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THESIS

WHEN THE SHOOTING STOPS: RECOVERY FROM ACTIVE-SHOOTER EVENTS FOR K-12 SCHOOLS

by

Douglas A. Berglund

December 2017

Co-Advisors: Lauren Wollman
Glen Woodbury

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Since Columbine, untold resources and planning efforts have been dedicated to active-shooter response by schools and public safety officials. Perhaps this is as it should be, but the almost exclusive focus on response has come at the expense of recovery. Active-shooter events were studied to identify and analyze gaps in recovery planning and operations. Research suggests that a comprehensive K-12 recovery plan with a phased approach would have enabled a faster and smoother recovery. There are no federal requirements for such a plan, and fewer than two-thirds of the states require a crisis plan for schools. The most important elements of active-shooter recovery for K-12 schools were determined: evacuation, relocation, and parent/student reunification; counseling and mental health therapy; funerals and memorials; post-incident staff reduction, suicide awareness, communication with non-English-speaking students and families, and donation management. Based on the lessons learned from six active-shooter incidents, steps are recommended for the successful, immediate, and national implementation of recovery planning for K-12 active-shooter events.

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Douglas A. Berglund
Director, Emergency Management, Washington County Sheriff's Office, Minnesota
B.A., Concordia University, St. Paul, 2011

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Approved by: Lauren Wollman
                    Co-Advisor

                    Glen Woodbury
                    Co-Advisor

                    Erik Dahl, Ph.D.
                    Associate Chair of Instruction
                    Department of National Security Affairs

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ABSTRACT

Since Columbine, untold resources and planning efforts have been dedicated to active-shooter response by schools and public safety officials. Perhaps this is as it should be, but the almost exclusive focus on response has come at the expense of recovery. Active-shooter events were studied to identify and analyze gaps in recovery planning and operations. Research suggests that a comprehensive K-12 recovery plan with a phased approach would have enabled a faster and smoother recovery. There are no federal requirements for such a plan, and fewer than two-thirds of the states require a crisis plan for schools. The most important elements of active-shooter recovery for K-12 schools were determined: evacuation, relocation, and parent/student reunification; counseling and mental health therapy; funerals and memorials; post-incident staff reduction, suicide awareness, communication with non-English-speaking students and families, and donation management. Based on the lessons learned from six active-shooter incidents, steps are recommended for the successful, immediate, and national implementation of recovery planning for K-12 active-shooter events.

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LIST OF ACRONYMS AND ABBREVIATIONS

AAR	after action report
ECHO	Emergency, Community, Health and Outreach
EMPG	Emergency Management Performance Grant
EOC	emergency operation center
EOP	emergency operations plan
ESF	Emergency Support Functions
FAC	Family Assistance Center
FEMA	Federal Emergency Management Agency
GAO	Government Accountability Office
HCF	health care facilities
PTSD	Post-Traumatic Stress Disorder
REMS	Readiness and Emergency Management for Schools
SRO	school resource officers
TA	technical assistance

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EXECUTIVE SUMMARY

Since Columbine, many schools and public safety agencies have focused their attention on improving response protocols to active-shooter incidents.[1] The attention applied to response, while appropriately applied, has come at the expense of a focus on recovery. In spite of the increasing trend of active-shooter incidents at K-12 schools, emergency planning has no national standards requiring a focus on the recovery phase. In some states, requirements for school emergency planning are limited to fire and lockdown drills. Without mandates for emergency planning, the depth and breadth of such plans varies. Barely half the states require a crisis plan for schools, and even fewer provide criteria needed to build a comprehensive plan that will meet all phases of the recovery process.[2] In most K-12 active-shooter incidents, the response is over in minutes, whereas the recovery for school staff and the victims' families may take years. The planning efforts for disaster recovery in schools must become a priority focus for schools and school districts.

Schools are continuing to operate with a false perception that they are prepared for a crisis such as an active-shooter type event. In reality, most crisis plans—if in place—identify lockdown procedures and a site selected to serve as a relocation facility if the need to evacuate students arises. While both actions are important, they are shortsighted as the means for readiness in the event of an active-shooter incident. This thesis explores the emergency recovery process in several K-12 active-shooter events. The purpose is to examine past events for best practices in recovery and to identify where gaps and challenges in the recovery process were the result of insufficient recovery planning.

A.   METHOD

The research was driven by the questions, "What are the most important elements of active-shooter recovery for K-12 schools, and how can we learn from previous

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[1] E. Reed Smith and John B. Delaney, "A New Response," *Journal of Emergency Medical Services,* (March 18, 2014), http://www.jems.com/ems-insider/articles/2014/02/a-new-response.html.

[2] Ashby, Cornelia, and William O. Jenkins Jr. *Emergency Management: Most School Districts Have Developed Emergency Management Plans, but Would Benefit from Additional Federal Guidance.* GAO-07-609 (Washington DC: Government Accountability Office, 2007), 1.

incidents to inform measures of effectiveness in recovery?" Sample studies of past active-shooter events at the K-12 schools Columbine High School, Sandy Hook Elementary School, Chardon High School, Rocori High School, Marysville-Pilchuck High School, and Santee High School were examined. The samples were selected intentionally to vary in details ranging from the size of the school district population to the number of fatalities by the assailants' hand. Also considered was the location of the incidents in relationship to their region of the country. The geographic diversity was also intentional; its purpose was to demonstrate that the risk of an active-shooter incident is not determined by population, economics, or level of preparedness. Additionally, the incidents occur over a span of 17 years prior to the start of this research. The long span of time was also selected purposefully, to examine the impact made by events prior and whether or not those lessons learned had influence on schools' planning efforts toward recovery.

B.   RESULTS

The research was consistent in that no schools in the selected samples had a comprehensive recovery plan in place that identified all phases of recovery. Common elements of concern witnessed by the schools as they moved through the recovery process were relocation of students and subsequent reunification with parents, length of school closure and when to resume classes, and concern for the mental health of students and faculty coping with the aftershock of a violent incident. Research also revealed a gap between known best practices in emergency recovery planning and the implementation of comprehensive plans to build preparedness for active-shooter events. The research provided evidence that most schools nationwide have access to effective crisis planning tools and guidance supplied through various government agencies, but the practical implementation of said guidance is not being employed. Successful management of an active-shooter recovery is difficult to measure as each situation is unique and recovery time may take years. However, research indicates the transition from phase to phase in the recovery process is less turbulent when plans for the process are in place prior to the incident's occurrence.

C. CONCLUSION AND RECOMMENDATIONS

A historical view of the timeline of K-12 active-shooter events in the last 50 years indicates a trend of violence against America's children while they are attending school continues. Schools, of their own volition, are not accepting the responsibility to incorporate comprehensive recovery planning into their emergency crisis plans. An active-shooter incident can happen at any school in any city; steps must be taken to ensure compliance with recommendations provided by governments. Several recommendations are proposed through local, state, or national mandates to assure consistency. It is further recommended that states facilitate the mandates through state statutes, possibly by attaching them to state aid funding.

- Schools must develop comprehensive crisis plans to include a recovery annex.

- Schools must submit a progressive five-year plan for drills and exercises that incorporate the plan doctrine.

- Districts must designate an emergency management coordinator with emergency preparedness as the primary job function.

- All personnel employed by the district must be trained in the Incident Command System to the level of ICS-100 and renew certifications every three years.

Reference List

Ashby, Cornelia, and William O. Jenkins Jr. *Emergency Management: Most School Districts Have Developed Emergency Management Plans, but Would Benefit from Additional Federal Guidance.* GAO-07-609 (Washington, DC: Government Accountability Office, 2007), 1.

Smith, E. Reed, and John B. Delaney, "A New Response," *Journal of Emergency Medical Services,* March 18, 2014, http://www.jems.com/ems-insider/articles/2014/02/a-new-response.html.

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This work is dedicated to the victims' families who have suffered and endured the incomprehensible tragedies that have occurred in K-12 schools at the hands of active shooters. I hope the work applied to this research will someday make a difference.

I. INTRODUCTION

The shooting at Columbine High School in April 1999 was the impetus for change in public safety's approach to active-shooter events. The lessons learned that day fostered a change in *response* protocol by all public safety disciplines, especially to the early and rapid extraction of viable victims from hostile areas.[1] The life safety benefit of this change in response protocol convinced many public safety leaders to design a curriculum to teach this new concept through trainings and full-scale exercises, gain buy-in from organizational members, and establish the new response protocol as a standard procedure for active-shooter events. The new response concept has already been attributed to life-saving efforts for active-shooter victims, including those of the mass shooting event at the Inland Regional Center in San Bernardino, California.[2]

For departments with limited time to dedicate to training, the extra attention to response, while essential, has arguably been paid at the expense of recovery. The recovery process that follows a disaster may continue for days or, in some cases, years and encompasses many actions that exceed the narrower scope of response, yet the trend in public safety is to spend considerably more time and resources preparing for response to active-shooter incidents as opposed to recovery. To support this point, the response to the shooting at Sandy Hook Elementary was over in minutes; however, the recovery process to manage thousands of donations lasted nearly a year.[3] The recovery for the community and families affected by the shooting at Columbine High School also took a significant amount of time. The families of victims pleaded to reconstruct the library, were so many had been slain. The process to garner the funding was itself a healing process, but again the recovery lasted months.[4] The components to recovery such as

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[1] Rick Braziel et al., *Bringing Calm to Chaos: A Critical Review of the San Bernardino Public Safety Response to the December 2, 2015, Terrorist Shooting Incident at the Inland Regional Center* (Washington, DC: United States Department of Justice, Office of Community Oriented Policing Services 2016), 67–69, https://www.justice.gov/usao-cdca/file/891996/download.

[2] Braziel et al., 74.

[3] Paul Kix, "65,000 Teddy Bears for Newtown, and One Man to Sort the World's Grief," *Trace,* December 13, 2015, https://www.thetrace.org/2015/12/sandy-hook-shooting-donations/.

[4] Kathleen Megan, "How Columbine Climbed Back," *Hartford Courant*, December 22, 2012.

student evacuation/relocation to a neutral site, medication dispensing, feeding displaced students and faculty, student and parent/guardian custodial issues, public communications, resumption of classes, funerals and memorials, counseling, and long-term relocation due to building remodeling or reconstruction all require planning attention from school officials.

Recovery requires planning and training by both public safety and school personnel; the planning normally taking place under the aegis of an emergency operations plan (EOP). A standard practice for government emergency planning is the development of an EOP: it begins with the base plan that illustrates the plan owner's responsibilities and defines tasks for each responsible party during an incident. For the purposes of this thesis, disaster plans and emergency plans are synonymous. Generally, the base plan is followed by task-specific annexes or addendums.[5] A couple of examples include lockdown, evacuation, or recovery actions as well as many more. The plan may also contain Emergency Support Functions (ESF), a grouping of capabilities performed by disaster or emergency responders to provide services and resources to help bring an emergency event to its conclusion, thereby facilitating the affected community's return to a normal state or condition. Each ESF describes which agencies are responsible and lists all supporting agencies.[6]

Table 1 contains a list of the Federal Emergency Management Agency's (FEMA) ESF categories. The bolded items are ESFs that may be put into action when an emergency operation center (EOC) stands up its operations in response to an active-shooter event. Some jurisdictions may not have every ESF as a part of their emergency operations plans.

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[5] Federal Emergency Management Agency, *Guide for Developing High-Quality School Emergency Operations Plans* (Washington, DC: Federal Emergency Management Agency, 2013), 28–31, https://www.fema.gov/media-library/assets/documents/33599.

[6] "Federal Emergency Management Agency Emergency Support Functions," Federal Emergency Management Agency, September 13, 2016, https://www.fema.gov/media-library/assets/documents/25512.

Table 1.   FEMA's ESF Categories

ESF 1—Transportation	ESF 10—Hazardous Materials
ESF 2—Communication	ESF 11—Community Food & Water
ESF 3—Public Works & Engineering	ESF 12—Energy & Utilities
ESF 4—Fire Fighting	ESF 13—Public Safety & Security
ESF 5—Emergency Management	**ESF 14—Long Term Recovery**
ESF 6—Mass Care & Sheltering	**ESF 15—Public Information**
ESF 7—Logistics Mgmt. and Resource Support	**ESF 16—Volunteers and Donations**
ESF 8—Medical Services	ESF 17—Animal Care
ESF 9—Search and Rescue	ESF 18—Administration & Finance

Bolded items are ESFs that may be put into action when an emergency operation center (EOC) stands up its operations in response to an active-shooter event.

Emergency operations plans and ESFs are designed to assist emergency managers to coordinate a response, or courses of action, that lead to a successful conclusion of a disaster incident. A holistic approach to disaster planning also includes plans and processes, sometimes referred to as addendums or annexes, for accomplishing other objectives. For example, some plans may include annexes for debris management, damage assessments, recovery operations, or requirements for a family assistance center. In the case of a major disaster, a recovery plan is designed to help guide a jurisdiction through the recovery mission. Research reveals that the recovery mission requires the most time and resources of FEMA's five missions: prevention, protection, mitigation, response, and recovery.[7] However, there are no federal requirements for K-12 schools to have emergency operations plans, there are only recommendations. Additionally, in 2007, only 32 states require emergency plans for schools; even then, they do not include specific criteria for plan development or content, including consideration for recovery operations.[8]

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[7] "National Preparedness Goal" Federal Emergency Management Agency, September 2015, 3, https://www.fema.gov/media-library-data/1443799615171-2aae90be55041740f97e8532fc680d40/National_Preparedness_Goal_2nd_Edition.pdf.

[8] Cornelia M. Ashby, *Emergency Management: Status of School Districts' Planning and Preparedness*, GAO-07–821T (Washington, DC: Government Accountability Office, 2007), http://web.a.ebscohost.com.libproxy.nps.edu/ehost/pdfviewer/pdfviewer?vid=4&sid=2654ef50-5642-4837-b710-18f0dac2a183%40sessionmgr4006&hid=4112., 2.

Because the recovery process may continue for years, the consequences of not requiring a plan for such operations are potentially tragic. Even the most prepared professionals operate under a state of "organized chaos" when bringing a disaster to its earliest possible conclusion. Seasoned emergency responders understand this to be true because information and communication at the beginning of an event are usually limited, which causes confusion. As the response efforts progress, the chaos decreases because the organization of the response improves and more information is gleaned, which complements strategies and tactics. For school officials, experiencing a disaster is rare, which means they are unaccustomed to making decisions under heightened anxiety; proceeding without a plan or a road map may prove detrimental to a successful recovery. School districts operating without a plan are putting themselves at risk for a difficult and challenging recovery.

Even in the absence of federal or state mandates to develop recovery plans, every K-12 school should have one. Experience has shown that people resist the idea of tragedy occurring at their front door. However, local public safety and emergency management practitioners need to understand and disseminate the lessons learned from previous school-related active-shooter events. If those events could be studied with an eye to the recovery phase, then standard requirements and elements for recovery planning, training, and execution of a recovery plan could be shared across the emergency management community, and, more importantly, with every K-12 school district in the United States.

A. RESEARCH QUESTIONS

1. What are the most important elements of active-shooter recovery plans for K-12 schools?

2. What can we learn from previous K-12 active-shooter events to inform measures of effectiveness in recovery?

B. LITERATURE REVIEW

Following the events of 9/11, FEMA identified prevention, protection, response, and recovery as four key mission areas to improve our national preparedness.[9] In the fall

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[9] Federal Emergency Management Agency, "National Preparedness Goal,"1.

of 2011, mitigation was added as a fifth mission.[10] The five missions collectively form an all-hazards approach to preparedness for disasters and emergencies. The following section presents literature on active-shooter events through a mission-specific lens.

The term "active-shooter" is defined by the Department of Homeland Security as an "individual actively engaged in killing or attempting to kill people in a confined and populated area; in most cases, active shooters use firearms and there is no pattern or method to their selection of victims."[11] From 2000 to 2013, active-shooter incidents increased annually in the United States.[12] A study conducted by the U.S. Department of Justice provides a comprehensive breakdown of 160 active-shooter events that occurred during that 13-year period.[13] Although nearly half of the events occurred at businesses, educational institutions were the second-highest reported location for active-shooter incidents.[14] The events that took place in April 1999 at Columbine High School arguably remain the watershed event in terms of raising the nation's consciousness to the reality of school violence.[15] Since that day in Colorado, school districts, public safety agencies, and governments have invested significant time and resources into active-shooter events.

The ever-increasing number of active-shooter events has contributed to copious amounts of literature available in many forms. Although limited publicly, searches of most databases reveal reports generated by individuals or agencies from local, state, and federal jurisdictions. After action reports (AAR) are difficult to find in the public forum; research revealed if they were generated for review of a real event, they are generally

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[10] Jared T. Brown, *Presidential Policy Directive 8 and the National Preparedness System: Background and Issues for Congress,* CRS Report No. R42073 (Washington, DC: Congressional Research Report, 2011), 2, https://fas.org/sgp/crs/homesec/R42073.pdf.

[11] United States Department of Homeland Security, "Active Shooter How to Respond" (Washington, DC: United States Department of Homeland Security, 2008), 2, https://www.dhs.gov/xlibrary/assets/active_shooter_booklet.pdf.

[12] Pete J. Blair and Katherine W. Schweit, "A Study of Active-Shooter Incidents in the United States Between 2000–2013," Federal Bureau of Investigation, September 16, 2013, 8, https://www.fbi.gov/file-repository/active shooter-study-2000-2013-1.pdf.

[13] Blair and Schweit, 8.

[14] Blair and Schweit, 13.

[15] James Alan Fox and Jenna Savage, "Mass Murder Goes to College: An Examination of Changes on College Campuses Following Virginia Tech," *Behavioral Scientist* 52, no. 10 (2009): 1474.

only available internally to the event participants. Through email correspondence, Rocori Superintendent Scott Staska stated he believed most of the incident-related documentation relevant to their shooting incident was kept internally.[16] Following the shooting at Marysville High School, a police commander stated that an internal discussion that took place will suffice and no AAR will be completed.[17] Most of these types of reports provide valuable insight into the response, which may identify strengths and weaknesses recognized by the responders to the event. Finally, journals are available containing peer-reviewed articles regarding active-shooter response, preparedness, and mitigation. Theses and dissertations on the active-shooter topic are also excellent tertiary sources for consideration.

1.   Protection Mission

Emergency planning for the educational system has existed for more than half a century. Fire drills became a staple in school's emergency preparedness efforts following the tragic schoolhouse fire in Chicago at the Our Lady of the Angels School, where 92 students and three teachers perished in December of 1958. Schools have used fire drills as a practice for emergency readiness in K-12 schools over much of that time. The existence of fire drills today is still relevant to school emergency planning, less so because of the threat of fire but more so for the organized evacuation of students.[18] In more recent years, other threats have been added to school planning initiatives: severe weather, flu pandemics, and most recently, hostile action or active-shooter events.[19] Stone and Spencer advocate for more inclusion of school resource officers (SRO) into the preparedness planning for schools. SROs were first implemented in the 1950s; today this resource in schools is considered commonplace and is considered as one solution toward

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[16] Scott Staska, personal communication, July 17, 2017.

[17] Lewis Kamb, "No Police Reviews after 2 Deadly School Shootings," *Seattle Times*, 25, 2015, http://www.seattletimes.com/seattle-news/crime/no-police-reviews-after-2-deadly-school-shootings/.

[18] Guy Bliesner and Mike Munger, "Fire Drills Are a Waste of Time," *Campus Safety Magazine,* March 5, 2014, https://www.campussafetymagazine.com/safety/fire_drills_are_a_waste_of_time/.

[19] William E. Stone and David J. Spencer, "Enhancing an Active Shooter School Emergency Plan Using Ambient Materials and School Resource Officers," *Southwest Journal of Criminal Justice* 7, no. 3 (2010): 295–296.

hostile-action based preparedness.[20] Stone and Spencer encourage schools to leverage the law enforcement knowledge and skill set of SROs by including them into their school's emergency plan development and subsequent plan reviews. Both authors have extensive backgrounds in law enforcement and corrections; with their occupational biases in plain sight, their argument for more school security is sound, backed by sources, and addresses the need for more emergency-planning dialogue.[21]

Locking down schools when a violent threat arrives has become a standard practice in some states.[22] However, its practicality and effectiveness in every educational institution is debatable. A 2009 article by James Alan Fox and Jenna Savage in the *American Behavioral Scientist* details many differences between high schools and universities during active-shooter events.[23] The planning characteristics for each are affected by their respective differences in functional use. One example provided is the adoption of lockdown procedures. Such procedures may be appropriate in K-12 schools; however, the actions are not practical in a sprawling college campus commonly open to the public and occupied by adults.[24] The authors highlight seven recommendations for active-shooter planning and preparedness from a national study.[25] According to Fox and Savage, the second most articulated practice is the adoption of a mass-notification system.[26]

Unlike the Columbine era, the common practice of students and faculty carrying cellphones has changed the complexity of the protection mission. Reinforcing the importance of communications, authors Sattler, Katy, and Larpenteur conducted a study in 2011 measuring the effectiveness of texts and email for mass notifications when disasters strike. The results indicate emails and text messages have a 95 percent success

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[20] Stone and Spencer, 299.

[21] Stone and Spencer.

[22] Crisis Management Policy, Minnesota Statute 121A.035, accessed May 13, 2017, https://www.revisor.leg.state.mn.us/statutes/?id=121A.035.

[23] Fox and Savage, "Mass Murder Goes to College,"1466.

[24] Fox and Savage.

[25] Fox and Savage, 1469.

[26] Fox and Savage.

rate in conveying clear messages to the receiver. The authors identified challenges to notification systems, including Internet and cell phone signal disruptions, as well as character limitations for text messages.[27]

2. Prevention Mission

Following the Virginia Tech shooting in April 2007 in which 32 students and faculty were killed, many colleges and universities considered options to explore the prevention of such tragedies.[28] Christopher Flynn and Dennis Heitzmann, two psychologists from Virginia Tech and Pennsylvania State University, respectively, address the psychological effects of an active-shooter event and how psychology may be applied to prevention. Flynn and Heitzmann address a handful of emergent issues that are psychology-related, but their suggestion to implement threat assessment teams delves into the heart of prevention.[29] Their idea is that the team would include a psychologist who could provide psychological profiles of individuals, share mental health perspectives, and determine appropriate intervention for specific students.[30]

Key to the potential success of threat assessment teams is early behavioral detection—determining a viable threat before a disaster occurs would save lives and emotional trauma. A 2010 collaborative report by the U.S. Secret Service, the U.S. Department of Education, and the FBI compiled data from incidents of violence at institutions of higher learning from the past 100 years.[31] Representatives from the three agencies used open-source data to assess methods of attack, the subject's school

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[27] David Sattler N, Katy Larpenteur, and Gayle Shipley, "Active Shooter on Campus: Evaluating Text and Email Warning Message Effectiveness," *Journal of Homeland Security and Emergency Management* 8, no. 1 (2011): 1.

[28] Christopher Flynn and Dennis Heitzmann, "Tragedy at Virginia Tech: Trauma and Its Aftermath," *The Counseling Psychologist* 36, no. 3 (2008): 479.

[29] Flynn and Heitzmann, 486.

[30] Flynn and Heitzmann, 486–487.

[31] Diana A. Drysdale, William Modzeleski, and Andre B. Simons, "Campus Attacks: Targeted Violence Affecting Institutions of Higher Education" (Washington, DC: United States Secret Service, United States Department of Homeland Security, Office of Safe and Drug-Free Schools, United States Department of Education, Federal bureau of Investigation, United States Department of Justice, 2010), iii.

affiliation, motivation for the attacks, and pre-incident behavior toward the targets.[32] The report does not make claim that an effective threat assessment can be accomplished by virtue of identifying disruptive or abnormal behavior or by speculating about the intent of an individual. The report does state that every situation needs to be addressed on a case-by-case basis, and that some college and university threat assessment teams use a three-step process, which is described in the report, to evaluate a person's violent risk potential.[33]

The public debate over the prevention of active-shooter incidents is often polarized and contentious. Historically, the debate intensifies following a high-profile event such as Sandy Hook or Columbine. An active-shooter event is an intentional act and as such demands attention in the arena of the prevention mission. However, because the circumstances around school-related active-shooter incidents are extensive and the occurrences are not that frequent, developing prevention strategies is difficult. In a 2015 issue of the *British Journal of Criminology*, Aaron Kupchik, John Brent, and Thomas Mowen make an argument for using psychology in the use of behavior-related prevention strategies for early active-shooter intervention.[34] Following the track of public sentiment after the massacre at Sandy Hook Elementary in Newtown, Connecticut, the call for solutions to active-shooter violence were very similar to that following the events of Columbine High School in 1999.[35] Kupchik, Brent, and Mowen contend that the outcry following the active-shooter events at Columbine and Sandy Hook puts too much emphasis on issues pertaining to gun control and increased school security; that ill-placed attention subsequently drowns out the call for an evidence-based response, which would include a psychological approach to violence prevention programs.[36] As a sociology professor, Kupchik's framework is biased toward social behavior analysis as a prevention

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[32] Drysdale, Modzeleski, and Simons, 11–21.

[33] Drysdale, Modzeleski, and Simons, 27.

[34] Aaron Kupchik, John J. Brent, and Thomas J. Mowen, "The Aftermath of Newtown: More of the Same," *British Journal of Criminology* 55, no. 6 (November 2015): 1115–30, https://doi.org/10.1093/bjc/azv049. *British Journal of Criminology* 55, no. 6 (2015): 1121.

[35] Kupchik, Brent, and Mowen, 1117.

[36] Kupchik, Brent, and Mowen, 1120.

method and against security and guns. He supports his argument by citing many sources substantiating the notion that behavioral red-flag moments preceded nearly every shooting.[37] The position that behavioral analysis can contribute to the prevention of school-related active-shooter events is not supported by empirical evidence; however, it is at least a consideration for school planner's' overall strategy for active-shooter emergency planning.

The most consistent argument in the literature for the prevention mission is to recognize a problem before it manifests into a tragedy, and Schuster's 2010 article reinforces this assertion. She references a study by the U.S. Secret Service conducted in 2002.[38] The study's findings fall directly in line with other research cited here, indicating that if threat assessment teams were allowed to evaluate suspicious or abnormal behavior and act on reports of significant behavioral changes, active-shooter events could be effectively reduced.[39] The sources cited in the prevention section of this literature review show a consistent theme: behavioral analysis, when combined with threat assessments, may provide the early warning needed to stop active-shooter events.

3.   Recovery Mission

From the moment an active-shooter threat is eliminated, the recovery mission begins. In a school setting, this process starts with the coordinated evacuation of students to another location followed by reunification with parents. Video evidence and witness accounts through the media show these events as chaotic, with the students and faculty experiencing high levels of anxiety. Academic research in this area has revealed an overriding theme: mental health considerations for students, faculty, and first responders deserve immediate consideration.

A technique widely used in the public safety service to sustain positive mental health after a traumatic incident is the Critical Incident Stress Debriefing. The debriefing

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[37] Kupchik, Brent, and Mowen, 1115.

[38] Beth Schuster, "Preventing, Preparing for Critical Incidents in Schools," *National Institute of Justice*, no. 262 (2010): 42.

[39] Schuster, 42–43.

is a formal intervention attended by all responders of an incident facilitated by trained mental health professionals.[40] The *International Journal of Emergency Mental Health* article "Coping with Psychological Aftermath of School Violence" by Levenson, Memoli, and Flannery, states the importance of mental health and the need for immediate psychological attention to victims of violence.[41] Although the article is nearly two decades old, it contains a considerable amount of cited data backed by empirical research. The article is written in support of a volunteer program—Assaulted Staff Action Program—benefiting victims and witnesses in the aftermath of a violent act through a type of group counseling.[42] This type of peer-driven mental health intervention designed to help with the recovery process is becoming a standard practice in public safety, following violent or traumatic events.

No matter the subject, real life experience is a valuable tool in preparing for the next happening. Capturing the circumstances of past events, real or exercises, is now a common practice in public safety; the information is collected and documented in a form called an after action report. William Steele's 2015 book draws on lesson learned from traumatic experiences.[43] His writings about tragic events such as 9/11, Chardon High School shooting, and the Sandy Hook Elementary School shooting, continue in the vein of drawing out from others the benefits of their crisis experiences. Steele's 180-page account of multiple disasters provides insight from victims and responders valuable to the formation and implementation of a crisis recovery plan.

Recovering from large-scale disasters is very often a long-term endeavor. One of the reasons for that is the emotional and psychological effect of traumatic experiences. In the case of terrorist-type events, the intent to inflict long-lasting psychological harm is the

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[40] Joseph A. Davis, "Critical Incident Stress Debriefing from a Traumatic Event," *Psychology Today,* accessed October 31, 2017, http://www.psychologytoday.com/blog/crimes-and-misdemeanors/201302/ critical-incident-stress-debriefing-traumatic-event.

[41] Richard L. Levenson Jr., Michelle Memoli and Raymond B. Flannery Jr., "Coping with Psychological Aftermath of School Violence: The Teacher and the Assaulted Staff Action Program," *International Journal of Emergency Mental Health* 2, no. 2 (2002): 107.

[42] Levenson, Memoli, and Flannery, 107.

[43] William Steele, *Trauma in Schools and Communities: Recovery Lessons from Survivors and Responders* (New York: Routledge, 2015).

purpose. This is an important connection for public safety to consider when developing plans for recovery. The RAND Corporation reproduced a book chapter by Tanielian and Stein as part of their reprint series.[44] The chapter, titled "Understanding and Preparing for Psychological Consequences of Terrorism" gets to the core of why the recovery process to disaster has long-term influence on a school's or a community's mental health resilience. The article also highlights the importance of the relationship public health has in the recovery domain. This relationship is often left out of disaster-related planning, and as a result it is sometimes considered only as an afterthought.

There are many phases to an active-shooter recovery process, each taking different forms and requiring a broad spectrum of resources. The mental health recovery process for individuals involved in an active-shooter event is personal and varies for each victim. Aaron Purcell's 2007 article documents how a college university, as an institution, navigated the recovery process guided by the effort to find emotional healing for the entire community. In the days following the Virginia Tech shooting, the university received tens of thousands of condolence items.[45] When confronted with the moral and ethical dilemma of how to respectfully cope with the overwhelming yet well-intended donations, the university realized they were confronted with two phases of the recovery process, donations management and mental health recovery. During the next six years, the university built an archival collection of the cards, letters, and banners; this collection reportedly provided closure for many of the victims and their families, and continues today as a reminder of the recovery process.[46] Purcell's article lends historical insight into the Virginia Tech tragedy, but more importantly to emergency managers, it illustrates the emotional healing phase necessitated by the extreme trauma generated by an active-shooter event.

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[44] Terri Tanielian and Bradley D. Stein, "Understanding and Preparing for the Psychological Consequences of Terrorism," (Santa Monica, CA: RAND, 2006), product page, https://www.rand.org/pubs/reprints/RP1217.html.

[45] Aaron D. Purcell, "More Than Flowers Left Behind: Building an Archival Collection and Remembering April 16, 2007 at Virginia Tech," *Journal of Archival Organization* 10, no. 3–4 (2012): Abstract.

[46] Purcell, 241.

Health care facilities (HCF) are central to emergency operations planning. HCFs include hospitals, health clinics, hospices, and long-term care facilities. All HCFs are required to have an all-hazards approach to emergency and disaster planning, including active-shooter or terrorist incidents.[47] A collaborative government prepared report by the U.S. Department of Health and Human Services references lesson learned, trends in preparedness, and provides government recommendations for industry best practices in response and recovery.[48] In addition, the report is the only one that identifies the need for a family assistance center to help families cope during the recovery phase.

4. Conclusion

The review of literature for this thesis did not reveal any sources that provided specific research dedicated to all aspects of the recovery mission for active-shooter events. Additional research is warranted in the form of reviewing after action reports from major events and studying high school and university emergency operations plans.

C. RESEARCH DESIGN

The area of study for this thesis is the recovery mission for K-12 schools with a focus on emergency or crisis planning for active-shooter events. The research focus is on the study of a process, a progression of events that must occur following every type of disaster event. The K-12 crisis preparedness culture is deficient in its approach to holistic emergency planning; it is lacking in oversight and direction.[49] Gaps in minimum planning criteria could be addressed by many schools if government-supported guidance was implemented. This thesis examines the recovery process as experienced through previous school disasters, how that process aligned with the school's perceived readiness

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[47] "Emergency-Prep-Rule," Centers for Medicare, Medicaid, November 13, 2017, https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/Emergency-Prep-Rule.html.

[48] United States Department of Health and Human Services, *Incorporating Active-shooter incident Planning into Health Care Facility Emergency Operations Plans* (Washington, DC: United States Department of Health and Human Services, 2014), http://www.phe.gov/preparedness/planning/documents/active shooter-planning-eop2014.pdf.

[49] Cornelia Ashby and William O. Jenkins Jr. *Emergency Management: Most School Districts Have Developed Emergency Management Plans, but Would Benefit from Additional Federal Guidance.* GAO-07-609. Washington, DC: Government Accountability Office, 2007, 1.

for disaster, and its subsequent actions taken to perform recovery operations. Specific attention is applied to the phases of recovery planning where the most important elements of recovery are identified and how those elements are captured in policy recommendations to strengthen the resilience of K-12 emergency/crisis recovery planning.

Research explored differences in K-12 school preparedness for recovery based on the availability of lessons learned from previous events. Events were selected from all regions of the country to explore the impact, if any, of differences in state regulatory mandates for emergency planning and the compliance thereof. Six schools were selected for analysis: Columbine High School, Chardon High School, Santee High School, Marysville-Pilchuck High School, Rocori High School, and Sandy Hook Elementary School. All of them suffered multiple casualties during active-shooter incidents, and fatalities ranged from two to 26, which provided a breadth of examination for recovery challenges. The year of occurrence was also an important factor; the events occurred between 1999 and 2014.

The research and analysis for this thesis are limited to the mission of recovery. For this study, the recovery process begins when the life safety threat to civilians and emergency responders has ended. The duration of the recovery process is unique to the incident; for the purpose of this 'study's recommendations and policy considerations, the recovery process does not extend past three years from the date of the incident.

Because there is a profound difference in recovery planning between K-12 and post-secondary institutions, comparisons that include colleges and universities would not lend to standard recovery practices for K-12 schools. Parent custodial issues, legal adult status of college students, and the fact that most college campuses remain unlocked and open to the public are just a few of the reasons for removing colleges and universities from the sampling research.[50]

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[50] Fox and Savage, "Mass Murder Goes to College,"1465-1467

In states such as Minnesota, school statutes for fire drills and exit doors also encompass private schools; however, state statutes for crisis management policy do not.[51] As such, this research explores the potential for local, state, and national regulatory and statutory requirements for emergency planning; however, because of state statutory inconsistencies this paper does not consider private and parochial schools despite the assumption that the private system would not likely have any distinguishable differences in recovery planning practices.

The data sources supporting the research for this thesis were accessed through open-source methods including incident-specific commission reports written in part or whole by governor-appointed committees, news and journal articles, government reports and state statutes, as well as direct email correspondence from school district personnel. Personal accounts from responders, victims, community residents, and witnesses describing details of their personal experiences in the recovery process were key elements to the research data.

This thesis uses the sampling method of research, which according to William Tomchin is a "method conducted by choosing from a particular group or population of similitude."[52] Its purpose is to form generalizations about the group and, in the case of this research, to understand the current standards in emergency planning for active-shooter events at K-12 schools. I examined a sample of actual active-shooter events at K-12 schools and looked at several features regarding their recovery. My first aspect was to determine whether there was a recovery plan in place at the time of the incident. Second, I researched which obstacles were encountered and what effects they had on the school's progression to recovery. And finally, I researched common elements between incidents where a comprehensive recovery plan including all phases of recovery would have made a noticeable difference.

My assumption was that K-12 schools have been under-prepared for disaster. Personal experiences have informed my understanding that most schools have crisis plans

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[51] Crisis Management Policy.

[52] William M. K. Tomchim, "Sampling," Research Methods Knowledge Base, accessed April 9, 2017, https://www.socialresearchmethods.net/kb/sampling.php.

in some form; however, many schools do not have plans specific to the recovery phase of disasters. In addition, few schools or their districts have considered all the phases of recovery they are likely to encounter following an active-shooter event. Federal support down to the district level only comes by way of recommendations and guidelines, research did not reveal any federal requirements for school district emergency planning.[53] As of 2016, less than two-thirds of school districts reported requiring emergency operations plans; only a slight percentage more reported the same requirement of schools.[54] These self-reported numbers from the schools expose a gap in school crisis preparedness.

The outcome of this research has provided a benchmark model for what a phased approach to recovery should look like. School districts are able to use the model as a template for a recovery addendum to their emergency operations plans. This model provides a planning roadmap, beginning from the moment the lockdown order is removed and extending out years after the incident. With a comprehensive planning template in place, a compelling argument for a policy requiring a planned approach to active-shooter recovery can be easily illustrated. Such a requirement will provide the students, faculty, school administrators, and the community with a more organized path to recovery.

In the post-Columbine era, from 2000 to 2015, there have been 27 active-shooter events in K-12 schools, and one event at a pre–K-12 school.[55] Because this era of horrific events in U.S. schools has demanded more attention to emergency planning, it is from these examples that the research for this thesis was chosen. Although the tragic event at Columbine occurred prior to 2000, its relevance to changes in response, recovery, and crisis planning warrant its inclusion in this research. Some of the details in the following chapters, while intentionally not explicit by design, may be difficult to read but were

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[53] Ashby, *Emergency Management,* 2

[54] Ashby.

[55] Blair and Schweit, "A Study of Active-shooter incidents"; Katherine W. Schweit, "Active-shooter incidents in the United States in 2014 and 2015," Federal Bureau of Investigation, 2016, https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=how%20many%20active%20shooter%20incidents%20in%202015.

important in the research examination, not in the sense of determining right or wrong actions, but in revealing methods of improvement for crisis planning.

When considering the steady trend of active-shooter incidents in the last 20 years, members of the public may assume emergency planning for schools to be a standard practice, perhaps even regulated by state law. The simple fact is, developing a comprehensive emergency plan requires input from many stakeholders and requires a commitment by the parent institution to revise it annually and exercise the plan frequently. The planning process demands time and resources to prepare for an event every school hopes will never come. The following chapter provides more insight into the crisis planning process, why it is a critical need, and how state and federal government relationships with schools have to become an essential influence.

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II.   EMERGENCY PLANNING FOR K-12 SCHOOLS

All-hazard emergency operations plans are comprehensive plans that take into consideration all threats, hazards, vulnerabilities, and consequences, and are generally predicated by a risk assessment of the jurisdiction for which the plan encompasses.[56] Despite government reports indicating many schools have emergency plans in place, research reveals many school plans do not have a strategy for action once the response mission is completed. A broader plan with more depth also considers all aspects of a disaster recovery phase.

A.   BASICS OF THE PLANNING PROCESS

According to at least one state's recommended planning principles, every school should have at a minimum an emergency crisis plan that addresses all phases of emergency planning: prevention/mitigation, preparedness, response, and recovery.[57] Other planning practices for schools are suggested in the *Guide for Developing High-Quality School Emergency Operations Plans*; the guide, developed for the U.S. Department of Education, advises schools to create a planning team consisting of members from all agencies involved in response and recovery to develop the school's emergency plan.[58] Such a team provides for two essential considerations. First, the school will have buy-in from all agencies regarding the plan's direction of responsibilities for all stakeholders. Second, inclusion of all entities limits gaps in the final draft of the plan.

To begin the process of developing an effective emergency plan, the plan writers first use a risk assessment to consider which threats pose the most risk to their

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[56] Brian J. O'Connor, Dean R. Larson, and Orlando P. Hernandez, *NFPA 1600 Handbook: Emergency Management and Continuity Programs*, (Quincy, MA: NFPA, 2016).

[57] "HSEM Comprehensive School Safety Guide," Minnesota Homeland Security and Emergency Management, 2011, 10, https://dps.mn.gov/divisions/hsem/mn-school-safety-center/Documents/Comprehensive%20School%20Safety%20Guide.pdf.

[58] Federal Emergency Management Agency, *Guide for Developing High-Quality School Emergency Operations Plans,* 6.

stakeholders.[59] A written plan illustrates which actions and resources will be needed to accomplish the designated objectives. A standard school emergency plan may consist of three parts: the basic plan, functional annexes, and threat- and hazard-specific annexes.[60] The basic plan may contain items such as the purpose, concept of operations, assignment of responsibilities, and plan maintenance, and it should contain the expected course of action for training and exercising the plan.[61]

The nature of the basic plan is broad and all-encompassing so it can be implemented in any type of emergency. It is designed to be the framework from which all emergency related actions are supported. However, some specific actions common in disaster response and recovery will benefit from the early consideration of strategy, tactics, and resource acquisition. These types of actions can be accounted for in pre-planned annexes or addendums. Annexes may include actions pertaining to lockdown protocols, student evacuation, family reunification, sheltering in place, student accountability, and hazardous chemical releases.[62] Many schools may have the same or similar annexes; however, the planning team needs to consider all-hazards and the school's particular threats to inform which annexes are necessary.

Experience has shown it is common practice for emergency operations plans (EOP) to be left unopened for years following their development. The completion of a written emergency plan should not be treated as a box to check or one of the obstacles in the quest to declare the school is prepared for emergencies. Instead, it should be reviewed annually by the planning team or a planning committee made of a smaller sample of individuals from the planning team. A full plan review by the planning team should be completed every two years.[63] A periodic peer review by someone outside the planning team, school, and district is also a standard practice in the emergency management

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[59] Federal Emergency Management Agency, 7.

[60] Federal Emergency Management Agency,17.

[61] Federal Emergency Management Agency, 23–27.

[62] Federal Emergency Management Agency, 28–36.

[63] Federal Emergency Management Agency, 22.

industry. A review process by external partners eliminates operational and procedural biases and provides an objective perspective.

Another essential condition for sustaining an effective plan is exercising or training with it as often as practical.[64] The designated planning team should consider the costs and benefits to the type of exercise they are considering. To provide the value necessary in proportion to the cost of planning and facilitating an exercise, the product must be of the highest quality.[65] A standard practice in emergency management is to follow an exercise process beginning with workshops or drills with key school officials to reinforce their understanding of the plan. Drills or workshops are generally followed by a tabletop exercise, a functional exercise, and a full-scale exercise if needed. Each step's purpose is to provide an evaluation of the plan's effectiveness and its comprehension by the stakeholders. An after action report (AAR) written by the event's evaluators should follow every event. The AAR captures the gaps in the plan and establishes an improvement plan to close the gaps.[66] It is critical that all participants have access to the AAR. Schools in all regions will be best served to request the assistance of certified local emergency managers in designing and conducting exercise and training events.

B.   K-12 PREPAREDNESS: FEMA'S MISSIONS, SCHOOL THREATS, AND HAZARDS

All schools are at risk to disaster, and many face more than one type of hazard. For planning purposes, most threats are categorized under one of three types of hazards: natural, technological, or intentional human-caused. See Table 2.[67] School districts with comprehensive emergency preparedness programs include the application of all five FEMA preparedness missions. An emergency preparedness program that has all missions in place will have a framework in place in which all emergency support functions can be

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[64] Federal Emergency Management Agency.

[65] Federal Emergency Management Agency.

[66] Minnesota Homeland Security and Emergency Management, "HSEM Comprehensive School Safety Guide," 57.

[67] "Threat and Hazard Identification and Risk Assessment Guide," United States Department of Homeland Security, August 2013, 6, https://www.fema.gov/media-library-data/ 8ca0a9e54dc8b037a55b402b2a269e94/CPG201_htirag_2nd_edition.pdf.

applied. FEMA's five mission areas are defined in Presidential Policy Directive / PPD-8: National Preparedness.[68] The U.S. Department of Education provides adapted versions of the missions for schools in a 2013 guide, which was created to assist schools in plan development.[69] The definitions from each source are presented to highlight each mission's relevance to school safety. School missions taken from the guide are in italics.

- Five Mission Areas of Preparedness from the Department of Homeland Security[70]

- *Mission Areas Adapted for Schools by the Department of Education*[71]

    - Prevention: preventing, avoiding, or stopping a threatened or an actual act of terrorism.

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

    - Protection: protecting our citizens, residents, visitors, and assets against the greatest threats and hazards in a manner that allows our interests, aspirations, and way of life to thrive.

    - *Protection: the capabilities to secure schools against acts of violence and manmade or natural disasters. Protection focuses on ongoing actions that protect students, teachers, staff, visitors, networks, and property from a threat or hazard.*

    - Mitigation: mitigating the loss of life and property by lessening the impact of future disasters.

    - *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.*

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68 Brown, *Presidential Policy Directive 8 and the National Preparedness System.*

69 Federal Emergency Management Agency, *Guide for Developing High-Quality School Emergency Operations Plans,* 2.

70 "National Preparedness Goal," Federal Emergency Management Agency, September 2015, https://www.fema.gov/media-library/assets/documents/25959.

71 Federal Emergency Management Agency, *Guide for Developing High-Quality School Emergency Operations Plans.*

- Response: responding quickly to save lives, protect property and the environment, and meet basic human needs in the aftermath of a catastrophic incident.

- *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.*

- Recovery: recovering through a focus on the timely restoration, strengthening, and revitalization of infrastructure, housing, and a sustainable economy, as well as the health, social, cultural, historic, and environmental fabric of communities affected by a catastrophic incident.

- *Recovery: the capabilities necessary to assist schools affected by an event or emergency in restoring the learning environment.*

Table 2.   Threats and Hazard Types Faced by U.S. Schools.[72]

Threat and Hazard Type	Examples
Natural Hazards	- Earthquakes - Tornadoes - Lightning - Severe winds - Hurricanes - Floods - Wildfires - Extreme temperatures - Landslides or mudslides - Tsunamis - Volcanic eruptions - Winter precipitation
Technological Hazards	- Explosions or accidental release of toxins from industrial plants - Accidental release of hazardous materials from within the school, such as gas leaks or laboratory spills - Hazardous materials releases from major highways or railroads - Radiological releases from nuclear power stations - Dam failure - Power failure - Water failure
Biological Hazards	- Infectious diseases, such as pandemic influenza, extensively drug-resistant tuberculosis, Staphylococcus aureus, and meningitis - Contaminated food outbreaks, including Salmonella, botulism, and E. coli - Toxic materials present in school laboratories
Adversarial, Incidental, and Human-caused Threats	- Fire - Active shooters - Criminal threats or actions - Gang violence - Bomb threats - Domestic violence and abuse - Cyber attacks - Suicide

[72] Adapted from "Threat and Hazard Identification and Risk Assessment Guide," Federal Emergency Management Agency, August 2013, 6, https://www.fema.gov/media-library-data/ 8ca0a9e54dc8b037a55b402b2a269e94/CPG201_htirag_2nd_edition.pdf.

All schools have some level of risk to disaster, as such they need to have an EOP ready to be activated at any time. Without a federal requirement to have a plan, EOP requirements must come from the state or local level. A 2007 report from the Government Accountability Office (GAO) provided some statistics on school district emergency planning that suggested the majority of schools have taken steps to prepare. The research showed that 32 states require schools or school districts to have EOPs.[73] Additionally, nearly 70 percent of the schools surveyed reported making improvements in security surrounding the school and upgrades in mechanisms for ingress.[74] The results of the survey indicated many districts are making an effort; however, because there is not a national standard in place, plans were random and inconsistent and did not reflect the intentions of federally provided recommendations.[75]

In 2014, a federally supported guide was developed by the Readiness and Emergency Management for Schools (REMS) Technical Assistance (TA) Center on behalf of the U.S. Department of Education.[76] The purpose of this guide was to provide a template for the development of a school EOP, a literal step-by-step process that includes formatting recommendations and suggestions for annexes.[77] Several years following the guide's release, the GAO provided another report to Congress on the current situation of school preparedness.[78]

The 2016 GAO report did not collect the same data as the 2007 report, this fact does allow for an examination of school improvements over the 10-year period. Although it appears advances were made in overall preparedness in terms of numbers of schools and districts, many gaps still exist. For example, fewer than half of the states require their

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[73] Ashby, *Emergency Management,* 11.

[74] Ashby, 22.

[75] Ashby, 46.

[76] "Building Blocks to School Safety: A Toolkit for Schools and Districts for Developing High-Quality Emergency Operations Plans," United States Department of Education, Readiness and Emergency Management for School, 2014), http://rems.ed.gov/docs/ BuildingBlocksToSchoolSafety_ToolkitForEOPs.pdf.

[77] United States Department of Education, 3.

[78] Federal Emergency Management Agency, *Guide for Developing High-Quality School Emergency Operations Plans.*

districts or a state authority to review their school plans at least every two years.[79] Only one-quarter of the states that require fire drills also require active-shooter drills.[80] Finally, 10 states still do not require districts or schools to have an EOP, although the report indicates 12 percent of the K-12 students in the country live in those states.[81]

The 2016 GAO report cites federal oversight as the biggest gap; the primary obstacle is that there is no leading agency or authority to direct the guidance needed for emergency planning in schools.[82] The report further states that, as a result, some agencies are not included in collaborative efforts to develop a formal strategy for emergency planning, and available guidance from the federal government is interpreted differently by some agencies.[83] According to the GAO report, 96 percent of school districts have a form of doctrine for addressing the threat of active shooters to their schools.[84] In summary, the report claims schools are inconsistent in guidance and development of emergency planning procedures. The lack of a comprehensive standard practice makes schools without a plan more vulnerable than necessary. Moreover, without a planning standard, school districts are prone to develop plans that do not include a recovery annex, thereby compounding the challenges for communities to return to normal following the event of an emergency.

C. STATUS OF SCHOOL CRISIS PLANS WHEN DISASTERS STRUCK

The research for the following section was solely to determine the status or existence of school crisis plans for the districts and states where the incidents in this sample selection occurred. Each of the schools selected experience a shooting incident

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[79] United States Government Accountability Office, *Emergency Management: Improved Federal Coordination Could Better Assist K-12 Schools Prepare for Emergencies,* GAO-16–144 (Washington, DC: Government Accountability Office, 2016), 4, http://www.gao.gov/products/GAO-16-144, 27.

[80] U. S. Government Accountability Office, 25.

[81] U. S. Government Accountability Office, 20.

[82] U. S. Government Accountability Office.

[83] U. S. Government Accountability Office.

[84] U. S. Government Accountability Office, 32.

causing fatalities at the school. More detail regarding the incident and additional background information is described further in Chapter III.

1.   Columbine High School, 1999

Research was inconclusive in determining the status or school crisis plan mandates in the state of Colorado at the time of the Columbine incident. Additional information gleaned from the Columbine Review Commission was also not clear. However, in the report's recommendations, it states that every school should have a crisis plan, suggesting Columbine at the time may not have.[85] The report suggests that there was a county emergency plan but does not refer to a school- or district-specific plan.[86] The commission acknowledges in the report that an all-encompassing plan intended to cover many schools within the district would provide a disadvantage to school administrators when a disaster strikes; the thought being that no district-wide plan could be specific enough in its planning details to meet the needs of individual schools. Instead, districts need to be mindful enough in their planning to address the individual differences of each school such as its geographical location, its ability to facilitate emergency ingress and egress, and specific roles and responsibilities assigned to staff.[87] The Columbine Review Commission also points out the age differences of students in elementary schools and those attending high school must be considered when developing a school's crisis plan.[88] A written plan supporting emergency response and recovery for seven year-olds will have different responsibilities than a plan supporting 16-year-olds; such a standard in school planning supports the review commission's notion that a "one-size-fits-all" model for school planning will not work.[89]

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[85] "The Report of Governor Bill Owens' Columbine Review Commission," School Shooters Info, May 2001, xii, https://schoolshooters.info/report-governor-bill-owens-columbine-review-commission.

[86] School Shooters Info,113.

[87] School Shooters Info, 114.

[88] School Shooters Info, 113–115.

[89] School Shooters Info.

2. Sandy Hook High School, 2012

The 2007 GAO report on school district planning and preparedness shows the state of Connecticut did not require districts or schools to have emergency plans.[90] In Chapter 7 of the *Final Report of the Sandy Hook Advisory Commission*, it states that until the events in Newtown, schools in the state of Connecticut responded to emergencies with an ad hoc approach.[91] The report recommends an initiative by the state to develop a plan for response to major incidents; the recommendation proposes every school year beginning on July 1, 2014, the school board shall establish a committee to help develop a safety plan.[92] It is further recommended by the report that relationships with agencies at every level of government are to be in place prior to an incident to help streamline recovery efforts.[93]

3. Rocori High School, 2003

At the time of the tragedy, neither Minnesota state nor federal officials were providing required emergency planning criteria for school crisis plans. Research has found there are states offering recommendations, but there are inconsistencies among all states. This is, of course, to be expected without a nationwide standard in place. Also, the comprehensiveness of the recommendations bares a wide spectrum of actions and strategies. The Rocori School District had acknowledged it was in compliance with the Minnesota education system requirement to have a crisis plan.[94] A Minnesota state statute requires the school board to adopt a crisis management policy to address the potential for violent events.[95] Returning to the argument regarding the robustness of recommendations, the Minnesota statute requires the crisis management policy to include

[90] Ashby, *Emergency Management,* 6.

[91] "Final Report of the Sandy Hook Advisory Commission," Sandy Hook Advisory Committee, March 6, 2015, 199, http://www.shac.ct.gov/SHAC_Final_Report_3-6-2015.pdf.

[92] Sandy Hook Advisory Committee, A-2.

[93] Sandy Hook Advisory Committee, 200.

[94] Tim Post, "MPR: Two Boys Shot at Central Minnesota High School, One Dies; Suspect in Custody," Minnesota Public Radio, September 25, 2003, http://news.minnesota.publicradio.org/features/2003/09/24_ap_schoolshooting/.

[95] Crisis Management Policy.

only five lock-down drills and five fire drills per year.[96] There is no verbiage within the statute referencing recovery guidelines for the development of evacuation procedures, identification of relocation facilities, or student/parent reunification.

In 1999, the Minnesota Department of Public Safety in collaboration with the Minnesota Department of Education released the first draft of the *Comprehensive School Safety Guide*.[97] Since then, there have been four revisions, with the most recent in 2011. The guide is a 145-page document providing a thorough overview of the criteria needed to develop an effective crisis plan that address all phases of emergency preparedness, including recovery.[98] At issue is the implementation by districts of this available guidance. Currently, no part of the Minnesota statute requires planning practices found in the comprehensive guide separate from that of fire drills and lockdown drills.

4.   Marysville-Pilchuck High School, 2014

The 2007 GAO report indicates the state of Washington requires districts to have emergency management plans in place.[99] On the day of the shooting at Marysville Pilchuck High School, the superintendent of the Seattle School District—an hour south of Marysville—drafted a message to all school staff, families, and the community.[100] The message by the superintendent references state law requiring monthly safety drills during the school year. Additionally, he references every school as having a plan; however, this statement is vague in that it does not distinguish between his district and all districts within the state.[101]

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[96] Crisis Management Policy.

[97] Minnesota Homeland Security and Emergency Management, "HSEM Comprehensive School Safety Guide."

[98] Minnesota Homeland Security and Emergency Management, 2.

[99] Ashby, *Emergency Management*

[100] Nyland, "A Message from the Superintendent," Seattle Public Schools, October 24, 2014, https://www.seattleschools.org/cms/One.aspx?portalId=627&pageId=20721.

[101] Nyland.

5. Chardon High School, 2012

Evidence for school crisis-planning mandates for Ohio is conflicting. The GAO report from 2007 highlights the state of Ohio on a nationwide map as requiring all districts and schools to have emergency management plans.[102] Conversely, Chapter 3313 of the Ohio Administrative Code indicates Code 3313.536, School Emergency Plans, as being effective on 9/17/2014.[103] William Steele's book about trauma in schools devotes a chapter to the events that took place at Chardon High School. In his book, he clearly states that Chardon did not have a recovery plan or a crisis team at the time of the shooting.[104] Other reports found during research indicate that some planning measures such as lockdown drills had been happening prior to the event.[105] As a result of the conflicting evidence, confirmation as to whether Chardon High School had a formal emergency operations plan in place was inconclusive.

6. Santana High School, 2001

Santana High School, as part of the Grossmont Union High School District outside San Diego, California, has been required to have a crisis plan in place since 1997.[106] Research for the Santana incident was only able to yield news articles that were released after the incident. A *Los Angeles Times* article released one day following the incident stated that, as part of the California "safe schools plan," California law requires all school emergency plans to be updated every year.[107] Research could not produce evidence of any plans outlining protocols for relocation, reunification, or a structured

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[102] Ashby, *Emergency Management,* 6.

[103] School Emergency Management Plans, ORC–3313.536 (2007). http://codes.ohio.gov/orc/ 3313.536.

[104] William Steele, *Trauma in Schools and Communities, 122.*

[105] Laura Johnston, "Chardon High School Emergency Plan Prepared Community for Shooting Tragedy," Cleveland.com, February 27, 2012, http://www.cleveland.com/chardon-shooting/index.ssf/2012/ 02/chardon_community_prepared_for.html.

[106] Jodi Wilgoren and James Sterngold, "Others' Tragedies Helped Santee Prepare for Its Own," *New York Times*, March 11, 2001, https://www.nytimes.com/2001/03/11/us/others-tragedies-helped-santee-prepare-for-its-own.html.

[107] Duke Helfand, "Santana High Had Elaborate Security Plan," *Los Angeles Times*, March 6, 2001, http://articles.latimes.com/2001/mar/06/news/mn-34018.

recovery; however, parent and student reunification was established at a mall across the street from the school.[108] A command center was established at the shopping center adjacent to the school; this also became the media-staging area.[109] A *New York Times* article reported that the school had arranged for 200 mental health counselors to be available at the school when students returned just days after the shooting.[110]

D.   SUMMARY

The core of basic emergency planning principles is well known, clearly articulated, and available in the public open-source arena. The building blocks for a solid planning foundation is a basic plan that touches all missions and considers all threats, hazards, and risks. Schools recognizing the value of a comprehensive preparedness plan and taking the steps to implement it are in a better position to recover from disaster than their counterparts preparing for the minimum.

The research for the six samples was consistent: specific details pertaining to all the selected schools' recovery operations were limited in the public forum. Schools in which some form of a plan was purportedly in place at the time of the active-shooter event were still not forthcoming publicly about the depth of their plans. To generalize the research group, specific details regarding the state of emergency readiness at the time of the shooting incident are either nonexistent or held internally and not made available as open-source material. In some cases, basic levels of preparedness such as lockdown drills and a relocation site were provided publicly. To understand this deeper, further inquiry into the events of the incident, the challenges faced by the school administrators and the lessons learned from experience must be examined.

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[108] Edwin R. Gerler Jr., *Handbook of School Violence* (New York: Hawthorn Reference Press, 2004), 334.

[109] Wilgoren and Sterngold, "Others' Tragedies Helped Santee Prepare for Its Own."

[110] Wilgoren and Sterngold.

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III. ACTIVE-SHOOTER INCIDENTS

Each individual school and school district is at some level of risk to an active-shooter incident. Where the next incident will occur is at the assailant's discretion; the choice may or may not be random. The point is, intentionally inflicted evil is not reserved only for the rich or impoverished communities; it is not just directed toward large or small populations nor is it directed specifically at one single race or region of the country. An active-shooter event may happen anywhere, thus a school's preparedness should never be left to chance.

The following pages illustrate the events that took place at the six schools selected for review for this thesis. These schools are diverse in many ways, as noted earlier, yet they are the same in that they experienced a tragedy. How they differ is by their response and recovery. The accounts, as informed by the research, are described through details of the incident and each school's subsequent response and recovery efforts.

The samples selected reinforce the assertion that an active-shooter incident can happen at any school, in any city. Table 3 illustrates the differences in school district population, median house income, and median house values.

Table 3.   Geographic Data for School District Population[111]

National Center for Education Statistics American Community Survey 2010–2014			
School	Total School District Population	District Median House Income	District Median House Value
Columbine *	94,990	$61,026	$196,600
Sandy Hook	27,960	$108,667	$417,000
Rocori **	83,267	$40,604	$159,200
Marysville	71,032	$65,251	N/A
Santana **	438,500	$54,438	$486,600
Chardon	21,575	$68,413	$213,700

* Information was derived from the 2000 Census

** Information was derived from the 2005 Census

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[111] Adapted from "Demographic Data," National Center for Education Statistics, https://nces.ed.gov/Programs/EDGE/demographic.aspx.

A.   COLUMBINE HIGH SCHOOL

About 10 miles south of Denver is the town of Littleton, Colorado. In the1998-1999 school year, 1,900 students from Littleton and several surrounding communities attended Columbine High School.[112] The high school is just one of 17 high schools in the Jefferson County School District, of which there were 144 total schools in the K-12 system in 1999.[113] Columbine High School has more than 75 classrooms and boasts a floor plan of over 250,000 square feet, a fact that was critical to law enforcement's response.[114]

1.   Incident

In April 1999, the city of Littleton, Colorado became a high-profile city in only a matter of hours. On April 20, 1999, two gunmen executed a horrific attack upon their fellow classmates at Columbine High School in Littleton, Colorado. They had been planning the attack for a year.[115] The attackers were both seniors. According to homemade videos by the attackers and thousands of pages of evidence reviewed by the commission, the two seniors devised a plan to kill as many of their classmates as possible.[116]

The initial plan began with the placement of two 20-pound propane bombs in the cafeteria. The expectation was that the blasts from the bombs would kill many of the 500 students in the cafeteria. Following the explosion, the attackers would begin shooting their classmates as they fled the attack.[117] The two seniors came prepared to kill. In their possession that day were 29 pipe bombs, 48 carbon dioxide bombs, two sawed-off shotguns, a 9mm semi-automatic pistol, and a 9mm semi-automatic carbine rifle.[118]

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[112] Ann Schrader, "Columbine —Tragedy and Recovery," *Denver Post*, May 4, 1999, http://extras.denverpost.com/news/shot0504b.htm.

[113] School Shooters Info, "The Report of Governor Bill Owens' Columbine Review Commission," 9

[114] School Shooters Info.

[115] School Shooters Info, 25.

[116] School Shooters Info, 25.

[117] School Shooters Info.

[118] School Shooters Info, 23.

Fortunately, the plan began with a failure; the propane bombs set to explode via automatic timers failed due to improper wiring.[119]

Upon noticing the cafeteria bombs failed to explode, the assailants abandoned their staging position in the parking lot and advanced toward the school. It was at this point that gunshots were heard and the assault on students began. After killing and wounding several outside the school cafeteria, the shooters entered the building, continuing their assault. They soon made their way to the library, where ten more innocent bystanders were subsequently murdered.[120] The commission report cites witness testimony that the shooters taunted many of the victims in the library. Upon leaving the library, the two assailants made their way to the science room area on the second floor. They moved about the school unrestricted, returning to the cafeteria several times before finally taking their own lives in the library.[121]

2.   Challenges/Issues

As mentioned in Chapter I, the Columbine High School shooting became the watershed moment for changes in the emergency management planning approach to school-related active-shooter planning. In all areas—response, recovery, mitigation, and prevention—adjustments were made and a new focus was applied to active-shooter planning and training by public safety agencies.[122] As such, the incident at Columbine is where this research begins.

The school attack, although not the first of its kind in the United States, was the first to draw live national media attention in real time. Several hours passed before law enforcement was able to secure the building, and because of the delay news cameras had arrived and captured live video of the rescue tactics deployed by law enforcement.[123] In

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[119] School Shooters Info, 26.

[120] School Shooters Info, 27–30.

[121] School Shooters Info, 34.

[122] School Shooters Info, 66–67.

[123] "Columbine High School Marks 10 Years Since Massacre on Monday," Fox News, April 17, 2009, http://www.foxnews.com/story/2009/04/17/columbine-high-school-marks-10-years-since-massacre-on-monday.html.

1998, during a span of three months and only one year prior to Columbine, there were four other school shootings in which six students and two teachers were killed, and 36 were wounded.[124] The threat of active-shooter violence in K-12 schools was not new, but the reality of such a crisis was now thrust into the prime-time view of American households.

In 1999 live coverage of breaking news stories was becoming mainstream due to broader cable television audiences. Television viewers were no longer limited to the three major networks; this opened the door for fledgling news agencies providing a means to bring breaking news to the nation on a first-come basis.[125] At this point in media history, the drama of Columbine unfolding live on television was inescapable. A total of eleven school shootings in the 1990s prior to Columbine still had not prepared America for what they witnessed unfolding live on April 20.[126] It was the extreme amount of time that it took for law enforcement to assemble and make entry into the building that provided media the time it needed to set up on scene and broadcast the event on television. It was the same span of time that would generate much discussion concerning reform in active-shooter response.[127]

Post-event discussion surrounding the actions of police focused on response protocols that were perceived to be ineffective; however, the commission report comments that witnesses providing statements to the commission believe police responded according to their current level of training.[128] Additionally, law enforcement encountered obstacles they were not prepared for, such as dozens of unexploded bombs impeding their paths to clear corridors and classrooms.[129] Also, SWAT officers responding from areas not within Littleton city limits had little or no familiarity with the

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[124] Chris Glavin, "History of School Shootings in the United States," K12 Academics, February 6, 2014, http://www.k12academics.com/school-shootings/history-school-shootings-united-states.

[125] Fox News, "Columbine High School Marks 10 Years Since Massacre on Monday."

[126] Glavin, "History of School Shootings in the United States | K12 Academics."

[127] School Shooters Info, "The Report of Governor Bill Owens' Columbine Review Commission," 59.

[128] School Shooters Info, 60.

[129] School Shooters Info, 61, note 155.

school floor plan. This, combined with communication challenges, fueled the chaos.[130] These obstacles identified in the commission report contributed to the delay of law enforcement finding and extricating all the victims. It is not the intent of this sampling research to call into question the effectiveness of law enforcement's response to Columbine; it is rather to provide an accurate account of events that had a major influence on future active-shooter planning preparedness.

The commission report states that on the day of the tragedy, Columbine school officials did not have a crisis plan in place.[131] The Jefferson County school security officer also has publicly stated Columbine did not have a crisis plan, a position that is disputed by Jefferson County school officials.[132] The Jefferson County emergency management plan had already been revised by the time the commission report was published. The report explains that the exact content for crisis plan criteria is contested by school and outside officials. The focal point of concern is that there is not a universal emergency or crisis plan, and that schools within a district could have significant differences within their geographic setting, demographics, or operational structure.[133] Thus, district-wide plans may not be comprehensive enough to provide necessary detail that is specific to every school; therefore, each school should possess its own plan.[134]

With or without a plan, students were escorted off campus and subsequently bussed to Leawood Elementary School to be reunited with their parents.[135] Authorities used the media to inform parents to pick up their children at the elementary school.[136] Students at the elementary school were escorted to the gymnasium to be reunited with their parents.[137] The report indicates that personnel were requested to go to the

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[130] School Shooters Info,

[131] School Shooters Info, 10.

[132] Howard Pankratz, "Columbine Tragedy," *Denver Post*, March 3, 2001, http://extras.denverpost.com/news/col030301.htm.

[133] School Shooters Info, "The Report of Governor Bill Owens' Columbine Review Commission."

[134] School Shooters Info, 113–114.

[135] School Shooters Info, 58.

[136] School Shooters Info,

[137] School Shooters Info,

elementary school to provide victim support, but it does not clarify what credentials or professional training these individuals had in immediate post-disaster counseling. Recovery will eventually happen, but a comprehensive plan in place prior to the event will reduce the challenges faced by responders and recovery coordinators.

All research indicates that Columbine did not have a plan for a long-term school closing. Students from Columbine were out of school for two weeks, many used that time to cope with the trauma, begin the emotional healing process, and attend funerals of friends and classmates. The district needed an ad hoc plan to get the students back in school and help the seniors graduate on time. The decision was made to move all 1,900 Columbine students to their archrival Chatfield High School for what would be a daily split schedule. Chatfield students would attend class from 7 am to 12:10 pm, and Columbine students would attend class from 12:50 pm to 6 pm.[138]

Part of working through the recovery process is moving toward a new normal, whatever that normal may look like. For the nearly doubled population of students attending Chatfield High School in the middle of May 1999, it meant that the parking lot needed to be cleared in 15 minutes so the afternoon students could come in.[139] It also meant that the Columbine students forced to leave their backpacks at the crime scene had to carry all their textbooks and subject notebooks to every class for the remainder of the year; because the school had essentially doubled in size, there were not enough lockers for all.[140] Experiences of other schools involved in shooting events demonstrates a need for school districts to address in their crisis planning what an entire student body relocation would look like for both short- and long-term. It is a consideration that is practical for all types of disasters, not just active-shooter incidents.

Columbine became the benchmark for tragic scenarios that form the base for emergency planning. Some schools and districts in the wake of Columbine reacted quickly by incorporating planning solutions to some of the challenges faced by

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[138] Schrader, "Columbine —Tragedy and Recovery."

[139] Schrader.

[140] Schrader.

Columbine officials. Other districts, for a litany of reasons, did not address creating or revising their crisis plans, or simply let the priority of such a task fade with the memory of the Columbine events. The Columbine commission report repeatedly emphasizes the importance of pre-crisis planning.

B.   SANDY HOOK ELEMENTARY SCHOOL

With fewer than 30,000 residents, the town of Newtown, Connecticut, could be considered a small town. The Newtown School District operates seven K-12 schools with a total 2015/2016 student population of 4,588.[141] Sandy Hook is one of four K-4 elementary schools in the district.[142] Its student enrollment during the year of the attack was 512.[143] In December 2012, Sandy Hook Elementary school and all its community members were thrust into the international spotlight when a lone gunman committed an inconceivable violent crime, leaving dozens slain.

1.   Incident

The following are details of the shooting as reported by the Sandy Hook Advisory Committee in its Final Report. The subsequent description is paraphrased from the report. On the morning of December 14, 2012, the mother of a 20-year-old man known to have emotional difficulties was slain in her own bed while sleeping. The gunman collected multiple weapons owned by his mother, including a semi-automatic assault type rifle, two semi-automatic hand guns, and a shotgun. All weapons taken were the legal property of the gunman's mother.

Immediately following the murder of his mother in her home in Newtown, the gunman drove to Sandy Hook Elementary School, also in Newtown. Upon arriving, he shot out the window immediately adjacent to the front doors, which were locked at the time. Hearing the shots that allowed the gunman to breach the building were two

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[141] "District Reports," Newtown Public School District, February 24, 2017, http://newtown.schooldesk.net/DistrictInformation/DistrictReports/tabid/98651/Default.aspx.

[142] "Sandy Hook Elementary School in Sandy Hook, Connecticut," Startclass, accessed September 24, 2017, http://public-schools.startclass.com/l/17947/Sandy-Hook-Elementary-School.

[143] "Sandy Hook Elementary School," SchoolDigger, accessed October 11, 2017, https://www.schooldigger.com/go/CT/schools/0291000617/school.aspx.

administrative staff members who entered the hallway to investigate. Both staff members were shot dead; one was the school principal. The shooter then entered the main office and did not attempt to search for possible victims. Staff members in the office at the time were hiding. The shooter left the office, headed for classrooms 8 and 10.

The shooter first entered room 8, where he found two staff members and 16 first graders. After firing 80 cartridges from his 223-caliber rifle, both staff members and 14 students lay dead, another from classroom 8 died later. One student from room 8 survived. The shooter left to go to room 10, where he found two more staff members and killed them along with five more first graders. This time however, nine students were able to escape and two remained in the room physically uninjured; this occurred about the same time law enforcement entered the building. The investigation led law enforcement to believe that upon hearing responders coming into the building, the shooter then turned one of his handguns on himself. He died in room 10 from one gunshot.[144]

In January 2013, 16 members of a newly formed commission were tasked with the challenge of identifying better policy in the areas of safe school operations, public safety, and mental health awareness in order to reduce the risk of another active-shooter event.[145] The formation of the commission established by the Connecticut governor follows the unprecedented tragic events of December 14, 2012.

2. Challenges/Issues

In the immediate aftermath of the arrival of first responders, Sandy Hook needed a plan to evacuate and reunify students. Unfortunately, there was no such plan in place.[146] Families rushing to the school after hearing the news could only get as close as the firehouse located at the end of the driveway to the school. It was there that reunifications were happening for some families. Mostly what was happening there was

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[144] Sandy Hook Advisory Committee, "Final Report of the Sandy Hook Advisory Commission," 10–12

[145] Sandy Hook Advisory Committee, xi

[146] Sandy Hook Advisory Committee, Appendix A of the commission report includes the recommendation from the committee directed to the state of Connecticut, *every school board must submit a security and safety plan for every school annually.*

chaos.[147] Children, parents, school staff, and first responders were all milling about with no structured purpose. Children were being taken home by well-meaning neighbors or in some cases other family members. Parents of those students were arriving and finding no information or record as to the location or release of their child.[148] The operations lending to the recovery of Sandy Hook families were more than 13 years removed from the lessons learned at Columbine, yet there was no plan to help facilitate the process.

Up until the time of the events that unfolded at Sandy Hook Elementary School, crisis resolution was conducted ad hoc. This was the case not only with Sandy Hook, but across the entire state.[149] Again, with or without a plan, recovery will happen. With the best interest of the children of Sandy Hook Elementary school in mind, the administration made the decision to try and return the students' environment back to normal, or as normal as possible.[150] To accomplish this they had to get them back in school. Meetings began the day after the shooting between Newtown school administrators, federal and state officials, and officials from the nearby town of Monroe to find a new location for the students to continue school instruction. An agreement was made to use Chalk Hill Elementary School, which had been closed following the 2010/2011 school year.[151] The building was currently a multipurpose site hosting the city's Parks and Recreation department, a day-care facility, and a training center for local emergency medical services; however, it was determined to be adequate space to house the additional students and the faculty from Sandy Hook.[152] The students were back in school the Tuesday following the shooting.

[147] Alissa Parker, "The Need for Reunification Protocols," Safe and Sound Schools, November 30, 2016, https://www.safeandsoundschools.org/2016/11/30/need-reunification-protocols/.

[148] Parker.

[149] Sandy Hook Advisory Committee, "Final Report of the Sandy Hook Advisory Commission, 199.

[150] Josh Kovner, "Newtown Teachers Went Back Too Soon, Union Head Says," *Hartford Courant*, August 15, 2014, http://www.courant.com/news/connecticut/hc-sandy-hook-commission-0816-20140815-story.html.

[151] "Monroe's Chalk Hill School Will Be Used to House Sandy Hook Elementary Students," *Monroe Courier*, December 16, 2012, http://www.monroecourier.com/1176/monroes-chalk-hill-school-will-be-used-to-house-sandy-hook-elementary-students/.

[152] "Monroe's Chalk Hill School Will Be Used to House Sandy Hook Elementary Students."

Knowing that the temporary student placement at Monroe Elementary was not a long-term solution, Newtown First Selectman Patricia Llodra began to consider possible alternatives. Just a few weeks following the disaster, the slow process of discussing options began with those that were ready; for many others, more time was needed to come to grips with the reality of the past event. Without a plan in place and no committee structures to lean on for recovery planning, Llodra built a task force consisting of a private consulting firm and more than two dozen local citizens serving on town boards.[153] The decision was made to move forward with the construction of a new school; it would be designed with the lessons learned from the past in mind, in conjunction with the innocence of the ones lost in the tragedy.[154]

Of the six events that make up the sampling research of this study, the assault on the victims at Sandy Hook Elementary stands out. For victims trying to return their lives to normal following an active-shooter incident, mental health recovery is arguably the longest process of all the recovery phases. As such it warrants high-priority consideration when building a recovery plan. Many of the recommendations found in the commission report contain an element of behavioral and mental health recovery. The report is explicit in suggesting state requirements that can be tied to licensing and/or certification renewals for teachers and personnel.[155] Details of what suggested mandates may include contain trainings for teachers such as psychological first aid, bereavement support, and skills in identifying signs indicating the need for added mental health services.[156]

In 2016, the Newtown School District opened the new Sandy Hook Elementary School. To facilitate the recovery of the community and more directly the families of Sandy Hook, the decision was made to demolish the old school and rebuild a new one. The state of Connecticut contributed $50 million to the project.[157] Expensive and large

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[153] Laura Smith and Dana Stevens, "Building the New Sandy Hook Elementary," *Slate*, December 25, 2014, http://www.slate.com/articles/life/culturebox/2014/12/the_new_sandy_hook_elementary_school_designing_and_building_the_newtown.html.

[154] Smith and Stevens.

[155] Sandy Hook Advisory Committee, "Final Report of the Sandy Hook Advisory Commission," 206

[156] Sandy Hook Advisory Committee, 213

[157] Smith and Stevens, "Building the New Sandy Hook Elementary."

construction projects are sometimes part of the recovery process. In the case of Columbine High School, the entire library was relocated and an atrium above the cafeteria was constructed.[158] In both cases, the idea is to help those directly affected to find closure in their quest for a new normal. In the end, recovery will happen.

C.   ROCORI HIGH SCHOOL

The Rocori School District in west-central Minnesota serves the communities of Rockville, Cold Spring, and Richmond. The district derives its name from the first two initials of each community.[159] It operates three elementary schools, three parochial schools, a middle school and the high school, all within its 127-square-mile boundaries.[160]

1.   Incident

Students and staff were only weeks into the 2003–2004 school year when disaster struck at Rocori High School in Cold Spring, Minnesota. Around midday, shots were heard. A freshman student had shot one student in the locker room and proceeded to shoot another classmate in the gymnasium. One student died shortly after arriving at the hospital, the other died several weeks later.[161] The shooter surrendered his weapon when confronted by a teacher. Classmates interviewed by news agencies told reporters they believed the shooter began to withdraw from friends the summer before the start of school. Others believed he had been bullied in the past, presumably about his acne.[162] Research regarding details of the shooting could not determine if the victims were selected randomly.

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[158] Megan, "How Columbine Climbed Back."

[159] "School Profile," Rocori School District, accessed August 8, 2017, http://www.ROCORI.k12.mn.us/school-profile.

[160] Rocori School District.

[161] "Minnesota School Shooting Leaves 1 Dead," CNN, September 25, 2003," accessed August 8, 2017, http://www.cnn.com/2003/US/Midwest/09/25/school.shooting/.

[162] Post, "MPR."

2.   Challenges/Issues

Following the release of the lockdown, the process for the evacuation of students began. Admittedly, Rocori officials did not have this procedure identified in their plan. As a result, there was not an institutionally understood process for faculty to be certain if it was safe to open their locked doors.[163] A well-known process understood by faculty may have expedited the process. Following the evacuation, students were brought to the elementary school to be reunified with their parents. Without having specifics in the emergency plan for this process, the school used faculty to help identify parents with students to authorize their release.[164] This was a more or less ad-hoc process that was effective, but may have been accomplished with less resistance with a plan that included forms, procedures, etc.

The short-term recovery for Rocori was focused on resuming classes quickly to foster a sense of normalcy, and the emotional impact of the incident on students and faculty. Multiple meetings were conducted to allow staff to have an open discussion pertaining to the events and to ask questions among themselves. Community meetings were also offered; parents and residents were invited to discuss changes that would address prevention measures to be considered by the district, improvements in planning, and the strength of their values within the community. Counseling opportunities were also offered for school staff, students and families, and members of the community. District officials were clear and open about their support for the teachers and staff at the school.[165]

The Rocori School District received federal school emergency assistance as a result of the incident. As a requirement of the assistance, the district needed to develop plans for long-term recovery. The district focused on three individual components:[166]

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[163] Scott R. Staska, personal communication, August 3, 2017.

[164] Staska.

[165] Scott R. Staska, personal communication, July 17, 2017.

[166] Scott R. Staska, personal communication, August 3, 2017.

- Conduct a survey of the district and community residents to garner concerns or ideas on various topics.

- Enable an assessment of school facilities to contemplate the safety and security aspect for long-term planning.

- Develop a strategy for the district to navigate the recovery process.

Research has revealed consistencies in the actions needed to be taken by districts following a shooting event. As is the case with any crisis event, the existence of a detailed plan will help facilitate an organized path to recovery. Of course, every step cannot be outlined; however, generalizations that will provide situational awareness for expectations of known actions to be taken, as determined from experiences gleaned from previous events, can be of significant value to the plan owner.

D.   MARYSVILLE-PILCHUCK HIGH SCHOOL

The Marysville-Pilchuck High School resides in the city of Marysville, Washington. The school is adjacent to the city of Marysville; the Tulalip Tribes of Washington are also served by the high school. Marysville-Pilchuck High School is part of an open enrollment district; students have the choice of which high school to attend and communities are not restricted by district or city boundaries when determining where their kids would attend school in the 2014–2015 school year.[167] The high school serves students in grades 9 through 12, with an enrollment of approximately 1,200 students and 60 teachers.[168]

1.   Incident

On the morning of October 14, 2014, a freshman at Marysville-Pilchuck High School asked several of his friends to eat lunch with him later that day. Several of them had to cut class to be there at their friend's request. Once all of them arrived and had

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[167] Eric Stevick, "Administrators Heed Insights on Easing Students' Return to School," *Herald,* November 1, 2014, http://www.heraldnet.com/news/administrators-heed-insights-on-easing-students-return-to-school/.

[168] Rob Lowry, "Executive Summary: Marysville-Pilchuck High School, Marysville School District #25," AdvancED, March 18, 2016, http://www.advanc-ed.org/oasis2/u/par/accreditation/summary/ pdf;jsessionid=22114567A8FEB9F9671368A44EFC086D?institutionId=52591.

taken a seat, the shooter removed a handgun from his backpack, stood up, and began shooting his friends one at time in the head. He shot five of his friends; four of them died. Upon emptying his weapon of ammunition, he reloaded the gun and turned it on himself; the bullet entered under his chin killing him instantly.[169] Two of his friends at the table survived the event without any physical injury and were able to provide investigators with details of the events.[170]

2.   Challenges/Issues

The students needed to be evacuated from the school; they were relocated to the Shoultes Community Church. Automated phone calls were sent to parents identifying where they can pick up their children.[171] Soon after the shooting, the decision was made to close the school the following week.[172] Research has revealed, in general, schools do not have a predetermined plan for how long they will close due to a crisis. Every school approaches the issue independently with the welfare of the students in mind. Some schools choose to return immediately to instill a feeling of normalcy.

As seen in other active-shooter recoveries such as Columbine and Sandy Hook, Marysville High School would undergo some building remodeling. What is generally aimed at the mental health stability and recovery of students and staff, the destruction or reconstruction of the area most associated with the identity of the shooting helps to signify a new beginning. In the case of the Marysville shooting incident, the cafeteria was slated for change, as this is where the shooting event unfolded.[173] Another change was implemented following the shooting to help curb the flood of memories from the

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[169] Jerry Rhue and Dave Honnen, "MPHS Shooting: Case File, MPHS School Shooting," School Shooters Info, October 24, 2014, https://schoolshooters.info/sites/default/files/Jaylen_Fryberg_Investigation_0.pdf.

[170] Max Kutner, "What Led Jaylen Fryberg To Commit the Deadliest High School Shooting in a Decade?," *Newsweek,* September 25, 2015, http://www.newsweek.com/2015/09/25/jaylen-ray-fryberg-marysville-pilchuck-high-school-shooting-372669.html.

[171] Elizabeth Wiley and Susan Wyatt, "Two Dead, Four Hurt in Shooting at Marysville-Pilchuck HS," *USA Today High School Sports* (blog), October 24, 2014, http://usatodayhss.com/2014/two-dead-four-hurt-in-shooting-at-marysvillepilchuck-hs.

[172] Stevick, "Administrators Heed Insights on Easing Students' Return to School."

[173] Stevick.

shooting—a change was made to the fire alarm tones throughout the school.[174] After the sound of gunfire was heard, someone had pulled the fire alarm alerting those that could to evacuate. The new alarm sound is intended to disassociate the warning system with the events that occurred on that day. These are all important recovery processes that are nowhere determined to have come from a crisis emergency plan. Research was unable to determine what level of planning was in place at Marysville-Pilchuck High School in September 2014, or whether or not any written plans had been trained on, exercised, or understood by faculty and staff.

As gleaned from years of experience in the field of emergency management, oftentimes when a major incident occurs that includes response by public safety, one or several participating disciplines may complete an after action report (AAR) to capture the details of the response to a specific event. The document is used to provide an analysis of operations that can be compared to the response plans intended for use in said type of incident. The AAR is regarded in emergency management circles as a means to identify strengths and weaknesses, and consequently develop a plan for making improvements on identified gaps.[175] The AAR is not intended to assign blame; it is merely a quality improvement tool.

In the case of Marysville-Pilchuck, there was not an AAR developed by police that could shed light on the processes used for evacuation, relocation, or any other recovery measures that police were associated with. In a June 2015 article published by the *Seattle Times* it was clearly stated by Commander Robb Lamoureux that an unofficial conversation by officers and SWAT team members would suffice. In an email referenced by the *Times* Lamoureux wrote, "It was an informal round-table discussion only and no formal report has been, nor will be, completed."[176] Although the tragic circumstances at Marysville was a local event, the lessons learned there could be of value to every district nationwide. Active-shooter incidents in K-12 schools by the numbers would be

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[174] Stevick.

[175] "Lessons Learned from School Crises and Emergencies," United States Department of Education, *After Action Reports: Capturing Lessons Learned and Identifying Areas for Improvement,* 2, no. 1 (2007): 1–6.

[176] Kamb, "No Police Reviews after 2 Deadly School Shootings."

considered by most to be a rare event; it is a lost opportunity when a high consequence-event is not documented for the benefit of responding jurisdictions and those charged with the safety and protection of children at school.

E.   CHARDON HIGH SCHOOL

The city of Chardon is located in the northeastern portion of Ohio near Lake Erie, about 30 miles east of Cleveland. The city's population at the time of the shooting was nearly 5,000 residents.[177] The Chardon School District represents the city of Chardon along with five other surrounding communities, a district footprint covering 88 square miles. The district operates four elementary schools, one middle school, and one high school—Chardon High School. The high school serves 1,100 students in grades 9 through 12.[178]

1.   Incident

On February 27, 2012, School was just getting underway at Chardon High School in Chardon, Ohio, when a 17-year-old student opened fire on other students in the school cafeteria. The shooter, acting alone, brandished a .22-caliber handgun and fatally shot three students in the backs of their heads.[179] Two other students were shot in the hallway as the gunman fled; one was hit in the buttocks, and the other was shot in the spine.[180] The shooter exited the school while being chased by the football team's offensive coordinator. Police found him in the woods near the school 45 minutes later, with the assistance of police K-9 units.

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[177] Scott Pelley, "The Shooting at Chardon High," CBS News, accessed August 13, 2017, http://www.cbsnews.com/news/hero-coach-frank-hall-on-ohio-school-shooting-at-chardon-high/.

[178] Johnston, "Chardon High School Emergency Plan Prepared Community for Shooting Tragedy."

[179] Johnston.

[180] Pelley, "The Shooting at Chardon High."

2. Challenges/Issues

The school had begun active shooter–type training just three years prior to the incident.[181] As of March 2007, the state of Ohio required the development of a comprehensive emergency management plan for every school district. Individual schools were required to include a floor plan specific to every building and include every floor of said building.[182] Chardon High School had a plan, and on that tragic morning the plan went into effect when the public-address system informed students and teachers to initiate lockdown procedures.[183]

The crisis plan called for faculty and staff to be responsible for student accountability and to physically escort them from the parking lot to reunify them with their parents.[184] Because the incident occurred so early in the school day, the adjacent elementary school was not yet occupied. Officials at the scene determined that the elementary school would be a better site for reunification; they made the decision to deviate from the crisis plan and made the change on the spot.[185] This fact provides a good example of allowing responsible parties the flexibility to make adjustments to a plan. Every plan when tested, whether through real events or exercises, will reveal gaps and areas for improvement. It should be expected that some gaps may be identified in the midst of operations.

Chardon students took it upon themselves to begin the recovery process the evening of the shooting. Over 100 students assembled in Chardon Square to sing songs and stand together honoring those lost and injured in the day's events.[186] The district, motivated by the desire to invoke a return to normalcy, made the decision that school would open on Thursday, three days following the incident. Classes would resume on

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[181] Doug Livingston, "Chardon Administrators Share Yearlong Hindsight after High School Shooting," *Akron Beach Journal* (blog), accessed August 13, 2017, https://www.ohio.com/akron/news/chardon-administrators-share-yearlong-hindsight-after-high-school-shooting.

[182] School Emergency Management Plans.

[183] Johnston, "Chardon High School Emergency Plan Prepared Community for Shooting Tragedy."

[184] Livingston, "Chardon Administrators Share Yearlong Hindsight after High School Shooting."

[185] Livingston.

[186] Johnston, "Chardon High School Emergency Plan Prepared Community for Shooting Tragedy."

Friday, allowing Wednesday to be a day for emotional healing with grief counselors for teachers and staff. Thursday was offered for students and families to go and have an opportunity to speak to counselors.[187] No school will find every answer to the problems faced by their current crisis; however, Chardon's difficult experience may have been tempered because of their efforts in exercising and training for an active-shooter crisis.

F.   SANTANA HIGH SCHOOL

Santana High School is in the City of Santee, California, and located about 18 miles northeast of San Diego. During the school year of 2000/2001, Santana High School had a student population of approximately 1,900.[188] Oversight of the K-12 education system is split between two districts: Santee School District encompasses all K-8 schools, and Grossmont Union High School District serves the 9–12 schools.[189]

1.   Incident

On a Monday morning in early March 2001, Santana High School located in the city of Santee became the focus of the nation's attention on another school active-shooter incident. At 9:22 a.m., a high school freshman exited a restroom and began shooting at a crowd of hundreds of students. When it was over, two students were dead and 13 others were wounded, 11 of which were also students.[190]

2.   Challenges/Issues

Since 1997, the state of California has required schools to write an emergency plan and submit it to the state.[191] Since the requirement, Santana High School and the

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[187] Madison Park and Elizabeth Landau, "Finding 'New Normal' after School Shooting," CNN, accessed August 13, 2017, http://www.cnn.com/2012/02/29/health/mental-health/grief-counseling-ohio-shooting/index.html.

[188] "Students Return to Santana High Two Days after Deadly Attack," *Topeka Capital-Journal*, accessed August 13, 2017, http://cjonline.com/stories/030701/new_studentsreturn.shtml#.WZDE0lWGPX4.

[189] "Grossmont Union High School District Population and Races," USA.com, accessed August 13, 2017, http://www.usa.com/school-district-0616230-population-and-races.htm.

[190] Gerler, *Handbook of School Violence*, 333

[191] Wilgoren and Sterngold, "Others' Tragedies Helped Santee Prepare for Its Own."

Grossmont Union District have taken steps toward preparedness to put their schools and district in a position to cope with this type of emergency. It was only several months prior to the incident when two district employees participated in a workshop sponsored by California's Safe Schools and Violence and Prevention Office.[192] Research pertaining to the Chardon shooting incident revealed news sources that reported improvements in Santana's readiness, including the addition of unarmed security guards, two-way radios, and a new system for students to report suspicious behavior or activity.[193]

The data that is publicly available for the recovery process during the Santana incident is fragmented. This may be due to its getting lost over the 16 years since its occurrence or the fact that it lives in the shadows of the shooting incident at Columbine High School, which occurred less than two years prior. Either way, the actions taken can and should be used as lessons. Reports suggest parents and students were reunited across the street from the school at a nearby mall.[194] School administration and law enforcement gathered across the street at a fast-food restaurant. Without the plan that was in place that day, it is impossible to say if these locations were pre-planned. Santana did pull together quickly; the night of the shooting the school assembled a meeting for parents and included the public safety stakeholders and school administrators. As a group, they were able to provide assurances of actions being taken and resources that would be immediately forthcoming. The students returned to school two days after the shooting. That day was delegated in its entirety to talk among each other and with any of the hundreds of mental health crisis counselors available throughout the school.[195]

G.   ANALYSIS SUMMARY

The samples chosen for this research were selected for several reasons. First, they span all regions of the country. It does not appear that any part of the country is immune from an active shooter type of tragedy. Second, the incidents range in a span of over 14

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[192] Wilgoren and Sterngold.

[193] Wilgoren and Sterngold.

[194] Gerler Jr., *Handbook of School Violence*, 334.

[195] Gerler, 336.

years. This timespan downplays the argument that awareness of the threat of an active-shooter scenario prohibited policy makers from incorporating a requirement for comprehensive emergency management crisis planning. Third, all samples reviewed included events with fatalities. This was done intentionally to put emphasis on the mental health component and stress the point that recovery from school-affiliated active-shooter events often takes years. Finally, a broad spectrum of district population density is represented in the samples. The size of the district was considered in the selection process to determine if population is a factor to community impact resulting from the shootings and the mental health resiliency as compared to small and large communities.

Multiple academic and open source databases were thoroughly reviewed for information relating to the sample events. Research data available in the public realm was limited in its availability. The author's conclusion for this fact is three-fold. First, schools that have not planned, trained, or exercised their intended actions for an active-shooter event are more likely to have negative experiences during real life crises. This is the core principle for states requiring fire drills in schools. The general understanding is that a practiced procedure becomes ingrained by repetition; when a real event takes place, the correct action is instinctive.

Second, research revealed some public safety agencies do not engage in the practice of developing AARs. The AAR is known to most emergency managers and is commonplace in the fire service as well as other public safety disciplines and the military.[196] Every active-shooter event researched in this thesis included response by police, fire, and emergency medical services (EMS). If public safety agencies are producing an AAR for internal use only, a recommendation for those agencies is to entertain formal requests for watered-down versions or simply make those versions publicly available with personal identifiable information redacted. So much preparedness planning is based on the value of lessons learned; the information gleaned from previous events is invaluable to all stakeholders' success in coping with the next event. This

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[196] Bill Carey, "A New Approach to After-Action Reports," *Fire Rescue Magazine,* June 13, 2013, http://www.firerescuemagazine.com/articles/print/volume-8/issue-7/firefighter-safety-and-health/a-new-approach-to-after-action-reports.html.

applies to the knowledge of both positive and negative experiences. Because crisis planning inherently brings schools and public safety agencies to the same table, the practice of writing AARs for training, drills, and exercises should become a standard practice for schools.

Finally, it may be difficult for some agencies to request a self-critique of their performance. In some cases, the individual with the authority to require a documented history of events or actions may well be the person responsible for the event's outcome. A good example of this is in fire reports for line-of-duty deaths. In general, these reports point to actions taken by an agency that were outside of protocol or there are common industry practices or strategies that were not performed by said agency. In either case, the introspective lens of observation is difficult when the details are negative. Nonetheless, agencies need to see the greater good; every incident provides opportunities for all to improve. The information gleaned from these samples will do just that.

H. SYNTHESIZING THE SAMPLES

Research, experience, and general reasoning informs us that immediate reactions to emergency crisis is often chaotic and unorganized. As a firefighter for 22 years, I have found validity in the expression describing an incident commander's strategic approach to emergencies: *actions taken in the first five minutes will determine the level of success in the next five hours.* This thought process is founded on the principle that our ability to cope with disasters is often guided by our experience with them and/or the planning and training we have done to prepare for them. When observed from a distance, the actions and reactions to the samples selected for this research validate that simple thought process.

From a holistic view of the samples, research identified consistencies in priorities for the recovery process. Of course, all details as applied to each phase of recovery were not available; however, from what we can see there are lessons to be gleaned. Although not the first phase of recovery, relocation and reunification were critical components to every school's recovery. Research revealed half the schools had a plan for this and half did not, and one changed their plan in mid-operation because a better option became

available.[197] Also consistent throughout the samples—attention to mental health became a high priority. Whether plans were in place or not, attention to the emotional well-being of students, faculty, and in some cases first responders was consistently documented as a concern. All schools took immediate action to address the mental health issue. Finally, every school had to determine when to resume class. This priority was complicated slightly because some schools were confronted with demolition, construction, or remodeling to complete before students could return to class. The element that remained the same was the determination of getting the students back into class; this was fostered by the notion of whatever is best for the students.

I.   CONCLUSION

Schools within the K-12 system have not been fully prepared to execute the recovery mission process. The reason is because of a lack in recovery planning caused by several influences. First, there is a gap in oversight requiring schools to implement comprehensive recovery plans that include all phases of recovery. Second, emergency and crisis planning to the level of active-shooter preparedness is not inherent in the culture of school administration's strategic attention. Effective preparedness for active-shooter events in K-12 schools may require federal, state, or local mandates for comprehensive planning. Partnerships with public safety and emergency management is needed to assist in the development of such plans.

In all of the samples examined in this thesis, the recovery process was accomplished. However, in some cases not all of the phases of recovery were tested. The examples demonstrated priorities such as student/parent reunification and mental health counseling as a staple for every school-related shooting event. However, since the degree of loss cannot be anticipated, all phases of recovery must be planned for, including donations management, social media surge, funerals/memorials, and extended school closures.

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[197] Livingston, "Chardon Administrators Share Yearlong Hindsight after High School Shooting."

IV.   PHASES OF RECOVERY PLANNING

An effective recovery plan goes far beyond predetermining a relocation site and informing parents where to go. Research into the selected samples directs the recovery lens to phases of recovery that occur days, weeks, and in some cases years post-incident. To construct a comprehensive recovery annex, it is essential to form an understanding of all recovery phases and their respective nuances.

A.   RECOVERY—WHAT DOES IT ALL MEAN?

The term "recovery" has many meanings in many different types of contexts. The "National Response Framework" describes recovery as the capabilities communities must have to recover from a crisis event in an effective manner.[198] Recovery is the process by which government agencies at all levels, including volunteer organizations and private businesses, work together to bring communities hit by disaster to their same preexisting status prior to the crisis, or as close to it as possible, as efficiently and expeditiously as possible.[199] Most notably, it is a process. In most cases it can be viewed as a process of operations, such as donation management, crisis therapy and mental health counseling, sheltering, family assistance and reunification, and reconstruction.[200] For the purposes of this paper, recovery is about resiliency. It is the process by which we try to return all aspects to their prior state, before the incident; it is the effort to return to normal, or as close to it as possible. For the purpose of active-shooter planning, recovery begins the moment law enforcement has eliminated the threat or has confirmed the threat no longer exists; its many phases may continue for years.

A GAO report from 2007 states that the Department of Education, the Department of Homeland Security, and the Department of Human Services have provided

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[198] "National Response Framework," Federal Emergency Management Agency, accessed July 14, 2017, https://www.fema.gov/media-library/assets/documents/117791.

[199] "Disaster Recovery—Local Governments and Communities," Homeland Security and Emergency Management, accessed July 14, 2017, 28, https://dps.mn.gov/divisions/hsem/disaster-recovery/Pages/local-state-governments.aspx.

[200] Homeland Security and Emergency Management.

recommendations for school districts to use in their emergency planning.[201] In the report, recovery related recommendations are limited. The recommendations are vague and do not provide detail. One recommendation suggests all schools should include procedures for recovering from an incident.[202] Although emergency practices indicate this to be good advice, it provides little insight to districts not accustomed to a nexus of emergency planning. The report also states that over half of the districts participating in the survey with written plans in place include items such as on-site trauma teams, damage assessment, and restoring administration operations; however, the report does not provide any data regarding the number of schools having components in their crisis plan that should include donation management, procedures to dispense medication to relocated students, or a plan for school administrators to interface with first responders when a crisis occurs.[203] The report does state that few schools have plans or procedures in place should a disaster force an extended school closure.[204] Recommendations for how to reunite students with parents, how to achieve school computer network interoperability from remote locations, or strategies to provide death notifications were not found in the report. A school emergency planning guide developed with collaboration from several federal agencies for the U.S. Department of Education provides a thorough overview and specific suggestions of what an emergency operations plan should include.[205] Also in the guide are recommendations for annexes, one of which includes recovery.[206] The guide has a wide spectrum of considerations for school planning; the information provided is more strategic in its presentation than tactical. However, it is very comprehensive in planning considerations in comparison to other government documentation found in this research.

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[201] Ashby, *Emergency Management.*

[202] Ashby.

[203] Ashby, 14

[204] Ashby, 15

[205] Federal Emergency Management Agency, *Guide for Developing High-Quality School Emergency Operations Plans.*

[206] Homeland Security and Emergency Management, "Disaster Recovery—Local Governments and Communities," 33–34.

A recommended strategy in recovery planning is to include in the emergency operations plan an appendix or addendum specific to recovery.[207] A phased approach will guide the user through the process one step at a time. With this approach, the plan user will always know where they are in the process and can look ahead in the process to help inform imminent planning decisions. As stated in Chapter I, the recovery process begins when the life safety threat to civilians and responders has ended. Once the scene is declared safe by law enforcement, the phased approach to recovery begins with the removal of the lockdown order authorized by law enforcement. A phased approach to recovery, in its entirety, may include all of the following components.

1.   **Lockdown**

Lockdown is the process by which students and faculty secure themselves in a room by locking the door and turning down the lights. The occupants will turn phones off and move to a corner away from windows; they should pull shades down if applicable. Some school plans may have in place a method for teachers to mark the door with red or green placards of some kind; this indicates to law enforcement the status of the room occupants, red meaning there is trouble and green indicates all room occupants are okay.[208]

The decision to have a lockdown procedure is widely accepted, the specifics of the procedure are very often contested; this is due to high-profile systematic protocols that have surfaced since Columbine. Protocols such as Alert Lockdown Inform Counter Evacuate (ALICE) and Run-Hide-Fight have created differences in recommendations among experts.[209] Because there are no specific standards in protocol supported by state or federal mandates, direction for lockdown actions often vary. It is important that districts consider there may be distinct differences in the protocols established for elementary and secondary schools. Some opponents have objections to school plans that

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[207] Federal Emergency Management Agency, *Guide for Developing High-Quality School Emergency Operations Plans*," 33.

[208] "School Safety," I Love U Guys Foundation, accessed Otober 12, 2017, http://iloveuguys.org/srp.html.

[209] "School Safety Questioned after Shooting," ABC News, December 16, 2012, http://abcnews.go.com/US/school-safety-experts-disagree-lockdown-procedures-newtown-shooting/story?id=17978485.

call for using codes to call for a lockdown because they can be confusing. Another potential policy is to have different levels of lockdown, so hesitation or fear of setting a false alarm does not stop someone from initiating a lockdown.[210] Experts have suggested that teachers keep their classroom door locked during teaching time.[211] This tactic may vary in its acceptance for differences in school cultures; however, if it was presented to the schools by recommendation it would provide the schools with a more solid foundation from which to make their argument in support of such a tactic.

Counterfactual Input: These lockdown procedures described are not part of the recovery process; such procedures are part of the response to an active shooter. However, understanding lockdown procedures will help set the stage for recovery because recovery begins with the organized release of students by law enforcement from their lockdown status. A comprehensive plan in place for recovery would include procedures for lockdown release. In the sample study of Rocori High School, a plan for a structured release was not in place.[212] According to Rocori School Superintendent Scott Staska, an organized evacuation of students was required; however, the process was hastened as there was not an established protocol in place for this procedure. As a result, it took longer than necessary to inform students and faculty that it was safe to come out of their rooms.[213] By incorporating release procedures into the recovery plan, all school faculty will have the knowledge to inform their students of the forthcoming process, consequently reducing anxiety while also expediting the process.

2.   Evacuation

The next phase is the evacuation phase—evacuation begins once the lockdown order has been released. Activation of the recovery operations starts here. Standard practice is for law enforcement to execute or oversee a controlled evacuation of all students once the area is clear. Law enforcement will declare the school a crime scene;

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[210] "9 Tips for More Effective School Lockdowns," *Campus Safety Magazine,* January 8, 2013, http://www.campussafetymagazine.com/safety/9-tips-for-more-effective-school-lockdowns/.

[211] "9 Tips for More Effective School Lockdowns."

[212] Scott Staska, personal communication, August 3, 2017.

[213] Staska.

students and faculty will not be allowed to take items such as purses, backpacks, or other personal items with them when they evacuate.[214] The plan must include the availability of transportation for moving all students, staff, and faculty to a remote location away from the affected school.

A recent national disaster report card from the non-governmental relief organization Save the Children states that for the first time, more than half the states have written into their school emergency plans four minimum standards for a disaster plan developed by a national commission: evacuation/relocation plans, children with special needs plans, family-child reunification plans, and K-12 multiple disaster plans.[215] An article written in the Michigan Daily calls out its state as one of the states cited in the Save the Children report as not meeting the minimum standards.[216] Again, as recommendations but not requirements, they lack the authority to build in the uniformity needed for districts to build highly effective plans throughout the state.[217] The report calls for legislators to set a statewide policy for emergency plans. When schools are left to their own discretion for emergency planning, other factors enter into the mix that will affect continuity between districts such as financial resources and experience in emergency planning development.[218] This creates the silo planning effect, which puts kids at risk.

Counterfactual Input: Without a plan in place, victims have found themselves in the middle of a chaotic evacuation process.[219] Columbine students who escaped the school grounds sought sanctuary in multiple places. Nearby houses, an adjacent park, and the public library were all sources of refuge for victims of the shooting. This also

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[214] Sandra J. Austin, "Lessons Learned from the Shootings at Columbine High School," The Human Side of School Crises: A Public Entity Risk Institute Symposium, February 24–28, 2003, http://www.schoolcounselor.org/asca/media/asca/Crisis/columbine.pdf.

[215] "Report: 21 States Don't Meet Emergency Standards for Kids," *USA Today,* accessed July 15, 2017, https://www.usatoday.com/story/news/nation-now/2014/09/01/disaster-report-card-save-the-children/14739989/.

[216] "State Evacuation Plans," The Daily, November 22, 2013, sec. Opinion, https://search.proquest.com.libproxy.nps.edu/docview/1461264025/abstract/D8A8D82EB295487DPQ/1.

[217] The Daily.

[218] The Daily.

[219] Columbine Review Commission, School Shooters Info, 129.

included Leawood Elementary, which became the final location for reunification. Students attending Leawood were instructed to go to the cafeteria and wait for their parents, while Columbine students were brought to the gymnasium.[220] According to the report from the Columbine Review Commission, the public library closed at 6 pm, forcing those waiting there to be relocated to Leawood Elementary.[221] Eventually the reunification was accomplished but the challenges experienced provide a clear illustration how a preconceived plan for operations to relocate students and parents can reduce frustration and anxiety.

3.   Relocation and Reunification

The relocation and reunification process is generally considered to transpire in one location. In certain circumstances it may be necessary to shuttle students once the custodial authorization is affirmed; the need to facilitate the reunion remotely is determined by geography and infrastructure. Nonetheless, even when the process is entirely conducted in one facility there are many moving parts to consider. These moving parts are separated out as eight subsections, as follows; Sections a through h were all discussed during planning meetings and considered to be important components for a real-world relocation and reunification recovery plan.

a.   *Location and the Building Footprint*

A relocation site suitable to house the entire student body needs to be secured with a memorandum of understanding, if the building is not operated by the district. The building must be carefully considered; the footprint and access and egress are critical components. If this is where parents will pick up their children, there will need to be a large parking lot with police-controlled traffic to get in and out. If the building has large windows, the students should not be allowed to occupy those spaces in front of them. Parents seeing their children will want to immediately remove them; taking this action

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[220] Austin, "Lessons Learned," 2.

[221] "The Report of Governor Bill Owens' Columbine Review Commission."

would disrupt the accountability process.[222] This will create problems as there needs to be a registration process to facilitate a handoff of custody. Parents that can see their child but not remove them will create unneeded anxiety. It is best to have the kids somewhere else in the building and retrieved via "runners" once parents have signed in.

The building should have an area large enough to be able to feed all of the students. If the event that caused the lockdown happens prior to the lunch period, students would not have had a chance to eat. It may be many hours before the students are allowed to go home because police may want to speak with many of them. Also, counselors may want to get an early evaluation of student and faculty mental well-being before they go home. Additionally, in lieu of a Family Assistance Center, the relocation building may need to have an area that is private enough to facilitate death notifications and conversations with family members in regard to body identification. The building should be in close proximity to the school, allowing for separation from the event but still allow for a feeling of connection to those left behind. The plan should call for assistance by law enforcement or the fire department to control the traffic route from the school to the alternate location. Upon arrival to the relocated site, there are many considerations for the school that the plan should include.

b.   *Split Students by Grade*

An early planning consideration for the relocation site is how the students are going to be split up. All schools will approach this differently, as elementary school students have different considerations and needs from their middle-school and high-school classmates. However, the plan needs to identify if the students will be separated by grade, classroom, etc., and the building also needs to be handicap accessible. Consideration must also be provided for students with functional needs, both for transportation and presence at the relocation site.

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[222] "School Safety."

c. Private Rooms for Immediate Aftermath Counseling

The building used for relocation should have privacy rooms available for counseling. Separate rooms have to be available to provide for early notification to families. Also, some witnesses to the event may require early intervention to cope with the unexpected high levels of anxiety commonly seen in an active shooter–type event.

d. Medical Availability for Students with Medication Needs

Another consideration for the plan is medical dispensing. Students evacuating will not be allowed to bring anything with them, this includes purses, backpacks, etc., that may contain medications. The school's plan needs to have annual updates of the students with medical requirements and make arrangements for those medications to be delivered to the relocation site. This can be accomplished with a written contract between the local ambulance provider, hospital, doctor clinic, etc., and the school.

e. Attendance Accountability, School Network Compatibility

It can be assumed schools affected by a spontaneous crisis such as an active-shooter incident are going to be challenged with student accountability. Again, this challenge may vary depending on the age of the students. Regardless, attendance at the relocation site will be required. The plan should include a method for the administrative leaders at the relocation site to access the district's computer network or server. This will aid in assessing attendance, students' schedules, and may also assist with access to information regarding custody concerns.

f. Non–English Speaking Students

There are schools all across the nation that have significant non-English speaking populations. It is essential for every district with non-English speaking populations to have in their plan a process to assure the capability to communicate with non-English speaking students and their families during and following a disaster. It is critical that translated communications are available in verbal and written form.[223] Additionally, contact numbers

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[223] Emergency Response and Crisis Management (ERCM) Technical Assistance Center, "Emergency Management in Nontraditional School Settings," *ERCM Express* 3, no. 5 (2007): 12.

for counselors speaking different languages should also be written into the plan. Some states have platforms from which they can disseminate emergency information to the non-English speaking public. In Minnesota, ECHO (Emergency, Community, Health and Outreach) is a leader in providing a communication model that can reach more than a dozen different-language speaking audiences during a crisis.[224] Messages pertaining to the emergency and recommended actions to be taken by the pubic are available through ECHO partnerships, the medium for messaging is diverse and includes television, radio, and ECHO's website. Additionally, during events, public safety managers distribute a phone number to be used by non-English speakers who may call and receive critical information regarding the emergency in their own language.[225] This is an invaluable resource for schools; if this type of resource is available in the district's area, it should be considered for inclusion into the communications piece of the EOP.

g. *Relocation Site Security—Media and Parent Surge*

When schools consider a building for the relocation of all students, staff, and faculty, among many of the concerns must be security. When a crisis happens such as a school shooting, experience has shown that the media response to the location will be swift and will soon become overwhelming. The plan must illustrate procedures for security of the building and controlled access to the parking areas. No media should be allowed general access to the relocation site. A primary and alternate site for media should be designated in the plan.[226] Students and faculty should be advised to not speak with the media directly.

Security will also be needed to enable the parent/student reunification process; desperate parents seeking answers about their children's safety will seek the path of least resistance to reunite themselves with their child.[227] As outlined in a sound crisis plan,

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[224] "About ECHO," ECHO Minnesota," accessed July 16, 2017, http://www.echominnesota.org/about.

[225] "About ECHO."

[226] United States Department of Education, *Practical Information on Crisis Planning* (Washington, DC: United States Department of Education, November 9, 2016), 6–23, https://www2.ed.gov/admins/lead/safety/emergencyplan/crisisplanning.pdf.

[227] United States Department of Education, *Practical Information on Crisis Planning,* 6–33.

proper and sufficient security measures put in place will help control the urge for parents to circumvent planning protocols in their frantic effort to find their child. A good security plan will help bring structure to what will be an unavoidably intense and often chaotic process. Finally, a strong security presence will help ensure the students that they are safe from any more threats.

h.   *Parent/Guardian Custodial Consideration and Confirmation*

In any crisis event where children and parents are separated, it will always be one of public safety's top priorities to reunite them as soon as possible.[228] Regardless of the crisis, incident officials must be certain that the person given custody is permitted to accept it and not just well-intended family, a friend, or an acquaintance. There are already in-use processes available for reuniting parents with their children. Personal student information cards can be pre-drafted ahead of time identifying custodial arrangements and all other pertinent information.[229] This type of process should be mandatory so the school can be certain each child is accounted for and handed off to the designated individual with custodial rights. The cards can also provide a record documenting that the student was there during the event, and possibly more details such as non-family members authorized to take custody of the child.[230] If the school has the means to safeguard the student's medical information, and it satisfies Health Insurance Portability and Accountability Act rules, the cards could also provide important crisis information such as allergies or current medications.[231]

Counterfactual Input: Some parents of Sandy Hook children also endured reunification anxiety that could have been reduced by implementing a plan to bring parents and students together and provide them critical information. As described in a blog by a parent of one of the fatally shot children of Sandy Hook, there was no order to

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[228] "Post Disaster Reunification of Children—A Nationwide Approach," Federal Emergency Management Agency, November 2013, https://www.fema.gov/media-library/assets/documents/85559.

[229] United States Department of Education, *Practical Information on Crisis Planning,* 6–32

[230] United States Department of Education, *Practical Information on Crisis Planning,*

[231] "Summary of the HIPAA Privacy Rule," Office for Civil Rights, May 7, 2008, https://www.hhs.gov/hipaa/for-professionals/privacy/laws-regulations/index.html.

the reunification process; in fact, some people were picking up other people's children, which created more confusion.[232] Plans, processes, and templates are available to assist in the development of reunification protocols, which will provide for an organized reunion of family members.[233]

4.   Ongoing Counseling and Therapy

Research has revealed that for many students, teachers, responders, and the community, the emotional recovery from an active-shooter incident will be the most challenging of the recovery process. Witnessing a violent event such as an active-shooter incident can be emotionally traumatic. Experiencing such a violent event in what was previously perceived to be a safe and comfortable environment such as a school can be the source of long-term emotional struggles, which could culminate in post-traumatic stress disorder (PTSD). In the wake of the Virginia Tech shooting in April 2007, the school counseling center treated more than 1,000 individuals in the first week; these included students, faculty, and university staff.[234] A survey was conducted at Virginia Tech at three months post-incident; "at least 5 percent self-reported significant symptoms of PTSD and an additional 21 percent reported symptoms consistent with elevated risk for PTSD."[235]

History has demonstrated that in many disasters, close examination of human behavior will show the best and worst of human intent. News reports following disasters often show civilian would-be rescuers, or conversely, citizens looting businesses, demonstrating the best and worst of human actions. In the mental health and behavioral field, it is common to see mental health practitioners step forward and offer their services to help victims, responders, and their community.[236] It should be understood and considered by school district personnel when developing this portion of their crisis plan that there is a distinction between social behavior counseling and psychoanalysis from

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[232] Parker, "The Need for Reunification Protocols."

[233] Federal Emergency Management Agency, "Post Disaster Reunification of Children."

[234] Flynn and Heitzmann, "Tragedy at Virginia Tech: Trauma and Its Aftermath," 483

[235] Flynn and Heitzmann, 484

[236] "Final Report of the Sandy Hook Advisory Commission," 200

disaster-specific specialized counseling such as "psychological first aid."[237] Mental health professionals agree that most commonly used techniques for counseling therapy are not an effective method for counseling those in the immediate aftermath of a major crisis or terrorist type event.[238] School districts are best served by including in their planning disaster volunteer agencies such as the Red Cross. The American Red Cross offers a training program specific to crisis response counseling.[239]

As witnessed in Newtown Connecticut following the events at Sandy Hook Elementary School, mental health behavior counselors will travel from outside the area to offer their services.[240] Some will have the best intentions, others may not. The crisis plan should have procedures in place to credential all behavioral counselor professionals to protect the victims and the community from opportunists. The plan can identify pre-determined relationships with therapists or organizations that supply therapists or psychologists. The Sandy Hook report asserts "the plan should clarify a range of roles and responsibilities, including the management of the school behavioral health response, provision of security, and operation of a family assistance center and a community assistance center."[241]

At the time of the Sandy Hook shooting, the citizens of Chardon Ohio and its high school community were nine months into their recovery from an active-shooter event. A 2007 GAO report had identified the state of Ohio as requiring all districts to have emergency management plans.[242] The facts of this case reinforce the assertion of this paper's premise that more stringent requirements for planning are necessary. In Chardon, a recovery plan was not in effect at the time of the shooting.[243] In order to cope with the demand for recovery resources, Chardon had to reach out for help. Without a process in

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[237] Tanielian and Stein, "Understanding and Preparing for the Psychological Consequences of Terrorism," 697

[238] Tanielian and Stein, 697

[239] Tanielian and Stein.

[240] "Final Report of the Sandy Hook Advisory Commission," 200

[241] "Final Report of the Sandy Hook Advisory Commission."

[242] Ashby, *Emergency Management,* 6

[243] Steele, *Trauma in Schools and Communities,* 122

place to vet incoming specialists, some of those offering to help were of less value to the mission.[244] Fortunately, for those most affected, resources and services were provided through the United Way, including a strategic planning committee and ongoing wellness programs.[245] The recovery process will look different to everyone. In Chardon, they conducted memorials at the one- and two-year anniversaries of the event.[246] Understandably some did not feel the need to participate; however, others did. The school recovery plan has to include the ongoing mental health recovery process and all its components; the process does not end because the students have returned to class.

5.   Funerals and Memorials

A comprehensive school recovery plan will include policies that address funerals and memorials following a crisis. In a high-profile event such as an active-shooter incident, funerals for the victims often become an important healing milestone for the entire community: students, faculty, staff, district personnel, and community residents attend the services and share their grief fostered by a common thread. Schools should acknowledge in their plan that attendance by staff and administrators will send a message of support. Every crisis is different, so schools should identify liaisons to communicate preferences of the victim's families.

In high-profile active-shooter events such as Columbine, the school principal and school administrators were in attendance at the funerals of students and faculty.[247] School recovery plans should identify a team of individuals available that can represent the schools at all funerals and memorials. The plan may suggest at a minimum that at least one school representative will attend every funeral or memorial. At a minimum, the plan may suggest an ad-hoc committee be assembled post-incident to address the specific

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[244] Steele.

[245] Steele.

[246] Steele, 133

[247] Evelyn Nieves, "Terror in Littleton: The Mourning; Long Week of Funerals Finally, Comes to an End," *New York Times*, April 30, 1999, https://www.nytimes.com/1999/04/30/us/terror-in-littleton-the-mourning-long-week-of-funerals-finally-comes-to-an-end.html.

needs as determined by the incident and the individuals involved. If it is addressed in the plan, it stands less of a chance of being overlooked during a busy recovery period.

Memorials, like funerals, are an important piece to emotional health following a tragic event. They can serve many purposes but also can be controversial. Because of the very nature of life, many students in the midst of an active-shooter crisis recovery will be experiencing for the first time the death of someone they know.[248] Funerals can be very effective in that children who attend will see others expressing their grief and anxiety in similar ways, thus making them feel normal about their thoughts, behaviors, and questions.[249] By having school personnel in attendance, they can help guide students through the grieving process by virtue of their experience, leadership, and mentorship. However, as mentioned earlier, holding or establishing memorials can be controversial, some may see memorials as reliving the incident.

Navigating through the process of determining whether or not there should be a memorial will be made easier if the school recovery plan illustrates a policy and/or identifies a memorial committee. In general, memorials will take form in one of three ways: permanent, semi-permanent, or temporary:

- Permanent—artwork, plaques, or stone markers

- Semi-permanent—planting a tree or garden, awarding a scholarship, or conducting an annual fundraiser

- Temporary—website, message banners, or conducting a candlelight vigil[250]

Controversy ensued the week after the Columbine shootings when a good Samaritan erected 15 hand-made crosses in Clement Park, about two miles from the school. Originally, the memorial display consisting of the eight-foot tall crosses contained two crosses that bared the names of the killers. A father of one of the victims

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[248] "Memorials: Special Considerations When Memorializing an Incident," National Association of School Psychologists, 2011, https://www.nasponline.org/x38589.xml.

[249] "Memorials: Special Considerations When Memorializing an Incident."

[250] "Memorials: Special Considerations When Memorializing an Incident."

removed the two controversial crosses.[251] In the end, a final permanent memorial was designed and built. Sometimes seemingly innocuous gestures such as a temporary memorial plaque or hallway banner memorializing a victim(s) may present a challenge to those suffering emotional pain from the event. Seeing the memorial conjures up images and forces them to relive the events. For these reasons it serves the district best to appoint a memorial committee and provide for open discussion with survivors and their families about what their needs are and proceed accordingly with memorials.

6.   Faculty and Staff Reduction

History has shown that dramatic, high-anxiety events such as active-shooter events have long-lasting mental health effects. It is reasonable and practical for school districts to expect a 70 to 80 percent turnover rate for district and school staff and faculty in the first three to five years following an active-shooter event.[252] The effects of those involved at Sandy Hook Elementary were right in line with the national trend. Following the events there, multiple teachers transferred to other schools or retired.[253] At Columbine High School, 60 percent had left in the first three years following the incident. As a comparison, the entire district had only seen an 11 percent turnover in teacher positions in the two years following the incident.[254] During the recovery process for Santana High School, nine staff members requested time off with the minimum request for time being four weeks. This occurred during the first year following the shooting.[255]

In some cases, it is the location itself that continues to be a reminder to the individual about the horrific events of the past. Survivors of crisis incidents sometimes find the physical surroundings of the location to be too much, creating a constant reminder of the tragedies they witnessed. At Columbine, psychologists were consulted to

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[251] Peggy Lowe and Andrew Guy Jr., "Columbine—Tragedy and Recovery," *Denver Post,* May 5, 1999, http://extras.denverpost.com/news/shot0505e.htm.

[252] Steele, *Trauma in Schools and Communities,* 95

[253] Kovner, "Newtown Teachers Went Back Too Soon, Union Head Says."

[254] "Columbine Staff Leaving in Droves," *Deseret News,* August 19, 2002, http://www.deseretnews.com/article/932033/Columbine-staff-leaving-in-droves.html.

[255] Gerler, *Handbook of School Violence*, 341

bring about physical changes within the school—both dramatic and subtle—to help foster a healthier mental health recovery.[256] It is commonly understood that sights, sounds, and smells can be powerful memory triggers; in some cases, these senses become reminders of a past horrific event. Because association of these tragic events can resurface without warning, schools and districts have seen reductions in faculty, sometimes years following the event.[257] An effective school recovery plan would not have to design a solution to this potential happening; instead, it should identify it as a likely certainty, thus converting what may otherwise become an unforeseen exodus of staff into an expected reality.

7. Suicide Awareness and Prevention

According to the Columbine Governor's Report, the commission writing the report was told teen suicides had increased in Jefferson County (the county where Columbine High School is located) following the high school shooting.[258] Research for this thesis was unsuccessful in substantiating a claim that suicide rates increase following an active-shooter event; however, an article written by the National Center for PTSD asserts that there is a link between post-traumatic stress disorder and suicidal thoughts or behaviors.[259] Every student's experience from an active-shooter incident will vary in its degree of exposure to the trauma. Not every student or staff member will develop PTSD or even show symptoms of the disorder; however, other social irregularities may surface such as depression or social isolation.

It is essential that emergency recovery plans identify this and suggest measures to monitor the students and faculty for signs or symptoms of depression. Processes can be put in place such as anonymous surveys or group therapy sessions where open discussion can be conducted and evaluated by mental health professionals. A hotline can be recommended by the plan to provide 24-hour response to those searching for help or answers.

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[256] Karen Auge, "Columbine: Memories at Every Turn," *Denver Post* (blog), April 18, 2009, http://www.denverpost.com/2009/04/18/columbine-memories-at-every-turn/.

[257] "Columbine Staff Leaving in Droves."

[258] School Shooters Info, 136, note 277.

[259] "Suicide and PTSD - PTSD: National Center for PTSD," General Information, accessed July 30, 2017, https://www.ptsd.va.gov/public/problems/ptsd-suicide.asp.

8.   Donation Management

As is the case in many types of disasters, knowledge of the events is broadcast across the nation, sometimes the world. Many members of the public feel the need to help in some small way. Some of them will accomplish this by sending donations, sometimes in the form of money, but it may also be in the form of personal items. These could range from a simple card, or a signed hood from a NASCAR race car. In the case of Sandy Hook, it took less than a week for those responsible for donations to become grossly overwhelmed by countless items sent from all over the world.

Figure 1.   Donations Received at Sandy Hook.[260]

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[260] Source (top): Kix, "65,000 Teddy Bears for Newtown, and One Man to Sort the World's Grief"; (bottom): Alyssa Zauderer, "Sandy Hook Donations Given Out to Newtown Families," NBC, accessed July 31, 2017, http://www.nbcconnecticut.com/news/local/Sandy-Hook-Donations-Given-Out-to-Newtown-Families-192856001.html.

Blindsided by the kindness, school officials had no plan for coping with the enormous quantity of gifts. Just three business days following the tragedy, six delivery trucks showed up packed with teddy bears, banners, letters, and more.[261]

In an urgent effort, the town's tax assessor, tasked with managing the donations, quickly secured a storage space with over 80,000 square feet. Within a week, that area was full. The post office was so inundated it had to reroute delivers to one of several regional hubs.[262] This type of generosity is not uncommon following a disaster. Following the active shooting event that took place at Virginia Tech, the school received over 100,000 items, which included cards, letters, artwork, and a painted memorial NASCAR hood.[263] Either way, if the school's plan does not recognize the possibility of thousands of donations, they stand the potential to become quickly overwhelmed. Schools will be best served to have a plan that identifies volunteers willing to address donation management on the school's behalf.

B.   SUMMARY

To write the recovery process into a planning format requires breaking it down into its separate parts. When doing this, it may be easier to absorb the entire mission conceptually by looking at it as a linear process, a sort of timeline of events that are expected to occur based on previous events. Examining the process piece by piece elucidates the resource demand for personnel, should all the functions to recovery need to be addressed. A robust recovery plan will recognize that the phases of recovery require many people. Planning for three-deep redundancy is a good planning principle. Picturing the recovery process as a linear timeline may help keep it manageable in terms of its scope.

The next chapter describes several more planning concepts common to emergency management; if incorporated routinely they will serve to support a stronger preparedness program. To support a school's investment in developing a plan for an

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[261] Kix,"65,000 Teddy Bears for Newtown, and One Man to Sort the World's Grief."

[262] Kix.

[263] Purcell, "More Than Flowers Left Behind," 241

active-shooter incident, the next chapter provides several examples of disasters from threats unrelated to active shooter. The intent of including disaster details that are off-topic is to demonstrate that many of the preparedness procedures discussed in this thesis transcend to other disaster events.

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V. SUPPORTING ELEMENTS FOR A STRONGER PROGRAM

The recovery process as described in Chapter IV is the sum of many phases that guide it to its inevitable end. Its success, however, can be influenced by supporting elements taken from standard emergency management principles. Implementing the following planning and preparedness components contributes to a stronger emergency management program by increasing knowledge and familiarity with the plan. Incidentally, these elements and the model for the recovery element that follows, build the capacity for responding and recovering from numerous disaster threats.

A. TRAININGS AND EXERCISES

Dwight D. Eisenhower coined the phrase "plans are worthless but planning is everything."[264] A takeaway from this quote is that plans have a tendency to be built and then set aside to be neglected indefinitely. Another takeaway is that the relationships developed during the planning process are more important than the plan itself. Many experienced crisis survivors might agree. There is value in knowing who your partners will be when you have to put a plan into practice. A common vernacular to hear and practice in emergency management is that it is best to exchange business cards during the planning process than to do so on the front lines of a disaster. It makes sense to want to go into battle with someone you know. This is why crisis trainings and exercises are so important.

Some states, including Minnesota, by statute require each school district to have five fire drills every school year.[265] The Minnesota statute also requires each district to adopt a crisis management policy that must be developed by committee of no less than 11 disciplines, and requires five lockdown drills.[266] Unfortunately, other than fire and

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[264] Woolley, John, and Gerhard Peters, "Dwight D. Eisenhower: Remarks at the National Defense Executive Reserve Conference," The American Presidency Project, accessed October 9, 2017, http://www.presidency.ucsb.edu/ws/?pid=10951.

[265] Fire Drill in School; Doors and Exits, Minnesota Statute 299F.30, accessed October 7, 2017, https://www.revisor.mn.gov/statutes/?id=299f.30.

[266] Crisis Management Policy.

lockdown drills, nowhere in the Minnesota statute does it require schools to drill, train, or exercise elements of the crisis plan. Training and exercising fire drills and lockdown drills are effective because they reinforce the understanding of actions delineated in the crisis plan. The actions taken by students and staff become routine by establishing a participant's pattern for response.[267] The same principle applies to the reunification of parents and students; practice of this process conditions participants for what to expect in a real event. Even a clearly illustrated plan would be better executed if the process has been practiced by participants from all sides.

Training and exercising a school's emergency plan deserves at least as much attention as applied to fire drills and fire safety. A 2007 report reveals an estimated 27 percent of districts with crisis plans in place have not trained or exercised aspects of their plan with their local public safety responders.[268] Another report by the same agency conducted nine years later in 2016 reveals nine states require school districts to exercise their active-shooter plans while 35 require fire drills. Only 12 states require individual schools to conduct an exercise of their active-shooter plan.[269] Schools may be more susceptible to complacency in terms of training and exercising because the inherent turnover of parents and students from year to year makes the thought of continued engagement seem daunting. In reality, the turnover is exactly the reason for annual training and exercises. Every year ushers in new parents and students unfamiliar with the emergency procedures enacted when an emergency plan is activated because of a crisis. It seems unreasonable to insist on continued fire drills but not require an exercise of the recovery plan. Research into the number of fatalities resulting from fires in the last two decades compared to fatalities from active-shooter incidents may reveal the need to shift priorities in preparedness.

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[267] Lucien G. Canton, "Why Are Exercises So Important?," Emergency Management, October 2, 2014, http://www.govtech.com/em/emergency-blogs/managing-crisis/Why-Are-Exercises-So-Important.html.

[268] Ashby, *Emergency Management,* 16

[269] U. S. Government Accountability Office, *Emergency Management,* 24.

B. AFTER ACTION REPORT—THE KEY TO LESSONS LEARNED

The value of AARs is recognized by their inclusion as a requirement for grant compliance. FEMA disperses billions of dollars through the Homeland Security Grant Program.[270] One of the grants in the program is the Emergency Management Performance Grant program (EMPG). The EMPG program is designed to help states expand their local, territorial, and tribal governments in their preparation for all-hazards planning.[271] As a requirement of the grant, participants that receive funding must complete three exercises annually.[272] The exercises are expected to be progressive, moving from the basic drill or workshop to a full-scale exercise. To remain in compliance, all jurisdictions must complete AARs for every exercise; the AAR tracks the objectives outlined by the exercise planner.[273] Exercise evaluators record the successes and failures in the AAR. The idea is that by recording the events of the exercise, the AAR provides the owners a documented reference of actions and protocols pertaining to their successes. The documented failures become areas for improvement to be tested at the next progressive exercise.

The AAR is an important planning tool that should not be reserved only for checking the box for grant compliance. An AAR can also function as a permanent record for real-life events, capturing event details as they occur and then storing the information until the implementation of improvements can be applied. At such time, comparisons can be made between past and present, illustrating the advances made in the development of preparedness plans and the ability to carry them into action. An AAR requirement for

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[270] Shawn Reese, "Department of Homeland Security Grants: A Summary and Issues" CRS Report No. R44669 (Washington, DC: Congressional Research Service, October 28, 2016), https://fas.org/sgp/crs/homesec/R44669.pdf, 13–14.

[271] "Fiscal Year (FY) 2017 Emergency Management Performance Grants (EMPG) Program Frequently Asked Questions (FAQs)" Federal Emergency Management Agency, accessed October 9, 2017, https://www.fema.gov/media-library-data/1496322792845-14e183f5162625ef399f7b09aa0630ff/FY2017_EMPG_FAQ_05302017_FINAL_508.pdf.

[272] "Emergency Management Performance Grant Program Multi-Year Programmatic Guidance," Federal Emergency Management Agency, May 25, 2016, https://www.fema.gov/media-library/assets/documents/105618, 21.

[273] "Emergency Management Performance Grant Program," Federal Emergency Management Agency, accessed August 14, 2017, https://www.fema.gov/emergency-management-performance-grant-program.

schools in their trainings and exercises as well as real-life events should become a staple in their emergency management protocols.

C.   FAMILY ASSISTANCE CENTER

The Family Assistance Center (FAC) is a structured operation designed for response to mass fatality incidents. The intention of the model (created by the National Transportation Safety Board) is to provide specific services to the families of the victims involved in a fatal disaster.[274] As learned from many previous fatality incidents, families of victims need immediate and accurate information without pressure from the media. The FAC is set up to create a safe place for families where they have direct contact with public-safety responders who can provide timely and accurate information regarding their loved ones. In emergency management circles, it is intentionally set up using the incident command system and it has the capacity to receive current information directly from the disaster scene via a liaison with incident command. Because of the emotional impact of the information families receive during the early stages of a disaster, the FAC model is instrumental to the immediate and long-term emotional and mental wellness of family members.

The FAC model was born out of the aviation industry, where families of victims involved in airline crashes needed many types of support structures while news of their loved ones was being determined.[275] In large-scale disasters, it is possible for families to wait hours or even days for confirmation of their loved ones' fate. During this time, counseling support is available ranging from county social workers to the families' own clergy. Progress on victim recovery is shared with the family, including information that may not be made public. Depending on the size of the event and number of fatalities, families of victims may receive death notifications at the FAC.

The FAC model is a necessary consideration for school emergency planning. It is too big and complex to expect a district to have the resources or personnel to manage

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[274] "Family Assistance Operations: Planning and Policy," National Transportation Safety Board, accessed October 9, 2017, https://www.ntsb.gov/tda/ops/Pages/default.aspx.

[275] National Transportation Safety Board.

such an operation; however, it would be prudent for districts to identify the need in the plan and work with their local emergency manager on a plan to fill this need if it is ever required. Some local emergency managers have partnerships in place that can help set up an FAC, such as county human services departments, medical reserve corps, and the Red Cross. As a part of the school plan, identifying possible FAC locations would be a good first step to offering this capability. They should not be considered with the same locations used to facilitate the reunification of students evacuated with their parents.

D.   RECOVERY APPLIED TO ALL HAZARDS

The focus of this thesis is on recovery planning for active-shooter events in K-12 schools. The recovery process that is supported by the concepts and principles identified in these pages is applicable to recovery from a host of other types of disasters. Schools that are prepared for active-shooter recovery have the capacity to leverage the phases of recovery already in place. In a sense, having a recovery plan for an active-shooter event is a force multiplier for planning, because by preparing for the worst, they have prepared for the rest. The following examples demonstrate the value of recovery plan guidance in non–active-shooter disasters.

1.   Moore, Oklahoma, May 20, 2013

The city of Moore, Oklahoma, was devastated by an ESF-5 tornado in May 2013. The storm caused approximately $2 billion in damage and killed 24 people.[276] Included in the destruction was damage to Briarwood Elementary School and the complete devastation of Plaza Tower Elementary School, where seven children died in the building collapse.[277] In 2003, the state passed a law requiring all public schools to have an emergency management plan that specifically addressed tornados and severe weather. The law, House Bill 1512, further states that districts are authorized to make additions to buildings to provide protection to all occupants against severe weather

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[276] Ben Brumfield, "The Moore, Oklahoma, Tornado a Year after It Killed 24 People," CNN, May 20, 2014, http://www.cnn.com/2014/05/20/us/oklahoma-moore-tornado-anniversary/index.html.

[277] CNN.

threats.[278] By all research accounts, Moore School District did have a crisis plan; however, a copy of the plan was unavailable in the open-source arena.

When the district received the weather warning that day, the plan was put into action.[279] At the time, the only action available was to shelter in place, and that was the action taken at both schools. Following the disaster, parents of the students at Plaza Tower were sent to a church to reunify with their children. Again, research was unable to ascertain whether that procedure was planned. The Moore School District had to relocate all students and faculty for both elementary schools for the next school year. Briarwood Elementary students were assigned to Emmaus Baptist Church while Plaza Tower classes were held at Central Junior High.[280] The Moore example shows that regardless of the crisis, emergency planning considerations such as long-term relocation, parent/student reunification, and mental health recovery are critical components to a recovery.

In Moore, the mental health aspect to the tornado disaster did not seem to reach the same level of attention as the active-shooter disasters reviewed in Chapter II. Moore's school superintendent stated that with the assistance of grant funding, he expected to see two to four counselors at each school for the year beginning after the tornado struck.[281] In several other sample studies, schools sought to have dozens of counselors on hand, and in at least one case, they were set to have one in every classroom when school resumed.[282] Counselors were also requested in Moore shortly after the storm; ten days

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[278] Sandy Garrett, "Safe Schools Guide: Selected Strategies and Resources," Oklahoma State Department of Education, 2005, http://sde.ok.gov/sde/sites/ok.gov.sde/files/Prev-SafeSchlGuide.pdf, 8.

[279] Mary Beth Marklein, "Safety Experts Say Okla. School Was Ready for Tornado," Oklahoma State Department of Education, May 22, 2013, https://www.usatoday.com/story/news/2013/05/22/safety-experts-oklahoma-school-tornado-shelter-preparedness/2349761/.

[280] Carrie Coppernoll, "Moore Public Schools Announces Plans for 2013–14 School Year," News OK, July 1, 2013, http://newsok.com/article/3858054.

[281] "Counselors on Hand for Moore Students Dealing with Mental Trauma," News On 6, August 16, 2013, http://www.newson6.com/story/23161041/counselors-on-hand-for-moore-students-dealing-with-mental-trauma.

[282] "Students Return to Santana High Two Days after Deadly Attack."

following the disaster students, parents, and staff were given the opportunity to meet with counselors at one of the remaining schools.[283]

2.   Livingston Parish, Louisiana, August, 2016

The second week of August 2016 brought over two feet of rainfall to the southern and southeaster portions of Louisiana. In all, more than 25 inches of rain fell in Livingston Parish, just east of Baton Rouge. More than a dozen lives were lost and tens of thousands were evacuated.[284] The flooding caused 22 school districts to close and displaced 4,000 faculty and staff from their homes. Livingston Parish School Superintendent Rick Wentzel reported his district had to close one-third of its schools, eight of them having suffered serious damage.[285]

Research on Livingston Parish Schools produced a document dated October 2014, nearly two years prior to the extreme rain events; the two-page document specifically references a need for emergency preparedness actions. It requires every school to have a crisis management and response plan that specifically addresses active shooters but also will apply to any type of emergency threat or hazard. It also calls for the inclusion of the "whole community" model as offered by FEMA, which proposes the development of partnerships among all agencies and non-governmental organizations for a disaster response.[286] The document also requires principals to incorporate monthly drills into their preparedness activities and to write follow-up reports for each drill performed and to share that report with faculty. Livingston Parish Public Schools also has an emergency planning location for parents of students on its website. The information on the website

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[283] "Counselors Available for Families, Staff of Moore Schools Hit By Tornado," News 9, May 29, 2013, http://www.news9.com/story/22451181/counselors-available-for-families-staff-of-moore-schools-hit-by-tornado.

[284] Tom Di Liberto, "August 2016 Extreme Rain and Floods along the Gulf Coast," National Oceanic Atmospheric Administration, August 19, 2016, https://www.climate.gov/news-features/event-tracker/august-2016-extreme-rain-and-floods-along-gulf-coast.

[285] "After the Floods, Louisiana Schools Struggling with Displaced Teachers," *Washington Post*, August 25, 2016, http://ilearn.woodfordschools.org/mcalvert/wp-content/uploads/2017/02/FloodArticleFormC.pdf.

[286] "Emergency/Crisis Management," Livingston Parish School Board, October 2, 2014, http://www.lpsb.org/UserFiles/Servers/Server_546/File/Policy/EBBC%20Emergency%20Crisis%20Management.pdf.

advises parents what emergency plans consist of, what actions the schools will take throughout the year to remain prepared, and advice for parental actions for when disaster strikes.[287]

By all accounts, given the extent of the damage faced by the southern portion of the state, it appears that neither Livingston Parish nor any other parishes could have prepared for what happened. The National Oceanic Atmospheric Administration website dated August 19, 2016, described this disaster as a 1-in-500-year event.[288] Livingston Parish required each school to have several relocation sites identified; however, with the extent of damage this type of disaster brings, even the redundancy built into the best plans was rendered ineffective. Although they were not attending the school they had registered for earlier in the summer, students in Livingston Parish were back in school within four weeks of the disaster.

E.   CONCLUSION

All of the information schools need to be prepared, to protect themselves, and to recover is available and in some cases, already in practice, albeit fragmented in many cases. Sound preparedness practices such as full-scale exercises are in large part not being conducted in the school environment.[289] States need to harness this information and put it into one package that is applicable to school preparedness planning. Proficiency in the practice of using AARs could simply be developed by requiring them for fire drills and lockdown drills. With exercises as a requirement of the plan, AARs would assist in the school's quest to prepare. Other important planning concepts such as an FAC can be leveraged by building relationships with local emergency managers and capitalizing on plans already in place.

Holistic recovery planning adds many layers to the recovery concept. Whether it is imbedded in the emergency basic plan, a part of a recovery annex, or stand-alone

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[287] "Emergency Planning: A Guide for Parents," Livingston Parish Public Schools, October 2, 2014, http://www.lpsb.org/parents.

[288] Di Liberto, "August 2016 Extreme Rain and Floods along the Gulf Coast," 20.

[289] U. S. Government Accountability Office, *Emergency Management,* 36.

requirements, a sound recovery plan depends on factors considered outside the standard phases of recovery. Preparations such as training and exercising current plans, or developing separate planning annexes such as family assistance centers or donation management, raises a school's readiness for all-hazards recovery. The time and resources invested to develop a recovery plan for active shooters can easily be leveraged for other threats against schools such as floods, tornados, or fire. The benefits of having a recovery process in place are the core of this thesis, the action needed is implementation.

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VI. RECOMMENDATIONS AND CONCLUSION

It is common knowledge in public safety to expect chaos at the onset of an emergency incident. Medical responders often refer to the golden hour as an important window of time where emergency actions applied during that time may be the difference between life and death. Such urgency creates tense moments and oftentimes high levels of anxiety. Experience in emergency management disaster circumstances reflects a similar phenomenon. The first hour is chaotic, and information is sketchy at best or acutely inaccurate at worst. In those instances where a full resolution is far past a one-hour window, having an emergency operations plan to activate can usher in a sense of control to the scene.

When we look to active-shooter incidents at K-12 schools, it is now understood through the research that the incident will not be over in that one-hour period. The research for this thesis reveals concerns in the confidence level that an emergency response plan designed and practiced by the school is available and ready for activation. In truth, the real preparedness begins long before the plan is activated. Research has made it clear, schools have the guidance available to them to assist in the development of emergency plans with a focused concentration on all phases of recovery. Who will take the first step in making K-12 recovery planning a top priority?

A. RESEARCH QUESTIONS—RESTATED

1. What are the most important elements of active-shooter recovery plans for K-12 schools?

2. What can we learn from previous K-12 active-shooter events to inform measures of effectiveness in recovery?

Examination of past active-shooter events shows that the recovery process is most often measured in years; this fact makes it difficult to identify priorities for planning content. The need is for all schools to develop a comprehensive plan that includes all elements contributing to a return to normalcy, or as close to it as possible. The objective for this thesis was to identify important elements that the research identified, but it is

critical to understand that an effective plan must not contain only the elements identified as "most important."

A common thread in preparedness planning is to prepare for the worst and hope for the best. Many would probably agree a mass murder occurring at a school is among the worst experiences for anyone. The schoolhouse atmosphere has long been perceived as a sanctuary for children, a safe haven where children are afforded protection by teachers and principals who have their best interest in mind.[290] This is the reason why the mental health effects of this type of crisis is one of the most important elements to an active-shooter recovery plan. When the perception of this safe environment is disrupted by a gruesome scene of violence, there is no mechanism in place for coping with it. This is also true for the community's first responders, who are accustomed to witnessing victims of physical trauma.

The sampling research conducted repeatedly identified the need for attention to emotional counseling for all parties involved in an active-shooter event, whether they are directly involved such as responding law enforcement, or indirectly involved such as a community resident. As such, school recovery planning must include procedures for procuring mental health counseling resources. This will be best accomplished by addressing local experts in this area in advance and including them in the plan through pre-drafted contracts or agreements. The school is also better served by this arrangement because the recovery process can take months or years; having local counselors involved means they will be around long term, guiding the victims' emotional recovery until its conclusion. Communities of high-profile mass casualty events have had therapists travel long distances to help; this can be of value to help fill short-term needs but it is unsustainable for the long term. It is also important to highlight the difference between immediate crisis counseling and long-term therapy. There are specific credentials for professionals with the capability to provide immediate disaster counseling. Identifying this need in the school's plan will also serve to secure this resource locally, when it is certain to be in high demand.

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[290] "HSEM Comprehensive School Safety Guide," 6.

It is common practice in emergency management to conduct trainings, drills, and exercises in conjunction with emergency management partners such as police, fire, public works, etc. In the majority of these instances, communication issues are obstacles to success. An important element to every active-shooter recovery plan for K-12 schools is the attention brought to the many facets of communication. Active-shooter events are ripe for national news attention, sometimes international attention. Schools must have a plan for managing the barrage of media focus, lest they become overwhelmed and paint a public picture for themselves of mismanagement and lack of organization. In addition to accommodating the media, communication with the community, parents of students, and the faculty will be equally important. The district must have a plan for disseminating accurate information as well as the ability to dispel the flood of misinformation that occurs in every disaster. Facilitating a relationship with the media can also work in the schools' favor by using them as source for disseminating accurate information. The need to handle the communication piece in an orderly manner cannot be overemphasized. This piece to the disaster will be long remembered as successful or something that exacerbated the problem.

1.   Recommendations—Gleaned from Research and Experience

The bottom line for managing an active-shooter incident is readiness. The degree of detail put into the plan and the attention given to the plan once it is written will be proportional to the operational success of the recovery process.

1.   Develop a plan and update it annually. Every school must update the plan each summer. These adjustments will include staff changes and agreements with outside public and private organizations (such as food vendors for relocation sites). The plan must be comprehensive and incorporate all items identified in Chapter IV.

2.   Establishment of crisis teams. Every district should develop a crisis team that designates duties assigned to district personnel. Each task needs to be designated three-people deep to assure representation when duty calls. Areas of detail are to include funerals, memorials, donation management, social media, news media, reunification management, transportation, long-term planning, and oversight for mental health counseling.

3.   Districts should implement an exercise schedule for each school that puts emphasis on some part of the plan. Each school can focus on a different

portion and begin a cycle of rotation. This leverages the ability to apply attention to as much of the plan as possible.

4.   Districts shall employ a full-time emergency coordinator. This person could also provide other services such as threat assessments and security. Where applicable, designated district emergency coordinators must be certified in emergency management principles.

5.   School districts will assign school resource officers at every middle school and high school. Resource officers are more than just a deterrent. They are a school's first responder, student mentor, and an internal liaison with incident command.

6.   All school personnel must receive basic level training in the incident command system; supervisory staff are to receive training up to the ICS 200 level

2.   Implementation

Many school districts across the country are operating on tight budgets. The recommendations found here require the addition of resources, and resources cost money. It is imperative that states recognize the consequences of school plans that are incomplete or outdated and secure a means to prevent that possibility. The federal government must assist in the development and subsequently require minimum crisis planning criteria for all schools nationwide to include in their crisis plan.

B.   FURTHER RESEARCH

Several important aspects to recovery planning were not addressed during this research but should be considered when developing a recovery plan. First, the consideration for students with functional needs was not apparent in the reviews conducted for the incidents included in the sample research. As it is in all emergency planning, consideration for special needs population presents unique challenges with communication, transportation, sheltering, and other areas. Schools with students having special needs must consider what attention toward planning will be required for these students during times of crisis. For example, is there transportation available for wheelchair-bound students to relocate to a designated evacuation site? Is the relocation

site ADA compliant? In 2007, only 28 percent of districts with emergency management plans spelled out specific measures to be taken for students with functional needs.[291]

Second, it is common for some schools to have non-English speaking populations. Students with English as a second language must be considered in all crisis planning.[292] These students are also more likely to have non-English speaking parents, which will impact their understanding of the district's instructions unless countermeasures are taken to ensure public messaging is meant for all audiences. Further research is required regarding which criteria should be mandatory for school emergency planning for special needs populations, and how to assure such requirements are implemented.

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[291] Ashby and Jenkins, "Emergency Management," 29.

[292] Ashby and Jenkins.

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