐ Local emergency/disaster declaration No. _____
- ☐ State emergency/disaster declaration No. _____
- ☐ Federal emergency/disaster declaration No. _____

HOW OFTEN DO YOU HAVE FULL-SCALE EXERCISES

- ☐ At least every year
- ☐ At least every two years
- ☐ At least every three years
- ☐ Four or more years apart.
- ☐ Never

Considerations and Reflections

With respect to my current position, my **formal education**:

- ☐ Has played no role
- ☐ Has very little significance
- ☐ Might be considered an asset
- ☐ Is an important asset in my position
- ☐ Is my most important asset

With respect to my current position, my **emergency management training**:

- ☐ Has played no role
- ☐ Has very little significance
- ☐ Might be considered an asset
- ☐ Is an important asset in my position
- ☐ Is my most important asset

With respect to my current position, my **practical experience**:

- ☐ Has played no role
- ☐ Has very little significance
- ☐ Might be considered an asset
- ☐ Is an important asset in my position
- ☐ Is my most important asset

If I were seeking a promotion, I think my **formal education**:

- ☐ Would play no role in the selection process
- ☐ Might hurt my chances in the selection process
- ☐ Would neither hurt nor help my chances in the selection process
- ☐ Might help my chances in the selection process
- ☐ Would significantly help me in the selection process

If I were seeking a promotion, my **emergency management training**:

- ☐ Would play no role in the selection process
- ☐ Might hurt my chances in the selection process
- ☐ Would neither hurt nor help my chances in the selection process
- ☐ Might help my chances in the selection process
- ☐ Would significantly help me in the selection process

Regarding the opportunity for more **practical experience**, my jurisdiction:

- ☐ Would prefer we didn't have any more!
- ☐ Doesn't even like to conduct regular exercises
- ☐ Reluctantly participates when they must
- ☐ Looks to me to keep them well trained
- ☐ Encourages me to help other jurisdictions and bring back the lessons learned

If I were seeking a promotion, my **practical experience**:

- ☐ Would play no role in the selection process
- ☐ Might hurt my chances in the selection process
- ☐ Would neither hurt nor help my chances in the selection process
- ☐ Might help my chances in the selection process
- ☐ Would significantly help me in the selection process

Regarding the opportunity for more **formal education**, I find myself:

- ☐ Not anticipating it at any time
- ☐ Not considering it at this time
- ☐ Remaining neutral
- ☐ Encouraged by the prospect
- ☐ Will definitely be enrolling in the near future

Regarding the opportunity for more **formal education**, my jurisdiction:

- ☐ Would consider it a waste of time
- ☐ Would not encourage me to pursue it
- ☐ Would neither encourage nor discourage it
- ☐ Would encourage me to pursue it
- ☐ Would not only encourage me but also would assist me

Regarding the opportunity for more **emergency management training**, I find myself:

- ☐ Not anticipating it at any time
- ☐ Not considering it at this time
- ☐ Remaining neutral
- ☐ Encouraged by the prospect
- ☐ Will definitely be enrolling in the near future

Regarding the opportunity for more **emergency management training**, my jurisdiction:

- ☐ Would consider it a waste of time
- ☐ Would not encourage me to pursue it
- ☐ Would neither encourage nor discourage it
- ☐ Would encourage me to pursue it
- ☐ Would not only encourage me but also would assist me

Regarding the opportunity for more **practical experience**, I find myself:

- ☐ Struggling to find opportunities that would give me more practical experience
- ☐ Neither discouraged nor disappointed if nothing happens in my jurisdiction
- ☐ Developing several exercises a year to stay sharp
- ☐ Handling all the experiences I can manage in my own jurisdiction
- ☐ Looking for opportunities to share my expertise by helping other jurisdictions

Regarding **formal education**, I would recommend that individuals seeking employment in emergency management:

- ☐ Not concern themselves with it
- ☐ Should have at least a two-year degree
- ☐ Should have at least a four-year degree
- ☐ Should have at least a graduate degree

An individual in emergency management should:

- ☐ Not focus on a specific academic discipline
- ☐ Focus on an integrated academic program
- ☐ Focus on a scientific discipline
- ☐ Focus on a technical discipline
- ☐ Focus on a business discipline
- ☐ Focus on a social science discipline

Regarding **emergency management training**, I would recommend that individuals seeking employment in emergency management:

- ☐ Not concern themselves with it
- ☐ Should have a basic understanding of ICS and Emergency Management basics
- ☐ Should complete at least the Professional Development Series
- ☐ Should complete several advanced courses

An individual in emergency management should either:

- ☐ Develop an expertise in one or two response disciplines
- ☐ Become familiar with all emergency management specialties

Regarding **practical experience**, I would recommend that individuals seeking employment in emergency management:

- ☐ Not concern themselves with it – it will come in time
- ☐ Should have at least one year of volunteer or related experience
- ☐ Should have at least three years of volunteer or related experience
- ☐ Should have at least five years of volunteer or related experience
- ☐ Should have completed a career in another related discipline before applying for a position in emergency management

Do you consider emergency management a professional occupation or a skill occupation?

- ☐ Professional occupation
- ☐ Skill occupation

Do you support efforts to define emergency management as a profession?

- ☐ Yes
- ☐ No
- ☐ I am undecided

Have your duties substantially changed since 9-11?
- ☐ Yes
- ☐ No
- ☐ I am in a new position since 9-11

Has your organization substantially changed since 9-11?
- ☐ Yes
- ☐ No
- ☐ My organization began after 9-11

Do you consider yourself the "go to" person in your jurisdiction for emergency management information?
- ☐ Yes
- ☐ No

Does your jurisdiction consider you the "go to" person for emergency management information?
- ☐ Yes
- ☐ No

Has this been altered in any way by the events of 9-11?
- ☐ Yes
- ☐ No
- ☐ I am in a new position since 9-11

Have you had to increase the number of your training experiences since 9-11?
- ☐ Yes
- ☐ No
- ☐ I am in a new position since 9-11

Would your status in the community be increased by additional education, training, or experience?
- ☐ Yes
- ☐ No
- ☐ Not sure

Do you feel threatened, limited, or pressured by your current level of education, training, or experience?
- ☐ Yes
- ☐ No

Would additional education, training, or experience decrease these feelings?
- ☐ Yes
- ☐ No

Do you think emergency management has a role separate or joined to homeland security?
- ☐ Totally separate
- ☐ Joined
- ☐ Some of both

Compared to other important programs in your jurisdiction, how do you consider the support your program has?
- ☐ Under-funded
- ☐ Funded appropriately
- ☐ Over-funded

Which areas of your program do you feel could improve with additional financial support?
(Mark all that apply)
- ☐ Personnel
- ☐ Training
- ☐ Equipment
- ☐ Other _____

Which areas of your program do you feel would NOT improve with additional financial support?
(Mark all that apply)
- ☐ Personnel
- ☐ Training
- ☐ Equipment
- ☐ Other _____

Do you anticipate an increase in the number of personnel assigned in your jurisdiction to an emergency management position?
- ☐ Yes
- ☐ No
- ☐ Desirable but it isn't going to happen
- ☐ Not desirable but it looks like it will happen anyway

THANK YOU FOR COMPLETING THIS SURVEY!

Appendix C

Survey Packet Materials

(Survey Packet materials are not included in this booklet – they were kept in a separate file and scanned for inclusion in the final document – available for review at any time on request)

Appendix D

List of Variables

CATEGORY: DEMOGRAPHICS 1	
CHARACTERISTIC	**VARIABLE**
AGE	age
GENDER	gender
EDUCATION COMPLETED	school
RACIAL/ETHNIC GROUP	race
TYPE OF EMPLOYMENT	empmnt
YEARS IN EMERGENCY MANAGEMENT	yr_svc
EMERGENCY MANAGEMENT CERTIFICATION	cert
YEARLY SALARY	salary
EM TRAINING – NO TRAINING	em_tng1
EM TRAINING – SOME/BASIC LEVEL	em_tng2
EM TRAINING – FEMA PDS-SERIES	em_tng3
EM TRAINING – ADVANCED	em_tng4
EM TRAINING – OTHER EMI HOME-STUDY COURSE(S)	em_tng5
EM TRAINING – EMI RESIDENT COURSE(S)	em_tng6
EM TRAINING – OTHER FORMAL/STATE-SPONSORED	em_tng7
TYPE OF JURISDICTION	jur_type
REGION	region
NATURAL THREAT – FLOOD	natural1
NATURAL THREAT – FIRE	natural2
NATURAL THREAT – EARTHQUAKE	natural3
NATURAL THREAT – HURRICANE	natural4
NATURAL THREAT – TORNADO	natural5
NATURAL THREAT – SEVERE WEATHER	natural6
NATURAL THREAT – VOLCANIC ERUPTION	natural7
NATURAL THREAT – DROUGHT	natural8
NATURAL THREAT – OTHER	natural9

CATEGORY: DEMOGRAPHICS 2	
CHARACTERISTIC	**VARIABLE**
TECHNOLOGICAL THREAT – TRANSPORTATION	tech1
TECHNOLOGICAL THREAT – HAZMAT	tech2
TECHNOLOGICAL THREAT – STRUCTURE COLLAPSE	tech3
TECHNOLOGICAL THREAT – POWER GRID	tech4
TECHNOLOGICAL THREAT – WATER	tech5
TECHNOLOGICAL THREAT – INFRASTRUCTURE	tech6
TECHNOLOGICAL THREAT – OTHER	tech7
SOCIAL THREAT – ILLNESS OUTBREAK	social1
SOCIAL THREAT – CIVIL DISOBEDIENCE/LAWLESSNESS	social2
SOCIAL THREAT – TERRORISM	social3
SOCIAL THREAT – BIOTERRORISM	social4
SOCIAL THREAT – OTHER	social5
LOCAL EMERGENCY/DISASTER DECLARATION	actual1
STATE EMERGENCY/DISASTER DECLARATION	actual2
FEDERAL EMERGENCY/DISASTER DECLARATION	actual3
FULL-SCALE EXERCISE SCHEDULE	fs_ex

CATEGORY: STUDY-SPECIFIC	
CONSIDERATION	**VARIABLE**
OPINION OF FORMAL EDUCATION – CURRENT	cur_ed
OPINION OF EM TRAINING – CURRENT	cur_tng
OPINION OF PRACTICAL EXPERIENCE – CURRENT	cur_pex
OPINION OF FORMAL EDUCATION – PROMOTION	pro_ed
OPINION OF EM TRAINING – PROMOTION	pro_tng
OPINION OF PRACTICAL EXPERIENCE – PROMOTION	pro_pex
OPPORTUNITY FOR FORMAL EDUCATION – SELF	fut_ed1
OPPORTUNITY FOR FORMAL EDUCATION -- JURISDICTION	fut_ed2
OPPORTUNITY FOR EM TRAINING – SELF	fut_tng1
OPPORTUNITY FOR EM TRAINING – JURISDICTION	fut_tng2
OPPORTUNITY FOR PRACTICAL EXPERIENCE – SELF	fut_pex1
OPPORTUNITY FOR PRACTICAL EXPERIENCE -- JURISDICTION	fut_pex2
RECOMMENDATION FOR FORMAL EDUCATION	rec_ed
RECOMMENDATION FOR CURRICULUM	crs_wk
RECOMMENDATION FOR EM TRAINING	rec_tng
RECOMMENDATION FOR EM TRAINING FOCUS	em_focus
RECOMMENDATION FOR PRACTICAL EXPERIENCE	rec_pex

CATEGORY: VIEWS AND OPINIONS	
QUESTIONS	**VARIABLE**
DUTIES CHANGED SINCE 9-11?	ch_duty
ORGANIZATION CHANGED SINCE 9-11?	ch_org
CONSIDER YOURSELF THE “GO TO” PERSON?	goto1
DOES JURISDICTION CONSIDER YOU THE “GO TO” PERSON?	goto2
STATUS CHANGED SINCE 9-11?	ch_911
INCREASED TRAINING SINCE 9-11?	ch_tng
WOULD STATUS CHANGE WITH MORE ED/TNG/PEX?	status
FEEL THREATENED/LIMITED/PRESSURED BY ED/TNG/PEX?	limits
WOULD THESE FEELING DECREASE BY MORE ED/TNG/PEX?	pdeffect
IS EM PROFESSION OR SKILL OCCUPATION?	proskill
SUPPORT EM PROFESSIONALIZATION?	emprof
IS EM DISTINCT FROM HOMELAND SECURITY?	hs_role
SUPPORT FOR EM?	em_spt
WOULD ADDITIONAL FUNDING IMPROVE – PERSONNEL?	pgm_per
WOULD ADDITIONAL FUNDING IMPROVE – TRAINING?	pgm_tng
WOULD ADDITIONAL FUNDING IMPROVE – EQUIPMENT?	pgm_eqt
WOULD ADDITIONAL FUNDING IMPROVE – OTHER?	pgm_x
WOULD ADDITIONAL FUNDING NOT IMPROVE – PERSONNEL?	pgm_perx
WOULD ADDITIONAL FUNDING NOT IMPROVE – TRAINING?	pgm_tngx
WOULD ADDITIONAL FUNDING NOT IMPROVE – EQUIPMENT?	pgm_eqtx
WOULD ADDITIONAL FUNDING NOT IMPROVE – OTHER?	pgm_xx
ANTICIPATE INCREASE IN EM PERSONNEL IN JURISDICTION?	more_ems

Appendix E

The Coding of Variables

CATEGORY: DEMOGRAPHICS 1		
VARIABLE	**RESPONSE**	**CODE**
age	Did not specify	0
	Under 25	1
	25 – 34	2
	35 – 44	3
	45 – 54	4
	55 and older	5
gender	Did not specify	0
	Female	1
	Male	2
school	Did not specify	0
	Less than high school diploma	1
	High school diploma/GED	2
	2 yr of College/Assoc. degree	3
	4 yr of College/Bachelor's degree	4
	Master's degree/Doctorate	5
race	Did not specify	0
	White	1
	Hispanic	2
	Black	3
	Native American/Eskimo	4
	Other	5
empmnt	Did not specify	0
	Full-time	1
	Part-time (Half-time or more)	2
	Part-time (less than half-time)	3
	On-call	4
	Volunteer	5

CATEGORY: DEMOGRAPHICS 2		
VARIABLE	**RESPONSE**	**CODE**
yr_svc	Did not specify	0
	0 – 4	1
	5 – 9	2
	10 – 14	3
	15 – 19	4
	20 – 24	5
	25 and over	6
cert	Did not specify	0
	No	1
	Yes, State-level certification	2
	Yes, IAEM CEM®	3
	Yes, both state-level and IAEM	4
salary	Did not specify	0
	Less than $25,000	1
	$25,000 - $34,999	2
	$35,000 - $44,999	3
	$45,000 - $54,999	4
	$55,000 - $64,999	5
	$65,000 - $74,999	6
	$75,000 - $84,000	7
	$85,000 and over	8

CATEGORY: DEMOGRAPHICS 3		
VARIABLE	**RESPONSE**	**CODE**
em_tng1	Did not specify	0
	No training completed	1
em_tng2	Did not specify	0
	Some/Basic course	1
em_tng3	Did not specify	0
	FEMA PDS-series	1
em_tng4	Did not specify	0
	Advanced	1
em_tng5	Did not specify	0
	Other EMI home-study course(s)	1
em_tng6	Did not specify	0
	EMI resident course(s)	1
em_tng7	Did not specify	0
	Other formal/State-sponsored course(s)	1
jur_type	Did not specify	0
	Federal	1
	State	2
	County/Parish	3
	Large City/Metropolitan Area	4
	Midsized city	5
	Small city/township	6
	Private employer	7
	Organization (Red Cross, etc.)	8
	Other	9

CATEGORY: DEMOGRAPHICS 4		
VARIABLE	**RESPONSE**	**CODE**
region	Did not specify	0
	New England	1
	Mid-Atlantic	2
	South/Gulf Coast	3
	Great Lakes	4
	Mid-America	5
	South-West	6
	Mountain	7
	Pacific	8
	Other	9
natural1	Did not specify	0
	Flood	1
natural2	Did not specify	0
	Fire	1
natural3	Did not specify	0
	Earthquake	1
natural4	Did not specify	0
	Hurricane	1
natural5	Did not specify	0
	Tornado	1
natural6	Did not specify	0
	Severe Weather	1
natural7	Did not specify	0
	Volcanic Eruption	1
natural8	Did not specify	0
	Drought	1
natural9	Did not specify	0
	Other	1

CATEGORY: DEMOGRAPHIC 5		
VARIABLE	**RESPONSE**	**CODE**
tech1	Did not specify	0
	Transportation	1
tech2	Did not specify	0
	HAZMAT	1
tech3	Did not specify	0
	Infrastructure collapse	1
tech4	Did not specify	0
	Power Grid failure	1
tech5	Did not specify	0
	Water Shortage/Contamination	1
tech6	Did not specify	0
	Infrastructure inadequacies	1
tech7	Did not specify	0
	Other	1
social1	Did not specify	0
	Illness outbreak	1
social2	Did not specify	0
	Civil Disobedience/Lawlessness	1
social3	Did not specify	0
	Terrorism	1
social4	Did not specify	0
	Bioterrorism	1
social5	Did not specify	0
	Other	1

CATEGORY: DEMOGRAPHICS 6		
VARIABLE	**RESPONSE**	**CODE**
actual1 actual2 actual3	Did not specify	0
	1-5 declarations	1
	6-10 declarations	2
	More than 10 declarations	3
fs_ex	Did not specify	0
	At least every year	1
	At least every two years	2
	At least every three years	3
	Four or more years apart	4
	Never	5

CATEGORY: STUDY-SPECIFIC 1		
VARIABLE	**RESPONSE**	**CODE**
cur_ed cur_tng cur_pex	Did not specify	0
	Has played no role	1
	Has very little significance	2
	Might be considered an asset	3
	Is an important asset in my position	4
	Is my most important asset	5
pro_ed pro_tng pro_pex	Did not specify	0
	Would play no role in the selection process	1
	Might hurt my chances in the selection process	2
	Would neither hurt nor help my chances	3
	Might help my chances in the selection process	4
	Would significantly help me	5

CATEGORY: STUDY-SPECIFIC 2		
VARIABLE	**RESPONSE**	**CODE**
fut_ed1 fut_tng1	Did not specify	0
	Not anticipating it at any time	1
	Not anticipating it at this time	2
	Remaining neutral	3
	Encouraged by the prospect	4
	Will definitely be enrolling in the near future	5
fut_ed2 fut_tng2	Did not specify	0
	Would consider it a waste of time	1
	Would not encourage me to pursue it	2
	Would neither encourage nor discourage it	3
	Would encourage me to pursue it	4
	Would not only encourage me but also would assist	5
fut_pex1	Did not specify	0
	Struggling to find opportunities	1
	Neither discouraged nor disappointed	2
	Developing several exercises a year	3
	Handling all the experiences I can manage	4
	Looking for opportunities to share my expertise	5
fut_pex2	Did not specify	0
	Would prefer we didn't have any more	1
	Doesn't even like to conduct regular exercises	2
	Reluctantly participates when they must	3
	Looks to me to keep them well trained	4
	Encourages me to help other jurisdictions	5

CATEGORY: VIEWS AND OPINIONS 1		
VARIABLE	**RESPONSE**	**CODE**
rec_ed	Did not specify	0
	Not concern themselves with it	1
	Should have at least a two-year degree	2
	Should have at least a four-year degree	3
	Should have at least a graduate degree	4
crs_wk	Did not specify	0
	Not focus on a specific academic discipline	1
	Focus on an integrated academic program	2
	Focus on a scientific discipline	3
	Focus on a technical discipline	4
	Focus on a business discipline	5
	Focus on a social science discipline	6
	Focus on an emergency services discipline	7
rec_tng	Did not specify	0
	Not concern themselves with it	1
	Should have a basic understanding of ICS and EM	2
	Should complete at least the PDS-series	3
	Should complete several advanced courses	4
em_focus	Did not specify	0
	Develop an expertise in one or two disciplines	1
	Become familiar with all EM specialities	2
rec_pex	Did not specify	0
	Not concern themselves with it	1
	Should have at least one yr of related experience	2
	Should have at least three yrs of related experience	3
	Should have at least five yrs of related experience	4
	Should have completed related career	5

CATEGORY: VIEWS AND OPINIONS 2		
VARIABLE	**RESPONSE**	**CODE**
ch_duty ch_org ch_911 ch_tng	Did not specify	0
	Yes	1
	No	2
	New since 9-11	3
goto1 goto2 limits pdeffect	Did not specify	0
	Yes	1
	No	2
status	Did not specify	0
	Yes	1
	No	2
	Not sure	3
proskill	Did not specify	0
	Professional occupation	1
	Skilled occupation	2
	Both	3
emprof	Did not specify	0
	Yes	1
	No	2
	I am undecided	3
hs_role	Did not specify	0
	Totally	1
	Joined	2
	Some of both	3
em_spt	Did not specify	0
	Under-funded	1
	Funded appropriately	2
	Over-funded	3

CATEGORY: VIEWS AND OPINIONS 3		
VARIABLE	**RESPONSE**	**CODE**
pgm_per pgm_tng pgm_eqt pgm_x	Did not specify	0
	Would improve	1
pgm_perx pgm_tngx pgm_eqtx pgm_xx	Did not specify	0
	Would not improve	1
more_ems	Did not specify	0
	Yes	1
	No	2
	Desirable but not going to happen	3
	Not desirable but going to happen anyway	4

Appendix F

The Recoding of Variables

CATEGORY: DEMOGRAPHICS			
ORIGINAL VARIABLE	**INITIAL RESPONSE**	**RECODED RESPONSE**	**RECODED VARIABLE**
yr_svc	1	1	carlvl
	2		
	3	2	
	4		
	5	3	
	6		

CATEGORY: STUDY-SPECIFIC 1			
ORIGINAL VARIABLE	**INITIAL RESPONSE**	**RECODED RESPONSE**	**RECODED VARIABLE**
cur_pex	1	1	curpex2
	2		
	3		
	4	2	
	5		
pro_pex	1	1	propex2
	2		
	3		
	4	2	
	5		
cur_tng	1	1	curtng2
	2		
	3		
	4	2	
	5		

CATEGORY: STUDY-SPECIFIC 2			
ORIGINAL VARIABLE	**INITIAL RESPONSE**	**RECODED RESPONSE**	**RECODED VARIABLE**
pro_tng	1	1	protng2
	2		
	3		
	4	2	
	5		
cur_ed	1	1	cured2
	2		
	3		
	4	2	
	5		
pro_ed	1	1	proed2
	2		
	3		
	4	2	
	5		

Appendix G

IAEM Code of Ethics

IAEM CODE OF ETHICS AND PROFESSIONAL CONDUCT

PREAMBLE

Maintenance of public trust and confidence is central to the effectiveness of the Emergency Management Profession. The members of the International Association of Emergency Managers (IAEM) adhere to the highest standards of ethical and professional conduct. This Code of Ethics for the IAEM members and also for the Certified Emergency Managers® (whether or not they are IAEM members) reflects the spirit and proper conduct dictated by the conscience of society and commitment to the well-being of all. The members of the Association conduct themselves in accordance with the basic principles of RESPECT, COMMITMENT, and PROFESSIONALISM.

ETHICS

RESPECT

Respect for supervising officials, colleagues, associates, and most importantly, for the people we serve is the standard for IAEM members. We comply with all laws and regulations applicable to our purpose and position, and responsibly and impartially apply them to all concerned. We respect fiscal resources by evaluating organizational decisions to provide the best service or product at a minimal cost without sacrificing quality.

COMMITMENT

IAEM members commit themselves to promoting decisions that engender trust and those we serve. We commit to continuous improvement by fairly administering the affairs of our positions, by fostering honest and trustworthy relationships, and by striving for impeccable accuracy and clarity in what we say or write. We commit to enhancing stewardship of resources and the caliber of service we deliver while striving to improve the quality of life in the community we serve.

PROFESSIONALISM

IAEM is an organization that actively promotes professionalism to ensure public confidence in Emergency Management. Our reputations are built on the faithful discharge of our duties. Our professionalism is founded on Education, Safety, and Protection of Life and Property

(www.iaem.com/ethics)