CAMPUS SAFETY IN 4-YEAR PUBLIC COLLEGES
AND UNIVERSITIES IN THE UNITED STATES

by

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ABSTRACT

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In 2013, the U.S. Department of Education published revised guidelines for emergency response planning for colleges and universities in the United States. These guidelines reflect the collective work of numerous government intelligence, law enforcement, and preparedness agencies that have taken into account the past successes and failures of schools in response to natural disasters and man-made disasters such as cyber hacking and targeted violent incidents on campuses. With a collective enrollment of over 20 million students annually and valuable physical resources such as libraries, stadiums, and medical centers at institutions of higher education (IHE), an effort to identify the current safety personnel, practices, and services was conducted.

The purpose of this research was to identify areas of IHE compliance with the government guidelines and to identify differences, if any, by school enrollment size and region of the country. A cross-sectional design was used to describe compliance with the government guidelines and examine the differences based on a random sample drawn from all accredited 4-year public colleges and universities (n=708) in the United States.

A sample of 17% of all eligible institutions was selected (n=120), and a 70.8% response rate was obtained (n=85). Directors of public safety were interviewed by telephone and reported information regarding their school’s availability of mental
health counseling, crime prevention programs, emergency communications plans, emergency operations plans, and personnel training.

The major findings of this study revealed that only 64 (75%) schools offered disaster response presentations to new students and staff, while 9 (11%) reported that their written emergency operations plans were not available to their communities, and that only 53 (62.4%) offered presentations regarding cyber-security and safeguarding online information. This study also revealed that 40 (47%) of the respondents either did not have or did not know if their school had an emergency operations plan for dealing with database theft, and 55 (64.7%) either did not have or did not know if there was a plan in place to safeguard the private contact information used in their emergency communications systems. With an estimated 300,000+ college students annually studying abroad, only 44 (51.3%) respondents reported offering travel safety presentations to their communities. Few differences were identified based on enrollment or regional location. The implications are discussed within the context of increasing national trends of gun violence, armed civilians and officers on campuses, cyber hacking, and increased participation by students and researchers traveling abroad.
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Chapter I

INTRODUCTION

According to the National Center for Educational Statistics (NCES, 2015), there are over 21 million students currently enrolled in all institutes of higher education in the United States (NCES, 2015). With the addition of administrators, faculty and staff, this expands the potential for great human loss on college campuses during catastrophic events. Many of these institutions are also home to laboratories, libraries, and museums of great value not only to those institutions where they reside, but also to surrounding communities. A Report for Congress in 2006 by authors Davey et al. identifies the billions of dollars in grants that are awarded to U.S. universities by the federal government. These institutions of higher education (IHEs) are cornerstones of many cities and towns and represent a collection of great human and physical resources in our society, and the safety of those assets should be a national priority.

Safety research has led to the conclusion that many IHEs do not place enough emphasis on the prevention of hazards, preferring to concentrate mainly on response planning (McIntyre, 2004; Mitroff, Diamond, & Alpaslan, 2006). Two studies demonstrated that, compared with private IHEs, public institutions were significantly more likely to be in alignment with national emergency planning guidelines (Connolly, 2012; Wilder, 2012), and a similar national survey of public safety directors by a leading campus safety publication echoed this finding (Campus Safety, 2013). The same survey
of public safety directors also revealed that 43% of the respondents cited “administration apathy and/or naïveté regarding campus safety and security” as a top concern regarding lack of support for their emergency preparedness work. These findings demonstrate differences in the areas of emergency planning among types of institutions, and perhaps conflicting areas of vision and leadership among campus public safety administrators.

A document produced for the U.S. Department of Education (DOE, 2013) represents the latest guidelines put forth by the U.S. government to address all aspects and priority areas of emergency management for U.S. colleges and universities. The Guide for Developing High-Quality Emergency Operations: Plans for Institutions of Higher Education guidelines include two changes to earlier versions of published disaster planning for IHEs by the Federal Emergency Management Agency (FEMA) in 2003, and the DOE in 2010. One change is a result of Presidential Policy Directive-8 signed in 2011, and involves a modified multi-phase emergency plan that was originally created concurrently with the creation of the first FEMA office in 1979. The other change involves additional disclosure requirements for IHEs regarding crimes of violence (Violence Against Women Act, 2013). A study regarding the compliance of colleges and universities in the U.S. with the earlier FEMA and DOE guidelines revealed that most institutions had plans to respond to most severe weather related emergencies and incidents that involve physical violence, but were lacking in plans for dealing with cyber/technological issues and mass terrorism events (Cheung, Basiaga, & Olympia, 2014).

This study examined the extent to which colleges and universities in the United States are aligned with the emergency management guidelines set forth by the U.S. Departments of Education and Homeland Security. By identifying how compliant these institutions are to those guidelines, this study contributes a picture of how well prepared
public 4-year U.S. colleges and universities are in the event of natural and man-made disasters, and may help to identify specific areas where improvements can be made. Information obtained from this study helps to inform disaster preparedness policy development, educational materials, and evaluation.

**Research Questions**

1. In what areas do institutions of higher education in the United States align with government guidelines for emergency planning and response?
2. What institution characteristics are associated with adherence to the guidelines was addressed as an exploratory secondary Aim of the study.

The research questions were designed to reflect areas of compliance with national guidelines published for IHEs as the first joint product between the U.S. Departments of Homeland Security, Health and Human Services, Department of Justice, and the Federal Bureau of Investigation produced for the U.S. Department of Education in 2013. Currently, there are no published studies examining compliance of US colleges and universities with these guidelines.

**Aims of the Study**

The first aim of this study was to examine the adequacy of current emergency management activities and plans in institutes of higher education. The activities would include their current patterns of community involvement, communications testing, response drilling, and training of security personnel. Evaluation of the adequacy of institutions hazard response capabilities include the thoroughness of their emergency operating plans to deal with a variety of natural and man-made catastrophes. A limited
example of these would include the effects of crimes such as personal data theft, instances of violent assault, and preparation for events as diverse as hurricanes, pandemic influenza outbreak, and an active shooter on campus.

The second exploratory aim of this study was to identify characteristics of institutions associated with adherence to the guidelines, specifically in enrollment size and geographic region within the United States.

**Definitions**

All Hazards Preparedness—The term "all-hazards preparedness" refers to preparedness for domestic terrorist attacks, major disasters, and other emergencies (PPD-8).

Federal Campus Security Act (Clery Act) —Requires postsecondary institutions participating in student financial aid programs under Title 5 of the Higher Education Act of 1965 to collect statistics of criminal activity on campus, publish and distribute an annual report, provide timely warnings to campus community about campus crimes. It also requires campuses to implement a campus emergency response plan, and post evacuation routes and test plan annually.

First Responders—The term "first responder" refers to those individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) that provide immediate support services during prevention, response, and recovery operations (PPD-8).
Presidential Policy Directive-8 (PPD-8) — National Preparedness directive that requires the involvement of first responders in systematic effort to keep the nation safe from harm and resilient when struck by hazards, such as natural disasters, acts of terrorism and pandemics.

**Significance**

The cultural, economic and human cost of damage to institutions of higher education in the United States is a growing area of concern for multiple reasons. Considerable federal resources are currently being directed to research and recovery of these institutions as demonstrated by the recent announcement of a $530K Department of Education (DOE) award issued to Umpqua Community College in Oregon to aid in their recovery efforts after an active shooter event in 2015, and the $65 million in research grants now available through the National Institutes of Justice as part of its new "School Safety Initiative." This area of funding is a welcome consideration to all IHEs as numerous institutions in the past have experienced catastrophic losses by both man-made and natural causes. Shooting massacres have occurred on a number of campuses, and the enormous costs of naturally occurring disasters are exemplified by the estimated $200 million in economic recovery losses at Tulane University after the devastation of Hurricane Katrina in New Orleans in 2005, and an estimated loss of $710 million to the University of Texas at Galveston after Hurricane Ike in 2008.

Emergency preparedness guidelines for institutes of higher education have come primarily from the Federal Emergency Management Agency (FEMA), and based upon guidelines developed initially for responses to natural disasters such as tornadoes and flooding. Development of response plans for academic environments have more recently
been published by FEMA in 2003, and most recently in the joint publication with the DOE in 2013. These guidelines acknowledge the greater likelihood of naturally occurring catastrophes but also acknowledge the differences in response planning for man-made hazards that were not fully explored before recent events such as the Virginia Tech shootings of 2007, where generic "all hazards" planning was more common. Changes to evacuation procedures at schools in response to active shooters in particular are a result of multiple case studies where evacuation of building procedures will differ from evacuation of buildings in an event of a natural disaster.

The Margolis, Healy, and Associates (MHA) professional services firm specializing in campus safety, and managing directors of the National Center for Campus Public Safety has been conducting yearly surveys at IHEs across the country. These surveys are unique in that they inquire about coverage in five areas of campus safety: staff services and training of Public Safety personnel, social media and monitoring on campuses, regulatory compliance of Clery mandates, study abroad safety, and threat and vulnerability assessments. The inclusion of social media monitoring is a relatively new field of interest to IHEs now relevant to student admissions, as well as human resources and public safety screening of employees.

Their survey reaches approximately 500 IHE administrators at 2-year and 4 year institutions, but the respondents are from a pool of MHA email subscribers and partnerships with other professional associations via their membership lists and social media contacts. This study included social media monitoring and addressed the same areas of inquiry with additional questions about personnel training, campus mental health counseling services, and campus crime prevention programs. Eligibility for this survey included senior safety personnel from all 4-year public IHEs recognized by the DOE, regardless of their professional affiliation with any security related consulting firm or
organization. Despite the limitations of the MHA respondent pool, the topic coverage of their survey represents a consensus of important campus safety issues being investigated by the National Center for Campus Public Safety, which was newly established in 2015 and continues to be federally funded. This study also more specifically explored elements of each institution’s emergency operations procedures and services, which the MHA survey broadly covers.

In "A Commentary Regarding Campus Safety and Security for Institutions of Higher Education," published as part of the proceedings of the Academy of Educational Leadership, authors Sheffield, Gregg, and Lee (2016) examine strategic considerations that IHEs may address in incorporating an emergency management cycle of “preparation, mitigation, response and recover.” The authors advocate the use of this version of an emergency management cycle, but as a model that does not incorporate or acknowledge the latest DOE guidelines specifically identifying Prevention, Protection, Mitigation, Response, and Recovery as the essential mission areas. Considering that the audience for this publication is directed to current IHE administrators, the fact that this article does not mention the new DOE planning guidelines is troubling. Despite that fact, the authors stress the importance of targeted training by IHE staff for both man-made and naturally occurring hazards in each of the stages of the emergency management cycle. They specifically recommend that residential life authorities perform more ongoing training to gain greater perspective regarding the operational aspects of managing emergency situations. This idea is also in alignment with research conducted by Seo, Torabi, Sa, and Blair (2012) that identified a low understanding of emergency response procedures among college students, and a study by Cheung and associates (2014) that only 47% of students at IHEs had disaster preparedness as part of their student orientation.
The article by Cheung et al. (2014) identifies that although there have been published studies of emergency preparedness at K-12 schools, there were no published studies examining the compliance of IHEs in the United States with 2003 nationally published guidelines for preparedness by FEMA and the DOE. This finding was valid before the Cheung et al. national survey was completed in 2011, and continues with the recently established guidelines by the DOE in 2013, where no national study has been conducted to describe the current characteristics of IHEs in regard to their emergency preparedness activities and personnel.

Campus violence trends from the 1970s through 2008 were reported by the DOE and federal law enforcement agencies in the document Campus Attacks: Targeted Violence Affecting Institutions of Higher Education (2010), which shows the number of "targeted violent incidents" specifically occurring on college campuses to be 25 incidents during the decade of the 1970s, 40 incidents during the 1980s, 79 incidents during the 1990s, and 83 incidents between 2000 and 2008. This document also highlights the growing use of firearms by perpetrators over the past four decades.

A publication entitled "A Study of Active Shooter Incidents in the US Between 2000-2013" by the FBI identifies an increasing trend of this type of event, where the average occurrence between 2000 and 2006 was 6.4 per year, and between 2007 and 2013, the rate increased to an average of 16.4 per year. The shootings occurred in 40 of 50 U.S. states, and 70% of those shootings occurred in either commercial or educational settings. Of the 39 incidents that occurred in educational environments, 12 (31%) took place at IHEs, with male and female shooters ranging in age between 18 and 62 years old. The shooters represented five former students, four current students, two employees (one faculty member), and one visitor at a university hospital. The two events with the highest
casualty rates of all locations involved university student perpetrators (Cho, 2007—49 casualties; Holmes, 2012—70 casualties).

An investigation of the trends in aggression and violence on college campuses by Jenson (2007) suggests that violence and aggressive behavior may mirror a host of individual, economic and social patterns, which make it hard to predict. Jenson cites a 2002 DOE study by Vossekul, Fein, Reddy, Borum, and Modzeleski that identified that a majority of school shooters in the decade of the 1990s had mental health issues, which also links the known characteristics of Seung-Hui Cho and James Holmes. Jenson’s suggestions for future policy, practice and research areas are in at least two key areas of social intervention—the connection between violence and mental illness and enhanced gun control policies. This study addressed the availability of mental health services for both students and staff, and the presence of IHE use of campus behavioral threat assessment teams.

For decades, national campus safety guidelines have focused on planning for natural disasters and have been headed by the Federal Emergency Management Agency (FEMA), which is commonly identified as a response agency. As naturally occurring hazards are the most likely incidents to affect college campuses, priority to address those events should be expected, though the increased trend in violent acts and cyber related crimes on educational settings should be cause for exploration in to the prevention and readiness of IHEs to handle both types of hazards. This study identifies the state of campus safety in 4-year public IHEs and explores the communication systems, emergency operation plans, mental health and public safety services available. This study also represents a unique area of coverage and depth that may yield significant insight necessary for effective policy and program development for all institutions of higher education.
Chapter II

LITERATURE REVIEW

Introduction

Colleges and universities in the United States have been called “soft targets” for terrorists by former FBI Director Robert Mueller in a public address to Congress in 2003. In 2007, after an evaluation of the state of security at U.S. institutes of higher education, a ranking board member of the Federal Law Enforcement Training Accreditation Agency, and Associate Dean of Education at Johns Hopkins University categorized IHEs as “high risk targets” (Greenberg, 2007). Some institutions have already documented enormous losses of resources due to mass shootings and natural disasters (Johnson, Nolan, & Sigrist, 2006; Loftus, 1999; O’Neil, Cook, Finkel, & Henry, 2007; Powell, Hanfling, & Gostin, 2012). These institutions are primarily responsible for educating students, and providing a safe atmosphere and learning environment for all faculty, staff, and students on its premises. Currently, there is no single unifying agency or central authority that supports campus safety as a priority (Greenberg, 2007), and with a variety of potential hazards by man-made and natural causes, it’s imperative that these institutions follow strategic emergency preparedness guidelines that adequately address the unique challenges that IHEs pose. Preparation for this study involved reviewing the literature relevant to emergency planning and response in the United States, the gap between perceived threat and level of preparedness in the U.S. population, disaster response in
institutions of higher education, national incident management systems, on-scene incident command systems, government guidelines developed for colleges and universities, and elements of new operation plans for institutions of higher education.

History of Emergency Planning and Response in the United States

The history of a modern agency responsible for coordinating essential personnel and resources in response to a large scale disaster has its roots in the designation of the first U.S. official in charge of emergency management, and thereby the creation of the first Office of Emergency Management (OEM) on May 25, 1940 (National Archives, 1940). This was established by the Executive Office of the President of the United States as a position to act as a coordinator and liaison with all U.S. national defense agencies. Details of the first officer in charge, James F. Byrnes and the history of the OEM’s creation and function during that era are documented by Hogue and Bea (2006) and reflect activities primarily involving clearing wartime defense measures and coordinating the national defense plan.

In 1950, an agency within the Office of Emergency Management oriented specifically toward citizen protection within U.S. territories was created by President Truman through Executive Order 10186 (National Archives, 1950). The Federal Civilian Defense Administration (FCDA) was created and responsible for general civilian safety strategy and for developing plans for fallout shelter use in case of Soviet attack of atomic weapons on the U.S. homeland. In 1958, President Eisenhower took the FCDA from the Office of Emergency Management and merged it with the Office of Defense Mobilization whose role was to control and coordinate all wartime activities directed towards economic stabilization involving both manpower and transport operations. Between 1958
and 1961, this became the Office of Civil and Defense Mobilization, which was then administered out of the Executive Office of the President. In 1961, the functions of the Office of Civil Defense and Defense Mobilization were divided. The national defense functions were transferred to the Secretary of Defense, and the mobilization functions were re-designated as the Office of Emergency Planning, whose function was to assist the President in “the coordination and determination of federal emergency preparedness policy” (National Archives, 1961). Hogue and Bea (2006) identified a lack of coordination on the part of multiple emergency response agencies in the 1960s and 1970s, noting that the Federal Civil Defense Administration had been under the Executive Office of the President, the Office of Civil Defense and Defense Mobilization was under the Department of Defense, and the Federal Disaster Assistance Administration under the Department of Housing and Urban Development. Falkenrath (2001) suggests that lack of cohesion and of a unifying authority in national emergency management issues was influenced by differing agency missions and budgetary priorities. Falkenrath describes the era of this lack of integration as a time of “a fragmented, chaotic policymaking and budgetary process.” When response to nuclear accidents and the transportation of hazardous materials were added to disaster relief laws, there were dozens of agencies that could have been involved in some aspect of response and recovery (FEMA, 2015). In 1978, the National Governor’s Association formally requested that President Carter address this dilemma. The organization known today as FEMA was created on April 1, 1979 by President Carter, when he signed an executive order for the creation of the governmental agency with a stated vision of “A Nation Prepared.” The agency was charged with the task of helping American communities prepare for, prevent, respond to, and recover from disasters (FEMA, 2015). Its original formation was intended to be of assistance to overwhelmed state and local agencies and
resources in times of disaster. The Federal Emergency Management Agency may be activated after the governor of the state in which emergency response is needed officially declares a state of emergency. This new agency would report directly to the Office of the President and included the Defense Civilian Preparedness Agency, Federal Disaster Assistance Administration, the Federal Insurance Administration, the General Services Administration and the National Fire Prevention and Control Administration. Notably, it was during this time that the first director, John Macy established the development of an integrated emergency management system and the priority of a 4-phase "all-hazards" approach to provide control and direction during a crisis situation (FEMA, 2010). The four phases of Prevention, Mitigation, Response, and Recovery have been in use since then, only recently amended to include an additional phase by way of Presidential Policy Directive-8 in 2013.

Despite the implementation of the all-hazards approach, the architects recognized that they needed to provide for some changes as a result of the first large scale terrorist attack in the 1995 Oklahoma City bombing. One result of this was a presidential mandate for the Department of Justice and FEMA to provide training for all emergency responders throughout the country to deal with crimes directly related to man-made catastrophes not previously addressed in the all-hazards planning. These new threats to public safety include biological, chemical, and radiological agents as well as explosives as weapons of mass destruction.

In response to the terrorist events in the United States on September 11, 2001, the Department of Homeland Security (DHS) was created in order to further coordinate efforts by intelligence and law enforcement agencies with the agencies responsible for civilian and infrastructure integrity. The Federal Emergency Management Agency no longer reported to the Executive Office of the President, but was one of several agencies...
joined together as part of the Emergency Response Directorate of the DHS, whose missions “include preventing terrorism and enhancing security; managing our borders; administering immigration laws; securing cyberspace; and ensuring disaster resilience” (DHS, 2012). Collectively, the range of directorates, offices and agencies under DHS now represent branches of health services, emergency management, intelligence, law enforcement, and protective services leadership.

The Federal Emergency Management Agency is now recognized as the lead entity responsible for training responders and coordinating response to catastrophic natural and/or man-made events. The agency is also responsible for educational resource development and for offering programs related to emergency response for professional responders as well as for the general public.

**Gap Between Perceived Threat and Level of Preparedness in the U.S. Population**

In 2007, the National Center for Disaster Preparedness (NCDP) at the Mailman School of Public Health at Columbia University working with the Children’s Health Fund and the Marist College Institute for Public Opinion released *The American Preparedness Project: Where the US Stands in 2007 on Terrorism, Security, and Disaster Preparedness*, a report summarizing the results of its national survey of over 1,300 adults in the United States. Their survey revealed that almost 60% of the population reported feeling "very prepared" or "prepared" to deal with natural disasters such as hurricanes and wildfires if given some warning, with most respondents identifying weather related events as the most likely threats they will have to deal with (Redlener, Grant, Abrahamson, Stehling-Ariza, & Johnson, 2007).
The results revealed that 63% of Americans trusted FEMA to provide reliable and accurate information to the public during catastrophic events, with the U.S. Centers for Disease Control ranking the highest (86%) in believability and information accuracy of any governmental agency.

Approximately 80% of respondents to the NCDP poll were “concerned about new terror attacks in the United States,” with 47% believing that they will personally experience a major disaster such as a weather emergency or terrorist attack within the next five years. Despite a high perception of personal threat, only 34% reported beginning preparedness planning and the gathering of survival resources.

The results of a more recent national poll taken in 2014 showed that 66% of parents with children in schools were concerned about natural disasters, and 70% were concerned about the threat of active shooters (Save the Children Report, 2014). Of these families, nearly half (49%) declared that they did not feel very prepared to protect their family, with the average head of household having spent only one hour on emergency planning over the past year. These findings prompted the vice president of Save the Children’s U.S. programs to describe the situation as “a wake-up call” to parents about how little they know about emergency planning and how they are failing to be proactive regarding preparedness. These findings may reflect a reliance on the institutions with which one is affiliated with for their personal safety.

**Disaster Response in Institutions of Higher Education**

The Higher Education Act of 1965 was a federal law requiring that all IHEs disclose crime-related information in a timely fashion and prepare an annual cumulative report of crimes committed on individual campuses. The law also required disclosing
each institution’s security policies. Since 1990, responses to incidents of violence on IHEs have typically fallen under Clery regulations, which elaborated on and were codified under the Higher Education Act. The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act was developed as a result of advocacy work started by Connie and Howard Clery after the rape and murder of their daughter Jeanne by a fellow student at Lehigh University in 1986. The Clery Center for Security on Campus, Inc. (formerly Security on Campus, Inc.) is a non-profit organization started in 1987 and focused on advocacy, collaboration, and safety education for colleges. Their landmark work, also known as the "Clery Act," is a federal law that requires each U.S. college and university to release their campus security policies and a uniform order of crime statistics to all current and prospective students and institution employees (Grasgren, 2013).

Changes to the Clery Act were passed in 2010 and required all IHEs to conduct annual emergency drills, risk and threat evaluations, and to report incidents of hate crimes on their annual reports to the campus community. Additionally, influenced by the shooting massacre at Virginia Tech University in 2007, a revision to the Clery Act included the provision of timely alerts of active shooters on campus (Szkotak, 2012).

In a national review of Clery Act violations between 2001 and 2012 by the Institute of Sciences within the National Center for Educational Statistics, the total number of arrests for illegal weapons possession and drug and liquor law violations increased from 40,300 in 2001 to 51,400 in 2012, though some of the increases in arrests may be associated with increases in student enrollment. The report also noted that both public and private 4-year IHEs had increases in disciplinary referrals between 2001 and 2012, where illegal weapons, drug law, and liquor law violations increased from 153.1 per
10,000 students in 2001 to 192.2 in 2012 for public 4-year institutions, and from 275.5 per 10,000 students to 334.3 per 10,000 students in non-profit private IHEs.

An Amendment to the Clery Act involves the submission of hate crimes information, and the information regarding trends in this area is just now being identified. This report notes an increase in the amount of hate crimes reported on college campuses between 2009 and 2012, with acts of intimidation increasing from 175 in 2009 to 251 in 2012, simple assaults increasing from 58 to 79, and acts of hate related vandalism of 396 to 412 in the same time period. In these specific areas of hate crimes (intimidation, simple assaults, vandalism), the overwhelming category of bias was the subgroup of "Race" as the primary target of these crimes (other groups include ethnicity, gender, sexual orientation, and religion) in 2012. Acts of intimidation due to racial issues accounted for 45.2%, and bias due to sexual orientation was 25.3% as the next closest category. Simple assaults due to racial issues accounted for 44.3%, and bias crimes related to sexual orientation accounted for 27.8% as the next closest category, and vandalism related to racial bias accounted for 45.9%, and 25.2% due to a sexual orientation bias. As IHEs continue to increase enrollment of minority groups, this is an area of targeted violence on campuses to monitor.

Institutional vulnerability and threat assessments are essential elements of an institution’s emergency planning development and include evaluations of critical infrastructure, personnel and resources. Despite the new Clery mandate to conduct regular assessments, Seo et al. (2012) and Robertson (2014) reported that only 30% of all institutions actually conduct annual security assessments. A study of the compliance of IHEs in the United States with national emergency disaster guidelines by Cheung and associates in 2014 found that 10% did not practice emergency plans, and 27% did not utilize table top exercises. In an MHA survey of IHEs in 2012, their results reflected a
40% non-compliance of annual assessments and also showed a low concern among school administrators for threats of natural disasters and chemical spills, which were identified by MHA as being two of the more likely campus disasters to occur. Mitroff et al. (2006) and Wu, Liu, and Lu (2007) discovered that most IHEs are prepared for events that they have experienced before—fires, lawsuits, and crimes.

The report by Rasmussen and Johnson (2008), which was an assessment of the nationwide impact of on campus safety policy and practice immediately after the Virginia Tech shooting, identified the growing movement of institutions toward the following areas: formation of eclectic teams responsible for behavioral threat assessments of students in crisis, an increase in mental health evaluation services and personnel, an increase in the number of risk assessments conducted on campuses, and an increased movement by groups advocating for the right to carry guns on campuses. In 2002, a study by Miller, Hemenway, and Wechsler was the first to demonstrate multivariate factors as predictors of gun violence on college campuses. The authors conducted a national survey of students at 4-year institutions and discovered that 4.3% reported having a gun on campus and 1.6% had been threatened with a gun, and identified that the persons most likely to bring guns to campus were: White, male, most likely to engage in risky behaviors (such as binge drinking and driving), and were at higher risk for injury. In the years since this study was conducted, the increased gun violence at IHEs may have prompted organized student movements for allowing guns on campus as a 2016 report by Morse, Sisneros, Perez, and Sponsler for the Research and Policy Institute of NASPA (Student Affairs Administrators in Higher Education) revealed that currently 9 states allow guns on campus, and in 2015, 14 other states proposed legislation to allow guns on their campuses.
In summary, even though more than 95% of IHEs have established some written plans for emergency response, some studies have shown that between 20% to 40% have never practiced these procedures (Cheung et al., 2014; MHA, 2012). Research by Seo et al. (2012) indicated that many colleges do not recognize the importance of nor engage in annual campus-wide response drills, and that only 25% of institutions surveyed believed that their students understood the emergency procedures on their campuses. Seo et al.’s research also indicated a gap between public (48%) and private (35%) colleges with respect to the conduct of regular emergency response drills. Clearly, the need for greater compliance and uniformity of practices is evident by the results of these studies. Violence on school campuses over the past few years has profoundly impacted the overall U.S. crime rate (Eisenbraun, 2007), where active shooter incidents at schools represented approximately 29% of all occurrences in the decade between 2000-2010 (FBI Bulletin, 2014).

**National Incident Management System**

The National Incident Management System (NIMS) is the name for the standard emergency management system that the U.S. government created in 2004 as the foundational structure of emergency response planning and on-scene procedures. The system features six integrated components, which serve as the basis of its systematic approach for responding to incidents: (1) Command and Management; (2) Preparedness; (3) Resource Management; (4) Communications and Information Management; (5) Supporting Technologies; and (6) Ongoing Management and Maintenance.

The main purpose of this system is to standardize agency roles and responsibilities during emergency situations. The NIMS framework establishes common terminology,
concepts, procedures, and standards among the three major groups of first responders. Law enforcement, fire control, and emergency medical personnel are expected to know and adhere to standard NIMS inter-agency communications and response procedures. Having a nationally established system for communications and priorities is thought to enhance the efficiency of proper response by all responders during periods of high stress and limited reaction time. In order to receive federal preparedness funds, adoption of the NIMS system has been mandated for college emergency response systems. Fazzini (2009) demonstrated the importance of this system to IHE administrators who recognize its value in enhancing an institution’s emergency response capabilities.

In order for IHEs to be in compliance with Homeland Security mandates, the NIMS system must: (1) be reflected in an institution’s all-hazards emergency response plans; (2) test their emergency operations plans; (3) have their staff NIMS trained; and (4) conduct continual reviews of the efficacy and efficiency of their plans. Fazzini (2009) suggests that by building a “continuum of compliance,” IHEs would benefit from constant re-evaluation and be in a better position to update their plans and provide timely changes to their personnel training. A report by Burke in 2010, on behalf of the Illinois Criminal Justice Authority, examined the relationship between local law enforcement and postsecondary institutions in Illinois and across the nation. Results of this study disclosed that many colleges have experienced critical emergency incidents within the past five years. The work by both Burke and Fazzini stresses the importance of adopting the NIMS system and its value in staff development, operational planning, testing, and monitoring. The benefits of adopting the NIMS system for all public and private institutions also feature the ability of on-campus personnel to seamlessly coordinate with off-campus emergency response professionals for maximum benefits. A complement to the NIMS
framework is the Incident Command System, which describes the on-scene management approach between responders and their resources.

**Incident Command System**

The Incident Command System (ICS) is a standardized all-hazards, on-scene, incident management structure that addresses communications, personnel, procedures, and resource personnel structure and assigned tasks, and addresses organizational theory by its system of procedures and resource allocation. The ICS is now considered the default strategy for handling all hazardous incidents, whether the institution is the sole responder or if outside agencies become involved in the event. The ICS provides the framework to address and manage hazardous or threatening situations, providing an operational structure and protocols during the event. And as the title implies, it provides specifications regarding the components of a command center, command team, and the role of an on-scene incident commander.

The operational strategies at the foundation of the ICS were derived from military procedure and are meant to provide a flexible framework designed to address all hazards communities may face. The ICS administrative model divides first responder functions into five distinct areas of responsibility: command, finance, logistics, operations, and planning (FEMA, 2011). The organizational model of the ICS also utilizes military and standard law enforcement procedures to prioritize a system of preservation of human assets first, and then of material resources with high value assets previously identified by the institution’s risk assessments. The flexibility of the framework is a result of some cross-training of personnel to be able to serve in a number of capacities and within different areas of responsibility, such as having the head of the operations section serve
as an interim incident commander in the brief time that the incident commander may need to move location due to an unstable environment. Incident commanders are typically professionals with on-scene first responder experience who are tasked with providing a timely strategy for allocating all resources, and for directly collaborating with outside agencies. The designated heads of the finance, logistics, operations, and planning divisions are typically institution administrators who are responsible for safe setup of their own operational areas and personnel, and are often not located within easy access of each other or of the incident commander.

**Government Guidelines Developed for Colleges and Universities**

National preparedness efforts are now guided by Presidential Policy Directive (PPD)-8, which was signed by President Obama in March 2011 and describes a framework for disaster prevention and preparedness. The elements of the directive reflect a collective understanding of national preparedness derived from lessons learned from environmental catastrophes, terrorist attacks, and other experiences from schools and institutes of higher education across the country.

In 2003, the Federal Emergency Management Agency published a document that provided a general guide for IHEs to become disaster resistant. The publication, entitled *Building a Disaster Resistant University* (DRU), was available online and free to the public. The DRU described the four phases of preparedness and response activities that had been a standard of emergency management practice since FEMA’s initial development in 1979. The initial phase of Prevention included strategies to save the communities human and material resources, and to facilitate response operations. The Mitigation phase aims to reduce the likelihood of a disaster occurrence, or to lessen the
damage caused by the event. The Response phase includes activities designed to provide immediate disaster assistance, minimize property damage, save the most lives, and speed up recovery efforts. The Recovery phase was designed to aid efforts to get the community back to normal operations after an event. Despite furnishing the general plan in this document, FEMA does mention that it is the responsibility of each institution to develop, implement, and continually improve their own plans as situations dictate those changes. The recommendations also include the suggestion to involve the diverse members of the campus community in the entire planning process and to solicit the cooperation and resources of surrounding public safety and services agencies.

In 2010, the U.S. Department of Education took recommendations by DHS, DOJ, and the FBI and published its own guide in emergency management for IHEs. This document, the *Action Guide for Emergency Management at Higher Education Institutions*, was intended for use by public and private community colleges, 4-year colleges, and full research universities (U.S. DOE). This was a document that was developed by the Office of Safe and Drug Free Schools division, and also adopted the 4-phase approach used in FEMA’s DRU publication. The Action Guide differed in that it could be used as a reference for evaluating an institution’s current plans already in use, identifying areas where improvement was necessary.

**Elements of New Emergency Operation Plans for Institutions of Higher Education**

The *Guide for Developing High Quality Emergency Operation Plans for Institutions of Higher Education* (2013) was developed, in part, as a response to “stakeholders following the recent shootings in Newtown and Oak Creek and the recent tornadoes in Oklahoma.” As a first product of the joint venture between the U.S.

The new guide reflects five mission areas disclosed on March 30, 2011 as Presidential Policy Directive-8, which was established for all private and non-profit sectors, schools and all levels of government:

1. **Prevention**—the capabilities necessary to avoid, deter, or stop an imminent crime or threatened or actual mass casualty incident. Prevention is the action IHEs take to prevent a threatened or actual incident from occurring.

2. **Protection**—the capabilities to secure IHEs against acts of terrorism and man-made or natural disasters. Protection focuses on ongoing actions that protect students, teachers, staff, visitors, networks, and property from a threat or hazard.

3. **Mitigation**—the capabilities necessary to eliminate or reduce the loss of life and property damage by lessening the impact of an event or emergency. In this document, mitigation also means reducing the likelihood that threats and hazards will happen.

4. **Response**—the capabilities necessary to stabilize an emergency once it has already happened or is certain to happen in an unpreventable way; establish a safe and secure environment; save lives and property; and facilitate the transition to recovery.

5. **Recovery**—the capabilities necessary to assist IHEs affected by an event or emergency in restoring the learning environment.
Summary

This review has presented a number of recent studies and documents that have identified origins of the discipline of emergency preparedness and response for IHEs in the United States and the present condition of colleges and universities. There is currently a lack of consistency and preparedness planning in IHEs, notably in community colleges. Studies by some researchers demonstrated IHEs’ emphasis on incidence response planning (Cheung et al., 2014; Mitroff et al., 2006; Wilder, 2012), and a lack of resources and support by administrators (MHA, 2011, 2012).

A 2006 Report for Congress described the millions of dollars invested in research grants and resources annually for IHE use, and the sheer number of the U.S. population that are part of campus communities are reasons for evaluating the current level of emergency planning by these institutions (Davey et al., 2007). Additionally, research cited by the FBI in 2014 indicated an alarming increasing trend of active shooter incidents on school and campus grounds over the past decade, with studies verifying citizens concern for their safety on campuses.

This review has also identified numerous documents created by the federal government that have attempted to provide IHEs with various guidelines and protocols for emergency preparedness and response. The latest document produced in 2013 finally incorporated the collective recommendations and resources of multiple government agencies representing specialties in education, health and human services, homeland security, intelligence analysis, justice administration, and response management. Previous studies on campus preparedness have not included the most recent guidelines, but have pointed out that though IHEs are required to comply with certain actions regarding safety and crime disclosure, institutions are currently not obligated by law to demonstrate
emergency plans or to carry out functional evaluations of their effectiveness (Cheung et al., 2014; Connolly, 2012; Wilder, 2012).
Chapter III

METHODS

Aims of the Study

The first aim of this study was to examine the adequacy of current emergency management activities and plans in institutions of higher education. The activities included their patterns of community involvement, communications testing, response drilling, and training of personnel. Evaluation of the adequacy of institutions’ hazard response capabilities include the thoroughness of their emergency operating plans to deal with a variety of natural and man-made disasters.

The second exploratory aim of this study was to examine to what extent, if any, the location or size of the institutions were associated with adherence to the guidelines. This aim involved conducting two sets of Chi square analysis for each item on the survey, one where institutions were classified by location (Northeast, Midwest, South, West), and one where they were classified by enrollment size (<6,044, 6,248–19,574, and >19,574). Despite the large number of statistical tests that were conducted, no statistically significant differences were observed.
Theoretical Framework

This study was primarily descriptive in nature. The intent was to estimate the extent to which various disaster preparedness guidelines are being followed by 4-year public IHEs in the United States. The Diffusion of Innovations framework, developed by Rogers (1962) over five decades ago, was used to conceptualize and guide this study. The Diffusion of Innovation framework specifies four aspects of the diffusion process: (1) the innovation itself; (2) users (individuals and organizations); (3) the process; and (4) time factors. In this study, emphasis was placed on the first two elements, the innovation and the users. In the context of the study, the guidelines are the innovation and an aim was to identify which aspects of the innovation were most and least likely to be implemented. In the results section, the guidelines that were most and least likely to be followed were presented. Factors may have affected low rates of implementation were considered in the Discussion. Rogers’s Diffusion of Innovations framework also identified characteristics of potential users in terms of when (how quickly) they adopted and began consistently using an innovation. He classified users as innovators, early adopters, early majority, late majority, and laggards. While prospective classification of users was beyond the scope of the proposed study, Aim 2 sought to explore what characteristics of IHEs were associated with greater or lesser adherence to each of the guidelines. These analyses were delimited in scope to institution characteristics that were publically available including enrollment size and geographic location.

Research Design

A telephone interview was developed and administered to a sample of campus public safety directors of U.S. IHEs. Participants were to report on their institution’s
emergency preparedness plans, policies and characteristics of their public safety staff training. The researcher conducted all of the interviews.

Institutions

1. Colleges and universities in the U.S. (excluding other U.S. territories), accredited by the Department of Education.
2. Only 4-year public institutions were included, though the original study design included 2-year and private schools.

Participants

Eligibility was limited to directors of campus public safety or other senior safety administrator at each institution.

Sample Selection and Recruitment

Participants were recruited through a telephone request for participation in the study. First, the contact information for the institution was identified from the NCES/IHE website, which included a direct link to the school (NCES, 2015a). A search on the school’s website provided the link to the institution’s public safety department, and telephone contact was attempted. When the respondent was reached and available, the survey was conducted at that time. If the respondent was not available at that time, an attempt to schedule a future appointment was made. Up to 25 attempts were made to complete each survey.
Sampling

Selection of the institutions involved the following steps:

1. Beginning the institution search on the National Center for Educational Statistics (NCES) -Integrated Post-Secondary Data System (IPEDS) website (https://nces.ed.gov/ipeds/) (NCES, 2015b). The NCES is the primary federal entity for collecting and analyzing data related to education in the United States.

2. Selecting, “Use the Data” from the navigation bar at the bottom of the page.

3. Selecting, “Compare Institutions” from the middle of the page.

4. Next, selection of “By Groups” and “EZ Group” from the drop down menu.

5. Next, select “Title IV Participating” and “U.S. only” from the top row options.

6. Next, under Special Considerations, choose Sector, and then select “Public, 4 year or above.”

7. Next, choose Degree-Granting Status, and then select “Degree Granting.”

8. There were 708 institutions that were eligible for inclusion in this study (listed from the latest academic year 2014-2015 available at the start of this study). These schools are recognized by the US Department of Education as degree granting institutions and participate in Title IV programs that offer their students federal financial aid assistance.

9. A total sample size of 120 schools were selected for this study and reflects 17% of the target population of 4-year public colleges and universities in the country.

10. Institution information was identified and coded as an independent record and entered into an Excel spreadsheet. Selection of participants for the sample was by a random record generator within the Excel software.
11. If contact with a school did not yield useable results (due to refusal to participate, not successful after numerous attempts to contact, incomplete questionnaire, or withdrawal), then another institution from the list of randomly selected institutions was used.

12. Eighty-five institutions responded, which represented 70.8% of the sample target.

**Development of Survey Instrument**

The survey was developed to reflect the major areas of campus public safety preparedness as determined by the *Guide for Developing High-Quality Emergency Operations Plans for Institutions of Higher Education*, which was made available by the U.S. Department of Education in June 2013. This instrument was also based on the existing literature and developed specifically for the target population. The questions were developed to be as brief and clearly understood as possible.

The survey consisted of five major sections covering the following areas: (1) institution characteristics and demographics, (2) public safety services, (3) emergency operations plans, (4) mental health services, and (5) emergency communications. The instrument included 36 questions: 31 of which require closed ended responses and offered a “yes/no/don’t know” response format, and 5 questions with multiple choice response format.

**Pretesting and Pilot Testing**

Experts in the field of campus public safety were recruited to do an initial evaluation of the questionnaire for appropriate content and format. Three director level
specialists with experience among them in public and private, suburban and urban environments participated in this evaluation. The researcher met with each of the experts individually and explained the study goals and answered any initial questions they may have had regarding the content and scope of this study. They were then each given a paper copy of the questionnaire and asked to evaluate it and to put forth recommendations for improvement. Each respondent provided some unique suggestions that resulted in a few changes to the questionnaire. Once those changes were incorporated in the questionnaire, the instrument was then returned to the three experts for a final opportunity for suggestions. The current version of the test instrument is a result of these revisions (see Appendix A).

Data Analysis

Data analysis involves calculating descriptive statistics, including frequencies and percentages and means and standard deviations to describe the extent to which the sample of IHEs is in compliance with preparedness guidelines. Comparisons related to Aim 2 will examine the degree to which there are differences between subgroups of IHEs. Analyses for these comparisons will be based on the level of measurement for the respective IHE classification variables, but in most outcomes Chi squared analysis will be used.

Calculating sample size requirements is hampered by the lack of data indicating the amount of variability in each of the implementation variables assessed. Maximum variability was, therefore assumed (e.g., 50% of the sample responding "yes" or "no"). The multiple comparisons required for Aim 2 is a further consideration. Given the lack of data, the basis for the sample size determination was feasibility of reaching respondents
and completing data collection within a reasonable time frame (~6 months). The comparatively large sample size will enhance the confidence that can be placed in the descriptive estimates to be derived, by reducing the confidence intervals around the respective estimates.
This study examines the extent to which 4-year public colleges and universities in the United States are aligned with the latest emergency management guidelines set forth by the U.S. Departments of Education and Homeland Security. A telephone survey was conducted with public safety administrators of a representative sample of those institutions. The second aim of the study was to explore to what extent, if any, the location or size of the institutions were associated with adherence to the guidelines. This aim involved conducting two sets of Chi square analysis for each item on the survey, one where institutions were classified by location (Northwest, Midwest, South, and West), and one where they were classified by enrollment size (<6,044, 6,248–19,574, and >19,574). Despite the large number of statistical tests that were conducted, no statistically significant differences were observed.

The data for this research were collected between December 2016 and September 2017. Of the 704 public colleges and universities that were eligible in the target population, a random selection of 120 institutions were included in the sample population, which represents 17% of the target population. Of those 120 institutions, 85 completed the survey, representing a 70.8% response rate. Eleven schools declined to participate, and 24 schools were considered unreachable after more than 25 attempts to contact each one. Differences in demographics between participating and
non-participating institutions regarding enrollment size and geographic region were assessed by chi-squared analysis and no significant differences were observed. In addition, IHEs were categorized by enrollment size and region (see Table 1) and differences in participants’ responses were examined using Chi square analyses. Given the large number of tests that this entailed, a p value of .001 was used. No statistically significant differences were observed. In almost all cases, the responses across the different categories were very similar (see Appendix B).

**Participants**

The response rate of 70.8% reflects responses by 80 campus safety officials (94.1%) that include: directors of public safety or campus police chief, or a designated officer of the public safety/police force. The remaining 5 participating respondents (5.9%) were recognized at their institution with the following titles: crime analyst, director of health and safety, emergency manager, environmental operations manager, and a safety operations manager. All of the respondents were senior staff members of their institutions and were qualified to participate in the survey.

**Institutional Characteristics**

The number of students attending each school ranged between 636 and 71,918 in enrollment, with the survey sample nearly evenly divided among three classifications of enrollment size (Table 1). All schools were categorized within the four major geographic regions recognized by the U.S. Census. The majority of respondents were from the Southern states and represented 41.2% of the participants, with the institutions from the West region constituting the smallest group of participants at 14.1%, with two states
(Alaska and Hawaii) not represented by any school. Seventy-six institutions (89.4%) provided year-round dining and housing resources for students, but only 15.5% had an on-campus emergency medical service. Seventy-six institutions (89.4%) exclusively employed their own security or police staff, with only 3 (3.5%) schools exclusively using a contracted private security company, and 6 (7.1%) institutions employing a combination of their own public safety/police staff supplemented with contracted security officers on a regular basis.

Table 1. Selected Institutional Characteristics of 4-Year Public Institutions among a National Sample of 4-Year Public Higher Education Institutions in the United States (n = 85)

<table>
<thead>
<tr>
<th>Institution Characteristics</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institution Size</strong></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>(636 – 6,043)</td>
</tr>
<tr>
<td>Medium</td>
<td>(6,248 – 19,574)</td>
</tr>
<tr>
<td>Large</td>
<td>(19,736 – 71,918)</td>
</tr>
<tr>
<td><strong>Region</strong></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>16 (18.8%)</td>
</tr>
<tr>
<td>(CT, MA, ME, NH, NJ, NY, PA, RI, VT)</td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td>22 (25.9%)</td>
</tr>
<tr>
<td>(IA, IL, IN, KS, MI, MN, MO, NE, ND, OH, SD, WI)</td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>35 (41.2%)</td>
</tr>
<tr>
<td>(AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV)</td>
<td></td>
</tr>
<tr>
<td>West</td>
<td>12 (14.1%)</td>
</tr>
<tr>
<td>(AZ, AK, CA, CO, HI, ID, MO, NM, NV, OR, UT, WA, WY)</td>
<td></td>
</tr>
<tr>
<td><strong>Residence Halls on Campus</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>76 (89.4%)</td>
</tr>
<tr>
<td>No</td>
<td>9 (10.6%)</td>
</tr>
</tbody>
</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Institution Characteristics</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campus Based Emergency Medical Service</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>13 (15.5%)</td>
</tr>
<tr>
<td>No</td>
<td>71 (84.5%)</td>
</tr>
<tr>
<td><strong>Public Safety Control on Campus</strong></td>
<td></td>
</tr>
<tr>
<td>Institution’s Own</td>
<td>76 (89.4%)</td>
</tr>
<tr>
<td>Contracted Service</td>
<td>3 (3.5%)</td>
</tr>
<tr>
<td>Both</td>
<td>6 (7.1%)</td>
</tr>
</tbody>
</table>

**Characteristics of Public Safety Personnel and Services**

The comprehensive federal law that prohibits discrimination on the basis of sex in any federally funded education program is known as Title IX, and 98.9% of the schools participating in this study had a designated Title IX specialist. The Clery Act is a federal statute requiring all IHEs participating in federal financial aid programs to maintain and disclose campus crime and security information, and 97.6% of the respondents identified a Clery compliance specialist among their staff.

Seventy-one (83.5%) schools employ sworn law enforcement officers for carrying out public safety duties (Table 2), with 73 schools (85.9%) empowering their officers to carry firearms on campus, and 57 (67.9%) offering physical self-defense classes to their communities. Also noteworthy was the presence of 81 individuals specifically designated as emergency response planners (94.1%).

The most common training experiences for the officers were: (1) basic first aid (97.6%); (2) NIMS/ICS on-scene emergency response procedures (93.9%); and (3) active shooter response (92.9%). The majority of schools (89.3%) also had a memorandum of
understanding with local aid and public safety organizations such as an American Red Cross or municipal fire and police departments.

The most common services that were offered through campus public safety departments were lecture-type crime prevention presentations covering the topics of harassment and stalking (91.7%), and theft and property crimes (95.2%). Eighty-five percent of all institutions surveyed offered general disaster preparedness presentations to students, faculty, and staff during their respective orientation sessions, with only 51.3% (n=40) offering a presentation covering travel safety while at a semester abroad for classes or research. Fifty-four (71.1%) of these institutions reported that they were actively monitoring online social media networks for threats to their campus community, and 53 schools offered presentations for safeguarding online information and issues related to cyber-security.

Overall, the results of this study revealed that 4-year public institutions of higher education in the United States utilize mostly sworn police officers (83.5%) who would have graduated from state-accredited training academies, and of the remaining institutions, only two others authorized officers to use firearms on their campuses. The police academy graduates would have been trained in first aid and NIMS/ICS procedures, and may have also undertaken training related to dealing with emotionally disturbed individuals. Though 98.9% of all institutions responded that they had plans in place to deal with active shooter scenarios, 14.1% of all respondents did not have the use of firearms to counter violent perpetrators on campus.

It should also be of interest that only 51.3% of the public safety departments offered any type of travel safety presentations to students, faculty, and staff who may travel abroad. According to the National Association of Foreign Student Advisers (NAFSA.org), the world’s largest nonprofit association for international education and
Table 2. Frequencies and Percentages of Selected Characteristics of Public Safety Services among a National Sample of 4-Year Public Higher Education Institutions in the United States

<table>
<thead>
<tr>
<th>Characteristics of Institution’s Public Safety Services</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of emergency services personnel at institution</td>
<td></td>
</tr>
<tr>
<td>Sworn police officers</td>
<td>Yes</td>
</tr>
<tr>
<td>Non-sworn officers</td>
<td>Yes</td>
</tr>
<tr>
<td>Fire safety specialist</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental health specialist</td>
<td>Yes</td>
</tr>
<tr>
<td>Emergency response planner</td>
<td>Yes</td>
</tr>
<tr>
<td>Clery compliance specialist</td>
<td>Yes</td>
</tr>
<tr>
<td>Title IX specialist</td>
<td>Yes</td>
</tr>
<tr>
<td>Trained to deal with emotionally disturbed individuals</td>
<td>Yes</td>
</tr>
<tr>
<td>Trained in first aid</td>
<td>Yes</td>
</tr>
<tr>
<td>Offer crime prevention presentations</td>
<td>Yes</td>
</tr>
</tbody>
</table>

If yes, topics covered:

|                                                  |       |
|                                                  | Yes   |
| Theft and property crimes                        | 79 (95.2%) |
| Self defense classes                             | 57 (67.9%) |
| Harassment / Stalking                            | 77 (91.7%) |
| Cyber security/online safety                     | 53 (72.6%) |
| Travel (study/research abroad safety)            | 40 (51.3%) |
| Public safety personnel armed with firearms      | 73 (85.9%) |
| Disaster preparedness part of student orientation | 63 (85.1%) |
| Disaster preparedness part of faculty/employee orientation | 64 (85.3%) |
| Plan to use NIMS/ICS system in an emergency situation | 77 (93.9%) |
| Offer active shooter response presentation        | 79 (92.9%) |
| Monitor social media networks for threats         | 54 (71.1%) |
| Memorandum of Understanding with local aid organizations | 75 (89.3%) |
exchange, during the 2015-2016 academic year the United States had 325,339 students enrolled in higher education institutions abroad (NAFSA.org). Though this may represent a fraction of the nearly 20 million students that have enrolled in private and public colleges during the 2015-2016 academic year, it still represents important assets and investments for every one of the participating schools.

Alignment with Government Guidelines

The specific aim of this study was to identify the areas that 4-year public colleges and universities in the U.S. align with government guidelines for high-quality emergency operations plans for institutions of higher education. Overall, the data identified specific activities, personnel, and plans utilized by these institutions to address man-made and natural disasters on campuses. Some of those actions included the development and testing of plans, the utilization of committees, recruitment of outside agencies and resources, policy development, and instituting training programs for community members.

Features of Institution’s Emergency Operations Plans

Most of the institutions (95.3%) surveyed relied on a dedicated emergency planning committee composed of safety administrators, health services personnel, facilities supervisors, and administrators for the development and revisions of their emergency operations plans, though some respondents mentioned that it had been the responsibility of a single person on their campuses. Seventy-three (85.9%) of the respondents reported that their emergency operations procedures were fully available to their communities either by written copy or online, though some respondents questioned
whether emergency response plans should be made public due to the risk of that information being misused by person’s who could be planning an attack on campus. Of the operations plans for man-made threats that were identified in this study, only bomb threat plans were reported for all 85 participants, followed by active shooter response (98.8%), and civil disturbances (90.6%). Responses for "plans to deal with personal information database theft" revealed that 37 respondents (43.5%) did not know if their institution had a plan to address this potential event, while 44 (51.8%) acknowledged that their schools did have plans to deal with database theft.

The most positive responses were for plans for dealing with fires (98.8%), hazardous materials (97.6%), natural disasters, such as tornados or earthquakes (96.5%), general utility failures (91.8%), and pandemics and infectious diseases (88.2%). Though 83 institutions (97.6%) reported having plans to deal with hazardous materials, only 58 (68.2%) respondents could state that their school had a plan specifically for dealing with radioactive release. And only 38 (44.7%) of the respondents knew of their institution’s plans to deal with escaped laboratory animals, though this study did not distinguish which schools had laboratory animals and which ones did not.

Overall, the development and management of the emergency operations plans were reportedly developed with 81(97.6%) schools using an emergency planning committee with members from various backgrounds, with 79 (92.9%) utilizing local agencies and resources when testing their plans, 79 (92.9%) performing after-action reports after their drills, and 68 (80.0%) schools including a continuity of operations section in their plans. Sixty-four of these institutions tested their plans yearly (75.3%), and 57 (67.1%) schools planned to review their emergency operations plans annually. It is also worth noting that the next most frequent time intervals for testing and reviewing of the emergency operations plans were for "every 6 months" at 12.9% for testing and 11.8% for reviewing;
Table 3. Frequencies and Percentages of Selected Characteristics of Emergency Operations Plans among a National Sample of 4-Year Public Higher Education Institutions in the United States

<table>
<thead>
<tr>
<th>Features of Institution’s Emergency Operations Plans (EOP)</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOP’s available to campus community</td>
<td>Yes 73 (85.9%)</td>
</tr>
<tr>
<td>Emergency Planning Committee</td>
<td>Yes 81 (97.6%)</td>
</tr>
<tr>
<td>Continuity of Operations section of EOP</td>
<td>Yes 68 (80.0%)</td>
</tr>
<tr>
<td><strong>Frequency of EOP testing</strong></td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>Yes 1 (1.2%)</td>
</tr>
<tr>
<td>Quarterly</td>
<td>Yes 3 (3.5%)</td>
</tr>
<tr>
<td>Every 6 months</td>
<td>Yes 11 (12.9%)</td>
</tr>
<tr>
<td>Yearly</td>
<td>Yes 64 (75.3%)</td>
</tr>
<tr>
<td>Every 2 years</td>
<td>Yes 1 (1.2%)</td>
</tr>
<tr>
<td>Never</td>
<td>Yes 1 (1.2%)</td>
</tr>
<tr>
<td>Did not want to answer</td>
<td>Yes 4 (4.7%)</td>
</tr>
<tr>
<td><strong>Frequency of EOP review</strong></td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>Yes 2 (2.4%)</td>
</tr>
<tr>
<td>Quarterly</td>
<td>Yes 5 (5.9%)</td>
</tr>
<tr>
<td>Every 6 months</td>
<td>Yes 10 (11.8%)</td>
</tr>
<tr>
<td>Yearly</td>
<td>Yes 57 (67.1%)</td>
</tr>
<tr>
<td>Every 2 years</td>
<td>Yes 2 (2.4%)</td>
</tr>
<tr>
<td>Never</td>
<td>Yes 1 (1.2%)</td>
</tr>
<tr>
<td>Ongoing/No schedule</td>
<td>Yes 2 (2.4%)</td>
</tr>
<tr>
<td>Did not want to answer</td>
<td>Yes 6 (7.1%)</td>
</tr>
<tr>
<td>Involve local responders when testing EOP</td>
<td>Yes 79 (92.9%)</td>
</tr>
<tr>
<td>Conducted active shooter response drill (tabletop or actual drill)</td>
<td>Yes 76 (89.4%)</td>
</tr>
<tr>
<td>Performs after action debriefing after drills</td>
<td>Yes 79 (92.9%)</td>
</tr>
<tr>
<td>Evacuation procedures planned</td>
<td>Yes 82 (96.5%)</td>
</tr>
<tr>
<td>Shelter in Place procedures planned</td>
<td>Yes 78 (91.8%)</td>
</tr>
</tbody>
</table>
Table 3 (continued)

<table>
<thead>
<tr>
<th>Response</th>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
<th>Did not want to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active shooter</td>
<td>84</td>
<td>3</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>Bomb threat</td>
<td>85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil disturbances (i.e., protests)</td>
<td>77</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escaped laboratory animals</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural disasters</td>
<td>82</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire safety</td>
<td>84</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous materials</td>
<td>83</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostage situation</td>
<td>61</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pandemic and infectious diseases</td>
<td>75</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radioactive release</td>
<td>58</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utility failure</td>
<td>78</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal information database theft</td>
<td>44</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not want to answer</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not want to answer</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

one respondent reported not testing their emergency operations plans at all, and one reported not being aware of their school committee ever reviewing their plans.

**Mental Health Resources Available to Campus Community**

Results from this sample of 4-year colleges and universities identified that 83 of these schools (98.8%) elected to assemble multi-disciplinary members of the administration for the creation of campus threat assessment teams (Table 4). The importance of these teams has been emphasized in the years following the Virginia Tech shooting in 2007, as campus personnel discovered multiple indicators of the perpetrator’s
plan for violence but did not act partially due to a lack of coordination and dissemination of all the information.

This survey revealed that 82 (96.5%) of the schools provided on-campus personnel for mental health counseling for students, though only 61 institutions (77.2%) provided those same services for faculty and staff. This study did not attempt to obtain information regarding the level of training or type of personnel available through those on campus mental health services.

Table 4. Frequencies and Percentages of Mental Health Resources Available among a National Sample of 4-Year Public Higher Education Institutions in the United States

<table>
<thead>
<tr>
<th>Mental Health Resources Available to Campus Community</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student mental health services available on campus</td>
<td>Yes</td>
</tr>
<tr>
<td>Employee mental health services available on campus</td>
<td>Yes</td>
</tr>
<tr>
<td>Multi-disciplinary behavioral threat assessment team</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Emergency Communications Plans**

The data in Table 5 show that all 4-year public institutions surveyed reportedly comply with Clery requirements for the disclosure of campus crime statistics for the previous three years with the publication of an Annual Security Report. In addition, all institutions reportedly make a current crime log available for public inspection, though most institutions post this information online, some will furnish the information only upon request.

The overwhelming majority of respondents have a written policy on issuing timely warnings on campus (97.6%) and for testing their emergency communications systems yearly (96.5%) and during peak times of the academic year (95.3%). Sixty-nine
institutions (81.2%) reported the use of an outside vendor as part of their emergency communications system, but 8.2% of respondents did not know if their school was working with an outside company. The majority of respondents (50/61%) did not know if they had a plan in place to safeguard their community’s online information stored in their databases, and only 23 (27.1%) of the respondents reported knowing of their institution’s plans to safeguard their online data.

Table 5. Frequencies and Percentages of Emergency Communications Plans among a National Sample of 4-Year Public Higher Education Institutions in the United States

<table>
<thead>
<tr>
<th>Emergency Communications Plans</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written policy on issuing timely warnings</td>
<td>Yes 83 (97.6%)</td>
</tr>
<tr>
<td>Emergency communications system tested annually</td>
<td>Yes 82 (96.5%)</td>
</tr>
<tr>
<td>Emergency communications system tested during peak time of year</td>
<td>Yes 81 (95.3%)</td>
</tr>
<tr>
<td>Institution uses an outside vendor as part of emergency communications system</td>
<td>Yes 69 (81.2%)</td>
</tr>
<tr>
<td></td>
<td>No 9 (10.6%)</td>
</tr>
<tr>
<td></td>
<td>Don’t Know 7 (8.2%)</td>
</tr>
<tr>
<td>Plan in place to protect personal data</td>
<td>Yes 23 (27.1%)</td>
</tr>
<tr>
<td></td>
<td>No 4 (4.7%)</td>
</tr>
<tr>
<td></td>
<td>Don’t Know 51 (60%)</td>
</tr>
<tr>
<td></td>
<td>Did not want to answer 7 (8.2%)</td>
</tr>
<tr>
<td>Crime log available for public inspection</td>
<td>Yes 85 (100%)</td>
</tr>
<tr>
<td>Publish an Annual Security Report</td>
<td>Yes 85 (100%)</td>
</tr>
</tbody>
</table>
Chapter V

CONCLUSIONS AND IMPLICATIONS

Main Conclusions

The latest U.S. government guidelines for institutions of higher education for managing and preparing for hazards of all kinds were published in 2013, and compliance of those guidelines are not currently mandated. This study contributes to a growing movement by a few researchers and organizations to evaluate the state of emergency preparedness activities on college campuses today. Using an original survey instrument, the goal of this study was to explore the areas of compliance to the national guidelines by gathering information from 4-year public IHEs regarding the training of emergency response personnel, services offered by their public safety department, coverage of emergency operations plans, coverage of on-campus mental health services, and aspects of their communications plans.

This survey was conducted via phone interviews with senior security personnel among a random sample of schools representing the country and representing a range of student populations between 636 and 71,918. According to data from the National Center for Educational Statistics, for 2014-2015 academic year, there were 9,876,054 students enrolled in 4-year public colleges and universities across the United States. This number includes some of the 300,000+ students involved in study abroad programs who rely on guidance from their primary school for their safety. It is imperative that safety plans, policies and services be available to college communities for the sake of their students,
but also for safeguarding their physical assets, data about students and employees, financial interests, preservation of intellectual property, and cultural value. Aligning IHE emergency response plans with national guidelines serves to help preserve lives, maintain continuity of operations, mitigate losses, and speed recovery after catastrophic events that befall U.S. institutions of higher education. Colleges and universities have had a long history of natural and man-made catastrophes on their campuses over the past few decades, and current trends indicate growing threats may necessitate a reconsideration of the use of assets at these schools.

Previous studies on campus preparedness have not included the most recent guidelines, but have pointed out that though IHEs are required to comply with certain actions regarding safety and crime disclosure, institutions are currently not obligated by law to demonstrate emergency plans or to carry out functional evaluations of their effectiveness (Cheung et al., 2014; Connolly, 2012; Wilder, 2012). The only areas of campus safety that are mandated are the crime statistics disclosure, written policy for emergency communications, and a statement regarding the institution’s plan to conduct an emergency response test. Violations involving these infractions begin at $54,000 per fine issued through the US Department of Education.

Though most IHEs have established some written plans for emergency response, 11% of the respondents in this study reported that their written emergency operations plans were not available to their communities. This is troubling as only 75% of IHEs offered disaster response presentations to students and staff at their orientations. Research by Seo et al. (2012) indicated that only 25% of IHEs surveyed believed that their students understood the emergency procedures on their campuses. The research by Seo et al. also indicated that many colleges do not recognize the importance of nor engage in annual campus wide response drills, and studies by Cheung et al. (2014) and MHA (2012) have shown that between 20% to 40% of IHEs had never practiced emergency response drills.
Drills that incorporate the activation of students, faculty, and staff with the local community would be the most useful type of exercises and would require annual funding and support (as some local agencies and organizations may want compensation for their efforts). That said, the information gained by way of demonstrating evacuation and shelter in-place plans for a variety of scenarios could yield invaluable information for security planners. The need for greater access to resources and participation by stakeholders should be encouraged, if not required to enhance proper campus response and to improve school resiliency.

Valued assets of IHEs include their people, property and information, which can be threatened by other people, events and/or situations. Though natural threats such as floods and hurricanes can cause massive destruction, man-made threats have increased in frequency over the past decade and can be just as, if not more, destructive. Cyber threats have manifested on campuses in two distinct ways. Cyber hacking and online threats for physical violence represent intentional threats to schools, while employees or students mistakenly leaving information unguarded represents an unintentional threat, and the potential for damage is equally great for both. Forty-seven percent of the respondents in this study either did not have, or did not know if their institution had an emergency operations plan for dealing with database theft, and 64.7% either did not have or did not know if there was a plan in place to safeguard the private contact information used in their emergency communications systems. This survey also uncovered that only 62.4% of these public 4-year IHEs offered cyber-security presentations to their students. Additional vulnerabilities to IHEs related to cyber hacking related threats include threats to intellectual property, disruption of power grids and HVAC systems.

In 2009, a survey was conducted with all members of the National Association of College and University Business Officers (NACUBO) regarding their institution’s safety planning efforts. Replies from 4-year private and public IHEs, and 2-year public colleges
indicated that of all the types of emergency events that IHEs spend time with in response drills, only 14% of respondents reported dealing with cyber disruptions, and only 51.9% of those respondents reported that their institution had plans to deal with cyber disruptions. Further, only 58% reported their IT professionals participated in their annual emergency training exercises (NACUBO, 2009). The results of that study and of my research suggest that public safety administrators may need to become more aware of their institution’s cyber security efforts, especially as it relates to dealing with campus crimes involving extortion hacking and ransom of their community’s medical and personal data, and drive efforts to merge physical and cyber security programs.

In 2014, the US Department of Homeland Security created the Homeland Security Academic Advisory Council (HSAAC) with an initial operating budget of $280,000 with the objective of providing advice and suggestions to the Secretary of Homeland Security and senior leadership on such issues as academic research, faculty exchanges, campus security and preparedness, and campus resiliency. One result of HSAAC influence has been the creation of annual National Table Top Exercises (NTTX) events for academic leaders across the country. It is worth noting that the NTTX exercises selected for both 2015 and 2017 focused on cyber attacks to college campuses. The emphasis for merging cyber and physical security measures is underscored by the fact that the 2017 NTTX specifically focused on "Failure in Campus Infrastructure Caused by Cyber-Attack" (https://www.dhs.gov/sites/default/files/publications/2017%20NTTX%20Summary%20Report_508c_FINAL.PDF). According to the EDUCAUSE.EDU Center for Analysis and Research, 324 IHEs reported 562 data breaches between 2005-2014, representing 15.5 million records (https://library.educause.edu/resources/2017/2/searching-for-a-smoking-gun-chasing-a-silver-bullet-data-breaches-in-higher-education). Colleges and universities that have not yet developed plans to integrate and prepare for cyber related
events should look at the direction of these government led activities and respond to them accordingly.

With the explosion of social media networks and their use by students and staff, it was encouraging to reveal that 71.1% of IHEs in my study were actively monitoring these networks for targeted threats to anyone or any entity on their campuses. Though no effort was made to identify how the monitoring was accomplished, national research by MHA in 2015 indicated that over 67% of IHEs used only manual methods for this enormously complicated task. The manual methods for those monitoring duties would include screening of all new employee and students’ personal websites, and tracking information traffic from at least 10 outlets such as Facebook, Flicker, Instagram, Snapchat and Twitter for members of the campus community. Their results also indicated that IHEs worked with an outside vendor only 8% of the time for monitoring social media outlets for threats to their communities.

Virtually every IHE in the country that participates in a study or research abroad program may send students, staff, faculty and other resources to foreign countries for months at a time, though only 51.3% of the schools in my study offered any kind of travel safety presentation through their public safety department. With over 300,000 students alone traveling abroad annually, this area warrants more attention by public safety departments. The FBI’s own travel safety brochure describes the most common threats to students traveling abroad are common assaults and cyber related crimes (FBI brochure, 2018 https://www.fbi.gov/file-repository/student-travel-brochure-pdf.pdf/view). According to the National Association of International Educators, the number of U.S. students studying abroad for credit during the 2015-2016 academic year grew 3.8% from 313,415 students to 325,339 students, and represents up to 10% of college graduates (NAFSA, 2017). In 2016, a focus group organized by the National Center for Campus Public Safety listed travel abroad safety as a top concern among the
IHE safety managers that participated. In their executive summary of that event, they stressed “that IHE[s] must instill a culture of compliance among faculty, students and staff in global programs,” as overseas threats may include natural disasters, terrorism, physical assault, regional political instability, and the possibility of a lack of medical resources as challenges to safety (NCCPS, 2016, p. 3).

As Figure 1 shows, the rise of terrorist attacks at IHEs has steadily increased over the past decade.

![Terrorist Attacks Targeting Educational Institutions Worldwide, 1970-2013](image)

Figure 1. Why do terrorists target colleges and universities?
Source: *Campus Safety* Feb.7, 2017 (Data from the Global Terrorism Database at the University of Maryland)

Although not all terrorist attacks on campus are the result of firearms, the presence of sworn officers would also imply a response protocol that would aggressively confront the attacker, which is not the case with non-sworn officers. Research from the Bureau of Justice Statistics in January, 2015 indicated that approximately 92% of public IHEs had some sworn police officers, and my research revealed that 83.5% of my sample of 4-year public IHEs had some sworn officers on their staff, though many departments were also using non-sworn officers as well. My study did not attempt to identify the ratio of these
types of officers at each school, nor did I attempt to find out the total number of officers there were per the student population.

The 73 IHEs that reported having armed officers on campus corresponded with a total of 1,332,876 students at those campuses. The 12 IHEs that reported no armed officers on campus had a total of 89,564 students. The target populations these samples represent are much larger. The presence of public safety officers on every campus is encouraging, though their effectiveness in dealing with active shooter scenarios and other violent crimes may be dependent upon their ability to respond with or without the use of firearms.

Violence on school campuses over the past few years has profoundly impacted the overall U.S. crime rate (Eisenbraun, 2007), where active shooter incidents at schools represented approximately 29% of all occurrences in the decade between 2000 and 2010 (FBI Bulletin, 2014). A report by Rasmussen and Johnson (2008), which was an assessment of the nationwide impact of campus safety policy and practice immediately after the Virginia Tech shooting, identified the growing movement of institutions toward the following areas: (1) formation of teams responsible for behavioral threat assessments of students in crisis, (2) increased mental health evaluation services and personnel, (3) increased number of risk assessments conducted on campuses, and (4) increased movement by groups advocating for the right to carry guns on campuses.

In response to the increase of active shooters on campuses, a movement for allowing civilians to carry concealed firearms by numerous organizations has begun. A 2016 report by Morse et al. for the Research and Policy Institute of NASPA (Student Affairs Administrators in Higher Education) revealed that nine states allowed guns on campus in 2015, but a list compiled by the non-profit coalition of partners, the Campaign to Keep Guns off Campus and the Coalition to Stop Gun Violence reported that as of March, 2018:
• **12 states now allow concealed carry weapons on IHEs** (Arkansas, Colorado, Georgia, Idaho, Kansas, Mississippi, Ohio, Oregon, Tennessee, Texas, Utah, Wisconsin)

• **28 states that leave campus concealed carry policies to individual IHEs** (Alabama, Alaska, Arizona, Connecticut, Delaware, Florida, Hawaii, Indiana, Iowa, Kentucky, Maine, Maryland, Minnesota, Montana, Nebraska, New Hampshire, Nevada, North Carolina, North Dakota, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, West Virginia, Vermont, Virginia, Washington)

• **10 states that do not allow concealed carry handguns on college campuses** (California, Illinois, Louisiana, Massachusetts, Michigan, Missouri, New Jersey, New Mexico, New York, Wyoming) (http://www.armedcampuses.org/)

Also in 2017, President Trump authorized a "1033 Program" for the acquisition of military grade firearms and other terrorism response equipment for IHE public safety departments, which were previously prohibited. With these movements, it appears as though the increased incidence of gun violence has precipitated the legalization of even more firearms on campus in response.

This research identified some areas of vulnerability that could be exploited by a number of threats. The potential for loss, damage, or destruction to IHE assets would be of a result from exploiting a known vulnerability of that school. Though we cannot control threats such as targeted violent incidents and cyber hacking, here or abroad, IHE safety professionals must continually re-assess those threats and recognize that a risk can be mitigated and managed in a way to reduce the damage to the campus community and to minimize the impact regarding the continuity of operations.

Rogers’s (1962) Diffusion of Innovation Theory was used, in part, to conceptualize this study. Two key elements in this theory were examined. One was assessing if there were characteristics of users who were more or less likely to adopt the innovation. In this case regional location and enrollment size were examined. The second was assessing if there were characteristics of the innovation itself that were more or less likely to be
implemented. With respect to the former, given the lack of variability in responses and comparatively small sample size, it is not surprising that no statistically significant differences were observed. With respect to the latter, cyber security and travel abroad policies were identified as two areas that were not as widely adopted by the participating institutions.

Overall, there were four main takeaway messages that can be derived from this study. First, there is a lack of consensus regarding some guidelines. This can be seen in the different recommendations for K-12 schools and colleges and universities in how to respond to an active shooter situation. Second, there is a lack of implementation for some guidelines regarding cyber, security, and students traveling abroad. Third, there is a lack of coordination among the different agencies responsible for IHE emergency preparedness. Fourth, there is a lack of information available to the public about IHE preparedness with respect to some topics.

**Implications for Policy**

A review of the Department of Education’s authority regarding the area of IHE emergency response planning should be explored to determine if the DHS should be the agency best suited to guide and investigate security related infractions. The Federal Emergency Management Agency of the Department of Homeland Security should be the lead government agency to establish an IHE emergency response certification program. Policies should address not only the general elements of disaster planning, but specific requirements for personnel training and a calendar of activities that should be completed in order to continue to take part in the federal financial aid program. While there are currently no recognized certification programs for IHE emergency preparedness, training programs offered by the government have been established for key responders and should
be required of all members of campus emergency management personnel including the IHE president.

This study served to identify a high percentage of safety personnel that self-report training experience with NIMS/ICS. Such training should also be required of all members who could assume a leadership role during a crisis. Encouragement for NIMS compliance is posted on a FEMA "toolkit" website for schools: “Because all schools and higher education institutions (HEI) are integral components of every community and its government, DHS and DOE recommend all schools and HEIs—regardless of whether they are recipients of Federal preparedness funds—implement NIMS” (FEMA, 2018).

Enrollment as a new student should be contingent upon completing a campus disaster preparedness training, and enrollment in that institution’s emergency alert communication system. Similarly, all new employees, especially faculty members, should be required to complete campus disaster preparedness training, and be required to enroll in the emergency alert system as requisite conditions for employment. These recommendations are based on the idea that having people be well prepared for dealing with various kinds of disasters is one of the best ways to minimize harmful consequences, and the compulsory preparedness training would be comparable to the tornado response training that virtually all students in the Midwest receive. Mandatory tornado response training is not common in other regions in the country, but is clearly seen as an essential experience for some IHE communities—just as active shooter response training and enrollment in a campus alert system should be for all IHEs.

School training exercises should occasionally be reflective of that institution’s risk assessment and involve drills that are also reflective of current trends in types of natural and man-made hazards (targeting active shooter and cyber threats). Policies should emphasize preparation for the most timely and urgent areas identified by the government, and by yearly re-evaluations of campus assets, threats and risks. Clery requirements are
vague in regards to their compliance activities: IHEs are required to document a completed emergency response "drill," but does not specify among the types of drills—table-top, functional/in-house with immediate stakeholders, and full-scale. Testing of NIMS/ICS integration with local agencies are typically not involved in table-top and functional/in-house drills. It would be helpful to have a written policy concerning the recommended type and frequency of drills that should be completed by institutions receiving federal aid funds.

A publication by the Major Cities Chiefs Police Association (MCC) in association with the U.S. Department of Justice provides guidelines for law enforcement to encourage the development of written policies and formal memorandums of understanding between local agencies and campus public safety departments (MCC, 2009). They encourage this in an effort to “define general and specific roles for all types of incident response.” The report also encourages campuses to work with local law enforcement agencies to improve information sharing and threat assessments in their common jurisdiction, and to create policies for working with media before, during, and after incidents. The MCC report also acknowledges that additional details may need to be written into policies where non-sworn security details will need to act with considerably different responsibilities when working with full service police departments.

In the states that are now allowing concealed carry weapons on campus, an effort should be made to advertise specific criteria and guidelines for those individuals who chose to bring guns to their campuses. Clear written policies should be easily accessible to all members of the community so there would be no question as to who is allowed to carry a weapon, the number of weapons allowed for each person, the acceptable number of rounds of ammunition to be carried, the acceptable ammunition calibers allowed, the specific types of weapons allowed, and the acceptable locations they are permitted. Since some IHEs are known to have medical centers and nuclear facilities among their
infrastructure, it is reasonable to assume that exceptions and limitations must be considered for each institution.

It should be noted that in 2012, the International Association of Chiefs of Police (IACP) defended their position of a Prohibition of Concealed Carry Weapons (CCW) on College and University Campuses at their 119th annual conference, stating that “there is no credible evidence to suggest that armed students, faculty, staff and community users would make campuses safer” and “would further complicate the jobs of college safety and security professionals.” A position statement by the National Behavioral Intervention Team Association states that along with the IACP, the Student Affairs Administrators in Higher Education, the Association of College and University Housing Officers-International, the American College Personnel Association, the National Association for Campus Activities, the Association of Student Conduct Administrators, Leaders in Collegiate Education and the International Association of Campus Law Enforcement Administrators (IACLEA) are all opposed to allowing concealed carry firearms on campuses (NABITA, 2016, p. 3—http://nabita.org/wordpress/wp-content/uploads/2018/01/2016MarchNaBITA-GunsPositionStatement.pdf). According to a study by Sanfilippo and Weed (2017), as reported in the May/June, 2017 IACLEA journal, a survey of directors of college counseling services at IHEs across the U.S. revealed that on campuses allowing concealed weapons carry, 42.9% reported students using guns for suicides, and that rate was only 13.3% on campuses not permitting concealed carry. Attempted suicide rates were 42.9% by firearm, and 6.7% on campuses that did not permit concealed carry weapons (IACLEA, 2017 p. 48). As a professional member of IACLEA and a college faculty member, I am opposed to having anyone other than campus public safety and police officers armed on IHEs. A recent survey showed that 95% of college presidents opposed concealed firearms on campus (Price et al., 2014), and that 94% of college faculty also oppose having concealed guns on campus (Thompson
et al., 2013b). Another study by Thompson found that 79% of students said that they would not feel safe if concealed guns were allowed onto their campuses (Thompson et al., 2013a).

Finally, the American Federation of Teachers and the National Education Association, representing the two largest organizations of education professionals in the U.S. are opposed to increasing the amount of guns in schools, and that echoes the National Association of School Resource Officers who strongly oppose the recent proposal to arm teachers.

**Implications for Practice**

All IHEs should have functional agreements with local aid organizations and agencies. These relationships should be viewed as partnerships during times of crisis response, and draw from successful past collaborations such as when various New York City IHEs shared their resources with the local fire, EMS, and police for staging and shelter areas post 9/11/01 attacks on the World Trade Center. Since full-scale drills are the only type of exercise that integrates and evaluates the response of both the host IHE with the operations and personnel of outside agencies, full-scale exercises should be a priority for each school.

All IHEs should put forth a plan to document and implement NIMS/ICS training for all key response personnel, and a timetable for integration drills with local support agencies, where evaluation of the NIMS/ICS systems can occur. Institutions of higher education should make emergency response training a mandatory experience for all administrators, faculty, staff and students. A study by Davis and Walker in 2005 found that students and faculty at IHEs had a lack of focus on campus preparedness unless impacted by a targeted violent incident that already occurred. Despite the fact that my
research indicated that approximately 75% of all faculty and students have a disaster preparedness presentation available to them, we do not know what proportion of students view the presentation nor the scope and depth of coverage in those presentations. This may contribute to the lack of attention to emergency response issues by individuals who have never directly dealt with violent encounters.

College and university presidents and senior administration officials should receive training in the FEMA Incident Command system and actively participate in yearly drills along with their institution’s emergency response team. As the top leader in any IHE, the president should have at least some basic understanding of the scope of responsibility they have under a range of disasters. Such understanding may help ensure that these positional leaders invest appropriate resources in infrastructure, training for other personnel and other aspects of emergency preparedness.

Training exercises or drills should be targeted to each audience (administration, faculty, staff, students) and should be offered on multiple dates, times and locations in an effort to accommodate as many people as possible. It would be helpful for each group to be able to voice their unique concerns and plan strategies among their peers. These kinds of training investments would communicate to various constituents that emergency preparedness is part of the institutional priorities.

All colleges and universities should require all administrators, faculty, staff, and students to register for their emergency notification system and provide email and phone information for contact. Ability to communicate effectively is one of the core requirements in dealing with an emergency situation. While such a requirement may seem to infringe upon personal freedom, it may also be viewed as consistent with institutional responsibilities. Even an "opt out" system, which involves the automatic enrollment of all campus community members, should be considered as an alternative to a mandatory enrollment. The requirement of actively petitioning to have your contact
information removed from that database may be a useful deterrent for individuals who don’t fully recognize the need for an emergency notification system. In the case of an active shooter response, timely communications between public safety professionals on campus and the rest of the community with specific directions are essential. Since most active shooter scenarios at schools only last an average of 6-9 minutes, other avenues of communication such as a public address system on a campus may be limited or unusable which could result in more casualties. The success of the Amber Alert system, which is tied in to campus emergency notifications, is another reason that benefits the community. The benefits for enrollment in an emergency communications system should far outweigh the surrendering of private contact information in these situations alone. All school members should be obligated to enroll in, or automatically be enrolled in ‘opt out’ emergency notification systems as a primary effort to maximize an appropriate timely response to campus emergencies.

All schools should establish both threat assessment and emergency planning committees and convene on a monthly basis to continually evaluate the constant changes to their institution’s assets and interpretation of threats and risks to their communities. While guidelines are very useful in many ways, each IHE is different as are the particular kinds of threats that may be most relevant. In addition, given the rapidity of change, especially with respect to technology, it is most important to have structures in place to assess and plan on a continuing basis.

Though IHEs may use an "all hazards" response approach as a default plan, training for special circumstances such as active shooter response should warrant unique plans to help mitigate community losses. Taking the advice of the MCC Police Chiefs report, IHEs need to develop special written procedures for non-sworn public safety officers who will have very different protocols and responsibilities in any situation
involving violence, or the potential of violence on campus. Each IHE should assess vulnerabilities that pertain to their specific content.

All IHEs should put forth their public safety program for IACLEA accreditation, which developed functional standards for departments that have sworn officers as well as for security departments without sworn and unarmed officers. IACLEA will evaluate a school’s emergency operations plans for dealing with violent encounters, how to train officers, handling communications, and collecting evidence, but does not currently address cyber-security issues even though an internal survey of their members report high concern for that area. It remains to be seen whether IACLEA and DHS coordinate to come up with standards of practice for blending cyber-security with physical security plans. In the meantime, all IHEs should not only strive to comply with the recommendations in the DOE *Guide for Developing High-Quality Emergency Operations Plans for Institutions of Higher Education* (2013) used in this research, and strive to meet IACLEA accreditation certification standards.

College and university emergency managers should register with the original and currently most up to date list serve at the University of Oregon’s Disaster Resistant University group (https://safety.uoregon.edu/disaster-resilient-universities-network). The information shared on this list serve covers areas relevant to administrators and first responders. Participation in this list serve could enhance effective hazard response and business continuity practices for each school.

Results should be taken from the new DHS Campus Resilience Pilot Program for colleges and universities announced in 2013, which was designed “to engage public and private sector IHE[s] to take proactive steps to enhance preparedness and campus resilience” (DHS, 2013). Another reason to bring school safety under the leadership of the DHS instead of the DOE, is that this program and agency is providing all of the technical assistance to participants in helping them further develop their own unique
emergency response and continuity of operations plans. The original press announcement for this program stated that it was created and originally supported by: FEMA, the U.S. Immigration and Customs Enforcement Student Exchange Visitor Program, and the Office of Academic Engagement, and does not list the Department of Education.

The Department of Education holds all schools participating in Title IV federal financial aid programs accountable to the Gramm-Leach-Bliley Act concerning privacy and security requirements for those institutions. Among the requirements are that all participating institutions must develop their own cyber security programs that; appoints a group of employees to manage the program, implements physical and technical safeguards for all personal data, and creates written policies for the handling and management of all personal information data at that institution. Although there are no monitoring or self-reporting activities mandated for these, IHEs should strive to complete these tasks or risk restrictions on Title IV funding, including a complete loss of eligibility.

For all schools that allow members of their communities to carry concealed guns on campus, I would recommend that each school develop a firearm knowledge and proficiency test and administer it to their members who choose to participate. This would allow, at the very least, members of the public safety department to become familiar with lethal weapons carrying members of their community. As some states do not require training or weapons proficiency as a condition for obtaining a concealed carry weapon license, the school test could provide some guidance of acceptable weapons care and etiquette. The test would also allow the public safety departments an opportunity to observe the range of skills and the types of weapons that their members may display. Finally, public safety departments will then need to develop a system to keep track of which on-campus housing units and storage facilities that will allow weapons, and for the owners of those weapons to be continually cross referenced with lists made available by
their school’s behavioral threat assessment team for either suicidal or violent tendencies, which can change at any time during an academic year.

**Delimitations and Limitations**

This research involved several delimitations, including problems of participant recruitment across all types of IHE control and level. Due to practical delimitations, this study involved only a sample of IHEs that were eligible for receiving Title IV funding from the federal government, and recognized by the DOE. Private schools proved to be reluctant to participate, and in the interest of time, the level of degree granting institutions were limited to 4-year public colleges and universities. This sample is considered representative of 4-year public colleges and universities in the U.S. The results should not be generalized to 4-year private IHEs or to 2-year private or public IHEs. It seems likely that levels of emergency preparedness activity may be substantially different at these institutions.

The decision to use the DOE *Guide for Developing High-Quality Emergency Operations Plans for Institutions of Higher Education* (DOE, 2013) as a reference for compliance represents the latest collective work of government education and safety specialists. A delimitation of these guidelines is that emergency response training in NIMS/ICS are only required for first responders, and there are currently no mandates for compliance for IHE administrators and division managers who will likely be in leadership roles during a campus crisis. This survey did not attempt to determine whether or not members outside of public safety personnel were trained in NIMS/ICS, though the DOE guide does recommend that training for all responding members of a campus emergency planning and response committee.
This study targeted a random sample of 15% of all DOE accredited public 4-year colleges and universities in the United States, but the 85 schools (70.8%) who participated may have been more interested and invested in the topic of security planning. Thus, a selection bias may be reflected in the responses given, and therefore the overall interpretation of the findings could suggest a higher level of preparedness than may actually exist. The results of this study indicated high compliance activities by IHEs of all sizes, and in all regions of the country, but we do not know if schools that did not respond can match the level of compliance of the participants.

One limitation of the study was the cross-sectional design. It is not unreasonable to suspect that IHE activities related to emergency preparedness are changing on an ongoing basis. Additional efforts are needed to track such changes. A limitation of the study was that the data represent respondents’ awareness and reports of their institution’s personnel, plans and services, which may have been primarily restricted to their department of public safety. They may have limited exposure to other departments’ offerings. As such, if respondents didn’t know an answer to a survey question, they may have answered in a way that they believed would be more favorable to the researcher. Further, since the topic of emergency preparedness may be a sensitive subject, participants may have responded in a socially desirable way that would make them appear very well prepared in comparison to their peers.

This study did not attempt to verify all the information obtained in the survey results, therefore we cannot be certain of the accuracy, amount, and scope of emergency plans IHEs purport to make available to their communities. An effort was made to corroborate some responses from information available from the institutions’ websites, which is outlined below.

Only certain information was examined, including (1) presence of sworn police officers on campus, (2) presence of an emergency operations plan for an active shooter,
(3) presence of an emergency operations plan for a bomb threat, (4) presence of an emergency operations plan for a disease pandemic, (5) presence of an on-campus mental health counseling service for students, (6) publication of an annual security report (ASR), and (7) publication of an annual crime log. Verification of self-reported data followed several steps. First, the official website of each school was identified. Within each school's website, the link to the public safety or police department was followed. The next step, which was not always necessary, was to search for a police agency or statement of officer arrest powers. This step dealt with the identification or presence of sworn police officers on campus.

The next step was using the institution's search bar to search for emergency response plans regarding active shooter, bomb threat, and pandemic response. In cases where no information was found, additional searches were conducted, including of the college catalogue and Google. For example, for pandemic response, searches were conducted of the school's health service or environmental health department and for specific disease topics. For responses to a bomb threat or active shooter, terms such as violence on campus and violent threat response were used to search for additional information that might have been available for each school.

For mental health counseling, the search bar was used to identify the kinds of counseling services that were available for students. An effort was made to distinguish between mental health and career counseling. This does not address such services that may have been available to employees.

The last two categories were straightforward. The federal government under the Clery Act requires these kinds of reports. All of the records pertaining to these last two factors were available online for all schools at both the school website and at the U.S. Department of Education.
All of the data described above were excerpted for both the 85 schools that participated in the study as well as for the 35 non-responding schools. This effort, therefore, served a twofold goal. First, it was used to show evidence for the veracity of information reported by respondents in the survey. Second, this effort showed similarity between the responding and non-responding institutions.

The results of this analysis are shown in Table 6 below. In general, there was a high degree of consistency between the information reported by respondents to the survey and information found on the respective school’s website. The main area where less information was found on the website was presence of an emergency operations plan for a disease pandemic. These data are reassuring and support the contention that the self-reports were accurate and that the respondents and non-respondents were similar, at least with respect to the limited scope of information described above.

Table 6. Comparisons for Selected Indices of Emergency Preparedness Obtained from Self-Reports and Online Sources and Comparisons of Online Data for Respondents (n=85) and Non-Respondents (n=35)

<table>
<thead>
<tr>
<th>Features</th>
<th>Sworn</th>
<th>Active Shooter</th>
<th>Bomb</th>
<th>Pandemic</th>
<th>Mental Health</th>
<th>ASR</th>
<th>Crime Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responders</td>
<td>77.7%</td>
<td>95.3%</td>
<td>92.9%</td>
<td>45.8%</td>
<td>99%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Non-Responders</td>
<td>74.3%</td>
<td>91.40%</td>
<td>80%</td>
<td>40%</td>
<td>94.30%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Survey Results</td>
<td>86%</td>
<td>98.90%</td>
<td>100%</td>
<td>88.20%</td>
<td>96.50%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Recommendations for Future Research

While this study compiled a unique combination of information regarding overall IHE hazard response preparedness, further studies that explore a wider range of
respondent backgrounds and school types would be very useful in gauging the state of IHE preparedness across the country. Two previous studies demonstrated that private IHEs were significantly less likely to be in alignment with national emergency planning guidelines (Connolly, 2012; Wilder, 2012) and a similar national survey of public safety directors also highlighted this finding (Campus Safety, 2013). A comparison of the results found in this study with private 4-year schools may prove valuable, particularly because sworn police officers are known to be a presence at less than 40% of private IHEs and at more than 90% for public colleges and universities (DOJ, 2015). The presence of these officers may be a mitigating factor in active shooter response scenarios, and certainly would be a factor in that institution’s preparedness and response planning.

This study showed that more than 75% of public colleges and universities conducted regular yearly drills, though a recent study indicated that 35% of private IHEs conducted regular emergency response drills (Seo et al., 2012). Exploration that may uncover other differences between the types of institutions could prove valuable for future practice and policy development.

Seo et al.’s (2012) research of campus safety administrators also showed that they believed only 25% of their students understood the emergency procedures on their campuses, and a study by Cheung and associates (2014) showed that only 47% of students at IHEs had disaster preparedness as part of their orientations. Future research could uncover the typical content and scope of the information shared at those orientations and identify why IHE leadership choose not to prioritize this training for students. The students represent the largest group of adults on campuses and without this vital training they could be a weak link in disaster response because of the lack of leadership and direction by the administration.

Relatedly, further research should be devoted to identifying the reasons why some emergency planning administrators have not completed NIMS/ICS training in an effort to
identify the barriers that may limit unified campus response to hazards. Currently, only first responders are required to complete NIMS/ICS training, but administrators are expected to take leadership roles during a campus crisis and a lack of preparation on their part may be a barrier to effective emergency response. Numerous administrative errors were identified in the VA Tech massacre (Davies, 2008), which has served to propel the importance of threat assessment and emergency planning teams, yet NIMS/ICS training is still a voluntary activity for many who serve on those teams.

This study also identified the relative lack of attention to the area of cyber threats and the ramifications of database theft. Future studies may help identify the most important factors related to this issue for campus public safety directors. A national survey of leading campus safety professionals lead by the National Association of College and University Business Officers demonstrated that only 14% of respondents used Cyber Disruption as an emergency simulation drill topic, and that only 51.9% covered Cyber Disruption in emergency preparedness plans (NACUBO, 2008). My research indicates that 60% of respondents did not know if their institution had a security plan in place to protect against a cyber-hack targeting personal data theft contained in their emergency communications network.

As mentioned above, in the decade between 2005-2014, there were 562 data breaches reported at 324 IHEs, with schools offering doctoral programs as the target 63% of the time (EDUCAUSE, 2014). Recent incidents of ransomware have identified a lack of physical security barriers that provided the opportunity for data theft to occur. Since public safety departments typically focus on physical security measures, future research could help identify best practices and strategies for integrating physical and cyber security planning for all IHEs.

The integration of physical and cyber security may also need to involve the relatively new practice of monitoring social media networks for threats to the community.
My research has indicated that approximately 36% of respondents either did not monitor or did not know if their school monitored these networks for threats. Research in 2015 indicated that the most common method for IHEs of monitoring social media networks for threats was completed manually (67.7%), and that outside contract vendors were used 8% of the time (MHA, 2015). Future research could focus on identifying the most effective monitoring methods for IHEs, including evaluation of the methods used by outside vendors.

My research has indicated that only 48.7% of IHEs offer safety presentations for students and faculty who may travel abroad. According to the Institute of International Education, the number of students traveling abroad has doubled in the past 15 years, with over 300,000 doing so during the 2014-2015 academic year (IIE.org, 2016). With that many students, faculty, and staff traveling abroad each year, and the expectation that the numbers will increase, more research is needed to identify the most relevant safety issues, and the reasons why more public safety departments do not offer such training. There may be unique aspects of safety in foreign environments and culture that typical U.S. campus safety departments do not feel comfortable or are not prepared to address.

Future research could include an expansion of my study that may involve a much larger sample of IHEs. Another related suggestion would be for a large sample to include surveying 2-year IHEs (public and private) for comparison with 4-year IHEs. In addition, such monitoring should occur on an ongoing basis and become part of a national surveillance system for emergency preparedness.

An attempt to verify some of the information retrieved from my survey was conducted by obtaining available information regarding emergency plans, resources, and services directly from school websites. A sample of 12 schools was selected. These schools were selected from those with the largest student enrollment, so they may present a best-case scenario. Other than being able to quickly identify if a public safety
department was a sworn police agency, the results showed that there was no uniformity among the IHEs in the amount, content, and structure of the available material. Although general evacuation plans for fire drills were also mentioned in all institutions’ websites, some IHEs made only references to maps and placards available on buildings to some schools listing of specific instructions in online manuals available to the community.

Although most (92.9%) IHEs in my study reportedly offered an active shooter response presentation to their communities, online information regarding this training ranged between no mention at all on websites, to the advertisement of a two-part in-person class on how to physically respond to a shooter, and subsequently how to deal with medical issues in the aftermath. Six of the schools referenced video presentations as part of their active shooter response training, and the videos varied in length between 3:28 minutes and 8:20 minutes, but all had used the current DHS plan of Run, Hide, Fight response. There was no mention on any IHE website for mandatory participation of any active shooter presentation, obligation to watch the video, or mention if the topic is covered in new student or employee orientations.

Ten of the schools did list procedures for dealing with bomb threats, though they were most often reprinted versions of the DHS pamphlet for responding to someone calling in a bomb threat. The DHS guide includes procedures to follow and questions to ask the person making the threat (https://www.dhs.gov/sites/default/files/publications/dhs-bomb-threat-checklist-2014-508.pdf).

Information varied widely regarding the types of timely warning communications available to their communities. All of the institutions mentioned a system for communicating via cellphone and text messaging but no online information was available for the ability to be notified by common social media links, though three institutions required log-in and password access to the communications system through the public safety websites. It is possible that some institutions allow for numerous email, phone and
social media accounts to be contacted for each person enrolled. Only two institutions mentioned the use of public address systems on campus buildings as part of their emergency communications system.

Further research to verify the survey results may be a worthwhile endeavor to uncover perhaps a more accurate picture of campus preparedness, since no mention online may mean that there is no actual presentation or service offered or that it is just not advertised or offered online.

Summary

Examination of numerous government documents and a review of the literature confirms the findings of other researchers in identifying the lack of federal or state mandates for emergency training at IHEs in the United States. An aim of this study was to help identify areas of compliance to guidelines set forth by numerous government agencies. This research demonstrated compliance in a number of areas, but also exposed areas of potential weaknesses in a lack of coordination in cyber threat preparedness, relatively little guidance in travel abroad safety, and noting that fewer active shooter response training was available in IHEs in the Northeast. Follow-up studies are needed to verify these findings, to generalize them to a broader population of IHEs and to address these weaknesses in emergency preparedness.

It is imperative that campus administrators take leadership in preparing for unique and emerging threats to campus communities, whether or not there are federal mandates compelling them to do so. Recruitment of a multidisciplinary team and encouraging interdepartmental cooperation and dialogue are essential to the development of a truly prepared and resilient campus. If the development of a timetable of practices and mandatory training are standardized, and incentivized for all stakeholders, this could be a
very meaningful step in the creation of a definitive emergency response manual for IHEs. As such efforts are developed and implemented an evaluation research program should be part of investments to identify what aspects of emergency preparedness are working well and which need improvement.
REFERENCES


NAFSA Association of International Educators. (2016) Retrieved from http://www.nafsa.org/Policy_and_Advocacy/Policy_Resources/Policy_Trends_and_Data/Trends_in_U_S__Study_Abroad/


Steve Szkotak was the writer for this Associated Press article. This is the link for my reference (above).


Appendix A

Campus Safety Questionnaire

Participant ID: __ __ __ __
Interviewer initials: __ __ _ Attempts ________________________________
Time call started: ___ : ___ (00:00 to 24:00) Time call ended: ___ : ___

Name of Institution: ____________________________________________

Respondent contact information
Name _______________________________________________________
1. Email __________________________ Phone #
   __________________________ - __________________

Hello. My name is George Padilla. May I please speak with
____________________________________________________ (First and last name)
If NOT AVAILABLE: When would be a good time to call back? ___ : ___
(00:00 to 24:00)

Contact with arranged appointment: Hello, this is George Padilla. Thank you for
making time for this phone interview, I really appreciate your contribution to this
research study.

Contact without arranged appointment:
Hello! My name is George Padilla and I’m a doctoral candidate in the Department
of Health and Behavior Studies at Columbia University, Teachers College. You
might remember receiving an email from me. You are one of the public safety
professionals randomly selected to participate in a telephone survey regarding the
state of public safety on college campuses. I’ll be asking you about how your staff is
trained and about your institution’s emergency response plans. The entire interview
will be conducted over this brief telephone call and should only take about 15
minutes. Is now a good time?

IF AGREEING: Thank you for your time today! If NO/REFUSES: Can I call back at
a better time? ______ Day: ______ Time: ______: ______ If still refuses:
Can I ask why you’re not interested? ______________________
Before we begin, I’ll briefly describe this study in greater detail and then ask for
your consent to continue.

INFORMED CONSENT
This research project is called Campus Safety in Colleges and Universities in the
United States, and the goal is to learn more about the public safety personnel and
emergency preparedness practices at colleges and universities across the country.
There are no direct benefits to you as an individual, but I’m hoping that
information gained by this study will help identify common practices and possibly
areas of improvement that institutions of higher education can reference for their communities.

Please know that your decision to take part in this project is COMPLETELY VOLUNTARY and that you may withdraw from participation at any time during this interview. You DON’T have to answer any question or questions that make you uncomfortable for any reason.

In the interview today, I will ask you questions about your college’s/university’s current public safety personnel, policies and practices.

I want you to know that records of this project will be kept confidential. Identifiers linking your name to your school’s data will be kept in a separate and secure area, and your name will never be used in any presentations or written reports. Your records may, however, be reviewed by the Teachers College Institutional Review Board, which is the professional group responsible for the safety of people who take part in our research projects.

Do you have any questions so far? *Note response, probe for understanding.* If you have any questions about taking part in this project, you should contact me (George Padilla) at (212) 854-0078 or my dissertation advisor Dr. Charles Basch at (212) 678-3983. You may also contact the Teachers College Institutional Review Board at (212) 678-4105.

To formally begin our interview, I’ll need to get your answer to the following question:

| CONSENT |
|-----------------|------------------|
| **Do you, (first name, last name), voluntarily agree to take part in this educational research project?** | 1=Yes  2=No |

*If NO:  For my records could you tell me why?*

*Interviewer signature:*

*If study participant says NO to Consent item, continue with the following script:*

Thank you for your time. Unfortunately, you’re not eligible to take part in our project.
Otherwise: OK. Let’s begin.

What is the title of your position at the college/university? (Circle the appropriate response)

1. Campus Safety Official (Director of Public Safety, Associate/Assistant Dir. Of Public Safety, Other within Public Safety/Security Staff ______________________
2. Key campus staff (General Counsel, Chief Administrative Officer, Chief Business Officer, VP Campus Services)
3. Campus Leadership (President/CEO, Provost, VP Academic Affairs, VP/Dean Student Affairs)
4. Other Title: _____________________________i.e., Emergency Manager in separate Division from Public Safety

I. INSTITUTION CHARACTERISTICS & DEMOGRAPHICS
1. Does your campus have Residence Halls? 1 = YES  2 = NO  3 = Don’t Know
2. Does your institution have a campus based Emergency Medical Service? 1 = YES  2 = NO  3 = Don’t Know
3. Are your public safety services administered within the college, or is it a contracted service with another company or agency? 1 = Institution’s Own  2 = Contracted Service  3 = Both

II. CHARACTERISTICS OF INSTITUTION’S PUBLIC SAFETY SERVICES
1. Which type(s) of emergency services personnel does your institution have? (Circle all that apply)
   1. Sworn police officers
   2. Non-sworn public safety/security officers
   3. Fire safety specialist
   4. Environmental health specialist
   5. Emergency Response planner/specialist (ie, CEM Certified Emergency Manager)
   6. Clery compliance specialist
   7. Title IX specialist
2. Is your staff trained to deal with emotionally disturbed individuals? 1 = YES  2 = NO  3 = Don’t Know
3. Is your staff trained to assist in medical emergencies? 1 = YES  2 = NO  3 = Don’t Know
4. Does your institution offer crime prevention presentations to the community? 1 = YES  2 = NO  3 = Don’t Know
5. If yes, please indicate which topics are covered:
   1. Theft and property crimes
   2. Violence prevention (ie, campus self defense classes)
   3. Harassment/stalking
   4. Cyber security and safeguarding personal information data
   5. Travel (study/research abroad) safety
   6. Not applicable / No crime prevention presentations offered

6. Are any of your public safety personnel armed with firearms?
   1 = YES  2 = NO  3 = Don’t Know

7. Is disaster preparedness part of student orientation?
   1 = YES  2 = NO  3 = Don’t Know

8. Is disaster preparedness part of faculty/employee orientation?
   1 = YES  2 = NO  3 = Don’t Know

9. Is there a plan to use FEMA’s NIMS and Incident Command System in an emergency situation?
   1 = YES  2 = NO  3 = Don’t Know

10. Does your institution offer an Active Shooter Response presentation?
    1 = YES  2 = NO  3 = Don’t Know

11. Does your institution monitor publicly available social media networks on and around your campus?
    1 = YES  2 = NO  3 = Don’t Know

12. Does your institution have a Memorandum Of Understanding (MOU) with local organizations?
    1 = YES  2 = NO  3 = Don’t Know

### III. FEATURES OF INSTITUTION’S EMERGENCY OPERATIONS/RESPONSE (EOP) PLANS

1. Are your institution’s EOP available to college community?
   1 = YES  2 = NO  3 = Don’t Know

2. Does your institution have an Emergency Planning Committee?
   1 = YES  2 = NO  3 = Don’t Know

3. Is there a continuity of operations section of the EOP?
   1 = YES  2 = NO  3 = Don’t Know

4. How often does your institution test its emergency operations/response plans?

5. How often do you review and update your emergency operations/response plan?
   a. monthly
   b. every 6 months
   c. yearly
   d. never
   e. other

6. Does your institution involve local responders in testing of EOP?
7. Has your institution conducted an active shooter response training exercise (table top or actual drill)?
   1 = YES  2 = NO  3 = Don’t Know

8. Do you perform after-action reports to assess the strengths and weaknesses of your plan after an exercise or activation of your plan?
   1 = YES  2 = NO  3 = Don’t Know

9. Are there evacuation procedures in place on campus?  1 = YES  2 = NO  3 = Don’t Know

10. Are there designated safe locations, shelter-in-place procedures for your institution?  1 = YES  2 = NO  3 = Don’t Know

11. Please indicate which of the following your Emergency Operations Plans address: (check all that apply)

   1. Active shooter  8. Hazardous Materials
   2. Bomb threat  9. Hostage situation
   3. Civil disturbances  10. Pandemics and Infectious diseases
   4. Violent Criminal Behavior  11. Radioactivity release
   5. Escaped Animals  12. Utility failure
   6. Natural Disasters  13. Personal Information Database Theft
   7. Fire Safety

IV. MENTAL HEALTH RESOURCES AVAILABLE TO CAMPUS COMMUNITY

The next series of questions involve your campus resources for dealing with your community’s mental and emotional health needs

1. Is there an individual or office responsible for Student mental health services on your campus?  1 = YES  2 = NO  3 = Don’t Know

2. Is there an Individual or office responsible for Employee/Faculty mental health services?  1 = YES  2 = NO  3 = Don’t Know

3. Does your institution have a multi-disciplinary behavioral threat assessment team that incorporates members from different campus divisions such as public safety, human resources, student affairs, academic services, mental health and legal counsel?  1 = YES  2 = NO  3 = Don’t Know

V. EMERGENCY COMMUNICATIONS PLANS

These questions will now deal with your institution’s emergency communications with your community

1. Does your institution have a written policy on the issuance of timely warnings?
   1 = YES  2 = NO  3 = Don’t Know
2. Does your institution test the communications system (CS) annually?
   
   1 = YES   2 = NO   3 = Don’t Know

3. Is the CS tested during high peak times during the academic year?
   
   1 = YES   2 = NO   3 = Don’t Know

4. Does your institution use an outside vendor as part of your CS?
   
   1 = YES   2 = NO   3 = Don’t Know

5. Does your institution have a security plan in place to protect the integrity of the system and the personal data of your community that it contains?
   
   1 = YES   2 = NO   3 = Don’t Know

6. Does your department maintain a crime log available for public inspection?
   
   1 = YES   2 = NO   3 = Don’t Know

7. Does your department publish an Annual Security Report (ASR)?
   
   1 = YES   2 = NO   3 = Don’t Know

Thank you! That’s all of the questions on our survey.
At this point, I’d just like to remind you that if you have any questions about taking part in this project, you can contact me (George Padilla) at (xxx) xxx-xxxx or my research adviser Dr. Charles Basch at (xxx) xxx-xxxx. You’re also welcome to contact the Teachers College Institutional Review Board at (xxx) xxx-xxxx. Thank you again for your participation!

Time call ended: __ __ : __ __