

Emergency Management and Homeland Security Education Needs Assessment

A Capstone Project

In Partial Fulfillment

of the requirements for the degree

Master of Public Administration

by

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## **Introduction**

As a result of catastrophic events such as the 9/11 attacks and Hurricane Katrina, the fields of homeland security (HS) and emergency management (EM) have been thrust into the media spotlight. What does the average person know about the fields of HS and EM? HS and EM professionals address issues related to the safety and well being of the citizens of the United States and, as a result decisions and actions taken by those professionals are highly visible and subject to public scrutiny. Due to HS and EM issues being so complex and in the national spotlight, there are often questions about the preparation and capabilities of individuals in EM and HS. There has been a push within the higher education community to build new academic program in an effort to produce individuals who are grounded in the theories of the profession, and are capable of coping with the rapidly changing set of national, state, and local needs.

At this time, there is no consensus in the literature on how higher education programs in HS and EM should be structured. There are several organizations attempting to establish a set of learning outcomes and core competencies for the fields. To date none have been recognized by the United States Department of Education or the Council for Higher Education Accreditation (Cutrer, Raffel, & Ramsay, 2010) Given the lack of guidance from any accrediting body, this paper will make an effort define the relationship between homeland security and emergency management both organizationally and academically. In addition by examining the literature the study will attempt to establish core competencies for HS and EM. Finally, using a survey tool, will attempt to gauge the level of interest of public safety personnel in HS and EM education at the graduate level at Clemson University.

## Definitions

It is important for the reader to understand the terms used in this study. For the purposes of this paper, the following terms were operationalized:

- **Homeland security** is defined as the overarching goal of protecting the United States against terrorist attacks, reducing the vulnerability to terrorism, and preparing for and recovering from large scale emergencies or disasters.
- **Emergency management** is the component of HS that is responsible for the preparation for responding to and recovery from large-scale disasters.
- **Public safety** involves welfare and protection of the public. Some examples of public safety issues are crimes, pandemic outbreaks, and disasters, natural or man-made.

Professions that are included in public safety include but are not limited to the below listed groups.

- Law enforcement
- Fire service
- Emergency management
- Emergency medical service
- Emergency communications
- Public health
- Non- profits (Example: Red Cross)

## Need for the project

The fields of HS and EM have grown into professions that have increased the demand for higher education programs focusing on these disciplines (Alexander, 2000; Oyola-Yemaiel & Wilson, 2001). Some of the reasons cited as for the development of higher education in the

fields of HS and EM are that the demands placed upon the disciplines that are involved in HS and EM has increased significantly since the beginning of the 21<sup>st</sup> century (Kapucu & Van Wart, 2006; Perry & Lindell, 2007; Rubin, 2007). Contributing factors are the increased extent of incidents that have occurred. The events have been catastrophic in nature and have increased the expectations and performance standards of those managing the events (Kapucu, 2010; Kapucu & Van Wart, 2006). In an effort to address the increased expectations the higher education community has responded by increasing the development of academic programs in the fields of HS and EM. These programs are being offered at all levels including certificate, two year, four year, and graduate degrees.

According to the Federal Emergency Management Agency's (FEMA) Emergency Management Institute (EMI) since September 11, 2001 there have been approximately 85 new programs in EM, bringing the total to well over one hundred and fifty (EMI, 2010). Steve Recca from the Naval Post Graduate School's (NPS) Center for Homeland Defense and Security (CHDS) advises that prior to September 11, 2001 there were no HS higher education programs and now there are approximately three hundred and thirty three. Annually EMI and CHDS each hold educational summits. While attending these summits it is not uncommon to hear representatives of institutions offering programs in HS and/or EM lamenting that they are turning students away due to there being such a demand for their programs. Based on the increased numbers of programs and the large number of enrollees reported, there appears to be a market for these programs around the country.

The development of academic programs has been swift; however the development of a recognized set of core competencies has not been established (Cutrer, Raffel, & Ramsay, 2010; Breckenridge, Cronin, Hatzadony, & Moore, 2010). When attempting to develop a set of core

competencies for a graduate level program in HS or EM to help those involved meet the increased demands, a key question that arises. Should they HS and EM be a separate set of competencies? On the other hand should they be intertwined academically as they are organizationally at the federal level with EM being a part of HS?

In October of 2009 this investigator attended a conference focused on EM in South Carolina. One of the speakers was Kim Stenson, chief of staff of the South Carolina Emergency Management Division (SCEMD). In his presentation, Stenson stated there was a need for EM higher education opportunities in the state. At the time, South Carolina was one of only two states in the country that did not have a program offered by an in state college or university in the fields of EM or HS. This information was presented to Clemson University's Strom Thurmond Institute of Government and Public Affairs (STI) Master of Public Administration (MPA) program to determine if there was an interest in developing an HS/EM educational program. STI was interested in exploring the project and it was determined that in order to proceed with the project there was a need to address the emerging educational needs of the professionals who work in the fields of HS and EM.

Prior to this study there was no available data on either the current education or desired education of the public safety community in SC. Establishing an understanding of the current educational levels as well as their interests in such programs, will help to determine the feasibility of starting programs to attempt meet their educational needs.

The two specific research questions addressed in this study include:

1. What is the relationship between HS and EM organizationally and academically?
2. Based on current literature, what are the core competencies in HS & EM?

Results of this study will be used to aid in the design of a program in HS and/or EM offered through the MPA program at Clemson University by suggesting a set of core competencies that cover the diversity represented in the fields.

## **Literature Review**

The following literature review will examine the relationship of EM and HS organizationally by comparing the structure of the disciplines at the local state and federal levels. The relationship will be further explored academically, by presenting suggested core competencies for EM and HS found in the literature. Reviewing the organizational structure as well as the academic competencies for each discipline may help to establish whether EM and HS are individual disciplines that warrant stand-alone programs. It is believed that the literature will lend support to the research questions and to help determine appropriate competencies that should be part of an education program in EM and/or HS.

### **Organizational Structures**

In order to understand the relationship between HS and EM it is important to examine how the disciplines are structured and related at the federal, state and local levels.

#### *The Federal Organizational Structure*

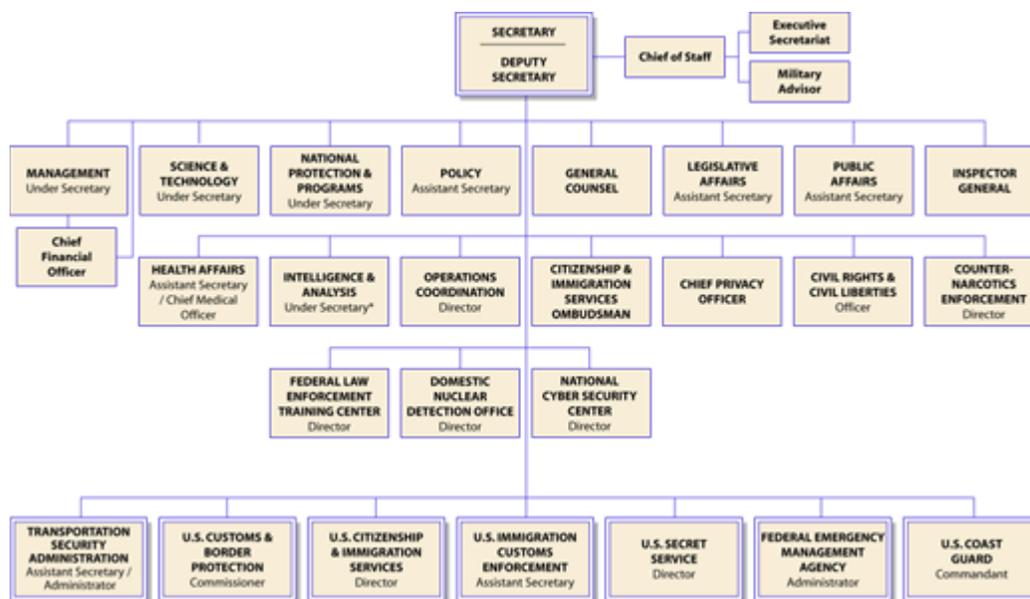
Prior to the terrorist attacks on September 11, there were more than forty federal agencies that were involved in counter terrorism (Decker, 2001). The over abundance of organizations dedicated to one mission and the lack of inter-agency cooperation has been determined to be a factor in the failure of the government preventing the attacks (Lee & Rao, 2007). After the attacks the executive branch assessed that this manner of organization was lacking and began the process of developing what we now know as the Department of Homeland Security (Wise, 2002).

Department of Homeland Security: The U.S. Department of Homeland Security (DHS) is not one single entity; it is a group of agencies that have the mission to secure the nation from terrorist attacks and threats and to respond to disasters (Wise, 2002). DHS consists of the

Transportation Security Administration (TSA), US Customs and Border Protection, Immigration and Customs Enforcement, Secret Service, Coast Guard, and the Federal Emergency Management Agency (FEMA). These agencies employ over 230,000 people under the Secretary of Homeland Security (DHS, 2010). (See Figure 1).

Figure 1

*Department of Homeland Security Organizational Chart*



Source: Department of Homeland Security, 2010

Federal Emergency Management Agency (FEMA): FEMA is the division of DHS tasked with preparing for, responding to and aiding in the recovery from disasters both manmade and natural. FEMA was created in 1979 as the federal government's agency that coordinates response to disasters that have exceeded the capabilities of the local and state governments (McLoughlin, 1985). From 1979 to 1993 FEMA was an independent agency and was elevated to the cabinet level in 1993 by President Clinton (Perrow, 2005). In 2003, when the new

Department of Homeland Security was organized, FEMA became part of DHS, and as a result the FEMA Administrator answers to the Secretary of Homeland Security (Cumming & Sylves, 2004).

This method of organization was enacted in an effort to improve inter agency collaboration and adapt to a more all-hazards approach to HS (Wise, 2002; Waugh, 2004; Wise, 2006). This unified structure has been pushed down to the state and local jurisdiction through Homeland Security Presidential Directive-5 (HSPD-5) by implementing the National Incident Management System (NIMS) which stresses a unified command structure when dealing with major incidents (Brewster, Knebel, McCarthy, Sauer, 2009; Moynihan, 2009). However, not all state and local agencies have adopted a unified approach to organization.

### **State Organizational Structure**

*Homeland Security:* States have different organizational structures for HS & EM. Some are under one organization (unified), while others are separate agencies. This report focuses primarily on the organizational structure in South Carolina which is located in FEMA Region IV. Table 1 below outlines the state structures of other states in FEMA Region IV. The different structures highlight the lack of consistency in the organization of HS & EM.

Table 1

#### *States from FEMA Region IV Organization Structure of HS and EM*

<b>State</b>	<b>Unified Organization</b>	<b>Separate Organization</b>
South Carolina		X
North Carolina	X	
Georgia	X	
Florida		X
Mississippi		X
Kentucky		X
Tennessee		X
Alabama		X

For homeland security in South Carolina, Title 23 section 23-3-15 of the South Carolina Code of Laws grants exclusive authority to the State Law Enforcement Division (SLED) in matters relating to counter terrorism, to include prevention against, preparation for, response to and crisis management of acts of terrorism affecting the state. SLED is also the point of contact for the Department of Homeland Security in the state of South Carolina regarding terrorism (Chowdhury, Dunning, & Fries, 2008). The chief of SLED is appointed by the governor and is a cabinet level position.

In contrast, the governance for EM is found in Title 25 section 25-1-420 of the South Carolina Code of Laws and places the South Carolina Emergency Management Division under the control of the Adjutant General's Office. The law also outlines the following responsibilities of the division:

- (a) Coordinating the efforts of all state, county, and municipal agencies and departments in developing a State Emergency Plan;
- (b) Conducting a statewide preparedness program to assure the capability of state, county, and municipal governments to execute the State Emergency Plan;
- (c) Establishing and maintaining a State Emergency Operations Center and providing support of the state emergency staff and work force;
- (d) Establishing an effective system for reporting, analyzing, displaying, and disseminating emergency information; and
- (e) Establishing an incident management system incorporating the principles of the National Incident Management System (NIMS) that provides for mitigation, preparedness, response to, and recovery from all man-made and natural hazards.

The structure in South Carolinas is in line with the majority of other states in FEMA Region IV in that the states HS and EM are handled by different organizations. However, it is clear that when trying to establish a relationship between HS and EM at the state level there is no continuity among the states.

#### Local Organizational Structure

*Homeland Security:* Local law enforcement has changed very little in the way it operates since the inception of the homeland security movement (Hendricks, Ortic, & Sugie, 2007). At the local level there is minimal involvement from local governments as entities in the counter terrorism portion of HS (Thacher, 2005; U.S. Conference of Mayors 2002). Local governments get involved in the effort by supplementing the federal assets dedicated to this mission. In return for this cooperation the local entities receive grant funding to accommodate the additional workload caused by the development of new job skills (DHS, 2010; Flanagan, 2002; Maguire & King, 2004). An example of this is local law enforcement agencies having officers assigned to the FBI's Joint Terrorism Task Force.

*Emergency Management:* Law in South Carolina mandates the position of county emergency manager. In Chapter 58 of the South Carolina Code of Regulations, section 58-1 (A) 2 states:

Each county within the State shall provide for the appointment of an Emergency Preparedness Director and the establishment and operation of a County Emergency Preparedness Agency, which shall be so named. The County Emergency Preparedness Agency, through the Director, shall be responsible to the County governing body, or its designated representative as appropriate under the Home Rule Legislation, for the coordination of preparedness and emergency response activities in compliance with this regulation and Regulation 58-101. Consideration should be given to the following qualifications when selecting the director:

- a. Diplomatic skills

- b. Thorough understanding of local government
- c. Good political skills (without strong political involvement)
- d. Managerial ability
- e. Strong communication skills
- f. Planning skills
- g. Understanding of public safety and preparedness issues and operations

It is clear by the wording of the legislation that those who drafted it had an understanding of the complexities of the job and thus outlined certain important qualifications. However these qualifications are just suggestions, the law does not elaborate on how these qualifications should be measured.

Local emergency managers are involved in a number of activities that provide services to their communities (Robinson & Reed, 2010). In South Carolina not all emergency managers do so full time. Although the law mandates the position, for some counties it is a part-time position. In addition, some emergency managers also coordinate their counties fire service, and 911 centers, while a small number operate as law enforcement officers. In Pickens County South Carolina, the emergency management director is also the assistant county administrator.

With the responsibilities of the local emergency manager being so diverse from location to location, it is difficult to define a consistent relationship between the local emergency manager and local government. When looking at the suggested qualifications in the South Carolina Statute, understanding of public safety and preparedness issues and operations was last on the list. What the legislature listed first was diplomatic, communication and political skills, understanding of government, and the ability to communicate. None of which, including understanding of public safety and preparedness issues and operations, are skills that are specific to EM. This may be a supporting factor in establishing that EM is not a stand-alone educational discipline.

## **Other Organizations Involved in Emergency Management**

Response to disasters involves coordination with different organizations, many of which are private, nonprofit, and or faith-based. The important role these types of organizations play in disaster response has led to the organization of nationwide organizations like the National Volunteer Organizations Active in Disaster (NVOAD) (Streib & Waugh 2006). Many states and counties have Volunteer Organizations Active in Disaster (VOAD) chapters to coordinate unmet needs at the local level. These volunteers provide a variety of different services and come from a variety of different disciplines (Howe, Mierswa, & Toner, 2010).

There are functions of HS and EM at all levels of government as well as nongovernmental organizations that have different roles in the EM and HS process (Cutrer, Raffel, & Ramsay, 2010). Although the job responsibilities differ, all of the functions listed have a common goal preparing for, preventing, responding to, and recovering from disasters (Pelfry, 2005, Brock, Nickerson, & Reeves, 2011, Harrald & Shaw, 2004). Training is paramount to success; most organizations, public or private, involved in EM use FEMA's independent study courses to enhance their capabilities (Coyle, Sapnas, & Ward-Presson, 2007; Somers, & Svara, 2009). Although the NVOAD does not set training standards for the local VOAD's, the majority of local VOAD's require a minimum number of FEMA courses to maintain membership.

The FEMA independent study courses administered by the Emergency Management Institute (EMI), cover a variety of topics. What makes them unique is that they are tailored around specific disciplines in EM (Holubic & Tomlinson, 2004; Gebbie, 2006). However, with so many different organizations involved with EM are the independent studies adequate training for emergency managers at all levels or jurisdiction? It would seem that the training and education needed to be an emergency manager or worker in homeland security at the federal

level or in large metropolitan areas such as New York City would be drastically different than needed to be a part-time emergency manager in a rural county in South Carolina. The FEMA courses are a baseline, but there are no standard criteria for what a professional working in the fields of EM or HS should meet.

### **Higher Education Competencies in Emergency Management and Homeland Security**

The majority of literature relating to higher education competencies in EM stresses sound decision-making skills, leadership, networking, bureaucracy, social considerations, and technical aspects such as geospatial information systems (GIS). None of these topics are specific to EM. The following literature on EM and higher education clearly shows that there is a need for more research in this area. In contrast, the competencies for HS are much more specific to the overall discipline of homeland security, which includes EM competencies.

### **Emergency Management Core Competencies**

The Federal Emergency Management Agency's (FEMA) Emergency Management Institute (EMI) initiated the Emergency Management Higher Education Program in 1994. The goal of the program was to work with colleges and universities to develop programs of higher learning in the field of EM (FEMA, 2008). Dr. Wayne Blanchard was appointed the Program Manager and was given the task from FEMA to develop a curriculum to support a degree in EM (Blanchard, 2003).

Dr. Blanchard is recognized as one of the most prominent figures in the development of higher education and core competencies in the field of EM (Bullock, Coppola, & Haddow, 2008; Rubin, 2009). He began developing the competencies by gathering data from academics, practitioners, and other interested parties (Blanchard, 2003). Through EMI, Dr. Blanchard also initiated an annual higher education conference to bring together colleges and universities that

have an EM / HS academic programs in place, or are investigating or developing an EM / HS academic program. The goal of the conference is to facilitate inter-school dialogue of issues and problems related to EM and HS higher education, as well as to open dialogue among the stakeholders (FEMA, 2010).

Dr. Blanchard created a document that addresses those who are building programs of higher education in the field that addresses the “top ten competencies for professional emergency management” (Blanchard, 2005). Dr. Blanchard first developed the list in 2003 and after subsequent FEMA Emergency Management Higher Education Project Conferences that included sessions discussing the competencies coupled with the inadequate response by government to incidents such as Hurricane Katrina, the list was reevaluated and rewritten (Blanchard, 2005). The ten competencies and key components listed by Blanchard are summarized in Table 2.

Table 2

*Blanchard top ten competencies and key components*

Blanchard Top Ten Competencies Comprehensive EM Framework	Elements of Competencies
Management	All Hazards and all Cycles of EM Implementation of Sound Plans and The Ability to Direct Subordinates
Networking and Coordination	Ability to Forge Relationships. Stakeholder Organization
Integrated Emergency Management	Assess Hazards, Integrate Plans, Keep up to date on latest trends
Political, Bureaucratic, and Social Contexts	Ability to Maneuver Through Government. Understanding Who is Affected by Disasters.
Technical Systems Standards	Maintain Awareness of the Latest Advances in Technology in Order to Keep the Agency up to Date.
Social vulnerability Approach	Tailor Response not to the Population as a Whole but to the Population Most Vulnerable
Leadership and Team Building	Vision, Compassion, Flexibility, and Imagination.
Experience	“The gaining of even modest experience will be of assistance to traditional college students who will need to find jobs upon graduation and will be competing against those who don’t have the educational foundation, but with experience” (Blanchard, 2005

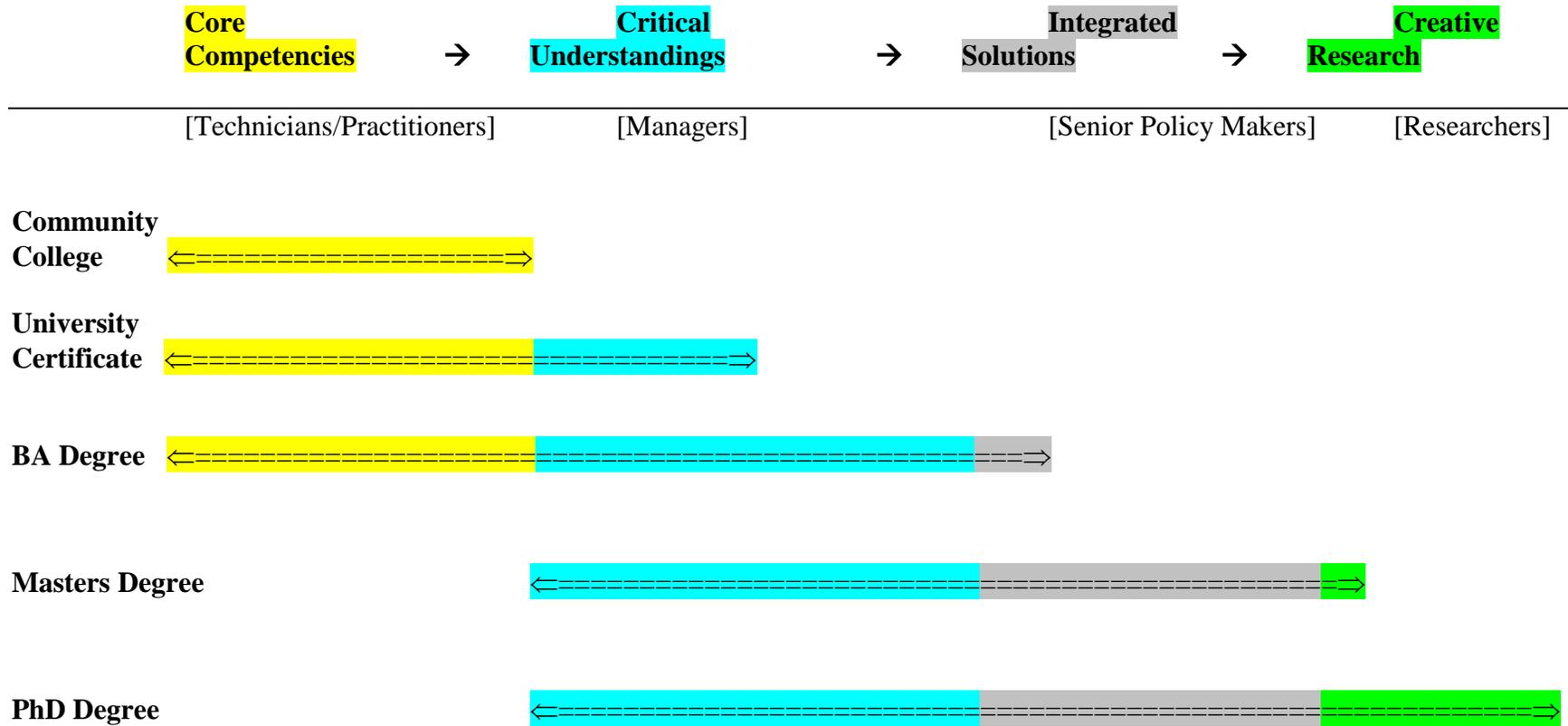
In an effort to define what level of higher education the different competencies should be taught, David Etkin, coordinator of the EM program at York University, submitted a study to the

EMI in 2006. The study breaks the suggested educational level and core competencies down to the level of the position an individual holds (see Figure 2). Etkin suggests that practitioners develop the basic skill sets to perform in a competent manner and should have attained, at a minimum an associate's degree from community college. He goes on to say that managers should have a handle on "critical understandings" (p. 3). These understandings are defined as "the knowledge of the theoretical underpinnings of the set of core competencies, and their limitations in terms of how they should be applied and the knowledge and ability to identify gaps in knowledge and understanding, and the implications of these gaps" (Etkin, 2006, p. 3). These critical understandings, Etkin surmises, should be acquired through an undergraduate certificate program or an undergraduate degree.

Those who are considered senior policy makers, according to Etkin, should be able to employ integrated solutions, which should be obtained by receiving a master's degree. He defines integrated solutions as "having the knowledge and ability to put EM issues into a larger social and environmental context, and being able to apply this knowledge within a comprehensive EM framework" (Etkin, 2006). Finally, Etkin says that in order for a researcher to be successful, they should "have an in-depth knowledge of the theory and practice of EM and of research methods and also having the ability to conceptualize research questions and carry out research projects designed to test them," this would be obtained at the doctorate level (Etkin, 2006, p. 3).

Figure 2

*Differentiating Educational Programs in Emergency Management*



Source: FEMA EMI, 2010

Etkin's and Blanchard's theories represent different levels of analysis used to establish a framework for core EM functions. As Naim Kapuchu points out in *Developing Competency Based Emergency Management Degree Programs in Public Affairs and Administration 2010*, Etkin's theory represents the "nature" (p.9) or the framework of competencies desired at different levels of education and complexity of the position held by the student. In contrast, Blanchard's theory represents the type of competencies, or the knowledge, skills, and tools that are relevant at all levels.

#### Homeland Security

Like EM, there is no standard followed for HS programs. There is an effort to develop a set of standards by the Homeland Security and Defense Education Consortium Association (HSDECA) which is the association for HS and homeland defense educational program accreditation. HSDECA is attempting to develop a program that accredits homeland security programs at all different levels associate's through doctorate and has different program level outcomes for each. HSDECA has created eight core area outcomes that apply to all degree levels, which are summarized in Table 3 (HSDECA, 2010).

The HSDECA standards are similar to seven key elements presented by former DHS Secretary Michael Chertoff at the Fourth Annual Homeland Security and Defense Education Consortium Summit. The elements Chertoff proposed are summarized and compared with HSDECA standards in Table 3.

Table 3

*Summary and comparison of Chertoff's key elements and HSDECA's accreditation standards*

Standards	Key Elements Proposed by Chertoff	HSDECA Standards
Intelligence	X	X
Law and Policy	X	X
Emergency Management	X	X
Risk Analysis		X
Critical Infrastructure and Key Resources		X
Strategic Planning	X	X
Terrorism		X
Strategic Communication		X
Technology Capabilities	X	
Social Psychology	X	
Cyber Security	X	
International Relations	X	

When looking at the competencies listed for EM and HS there is a glaring difference in the two. HS competencies are more technical and specific in nature. In addition they are structured similarly to the federal HS structure which includes EM as a competency of the overall discipline of HS. Conversely, EM competencies appear to be similar to those traditional management and leadership skills required of many supervisory professional positions. Etkin suggested core competencies for EM should be taught at the associate degree level, and that the ability to apply higher order thinking skills should be taught at the master's level (Etkin, 2006). Although there may be an interest in an EM program at the graduate level, it may be found that the majority of the higher level competencies are not EM specific, the need already being met by other more established programs of study. A prime example would be public administration, where

much of the literature addressing EM has been published in the traditional public administration journals (Kapuchu 2006; Caruson & MacManus, 2008; Kapuchu, 2010). In the federal structure, EM is not a separate entity; it is a function of HS. After examining the suggested competencies for EM and HS this investigator submits that higher education in the fields should be structured in the same manner, by including EM fundamentals within a degree in HS.

While questioning the feasibility of an EM degree at the graduate level, combining Etkin, Blanchard, HSDECA, and Chertoff's approaches would be beneficial. If partnerships are developed with other institutions to offer undergraduate or associate level programs in EM and/or HS, using Etkin's model to developing the programs at different levels to meet the needs of all levels of actors would draw clear lines between each level and create a stepping stone for higher education. Then developing the curricula based on the core competencies that Blanchard, HSDECA, and Chertoff have presented.

## **Research Design and Methodology**

### **Overview**

The purpose of this study is to aid in the design of a program in HS and/or EM offered through the MPA program at Clemson University by suggesting a set of core competencies that cover the diversity represented in the fields. In examining this issue, this study sought answers to two primary research questions:

1. What is the relationship between HS and EM organizationally and academically?
2. Based on current literature, what are the core competencies in HS & EM?

### **Design**

A concurrent mixed method design was employed in this project. This method was chosen in order to merge quantitative and qualitative data to answer the research questions (Creswell, 2009). This allowed the use of “both open and closed ended questions, multiple forms of data drawing on all possibilities, and statistical and text analysis” (Creswell, 2009, p.15). The quantitative data is important to gather statistical data, while the qualitative data is important to gather the thoughts and feelings of the respondents.

The survey was designed so that the open and closed in questions would complement one another to better analyze the data. Since both quantitative and qualitative data came from the same individuals at the same time, it can be more easily and accurately compared. In this study the use of quantitative or qualitative methods by themselves would not thoroughly address the complexities raised in this study. Together the methods provide a more comprehensive view of the data (Creswell, 2009).

The design of the research is cross-sectional, meaning that data was collected on relevant variables in one survey. This design was chosen based on the geographic dispersal of the recipients of the survey (O'Sullivan, Rassel, & Berner, 2003).

### **Survey Population**

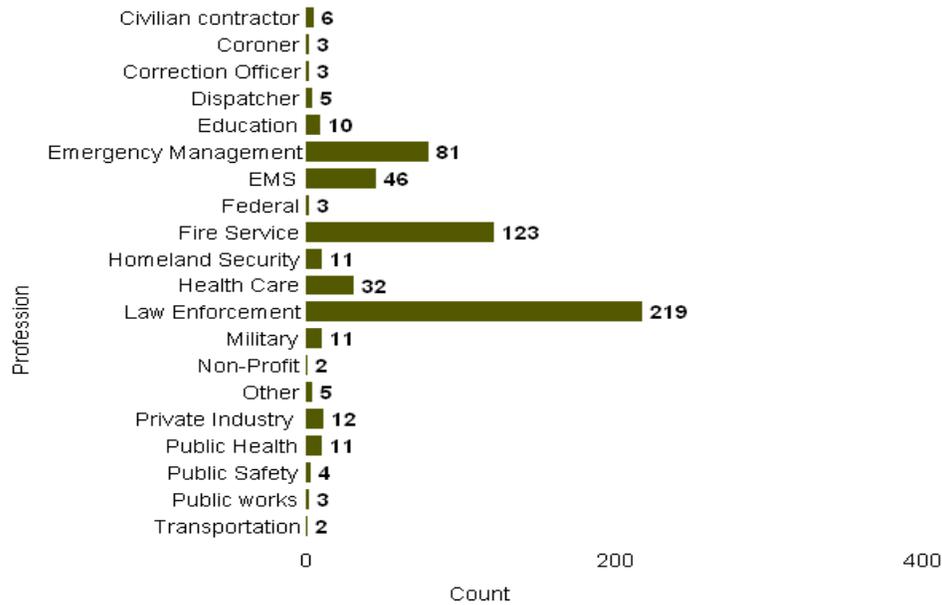
The data gathered for this project was distributed through the different associations so there is no way to gauge who the received the survey. A survey was chosen because it is the most efficient method of distributing a standardized group of questions to a large group in a timely manner. The assessment addressed demographic information, current educational level, profession, area of interest, and likelihood of enrolling in a program if offered.

On February 21, 2010, a web-based needs assessment survey was distributed to the membership of the following organizations, the South Carolina Fire Fighters Association, South Carolina Sheriff's Association, South Carolina Law Enforcement Officers Association, and all of the county emergency managers across South Carolina. The assessment was also given to Federal Department of Homeland Security Personnel, military officials and others who expressed interest in the program. One follow-up email reminder was disseminated prior the survey being closed on March 31, 2010.

The distribution of the respondents' professions is detailed below in Figure 3. Some respondents indicated multiple different professions, for the purposes of this study only the first profession indicated was used.

Figure 3

## Distribution of Respondents Profession



The three largest organizations represented are law enforcement, fire service, and emergency management. For data analysis purposes, the remaining respondents were merged into a single group titled “other”.

### Assumptions

While conducting this research, the investigator made several assumptions about the survey and respondents. The professional organizations that distributed the survey have statewide membership. Membership is not based on agency size, position held in the agency, or time in service. It is believed that those who received and responded to the survey represent a broad sample of the intended population and that due to their professional affiliation understood the terminology used, as well as understanding how EM and HS are related to their particular vocation. Based on this it is also believed that under similar circumstances, the findings of subsequent surveys could duplicate the

findings of this study. It is also believed that the respondents provided honest and accurate responses to the questions.

### **Limitations**

The method the survey was disseminated did not allow for an accurate count of people who received the survey but did not respond. In addition, the military response was extremely limited due to the lack of a military distribution network available at the time the survey was distributed. The respondents self reported the data furnished in the report. As a result, it cannot be independently verified. Self reported data might also allow for the respondent to interject bias into their response.

### **Data Collection Schedule and Processes**

In January 2010 information on EM/HS organizations was gathered and phone contact was made with the organizations that would forward the survey to their membership. All pledged their support in forwarding the survey. The survey consisted of 29 items broken down into four sections. The first section solicited demographic information about the respondent; section two addressed the respondent's current education level and needs. These first two sections consisted solely of closed ended questions. Section three sought to obtain the financial needs or concerns of the respondents. Section four was focused primarily on the thoughts of respondents who serve in a management capacity. The final two sections consisted of open and closed end questions. The entire survey can be found in Appendix A.

## Data Analysis

Using a concurrent mixed method design, the questions proposed by this study will be analyzed by examining qualitative as well as quantitative data collected from the needs assessment. The primary research questions are:

1. What is the relationship between HS and EM organizationally and academically?
2. Based on current literature, what are the core competencies in HS & EM?

Overall, the results of the survey were very positive from an interest perspective. Limiting the survey to be disseminated by organizations based in South Carolina still yielded 592 responses, which was much higher than anticipated. The professions that had the highest number of respondents were law enforcement, fire service, and emergency management. The majority of the respondents were from South Carolina; however nineteen were from other states. Georgia, North Carolina and Florida each had three people respond. North Carolina had four respond, West Virginia, Missouri, New Jersey, Texas, California and Indiana each had one

### **Question 1: What is the relationship between homeland security and emergency management organizationally and academically?**

Given the complexities of the professions, as discussed in earlier sections, it was of interest to determine how others perceived the separation or commonalities between the two professional areas. For example, the structure of the survey allowed for respondents to choose independently between EM focus areas and HS focus areas for educational opportunities. This allowed the opportunity to observe whether the respondents discipline had bearing on their interest in EM or HS.

The respondents were asked to rate their likelihood of enrolling in three distinct levels of academic achievement. The levels presented were bachelor's degree, graduate certificate and master's degree. Additionally the respondents were offered the option of obtaining one of the following specializations, HS and EM. The following data will examine responses of the different public safety organizations represented, law enforcement, fire service and emergency management. Under each level and subject, respondents were given the option to respond as "likely to enroll", "uncertain", "unlikely" or "no answer".

Some of the respondents who answered the survey expressed their interest in educational levels in which they were not academically eligible to enroll based on their highest education level already attained. As a result, the responses analyzed are those that meet the criteria to enroll. For bachelor's level, the respondent must have at minimum a high school diploma or equivalent, which was everyone represented in the data. For the graduate level certificate and master's degree the respondent must have at minimum bachelor's degrees, which were 289 or 49% of the respondents.

The data were examined by subject (EM & HS) in an effort to determine if there is a pattern associated with the discipline of the respondents and the subject in which they are more "likely" to enroll. The number of respondents from each discipline was not equal. As a result analyzing the responses based on just the numbers would not provide accurate measurement. The analysis will be based on the percentage of responses from each discipline.

## Emergency Management

EM is the first set of data to be examined. The results are separated by degree level and are summarized in Tables 4-6. Examining the percentage of each discipline, overall the fire service respondents would be the group most “likely” to enroll an EM program. EM personnel responded as the second most “likely” discipline to enroll in an EM program. “Other” and law enforcement were similar in their likelihood of enrollment in an EM program and were the most “unlikely” to enroll in an EM program. The disciplines responses were relatively consistent across all levels.

Table 4

### *Interest in Emergency Management Bachelor’s Degree by Discipline*

<b>Interest Level</b>	<b>Law Enforcement #/%</b>	<b>Fire Service #/%</b>	<b>Emergency Management #/%</b>	<b>Other #/%</b>	<b>Total #/%</b>
<b>No Answer</b>	23 / 9%	9 / 7%	4 / 4%	2 / 2%	<b>38 / 6</b>
<b>Likely</b>	68 / 28%	68 / 51%	42 / 42%	32 / 27%	<b>210 / 35%</b>
<b>Uncertain</b>	41 / 17%	25 / 19%	14 / 14%	22 / 18%	<b>102 / 17%</b>
<b>Unlikely</b>	111 / 46%	31 / 23%	39 / 39%	61 / 52%	<b>242 / 41%</b>
<b>Total</b>	<b>243 / 52%</b>	<b>133 / 22%</b>	<b>99 / 17%</b>	<b>117 / 20%</b>	<b>592 / 100%</b>

Table 5

### *Interest in Emergency Management Graduate Specialization by Discipline*

<b>Interest Level</b>	<b>Law Enforcement #/%</b>	<b>Fire Service #/%</b>	<b>Emergency Management #/%</b>	<b>Other #/%</b>	<b>Total #/%</b>
<b>No Answer</b>	3 / 2%	1 / 3%	1 / 2%	1 / 2%	<b>6 / 2%</b>
<b>Likely</b>	52 / 39%	21 / 62%	39 / 66%	34 / 54%	<b>146 / 51%</b>
<b>Uncertain</b>	37 / 28%	6 / 18%	5 / 8%	11 / 17%	<b>59 / 20</b>
<b>Unlikely</b>	41 / 31%	6 / 18%	14 / 24%	17 / 27%	<b>78 / 27%</b>
<b>Total</b>	<b>133 / 46%</b>	<b>34 / 12%</b>	<b>59 / 20%</b>	<b>63 / 22%</b>	<b>289 / 100%</b>

Table 6

*Interest in Emergency Management Master's Degree by Discipline*

<b>Interest Level</b>	<b>Law Enforcement #/%</b>	<b>Fire Service #/%</b>	<b>Emergency Management #/%</b>	<b>Other #/%</b>	<b>Total #/%</b>
<b>No Answer</b>	10 / 17%	4 / 12%	2 / 2%	4 / 6%	<b>20 / 7%</b>
<b>Likely</b>	42 / 71%	20 / 59%	32 / 24%	19 / 30%	<b>113 / 39%</b>
<b>Uncertain</b>	35 / 59%	4 / 12%	12 / 9%	15 / 24%	<b>66 / 23%</b>
<b>Unlikely</b>	46 / 78	6 / 18%	13 / 10%	25 / 40%	<b>90 / 31%</b>
<b>Total</b>	<b>59 / 20%</b>	<b>34 / 12%</b>	<b>133 / 46%</b>	<b>63 / 22%</b>	<b>289 / 100%</b>

**Homeland Security**

Next, the HS data was analyzed. The results are separated by degree level and are summarized in Tables 7-9. Examining the percentage of the responses from each discipline, overall, law enforcement would be most “likely” to enroll in a HS. Fire service respondents responded as the second most “likely” discipline to enroll in an HS Program. The “other” category and EM personnel are the groups most “unlikely” to enroll in an EM program. These levels of interest remained consistent across all of the degree levels.

Table 7

*Interest in Homeland Security Bachelor's Degree by Discipline*

<b>Interest Level</b>	<b>Law Enforcement #/%</b>	<b>Fire Service #/%</b>	<b>Emergency Management #/%</b>	<b>Other #/%</b>	<b>Total #/%</b>
<b>No Answer</b>	15 / 6%	7 / 5%	5 / 5%	6 / 5%	<b>33 / 6%</b>
<b>Likely</b>	91 / 37%	42 / 32%	20 / 20%	28 / 24%	<b>181 / 31%</b>
<b>Uncertain</b>	34 / 14%	43 / 32%	22 / 22%	21 / 18%	<b>120 / 20%</b>
<b>Unlikely</b>	103 / 42%	41 / 31%	52 / 53%	62 / 53%	<b>258 / 44%</b>
<b>Total</b>	<b>243 / 41%</b>	<b>133 / 22%</b>	<b>99 / 17%</b>	<b>117 / 20%</b>	<b>592 / 100%</b>

Table 8

*Interest in Homeland Security Graduate Specialization by Discipline*

<b>Interest Level</b>	<b>Law Enforcement #/%</b>	<b>Fire Service #/%</b>	<b>Emergency Management #/%</b>	<b>Other #/%</b>	<b>Total #/%</b>
<b>No Answer</b>	3 / 2%	4 / 12%	1 / 2%	0 / 0%	<b>8 / 3%</b>
<b>Likely</b>	75 / 56%	12 / 35%	23 / 39%	33 / 52%	<b>143 / 49%</b>
<b>Uncertain</b>	26 / 20%	12 / 35%	14 / 24%	11 / 17%	<b>63 / 22%</b>
<b>Unlikely</b>	29 / 22%	6 / 18%	21 / 36%	19 / 30%	<b>75 / 26%</b>
<b>Total</b>	<b>133 / 46%</b>	<b>34 / 12%</b>	<b>59 / 20%</b>	<b>63 / 22%</b>	<b>289 / 100%</b>

Table 9

*Interest in Homeland Security Masters Degree by Discipline*

<b>Interest Level</b>	<b>Law Enforcement #/%</b>	<b>Fire Service #/%</b>	<b>Emergency Management #/%</b>	<b>Other #/%</b>	<b>Total #/%</b>
<b>No Answer</b>	5 / 4%	5 / 15%	0 / 0%	2 / 3%	<b>12 / 4%</b>
<b>Likely</b>	46 / 35%	9 / 26%	18 / 31%	14 / 22%	<b>87 / 30%</b>
<b>Uncertain</b>	31 / 23%	9 / 26%	13 / 22%	14 / 22%	<b>67 / 23%</b>
<b>Unlikely</b>	51 / 38%	11 / 32%	28 / 47%	33 / 52%	<b>123 / 43%</b>
<b>Total</b>	<b>133 / 46%</b>	<b>34 / 12%</b>	<b>59 / 20%</b>	<b>63 / 22%</b>	<b>289 / 100%</b>

**Commonalities and Differences**

Examining the commonalities and differences between each of the groups responses may show what field of study that each of those groups associates themselves with. The fire service is the group that was the most “likely” to enroll in an EM program and the second most “likely” to enroll in a HS program. This indicates that of those surveyed from the fire service, they find themselves associated with both EM and HS. Conversely, law enforcement was the most “likely” to enroll in a HS program, and the least “likely” to enroll in an EM program. This indicates that of those surveyed in law enforcement associate themselves more with HS studies.

EM professionals were the second most “likely” to enroll in an EM program and the least “likely” to enroll in a HS program. Not surprisingly this shows that those in the field of EM surveyed associate themselves more with EM. The “other” category of respondents is next to the last “likely” to enroll in an EM or HS program indicating that overall that group does not associate themselves strongly with either category of study.

### **Measuring Dependent and Independent Variables**

The variables in this series of questions are categorical data. The independent variable is the respondent’s profession, and the independent variable is the educational interests of the respondent. The Pearson Chi-Square test was employed to determine if there was significance in the relationship between the respondent’s interest in an EM and/or HS course of study and their profession. Noting that the level of significance is 0.05, it was determined that the respondent’s professions were significant in determining whether they were interested in EM or HS. Table 10 displays the Chi-Square P-value for the independent variables.

Table 10

<b>Independent Variable</b>	<b>Bachelor’s Degree in EM</b>	<b>Bachelor’s Degree in HS</b>	<b>Graduate Specialization in EM</b>	<b>Graduate Specialization in HS</b>	<b>Master’s Degree in EM</b>	<b>Master’s Degree in HS</b>
<b>Discipline</b>	0.0001	0.0001	0.0392	0.0039	0.0144	0.0418

Note: Level of Significance = 0.05

### **Question 2: Based on current literature, what are the core competencies in emergency management and homeland security?**

For the purpose of this study, a core competency is an area of expertise fundamental to the profession of EM or HS. This is not to be confused with learning

outcomes, which are what the student should possess a demonstrated knowledge of upon completion of a particular course.

In an earlier work by David L. Cook (2010), “Clemson University Post-Graduate Homeland Security Outcomes Based Postgraduate Education Program”, Cook developed a matrix showing core academic areas & definitions, learning outcomes, and possible courses that would meet the learning outcomes for a quality Clemson homeland security program. His findings are summarized below in Table 11; the complete matrix can be seen in Appendix B.

Table 11

*Masters of Public Administration with a Homeland Security Specialization Core Academic Areas and Possible Instructional Courses*

Core Academic Areas	Possible Courses That Would Meet the Learning Outcomes
<b>Policy Development &amp; Analysis</b>	Perspectives in Public Administration
<b>Research Methods &amp; Data Analysis</b>	Research Methods/Data Analysis
<b>Homeland Security Organizational Environment</b>	Introduction to Homeland Security Grant Funding and Evaluation
<b>Law and Policy</b>	Legal Issues in Homeland Security and Emergency Management Security and Civil Liberties
<b>National vs. State &amp; Local Issues</b>	Contemporary Issues in Homeland Security Homeland Security and Law Enforcement
<b>Intelligence</b>	Intelligence and Homeland Security Homeland Security Intelligence at the State and Local Level

Table 11 Cont:

<b>Terrorism and Security Studies</b>	Domestic and International Terrorism  Border Security: Policies, Actions, and Implications  Transportation Security Issues and Management
<b>National Security vs. Homeland Security</b>	Role of Federal Agencies in Homeland Security
<b>National Preparedness Goals, Planning, and Policies</b>	Strategic and Tactical Planning for Homeland Security
<b>Emergency Management</b>	Introduction to Emergency Management
<b>Critical Infrastructure</b>	Critical Infrastructure and Key Resource Protection
<b>Risk Management</b>	Risk and Vulnerability Analysis Planning, Prevention, and the Management of Risk
<b>Homeland Security and Public Health</b>	Public Health Preparedness  Bio-Terrorism Preparedness and Response
<b>Homeland Security and Technology</b>	Technology, Security, and Preparedness  GIS and HLS/EM
<b>Cyber-Security</b>	Introduction to Information Security and Information Assurance  Computer and Network Security  Information Systems Security Management

In Table 12, using the same format as Cook, this study presents the Core Academic Areas, Associated Student Learning Outcomes, and Possible Instructional Courses for EM. The core academic areas and outcomes were developed by applying the FEMA core competencies as presented by Dr. Wayne Blanchard. Dr. Blanchard periodically updates the list to keep with current trends observed by practitioners and

academics in the field of EM, and this is the latest list presented current as of 2005 (Blanchard, 2005). Courses currently being offered within the Clemson MPA program are introduced where they meet the criteria, and where there is not a course in place to meet the competency then a potential course(s) is suggested. The suggested classes are denoted with an asterisk.

Table 12

*Masters of Public Administration with an Emergency Management Specialization  
Core Academic Areas, Associated Student Learning Outcomes, and Possible  
Instructional Courses*

Masters of Public Administration with an Emergency Management Specialization <i>Core Academic Areas, Associated Student Learning Outcomes, and Possible Instructional Courses -</i>			
	Core Academic Area & Definition	Learning Outcomes – Students will possess a demonstrated ability to or knowledge of:	Possible Courses that would meet the learning outcomes
CAA 1	Comprehensive Emergency Management Philosophy - “All hazards, all phases, and all actors” (Blanchard, 2005)	The four phases of emergency management and how each phase is developed locally and federally. These four phases are mitigation, preparedness, response and recovery for man-made and natural disasters. Practical understanding of the concepts, tools, and relationships necessary to be a successful emergency manager.	Introduction to Emergency Management  Hazard Mitigation and Preparedness*
CAA 2	Leadership and Team Building- Effective leadership skills are needed when dealing with the complex issues surrounding emergency management.	Organization theories, personnel administration, decision making, ethics and accountability in public organizations.	Administrative Leadership
CAA 3	Management- Beyond leadership, a successful emergency manager must have the ability to implement effective strategies while being mindful of economic, social and political issues.	Theories and concepts of organizational behavior and public management from economics, sociology and political science. Organizational decision making, bureaucracy, organizational change and learning, public versus private organizations, leadership, and organizational culture	Public Organizations Management*  Legal Issues in Homeland Security and Emergency Management

Table 12 Cont:

<p>CAA 4</p> <p>CAA 5</p>	<p>Networking and Coordination- Emergency managers are often faced with small staff's and insufficient resources. Failure to adequately network in advance will lead to failure.</p> <p>And</p> <p>Integrated Emergency Management- Coordination with a broad range of stakeholders within the government context. Integration of emergency planning into non-emergency organizations such As public works, transportation, and human services, etc.</p>	<p>Gain an understanding of the theory of strategic planning and how it fits into other planning philosophies.</p> <p>Increase your knowledge of the strategic planning process, learning how to design, lead and implement planning models given different administrative scenarios.</p> <p>Learn about managing change within your organization, working through cultural issues and other concepts to better prepare for achieving success with your plan.</p> <p>Learn how to work within a team to practice and build leadership skills.</p>
<p>CAA 6</p>	<p>Political, Bureaucratic, and Social Contexts- Emergency managers must operate within different constraining and enabling circumstances. Among those circumstances are political, bureaucratic and social contexts of a jurisdiction.</p>	<p>Perspectives in Public Administration - Gain an understanding of the role of politics in the administrative process</p> <p>Describe and properly utilize the basic theoretical approaches for use within the public and non-profit sector.</p> <p>Public Policy Process – Understand the basic mechanisms of how laws are made in the United States, and the underlying forces behind this process.</p> <p>Understand theories about how policy makers choose to address some issues and not others.</p> <p>Understanding of how issues actually become implemented into policy.</p>
<p>CAA 7</p>	<p>Technical Systems and Standards-</p>	<p>Understand the evolution of the public information system</p> <p>Assess the political and policy factors affecting the success of projects</p> <p>Appreciate the nuances of managing information systems within the public and non-profit sectors</p> <p>Understand the keys for successful implementation</p>

Table 12 Cont:

CAA 8	Social Vulnerability- Often emergency managers look at what can be done for the largest numbers of people in a community, however the largest numbers often do not translate into the most vulnerable members of the community.	Gain an understanding of the multiple forms of social impacts from disasters.  Acquire a working knowledge of how to apply the concept of resiliency to strategies that will reduce the social impacts of disasters and create more resilient communities.	Resilience in Disaster Recovery
CAA 9	Emergency Management Functions- Beyond the introduction level of emergency management. The key functions of emergency management.	Understanding of the key functions of emergency management. Applying lessons learned and research findings to emergency management functions on an on-going basis. Risk assessment Planning Training Exercising Emergency Operations Center Operations Establishing interoperable communications	Emergency Management Planning and Preparation*
CAA 10	Experience-	The student should be exposed to professional opportunities within their specialization beyond that of their current position.	Internship or Practicum

On the survey in order to gauge interest level in specific topics, the respondents were asked to choose from a list of 16 potential course topics. The respondents were not asked to rank them in any particular order. Table 13 displays the top nine EM courses and the number respondents who expressed an interest in each course.

Table 13

*Top nine EM courses as indicated by the respondents*

<b>Rank</b>	<b>Course</b>	<b>Number of Times Selected</b>
<b>1</b>	Disaster Preparedness and Hazard Mitigation	106
<b>2</b>	Risk and Vulnerability Assessment for Business and Industry	92
<b>3</b>	Public Information and disasters	75
<b>4</b>	Resilience in Disaster Recovery	70
<b>5</b>	EM Policy & Administration	68
<b>6</b>	Legal Issues in EM	67
<b>7</b>	Technology for Comprehensive Emergency Management	58
<b>8</b>	Military's Role in Disaster Recovery	31
<b>9</b>	GIS Processing and Systems	29

FEMA asserts that their core competencies are a collaborative work compiled by speaking with EM practitioners and academics (Blanchard, 2005). In an effort to test the findings of FEMA, the top levels of interest from the respondents in South Carolina are compared to FEMA's core competencies. After examination, Table 14 aligns the relationships between FEMA's core competencies and the interests of the respondents to this survey. The only competency with no relation is "experience," there was no option given to the respondents that involved the option of experience.



## Conclusion

The findings of this study present information to aid in the development of the HS and/or EM program at Clemson University. The respondents to the survey indicated an interest for this type of program being offered by Clemson. The numbers indicated that would “likely” enroll at all levels exceed the expectations going into the study. Using data from the survey, it was determined that 48% of the respondent’s highest level of education is a 4-year degree or higher, which makes them qualified to apply for master’s level certificate or degree. In addition 52% of the respondent’s highest level of education is a high school diploma some college, an associate’s degree, or on the job training. This is important to note when building relationships with other institutions to offer programs at the undergraduate level.

An important part of the study relates to the relationship between HS and EM in practice and how it affects core competencies and curricula. In practice EM is a function of HS. It is this investigator’s belief that the proposed programs would be well served to develop the program with that in mind by making the program based on the overarching role of HS. When examining the competencies for HS they are more detailed and technical. The competencies for EM are based more on leadership, bureaucracy, management and social considerations which are already being covered by the core courses in the Master of Public Administration program.

Examining the core competencies suggested by Blanchard against with the interests of the respondents, it was determined that the interests are in line with his findings. The data provides strength to his theory, and a solid foundation upon which future curriculum can be built. It is also important to note that the courses already being

offered within the MPA program are in line with many of the competencies well. This provides additional evidence that there may not be a need for a stand-alone EM program.

In contrast to this investigator's belief that EM and HS should be unified under one degree, it was determined that there was a significant association between the respondent's profession and their interest in either EM or HS. This could indicate that although organizationally EM is parts of HS, the specific disciplines have a clear picture of where their profession fits into the equation. A suggested resolution would be a single degree program offering electives with an emphasis on the different facets of HS. This would address the specific interests.

### **Implications and Next Steps**

The response to the survey was greater than was expected, however there are many more first responders and private industry employees that could benefit from this type of program than responded. Future analysis could consist of reaching out to a broader group of first responders and emergency managers in the private sector. When the survey was initially disseminated, there had been minimal contact made with military personnel in South Carolina and surrounding states. As a result a more in depth analysis of the needs of the military would be in order. There has already been a concerted effort to build relationships with other institution to offer emergency management and homeland security programs at the undergraduate level. One of the goals set forth by program administrators is to develop a relationship with an institution to offer BA level courses; this should continue to be aggressively pursued.

Marketing continues to be a need for this program. To this point, the majority of enrollees are aware of the program from the survey, word of mouth, presentations by the

staff or they were already enrolled in the MPA program. A fully-fledged marketing campaign should be initiated by professionals within the university to increase enrollment numbers. As the research has shown, funding is a major concern for those interested in furthering their education. The lack of funding is particularly prevalent given the tough economic conditions and employers cutting out or limiting programs like tuition reimbursement. The Strom Thurmond Institute should continue to seek external funds to help alleviate financial concerns of potential students.

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Appendix A  
Emergency Management & Homeland Security Needs Assessment Survey

1. Please provide the state where you reside.
2. If you are in the military, please provide the name of the base where you are stationed.
3. What is your age group?
  - 18-24
  - 25-32
  - 33-40
  - 41-50
  - Over 50
4. What is the highest level of education you have completed?

High school diploma

  - Technical college / 2 year degree
  - Some college
  - 4-year degree
  - Some graduate school
  - Master's degree
  - Doctoral degree
  - Other, please specify
5. What is your current line of work?
  - Law enforcement
  - Fire
  - EMS
  - Emergency Management
  - Hospital / health care
  - Private industry
  - Public Health
  - Military
  - Civilian contractor
  - Homeland security
  - Social services
  - Other, please specify

For the following set of questions, the respondents were asked to rate their interest in each topic.

6. Graduate certificate in Emergency Management (15 credits)
  - Highly unlikely
  - Unlikely
  - Uncertain
  - Likely
  - Will enroll if offered

7. Graduate certificate in homeland security (15 credits)
  - Highly unlikely
  - Unlikely
  - Uncertain
  - Likely
8. Will enroll if offered Associate's degree in emergency management
  - Highly unlikely
  - Unlikely
  - Uncertain
  - Likely
9. Associate's degree in homeland security
  - Highly unlikely
  - Likely
  - Uncertain
  - Unlikely
  - Will enroll if offered
10. Undergraduate degree in emergency management
  - Highly unlikely
  - Unlikely
  - Uncertain
  - Likely
  - Will enroll if offered
11. Undergraduate degree in homeland security
  - Highly unlikely
  - Unlikely
  - Uncertain
  - Likely
  - Will enroll if offered
12. Masters degree in emergency management
  - Highly unlikely
  - Unlikely
  - Uncertain
  - Likely
  - Will enroll if offered
13. Masters degree in homeland security
  - Highly unlikely
  - Unlikely
  - Uncertain
  - Likely
  - Will enroll if offered
14. Doctoral degree focusing on emergency management
  - Highly unlikely
  - Unlikely
  - Uncertain

- Likely
  - Will enroll if offered
15. Doctoral degree focusing on homeland security
- Highly unlikely
  - Unlikely
  - Uncertain
  - Likely
  - Will enroll if offered
16. What Specific topics in emergency management and/ or homeland security do you have an interest in? Choose all that apply.
- Homeland Security Policy
  - Risk Vulnerability Assessment for Business and Industry
  - Geographic Information Processing and Systems
  - Disaster Preparedness and Hazards Mitigation
  - Technology for Homeland Security
  - Intelligence for Homeland Security
  - Critical Infrastructure: Vulnerability Analysis and Protection
  - Public Information and Disasters
  - Legal Issues in Emergency Management
  - Cyber Security
  - Agro-Terrorism
  - Military's Role in Disaster Recovery
  - Maritime Transportation and Security
  - Technology for Comprehensive Emergency Management
  - Emergency Management Policy and Administration
  - Resilience in Disaster Recovery
  - Other, please specify
17. Are you interested in taking any public health emergency preparedness courses?
- Yes
  - No
  - Maybe
18. If yes or maybe, what courses would you be interested in taking?
- Surveillance and Epidemiology
  - Risk Communication
  - Psychosocial Effects of Disasters and Emergencies
  - Public Health Law
  - Environmental Health and Safety
  - Evaluation of Outcomes, Exercises and Drills
  - Hospital Preparedness
  - Ethics of Public Health Preparedness
  - Agricultural Safety
19. Would this program be eligible for any tuition reimbursement from your employer?

- No
  - Maybe, I don't know
  - Yes, partial reimbursement
  - Yes, full reimbursement
  - Other, please specify
20. How would the opportunity for scholarships or tuition discounts affect your interest in enrolling?  
Program coordinators intend to pursue grant and training funds that could offset course costs. However, we do not anticipate having any financial assistance in place by fall 2010.
- I could not enroll without financial assistance
  - I could enroll with some tuition discounts per class
  - With tuition reimbursement I could enroll without a discount
  - I would be willing to enroll even without assistance
21. Please make any additional comments about finances in the box below.
22. What would be your primary motivation for choosing to enroll in an emergency management as opposed to a homeland security program?
- Personal interest
  - Will help me achieve my long term career goals
  - Required for promotion in my current organization
  - Required for a job I would like to have in another organization
  - Affiliation with a volunteer organization
  - Other, please specify
23. Do you believe your current organization would be supportive of you enrolling in a program?
- No, not at this time
  - Maybe, I don't know
  - Yes, as long as it occurs after hours
  - Yes
  - Please make any additional comments below
24. The Clemson program is an online program. Have you taken an online class before?
- Yes
  - No

The following questions are intended for those who hire and/or supervise staff members. If you do not supervise any staff, please continue to Question 28.

25. Do you currently require a college degree for your employees who work in emergency management and/ or homeland security areas?
- Yes
  - No
  - N/A
26. If you responded "yes," to the above, what level do you require?
- College courses in emergency management and/ or homeland security
  - Associate's degree

- Bachelor's (undergraduate) degree
  - Graduate certificate
  - Graduate degree
27. Once the Clemson program is underway, would you encourage your staff to participate?
- No, I think on the job training is better
  - No
  - Maybe, once I learn more about the courses
  - Most likely I will
  - Yes, I definitely would
28. If you would like to be included on future emails about the program, please enter your email address below.
29. If you have any other comments or suggestions for the emergency management and homeland security program possibilities, please list them below.

## Appendix B

<b>Masters of Public Administration with a Homeland Security Specialization</b>			
<b>- Core Academic Areas, Associated Student Learning Outcomes, and Possible Instructional Courses -</b>			
	<b>Core Academic Area &amp; Definition</b>	<b>Learning Outcomes – Students will possess a demonstrated ability to or knowledge of:</b>	<b>Possible Courses that would meet the learning outcomes</b>
CAA 1	<p><b>Policy Development &amp; Analysis</b> - <i>Process by which plans or courses of action intended to determine decision or influence rational outcomes are developed. Subsequently, policy analysis results in a determination of which of a set of alternative policies will achieve a specific goal.</i></p>	<p>Various theories and models of public policy making and implementation.</p> <p>The politics of homeland security policy as applied to stakeholder's influence in the process.</p> <p>Communicate to stakeholders the impacts, outcomes and influences of homeland security policies, problems, and issues.</p> <p>The ability to analyze, synthesize, think critically, and develop solutions to homeland security policy issues.</p>	Perspectives in Public Administration

		Conduct a critical analysis of a homeland security strategy, policy, organization, or function.	
CAA 2	<b>Research Methods &amp; Data Analysis</b> – <i>the search for knowledge or systematic investigation to establish facts. Subsequently, data analysis is the process of examining and modeling data to highlight useful information that suggests conclusions and support decision making.</i>		Research Methods  Data Analysis
CAA 3	<b>Homeland Security Organizational Environment</b> – <i>The federal, state and local government organizational structure for homeland security, counterterrorism, and emergency management.</i>	The formation of the Department of Homeland Security, its structure, and policy approach, missions, and goals.  Define and explain the meaning of the term “homeland security” from a range of differing perspectives.  Recognize the disciplines and processes that	Introduction to Homeland Security  Grant Funding and Evaluation

		constitute the emerging field of homeland security.	
CAA 4	<p><b>Law &amp; Policy-</b> <i>Legal and policy formulations that provide the basic direction of homeland security means and objectives and establish a context for homeland security within the broader purview of national security</i></p>	<p>Legal and constitutional principles and their application in the area of Homeland or National Security law and policy.</p> <p>Laws relating to and having an effect upon homeland security policy and operations.</p> <p>Assess the impact of various homeland security laws and policies in balancing security and civil liberties/privacy.</p>	<p>Legal Issues in Homeland Security and Emergency Management</p> <p>Security and Civil Liberties</p>
CAA 5	<p><b>National vs. State &amp; Local Issues</b> –<i>Homeland security issues resulting from difference in viewpoint such as focus, funding, control, planning that complicate the relationship and operations of federal, state and local entities in preparing for, mitigating, responding to, and recovering from a man-made or natural disaster.</i></p>	<p>DHS budgeting, grant making, and policy implementation.</p> <p>Describe the integration of national homeland security strategy as it relates to the state, local and private sectors.</p> <p>Identify the elements of U.S. strategy and policy for homeland security, including the Homeland Security Presidential Directives, National</p>	<p>Contemporary Issues in Homeland Security</p> <p>Homeland Security and Law Enforcement</p>

		<p>Strategy for Homeland Security, and the National Response Framework.</p> <p>Explain the interaction between the private sector, government and the military as it relates to the execution of homeland security policy.</p> <p>Understand the role of law enforcement at the national, state, and local levels in securing the Homeland.</p>	
<p>CAA 6</p>	<p><b>Intelligence</b> - <i>Discrete or secret information with currency and relevance, and the abstraction, evaluation, and understanding of such information for its accuracy and value. A systematic process of collection, analysis, and dissemination of information in support of national, state, and/or local policy or strategy.</i></p>	<p>Intelligence concepts, to include the collection, analysis, and dissemination of intelligence data.</p> <p>The organization and mission of the federal Intelligence Community, state and local intelligence agencies within the U.S.</p> <p>Fundamental intelligence concepts while understanding their variables, limitations, and shortcomings.</p>	<p>Intelligence and Homeland Security</p> <p>Homeland Security Intelligence at the State and Local Level</p>

		<p>Current initiatives specifically relating to homeland security intelligence gathering.</p> <p>The sources, methods and uses of homeland security information and intelligence, especially in an environment where many public agencies, private agencies, and the military have acknowledged the new imperative to work collaboratively.</p>	
CAA 7	<p><b>Terrorism and Security Studies</b> - : <i>the calculated use, or threatened use, of force or violence against individuals or property to coerce or intimidate governments or societies, often to achieve political, religious, or ideological objectives. Terrorism is a method of combat in which random or symbolic victims become targets of violence. Through the repeated use of violence or the credible threat of violence, members of another group are put in a state of</i></p>	<p>The history and basic concepts of global terrorism to include groups, ideologies, and underlying causes.</p> <p>Specific types of terrorism (e.g., state-supported, transnational, domestic, international) including their similarities and differences.</p> <p>The conceptual aspects of counter-terrorism, counter-terrorist activities, and outcomes and be able to</p>	<p>Domestic and International Terrorism</p> <p>Border Security: Policies, Actions and Implications</p> <p>Transportation Security Issues and Management</p>

	<i>chronic fear (terror).</i>	identify and describe examples of these concepts.	
CAA 8	<b>National Security vs. Homeland Security -</b>	<p>Role of the military and other Federal agencies in homeland security.</p> <p>Identify and evaluate the government organizational structure for homeland security and counterterrorism, and describe the roles and functions of the military and civilian agencies at the federal, state, and local levels.</p> <p>Discuss the challenges of state and local governments in their efforts to ensure homeland security.</p>	Role of Federal Agencies in Homeland Security
CAA 9	<b>National Preparedness Goals, Planning, and Policies -</b> <i>national policies to strengthen the preparedness of the United States to prevent, protect against, respond to, and recover from threatened or actual terrorist attacks, major disasters, and other emergencies within the</i>	<p>National homeland security doctrinal guidelines such as the National Planning Guidance (NPG) and the National Response Framework (NRF)</p> <p>The organization, purpose, and processes of the National Incident</p>	Strategic and Tactical Planning for Homeland Security

	<i>United States.</i>	<p>Management System (NIMS) and its various components.</p> <p>Response and Recovery as outlined in the Incident Command System (ICS)</p> <p>Define and explain the elements of the Homeland Security critical mission areas: prevention, protection, response, and recovery</p>	
CAA 10	<p><b>Emergency Management-</b> <i>The process of coordinating available resources to deal with emergencies effectively, thereby saving lives, avoiding injury or illness, and minimizing economic losses. This protection process involves four phases that are reinforcing and mutually dependent: preparedness, response, mitigation, and recovery.</i></p>	<p>Emergency management and response concepts, phases, and procedures across the range of homeland security challenges.</p> <p>The four phases of emergency management and how each phase is developed locally and federally. These four phases are mitigation, preparedness, response and recovery for man-made and natural disasters.</p>	<p>Introduction to Emergency Management</p> <p>Psychological and Sociological Impacts of Disasters</p> <p>Preparing for Catastrophic Emergencies</p>
CAA 11	<p><b>Critical Infrastructure –</b> <i>Assets, systems, and networks, whether physical or virtual to the U.S. that the incapacity or</i></p>	<p>The evolution and basic principles of Critical Infrastructure that is vital to a local community, a state, or the nation.</p>	<p>Critical Infrastructure and Key Resource Protection</p>

	<i>destruction of such assets, systems, or networks would have a debilitating impact on security, national economic security, public health or safety, or any combination of those matters.</i>	Private sector and governmental responsibilities in the area of critical infrastructure/key asset identification and protection.  Conventional and unconventional threats to the nation's critical infrastructure.	
CAA 12	<b>Risk Management-</b> <i>a systematic, analytical process to consider the likelihood that a threat will harm an asset or individuals and to identify actions that reduce the risk and mitigate the consequences of an attack or event.</i>	Standard and best practices used in risk management in the world of homeland security. This includes knowledge of an all hazards approach to risk analysis and infrastructure protection.  Threat, vulnerability, consequence, and critical infrastructure analysis.	Risk and Vulnerability Analysis  Planning, Prevention and the Management of Risk
CAA 13	<b>Homeland Security &amp; Public Health</b> – <i>As noted in the National Health Security Strategy document, national health security is achieved when the Nation and its people are prepared for, protected from, ready to respond to, and able to recover from incidents</i>	Define the various public health concerns in the field of homeland security.  Outline the various agencies involved in public health risks in homeland security.	Public Health Preparedness  Bio-Terrorism Preparedness and Response

	<i>with potentially catastrophic health consequences.</i>	Comprehend the various methods that may be used in an attack on the public water and food supplies.	
CAA 14	<b>Homeland Security and Technology -</b>	The uses and limits of technology in homeland security.  The technology and science efforts in homeland security	Technology, Security and Preparedness  GIS and HLS/EM
CAA 15	<b>Cyber-Security</b> – <i>Cyber security is the protection of information and property from theft, corruption, or natural disaster, while allowing the information and property to remain accessible and productive to its intended users. Cyber security means the collective processes and mechanisms by which sensitive and valuable information and services are protected from publication, tampering or collapse by unauthorized activities or untrustworthy individuals and unplanned events respectively. The strategies and methodologies of cyber security often differ from most other computer</i>	Identify the levels of and prioritize current vulnerabilities and threats to information systems.  Analyze policies and procedures that impact an organization’s information/cyber security systems.  Facilitate the appropriate implementation and use of information/cyber security systems.	Introduction to Information Security and Information Assurance  Computer and Network Security  Information Systems Security Management

	<i>technologies because of its somewhat elusive objective of preventing unwanted computer behavior instead of enabling wanted computer behavior.</i>		
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