

4-23-2013

Collaboration: The Effects of Joint Agency Training for Both National Guard and Department of Homeland Security

Benjamin J. Rogers
College of Technology, brogers@purdue.edu

Follow this and additional works at: <http://docs.lib.purdue.edu/techdirproj>

Rogers, Benjamin J., "Collaboration: The Effects of Joint Agency Training for Both National Guard and Department of Homeland Security" (2013). *College of Technology Directed Projects*. Paper 47.
<http://docs.lib.purdue.edu/techdirproj/47>

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.

RUNNING HEAD: COLLABORATIVE TRAINING

COLLABORATION: THE EFFECTS OF JOINT AGENCY TRAINING FOR BOTH
NATIONAL GUARD AND DEPARTMENT OF HOMELAND SECURITY

Directed Project

Submitted to the Faculty

of

Purdue University

by

Benjamin Joseph Rogers

In Partial Fulfillment of the

Requirements for the Degree

of

Master of Science

May 2013

Purdue University

West Lafayette, Indiana

TABLE OF CONTENTS

	Page
ABSTRACT.....	iii
CHAPTER 1 INTRODUCTION	1
1.2 Background.....	1
1.3 Significance	2
1.4 Statement of Purpose	2
1.5 Research Questions.....	3
1.6 Assumptions	4
1.7 Limitations.....	4
1.8 Delimitations.....	5
1.9 Definitions of Key Terms	5
1.10 Overview of Study	7
CHAPTER 2 LITERATURE REVIEW	8
2.2 Manmade Incidents.....	9
2.3 Natural Incidents.....	10
2.4 Response	11
2.5 Interagency Collaboration	14
2.6 Chapter 2 Summary	15
CHAPTER 3 METHOD AND MATERIALS.....	16
3.2 Framework	16
3.3 Approach	16
3.4 Methodology.....	17
3.4.1 Participants	18
3.4.2 Data Collection	18
3.4.3 Data Analysis.....	19
RECOMMENDATIONS AND CONCLUSIONS	31
RECOMMENDATIONS FOR FURTHER STUDY.....	34
LIST OF REFERENCES	36
APPENDIX A SURVEY	
APPENDIX B IRB EXEMPTION APPROVAL	
APPENDIX C INVITATION EMAIL	

ABSTRACT

Rogers, Benjamin J. M.S., Purdue University, May 2013. Collaboration: The Effects of Joint Agency Training for Both National Guard and Department of Homeland Security. Major Professor: Daniel Lybrook.

Using subject matter experts and responders in the field of incident response, this study was designed to ascertain whether there is a need for more collaborative training among both National Guard responders and Department of Homeland Security responders. It did this by answering the key questions of:

1. What areas within training can be collaborative?
2. What are the effects of joint training on first responders?
3. What training processes can be made more efficient?

Survey participants were asked two phases of questions. The first was designed to collect data on their experiences. The second was designed to gather their opinions on collaborative training and to identify areas in need of improvement as well as identify those areas not in need of improvement through collaborative training. Thematic analysis was then used on the data to identify common themed areas that could lead to collaborative training.

CHAPTER 1 INTRODUCTION

Chapter 1 gives a synopsis for the research and study of this document. Chapter 1 sheds light on the field of training for response to natural or manmade incidents. The areas of scope, purpose, research questions, assumptions, and limitations will also be covered. The conclusion of this chapter is an overview of the undertaking that was this project.

1.2 Background

My National Guard unit's mission of being the reaction force for a large scale incident within the State of Indiana and how the unit was doing many of the things we discussed while attending the Homeland Security class led to a directed project proposal on joint agency training.

Bardach defines collaboration as: "any joint activity by two or more agencies that is intended to increase public value by their working together rather than separately" (Bardach 1998, p.8). Both the National Guard and the Department of Homeland Security have a responsibility to collaborate in the response to a large scale incident. When it comes to large scale incident response, the Department of Homeland Security has some resources at its disposal, though its primary responsibility is to train and equip the local responders. The National Guard is primarily responsible for the assigning of units to be

their Quick Reaction Force, or first responding unit with the most training for response. The National Guard trains and equips these units as best as possible.

These two different agencies are training people for the same tasks and mission. Yet their ability to collaborate in large scale training events is minimal. They need guidance in developing a joint agency response training plan. The objective of this research, is therefore, to identify through first responder points of view areas within responder training that could use collaborative or more collaborative training between agencies.

1.3 Significance

There is limited literature related to joint agency training of both Homeland Security and National Guard personnel. By gaining better knowledge of how experienced first responders feel about large scale joint training events through qualitative data, guidance for better collaborative training can be developed. Instead of two agencies training for the same tasks, and reinventing the wheel every time, they can combine methods and expertise levels for more efficient and cost effective training.

1.4 Statement of Purpose

The purpose of this project was to measure the effectiveness of combined training with the Indiana Quick Reaction Force mission and Department of Homeland Security units. The Indiana Army National Guard assigns a battalion as the unit to be on standby and ready to react to any disaster or incident that is man-made or natural. Currently, there are set requirements for training for this mission. However there is not a set manual

nor is there guidance for how the requirements are met. Currently, there are several agencies that have similar or the same requirements, all of which are likely to respond to an incident in one way or another. For example; responding National Guard units, police, and firefighter must complete National Incident Management System courses. Both the National Guard responding units and Police must have riot control training. It is the goal of this project to see if there is a need for further development of training and manuals for the mission of responding to a large scale incident within the State of Indiana.

The author has firsthand experience with both the Indiana Army National Guard and the Department of Homeland Security. He is currently commissioned in the Army National Guard and has had a class on Homeland Security. His unit is assigned the Quick Reaction Force mission and has been through the training process for it. The Department of Homeland Security has already developed training and guides for reacting to an incident.

The development of a manual should prove helpful and make training of first responders much more efficient. If the training is more efficient due to joint agency training, then money should be saved. The saving of money should not come at an expense of training value.

1.5 Research Questions

The questions to be researched are:

1. What areas within training can be collaborative?
2. What are the effects of joint training on first responders?

3. What training processes can be made more efficient?

1.6 Assumptions

Assumptions for this directed project are

1. That there is a need for joint training for response.
2. That all participants responded to the study questions to the best of their ability, as accurately and truthfully as possible in reference to their knowledge and experience pertaining to incident response and training.
3. That all participants have the freedom and ability to acknowledge that they cannot answer a question because of the lack of knowledge or remembrance.
4. That the total number of participants is adequate for the proper amount of data for analysis.
5. That the participants were adequately able to articulate their knowledge and experience.
6. That the methods used for this research are adequately able to provide the data necessary to answer the proposed questions.

1.7 Limitations

The areas of this study that are assumed to be limitations are as follows:

1. That the number of volunteer incident responder participants is limited within the State of IN.

2. That the participants' willingness to participate may be limited as well as limitations of their schedules.
3. The cost of testing the identified areas in need of collaboration is too costly.
4. Responses are opinions based off of responder personal experience.

1.8 Delimitations

The areas of this study that are assumed to be delimitations are as follows:

1. The actual occurrence of a large scale incident.
2. The time since the last large scale incident.
3. Actual personal experience of the responders.

1.9 Definitions of Key Terms

collaborations – As defined by Bardach is “any joint activity by two or more agencies that is intended to increase public value by their working together rather than separately (Bardach 1998).”

emergency - Any incident, whether natural or manmade, that requires responsive action to protect life or property. Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, an emergency means any occasion or instance for

which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States (Department of Homeland Security, 2011).

Incident - An occurrence, natural or manmade, that requires a response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, civil unrest, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, tsunamis, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response (Department of Homeland Security, 2011).

National Incident Management System (NIMS) - National Incident Management System:
A set of principles that provides a systematic, proactive approach guiding government agencies at all levels, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life or property and harm to the environment (Department of Homeland Security, 2011).

response - Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities include applying intelligence and other information to lessen the effects or consequences of an incident; increased security operations; continuing investigations into nature and source of the threat; ongoing public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and specific law enforcement operations aimed at preempting,

interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice (Department of Homeland Security, 2011).

1.10 Overview of Study

With the rising demand of responders needing to work together on large scale incident sites, this study was designed to collect data on how to best determine and implement collaborative training for Department of Homeland Security responders and National Guard responders. The rationale behind collaborative training is for the responders to train as they would respond in “real world” events.

This study attempts to identify areas for recommended collaborative training that are similar to actual incident responses and does so by gathering opinions of subject matter experts and first responders on the need for collaborative training.

CHAPTER 2 LITERATURE REVIEW

In an effort to reduce the threat to the United States' vulnerabilities from terrorists, President Clinton issued Presidential Decision Directive 39 in 1995 and the Defense against Weapons of Mass Destruction Act in 1996 (Gertha-Taylor, 2006). Heather Gertha-Taylor's (2006) article on leader collaboration had some research that was done on the actions of one Darrell Darnell of the Office of Grants and Training. In her article she refers to a key lesson learned by Darnell, and it is:

Collaboration is needed to maximize strengths and fill the gaps in the federal government's capabilities. Because there are limitations on federal response efforts, we must develop state and local response capacity. Part of developing that capacity is the coordination of response plans. When plans aren't coordinated, unexpected stumbling blocks will stall recovery efforts (Gertha-Taylor, 2006, p.160).

One of the more significant incidents in recent U.S. history is the terrorist attacks on September 11th, 2001. These events brought to light the need for more readily available responders that are well trained in incident response. This example is one of a manmade incident. The following example is of a natural incident.

In more recent history, Hurricane Katrina played a very significant role in current large scale incident training and standards. The events that contributed to and were caused by the hurricane led to a realization of areas needing attention and improvement

when responding to a large scale incident. Some of the areas identified as needing attention include the need for funding, sheltering, feeding, and health care of those affected by the incident (Helferich & Griggs, 2006).

The Department of Homeland Security funds research for improvement within these areas. For example, the improvement of the communications used during damage assessment has been funded by the Department of Homeland Security (Helferich & Griggs, 2006).

2.2 Manmade Incidents

Manmade incidents are predominantly large scale incidents caused by humans, such as terrorism (including bioterrorism, riots, attack or war) and even technical failures like a building collapse or bridge failure. One of the biggest manmade incidents in recent U.S. history was the September 11th terrorist attacks of 2001. The people of the United States rely heavily on “strong leadership” to protect and react to such manmade threats (Kapucu, Arslan, & Demiroz; 2010). Strong leadership relies heavily on collaboration and training.

Bioterrorism and biological threats to society pose a significant risk. Reischl, Sarigiannis and Tilden (2008) suggest that environmental health professionals play a larger role in the preparedness planning and training. This would allow for better training for first responders in the event of an outbreak or attack. “A 1993 study by the Office of Technological Assessment concluded that a single airplane delivering 100 kilograms of anthrax spores by aerosol on a clear, calm night over Washington, D. C. could kill between one and three million people” (Weiss, 2001, p.121)

There have been attempts at even predicting the unpredictable, which are people. In an article by Cynthia Wagner (2007) on predicting panic, she mentions a software tool designed to train officials on scenarios involving mob groups. It combines individual variables with crowd behaviors in an effort to train officials on how to spot and anticipate situations and actions that could lead to a mob mentality event (Wagner 2007).

2.3 Natural Incidents

Natural incidents are any large scale incidents that are a result of a naturally occurring event. Some examples of natural events would include tornado damage, flooding, hurricane, blizzard, disease outbreak, earthquake, and many others.

As mentioned earlier, outbreaks are a concern for many environmental health professionals. As mentioned by Mark Miller's (2008) review of an Environmental Health Training in Emergency Response pilot, some of the key foci of environment health and emergency response are: "Disaster management, responder safety, potable water, wastewater management and disposal, food safety, vector control and pest management, solid waste and hazardous materials, shelter assessment, and building assessment" (Miller, 2008, p.62). Outbreaks can happen on their own, or by another natural incident. It could also be caused by the actions of man. A lot of natural incidents create environments that are excellent for spreading contamination and disease. Flooding has a tendency to create conditions optimal for spreading contamination and disease. Reischl et al.'s (2008) study on environment health professionals showed that on their survey: "Roughly half of the respondents indicated their preference for training on water security (53%), food security (49%), biological emergency response (48%), and risk

assessment applications (45%) as well as showing a preference for technical and proficient skills training rather than awareness training” (Reischl, et al., 2008, p.16).

2.4 Response

“Emergency management is both proactive and reactive” (Prizza & Helfand 2001, p.179). Emergency management starts from the ground up, avoiding hindrance from the top down approach of most hierarchical governance (Kapucu, et al., 2010). This requires collaboration and cooperation from all agencies and agents regardless of rank. The idea behind this is that the low level “commander” is usually the first official on ground and is the most knowledgeable of the area and situation. High authority officials usually do not arrive on scene first and are less likely to know the area and situation. However, local responders and local National Guardsmen have an invested interest within their communities. “He works in the community, goes to church there, raises his family there, and pays taxes there” (Meyer, 1996, p.11). “The National Guard Membership comes from the community, and has a stake in the outcome of any local disaster” (Meyer, 1996, p. 20). Meyer (1996) also stated within his report that the National Guard had the manpower to deal with incidents and to serve the immediate needs of the community. Some politicians have considered broadening the role of the military to include the National Guard when it comes to preventing an attack on the United States. That consideration was for making them more like police. Risa Brooks (2002) would argue against that broadening, in that for the sake of the military it would prove more harmful than good. Not only would it increase the responsibilities and training requirements on the military, it would potentially cause political tension and motives within the military.

The National Guard has the exceptional ability to handle incident response, but should only be asked to respond and not prevent unless it would be prevention through normal military means. Additionally they should only respond long enough to help get the local authorities stabilized. The National Guard should only be there to assist local authorities during an incident other than that of war. Anything more other than assisting may be perceived as authority in a matter where the National Guard does not have it. On top of that, it is costly to keep a National Guard force mobilized, so stabilizing the local authorities as efficiently and effectively as possible could save a lot of money for the state that mobilized the National Guard forces. The way to a fast stabilization is through collaborative training between the National Guard and other agencies within the Department of Homeland Security.

The National Guard has another hurdle to pass; the hurdle of having more than one mission and little time to train for both. The military mission is considered the primary mission, yet there is still a lot of focus on being trained for the secondary mission of civil incident response. Weiss' (2001) article on *When Terror Strikes Who Should Respond* quoted Harry Summers, a military analyst, in saying that "Every day spent on consequence management is a day in which perishable war fighting skills are not maintained or improved" (Weiss, 2001, p.124). "Reserve component units, with limited available time, will find it difficult if not impossible to train well for both missions" (Kelly, 2003, p.38). The burden of this task may be lightened through collaborative training, or even "piggy back" training. The National Guard could participate in a large scale training event hosted by another agency.

Other agencies that have little to no authority also play a very integral role in a response to an event. Private agencies such as Wal-Mart and Home Depot respond with logistical and life sustainment support (Kapucu, et al., 2010). Medical facilities also play a large role in incident response, without much authority. Usually the main response for a medical facility is to respond to the inflow of casualties. According to Prizza and Helfand (2001), the main focus of the Queen's Medical Center in Hawaii during a large incident is on "the number and types of victims coming into the hospital; internal problems at the hospital, including the possibility of risk through damage, contamination, etc.; optimizing patient outcomes; and assessing and improving risk management for similar incidents in the future" (Prizza & Helfand, 2001, p.178). Prizza and Helfand also suggested a recommendation for interagency disaster drills to happen more often (Prizza & Helfand, 2001).

For interagency training to occur there must first be planning and goals. Craig Schroll's article, *Emergency Response Training*, identifies these goals and how to plan for the development of training. The goals are to train the responders to make certain the safety of those who are responding while not compounding the incident, making the situation worse, and to use an effective response to the incident (Schroll, 2002). He also identified some challenges to response training. "It is training that trainees will hopefully never use, skills and knowledge must be used for problems of great risk, Emergencies are fast-paced and dynamic, and that it is impossible to have seen it all" (Schrolls, 2002, p.17). Safety is the biggest concern during training and during actual responses.

2.5 Interagency Collaboration

Homeland Security has a need for multi-agency collaboration. From the federal level all the way down to the local responders. The military responders will likely be directed by an “on-scene commander” from a civilian agency (Kelly, 2003). A collaborative effort between agencies can augment “post-event outcomes” and reduce waste (Bitto, 2007). A big key in that is the ability to reduce waste. Reducing waste saves money; saving money increases cooperation.

The ability for small agencies, such as a local police department, to overcome hurdles in place involving jurisdiction and resources available, requires collaboration. Though most agencies have policies and agreements in place to help one another during a crisis, it is still up to the individual agency to ensure that they have established collaboration with other agencies within their level. For example, most states have agreements with one another stating that they will help each other during an emergency. They will have already identified who has what resources and who will pay for what.

“The theoretical justification for collaborations in general emphasizes that a collective comprehensive approach/strategy to any given problem results in a better means of resolving that problem than a single-agency or single-strategy approach would afford” (Schnobrich-Davis & Terrill, 2010, p.510). Another hurdle to overcome is that of collaborating intelligence and data for the prevention of an incident. It is suggested by Alan Doig’s (2006) article on the response to terrorism, that many of the threats and personnel involved with the terrorist attacks on September 11th, 2001 could have been identified prior to the incident if all agencies were sharing and collaborating their data.

2.6 Chapter 2 Summary

In summation, this chapter covered everything from the types of manmade and natural incidents and the types of responders that specialize in those areas, to the response efforts for those incidents. This chapter also covered interagency collaboration efforts currently being utilized throughout the field of incident response. The types of situations and incidents are vast and very unpredictable. While the people that respond may seem to be great in numbers, they are actually quite small compared to the potential large scale incident that could affect thousands of people; that is why every responding unit should train together for a large scale incident. Not every training event needs to be collaborated, but the training for the large scale incidents will require many or all responding units to work together to save life, limb, and property.

CHAPTER 3 METHODS AND MATERIALS

As stated in Chapter 1, the purpose for this research is to shed light on the field of training for response to natural or manmade incidents. The idea behind the research is to develop data on the collaboration of training for responding units to a natural and manmade incident. These responding units are involved with the Department of Homeland Security and the National Guard.

3.2 Framework

This research is qualitative in nature and uses thematic analysis to analyze the results. This will be through participant and expert opinion gathering based on their personal experiences.

3.3 Approach

First responder units from both the National Guard and the Department of Homeland Security are training for the same types of incidents. However, they are not executing this training together. Many responders end up working together for the first time during an incident. The author took this problem and designed a survey questionnaire to collect data from first responders and subject matter experts associated with the Department of Homeland Security, the National Guard, or both. The data was

then analyzed to identify areas within response training that could be collaborated and build our recommendations with that information.

Response training is vast and is used in many different ways and areas. When it comes to training for an incident where many different units and agencies will potentially have to work together during their response, especially the larger the incident, it is this author's theory of collaborating training that should be considered for its potential. The data collected should help in ascertaining whether or not collaborative training for large scale incidents could prove to be useful.

3.4 Methodology

Some of the areas covered within the methodology section for this research, answer the questions of who, what, when, where, why, and how the research was conducted.

A survey was designed and developed (See Appendix A) to collect data on incident training and incident response experiences from first responders. This survey and study proposal was submitted to Purdue University's Institutional Review Board for approval and permission to administer. (See Appendix B for the exemption approval.) After the approval, an invitation email was sent to first responders asking for their participation. (See Appendix C for the invitation email.) A few had forwarded the invitation to fellow responders, creating a small snowball recruiting effect. There were 19 total participants that started the survey, with 16 participants that completed the survey in its entirety.

3.4.1 Participants

The intended participants for this study were comprised of subject matter experts and responders. The sample comes from the State of Indiana's National Guard Reaction Force, 2-151st Infantry Battalion and other Indiana Army National Guard service members. The sample also had subject matter experts and responders from around the state with some sort of experience currently or formerly with Department of Homeland Security units. Many had experience outside of the state as well.

Participants were recruited using contacts within the 2-151st Infantry Battalion and other Indiana Army National Guard service members to enlist volunteers that have or are being trained for response to incidents. The same recruiting technique was used for recruiting volunteers through the Indiana Department of Homeland Security.

Participants were sent an email containing a link to the questionnaire to complete (See Appendix C)

3.4.2 Data Collection

The questionnaire had two phases. The first was data collection of current experience with the second being on the participant's opinions of prior experiences. The questionnaire asked about responder background information, training received, training given, training aspects (most and least effective), training improvements and unnecessary training, collaboration training experience, collaboration training working relationship, actual incident experience, and actual incident collaboration working relationships. The previous grouping of questions hit on the following areas: personal experience with actual incidents and training, responsibilities, actual training process, and training that is

useful and training that could use some improving. Using the Qualtrics Survey Software, participants answered in short essay format for questions within the previously mentioned groups. (See Appendix A for Survey)

Participants were asked to complete the survey questionnaire by opening the invitation email. The email and the questionnaire front page stated that the survey was confidential and that by starting the survey, they consented to the data collected to be used in this study. The email contained the link to the Qualtrics survey. This allowed participants to take the survey in a setting of their choosing, as long as there was a computer with internet access.

The survey process conducted in Qualtrics allowed flexibility and ease of completion to the participants. The participants were asked to answer the questions honestly and as truthfully as possible. Using Qualtrics ensured the survey as anonymous and as easy as possible for the participants.

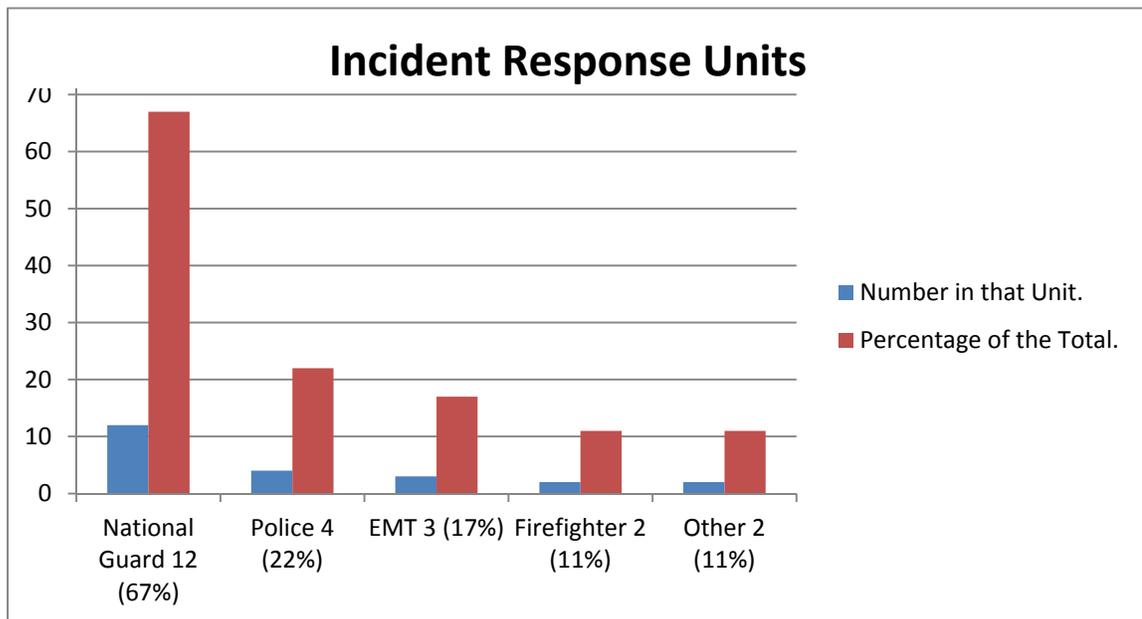
The Data was analyzed using a qualitative methodology method that identified key themes, repetitive themes and “hot spots”. The key themes identified within question groups allowed for the comparison of the question groups with similar themes.

3.4.3 Data Analysis

This section discusses some of the significant results of the survey, and compares some of those results. By doing so, this author will provide recommendations for proposed collaboration training and further studies. The previously mentioned question groups will be discussed individually and then again by cross comparison of those results,

starting with the basic survey information and the participant’s Responder Background Information.

There were a total of 18 survey participants. Between these participants, there were 23 total responses. This is a result of participants belonging to more than one respondent group. Of the groups that our survey participants belonged to, 12 (67%) were National Guard, 4 (22%) were Police / Law Enforcement, 3 (17%) were EMT / Paramedic, 2 (11%) were Firefighters, and 2 (11%) were Other. The Other category responses were Hazardous Materials Technician and Technical Rescue Specialist, as well as Area / Incident Commander.



The 5 response overlap is due to 2 Firefighters also being Paramedics with other group titles and 1 Police Officer also being a Paramedic. The occurrence of multiple respondent group membership was expected, but it was expected to be from National Guard service members due to National Guard service only being part-time for most

soldiers. None of the participants marked that they were from both the Indiana Army National Guard and from a Department of Homeland Security unit. Being that the majority of the participants were in the National Guard and potentially have other jobs outside of the National Guard, then it was expected that there might be more double agency participants.

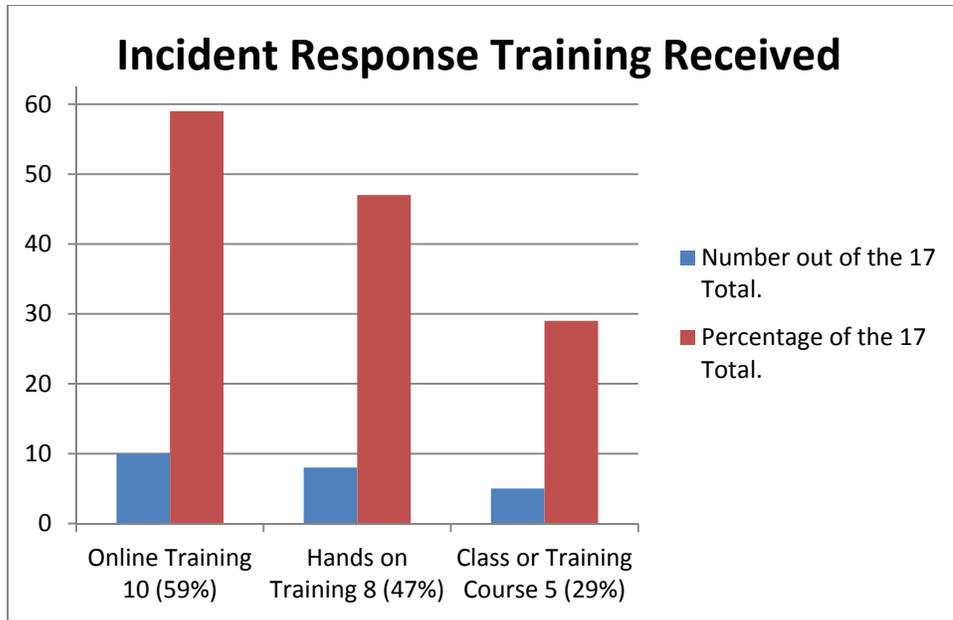
All 18 participants answered that they felt responsible for responding to an incident if the call was to be made. They also have a combined experience of 208 years with an average of 11.6 years. The experience range of our survey participants is a maximum of 34 years and a minimum of just 1 year.



14 out the 19 current job titles listed were regular job titles that also correlate to response positions. For example a Patrol Officer or a Platoon Leader during an incident response is also a Patrol Officer or a Platoon Leader during their normal operations. Only a few answered with an actual incident response title, like liaison officer. 2 survey participants listed 2 current job titles. 3 categories emerged from all of the participants’

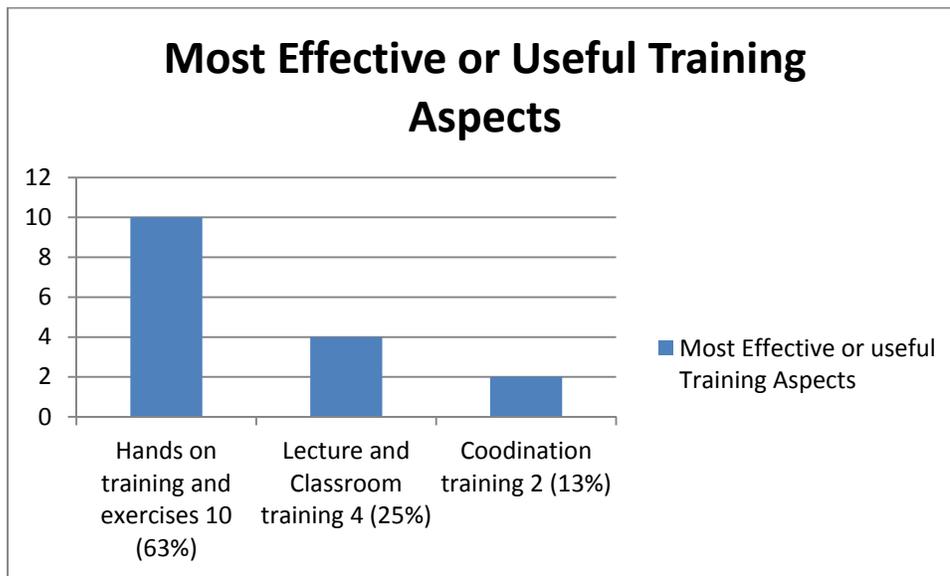
job titles and positions that they have held to include their current positions. Those categories were leaders, instructors, and task positions. The leader positions were things like Incident Commander, Civil Support Planner, and duty assigned position leadership. Instructor positions were such positions as Active Shooter Instructor, Defensive Tactics Instructor, and Hazardous Materials Instructor. Heavy Vehicle Driver, Supply movement, and duty assigned position were types of positions for Task Positions. Those were just a brief sample of the types of positions the participants held.

Of the 17 survey participant responses to the question “What type of incident response training have you received?”, 16 (94%) were specific enough to list their training to have been received through classes or training courses, online courses such as National Incident Management System and Federal Emergency Management Agency online classes and hands on or training exercises. These three training methods will come up again in the analysis of question groups to come. Of the 17 participants that had received incident response training, 5 received classes or training courses, 10 received training via online training, and 8 had received hands on training. There were also some examples of more specialized training, such as Hazardous Materials Handling, Operations and Logistics, and Tactics.



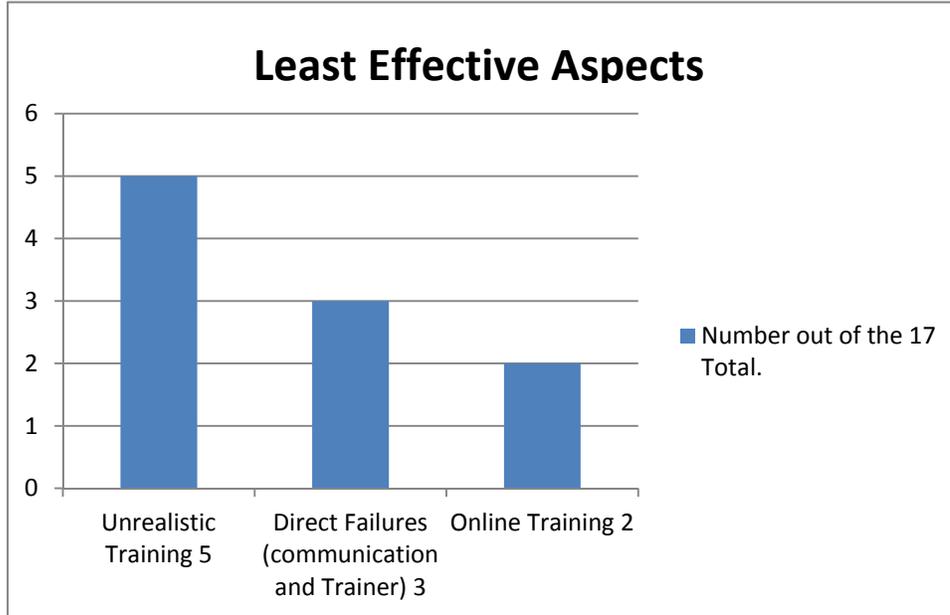
10 (56%) out of the 18 survey participant responses said that they have not trained other responders in incident response. The 8 (44%) survey participants that had trained others said that they have trained incident response a relatively large amount of times. Of those same 8 participants, 6 claimed to have trained National Guard soldiers and 4 claimed to have trained Department of Homeland Security unit personnel. Other personnel have been trained to include Marines, School staff, and Utilities Technicians. Of the training that was given, most of it was bigger picture type of training, to include such training as hazardous materials handling or specific scenario training. One participant had even mentioned integration between responders and the National Guard. Only one mentioned providing training that was specific to individual presumed roles during an incident. When asked to elaborate on which aspects of response training were the most effective or useful, 10 (63%) of the 16 survey participant responders said that hands on training and exercises were effective and useful. This was followed by lecture and classroom type training, with 4 (25%) mentioning it. The last category was

coordination between the National Guard and the Department of Homeland Security with 2 (13%) mentioning it. It is unclear if the low percentage of participants mentioning coordination is due to the lack of coordination training or that the coordination was not as useful.



However, when listing the least effective or useful training aspects the participants did NOT mention coordination. This tends to support arguments that the lack of training coordination is a more likely reason for the low percentage of participants stating that they thought it to be useful. The aspects that were listed as least effective or useful could be grouped as methods of training and how the training was conveyed. The large number of possible incident training scenarios, led to a focus on worst case scenarios and less on more common scenarios. It was thought that it would be more beneficial to be prepared for the incidents that they are more likely to see or even see more often. Online training was one of the least preferred ways of conveying response training. Some of the training

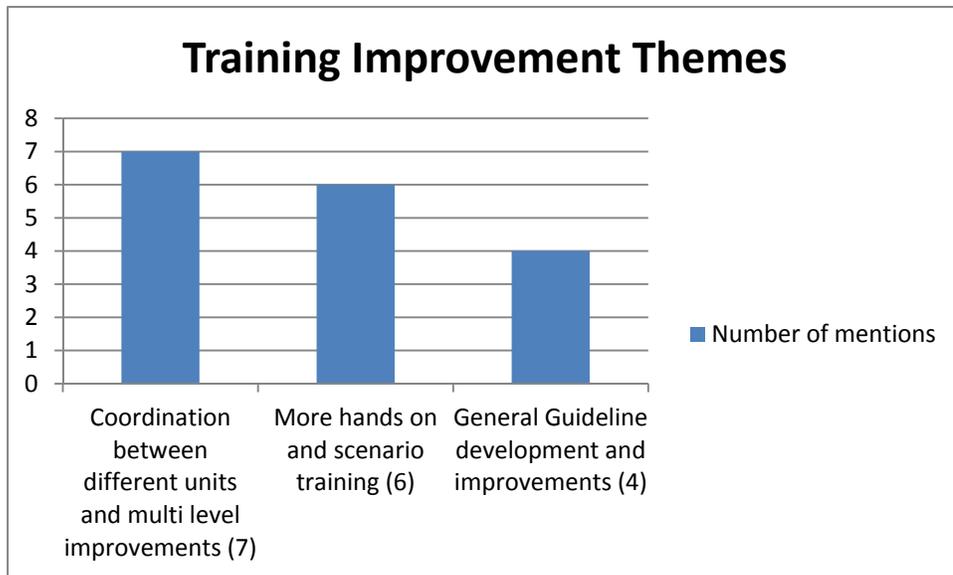
aspects identified shortcomings that were accredited to direct failures or trainer failures.



Some examples of this were communication failures of all types and trainer experiences being too narrow and only from their background and not understanding those that they are training. Communication is one aspect in training and especially in real life which can always use improvements regardless of how well it went between units. So, if it has direct failures or leads to other indirect failures, then it must be worked on.

When we compare the training received with the training aspects, 10 (59%) out of the 17 survey participant responses have received some form of online training for incident response. However, online training was one of the themes of least effective or useful forms of training. Yet, online training was not one of the themes that came up in the training improvement and unnecessary training questions, and when it came to unnecessary training, 8 (80%) out of 10 said in some form or another that no training is unnecessary. This implies that online training is not a preferred method of training, but it does have its place in incident training.

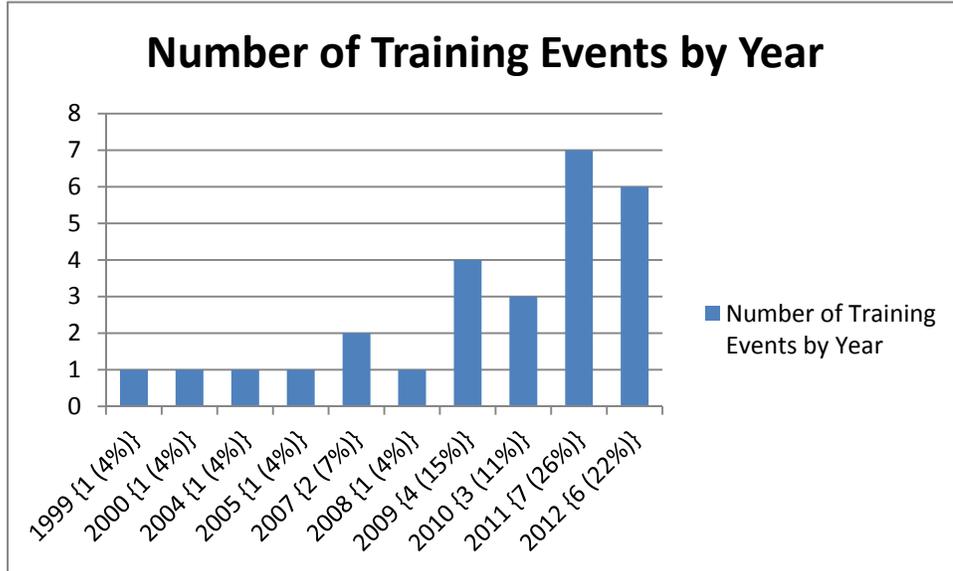
There were three themes that came from the survey participant responses to the improvement portion of the survey. The first was coordination between different units and multilevel improvements (mentioned 7 times), the second more hands on and scenario training (mentioned 6 times) and the third being general guideline development and improvements (mentioned 4 times).



Two specific areas that were said to have needed improvement, but didn't fit into the themes were the National Incident Management System online training which was "overly complex and difficult" and Jurisdictional Limitations was also listed as an issue.

When it comes to collaborative training experiences, 13 (81%) out of 16 survey participant responses said they had participated in collaborative training between one form of Department of Homeland Security unit and the National Guard. 27 training

events were listed, 13 (48%) of the 27 training events were in 2011 and 2012.



The responses to the collaborative training experience section had similar themes to that of the most useful training aspects section. The first common theme is the coordination between Department of Homeland Security units and National Guard units, with the second theme being hands on and exercise training. So notation of the in favor of and the in favor against remarks was taken on the specified themes and then tallied.

Coordination

In Favor of Coordination:

11 survey participant responses had favorable remarks for coordinated training. This is a combination of liking the coordinated training and disliking that there was not enough coordinated training.

Not in Favor of Coordination:

Some may argue that the following statements would be in favor of coordinated training, though these responses were separated from the in favor of category due to them being

dislikes about actual training. One did not think that the National Guard played much of a role during a scenario and another believed that the IDHS “pulled out of the exercise early.”

Hands on / Exercise

In Favor of Hands on / Exercise:

Five were in favor of the hands on training in which they took part. This is a combination of liking the hands on training and disliking that there were not enough hands on training.

Not in Favor of Hands on / Exercise:

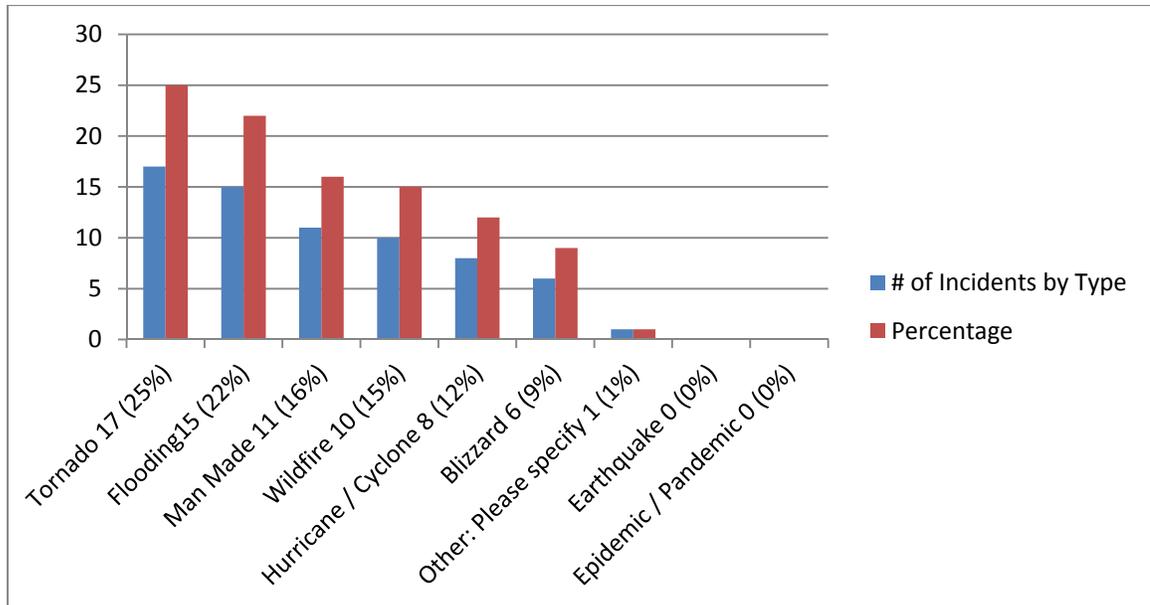
One did not like the level to which a training scenario was given.

The most common roles and responsibilities held during the collaborative training events was direct leadership and specialty positions with 5 survey participant responses each. This was followed by Liaising (3 responses), Operations and Planning (3 responses), Logistics (2 responses), and 1 response of none. When asked for their opinions on collaborative training between Department of Homeland Security Units and National Guard units, none spoke negatively of collaboration, referring to it as important and regarding it as necessary. In a way they seem to regard training as always a good thing, where more is better and at the very least won't hurt things.

Most of our participants held roles or responsibilities in the form of higher authority positions. With 9 (69%) out of 13 survey participant responses having something positive for their opinion on the subject of collaborating training between Department of Homeland Security units and National Guard units. These opinions

contained terms and phrases such as important, great opportunity, always worthwhile, necessary, critical, and always good. The other 4 (31%) did not share negative opinions, but rather more neutral or little opinion on the matter. This tends to show that the survey participants find collaborative training to be viable and worthwhile, however in some cases they felt that certain units were not being utilized effectively during certain trainings. They had identified shortcomings that are sure to impact the effectiveness of many different types of training, to include communication failures and misunderstanding of unfamiliar unit capabilities.

Moving on to Actual Participant Incident Experience, 13 of our participants have actually responded to an incident. The average number of incidents responded to is 5.3. However there is one participant that has responded to 32 incidents, which happens to be 46% of the total number of incidents. If we remove that one participant then the average number of incidents responded to is 3.1. The following graph represents the types of incidents responded to by number of incidents and by percentage of the 68 total incidents responded to by the participants.



Tornadoes were the most responded to incident at 25% of the total incidents and flooding was a close second at 22%. This correlates with typical weather patterns and would make sense due to tornadoes and flooding being prevalent in the state of Indiana. The majority of the most recent responses to incidents took place in 2012 and of those that could remember some were as far back as 2001.

The participants were asked about their working relationships for both collaborative training and actual incident collaboration working relationship. 10 (63%) out of 16 of our survey participant responses said they have had to work with another unit during training. 100% of those participants said that the working relationship was cooperative or more than cooperative. When asked if they had ever worked with another response unit during an actual incident, 6 (38%) out of 16 said that they had. Some might say that this number should have been closer to 100% besides those who have not responded to an incident. Ideally, incidents are taken care of at the lowest and most cost

effective level. This may mean just local responders at the incident. Another reason our results show such a low number may be due to the fact that the majority (67%) of our participants were from the National Guard. The National Guard deploys in much larger numbers thus maybe providing positions that do not have to collaborate with other units. The ratio just may not allow direct collaboration among all responders. When asked about their collaboration working relationship during actual incidents 3 (50%) of the 6 survey participants had positive remarks. 2 (33%) had neutral remarks, and 1 (17%) had negative remarks.

Recommendations and Conclusions

This project's undertaking was to find areas within incident response training that could be collaborative across multiple agencies and units and to create increased efficiency, while considering the effects on first responders. After gaining knowledge of how experienced first responders feel about the training they have received and comparing that with their actual incident response experiences, we are able to see what types of training they have received that have already been a collaboration effort, allowing us to identify shortcomings and areas that still may need collaboration. Through this knowledge, it is this author's belief that guidance for better and more collaborative training between agencies can be developed. This data shows that collaborative training is effective in the minds of the survey participants. To ensure effectiveness, two things must happen. The first is for more collaborative training to be developed and delivered on a much larger scale and unfortunately more incidents must be responded to in order to assess the overall outcomes of that training. Some of the current aspects of training and incident response need to be improved. Improvements to communication could be

implemented through a guide or manual along with implementing more training courses. These guides, manuals, and courses will teach responders the same lingo while also teaching responders to understand other unit capabilities as well as what capabilities and equipment they should have ready to go for all of the standard incident types. The courses could be taught by a subject matter expert from one type of unit that teaches responders that belong to different units. They could also be a team of subject matter experts from different unit backgrounds; because one of the opinions from a survey participant was that the instructors were not organic to the unit being taught and did not have knowledge on how the unit operates and its capabilities.

Online training is likely the most inexpensive and most accessible method to get information and training to a large amount of responders. However, it was not favored by participants and since most feel that any and all training is a good thing, then this author's recommendation is to supplement the online training with more classroom and lectures followed by hands on training which is favored by the participants.

So we have responders that have communication issues compounded by the lack of knowledge or experience of how other units operate. We also have online training in need of supplemental hands on training. This author's recommendation would be to implement a crawl, walk, and run type of training outline.

The Crawl Phase:

The online portion is the same as before, introducing the basics and familiarizing responders to the response systems in place.

The Walk Phase:

I would introduce a “classroom” type course or courses for responders, which familiarize them with other types of responder units. A class presented by that type of responder unit by one of their subject matter experts to any and all other types of responders. So a Firefighter and Police Officer could be given a class by a National Guard Soldier on how the National Guard Operates during incidents, their capabilities, and all around familiarization. This would also reflect for all major responding units giving similar training.

The Run Phase:

Practical hands on collaborative training would then continue as it normally would, but with hopefully improvements in realism and communication.

It stands out that training collaboration working relationship is entirely positive, but that seems to fall apart during actual incidents. Maybe the breakdown is due to Murphy's Law. This author's only recommendations for this is to provide more realistic collaborative training scenarios and to focus more on the more probable scenarios but not limit training to those scenarios.

With the need for training comes the need for training manuals to insure continuity and understanding between units and agencies, whether they are working together or replacing one another. Instead of reinventing the wheel every time a new unit is assigned a response mission, the author is suggesting that providing a manual or guidebook for said mission would be considerably effective. It would state the basic requirements for a response, who responds, basic contact information for combined training coordination, and preferred techniques.

Recommendations for Further Study

It is this author's recommendation to conduct further study on the suggested changes from the previous section. It would be a larger and more costly project, and may depend on the actual response to an incident. Ideally, it should have volunteers from all levels of the Indiana Army National Guard and Department of Homeland Security. However, further study is needed to prove that the suggested recommendations would work. The data from this study shows that there are obvious needs for improvement and that the areas that need it the most are communication and the methods of training. A future study that gives manuals to units assigned specifically to incident response and then has those units start to implement the crawl, walk, and run phases of training may be a good way to test the recommendations. The crawl phase of online training that includes the basics followed by the recommended courses that not only teach incident response, but also other unit capabilities and lingo. The third phase would be to implement a large scale incident training scenario that includes trainees from all standard responding units and assets. This cycle would repeat while implementing lessons learned and rotating through different scenarios to include the more likely incidents to the less likely, but more catastrophic. All while collecting data through out on opinions and lessons learned in an after action review type of fashion. The ultimate test to success would be an actual incident response and gathering responder feedback on how it compared to previous experiences. In a perfect world there would never be any incidents to respond to, so in a best case scenario for implementing incident response training, we would never know if the recommendations actually worked.

One area that should also be considered for future study would be the correlation between incident training to actual incidents historically and over time. There may also be an association with funding available for training and response. The money used for response may draw from the money available for training.

List of References

- Adenike, B. (2007). Say what? Me? Right here in the trenches? Collaborate on what?-Seeking common ground in regional all-hazards preparedness training. *Journal of Environmental Health*, 69 (6), 28-33.
- Bardach, E. (1998), *Getting agencies to work together*, Brookings Institute: Washington, DC.
- Brooks, R. A. (2002). The military and homeland security. *Policy and Management Review*, 2 (2), 1-18.
- Department of Homeland Security (2011). *Federal Emergency Management Agency: National Incident Management System Glossary*.
<http://www.fema.gov/emergency/nims/Glossary.shtm#R>
- Doig, A. (2005). Joining up a response to terrorism?...And agency shall speak to agency. *Crime, Law & Social Change*, 44, 423-440.
- Getha-Taylor, H. (2006). Preparing leaders for high-stakes collaborative action: Darrell Darnell and the department of homeland security. *Public Administration Review*, 66, 159-160.
- Helferich, O. K., & Griggs, J. E. (2006). An opportunity: Improving client services during disaster relief. *Journal of Environmental Health*, 69 (4), 34.
- Kapucu, N., Arslan, T., & Demiroz, F. (2010). Collaborative emergency management and national emergency management network. *Disaster Prevention and Management*, 19 (4), 452-468.
- Kelly, T. K. (2003). Transformation and homeland security: Dual challenges for the US Army. *Parameters*, 33 (2), 36-50.
- Meyer, M. P. (1996). The national guard citizen-soldier the link between responsible national security policy and the will if the people. *Air War College, Maxwell Air Force Base*.
- Miller, M. D. (2008). Emergency preparedness and response training for environmental health practitioners. *Journal of Environmental Health*, 70 (8), 62-63.
- Prizzia, R., & Helfand, G. (2001). Emergency preparedness and disaster management in Hawaii. *Disaster Prevention and Management*, 10 (3), 173-182.

- Reischl, T. M., Sarigiannis, A. N., & Tilden, J. (2008). Assessing emergency response training needs of local environmental health professionals. *Journal of Environmental Health, 71* (2), 14-19.
- Schnobrich-Davis, J., & Terrill, W. (2010). Interagency collaboration: An administrative and operational assessment of the Metro-LEC approach. *Policing: An International Journal of Police Strategies & Management, 33* (3), 506-530.
- Schroll, R. C. (2002). Emergency response training. *Professional Safety, 47* (12), 16-21.
- United States Army (2011). *Field Manual 101-5-1: Operational Terms and Graphics*. <http://www.fas.org/man/dod-101/army/docs/fm101-5-1/f545-s.htm>
- Wagner, C. G. (2007, November). Predicting panic. *The Futurist, 41*(6), 68-69.
- Weiss, A. (2001). When terror strikes, who should respond? *Parameters, 31* (3), 117-133.

Appendix A

Survey

Consent**Large Scale Incident Training Study**

Thank you for agreeing to participate in this Large Scale Incident Study! This project is designed to learn about your experiences with Large Scale Incident Training and Large Incidents.

People vary in the time it takes to complete this survey, but most people can complete it in approximately 15 minutes.

Risks: The risks of participating in this study are considered minimal, as they do not exceed those that are encountered in your daily life.

Confidentiality: We will keep all identifying information separate from your survey and interview responses. This survey will not ask for any personal identifiable information nor are we asking for any information that may be considered confidential.

Voluntary Nature of Participation: You do not have to participate in this study. You may withdraw your participation at any time. You may mark "Prefer Not To Answer" for any question that makes you feel uncomfortable. Participation in this study will not affect your service status.

Contact Information: If you have any questions about this study, you can contact Ben Rogers Graduate Student in the School of Technology, Purdue University ((765) 413-8705 or via email at brogers@purdue.edu). If you have concerns about the treatment of research participants, you can contact the Human Research Protection Program at Ernest C. Young Hall, 10th floor, room 1032, 155 S. Grant Street, West Lafayette, IN 47907-2040. The phone number for the Committee's secretary is (765) 494-5942. The email address is irb@purdue.edu.

Qualtrics Survey Instructions

We ask that you please answer all questions as accurately and honestly as possible.

When ready to move on to the next page of questions or to go back to a previous set of questions on another page, use the arrow buttons located at the bottom the screen.

Please feel free to enter "Prefer not to answer" for any question that you wish to skip.

Do not worry about questions that are not applicable, simply enter "N/A" and/or please move on to the next question.

Do not worry about questions to which you prefer not to answer, simply enter "Prefer Not To Answer" and/or please move on to the next question.

Do not worry about questions to which you do not know the answer to, simply enter "Do Not Know" and/or please move on to the next question.

Some questions are based off of previous questions, those questions may or may not be displayed depending on your previous response.

After completing the survey, you will be prompted with a message thanking you for completing the survey. At which time you may close out of the survey and your data will be collected.

PERSONAL BACKGROUND EXPERIENCE

In this survey we will be asking questions about your experiences.

1. Please indicate all of the groups of Incident Responders that you fit into as a current responder or former responder. (Mark all that apply)

- I am/was a Guard Member
- I am/was a Police Officer / Law Enforcement Officer
- I am/was a Fire Fighter
- I am/was a Public Health Official
- I am/was an EMT / Paramedic
- Other: Please Specify
- Prefer Not To Answer
- N/A
- Do Not Know

2. Do you consider yourself to be responsible for responding if the request or order comes about in the event of a large scale incident?

(By large scale incident, we mean a disaster or state of emergency.)

- Yes
- No: (example Retired)
- N/A
- Prefer Not To Answer
- Do Not Know

3. How long have you been or were you responsible for responding? (Please round to the nearest number of Years)

(Please round to the nearest number of Years)

4a. What is/was your last or current response position/job title?

4b. Please list all of the other response positions/job titles held by you.

Now we would like to ask some questions about response training that you may have received.

5a. Have you been Trained for Incident Response?

- Yes
- No
- Prefer Not To Answer
- Do Not Know

5b. How much Incident Response training have you received? Please elaborate.

5c. What type of Incident Response training have you received? Please elaborate.

Now we would like to ask about training that you may have given to other responders.

6a. Have you Trained other responders for Incident Response?

- Yes
- No
- Prefer Not To Answer
- Do Not Know

6b. How much have you trained responders for incident response? Please elaborate.

6c. Which responders did you train? Please elaborate, not specific names. Example: unit or organization.

6d. What type of Incident Response training did you train other responders? Please elaborate.

Now we would like to ask about some aspects of training that you may have had.

7a. What aspects of response training do you believe to be the most effective or useful? Please elaborate.



7b. What aspects of response training do you believe to be the least effective or useful? Please elaborate.



8. Of the response training that you have received or provided to others, what would you improve and how? Please enter as many topics that you would like.



9. Of the response training that you have received or provided to others, would you identify any that you consider to be unnecessary and why? Please enter as many topics that you would like.



10. Have you participated in collaborated training between any form of Homeland Security unit or any form of National Guard unit and your organization?

(Collaborated training would be any combined or joint response training with one or more different organizations other than your own.)

- Yes
- No
- N/A
- Prefer Not To Answer
- Do Not Know

11a. What was the training event that you participated in, when did it take place, and what are your likes and dislikes are for the training events? Please enter as many training entries as you would like. More entry spaces can be provided by requesting more entries.

1st training event entry.	<input type="text"/>
The year that the 1st training entry took place.	<input type="text"/>
What are your likes about your 1st training event entry?	<input type="text"/>
What are your dislikes about your 1st training event entry?	<input type="text"/>
2nd training event entry.	<input type="text"/>
The year that the 2nd training entry took place.	<input type="text"/>
What are your likes about your 2nd training event entry?	<input type="text"/>
What are your dislikes about your 2nd training event entry?	<input type="text"/>
3rd training event entry.	<input type="text"/>
The year that the 3rd training entry took place.	<input type="text"/>
What are your likes about your 3rd training event entry?	<input type="text"/>
What are your dislikes about your 3rd training event entry?	<input type="text"/>

11b. Would you like more entries for question 11?

- Yes
- No

11c. What was the training event that you participated in, when did it take place, and what are your likes and dislikes are for the training events? Please enter as many training entries as you would like. More entry spaces can be provided by requesting more entries

4th training event entry.	<input type="text"/>
The year that the 4th training entry took place.	<input type="text"/>
What are your likes about your 4th training event entry?	<input type="text"/>
What are your dislikes about your 4th training event entry?	<input type="text"/>
5th training event entry.	<input type="text"/>
The year that the 5th training entry took place.	<input type="text"/>
What are your likes and about your 5th training event entry?	<input type="text"/>
What are your dislikes about your 5th training event entry?	<input type="text"/>
6th training event entry.	<input type="text"/>
The year that the 6th training entry took place.	<input type="text"/>
What are your likes about your 6th training event entry?	<input type="text"/>
What are your dislikes about your 6th training event entry?	<input type="text"/>

11d. Would you like more entries for question 11?

- Yes
 No

11e. What was the training event that you participated in, when did it take place, and what are your likes and dislikes are for the training events? Please enter as many training entries as you would like. More entry spaces can be provided by requesting more entries

7th training event entry.	<input type="text"/>
The year that the 7th training entry took place.	<input type="text"/>
What are your likes about your 7th training event entry?	<input type="text"/>
What are your dislikes about your 7th training event entry?	<input type="text"/>
8th training event entry.	<input type="text"/>
The year that the 8th training entry took place.	<input type="text"/>
What are your likes about your 8th training event entry?	<input type="text"/>
What are your dislikes about your 8th training event entry?	<input type="text"/>
9th training event entry.	<input type="text"/>
The year that the 9th training entry took place.	<input type="text"/>
What are your likes about your 9th training event entry?	<input type="text"/>
What are your dislikes about your 9th training event entry?	<input type="text"/>

12. What roles and responsibilities did you hold during the incidents listed in question 11?

13. Regardless of your experience with collaborative training, Would you please share your opinions on the subject of collaborating training between Homeland Security units and National Guard units?

14. What is your experience with actual large scale incidents?

(By large scale incident, we mean a presidential declared disaster or state of emergency.)

15. What types of incidents have you responded to, and how many times have you responded to that type of incident?

	0	1	2	3	4	5	6	7	8	9	10	Not Applicable
Man Made(By Man Made we mean incidents like Riots, Terrorist Attacks, Technical Failures, and Acts of War.)												<input type="checkbox"/>
Flooding												<input type="checkbox"/>
Blizzard												<input type="checkbox"/>
Tornado												<input type="checkbox"/>
Hurricane / Cyclone												<input type="checkbox"/>
Wildfire												<input type="checkbox"/>
Earthquake												<input type="checkbox"/>
Epidemic / Pandemic												<input type="checkbox"/>
Other: Please specify <input type="text"/>												<input type="checkbox"/>

16. What is the date of your most recent response to a large incident? (Please enter "N/A" in both sections if you have not responded to an large incident. Please enter "Do Not Know" for any of the sections of the date that you do not know.)

Month: (1-12)

Year: (1995)

17. Have you ever had to work with another response unit during training?

- Yes
- No
- N/A
- Prefer Not To Answer
- Do Not Know

18. How would you describe the relationship between the two groups during that training?

- | | | | | | |
|--------------------------|-----------------------|--------------------------|-----------------------|-------------------------|-----------------------|
| Less than
Cooperative | Cooperative | More than
Cooperative | N/A | Prefer Not To
Answer | Do Not Know |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

19. Have you ever worked with another response unit during a response to a large incident?

- Yes
- No
- N/A
- Prefer Not To Answer
- Do Not Know

20. How would you describe the relationship between the two groups during that response?

At this time the survey is complete.
Thank You for Time and Cooperation.

Appendix B

IRB Exemption Approval

To: DANIEL LYBROOK
YONG 441

From: JEANNIE DICLEMENTI, Chair
Social Science IRB

Date: 11/14/2012

Committee Action: **Exemption Granted**

IRB Action Date: 11/13/2012

IRB Protocol #: 1210012883

Study Title: National Guard and Department of Homeland Security Collaborative Training

The Institutional Review Board (IRB) has reviewed the above-referenced study application and has determined that it meets the criteria for exemption under 45 CFR 46.101(b)(2) .

If you wish to make changes to this study, please refer to our guidance “**Minor Changes Not Requiring Review**” located on our website at <http://www.irb.purdue.edu/policies.php>. For changes requiring IRB review, please submit an **Amendment to Approved Study** form or **Personnel Amendment to Study** form, whichever is applicable, located on the forms page of our website www.irb.purdue.edu/forms.php. Please contact our office if you have any questions.

Below is a list of best practices that we request you use when conducting your research. The list contains both general items as well as those specific to the different exemption categories.

General

- To recruit from Purdue University classrooms, the instructor and all others associated with conduct of the course (e.g., teaching assistants) must not be present during announcement of the research opportunity or any recruitment activity. This may be accomplished by announcing, in advance, that class will either start later than usual or end earlier than usual so this activity may occur. It should be emphasized that attendance at the announcement and recruitment are voluntary and the student’s attendance and enrollment decision will not be shared with those administering the course.
- If students earn extra credit towards their course grade through participation in a research project conducted by someone other than the course instructor(s), such as in the example above, the students participation should only be shared with the course instructor(s) at the end of the semester. Additionally, instructors who allow extra credit to be earned through participation in research must also provide an opportunity for students to earn comparable extra credit through a non-research activity requiring an amount of time and effort comparable to the research option.
- When conducting human subjects research at a non-Purdue college/university, investigators are urged to contact that institution’s IRB to determine requirements for conducting research at that institution.
- When human subjects research will be conducted in schools or places of business, investigators must obtain written permission from an appropriate authority within the organization. If the written permission was not submitted with the study application at the time of IRB review (e.g., the school would not issue the letter without

proof of IRB approval, etc.), the investigator must submit the written permission to the IRB prior to engaging in the research activities (e.g., recruitment, study procedures, etc.). This is an institutional requirement.

Category 1

- When human subjects research will be conducted in schools or places of business, investigators must obtain written permission from an appropriate authority within the organization. If the written permission was not submitted with the study application at the time of IRB review (e.g., the school would not issue the letter without proof of IRB approval, etc.), the investigator must submit the written permission to the IRB prior to engaging in the research activities (e.g., recruitment, study procedures, etc.). This is an institutional requirement.

Categories 2 and 3

- Surveys and questionnaires should indicate
 - only participants 18 years of age and over are eligible to participate in the research; and
 - that participation is voluntary; and
 - that any questions may be skipped; and
 - include the investigator's name and contact information.
- Investigators should explain to participants the amount of time required to participate. Additionally, they should explain to participants how confidentiality will be maintained or if it will not be maintained.
- When conducting focus group research, investigators cannot guarantee that all participants in the focus group will maintain the confidentiality of other group participants. The investigator should make participants aware of this potential for breach of confidentiality.
- When human subjects research will be conducted in schools or places of business, investigators must obtain written permission from an appropriate authority within the organization. If the written permission was not submitted with the study application at the time of IRB review (e.g., the school would not issue the letter without proof of IRB approval, etc.), the investigator must submit the written permission to the IRB prior to engaging in the research activities (e.g., recruitment, study procedures, etc.). This is an institutional requirement.

Category 6

- Surveys and data collection instruments should note that participation is voluntary.
- Surveys and data collection instruments should note that participants may skip any questions.
- When taste testing foods which are highly allergenic (e.g., peanuts, milk, etc.) investigators should disclose the possibility of a reaction to potential subjects.

Appendix C

Invitation Email

COLLABORATIVE TRAINING

Dear (Enter Responder Name),

Hello, from the Department of Organizational Leadership and Supervision of Purdue University. We are conducting a research study based on the experiences of responders to large scale incidents within the state of Indiana. We would like to invite you to share your personal responding experiences with us as well as your thoughts and opinions on the matter. If you would like to take 15 minutes to share your thoughts, opinions, and experiences with us, then we would ask that you do so confidentially through the survey link posted below.

Confidentiality

The research study is confidential and anonymous. This means that we are not asking for any personal information. The survey asks for responses in the categories of:

- * Experience
- * Training
- * and Opinions

We hope to use the information collected to affect the field of training for large scale incidents.

Risk

Breach of confidentiality is a risk and this research study safeguards this risk by not asking for personal information. The risks of participating in this study are considered minimal, as they do not exceed those that are encountered in your daily life.

COLLABORATIVE TRAINING

Benefits

Depending on the results of this study, there may be potential for the development of higher quality training of the responders. Society may benefit from paying for more efficient training and by having better trained responders.

Consent

If you would like to consent to participate in our study, then please enter this link into your internet browser and complete the survey.

https://purdue.qualtrics.com/SE/?SID=SV_9naxg23w8MKIklv
<blockedhttps://purdue.qualtrics.com/SE/?SID=SV_9naxg23w8MKIklv>

We appreciate your time and efforts towards this study, and we thank you for your service to the people of the State of Indiana and the country.

Contact Information

If you have any questions about this study, you can contact Ben Rogers Graduate Student in the School of Technology, Purdue University ((765) 413-8705 or via email at brogers@purdue.edu). If you have concerns about the treatment of research participants, you can contact the Human Research Protection Program at Ernest C. Young Hall, 10th floor, room 1032, 155 S. Grant Street, West Lafayette, IN 47907-2040. The phone number for the Committee's secretary is [\(765\) 494-5942](tel:(765)494-5942). The email address is irb@purdue.edu.