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THE SCHOOL SHOOTER: A RAPIDLY GROWING PROBLEM FOR HOMELAND SECURITY

by

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School shootings have significantly impacted many aspects of our lives across the United States. They first became a recognized problem in American society in the 1960s and have since continued to increase in frequency and severity. Casualty numbers from school shootings have steadily increased since 1990, and even though such shootings are rarer than homicide, mass murder, and off-campus violence, they have a great impact on a community. Normally, techniques and tactics used by school administrations and law enforcement change over time to adapt to growing threats. Cases such as the University of Texas shooting in 1966 and Columbine High School in 1999, for example, led to changes in law enforcement tactics. While UT Austin and Columbine are landmark examples, from 2000 to 2015, there have been 45 school shootings. Attacks in Sandy Hook Elementary School and Marjory Stoneman Douglas High School have focused demands for change, and school and law enforcement procedures have not yet adapted to the rising threat. This thesis examines how educators, first responders, and law enforcement should respond to school shooters today using threat assessment processes and facility security upgrades.

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THE SCHOOL SHOOTER: A RAPIDLY GROWING PROBLEM FOR HOMELAND SECURITY

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Submitted in partial fulfillment of the
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ABSTRACT

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LIST OF ACRONYMS AND ABBREVIATIONS

9/11	September 11, 2001, terrorist attack
ADHD	attention deficit hyperactive disorder
CCW	concealed carry weapon
CRS	Congressional Research Service
DHS	Department of Homeland Security
EMS	Emergency Medical Services
FAMS	Federal Air Marshal Service
FBI	Federal Bureau of Investigation
FFDO	federal flight deck officer program
IPSB	Installed Physical Secondary Barriers
LE	law enforcement
LEO	law enforcement officer
MH	mental health
NASRO	National Association of School Resource Officers
NFL	National Football League
OCD	obsessive-compulsive disorder
PASS	Parents Assuring Student Success
PATCH	Parents as Teachers of Children
RAND	Research and Development Corporation
SBLE	school-based law enforcement
SRO	school resource officer
SWAT	Special Weapons and Tactics
TSA	Transportation Security Administration

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I. INTRODUCTION

A. RESEARCH QUESTION

School shooters have become the biggest problem for Homeland Security organizations since 9/11. Current guidance from the FBI and DHS calls for citizens to "Run-Hide-Fight" and for immediate response by law enforcement.[1] But response time length, first responder fatalities, medical attention obstacles, and incident frequency necessitate an analysis of how effective current programs are for responding to school shooter situations. This thesis will examine the question: Is current school shooter guidance appropriate, and if not, how should administrators, educators, first responders, and law enforcement respond to today's school shooter threats?

B. PROBLEM STATEMENT

School shootings have significantly impacted many aspects of our lives across the United States. School shootings change the way we conduct law enforcement, intelligence, medical response, school security, and force protection protocols. Cases such as the University of Texas shooting in 1966 drastically changed the way law enforcement conducts business. That event lasted longer than 90 minutes and resulted in 16 deaths and 31 injuries.[2] After the shooting several police departments realized the necessity for special weapons and tactics (SWAT) teams as well as for organic university police.[3] Then in April 1999, Eric Harris and Dylan Klebold killed 13 people at Columbine High School.[4] It took police over three hours to clear the premises and evacuate all casualties, and some injuries

[1] "Active Shooter Pocket Card," ed. Department of Homeland Security (Washington, D.C.).

City of Houston Mayor's Office of Public Safety and Homeland Security, "Responding to an Active Shooter Crisis Situation" (Federal Bureau of Investigation, 2012).

[2] Jeff Wallenfeldt, "Texas Tower Shooting of 1966," Encyclopedia Britannica, last modified February 15, 2017, https://www.britannica.com/event/Texas-Tower-shooting-of-1966.

[3] "Active Shooter/Suicide after Action Report," (The University of Texas at Austin Police Department, 2010), 2.

[4] Federal Bureau of Investigation, *Columbine High School; Firearms Act - Homicide*, (Washington, D.C.: Department of Justice, 1999), https://vault.fbi.gov/Columbine%20High%20School%20/Columbine%20High%20School%20Part%201%20of%204

became fatalities because of first responder delays.[5] Columbine further changed law enforcement tactics by highlighting the need for law enforcement to engage active shooters immediately instead of waiting for SWAT.[6] Tragic events tend to bring about changes in policy in an attempt to prevent them from happening again.

Lines differentiating terrorist acts, mass shootings, active shooters, and mentally ill criminals are blurry at best. Clear definitions are difficult to establish and even harder to agree upon. However, it is important to set baseline definitions because different cases could be handled differently based solely on labels. For example, a terrorist would be treated differently and probably receive a different verdict than a mentally ill criminal in trial.[7] Research shows that non-Muslim perpetrators commit most shooting attacks in America.[8]

Casualty numbers from mass shootings have steadily increased since 9/11. For the purpose of this thesis, injuries are included in casualty numbers. Statistics from 2000 to 2013 are summarized by a FBI report on active shooter incidents. The report states, "In the first half of the years studied, the average annual number of incidents was 6.4, but that average rose in the second half of the study to 16.4, an average of more than one incident per month."[9] Trends continue to move upward since then. Yearly mass shooting casualties from 2013 to 2016 are as follows: 1495, 1577, 1856, and 2387.[10] Raw data and government reports show a gradual increase in the number of incidents and casualties from active

[5] "Integrated Response to Mass Shootings," (paper presented at the Emergency Medical Services Trauma System, Phoenix, AZ, 2016).

[6] "Active Shooter/Suicide after Action Report."

[7] Neil Vidmar, "When All of Us Are Victims: Juror Prejudice and "Terrorist" Trials," *Chicago-Kent Law Review* 78 (2003), 1173.

[8] Lenz, 4.

[9] Pete J. Blair and Katherine W. Schweit, *A Study of Active Shooter Incidents, 2000–2013*, ed. U.S. Department of Justice (Washington, D.C.: Texas State University Federal Bureau of Investigation, 2014), https://www.fbi.gov/file-repository/active-shooter-study-2000-2013-1.pdf, 20.

[10] "Mass Shooting Tracker," Mass Shooting Tracker, accessed June 10, 2017, https://www.massshootingtracker.org.

shooter events and mass shootings. A 2015 study by Joel A. Capellan highlights a notable increase of shooting attacks over the last 15 years.[11]

Normally, techniques and tactics used by intelligence and law enforcement change over time to adapt to growing threats. But although the severity of the school shooting problem has increased, tactics and federal regulation remain relatively unchanged since 9/11. This thesis will address any potential improvements in policy and practice to define, identify, prevent, and reduce the severity of school shooting incidents.

C. LITERATURE REVIEW

Mass shootings and active shooter threats warrant a variety of responses in the context of current literature and political debate. Schildkraut summarizes the mass shooting debate by stating:

> The discourse in these instances typically centers on a call for improved and/or additional security measures, encompassing topics such as a search for the motivation behind the shooting, early identification of potential threats and warning signs, police presence, gun control and gun rights, mental health, preparation and training, and new inventions to keep us safe.[12]

Key topics under discussion in the literature on active shootings include: a) how to define the problem; b) how to identify shooters prior to an attack; c) whether stricter gun control should be part of the solution; d) analysis of mental health issues; e) physical security improvements that can be made at schools; and f) the importance of developing a culture of self-defense within schools and other institutions. This literature review will examine each of these debates.

1. Defining the Problem

Terrorism blurs the boundary between a criminal act and a violent political act. Mass shootings are sometimes labeled as terrorist acts. A big difference between terrorism

[11] Joel A. Capellan, "Lone Wolf Terrorist or Deranged Shooter? A Study of Ideological Active Shooter Events in the United States, 1970–2014," *Studies in Conflict and Terrorism* 38, no. 6 (2015), 406.

[12] Jaclyn Schildkraut and H. Jaymi Elsass, *Mass Shootings: Media, Myths, and Realities* (Santa Barbara, California: Praeger, 2016), 115.

and mass murder is the targeted nature of the killing. Mass shooters often target a school, military base, or workplace to kill with no greater intended effects. Terrorists have a political motive with effects intended beyond the immediate casualties.[13] However, Fox et al. state, "the repercussions [of school shootings] spread far beyond the grounds of that school or the borders of that community."[14] Whether or not mass shooters are labeled terrorists, they still pose a significant threat to homeland security.

School shooters differ from terrorists in the motives for attacking vulnerable targets. Terrorists wish to influence a larger entity and school attackers lack a clear purpose in their attacks. Shooters assaults on schools fail to bring about change in the education mission, shooters only desire to murder as many students as possible in a selfish act of perceived retaliation.[15]

For analytical purposes, mass shootings are typically separated by type of location. Workplace violence and school shootings are separated into different categories, and school shootings are often segregated further into high school and university shootings.

One reason why high school and university cases are considered separately is that local authorities typically have very different capabilities to prevent and respond to active shooters. These differences often lead to very different recommendations for how high schools and universities can reduce the threat of mass shootings. High schools, for example, have the ability to control entry to school grounds, and they are able to drastically improve response time with a school resource officer, or SRO.[16] Unlike high schools, however, university campuses contain multiple buildings and are often accessible to the public.

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[13] "Terrorism Definitions," in *U.S. Code 2331*, ed. U.S. Government (2004).

[14] James Alan Fox, Jack Levin, and Kenna Quinet, *The Will to Kill: Making Sense of Senseless Murder*, Fourth ed. (Upper Saddle River, NJ: Pearson Education, 2012), 119.

[15] Capellan, 407–408.

[16] Charles Anklam et al., "Mitigating Active Shooter Impact; Analysis for Policy Options Based on Agent/Computer Based Modeling," *Journal of Emergency Management* (2014), 24.

2. Identification and Prevention

A key question examined by experts on school shootings is: how often do school shooters discuss their plans with other people before attacks occur? This question is especially important, because if mass shooters do tend to discuss their plans ahead of time, that would suggest that authorities should focus more efforts on detecting such clues.

Shooters take time to plan their murders and commonly reveal some aspects of those plans to classmates. A Department of Education and Secret Service collective report claims that 75 percent of attackers told a friend or peer about a planned attack.[17] Threats should be analyzed along with a student's capability and means to carry out an attack.[18] Threat assessment practitioners benefit from prudent investigation of valid threats to improve school safety and filter out non-serious remarks.

Peers at schools are often exposed to plots and threats, but not all students report their friends to school officials. However, several students have found "hit-lists" and rifles of students making threats, preventing potential mass shootings. Such was the case in Twenty-Nine Palms, California, in the spring of 2001.[19] Parents also play an important role in prevention. Blaec Lammers was turned in to law enforcement by his mother after purchasing two semi-automatic rifles with the intent of becoming a mass shooter in Bolivar, Missouri.[20] Experts agree that shooters tend to expose their plans to friends, family, or acquaintances prior to their attacks. Referrals such as these could save numerous lives and prevent catastrophe if people privy to planned attacks come forward and report potential shooters to authorities.

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[17] Randy Borum et al., "What Can Be Done About School Shootings? A Review of the Evidence," *Educational Researcher* 39, no. 1 (February 2010), 31.

[18] Mary Ellen O'Toole, *The School Shooter: A Threat Assessment Perspective*, ed. Arnold R. Isaacs (Quantico, Virginia: Federal Bureau of Investigation, 1999), http://www.publicsafety.ohio.gov/links/ohs-TheSchoolShooter.pdf.

[19] Newman et al., 290.

[20] Doss and Shepherd, 10.

Some characteristics are identifiable and "knowable" prior to active shooter events.[21] Leary et al. state, "testimony presented to the House Judiciary Committee after the Columbine shootings suggested that a typical school shooter feels 'lonely and isolated. They are highly sensitive to teasing and bullying, and are deeply resentful, ruminating over perceived injustices.'"[22] Peer and parent rejection are strong predictors of aggression among adolescents.[23] Categorizations such as these are important when analyzing groups of incidents, but are unrealistic to predict shooters based on broad characteristics shared by many students in the same profile.

Besides concrete evidence such as rifles and hit lists, some authors conclude that shooters share common behavior. Shooters may share demographic, racial, and economic similarities. Further demographic research has shown that 95.3 percent of school shooters are males and 69.4 percent were white prior to Columbine.[24] After April 20, 1999, the number of white attackers dropped to 25 percent.[25] Langman categorizes school shooters based on mental health and personal issues as follows: psychopathic, psychotic, and traumatic.[26] Even though similarities such as these arise, they do not provide utility in preventing future attacks because the data is too broad and not actionable. Correlations made between shooters show some commonalities, but transitioning those similarities to identification before an active shooter event remain near impossible.

Experts disagree about whether it is possible to identify the causal factors that drive school shooters over the edge. Some believe that societal and cultural factors can be risk factors. According to this view, social rejection, ostracism, and bullying, combined with a

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[21] Bryan Vossekuil et al., "The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States," (Washington, D.C.: United States Secret Service and United States Department of Education, 2004).

[22] Mark R. Leary et al., "Teasing, Rejection, and Violence: Case Studies of the School Shootings," *Aggressive Behavior* 29 (2003), 202–203, Wiley InterScience.

[23] Ibid., 203.

[24] Peter Langman, "Multi-Victim School Shootings in the United States: A Fifty-Year Review," *The Journal of Campus Behavioral Intervention* 4 (2016), 3, 5.

[25] Ibid., 5.

[26] *School Shooters: Understanding High School, College, and Adult Perpetrators* (Lanham, MD: Rowman & Littlefield, 2015). 3; *Why Kids Kill: Inside the Minds of School Shooters* (New York, NY: St. Martin's Press, 2009). 18.

veneration of firearms/military and an obsession with death, often produce aggression seen in school shooters.[27] Mass shooters are seen as having "problem identification," meaning an inability to accept responsibility for adverse events on their life, causing them to resort to violence at school.[28] Although almost all cases of school shootings involve claims of bullying and popular culture as influencing factors, it is also recognized that not everyone who is bullied and plays violent video games becomes a mass shooter.[29] Problems from a shooter's childhood may also surface later in life as violent aggression.[30] Other experts, however, argue that early identification of potential shooters is not possible. Profiles of shooters remain problematic to identify. Shooters come from varying family, socioeconomic, ethnic, and hereditary backgrounds. School security teams improve their chances to identify potential shooters using threat assessments.

The FBI and Congressional Research Service believe a better way to identify potential school shooters is through the use of threat assessments, which are produced after a potential threat has been identified. Assessments usually analyze a possible shooter using the following factors: exhibited behavior, relationships with classmates, friendships outside of school, and familial connection.[31] Threat assessments are more beneficial in school shooting prevention than profiling potentially violent students.[32] Characteristics covered by the FBI are not meant to be a checklist to prevent future behavior but to analyze the severity of threats made and determine the severity of claimed intent by potential shooters.

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[27] Leary et al.

[28] Newman et al. 102.

[29] Michael Rocque, "Exploring School Rampage Shootings: Research, Theory, and Policy," *The Social Science Journal* 49 (2012), 308, https://www.scottbarrykaufman.com/wp-content/uploads/2012/12/Rocque_2012_SSJ.pdf.

[30] Ibid., 307.

[31] O'Toole, 15.

[32] Ibid., 30; Borum et al., 31.

3. Gun Control

Law enforcement response times also provide the basis for one of the more controversial debates stemming from mass shootings: gun control. Some scholars argue that mass shootings can be better addressed through wider ownership of guns by law-abiding citizens, and that "gun control does not reduce violence or crime."[33] Anklam et al. argue, "this suggests that despite best intentions and alternative efforts, the need to arm school teachers or faculty for the defense of their students should not be dismissed on face value simply because of the initial contemporary cultural aversion to firearms."[34] Bird claims most events are over before law enforcement can engage the shooter, therefore response by people at the scene is the fastest way to reduce the number of casualties.[35]

Others, however, claim tighter gun control is the best response to mass shootings. According to this view, active shooters are only able to cause devastating numbers of casualties because of the availability of guns. Klarevas calls for fewer guns to be available for purchase, and he argues that mass murder does not come from angry perpetrators or vulnerable targets, but rather from the lethality guns provide.[36] Mass shootings, especially school shootings, ignite the gun control debate across the country. There are vigorous arguments for both sides of the gun control argument, but there is a general consensus for proper storage and handling of firearms by parents to reduce availability to their children.[37]

4. Mental Health

Experts believe that a lack of resiliency, depression, anger management issues, and turbulent family relationships are all factors contributing to a shooter's character, and the

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[33] Anklam et al., 24.

[34] Anklam et al., 24.

[35] Chris Bird, *Surviving a Mass Murder Rampage: When Seconds Count, Police Are Still Minutes Away* (San Antonio, TX: Privateer Publications, 2016), 391.

[36] Louis Klarevas, *Rampage Nation: Securing America from Mass Shootings* (Amherst, NY: Prometheus Books, 2016), 265.

[37] Rocque, "Exploring School Rampage Shootings: Research, Theory, and Policy," 309.

Newman et al., 230.

Fox, Levin, and Quinet, 130.

severity of these issues can be reduced by robust mental health services.[38] In particular, it is seen that increasing mental health services capabilities would benefit secondary schools by identifying issues among students and addressing them before they became problems.[39] Mental health referrals could reduce the incidence of mass shootings, according to some experts.[40] For example, 80 percent of shooters examined in one study were suicidal.[41]

Some shooters are categorized as mentally ill. Shooters such as Charles Whitman, Kip Kinkel, and Adam Lanza were found to be suffering from a mental illness. Shooters suffering from mental illness bring healthcare into the debate. Some experts have argued for psychiatrists and healthcare professionals to refer cases to homeland security intelligence professionals and law enforcement.[42] Mental illness has not yet been linked to violent crimes such as mass shootings, but the correlation continues to arise in the debate for how to identify and stop school shooters.

5. Physical Security

Physical security measures are often included in literature focused on mass shootings, especially in schools. One study concludes that "school design should include building chain link fences around campus, cleaning up graffiti and reducing dark areas."[43] Other physical security improvements include security cameras, locked/monitored doors, faculty badge display/access, and SROs.[44]

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[38] O'Toole, 17–24.

[39] Jerome P. Bjelopera et al., *Public Mass Shootings in the United States: Selected Implications for Federal Public Health and Safety Policy*, CRS Report No. R43004, (Washington, D.C.: Congressional Research Service, 2013), https://fas.org/sgp/crs/misc/R43004.pdf, 24; Newman et al., 293.

[40] Michael Leavitt, Margaret Spellings, and Alberto R. Gonzales, "Report to the President on Issues Raised by the Virgina Tech Tragedy," ed. Health and Human Services (Washington, D.C., 2007), 14.

[41] Newman et al., 294.

[42] Kevin T. Doss and C. David Shepherd, *Active Shooter: Preparing for and Responding to a Growing Threat* (Oxford, UK: Butterworth-Heinemann, 2015), 26; Katherine S. Newman et al., *Rampage: The Social Roots of School Shootings* (New York: Basic Books, 2004), 289; Ryan Lenz, "Age of the Wolf: A Study of the Rise of Lone Wolf and Leaderless Resistance Terrorism," ed. Mark Potok (Montgomery, AL: Southern Poverty Law Center, 2015), 36.

[43] Rocque, "Exploring School Rampage Shootings: Research, Theory, and Policy," 310.

[44] Bjelopera et al., *Public Mass Shootings in the United States: Selected Implications for Federal Public Health and Safety Policy*, 33.

Security measures at universities also vary greatly from high schools. A NPS thesis studied universities and discovered facility upgrades are required to reduce the frequency of casualties brought on by active shooters due to response times by law enforcement.[45] Vulnerabilities exist in lack of compartmentalization, inadequate alarm systems, and shooter movement going undetected. Facility upgrades could improve response time, secure threat areas, and reduce casualties from mass shooting incidents at universities.

For the most effective security measures, schools are sometimes required to combine emergency action plans with physical security. Across the country, 92 percent of states require high schools maintain some form of crisis response capacity and recommend that they conduct emergency plan drills.[46] These plans vary across school districts but efforts have been made to establish baseline emergency plans at the federal level.[47]

6. The Importance of a Self-Defense Culture

Resource officers and law enforcement cannot have a presence everywhere at once, and experience has shown that the opportunity for shooters to conduct attacks can be reduced by the presence of citizens capable and willing to fight back. This has been described as having a self-defense culture in schools or other communities where active shooter threats exist.[48] Cases such as Tucson, Arizona, and Pearl, Mississippi, show that citizen intervention is the quickest response. In Arizona, two bystanders subdued Jared Loughner after he killed six people.[49] Law enforcement recovered two additional magazines when they apprehended Loughner,[50] suggesting that without immediate bystander intervention the shooting would have continued. At Pearl High School in

[45] Charles E. Ergenbright and Sean K. Hubbard, "Defeating the Active Shooter: Applying Facility Upgrades in Order to Mitigate the Effects of Active Shooters in High Occupancy Facilities" (master's thesis, Naval Postgraduate School, 2012), 12, https://calhoun.nps.edu/handle/10945/7337.

[46] Bjelopera et al., *Public Mass Shootings in the United States: Selected Implications for Federal Public Health and Safety Policy*, 33.

[47] Ibid., 33.

[48] Mike Wood, "Why 'Run, Hide, Fight' Is Flawed," *PoliceOne* (2016), https://www.policeone.com/active-shooter/articles/190621006-Why-Run-Hide-Fight-is-flawed/; Doss and Shepherd, 86–87.

[49] Bird, 16.

[50] Ibid., 13.

Mississippi, an assistant principal was able to stop an active shooter by retrieving a pistol he had stored in his truck.[51] These cases demonstrate it is up to civilians to escape a victim mentality and prevent catastrophe whenever possible.[52]

7. Conclusion

The literature surrounding active shooter events, especially school shootings and workplace violence, focuses on a wide variety of issues, and many experts argue that a holistic approach is needed. Newman et al. claim, "there are no policy solutions that can reduce the risk of a school shooting to zero,"[53] but research indicates prevention can be improved, and the literature reviewed above offers several recommendations to improve mass shooting prevention and response. Some recommendations focus on better tracking of students that might need mental health services or other kinds of attention. Other recommendations call for strict gun control, facility upgrades, or mental health improvements. Some experts argue that the best improvements for school shooting response are those that reduce the response time and casualty numbers,[54] but although law enforcement improvements can help reduce response time, prevention and immediate response are issues primarily involving civilians.

D. RESEARCH DESIGN

This thesis will examine comparative case studies of active shooter incidents to determine whether current guidance is appropriate, and whether the use of threat assessments and the development of a self-defense culture can help prevent attacks. Cases to be analyzed include: Columbine High School, Sandy Hook Elementary, Thurston High School, Pearl High School, Heath High School, and Westside Middle School. In each case, factors to be analyzed include: law enforcement response time, event time, shooter apprehension type (suicide/suicide by cop/arrest/civilian intervention), casualty numbers

[51] Ibid., 49.

[52] Wood, "Why 'Run, Hide, Fight' Is Flawed."; Bird, *Surviving a Mass Murder Rampage: When Seconds Count, Police Are Still Minutes Away*, 49.

[53] Newman et al., 272.

[54] Schildkraut and Elsass, 117; Newman et al., 280.

(dead and injured), weapons used, tactics employed by shooter/law enforcement, potential lessons learned by law enforcement, and implications to the homeland security community.

Following case studies, this thesis analyzes school security in relation to aviation security, sports complex security, and federal government facility security. The aviation community improved significantly after 9/11 with efforts including the FFDO program and a shift from victim mindset to self-defense mindset for air travelers. Sports arenas regularly host large amounts of people with little incident. Finally, federal government buildings such as courthouses and military bases feature robust security methods to enforce gun-free areas that provide implications to school districts seeking to improve safety while maintaining a gun-free zone.

E. THESIS OVERVIEW

Chapter II highlights the historical context of school shootings and begins with key term definitions. This chapter introduces the history of targeted school violence beginning in the Great Depression through the 1980s including the wave of incidents beginning in the 1960s. The timeline shifts in the 1990s to present, introducing the modern context of school shootings and the increased devastation they present to homeland security. The following section introduces key players involved with school safety in different roles including students, school administrators, teachers, guidance counselors, mental health professionals, parents, law enforcement, and local communities.

Chapter III first addresses school responses, including facility security efforts, organizational reforms, and student social policies such as mental health and threat assessments. Second, this chapter analyzes law enforcement measures in schools, including school resource officers and liaison relationships with administrative officials. Third, this chapter concentrates on media attention and public perception of school security. Next, this chapter analyzes media and public debate impact on government legislation effecting school security and public gun policy alike. Finally, this chapter explores government legislative decisions at the local, county, state, and federal level with regard to school security.

Chapter IV compares and contrasts the six case studies listed above. First, the chapter analyzes law enforcement policy changes as a result of Columbine. Second, Sandy Hook analysis shows potential shortcomings from mental health and threat assessment implementation. Next, Thurston, Pearl, and Heath High Schools illustrate school student and administration responses to active shooters at school. These cases also present necessary improvements for identifying and assessing potential threats before an incident. Westside Middle School highlights age considerations and legal challenges associated with them. Similarities and implications from these cases are then analyzed to benefit law enforcement and school staff policies.

Chapter V analyzes other security programs in various government and private sectors. First, the chapter inspects aviation security improvements since 9/11 including the FFDO program, DHS, TSA, and the cultural shift with regard to security. Next, the chapter analyzes gun-free zone implementation in federal government buildings such as courthouses and military bases. The chapter then examines sports complex security to withdraw any recommendations for school improvements. Finally, Chapter VI concludes with the changes necessary to bolster school security through gun-free zone implementation, threat assessment practices, and information sharing among the entire school security team.

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II. BACKGROUND

School shootings started to become a publicized problem in American society in the 1960s and have since continued to increase in frequency and severity. Incidents of targeted school violence have steadily increased over recent decades with four school shootings from 1970–79, five from 1980–89, 28 from 1990–99, and 25 from 2000–2010.[55] School shootings are much rarer than homicide, mass murder, and off-campus violence. However, the impact school shooting incidents have on a community and surrounding areas continues to rise. School violence is becoming an epidemic, inducing more trauma today compared to the past. This Chapter examines the history of school shootings in America, discusses the different actors involved, and introduces important background material to analyze school shootings in further detail.

A. A BRIEF HISTORY

Literature covering targeted school violence, mass shootings, and active shooter situations are all closely related, but there are key distinctions to make in each definition. This thesis will focus on all of these terms in relation to the school shooting problem for homeland security. This thesis will not cover ideological motivations of shooters and whether to label school shootings as acts of terrorism.

The term "school violence" became prevalent in the 1960s due to the growing problem of student assault on teachers and weapons in schools.[56] For the purpose of this thesis a rampage killing is defined as an attempted mass murder with less than three deaths. Mass killings definitions are still not agreed upon across institutions. For example, the FBI determines, "mass killing as three or more killed in a single incident" based on a 2012 federal statute.[57] Meanwhile, the Gun Violence Archive and the Congressional Research

[55] Bryan R. Warnick, Benjamin A. Johnson, and Samuel Rocha, "Tragedy and the Meaning of School Shootings," *Educational Theory* 60, no. 3 (2010): 371, ProQuest.

[56] Elizabeth Midlarsky and Helen Marie Klain, "A History of Violence in the Schools," in *Violence in Schools* (Boston, MA: Springer, 2005), 44.

[57] Pete J. Blair and Katherine W. Schweit, *A Study of Active Shooter Incidents, 2000–2013*, ed. U.S. Department of Justice (Washington, D.C.: Texas State University Federal Bureau of Investigation, 2014), https://www.fbi.gov/file-repository/active-shooter-study-2000-2013-1.pdf, 20.

Service (CRS) define mass shootings as four or more deaths.[58] For the purpose of this thesis, the FBI definition of three or more deaths will be used for mass killings. DHS designates an active shooter as, "an individual actively engaged in killing or attempting to kill people in a confined and populated area, typically through the use of firearms."[59] Prior to the 1980s, mass murder was used as a catchall definition for homicides including multiple victims. The lexicon changed, and the definition of mass murder narrowed after reporters distinguished the McDonald's massacre on July 18, 1984, by James Huberty as a mass murder as opposed to a serial murder.[60] The distinction lies in the timeline of violence. Mass murders occur in minutes or hours with limited pauses, while serial murders transpire over a more extended period of time.[61] Multiple murder now serves as the overarching term containing both serial and mass murders.[62]

1. 1920s–1980s

Targeted school violence has plagued America for a long time. The worst school massacre in American history was not Columbine, Virginia Tech or the University of Texas at Austin. The largest school tragedy occurred in 1927 at Bath Consolidated School in Michigan.[63] A school board member bombed the school resulting in 44 deaths, 38 of whom were students.[64] Media coverage did not last long, and the school was rebuilt in less than a year. According to Grant Duwe, "mass murder was nearly as common during the 1920s

[58] "Mass Shootings," Gun Violence Archive, accessed March 20, 2018, www.shootingtracker.com; Bjelopera et al., *Public Mass Shootings in the United States: Selected Implications for Federal Public Health and Safety Policy*, 33.

[59] "Active Shooter Pocket Card," ed. Department of Homeland Security (Washington, D.C.).

[60] Grant Duwe, *Mass Murder in the United States: A History* (Jefferson, NC: McFarland & Company, Inc., Publishers, 2007), 8.

[61] James Alan Fox, Jack Levin, and Kenna Quinet, *The Will to Kill: Making Sense of Senseless Murder*, Fourth ed. (Upper Saddle River, NJ: Pearson Education, 2012), 137.

[62] Bjelopera et al., *Public Mass Shootings in the United States: Selected Implications for Federal Public Health and Safety Policy*, 8.

[63] Lorraine Boissoneault, "The 1927 Bombing That Remains America's Deadliest School Massacre," *Smithsonian*, May 18, 2017, https://www.smithsonianmag.com/history/1927-bombing-remains-americas-deadliest-school-massacre-180963355/.

[64] Ibid.

and 1930s as it has been since the 1960s."[65] The interwar years stand out for a significant amount of violence, but most of these were familicides thought to have been brought on by economic hardship during the Great Depression.[66] However, the 1960s initiated an extended period of mass murder, with school shootings standing out as a growing problem.

School shootings have become an increasing problem for Americans since the mid-1960s.[67] Several incidents at schools occurred prior to 1966, but the media coverage and public concern was negligible. A major tragedy happened on July 14, 1966, when Richard Speck raped and murdered eight nursing students in a townhouse on the south-side of Chicago. This incident did not take place on a school campus and does not categorically fit in as a school shooting, but it ignited a publicized "wave" of mass murder events.[68] Charles Whitman, a former U.S. Marine, committed the worst school shooting in American history (until VA Tech) at UT Austin only two weeks after the Speck killings.[69] Whitman murdered 16 people and one unborn baby in the 96 minute rampage.[70] The UT Austin bell tower shooting remains as one of the most catastrophic shootings, but the case served to teach officials charged with response and prevention some important lessons (lessons learned from historical cases will be covered in Chapter III).

A negative side-effect of these publicized shootings came through copy-cat killings. Media coverage publicized the shooters, Speck and Whitman, gaining them large notoriety across the nation. One of the first copy-cat shootings arose on November 12, 1966, when Robert Benjamin Smith killed five people and wounded two at the Rose-Mar

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[65] Duwe, *Mass Murder in the United States: A History*, 11.

[66] Duwe, *Mass Murder in the United States: A History*, 49; Jaclyn Schildkraut and H. Jaymi Elsass, *Mass Shootings: Media, Myths, and Realities*, ed. Frankie Y. Bailey and Steven Chermak, Crime, Media, and Popular Culture (Santa Barbara, California: Praeger, 2016), 31. Familicide refers to killing one's family, as explained by Duwe, Schildkraut and Elsass regarding historic mass shootings during the Great Depression. Familicide includes Prolicide (killing one's offspring) and Uxoricide (killing one's wife).

[67] Warnick, Johnson, and Rocha, "Tragedy and the Meaning of School Shootings."

[68] Mara Bovsun, "Nurse Hides as 8 Friends Raped, Murdered in 1966," *NY Daily News*, July 9, 2016, http://www.nydailynews.com/news/crime/nurse-hides-8-friends-raped-murdered-1966-article-1.2705565; Duwe, *Mass Murder in the United States: A History*, 20.

[69] *Mass Murder in the United States: A History*, 6.

[70] One victim died of kidney failure in 2001 and cause of death was ruled a homicide. Maria Esther Hammack et al., "Behind the Tower: The Victims," The Public History Seminar at UT Austin, http://behindthetower.org/the-victims/.

College of Beauty in Mesa, Arizona.[71] Duwe states, "[Smith] claimed he got the idea for the murders, which he committed to 'make a reputation' for himself, from the mass killings four months earlier in Chicago and Austin."[72] The number of student assaults on teachers increased from 253 to 1,801 and weapons violations rose from 396 to 1,508 during this decade.[73]

During the 1970s, public concern grew towards violence in schools. The 1978 Gallup poll on public attitudes listed school violence as a top ten concern.[74] In 1978, high school students had a greater chance of falling victim to violence at school than any other location.[75] The Anthony Barbaro shooting is a high-profile rampage case from this decade. Barbaro set fire to his high school on December 30, 1974, then shot the janitor and first responders, killing two and wounding nine.[76] Although schools encountered greater instances of violence overall, mass shootings in schools became less frequent, with three incidents in the decade.[77]

Homicide rates of youngster aged 15 to 19 serves as a statistical distinction of the 1980s. The homicide rate for this age groups increased 154 percent from 12 per 100,000 to 33 per 100,000.[78] Also, trends of targeted school violence shifted from young African-American males in inner cities to white male youths in suburban and rural areas.[79] Overall,

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[71] Duwe, *Mass Murder in the United States: A History*, 98.

[72] Duwe, *Mass Murder in the United States: A History*, 98.

[73] Midlarsky and Klain, "A History of Violence in the Schools," 44.

[74] Ibid., 45.

[75] Ibid.

[76] Katherine S. Newman et al., *Rampage: The Social Roots of School Shootings* (New York: Basic Books, 2004), 236.

[77] Bryan Vossekuil et al., *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*, (Washington, D.C.: United States Secret Service and United States Department of Education, 2004), 47, https://www2.ed.gov/admins/lead/safety/preventingattacksreport.pdf.

[78] Stephanie Verlinden, Michel Hersen, and Jay Thomas, "Risk Factors in School Shootings," *Clinical Psychology Review* 20, no. 1 (2000), 4, http://www15.uta.fi/arkisto/aktk/projects/sta/Verlinden_Hersen_Thomas_2000_Risk-Factors-in-School-Shootings.pdf.

[79] Rachel Kalish and Michael Kimmel, "Suicide by Mass Murder: Masculinity, Aggrieved Entitlement, and Rampage School Shootings," *Health Sociology Review* 19, no. 4 (December 2010), 451–452, ProQuest

the 1980s saw five incidents of targeted school violence, a minimal increase from the previous decade.[80]

2. 1990s–Present

The 1990s demonstrated a dramatic increase in school shooting incidents from previous decades. A total of 28 school shootings took place from 1990–99, a dramatic rise from years prior.[81] 197 deaths, mostly from shootings, occurred at schools from July 1, 1994, until 1999.[82] Media coverage greatly expanded in the 1990s with as many as 319 nightly news stories in the year and 53 stories in the week following the Columbine High School shooting in 1999.[83] A significant effect of media coverage was that it greatly increased public concern for school safety and greater fear among students. In the year 2000, 9 percent of secondary school students anticipated being harmed at school and 4 percent avoided school due to a perceived lack of safety.[84] Prior to 1992, a University of California database listed only 179 incidents of school violence while that number grew 70 percent in the next eight years.[85] Research articles on school violence also grew exponentially during this decade.[86] The 1990s mark a dramatic increase in the number of school shooting incidents and pushed the problem to the forefront of public concern.

From 2000 to 2013, the FBI conducted a study on active shooter events and found "27 school incidents resulted in 57 individuals killed and 60 individuals wounded."[87] Since 9/11, public mass shootings overall have claimed 281 lives in 38 incidents.[88] The study

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[80] Vossekuil et al., *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*, 47.

[81] Ibid.

[82] Verlinden, Hersen, and Thomas, "Risk Factors in School Shootings," 4.

[83] H. Jaymi Elsass, Jaclyn Schildkraut, and Mark C. Stafford, "Studying School Shootings: Challenges and Considerations for Research," *American Journal of Criminal Justice* 41 (October 2015), 444, Springer.

[84] Verlinden, Hersen, and Thomas, "Risk Factors in School Shootings," 4.

[85] Kristin D. Eisenbraun, "Violence in Schools: Prevalence, Prediction, and Prevention," *Aggression and Violent Behavior* 12 (January 2007), 460, ScienceDirect.

[86] Ibid., 460.

[87] Blair and Schweit, *A Study of Active Shooter Incidents, 2000–2013*, 16.

[88] Bjelopera et al., *Public Mass Shootings in the United States: Selected Implications for Federal Public Health and Safety Policy*, 2.

also found a majority of shooters at high schools and middle schools were students attending the same school (17 cases out of 20, or 85 percent).[89] The exacerbated rise of school shooting incidents in the 1990s continues to plague America as a significant homeland security problem. Shootings continue to devastate schools and present problems to law enforcement such as Marshall County High School on January 23, 2018, and Marjory Stoneman Douglas High School in Parkland, Florida where 17 people lost their lives on February 14, 2018.[90]

B. PLAYERS INVOLVED

Various types of individuals are associated with school shootings. The groups involved with mass shootings are separated by institutional roles at schools. The different roles include students, school administrators, teachers, guidance counselors, mental health professionals, psychologists, social workers, parents, law enforcement, emergency response personnel, local communities, and the media. Each category of people has different opportunities and responsibilities in preventing and responding to mass school shootings.

While each individual has different capabilities related to school violence, every student, faculty, or staff member has the ability to improve the climate of their school to deter an event before it begins. Hernandez and Seem state, "the unwritten beliefs, values, and attitudes…become the style of interaction between students, teachers, and administrators. School climate sets the parameters of acceptable behavior among all school actors, and it assigns individual and institutional responsibility for school safety."[91] School climate refers to student and staff views on the supportive learning environment, organization, level of safety, and comfort level in the school. All participants in the school

[89] Blair and Schweit, *A Study of Active Shooter Incidents, 2000–2013*, 16.

[90] Ali Gostanian, Alex Johnson, and Corky Siemaszko, "Kentucky School Shooting: Two Dead after Attack at Marshall County High School," *NBC News*, January 23, 2018, https://www.nbcnews.com/news/us-news/one-dead-after-shooting-kentucky-high-school-multiple-victims-reported-n840171; Charles A. Morris and Jonathan B. Miller, "Broken Hearts and Opened Eyes," *The New England Journal of Medicine* 378 (February 2018): 1078, https://www.nejm.org/doi/full/10.1056/NEJMp1802509.

[91] Thomas J. Hernandez and Susan R. Seem, "A Safe School Climate: A Systemic Approach and the School Counselor," *Professional School Counseling* 7, no. 4 (2004), http://www.biomedsearch.com/article/safe-school-climate-systemic-approach/116734817.html.

institution play a role in developing a positive and safe school climate that fosters learning and deters shooting incidents.

Students are involved in every school shooting, whether as perpetrators or as victims and sometimes both. Students as shooters are often seen as outcasts unable to cope with social difficulties. According to Newman et al., "the first necessary factor is the shooter's perception of himself as extremely marginal in the social worlds that matter to him…Second, school shooters must suffer from psychological problems that magnify the impact of marginality."[92] However, school and law enforcement professionals are cautioned against profiling students due to the inability to accurately classify shooters based on a set of characteristics. Instead, prevention advocates recommend threat assessments to address potential problems, which this thesis will address in Chapter IV. Noncriminal student offenses often slip under the cracks and are lost between teachers and schools.[93] One program utilized by many schools for noncriminal conflict resolution lies in peer mediation programs.[94] Students serve as a front-line defense against school shootings by following school policies, reporting threats, knowing how to communicate concerns about a classmate, addressing mental health concerns, and many more.[95]

School administrators serve a uniquely pivotal role in school shooting prevention. Administrators impact several factors directly related to school function and security. Communication with faculty, problem solving, establishing rule and reward structures, care for students, and proper punishment of misconduct significantly improve school climates and lower school violence.[96] Administrators also coordinate with others in shooting response through establishing school policies, working with first responders, managing school staff, and coordinating mental health/psychological resources, and liaising with media after a shooting incident. Administrators set the tone for school climate

[92] Newman et al., *Rampage: The Social Roots of School Shootings*, 229.

[93] Ibid., 109.

[94] Alissa J. Kramen, Kelly R. Massey, and Howard W. Timm, "Guide for Preventing and Responding to School Violence," (Alexandria, VA: International Association of Chiefs of Police Bureau of Justice Assistance, U.S. Department of Justice, 2007), 8.

[95] Ibid., 12.

[96] Hernandez and Seem, "A Safe School Climate: A Systemic Approach and the School Counselor."

in discipline, school policies, and safety measures. Disciplinary programs must be fair, understood, and unbiased to be effective in reducing school violence.[97] Policies addressing school safety should be long-term and positively reinforced throughout the school institution.

Teachers interact with students the most of any participant on any given school day. Educational instruction and academic improvement are their primary goals, but teachers need secure facilities to create a successful learning environment. Moral education and character development also fall within teachers' responsibilities. Sex education, drug education, personal health, and family resource classes serve to educate students on moral behavior, but these programs might lack buy-in from students and teachers alike.[98] Most teachers do not directly teach morality, but they exemplify and expect moral behavior in classrooms. Teachers play a critical role in preventing drop-out rates and school suspensions through positive reinforcement.[99] Teachers are encouraged to practice inclusive techniques rather than exclusionary ones when dealing with student misbehavior.[100]

Guidance Counselors serve a critical role in managing school climate and dealing with problems among and between students. Hernandez and Seem claim, "school counselors' knowledge of counseling, classroom guidance, consultation, and coordination services position them to be effective catalysts and advocates for systemic change within their school."[101] School guidance counselors can work with teachers to address behavioral problems early. Many school shooters exude impulsive behavior, perceived loss of control, and lack of empathy for others before they lash out.[102] Guidance counselors can preempt some of these perceptions through character development and value statements for

[97] Eisenbraun, "Violence in Schools: Prevalence, Prediction, and Prevention," 466.

[98] Hunter Brimi, "Academic Instructors or Moral Guides? Moral Education in America and the Teacher's Dilemma," *The Clearing House* 82, no. 3 (February 2009): 179, Taylor & Francis.

[99] Eisenbraun, "Violence in Schools: Prevalence, Prediction, and Prevention," 467.

[100] Ibid.

[101] Hernandez and Seem, "A Safe School Climate: A Systemic Approach and the School Counselor."

[102] Ibid.

students. Perhaps if a shooter learns to respect life, take accountability for their actions, and learn how to improve their reaction to stress then schools can avoid a shooting before it is thought of as a possible action by a student. Counselors can assist teachers establish trust with students and build empathy and respect to improve school safety. Counselors have the ability to establish group sessions to address school climate challenges, individual sessions for personal needs, and peer mentoring to foster intra-student relationships. Counselors serve a critical role in the school institution because they are able to address problems outside of the classroom while improving the educational mission of schools.

Mental health professionals, social workers, and psychologists play a critical role in providing mental health resources to at-risk students. Reinke et al. state, "the vast majority of individuals who receive any mental health services receive them in school."[103] Approximately 20 percent of children under the age of 18 have mental health issues and that number grows to 25 percent in adverse conditions.[104] School psychologists work with teachers on the individual level for student service consultations and behavioral interventions as well as the system level to support policies providing mental health support to students in schools. School psychologists play a key role in screening and assessing individuals and schools requiring mental health services. Students raised in poverty or students who were victims of physical abuse are often skeptical of new situations and affect the perceived safety of the school environment.[105] Social workers can establish a clear line of communication with the school about these issues to enable school counselors to address these concerns before any outbursts from the student. Students have varying needs for mental health services, but it is often the case resources are not allocated effectively to

[103] Wendy M. Reinke et al., "Supporting Children's Mental Health in Schools: Teacher Perceptions of Needs, Roles, and Barriers," *School Psychology Quarterly* 26, no. 1 (2011): 1, ResearchGate.

[104] Ibid.

[105] Gale M. Morrison, Michael J. Furlong, and Richard L. Morrison, "School Violence to School Safety: Reframing the Issue for School Psychologists," *School Psychology Review* 23, no. 2 (1994), 251, https://www.researchgate.net/profile/Michael_Furlong2/publication/232514481_School_violence_to_school_safety_Reframing_the_issue_for_school_psychologists/links/54b4935f0cf26833efd02747/School-violence-to-school-safety-Reframing-the-issue-for-school-psychologists.pdf.

address concerns for students that need them.[106] Psychologists and mental health professionals focus school resources on students that would benefit from them, improving the school climate and school security.

Parents are charged with raising responsible, respectful, and well-behaved children, but they play an important role in the school institution as well. Peterson and Skiba state, "increased parent involvement can result in home environments that are more conducive to learning and that improve communication and consistency between home and school. These changes can lead to safer, more responsive schools."[107] Traditionally, parents were only involved in school through open houses and parent-teacher conferences. However, schools use additional programs (mainly at the local level) to further increase parental involvement in education. In the Parents Assuring Student Success (PASS) program, parents instruct their children on basic schoolwork including literacy and time management.[108] The Parents as Teachers of Children (PATCH) program integrates parents and school staff at additional meetings to address any educational or behavioral concerns.[109] The Indianapolis Public School system uses the Parent in Touch program to include parents in the academic curriculum planning process.[110] Parent involvement largely depends on school willingness to include them in organized programs, but a positive home environment strongly correlates to child development and safe schools.

While teachers, administrators, and counselors occupy positions of authority, their role in responding to school shootings should be preventative as opposed to law enforcement and first responder direct confrontation with shooters. Law enforcement represents the criminal justice aspect of security and school resource officers play a key role in physical security at school facilities. However, law enforcement officers also serve

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[106] Reinke et al., "Supporting Children's Mental Health in Schools: Teacher Perceptions of Needs, Roles, and Barriers," 1.

[107] Reece L. Peterson and Russell Skiba, "Creating School Climates That Prevent School Violence," *The Clearing House* 74, no. 3 (February 2001): 156, ProQuest.

[108] Peterson and Skiba, "Creating School Climates That Prevent School Violence," 156.

[109] Ibid.

[110] Ibid.

as additional educators and mentors in the school violence prevention effort.[111] Law enforcement officers are present at schools from an external police department as school resource officers (SROs), or a modern effort by school districts to provide organic policing services referred to as school-based law enforcement (SBLE) officers.[112] SBLE officers differ from SROs in that they are peace officers within a school-based police department utilized by the school district instead of a local or county law enforcement agency. Law enforcement presence at schools began to increase dramatically after the targeted school violence incidents of the late 1990s. SROs and SBLE officers often assist administrators and district officials with emergency operations planning and drilling at schools while maintaining a daily presence as a deterrent and additional resource for school disciplinarians. Critics of SRO and SBLE programs disagree, "school resource officers may hypercriminalize misbehavior that was once handled by school administrators, further marginalize already disadvantaged youth, and create feelings of distrust between youth and the police."[113] Other criticisms cite law enforcement exacerbating the "school to prison" pipeline for at-risk youth.[114] However, SROs are instrumental in school safety and improve education goals if utilized properly. Students should feel supported, not threatened by SROs and SBLE officers. Law enforcement plays the most critical role in addressing school safety head on, and they must be willing to address threats head on to protect students under their purview.

Local communities play a supportive role in school shootings, mainly after an incident has occurred. Students and families need time to heal and robust counseling resources after an event. Parents, students, teachers, administrators, counselors, and law

[111] Joseph M. McKenna, Kathy Martinez-Prather, and Scott W. Bowman, "The Roles of School-Based Law Enforcement Officers and How These Roles Are Established: A Qualitative Study," *Criminal Justice Policy Review* 27, no. 4 (2016): 421, Sage Publications.

[112] Ibid., 422.

[113] Caitlin G. Lynch, Randy R. Gainey, and Allison T. Chappell, "The Effects of Social and Educational Disadvantage on the Roles and Functions of School Resource Officers," *Policing: An International Journal of Police Strategies and Management* 39, no. 3 (June 2016), 521, ProQuest.

[114] Nathan James and Gail McCallion, *School Resource Officers: Law Enforcement Officers in Schools*, CRS Report No. R43126 (Washington, D.C.: Congressional Research Service, 2013), 21, https://fas.org/sgp/crs/misc/R43126.pdf.

enforcement are responsible simultaneously for prevention and response of school shootings to varying degrees of magnitude.

C. CONCLUSION

History shows targeted school violence is not a new trend. However, school shootings consistently increase in frequency and fatality over time. While some time periods such as the 1960s and 1990s stand out as particularly devastating, the school shooting problem continues to plague American schools with growing fervor from parents and the public at large. Some studies downplay the growing problem of targeted school violence. While the number of thefts, violent crimes, and serious violent crimes against students aged 12 to 18 has decreased since 1992, the frequency of school shootings has continually increased every decade since the 1960s.[115] Homeland security, public health, law enforcement, and education professionals should be prepared for potential attacks at school and respond accordingly. Awareness and information play key roles in emergency preparation, but culture and climate are also important in fostering safe school environments.

Every person involved in primary and secondary education has a distinct role to play with regard to school security. Students can be shooters, whistle-blowers, or victims. Most shooters make their plans known to friends and classmates prior to an attack. Many thwarted shootings were stopped by an informed student that came forward to an adult school official with credible threat information.[116] Educators, school administrators, and counselors also bolster security through student interactions, coordination with law enforcement, and fostering a safe school environment. Administrators play a critical role of policy makers and disciplinarians within most schools. They coordinate with school boards and district officials to establish school rules and enforce those rules to the student body. Law enforcement coordinates with school staff within schools as SROs or SBLE as well as liaison during threat assessments. Primarily, law enforcement responds to school shooting incidents to engage shooters and remove both potential and proven threats.

[115] Warnick, Johnson, and Rocha, "Tragedy and the Meaning of School Shootings," 371.

[116] Newman et al., *Rampage: The Social Roots of School Shootings*, 264.

Several efforts have been made to address school security issues. The next chapter will discuss what efforts have been taken to address the school shooting problem and which methods seem to be working or not working.

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III. PRIMARY AND SECONDARY SCHOOL SHOOTINGS

Primary and secondary school shootings continue to increase in frequency while security efforts escalate as well. Some efforts taken in schools prove to increase safety while others have indeterminate or counterproductive results. School shootings are low probability, high impact events that have devastating effects on a community. Limited resources, especially for public schools, must be allocated wisely because a child's life may depend on it.

This chapter focuses on actions taken by school districts, law enforcement, and government legislation in an effort to bolster school security. First, this chapter addresses school responses, including facility security efforts, organizational reforms, and student social policies such as mental health and threat assessments. Second, this chapter analyzes law enforcement measures in schools, including school resource officers and liaison relationships with administrative officials. Third, this chapter will concentrate on media attention and public perception of school security. Next, this chapter analyzes media and public debate impact on government legislation effecting school security and public gun policy alike. Finally, this chapter explores government legislative decisions at the local, county, state, and federal level with regard to school security.

A. SCHOOL PREVENTION EFFORTS

Preventing school shootings should be the goal for law enforcement, public health officials, parents, and educators alike. A CRS report observes, "while tragic and shocking, public mass shootings account for few of the murders or non-negligent homicides related to firearms that occur annually in the United States."[117] Since 1983, public mass shooting deaths total 547 with 476 injured victims compared to "approximately 30,000 shooting fatalities (suicide, homicide, and accident) each year."[118] The proportion of school-aged

[117] Bjelopera et al., *Public Mass Shootings in the United States: Selected Implications for Federal Public Health and Safety Policy*, 1.

[118] Ibid.; Randy Borum et al., "What Can Be Done About School Shootings? A Review of the Evidence," *Educational Researcher* 39, no. 1 (February 2010), 27.

children (5-19 years old) murdered on school campuses or transit to/from school constitutes under 1 percent of all child homicides.[119] Figure 1 shows the number of incidents at school versus not at school. A large number of homicides occur off-campus, highlighting that the perceived risk to students at school remains relatively low compared to risk away from school.

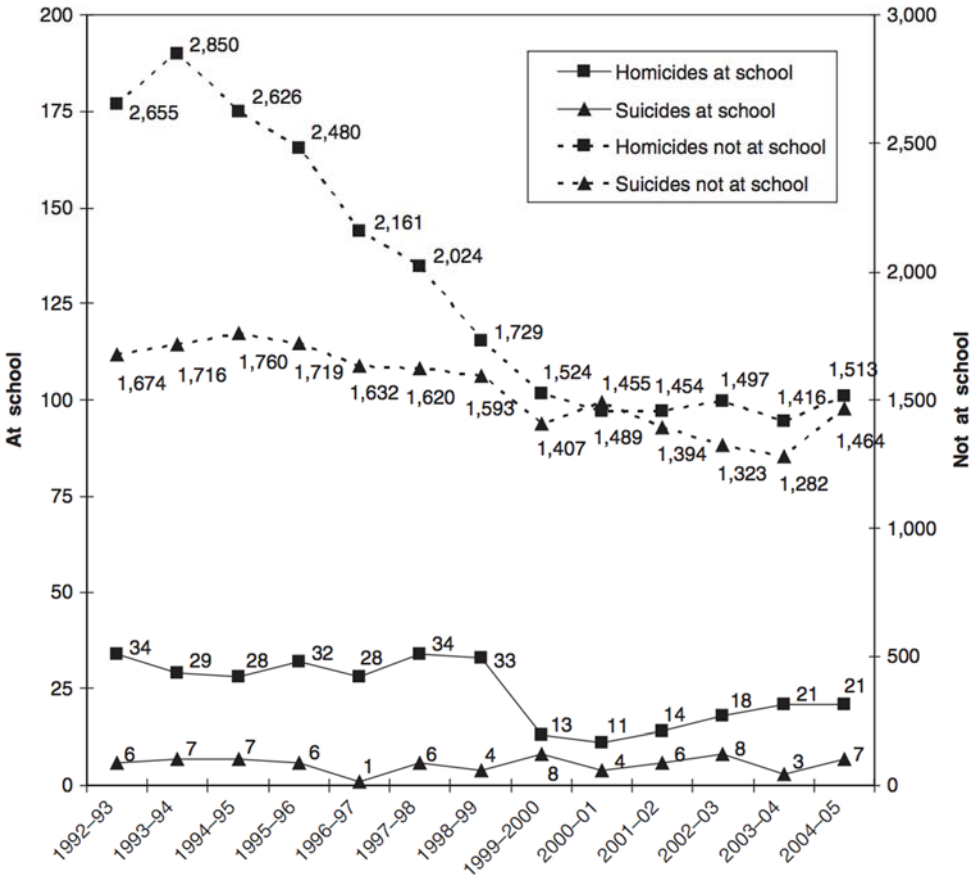

Figure 1. Student homicides and suicides at school and not at school, ages 5 to 18, yearly totals (1992–2005).[120]

[119] Verlinden, Hersen, and Thomas, "Risk Factors in School Shootings," 4.

[120] Source: Borum et al., "What Can Be Done About School Shootings? A Review of the Evidence," 30. "At school" refers to school property, a school sponsored event, or travel between school and events. Data obtained from the Center for Disease Control and Prevention School-Associated Violent Deaths Surveillance Study.

These casualties appear minimal next to other gun-related deaths, but prevention is possible with the right focus. Schools main goal centers around providing a quality education to children. The education mission necessitates secure schools to ensure child and teacher safety. Efforts should be made to reduce the school shooting problem as it continues to grow. A key difference between shootings on-campus versus shootings of school-aged children off-campus lies in the available security measures. School officials do not have jurisdiction over students off campus, but they must provide a secure educational environment at school and make every attempt to do so. Law enforcement retains some responsibility for school shooting responses, but the problem requires coordination with other stakeholders as well.[121] Efforts to prevent school shootings include threat assessments, administrators, teachers, counselors, school resource officers, and physical security measures. However, not all school-implemented policies produce effective results toward improving school security. Administrations should avoid extremely punitive discipline measures to address student issues because they will likely alienate students and worsen the problem.[122] Security improvements at school should enhance the education mission without detracting from education efforts.

Response efforts differ from preventive efforts mainly by time proximity to an attack. However, response efforts such as crisis planning, emergency response drills, and law enforcement coordination before an attack blend into prevention. An aspect of response depends on school crisis response and recovery efforts. The PREPaRE model established by the Department of Education and Department of Homeland Security seeks to improve incident responses in schools.[123] The model established best practices for schools returning a sense of normalcy after a violent attack. The PREPaRE model serves schools post-attack, but studies show schools should incorporate these methods prior to a shooting.[124] School administrators, law enforcement, guidance counselors, mental health professionals, social

[121] Kevin T. Doss and C. David Shepherd, *Active Shooter: Preparing for and Responding to a Growing Threat* (Oxford, UK: Butterworth-Heinemann, 2015), 22.

[122] John Van Dreal, *Assessing Student Threats: A Handbook for Implementing the Salem-Keizer System*, ed. Salem-Keizer Public Schools (Lanham, MD: Rowman & Littlefield Education, 2011), 3.

[123] Borum et al., "What Can Be Done About School Shootings? A Review of the Evidence," 34.

[124] Ibid.

workers, and, to a lesser degree, teachers execute prevention and response coordination efforts. The three different classifications of prevention and response efforts include: facility security, school organizational reform, and student social policies.

1. Facility Security

Many schools implement target hardening methods to improve facility security. These safety measures include dress codes, controlled visitation, identification badges, metal detectors, electronic locks, video surveillance, translucent backpacks, and random locker searches.[125] Physical security standards efficiency remains questionable in reducing school violence.[126] Hypothetical arguments against physical security measures include shooters attacking students lined up at weapons detection devices before school and defeating an armed guard.[127] Metal detectors funnel students arriving to school at the same time, but metal detectors are commonly used in high security buildings such as courthouses and airports.[128] Weapon detection systems, including metal detectors, successfully reduce gun and knife violations in schools.[129] Research recommends that schools implement multiple guards with additional inspection points to increase security and to reduce susceptibility to an attack.[130] Most of these security measures do not fit into public universities due to their access to the public and their larger size. Most state universities occupy several acres of land with dozens of buildings while lacking a physical border. Elementary and secondary schools represent much different security environments and have additional physical security methods from which to choose.

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[125] Wesley G. Jennings et al., "Evaluating the Relationship between Law Enforcement and School Security Measures and Violent Crime in Schools," *Journal of Police Crisis Negotiations* 11 (2011), 113, Routledge.

[126] Ibid.

[127] David B. Kopel, "Pretend "Gun-Free" School Zones: A Deadly Legal Fiction," *Connecticut Law Review* (2009), 19, LexisNexis.

[128] Ibid.

[129] Jennings et al., "Evaluating the Relationship between Law Enforcement and School Security Measures and Violent Crime in Schools," 114.

[130] Kopel, "Pretend "Gun-Free" School Zones: A Deadly Legal Fiction," 19.

Public secondary schools and institutions of higher learning commonly enforce gun-free zones. Institutions other than schools including federal government buildings, sports arenas, and airports implement robust physical security measures to deter crime within these designated areas. While the Gun-Free School Zones Act of 1990 established schools as gun-free, states choose whether or not to exclude licensed weapons permit holders from these zones.[131] Therefore, states lacking the political will to enable campus carry by teachers, administrators, and counselors should invest in robust physical security measures. Chapter V will compare other government and civilian sectors enforcing gun-free zones and the resources required to prevent violent targeted attacks.

2. Organizational Reform

Threat assessments serve as the first and foremost effort towards school shooting prevention. Threat assessments differ greatly from student profiling in that they are tailored, fair, and consistent evaluations to evolving problems.[132] Assessments account for two issues, "how credible and serious is the threat itself? And to what extent does the threatener appear to have the resources, intent, and motivation to carry out the threat?"[133] Prior to most school shootings, attackers avoided a mental health screening and held no record of criminal or violent behavior.[134] However, many shooters displayed behavior indicating a planned school attack prior to the targeted violence.[135] Most of the time these behaviors arise indirectly to targets.[136] Shooters share intent and sometimes attack plans with peers prior to the shooting. According to a guide released by the Secret Service and

[131] Kopel, "Pretend "Gun-Free" School Zones: A Deadly Legal Fiction," 37.

[132] *Mary Ellen O'Toole, The School Shooter: A Threat Assessment Perspective*, ed. Arnold R. Isaacs (Quantico, Virginia: Federal Bureau of Investigation, 1999), 1, http://www.publicsafety.ohio.gov/links/ohs-TheSchoolShooter.pdf.

[133] Ibid., 5.

[134] Vossekuil et al., *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*, 21–22.

[135] Ibid., 24; Borum et al., "What Can Be Done About School Shootings? A Review of the Evidence," 31.

[136] Robert A Fein et al., *Threat Assessment in Schools: A Guide to Managing Threatening Situations and to Creating Safe School Climates* (Washington, D.C.: United States Secret Service United States Department of Education, 2002), 33. Direct threats were made to targets in only 20 percent of cases analyzed by Fein et al.

Department of Education, three requirements constitute effective threat assessments: demonstrable prerogative to carry out an inquiry/investigation, potential to assess threats, and integrated relationships inside and outside of school.[137] A significant distinction exists between inquiries and investigations. Inquiries should be carried out by school staff while investigations should be conducted by law enforcement.[138] Inquiries serve a preliminary function to identify issues using the school security team primarily led by administrators. If a student presents a credible threat the inquiry team transitions the assessment to law enforcement to conduct an investigation. Threat assessment authorities strengthen risk identification by properly conducting inquiries and handing valid cases over to law enforcement partners for further investigation.[139]

Threat assessments should proportionately deal with students. Assessment practitioners risk false positives (over-emphasizing violence from harmless students) with tight parameters and false negatives (missing credible threats from potentially dangerous students) with loose guidelines.[140] The best threat assessment program accurately identifies and proportionately responds to threats to school security.

The organizational structure of schools fosters segregation of information due to division of labor.[141] For example, guidance counselors receive different information from students than do teachers, and principals become aware of only serious issues requiring disciplinary action.[142] Compartmentalization of information increases the likelihood of a school missing a potential threat. Columbine serves as a grave example. The Sheriff's Office informed the school they were looking into a student attempting to build a pipe bomb, but they never informed school administrators of the student's identity (Eric Harris).[143] Students commonly withhold information that potentially tips off law

[137] Ibid., 38–39.

[138] Fein et al., *Threat Assessment in Schools: A Guide to Managing Threatening Situations and to Creating Safe School Climates*, 43–44.

[139] Ibid., 45.

[140] Warnick, Johnson, and Rocha, "Tragedy and the Meaning of School Shootings," 376.

[141] Newman et al., *Rampage: The Social Roots of School Shootings*, 82.

[142] Ibid.

[143] Ibid.

enforcement to school shooting plans.[144] Organizational failure in the normalization of deviation potentially causes a loss of information by school officials. Actions based on cultural norms potentially prove harmful as well; the "clean slate policy" in use by many administrators, upholding the goal of self-reinvention and improvement between middle and high schools, turned out to prevent information sharing in the Heath and Westside cases.[145] Teachers and administrators cannot realistically foresee school shootings; however, they might identify troubled students and determine steps to address issues before violent outbursts.

School climate plays into the level of safety at schools as well. Administrators, teachers, counselors, and students influence climate with positive or negative impacts on safety. One crucial positive factor prevails in student relationships with adults at school. Pollack et al. state, "bystanders who came forward with information commented that they were influenced by positive relations with one or more adults, teachers, or staff, and/or a feeling within the school that the information would be taken seriously and addressed appropriately."[146] On the other hand, when students expect school staff to react adversely to tips they [students] reluctantly withhold information that could prevent a threat from developing into a tragedy.[147] Culture also factors into prevention through perceived severity (or lack thereof) of potential threats. Bystanders fail to report attacks when the threat seems innocent, halfhearted, or unimportant. School culture should emphasize information sharing, especially from students to adults, to enhance security and reduce the chances of a shooter slipping through the cracks.

A report released by the U.S. Secret Service and Department of Education highlights that, "perpetrators exhibited concerning behavior prior to the attack in 93% of

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[144] Fein et al., *Threat Assessment in Schools: A Guide to Managing Threatening Situations and to Creating Safe School Climates*, 32.

[145] Cybelle Fox and David J. Harding, "School Shootings as Organizational Deviance," *Sociology of Education* 78 (January 2005), 83, Sage Publications.

[146] William S. Pollack, William Modzeleski, and Georgeann Rooney, *Prior Knowledge of Potential School-Based Violence: Information Students Learn May Prevent a Targeted Attack*, (Washington, D.C.: United States Secret Service and United States Department of Education, 2008), 7.

[147] Ibid.

the incidents."[148] Additionally, in 81 percent of the incidents someone knew of the attackers' plan beforehand; 93 percent of those individuals were friends, classmates, or siblings of the shooters.[149] Newman et al. state, "in every recent case of rampage school shootings, the perpetrators have sounded off to other kids before they have acted."[150] Most near misses resulted when peers told a responsible adult of an attackers devastating plan.[151]

3. Social Policy Efforts Toward Students

Some actions taken to prevent school shootings prove ineffective and potentially counterproductive. Actions based on a misconception of threats possibly reduce school safety instead of improve it. Practices such as zero-tolerance discipline and student profiling adversely affect school safety from mass shootings.[152] Zero-tolerance refers to strict punishments for minor offenses in order to stop larger ones, such as school shootings, from occurring. Almost 75 percent of schools utilize zero-tolerance with no evidence of its effectiveness for increased school safety.[153] Zero-tolerance policies make sense for gross policy violations such as a student bringing a weapon to school. However, less severe actions punished with flexible disciplinary responses foster inclusion and reduce feelings of alienation among students. Severe punishments prove ineffective due to the fact that they ignore "peer relations and the flow of information in schools."[154] Exclusion exacerbates students' disconnection with students and school staff. Methods of inclusion and increased communication better serve school security in addressing problems early. School security depends on school officials building trust with students. Zero-tolerance policies negatively effect on this trust and serve to alienate students further.[155]

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[148] Pollack, Modzeleski, and Rooney, *Prior Knowledge of Potential School-Based Violence: Information Students Learn May Prevent a Targeted Attack,* 4.

[149] Ibid.

[150] Newman et al., *Rampage: The Social Roots of School Shootings,* 175.

[151] Ibid., 290.

[152] Borum et al., "What Can Be Done About School Shootings? A Review of the Evidence," 28–29.

[153] Ibid., 28.

[154] Newman et al., *Rampage: The Social Roots of School Shootings,* 285.

[155] Ibid., 286.

Aside from disciplinary policy, schools might improve threat identification practices. One negative method of identifying threats surfaces through student profiling. Profiling students means predetermining student potential for violent behavior by creating a checklist. A FBI report on threat assessments states, "a 'profile' of the school shooter or a checklist of danger signs…do not exist."[156] Profiles do not prevent acts of violence and remain ineffective in identifying would-be shooters. Pre-determined threat characteristics misidentify threats because attacker age, sex, ethnicity, family situation, grades, and social participation vary among shooters.[157] Also, profiles commonly brand innocent students as violent and potentially lethal.[158] While a checklist of danger signs proves ineffective, some shooters share traits that assist schools in the threat assessment process and security improvement efforts.

Mental health problems serve as one commonality shared between many shooters.[159] The Safe School Initiative found, "most attackers were known to have had difficulty coping with significant losses or personal failures. Moreover, many had considered or attempted suicide."[160] Mental illness disorders potentially raise the propensity for violence and would benefit from a mental healthcare professional evaluation aside from threat assessments.[161] Furthermore, several studies note the increased detriment of bullying and adverse social interactions of adolescents suffering from mental illness.[162] One significant problem appears in accessibility to mental health treatment for children. Figure 2 highlights the different mental health resources available to urban and rural counties within the United States.

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[156] O'Toole, *The School Shooter: A Threat Assessment Perspective*, 1.

[157] Vossekuil et al., *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*, 20.

[158] O'Toole, *The School Shooter: A Threat Assessment Perspective*, 2.

[159] Ibid., 15.

[160] Vossekuil et al., *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*, 23.

[161] O'Toole, *The School Shooter: A Threat Assessment Perspective*, 15.

[162] Langman, *School Shooters: Understanding High School, College, and Adult Perpetrators*, 3; Newman et al., *Rampage: The Social Roots of School Shootings*, 294.

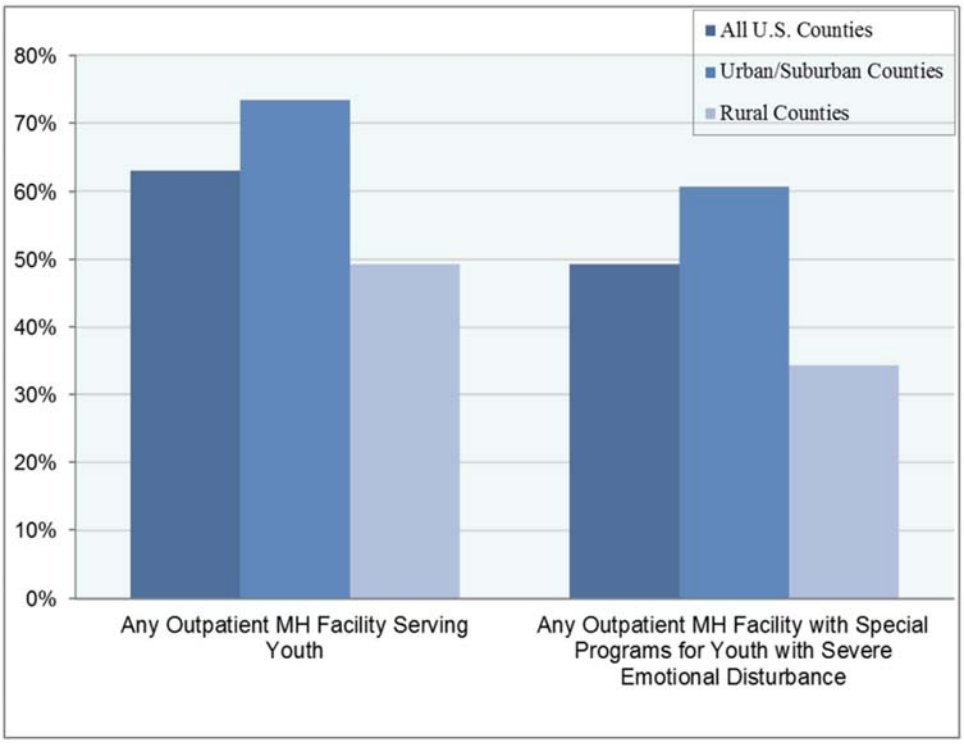

Figure 2. Percentage of U.S. counties providing outpatient mental health services to youth, 2008.[163]

Even with such a deficit, states reduced mental health agency funding by $1.6 billion between 2009 and 2012.[164] States and school districts cut many mental health programs and services due to lack of adequate funding. These mental health services would not only serve to address anguish in potential shooters but would dissuade suicidal thoughts and depression for thousands of other students. Approximately 20 percent of high school students report thoughts of suicide and would benefit from more robust counseling, social worker, and mental health professional interaction.[165] Metzl and MacLeish contend, "evidence strongly suggests that mass shooters are often mentally ill and socially marginalized…mass shootings often shed light on the need for more investment in mental

[163] Source: Cummings, Wen, and Druss, "Improving Access to Mental Health Services for Youth in the United States," 4.

[164] Janet R. Cummings, Hefei Wen, and Benjamin G. Druss, "Improving Access to Mental Health Services for Youth in the United States," *Journal of the American Medical Association* 309, no. 6 (2013): 553, National Institute of Health.

[165] Newman et al., *Rampage: The Social Roots of School Shootings*, 295.

health support networks."[166] Most mentally ill children do not become mass shooters, but many shooters display signs of mental health issues. Schools would benefit from additional mental health treatment capabilities to prevent potential shootings and suicides.

School shooters also suffer from environmental challenges inhibiting moral behavior development. These challenges include caregiver mistreatment during childhood, marginalization by peers, and the inability to fit into a competitive school environment.[167] Ignored and outcast children may not gain ethical guidelines at school or at home. Lack of empathy and morality increases the propensity for violence in some children, especially when they perceive other options for emotional release are not available. Langman categorizes three types of school shooters: "psychopathic, psychotic, and traumatized" perpetrators.[168] Psychopathic adolescents present a severe lack of empathy. Psychotic shooters portray degrees of schizophrenia and hallucinations. Traumatized children encounter abuse, rape, and/or severe parental mistreatment. While these factors exist in multitudes of adolescents that do not commit acts of targeted school violence, they are common conditions found in school shooters to varying degrees.[169]

Schools often fall short in identifying and responding to student mental health needs. Newman et al. conclude that schools fail to equip educators for mental health problem identification and should remain focused on the education mission inside of the classroom.[170] Schools rely on guidance counselors to help children struggling with mental health issues, but many schools miss the mark. Newman et al. assert that, "schools set a standard of no more than 250 students per counselor at an annual cost that, according to some estimates, would be comparable to what we are spending on security cameras and

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[166] Jonathan M. Metzl and Kenneth T. MacLeish, "Mental Illness, Mass Shootings, and the Politics of American Firearms," *American Journal of Public Health* 105, no. 2 (February 2015), 240, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4318286/?utm_source=Yahoo&utm_medium=Beauty&utm_campaign=kirstie-alley-las-vegas-shooter-stephen-paddock-psychiatric-medications.

[167] Stephen Thompson and Ken Kyle, "Understanding Mass School Shootings: Links between Personhood and Power in the Competitive School Environment," *The Journal of Primary Prevention* (September 2005): 419, ProQuest.

[168] Langman, *School Shooters: Understanding High School, College, and Adult Perpetrators*, 3.

[169] Ibid.

[170] Newman et al., *Rampage: The Social Roots of School Shootings*, 295.

metal detectors."[171] As of the 2014 school year the student to school counselor ratio is 482-to-1.[172] Newman et al. continue, " the vast majority (90-95 percent) of people who commit suicide had a potentially diagnosable mental disorder…but only about half had received any treatment."[173] Most school attackers considered or attempted suicide prior to their act of violence.[174] Shooters such as Michael Carneal (Heath High School in West Paducah, Kentucky) possibly would have benefitted from more robust mental health resources as he displayed six signs of suicide.[175]

B. LAW ENFORCEMENT AND FIRST RESPONDER EFFORTS

Law enforcement tactics continually improve through analyzing lessons learned from some school shooting incidents. Law enforcement should arrive on scene and respond to a shooting as soon as possible.[176] Rapid deployment times serve an advantage to active shooter responders, and that time shortens significantly with law enforcement already on-scene.[177] Time serves as a critical factor for school shooting response.

Some of the worst school shootings include University of Texas at Austin, Columbine, Virginia Tech, and Parkland. All of these incidents highlight a delayed law enforcement response. The bell tower shooting at University of Texas at Austin (UT Austin) lasted over 90 minutes with 16 people killed before the shooter was neutralized.[178] Law enforcement officers initially exchanged gunfire with Eric Harris and Dylan Klebold outside Columbine High School, but the shooters returned inside the school after this

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[171] Newman et al., *Rampage: The Social Roots of School Shootings*, 296.

[172] Bethany Bray, "U.S. Student-to-School Counselor Ratio Shows Slight Improvement," *Counseling Today*, October 20, 2017, ct.counseling.org/2017/10/u-s-student-counselor-ratio-shows-slight-improvement/.

[173] Newman et al., *Rampage: The Social Roots of School Shootings*, 296.

[174] Pollack, Modzeleski, and Rooney, *Prior Knowledge of Potential School-Based Violence: Information Students Learn May Prevent a Targeted Attack*, 3.

[175] Newman et al., *Rampage: The Social Roots of School Shootings*, 298.

[176] Doss and Shepherd, *Active Shooter: Preparing for and Responding to a Growing Threat*, 77.

[177] Steve A. Ausdemore, "Eliminating the Lost Time Interval of Law Enforcement to Active Shooter Events in Schools" (master's thesis, Naval Postgraduate School, 2015), 77, https://calhoun.nps.edu/handle/10945/47227.

[178] Wallenfeldt, "Texas Tower Shooting of 1966."

skirmish. Ten students and one teacher perished while police established a perimeter (more than 1,000 first responders amassed outside the school).[179] Seung Hui Cho locked three entrances with heavy chains and moved about freely in Norris Hall for 11 minutes, expending 174 rounds of ammunition; he killed 30 people and wounded 17 before committing suicide.[180] Nikolas Cruz murdered 17 students and wounded 17 more in Parkland, Florida.[181] While the shooting only lasted 5 minutes, 80 minutes passed after the shooting started until police arrested the shooter.[182]

Several important law enforcement tactics arose out of these tragedies. The UT Austin shooting largely influenced the establishment of special weapons and tactics (SWAT) units in metropolitan police departments as well as organic campus security at many public state universities.[183] Columbine illuminated the need to change SWAT implementation during active shooter events.[184] Law enforcement officers first on scene could no longer wait for SWAT and therefore required training on active shooter response using ad hoc methods. Virginia Tech highlighted mental health issues to school officials while drawing attention to firearm sales concerns and forced-barrier entry issues for law enforcement. Parkland serves as a reminder for the need of rapid shooter neutralization and effective crisis management. These types of shootings remain extremely rare and law enforcement efforts continue to improve over time.

1. School Resource Officers

School Resource Officer (SRO) programs consist of law enforcement officer(s) from local agencies partnering with schools and improving a school's organic security

[179] Ausdemore, "Eliminating the Lost Time Interval of Law Enforcement to Active Shooter Events in Schools," 101.

[180] Ibid., 49.

[181] Kevin Sullivan, Samantha Schmidt, and David A. Farenthold, "What Happened in the 82 Minutes between Nikolas Cruz's Arrival and Arrest During Florida Shooting," *Washington Post* (2018), http://www.chicagotribune.com/news/nationworld/ct-82-minutes-florida-shooting-20180215-story.html.

[182] Ibid.

[183] Bird, *Surviving a Mass Murder Rampage: When Seconds Count, Police Are Still Minutes Away*, 39.

[184] Ausdemore, "Eliminating the Lost Time Interval of Law Enforcement to Active Shooter Events in Schools," 101.

capabilities. Historically, law enforcement agencies coordinated with schools off campus; however, over the last 20 years police increasingly serve in schools full-time.[185] SRO roles vary from school to school to address differing needs, but their roles consistently fall within three categories: "safety expert/law enforcer, problem solver/liaison to community resources, and educator."[186] See Table 1. Typically, criminal justice proceedings occupy half of a SRO's time.[187]

Table 1. School resource officer definition and responsibilities.[188]

SRO Responsibilities	SRO Definition: Career law enforcement officer, with sworn authority, deployed in community-oriented policing, and assigned by the employing police department or agency to work in collaboration with schools and community-based organizations
A	Address crime and disorder problems, gangs, and drug activities in or around an elementary or secondary school
B	Develop or expand crime prevention efforts for students
C	Educate likely school-age victims in crime prevention and safety
D	Develop or expand community justice initiatives for students
E	Train students in conflict resolution, restorative justice, and crime awareness
F	Assist in the identification of physical changes in the environment that may reduce crime in or around the school
G	Assist in developing school policy that addresses crime and to recommend procedural changes

[185] Barbara Raymond, *Assigning police officers to schools,* (Washington, DC: Department of Justice, Office of Community Oriented Policing Services, 2010), 1.

[186] Raymond, *Assigning Police Officers to Schools*, 2.

[187] Ibid.

[188] Adapted from: James and McCallion, "School Resource Officers: Law Enforcement Officers in Schools," 3.

Establishing a new SRO program requires attention to detail based on a school's specific needs.[189] Several roles between the law enforcement agency and school administration require action when starting the program, such as: identify the representative from each entity, define the level of time and resources required, define the overall aims and objectives, identify responsibilities on a daily basis and in crisis, deconflict reporting requirements, and establish conflict resolution mechanisms.[190] SRO programs should also establish legal rules with schools for search and seizure, student interviews, information sharing, and privacy restrictions with a signed document between school administrators and law enforcement leadership.[191]

Many school districts face challenges implementing a SRO program. Some schools choose to operate without a SRO because they claim to not need one or encounter funding issues.[192] Secondary schools, schools in urban areas, and schools with an enrollment of 1,000 students or greater have the highest likelihood of implementing SROs.[193] Small schools (less than 300 students) and schools in rural areas utilize SRO programs much less frequently. The 2007–2008 School Survey on Crime and Safety found 72 percent of rural schools and 84 percent of small schools had a SRO on campus less than once a week.[194] Federal funding cutbacks also plague schools with the desire but lack of means for law enforcement presence. James and McCallion report, "two federal grant programs provided funding for the hiring and placement of law enforcement officers in schools across the country…Funding for these programs ended, respectively, in FY2005 and FY2009."[195] Figure 3 shows SRO and law enforcement presence at schools from 2005 to 2016. Limited funding of SRO positions may leave them filled by retired law enforcement officers

[189] Federal Bureau of Investigation, *Violence Prevention in Schools*, Washington, D.C.: U.S. Department of Justice, 2017, https://www.fbi.gov/file-repository/violence-prevention-in-schools-march-2017.pdf/view, 1.

[190] Ibid.

[191] Federal Bureau of Investigation, *Violence Prevention in Schools*, 1.

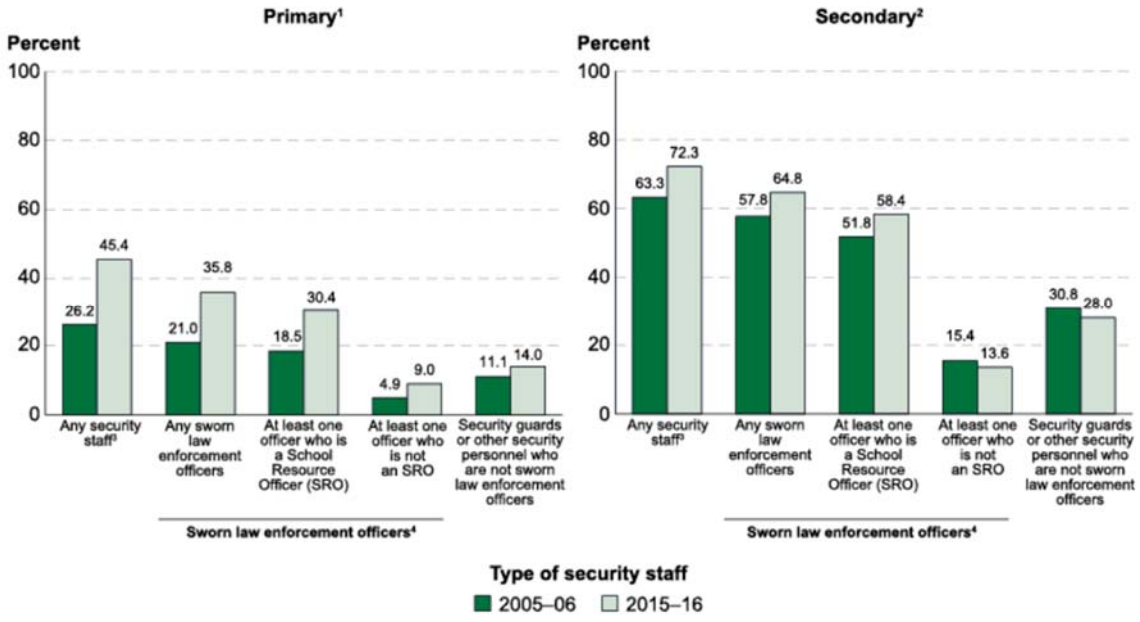
[192] "School Resource Officers: Law Enforcement Officers in Schools," 4.

[193] Ibid., 6.

[194] Ibid., 6–7.

[195] Ibid., 7.

supplementing a pension. Newman et al. warn schools, "if we want quality, we will have to pay for it."[196]



[1]Primary schools include schools with lowest starting grade 3 and highest ending grade 8. [2]Secondary schools include grades 9 through 12 and combined schools. [3]Schools using more than one type of security are labelled "Any security staff." [4]Schools using a combination of SROs and LEOs fall into "Any sworn law enforcement officers."

Figure 3. School resource officer deployments.[197]

SRO programs encounter criticism and scrutiny as well, with questions to their effectiveness in improving school security. Some critics claim they increase students' "risk of injury and criminal prosecution…[in] a school to prison pipeline."[198] In the Westside example, local juvenile courts encounter more cases from SRO schools than those without

[196] Newman et al., *Rampage: The Social Roots of School Shootings*, 281.

[197] Source: "Spotlight 1: Prevalence, Type, and Responsibilities of Security Staff in K–12 Public Schools," National Center for Education Statistics, accessed April 16, 2018, https://nces.ed.gov/programs/crimeindicators/ind_S01.asp.

[198] Joseph B. Ryan et al., "The Growing Concerns Regarding School Resource Officers," *Intervention in School and Clinic* 53, no. 3 (June 2017): 188–189, Sage Publications.

an SRO.[199] Previously, disciplined students' mistakes would show on a temporary academic record, whereas those students now have an arrest record. SRO roles also appear to suffer ever-expanding responsibilities to include school discipline and policy enforcement. SROs have taken on a multitude of roles, beginning with racial integration issues in the 1960s, followed by counter-drug efforts, and today SROs mainly address school shooting incidents.[200] Resource Officers' growing mission set allegedly reduces effectiveness and increases negative student interactions.[201] The National Association of School Resource Officers (NASRO) warned against SRO involvement in school discipline functions normally held by school administrators and educators.[202]

While juvenile detention referrals are common for crimes committed at schools with a SRO, the LEO at school has no choice for serious crimes committed by students.[203] Langman and Newman both support SROs as a liaison between students and staff to increase information flow in the academic environment.[204] SROs establish a level of trust with students, teachers, administrators, counselors, and parents to enhance security and communication within schools.[205] SROs carry out the beneficial function of enhanced shooting prevention. Research illustrates SRO presence correlates with decreased criminal disturbances at schools.[206] As stated earlier, shooters often make their plans of attack known beforehand to friends and other students. If a student brings that plan to a SRO, the time to address the potential problem is shortened significantly, as opposed to standard law enforcement methods.[207] One example occurs in the Evergreen High School case where a

[199] Newman et al., *Rampage: The Social Roots of School Shootings*, 282.

[200] Ryan et al., "The Growing Concerns Regarding School Resource Officers," 189.

[201] Ibid.

[202] Ibid., 191.

[203] Maurice Canady, Bernard James, and Janet Nease, *To Protect & Educate: The School Resource Officer and the Prevention of Violence in Schools*, (Hoover, AL: National Association of School Resource Officers, 2012), 7, https://nasro.org/cms/wp-content/uploads/2017/10/NASRO-Protect-and-Educate.pdf.

[204] Langman, *Why Kids Kill: Inside the Minds of School Shooters*. 192. Newman et al., *Rampage: The Social Roots of School Shootings*, 280.

[205] *Rampage: The Social Roots of School Shootings*, 281.

[206] Jennings et al., "Evaluating the Relationship between Law Enforcement and School Security Measures and Violent Crime in Schools," 121.

[207] Newman et al., *Rampage: The Social Roots of School Shootings*, 281.

SRO learned of one such plan, seized the accused student, and found a loaded machine gun in his backpack.[208] Criticism blames SROs for increased criminality when they actually serve to preempt violence instead of reacting to it.

2. Law Enforcement Liaison Relationship with School Administrative Officials

School administrators and law enforcement should establish a joint relationship to enhance school security. This relationship should include efforts such as emergency action planning, school security teams to include SROs, threat assessment guidance and implementation, as well as established plans for responses during and after attacks on school grounds. The Safe School Initiative maintains, "despite prompt law enforcement responses, most shooting incidents were stopped by means other than law enforcement intervention."[209] School administrators, educators, other students, or the attacker themselves stopped shootings prior to a law enforcement response. Therefore, schools with emergency action plans coordinated with local law enforcement agencies benefit from improved efforts to prevent and respond to attacks at any stage. The main effort should focus on prevention, but school administrators should always be prepared for the worst case.

3. Medics

As shooting incidents become increasingly lethal, it is paramount that emergency medical services (EMS) respond as soon as possible. Tierney pinpointed the problem that law enforcement must first clear the scene in order for EMS to respond.[210] Victims lack urgent medical attention while the scene remains uncleared. EMS should train and operate with law enforcement to provide medical care before the scene is declared safe, acting in an organized and deliberate manner. Law enforcement officers should also develop trauma first aid capabilities to bolster initial medical attention to shooting victims coupled with a

[208] Ibid.

[209] Vossekuil et al., *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*, 12.

[210] Martin Tierney, "Facilitating the Medical Response into an Active Shooter Hot Zone" (master's thesis, Naval Postgraduate School, 2016), 2, https://calhoun.nps.edu/handle/10945/49402.

tactical EMS response.[211] Timely and improved medical care for trauma victims leads to increased chances of survival.[212] Statistics highlight timely medical response as a critical factor to saving trauma victims' lives.[213] Medical intervention is key for shooting victims, and medical responder capabilities continue to improve with updated tactics and training methodologies.

C. MEDIA ATTENTION AND PUBLIC PERCEPTION

School shootings garnered increased media attention of late.[214] Mass media portrays these tragic events through extensive video clips and agenda setting print articles that establish consensus and convey significance to their viewers and readers.[215] News stories significantly decrease after two to three years, but public fears remain consistently elevated after high profile mass shootings.[216] Mainstream news coverage of school shootings spreads many misconceptions: violence embodies an epidemic in schools, all school shooters exhibit the same characteristics, school shooters are loners, revenge solely motivates shooters, and weapon access significantly raises risk.[217] Therefore, media coverage does not correlate with public fears. Media exacerbates sentiments of fear among children, their parents, teachers, administrators, and government decision makers.[218] Schildkraut and Elsass assert, "the media's focus on high-profile cases creates an opportunity for claims makers to use these celebrated cases as examples for why these events are social problems, but it also provides an entertainment product for the media to

[211] Ibid., 28.

[212] Ibid., 2.

[213] Paul A. Atwater, "Force Protection for Fire Fighters: Warm Zone Operations at Paramilitary Style Active Shooter Incidents in a Multi-Hazard Environment as a Fire Service Core Competency" (master's thesis, Naval Postgraduate School, 2012), 75, https://calhoun.nps.edu/handle/10945/6764.

[214] Richard Lawrence and David Mueller, "School Shootings and the Man-Bites-Dog Criterion of Newsworthiness," *Youth Violence and Juvenile Justice* 1, no. 4 (October 2003): 330, Sage Publications.

[215] Ibid. Schildkraut and Elsass, *Mass Shootings: Media, Myths, and Realities*, 7–8.

[216] Aaron Kupchik and Nicole L. Bracy, "The News Media on School Crime and Violence," *Youth Violence and Juvenile Justice* 7, no. 2 (April 2009), 143, Sage Publications.

[217] O'Toole, *The School Shooter: A Threat Assessment Perspective*, 4.

[218] Verlinden, Hersen, and Thomas, "Risk Factors in School Shootings," 3.

sell."[219] Public perception of mass shootings should include improved representation and information aside from media accounts to develop informed views as opposed to panic-induced reactions.[220]

1. Media Impact on Legislation

Claims makers give social problems such as school shootings context and potential solutions.[221] They may simply bring awareness to an issue, or they may offer policy prescriptions to address it. Victims, eye-witnesses, and experts make up primary claims makers. Primary claims makers have in-depth knowledge of the issue.[222] Politicians and political pundits may also fit into the primary claims maker group. The media is a secondary claims maker due to their removal from the issue and because they require dissemination and speculation of primary accounts.

Before Columbine, school shootings were viewed as isolated incidents with limited media coverage.[223] The 17 articles written by *The New York Times* were the only exception about Charles Whitman's shooting at University of Texas at Austin, three of which were front page pieces.[224] Littleton, CO was one of the first school shootings that sparked national discussion. The discourse after Columbine included, "how suburban schools no longer seemed safe, the meaning of Columbine for the national culture, and the institution of prevention strategies."[225] School shootings are rare events, so the media inaccurately

[219] Schildkraut and Elsass, *Mass Shootings: Media, Myths, and Realities*, 10.

[220] Ronald Burns and Charles Crawford, "School Shootings, the Media, and Public Fear: Ingredients for a Moral Panic," *Crime, Law & Social Change* 32 (October 1999): 165, Springer.

[221] Schildkraut and Elsass, *Mass Shootings: Media, Myths, and Realities*, 5.

[222] Ibid., 7.

[223] Ibid.

[224] Ibid., 34.

[225] Glenn W. Muschert, "Frame-Changing in the Media Coverage of a School Shooting: The Rise of Columbine as a National Concern," *The Social Science Journal* 46 (2009), 169, http://www15.uta.fi/arkisto/aktk/projects/sta/Muschert_2009_Frame-changing-in-a-Media-Coverage-of-School-Shooting.pdf.

portrays the problem.[226] Policies for school violence prevention should incorporate less media influence and focus more on risk and safety assessments.[227]

2. Public Debate

School shootings occupy center stage in many public debates, specifically debates on gun control, mental health issues, and school safety efforts. Schildkraut and Elsass contend, "many of the responses filling the discourse following these events remain the same—gun control, right-to-carry laws, mental health, and violent media."[228] Public interpretation of the school shooting issues attempts to identify causal factors and address them in order to prevent future incidents.

The United States represents an outlier with regard to gun violence as a whole. The fatality rate from firearm incidents is five times higher in the U.S. than all other industrialized nations.[229] Gun-related deaths rank second only to motor vehicle accidents in injury deaths.[230] Gun violence partially correlates with gun ownership and potentially increases susceptibility to mass shootings.[231] Thus, gun access commonly arises in the public debate on school shootings.

Access to weapons and weapon usage precede many school shootings.[232] The Safe School Initiative found that over two-thirds of school shooters acquired the gun(s) from parents or a relative.[233] Gun numbers in America increased twofold since 1970, coming close to 200 million guns.[234] However, gun ownership stayed consistently around 30

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[226] Lawrence and Mueller, "School Shootings and the Man-Bites-Dog Criterion of Newsworthiness," 342.

[227] Ibid.

[228] Schildkraut and Elsass, *Mass Shootings: Media, Myths, and Realities*, 25.

[229] Ausdemore, "Eliminating the Lost Time Interval of Law Enforcement to Active Shooter Events in Schools," 2.

[230] Ibid.

[231] Adam Lankford, "Public Mass Shooters and Firearms: A Cross-National Study of 171 Countries," *Violence and Victims* 31, no. 2 (2016), 187.

[232] Vossekuil et al., *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*, 12.

[233] Ibid., 27.

[234] Newman et al., *Rampage: The Social Roots of School Shootings*, 69

percent since 1980.[235] The National Rifle Association, scholars, educators, and law enforcement all recognize the importance of preventing gun access to children.[236] Studies recommend parents and relatives install robust gun safes to prevent theft and misuse by their children.[237] Gun owners with children could also store guns at a gun club or weapons range inaccessible to their young ones. While gun access factors into school shootings, they are not a causal factor. Langman states, "if guns were impossible to obtain there would be no shootings. The availability of guns, however, does not explain school shootings. In fact, when shootings occur in areas where gun ownership is common, the misuse of firearms should be seen as particularly unusual."[238] Researchers argue school shootings should not be blamed on gun culture because shooter actions contradict responsible gun ownership and use.[239]

School shootings may incite a moral panic, being overemphasized in the spectrum of American crime problems. Burns and Crawford define a moral panic arises when:

> A condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests; its (the panic) nature is presented in a stylized and stereotypical fashion by the mass media…Sometimes the subject of the panic is quite novel and at other times it is something which has been in existence long enough, but suddenly appears in the limelight. Sometimes the panic passes over and is forgotten…at other times it has more serious and long lasting repercussions and might produce such changes as those in legal and social policy or even in the way society conceives itself.[240]

Moral panics incite a desire for public action in response to a perceived issue. Fear for children's safety at school and chances of encountering a shooting on campus are often

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[235] Ibid.

[236] O'Toole, *The School Shooter: A Threat Assessment Perspective*, 21; Vossekuil et al., *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*, 12; Gary Kleck, "Mass Shootings in Schools: The Worst Possible Case for Gun Control," *American Behavioral Scientist* 52, no. 10 (June 2009), 1455, Sage Publications.

[237] Kleck, "Mass Shootings in Schools: The Worst Possible Case for Gun Control," 1455.

[238] Langman, *Why Kids Kill: Inside the Minds of School Shooters*, 5.

[239] Ibid.

[240] Burns and Crawford, "School Shootings, the Media, and Public Fear: Ingredients for a Moral Panic," 148.

exaggerated.[241] Students are twice as likely to die from a lightning strike than from a school shooting; however, lightning strikes are largely unavoidable while preventive action and early response may thwart school shootings.[242]

Gun control measures consistently surface in public and media debates after school shootings, resembling a moral panic.[243] Regardless, based on Gallup and Pew polling data from the months following Columbine and Virginia Tech, school shootings mildly impacted public opinion with regard to gun control.[244] Gun control measures are introduced through legislation after many school shootings, many are not passed, highlighting the power of opinion to sway the political force behind such laws.[245]

The efficacy of gun-free zones recently surfaced in the school violence debate. Kopel asserts, "campuses should be safe zones for students and teachers-not for predators who are legally guaranteed that their victims will be defenseless."[246] Several states implemented campus carry policies including Utah and Texas.[247] While some argue for removing gun-free zones to varying degrees, others vehemently insist on retaining them.[248] Some pundits claim as many as 98 percent of mass public shootings occur in gun-free zones.[249] Others argue only 13 percent of mass shootings occur in gun-free zones.[250]

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[241] Ibid., 155; Schildkraut and Elsass, *Mass Shootings: Media, Myths, and Realities*, 58.

[242] Burns and Crawford, "School Shootings, the Media, and Public Fear: Ingredients for a Moral Panic," 154.

[243] Jaclyn Schildkraut and Tiffany Cox Hernandez, "Laws That Bit the Bullet: A Review of Legislative Responses to School Shootings," *American Journal of Criminal Justice* 39 (2014): 359, Springer; Kleck, "Mass Shootings in Schools: The Worst Possible Case for Gun Control," 1447.

[244] Schildkraut and Hernandez, "Laws That Bit the Bullet: A Review of Legislative Responses to School Shootings," 368.

[245] Ibid.

[246] Kopel, "Pretend "Gun-Free" School Zones: A Deadly Legal Fiction," 38.

[247] Ibid.

[248] Ibid., 20. Institutions such as the Brady Center argue for complete gun prohibition on school campuses.

[249] John Lott, "More Misleading Information from Bloomberg's Everytown for Gun Safety on Guns: "Analysis of Recent Mass Shootings," Showing How Mass Public Shootings Keep Occurring in Gun-Free Zones," *Crime Prevention Research Center* (2014), https://crimeresearch.org/2014/09/more-misleading-information-from-bloombergs-everytown-for-gun-safety-on-guns-analysis-of-recent-mass-shootings/.

[250] Michele Gorman, "Do Mass Shooters Target Gun Free Zones? It's Complicated," *Newsweek*, last modified January 14, 2016, www.newsweek.com/mike-huckabee-mass-shooters-gun-free-zones-416016.

Analysis remains relatively inconclusive as to the efficacy of gun-free zones and whether they factor into shooter target identification.

D. LEGISLATIVE DECISIONS

Legislative measures at the local, school district, county, state, and federal levels consistently emerge for debate among various policy officials. These measures include proposals for gun control, gun-free zones, increased enforcement of existing laws, parents' accountability for their children's animosity, separate courts and prosecution methods for child weapons offenses, school discipline reform, and alternative school placement for children charged with weapons violations. Bill proposals often spike after high profile school shootings. For example, after Columbine (April 20, 1999) over 800 pieces of legislation were proposed, but only 10 percent of them passed into law.[251]

1. Local/School District

A 2002 study surveyed 336 Texas school administrators and found that many parents disagreed with school policies after enacting zero-tolerance responses to firearms, drugs, and gang-related incidents.[252] Snell et al. argue, "almost all school administrators claimed that publicized school crimes had an impact on that policy."[253] Administrators and school boards enacted social policy and physical security changes in response to shootings with nationwide attention instead of local level incidents.

Some states explicitly prohibit right to carry laws on public school grounds, while other states may not forbid gun carrying on campus.[254] However, many school boards and administrators in those states without legal carry restrictions implement weapons bans of their own.[255] A few universities, such as Dartmouth College and Boise State University,

[251] Schildkraut and Elsass, *Mass Shootings: Media, Myths, and Realities*, 39.

[252] Clete Snell et al., "School Crime Policy Changes: The Impact of Recent Highly-Publicized School Crimes," *American Journal of Criminal Justice* 26, no. 2 (2002): 269, Springer.

[253] Ibid., 280.

[254] Kopel, "Pretend "Gun-Free" School Zones: A Deadly Legal Fiction," 3.

[255] Ibid.

allow faculty gun carrying.[256] Administrators possess significant leeway with regard to policy decisions that impact second amendment rights on their campuses.

2. County/State

States play less of a role in school policy legislation and more of a role on gun laws as a whole. Concealed carry weapons (CCW) permit issuance varies greatly state to state. Forty states implement "Shall Issue" CCW permits with objective standards.[257] Eight states allow issuing agency discretion for CCW permit licensing, and two states do not issue gun carry permits (Illinois and Wisconsin).[258] Twenty-six states proposed campus carry laws, but most bills were defeated.[259] Arizona passed a law in 2009, "to forbid employers from prohibiting employee guns in locked cars in parking areas."[260] Arizona public universities then altered regulations to allow guns in parking areas to follow state law. Former Texas Governor Rick Perry publicly endorsed campus carry for college students and public school teachers, and several school districts in Texas passed licensed carry for teachers.[261] Utah remains an outlier in campus carry legislation. Since 1995, any valid CCW permit holder in Utah is exempt from public school weapon bans, including at state universities.[262] Records show a complete lack of mass murder attempts in Utah, and CCW permit holders there have not misused firearms on campus.[263]

3. Federal

Federal legislation largely focuses on restrictions such as the National Firearms Act of 1934, which restricted machine (fully automatic) guns, short barreled rifles, short barreled shotguns, silencers, and destructive devices (explosives, missiles, poisonous gas,

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[256] Ibid.

[257] Ibid.

[258] Ibid.

[259] Kopel, "Pretend "Gun-Free" School Zones: A Deadly Legal Fiction," 5.

[260] Ibid.

[261] Ibid.

[262] Ibid., 7.

[263] Ibid.

and pistols/rifles larger than 0.5 inch bore).[264] Another federal legislation initiative took form in the Violent Crime Control and Law Enforcement Act of 1994 that contained the Federal Assault Weapons Ban that expired in 2004.[265] Assault weapons included semi-automatic rifles with collapsible stocks, pistol-grips, magazines holding more than 10 rounds, and bayonet attachments.[266] Several federal laws amended school safety, such as the Gun-Free School Zone Act of 1990, that established gun-free zones at public schools; however, states may exempt licensed individuals (such as Utah).[267] Another federal effort was the Gun-Free Schools Act of 1994 that established zero tolerance policy requiring one-year expulsions in order for schools to qualify for federal funding.[268]

E. CONCLUSION

The background reviewed in this chapter indicates that schools have several options to improve school security. Conscientious facility security upgrades implemented with a focus on cost-benefit analysis against other programs bolster resilience to an attack. Organizational reform should focus more on information sharing to properly address potentially dangerous students via threat assessment processes. Social policies should deemphasize zero-tolerance policies and enhance mental health resources in order to diagnose and treat struggling students. SRO programs should proliferate throughout schools via increased funding and support. Law enforcement and administration officials should establish alliances that develop effective policies for improving school safety. Media coverage should allow communities time to heal by utilizing more sympathetic appeals and less agenda setting stories. Legislators should focus less on secondhand factors, such as gun control, and pay more attention to mental health issues, school counselor/psychological professional resources, and SRO program funding issues that are

[264] National Firearms Act of 1934, Pub. L. No. 73–474 § 5801 Stat. 1236 (1934). https://www.gpo.gov/fdsys/pkg/USCODE-2011-title26/pdf/USCODE-2011-title26-subtitleE-chap53.pdf

[265] Violent Crime Control and Law Enforcement Act of 1994, Pub. L. No. 103–322, 108 Stat. 1796 (1994). https://www.gpo.gov/fdsys/pkg/BILLS-103hr3355enr/pdf/BILLS-103hr3355enr.pdf

[266] Ibid.

[267] S. 2070, 101st Cong. (1990). https://www.congress.gov/bill/101st-congress/senate-bill/2070.

[268] H.R. 987, 103rd Cong. (1994). https://www.congress.gov/bill/103rd-congress/house-bill/987.

causal factors. Improvements made across many educational mission stakeholder groups increase security. Preventive efforts never completely eliminate school shooting incidents. However, the most effective steps come from within schools. Education officials should foster an inclusive learning environment with adequate resources to assist struggling adolescents. Schools should take proactive steps aimed at preventing school shootings while abstaining from counterproductive measures. These methods will vary from school to school based on funding, security environment, and legal setting. Each school should closely analyze the potential impacts before implementing new policies.

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IV. CASE STUDIES

This chapter analyzes recent school shootings in order to draw lessons learned, further school shooting prevention, and improve armed response. The research design utilizes a mini-case study approach to highlight background and event timelines to compare these primary and secondary school shootings. Factors analyzed for each case include: law enforcement response time, event time, shooter apprehension type (suicide/suicide by cop/ arrest/civilian intervention), casualty numbers (dead and injured), weapons used, tactics employed by shooter/law enforcement, potential lessons learned by law enforcement, school administration changes, and implications to the homeland security community. Each case study provides a brief overview of the attack, a background of each shooter, and lessons learned for what institutional changes might prevent shootings in the future. As was discussed in Chapter III, detailed profiles of shooters are of limited value, because each shooter and each case is very different from the next. However, these case studies can provide school security practitioners with hindsight and potential factors to watch out for, especially in the threat assessment process. The cases analyzed in this chapter are: Columbine, Sandy Hook, Thurston High School, Pearl High School, Heath High School, and Westside Middle School.

A. COLUMBINE

Eric Harris, age 17, and Dylan Klebold, 18, attacked Columbine High School in Jefferson County, Colorado, on April 20, 1999.[269] They killed 12 students, one teacher, and wounded 24 students, primarily with firearms. Their plan involved shooting students fleeing school after detonating two 20-pound propane bombs in the school cafeteria, but the bombs failed to explode.[270] They improvised by shooting students eating lunch outside, moving to the cafeteria, and finally the library.[271] They detonated pipe bombs without much

[269] William H. Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, (Denver, CO: State of Colorado, 2001), XXI; Jenn Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters* (Independently Published, 2017), 99.

[270] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, II.

[271] Ibid.

effect, but the gunmen encountered 60 students and staff in the library where the most carnage ensued.[272] In total, law enforcement officials recovered more than 90 bombs after the attack.[273] Casualties from the attack would have greatly increased if the bombs had detonated as planned.[274]

Harris and Klebold's assault began at 11:19 a.m.[275] The first officer reached the scene just four minutes after the first 9–1-1 call.[276] Five other officers arrived within minutes and began assisting fleeing students and faculty.[277] The Jefferson County Sheriff's Office requested outside assistance, amassing more than 1,000 first responders at the scene.[278] SWAT entered the school at 12:06 p.m. and the shooters committed suicide at 12:08 p.m.

Harris and Klebold shot Dave Sanders, a teacher, who went more than three hours without medical attention and bled to death from the shotgun wound.[279] Policy prevented EMS technicians from entering the school prior to law enforcement declaring the scene safe.[280] Law enforcement appeared at the scene at 11:23 a.m., but some of the wounded remained untreated as late as 3:00 p.m.[281] Harper states, "consensus among law-enforcement authorities across the country is that Columbine was handled by the book—but that book should be rewritten."[282]

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[272] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, IV.

[273] Ibid., 12.

[274] Ibid., 25. Nearly 500 students ate lunch in the cafeteria where Klebold and Harris planted their largest bombs.

[275] Timothy Harper, "Shoot to Kill," *The Atlantic Monthly* 286, no. 4 (October 2000): 30, ProQuest; Thomas C. Mijares and Ronald M. McCarthy, *Significant Tactical Police Cases: Learning from Past Events to Improve Upon Future Responses* (Springfield, IL: Charles C. Thomas, 2015), 181.

[276] Harper, "Shoot to Kill," 30.

[277] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, 37.

[278] Ibid., 10.

[279] Ibid., II.

[280] Martin Tierney, "Facilitating the Medical Response into an Active Shooter Hot Zone," 56.

[281] Harper, "Shoot to Kill," 30.

[282] Ibid., 30.

1. Background/History

Wayne Harris, Eric's father, was an officer in the U.S. Air Force and moved the family to Columbine after his retirement in 1993.[283] Dylan Klebold spent most of his childhood in Jefferson County and met Harris in middle school.[284] Harris and Klebold led normal childhoods and school careers by most accounts of friends and parents. They maintained social lives, high school jobs, and enjoyed sports.[285]

Harris and Klebold made several videos in the months leading up to the attack, referred to as "the basement tapes."[286] Columbine High School administrators suspended the pair after they hacked the school's computer system.[287] Harris and Klebold also dealt with the Jefferson County Sheriff's Office after their arrest for "breaking into an electrician's van."[288] Punitive measures imposed by the sheriff placed the two students on a diversion program because of no prior criminal incidents and their ages (both were 17).[289] Although the two students expressed bitterness towards the Sheriff's Office for their embarrassment, it is unclear whether or not this factored into their motive for attacking the school.

2. Lessons Learned

Law enforcement agencies across the country implemented policy changes after Columbine in three different areas: law enforcement response, communications, and school resource officer training and policy.[290] Prior to Columbine, law enforcement response called for secure scene establishment to handle trapped bank robbers and hostage takers,

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[283] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, 17.

[284] Ibid.

[285] Peter Langman, "The Search for Truth at Columbine," *School Shooters* (2008), www.schoolshooters.info, 5.

[286] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, 19.

[287] Ibid., 20.

[288] Ibid.

[289] Ibid.

[290] Mijares and McCarthy, *Significant Tactical Police Cases: Learning from Past Events to Improve Upon Future Responses*, 180.

not adolescents on a killing spree.[291] Most agencies responding to the Columbine shooting operated radios on different bandwidths, resulting in strained communication efforts.[292] School resource officer (SRO) training and emergency management also required review by many law enforcement agencies.[293] Jefferson County Sheriff's Office deployed multiple SROs to Columbine, but SRO response proved insignificant in stopping the Columbine shooters. SRO functions at Columbine included: school grounds patrols, visible crime deterrent, student dispute settlement, traffic direction, and presence at school functions such as plays, sports matches, and dances.[294]

SWAT teams received criticism for delays in securing the scene for treatment of the wounded.[295] Officers initially responding followed policy by establishing a perimeter and evacuating personnel to safe areas.[296] Published law enforcement policies referred to this tactic as the static mode with goals of containing the crime scene: administering first-aid to the wounded and gathering tactical intelligence useful to SWAT teams.[297] Criminal objectives prior to Columbine typically focused on robbery or hostage taking, not mass murder.[298] SWAT officers had little to no knowledge of the school layout at Columbine, and teams moved slowly because of the persistent bomb threats throughout the scene.[299] Smoke, loud noises, and water pooled from sprinklers also plagued first responders during evacuation efforts.[300] Columbine highlighted the need for an incident command system and improved interagency communication, especially for large-scale emergencies.[301] SRO

[291] Harper, "Shoot to Kill," 30.

[292] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, 13.

[293] Ibid., X.

[294] Mijares and McCarthy, *Significant Tactical Police Cases: Learning from Past Events to Improve Upon Future Responses*, 183.

[295] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, 61.

[296] Ibid.

[297] Mijares and McCarthy, *Significant Tactical Police Cases: Learning from Past Events to Improve Upon Future Responses*, 183.

[298] Ibid., 184.

[299] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, 61.

[300] Ibid., 62.

[301] Ibid., X.

implementation policies changed drastically among law enforcement agencies and school administrations as a result of Columbine.

Prior to Columbine, time favored law enforcement requiring deadly force employment in situations such as armed hostage negotiations. Police encountered armed perpetrators by securing a perimeter outside and engaging with SWAT. Columbine broke this mold and reemphasized timeliness and unity of effort by first responders when dealing with an active shooter event.[302] After Columbine, all law enforcement officers received training with a focus on engaging an active shooter as soon as possible, in smaller teams of four or five.[303] Responding officers first arrive on scene within minutes whereas SWAT takes 30 to 60 minutes to deploy on average.[304] After Columbine, SWAT training changed to improve medical treatment capabilities and hasten treatment to those who need it most.[305] Research demonstrates law enforcement and school administration benefit from advanced emergency planning as opposed to ad hoc planning after an emergency arises.[306] School safety practices included emergency action planning to coordinate relationships with first responders and develop effective planning processes.[307] Schools started to conduct annual lockdown drills, hardened physical security, and improved warning systems in case of an active shooter event.[308] Another school safety imperative emerged through efforts to improve communication from students about possible threats.[309] Schools

[302] Mijares and McCarthy, *Significant Tactical Police Cases: Learning from Past Events to Improve Upon Future Responses*, 190.

[303] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, X; Harper, "Shoot to Kill," 30.

[304] "Shoot to Kill," 30.

[305] Tierney, "Facilitating the Medical Response into an Active Shooter Hot Zone," 56.

[306] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, 113; Mijares and McCarthy, *Significant Tactical Police Cases: Learning from Past Events to Improve Upon Future Responses*, 184.

[307] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, X.

[308] Mijares and McCarthy, *Significant Tactical Police Cases: Learning from Past Events to Improve Upon Future Responses*, 183.

[309] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, X.

now implement threat assessment processes and tip lines to foster anonymous information exchanges and fair risk analysis by school safety teams.[310]

B. SANDY HOOK

Adam Lanza, age 20, claimed 27 lives and wounded 10 others at Sandy Hook Elementary School in Newtown, Connecticut, on December 14, 2012.[311] Lanza killed his mother early that morning prior to commencing the school shooting. He arrived at Sandy Hook at 9:35 a.m. and shot out the school's front lobby windows to defeat the locked doors.[312] The principal, psychologist, and head teacher investigated the noise; they were shot by Lanza, and only the head teacher survived.[313] Lanza proceeded down the hallway into two first grade classrooms where he shot and killed two teachers, a teacher's aide, a behavioral therapist, and 20 students.[314]

The Newtown Police Department received the first 9–1-1 call at 9:35 a.m. The Connecticut State Police first responded to the scene within four minutes and established command while coordinating with the Newtown Police Department.[315] Lanza fatally shot himself just one minute after the first officer arrived on scene.[316] Law enforcement entered Sandy Hook Elementary School at 9:45 a.m., ten minutes after the attack began.[317] Medical response rapidly treated two wounded adults and two first grade students at nearby

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[310] Jerome P. Bjelopera et al., *Public Mass Shootings in the United States: Selected Implications for Federal Public Health and Safety Policy*, CRS Report No. R43004, (Washington, D.C.: Congressional Research Service, 2013), 18; Sarah Gray, "The House Passed a School Safety Bill While Students Walked out of Class. Here's What's in It. And What's Not," *Time*, March 15, 2018, http://time.com/5201713/what-is-stop-school-violence-act/.

[311] "After Action Report - Newtown Shooting Incident 12–14-2012," (Connecticut State Police, 2012), 4–5.

[312] Ibid., 5.

[313] Ibid.

[314] Ibid.

[315] Ibid.

[316] Stephen J. Sedensky, "Report of the State's Attorney for the Judicial District of Danbury on the Shootings at Sandy Hook Elementary School and 36 Yogananda Street, Newtown, Connecticut on December 14, 2012," (Office of the State's Attorney Judicial District of Danbury, 2013), 2.

[317] Ibid.

hospitals, the adults survived while the children were pronounced dead.[318] School officials and law enforcement assumed a second shooter remained active after Lanza committed suicide due to supposed gunshots outside of the school.[319] Further investigation found these reports to be false, and efforts to secure the scene continued.[320]

1. Background/History

After 2010, his mental state quickly diminished while he grew emaciated, isolated, and remained untreated.[321] Lanza stood almost six feet tall and weighed 112 pounds at the time of his death.[322] Studies show that anorexia, together with Asperger's and obsessive-compulsive disorder (OCD), may have increased Lanza's suicidal and violent tendencies.[323] Eagan et al. state, "this report suggests the role that weaknesses and lapses in the educational and healthcare systems' response and untreated mental illness played in AL's deterioration."[324] While mental health issues do not always accompany violence, Lanza's agitated mental state may have affected his decision making towards the end of his life.

Sandy Hook also highlights problems stemming from mental health, social welfare, parental guidance, and educational areas. One developmental issue emerged through a book Lanza co-authored in 5th grade, titled "The Big Book of Granny."[325] This book contained graphic scenes of intense violence, taxidermy, cannibalism, and the murder of children.[326] Critics claim the contents of this book necessitated further evaluation by mental

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[318] Ibid., 10.

[319] Sedensky, "Report of the State's Attorney for the Judicial District of Danbury on the Shootings at Sandy Hook Elementary School and 36 Yogananda Street, Newtown, Connecticut on December 14, 2012," 12–13.

[320] Ibid.

[321] Sarah Healy Eagan et al., "Shooting at Sandy Hook Elementary School," (Connecticut Office of the Child Advocate, 2014), 8.

[322] Ibid., 102.

[323] Ibid., 103.

[324] Ibid., 8.

[325] Ibid., 34.

[326] Ibid., 29.

health professionals.[327] Lanza and his mother discarded many treatment options, including medication, in favor of keeping him in a comfortable setting despite his growing social debilitation.[328] Threat assessment teams should focus on behavior and circumstantial evidence of violence among students. Privacy restrictions impact medical information sharing between psychologists and law enforcement absent obvious violent behavior. The Sandy Hook Advisory Commission asserts, "once a team has identified someone who appears to be on a pathway to violence, the team ideally becomes a resource connecting the troubled child, adolescent, or adult to the help they need to address their underlying problems."[329] Mental health professionals might assist law enforcement by flagging students struggling in social interactions combined with a preoccupation with violence for additional assessment.

2. Lessons Learned

The Sandy Hook case presents insight into adult school shooters. Sandy Hook remains troubling because the shooter was a graduate, rather than a current student. Threat assessments focus on current students, not prior students. However, schools with knowledge of a threatening individual could forward the case to law enforcement, barring any legal and privacy restrictions. Federal legislation such as the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule and the Family Educational Rights and Privacy Act (FERPA) prevent unauthorized medical record releases.[330] The Sandy Hook case highlights drawbacks of traditional threat assessments.

Additionally, the shooting in Newtown, CT brought school facility security issues to light. The Sandy Hook Advisory Commission states, "the testimony and other evidence presented to the Commission reveals that *there has never been an event in which an active shooter breached a locked classroom door*."[331] This report recommends schools implement

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[327] Ibid., 33.

[328] Eagan et al., "Shooting at Sandy Hook Elementary School," 57.

[329] Sandy Hook Advisory Commission. "Final Report of the Sandy Hook Advisory Commission." *State of Connecticut* (2015), 183.

[330] Ibid., 153.

[331] Ibid., A-1. Italics in original.

classroom doors with locking capabilities from the inside.[332] Lanza shot his way past external locks, but he avoided locked classrooms once inside the school. Law enforcement failed to locate access keys and lacked floorplans to Sandy Hook.[333] Investigators effectively utilized tips to the Investigative Command Post, and law enforcement benefit from additional information from outside sources.[334] Facility lockdown procedures, enhanced emergency communication practices, and school security committees serve to further enhance safety measures in the event of an active shooter.[335]

Mental health resources and information sharing benefit child development as well as threat assessment practitioners. Schools should coordinate with law enforcement on access and layout during emergencies. School facilities should allocate a "LE Resource Box" containing keys, schematics, and school facility contact information to foster effective active shooter responses.[336] Law enforcement and schools improve information sharing efforts by including tips from outside sources through a tip line. These tip lines should become standard implementations for law enforcement and schools. Detailed school records on developmental issues, mental health concerns, and student fascination with violence could potentially improve warning signs of a threat to school safety, even after a student graduates.[337] Privacy concerns should be considered throughout the threat assessment process. School administration dialogue with parents and law enforcement should take place only for credible threats, and these conversations should continue after graduation. Privacy and safety remain a balancing act for schools and law enforcement, efforts should focus on physical security and information sharing within the existing legal framework.[338]

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[332] Ibid.

[333] "After Action Report - Newtown Shooting Incident 12–14-2012," 22.

[334] Ibid., 40.

[335] "Final Report of the Sandy Hook Advisory Commission," 55–56.

[336] "After Action Report - Newtown Shooting Incident 12–14-2012," 22–23.

[337]"Shooting at Sandy Hook Elementary School," 35.

[338] "Final Report of the Sandy Hook Advisory Commission," 164.

C. THURSTON HIGH SCHOOL

Kip Kinkel, age 15, murdered his parents on May 20, 1998, and then killed two students and wounded 25 in Springfield, Oregon, the next day.[339] This case is different from others, Kinkel did not plan these attacks over a long period of time. After Kinkel brought a gun to school and was expelled on May 20, he killed his father while he was on the phone with military-style boot camps.[340] Afterwards, he planned to kill his mother later that night and shoot as many students as possible at his school the next morning.[341]

Thurston High School administered a zero-tolerance policy on guns and expelled Kinkel after law enforcement found a gun in his locker.[342] The police station released Kinkel to his father, William, on the condition that his son lacked access to any weapons.[343] However, William did not remove the firearms once they returned home.[344] He began calling military boot camp programs around 3:00 p.m.[345] Kinkel shot his father that afternoon then his mother after she returned home at 6:30 p.m.[346] Kinkel went to school the next morning with all of his firearms. He shot and killed two students in the hallway leading to the cafeteria then shot his remaining bullets from a 50-round magazine in the cafeteria.[347] Eventually, Jake Ryker tackled and disarmed him.[348] A group of boys held him down until police arrived and arrested Kinkel as they had done the day prior.[349] Baxter

[339] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 76.

[340] Ibid., 76.

[341] Peter Langman, *Why Kids Kill: Inside the Minds of School Shooters* (New York, NY: St. Martin's Press, 2009), 92.

[342] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 76.

[343] Ibid., 85.

[344] Ibid., 86.

[345] Langman, *Why Kids Kill: Inside the Minds of School Shooters*, 91.

[346] Ibid., 92.

[347] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 88.

[348] Ibid., 89.

[349] Ibid.

states, "Kip pleaded guilty to four counts of murder and 26 counts of attempted murder."[350] The judge sentenced him to 111 years in prison without parole.[351]

1. Background/History

Kinkel's parents taught Spanish and took a one-year sabbatical to Spain where he attended kindergarten.[352] After returning to the United States, Kinkel struggled with reading and writing. His parents enrolled him in special education classes in the third grade, and educators diagnosed him with dyslexia.[353] As a teenager, Kinkel developed an obsession with bomb-making and firearms.[354] Kinkel also abused domestic pets, potentially alluding to a violent disposition towards people.[355] In his continued aggression, Kinkel threw rocks from an overpass on a snowboarding trip with a friend and hit a truck.[356] The truck driver called the police, who then arrested Kinkel and his friend. After this incident, Kinkel's mother arranged an appointment for him to see a psychologist. She alluded to increasingly violent behavior, anger management issues, a strained paternal relationship, and an unhealthy fixation with weapons.[357] Kinkel was found to have suffered psychotic hallucinations starting in the 6th grade along with attention deficit hyperactive disorder (ADHD) and major depressive disorder; doctors prescribed him Ritalin and Prozac, respectively.[358] Mental illness fails to correlate to school shootings, but Kinkel's symptoms, combined with his fascination with weapons and anger issues, preceded problematic reactions to stressful situations.

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[350] Ibid., 96.

[351] Sam Verhovek, "Teenager to Spend Life in Prison for Shootings," *The New York Times*, November 11, 1999, https://www.nytimes.com/1999/11/11/us/teenager-to-spend-life-in-prison-for-shootings.html.

[352] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 76.

[353] Ibid., 77.

[354] Ibid., 78–79.

[355] Arnold Arluke and Eric Madfis, "Animal Abuse as a Warning Sign of School Massacres: A Critique and Refinement," *Homicide Studies* 18, no. 1 (2014), 10.

[356] "The Killer at Thurston High. Frontline," PBS, video, 56:34, January 18, 2000, https://www.pbs.org/wgbh/pages/frontline/shows/kinkel/

[357] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 80.

[358] Langman, *Why Kids Kill: Inside the Minds of School Shooters*, 88; Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 77.

Despite all, in 1996, Kinkel's father gave him a rifle in an effort to reduce the appeal of firearms; his parents believed once he grew familiar with firearms his obsession with them would subside.[359] His parents thought familiarity with safe and responsible gun use would detract from his fascination and make firearms more mundane. After relentless begging, the next year Kinkel bought a Glock handgun and .22 semiautomatic rifle with his parents' permission.[360] His mother stated he lacked access to the firearms without his father's presence, but his parents remained unaware he purchased a .22 pistol kept at home.[361] On May 19, 1998, Kinkel bought another handgun from a classmate at school and stashed it in his locker.[362] The student who sold the gun to Kinkel stole it from a classmate's father; it remains unclear whether or not Kinkel knew the gun's origins.[363] The initial owner contacted authorities and referred them to Thurston High School. The detective on the case then interviewed students and, shortly thereafter, arrested Kinkel and his accomplice on May 20, 1998.[364] Thurston High School expelled him that day as well, leading up to the tragic events that night and the next morning.

2. Lessons Learned

This Thurston High School case presents issues crossing law enforcement, mental health, and school threat assessment responsibilities. Law enforcement officers could have detained Kinkel for 72 hours following his weapons violation at school, but the assurance from Kinkel's father and lack of assessed violence from Kip induced them to release Kinkel from custody.[365] Langman states, "Kip inherited a genetic predisposition to mental illness from both parents. In addition, he was exposed to his parents' emotional instability."[366] At least one of Kinkel's psychologists knew about his obsession with firearms, his delusions

[359] *Killers in the Classroom: Case Studies of School Rampage Shooters*, 79.

[360] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 81.

[361] Ibid., 82.

[362] Ibid., 84.

[363] *The Killer at Thurston High*.

[364] *Killers in the Classroom: Case Studies of School Rampage Shooters*, 84.

[365] Ibid., 85.

[366] Langman, *Why Kids Kill: Inside the Minds of School Shooters*, 90.

of persecution, and his anger issues while failing to refer this potential issue to authorities or school administrators.[367] Kinkel's parents directed him to stop taking Prozac after only three months without consulting a medical or psychologist opinion.[368] Verhovek reports from a psychiatric specialist, "I think he could have been under treatment with appropriate medication and appropriate follow-up, I do not think he would have gone on to commit these acts."[369] No follow-up ensued.

The high school appropriately expelled Kinkel, but William Kinkel convinced the assistant principal no firearms remained in their house. Information sharing between multiple parties could have benefitted the school and Kinkel's parents. Kinkel's psychologist knew about his firearm ownership and delusions but failed to warn school officials. Kinkel's parents retained firearms at home without law enforcement knowledge. Finally, Kinkel's parents changed his medication program without consulting a professional opinion.

D. PEARL HIGH SCHOOL

Luke Woodham killed his mother and two students and injured seven on October 1, 1997, in Pearl, Mississippi.[370] Langman states, "the psychologist who evaluated Luke after the attack concluded that Luke had 'psychotic processing' and this misinterpreted reality."[371] Woodham's motive for shooting his mother, his girlfriend, and her best friend remains up for debate. His comments before and after the shooting appear contradictory, claiming revenge at first then shifting towards hallucinations and psychotic delusions.

The shooter murdered his mother with a butcher knife around 5:00 a.m., drove her car to Pearl High School, and arrived at 7:55 a.m. with a .30-30 lever-action hunting rifle

[367] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 81.

[368] Ibid., 82.

[369] Verhovek, "Teenager to Spend Life in Prison for Shootings."

[370] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 30.

[371] Peter Langman, "Luke Woodham: The Search for Justification," (2012), https://schoolshooters.info/sites/default/files/woodham_search_for_justification_1.1.pdf, 1–2.

concealed under a trench coat.[372] He began shooting at 8:06 a.m., killing two girls and wounding seven other students.[373] Shortly thereafter, assistant principal Joel Myrick, who was a U.S. Army Reserve unit commander, retrieved a semi-automatic pistol from his vehicle in the parking lot but could not shoot Woodham due to students in the background.[374] Woodham spotted his armed assistant principal, got in his mother's car and attempted to escape.[375] The car careened out of control and came to a stop where Myrick detained Woodham until law enforcement arrived.[376] Kopel states, "[Woodham's] plan, authorities subsequently learned, was to drive to nearby Pearl Junior High School and shoot more kids before police could show up."[377] Officer Roy Dampier arrested Woodham several minutes later. A judge later sentenced Woodham to two consecutive life sentences and seven 20-year sentences to represent punishment for the two dead and seven injured students.[378]

1. Background/History

Woodham primarily targeted his mother and Christina Menefee, his ex-girlfriend, with contradictory motivations.[379] Woodham described his plans to his friend Lucas Thomas on September 28, just three days prior to the shooting.[380] Thomas failed to warn authorities or school officials of Woodham's violent intentions. Had Thomas confided in a responsible adult the school could have assessed Woodham prior to the attack. Upon his

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[372] Ibid.; Bill Hewitt, "The Avenger — Murder, Real People Stories," *People Weekly*, 3 November 1997.

[373] Stephanie Saul, "An Armed Principal Detained a Campus Gunman. But He's against Arming School Staff," *The New York Times*, February 21, 2018, https://www.nytimes.com/2018/02/21/us/school-shootings-teachers.html.

[374] Saul, "An Armed Principal Detained a Campus Gunman. But He's against Arming School Staff"; Hewitt, "The Avenger — Murder, Real People Stories."

[375] Saul, "An Armed Principal Detained a Campus Gunman. But He's against Arming School Staff."

[376] Ibid.

[377] David B. Kopel, "Pretend "Gun-Free" School Zones: A Deadly Legal Fiction," *Connecticut Law Review* (2009), 12, LexisNexis.

[378] Luke T. Woodham v. State of Mississippi, 1998-KA-01689-SCT (S. C. Miss. 2001), https://schoolshooters.info/sites/default/files/Woodham%20court.pdf

[379] Langman, "Luke Woodham: The Search for Justification", 1.

[380] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 37.

arrest, Woodham told police his motivation stemmed from his breakup with Christina, exactly one year prior to the attack.[381] Woodham's motivations became more convoluted after claiming he heard voices commanding him to carry out horrific actions.

One of the voices Woodham blamed for his actions was from a classmate, Grant Boyette.[382] Boyette led a group named the Kroth upholding powers of dark magic and spells.[383] Boyette helped Woodham abuse his pet dog by beating it and setting it ablaze in the backyard.[384] Woodham viewed Boyette as a mentor, and Boyette abused their friendship by telling Woodham to kill his mother and extract revenge from Christina.[385] Prior to the attack, Woodham claimed revenge as his sole motivation, but afterwards he claimed psychotic episodes including Boyette's voice and demons in his head as influencers of his actions.[386] After law enforcement investigation and Woodham's trial, Boyette pleaded guilty to conspiracy, serving time through a military-style boot camp and five years of probation.[387]

2. Lessons Learned

Woodham initially claimed the attack spurred from harassment and his breakup, but later he alluded to demonic hallucinations, indicating symptoms of schizophrenia and psychosis.[388] Even if Woodham was not mentally ill, he exhibited signs of psychological issues by obsessing over superstitions, spells, and paranormal phenomena.[389] Woodham's notes also prove contradictory by stating, "I am not insane…I am angry. I am not spoiled

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[381] Langman, "Luke Woodham: The Search for Justification", 1.

[382] Ibid.

[383] Langman, "Luke Woodham: The Search for Justification", 2.

[384] Arluke and Madfis, "Animal Abuse as a Warning Sign of School Massacres: A Critique and Refinement," 10.

[385] Langman, "Luke Woodham: The Search for Justification", 2.

[386] Ibid., 1.

[387] Katherine S. Newman et al., *Rampage: The Social Roots of School Shootings* (New York: Basic Books, 2004), 65.

[388] Peter Langman, "Expanding the Sample: Five School Shooters," (2015), https://schoolshooters.info/sites/default/files/expanding_the_sample_1.5.pdf, 8.

[389] Ibid., Langman identifies Woodham's behavior as schizotypal, including difficult social interactions and obsessions with unusual ideas and beliefs such as superstitions and paranormal phenomena.

or lazy, for murder is not weak and slow-witted. Murder is gutsy and daring. I killed because people like me are mistreated every day. I did this to show society, 'Push us and we will push back.'"[390]

After the shooting, the Pearl school district bolstered law enforcement presence and conducted sensitivity training for teachers and other faculty members.[391] Also, Mississippi enacted legislation making any murder on school grounds a capital offense.[392] Pearl High School illustrates the capability of school officials to respond to school shootings under certain circumstances, and perhaps highlights the importance of school resource officers in hastening active shooter response times.

E. HEATH HIGH SCHOOL

Michael Carneal killed three girls and wounded five other students at Heath High School in West Paducah, KY. Carneal took five firearms to school on December 1, 1997, and he began his attack on a prayer circle of 20 to 30 students prior to classes starting.[393] Carneal stole from his father and neighbor, stockpiling nine firearms and thousands of bullets before the shooting.[394] He told at least ten other students about "big plans on Monday" or that it would be "cool to walk down the hall and kill people."[395] However, students saw these warnings as bluffs to get attention or a joke. Indeed, he brought the weapons to school in an attempt to gain favor with the Goths, but they did not notice his weapons cache covered with a rug.[396] Michael then grabbed hearing protection and a pistol; he loaded it and began firing on the prayer circle.[397] The leader of the Christian group,

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[390] Kevin Sack, "Southern Town Stunned by Arrests in Murder Plot," *The New York Times*, October 9, 1997, https://www.nytimes.com/1997/10/09/us/southern-town-stunned-by-arrests-in-murder-plot.html.

[391] Daniel Perlstein, "Saying the Unsaid: Girl Killing and the Curriculum," *Journal of Curriculum and Supervision* 14, no. 1 (1998): 97, ProQuest.

[392] Irvin Perline and Jona Goldschmidt, *The Psychology and Law of Workplace Violence: A Handbook for Mental Health Professionals and Employers* (Springfield, IL: Charles C. Thomas, 2004), 320.

[393] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*. 44. Newman et al., *Rampage: The Social Roots of School Shootings*, 238.

[394] *Rampage: The Social Roots of School Shootings*, 69.

[395] Ibid., 157.

[396] Ibid., 4.

[397] Ibid.

Luke Fallon, confronted Michael who then placed the pistol on the ground.[398] Principal Bill Bond immediately took Michael into his office after he disarmed himself.[399]

1. Background/History

Carneal's childhood was frought with irregular behavior and irrational fears. He struggled sleeping in his bedroom because he feared monsters and attackers were coming to harm him and his family.[400] Carneal began to mentally worsen in the 8th grade, spiraling into depression and states of psychosis.[401] He kept metal objects under his mattress to protect himself from a perceived chainsaw attacker.[402] Langman asserts, "Carneal not only was delusional, he also had auditory hallucinations. The voices criticized and threatened him and eventually began commanding him to do things."[403] For example, by the time Carneal entered 9th grade he wrote about being an alien, pointing to worsening delusions.[404]

Carneal's social relationships also deteriorated significantly just prior to his middle school graduation. Newman et al. continue, "a gossip column, 'Rumor Has It,' in a school newspaper…implied that he had a homosexual relationship with another boy…Carneal was humiliated by the allegation, particularly when other students began to tease him and call him 'gay' and 'faggot.'"[405] The school staff members reportedly approved this column, and its publication profoundly impacted Carneal.[406] Carneal experienced significant embarrassment from this news piece in the 8th grade and developed deep resentment. Due to the clean slate policy, which clears students' discipline and counseling records between

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[398] Ibid., 6.

[399] Ibid., 7.

[400] Newman et al., *Rampage: The Social Roots of School Shootings*, 24.

[401] Ibid., 27.

[402] Peter Langman, *School Shooters: Understanding High School, College, and Adult Perpetrators* (Lanham, MD: Rowman & Littlefield, 2015), 34.

[403] Ibid.

[404] Newman et al., *Rampage: The Social Roots of School Shootings*, 26.

[405] Ibid., 27.

[406] Ibid.

schools, school officials at Heath High School remained unaware of these issues once Carneal entered the 9th grade.

2. Lessons Learned

Carneal lacked an outward motivation for his attack at school. He remained resentful and isolated but lacked any targeted victims. Newman et al. state, "had anyone looked at the contents of the hard drive on Michael's computer—often compiled late at night in the family living room, where he slept—they would have gotten a glimpse of the angry, violent impulses brewing beneath his awkward exterior."[407] After the shooting, Michael saw two psychologists who diagnosed him with mental illness. In prison he succumbed to advanced schizophrenia and required antipsychotic medication.[408]

Heath illustrates problems with information sharing between middle school and high school, also known as the clean slate program.[409] Carneal experienced traumatic harassment and personal struggles in the 8th grade that Heath High School counselors and administrators knew nothing about. Perhaps if educators and administrators bring awareness to potential problems for new students, schools might address problems through risk and threat assessment processed to appropriately respond to issues faced by new students.

F. WESTSIDE MIDDLE SCHOOL

Andrew Golden (11 years old) and Mitchell Johnson (13 years old) killed four girls, a teacher, and they wounded nine others on March 24, 1998 in Jonesboro, AK.[410] They pulled the school fire alarm, shot at the occupants leaving the building, and attempted to getaway in a van they stole from Golden's father while he was at work.[411] The shooters' youth at the time of shooting prevented them from being tried as adults in the state of

[407] Newman et al., *Rampage: The Social Roots of School Shootings*, 25.

[408] Ibid., 59.

[409] Ibid., 81.

[410] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 58.

[411] Ibid.

Arkansas.[412] The school shooting at Westside remained tied as the second worst in U.S. history until Columbine.

1. Background/History

Mitchell Johnson's birth father often abused him, causing Johnson to run away from his Kentucky home without telling anyone.[413] Law enforcement searched for Johnson on more than one of these occasions. Johnson also used marijuana before he turned 10 years old, and an older boy sexually assaulted him from eight years old until he moved to Arkansas after his tenth birthday.[414] Johnson's mother moved the family after marrying a convicted drug felon at the correctional facility she worked at in Kentucky.[415] Johnson got along well with his new stepfather and the Johnson family seemed to enjoy their new home in Arkansas.[416] But as Johnson progressed through middle school he lashed out in fits of rage, landing him "in-school suspension (ISS)" three times.[417] Johnson penned an essay during the last incident which worried the ISS supervisor to the point of warning the principal of potentially deadly plans.[418] On the day prior to the shooting, Johnson showed his closest friend a "death list" with the names of several Westside students and staff.[419]

As opposed to Johnson, Andrew Golden came from a safe and caring household. His parents tried to shield him from harm so strongly they listed him in the "do not paddle" category for punishment at school.[420] One incident involving Golden shooting dirt in a girl's eye with a toy gun resulted in his grandmother publicly scolding his elementary

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[412] Meghan Keneally, "The Only Two Living Us Mass School Shooters Who Are Not Incarcerated," *abc News*, February 17, 2016, http://abcnews.go.com/US/living-us-mass-school-shooters-incarcerated/story?id=36986507.

[413] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 59.

[414] Ibid.

[415] Newman et al., *Rampage: The Social Roots of School Shootings*, 35.

[416] Ibid.

[417] Ibid.

[418] Ibid., 36.

[419] Ibid., 37.

[420] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 64.

school teacher that paddled him.[421] His mother swapped him out of another teacher's class after learning of verbal reprimands towards Golden.[422] Golden's family hunted frequently, and his parents introduced him to firearms at a young age.[423] Golden did not display responsible behavior with his firearms as he shot a neighbor's cat and left it in their trash can.[424] Several neighbors understood Golden's violent tendencies and prevented their children from playing with him.[425]

Johnson's stepfather did not keep any firearms in the home because he was a convicted felon, but nonetheless Golden and Johnson amassed 11 firearms between them.[426] Golden's family kept numerous hunting rifles locked at home along with hidden ammunition. Golden knew the locations of these weapons, and with Johnson's help, they defeated the cable lock and located the ammunition.[427]

2. Lessons Learned

The two shooters targeted mainly female victims. Perlstein states, "all 4 children and the 1 teacher killed in Jonesboro, as well as 9 of the 10 wounded, were female."[428] Golden offered no motive to law enforcement or the courts after his arrest, but Johnson claimed the attack was out of anger.[429] The anger Johnson stated remains unspecified, leaving analysts to speculate why the boys committed such a heinous act at such a young age. Golden and Johnson's psychological evaluations remain sealed due to juvenile court policy.[430]

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[421] Ibid.

[422] Ibid.

[423] Ibid., 63.

[424] Arluke and Madfis, "Animal Abuse as a Warning Sign of School Massacres: A Critique and Refinement," 13.

[425] Newman et al., *Rampage: The Social Roots of School Shootings*, 40.

[426] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 72.

[427] Ibid., 69.

[428] Perlstein, "Saying the Unsaid: Girl Killing and the Curriculum," 89.

[429] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 71.

[430] Newman et al., *Rampage: The Social Roots of School Shootings*, 59.

The two shooters' sentences ended on their 21st birthdays and the state of Arkansas released them from custody.[431] They are the only mass shooters in America still living and free from detention to date.[432] One year after their trial Arkansas revised laws preventing juveniles facing adult judicial proceedings.[433] Because of this example, Westside Middle School reveals young students retain the capacity to enact targeted violence. Threat assessments should not underestimate threats of violence based on a student's age. Middle schools should consider threat assessment processes and facility security upgrades to increase shooting prevention and response efforts. Signs of trauma and personal anguish in young students should not go unattended because of the students' youth. If anything, schools should address issues in younger students more readily with parental and counselor interaction.

G. SIMILARITIES

These school shootings share many similarities. In all these cases there were clues, and peers and adults knew of threatening behavior before the attacks.[434] Prior to their attacks, many shooters frequently lost their tempers for seemingly minor reasons and struggled with social interaction.[435] All of the attacks were planned and thought out—no shooter acted spontaneously—and in each case the attackers anticipated security and law enforcement tactics in their planning.[436] But none of the shooters singled out specific targets. Kinkel and Lanza murdered their parents but had no specific victims once they reached the school,[437] and although Woodham targeted female victims, he had not identified them ahead of time and continued to shoot once he attacked his ex-girlfriend.

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[431] Keneally, "The Only Two Living Us Mass School Shooters Who Are Not Incarcerated."

[432] Ibid.

[433] Ibid.

[434] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 1.

[435] Langman, "The Search for Truth at Columbine," 10–11; Eagan et al., "Shooting at Sandy Hook Elementary School," 51; Langman, "Expanding the Sample: Five School Shooters," 8.

[436] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, 25; Eagan et al., "Shooting at Sandy Hook Elementary School," 106; Langman, "Luke Woodham: The Search for Justification," 1.

[437] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 1.

The shooters also shared an obsession with guns and the military, and they idolized violent figures.[438] Almost every shooter desired to commit suicide, even if they survived the attack, with the notable exceptions of Andrew Golden and Mitchell Johnson.[439] Another disturbing commonality arose through animal abuse; Kip Kinkel, Luke Woodham, and Andrew Golden brutally tortured domestic pets, a sign pointing to future misconduct and more profound psychological issues.[440] A number of the assailants suffered from significant psychiatric issues while others simply lacked social skills. Various attackers acted alone while others shot with a partner.

No single profile fits all shooters, but some characteristics illuminate the presence of potential issues and should be addressed with care by teachers, counselors, administrators, and law enforcement officers. Table 2 aggregates the cases and compares various law enforcement, social, and medical factors.

[438] Langman, "The Search for Truth at Columbine," 12; *School Shooters: Understanding High School, College, and Adult Perpetrators*, 140; "The Enigma of Adam Lanza's Mind and Motivations for Murder," *The Journal of Campus Behavioral Intervention* 3 (2015), 5–6; Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 78; Langman, "Luke Woodham: The Search for Justification," 2; Newman et al., *Rampage: The Social Roots of School Shootings*, 29, Eric Harris and Dylan Klebold idolized Adolf Hitler. Harris attempted to join the Marines. Adam Lanza became fascinated with Satanism and mass murderers. Lanza also expressed an interest in joining the Marines, but his mother dissuaded him. Kip Kinkel began making bombs in the 7th grade and developed a strong obsession with firearms. Kinkel also deeply admired the Unabomber. Luke Woodham affiliated with a group believing in supernaturalism, dark magic, and Satanism. Michael Carneal affiliated with the Goths who practiced the Wicca religion and equated guns to a social boost.

[439] Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*, 6; Eagan et al., "Shooting at Sandy Hook Elementary School," 8; Langman, "Expanding the Sample: Five School Shooters," 7; Newman et al., *Rampage: The Social Roots of School Shootings*, 59; Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 48.

[440] *Killers in the Classroom: Case Studies of School Rampage Shooters*, 42, 64.

Table 2. School shooting case aggregated data.[441]

Shooters	LE Response Time	SWAT Deployed	Event Duration [442]	Shooter Apprehension	Killed	Wounded	Weapons Used[443]	Shooter Bullied Others	Bullying against Shooter	Medical Condition, Prescription
Eric Harris/ Dylan Klebold	4 mins	Yes 47 mins	49 mins	Suicide	13	24	P, R, S, O	Yes	Yes	Harris: OCD, Luvox Klebold: N/A
Adam Lanza	4 mins	No	6 mins	Suicide	27	10	P, R	No	No	Asperger's/ Anxiety/OCD, Untreated
Kip Kinkel[444]	1 min	No	9 mins	Students tackled, then Arrested	4	25	P, R	Yes	No	ADHD/Major Depressive Disorder, Ritalin/ Prozac
Luke Woodham	11 mins	No	11 mins	Asst Principal Detained	3	7	R	Yes	Yes	Schizotypal Personality, Untreated
Michael Carneal	5 mins	No	1 min	Peer intervened Arrested	3	5	P (R)	Yes	Yes	Clinical Depression/ Schizophrenia, Untreated
Andrew Golden/ Mitchell Johnson	10 mins	No	10 mins	Arrested	5	9	R	Yes	Yes	Both: None

H. IMPLICATIONS

School security efforts should continue to improve security at schools in the face of shootings such as the ones described above. Law enforcement response continues to implement improved tactics and training as evidenced by Columbine. Mental health efforts in concert with threat assessments and school security teams improve potentially dangerous student identification. Sandy Hook and Thurston High presented gaps in the mental health treatment and information sharing with law enforcement. Thurston and Pearl High School prove citizen's arrest can stop active shooter events before law enforcement arrives on scene to prevent additional violence. Joel Myrick, former assistant principal at Thurston High, claims school resource officers improve response to active shooter events.[442]

[441] Adapted from Erickson, *The Report of Governor Bill Owens' Columbine Review Commission*; Harper, "Shoot to Kill"; Langman, "The Search for Truth at Columbine"; "After Action Report – Newtown Shooting Incident 12-14-2012"; Eagan et al., "Shooting at Sandy Hook Elementary School"; Langman, "The Enigma of Adam Lanza's Mind and Motivations for Murder"; Sedensky, "Report of the State's Attorney for the Judicial District of Danbury on the Shootings at Sandy Hook Elementary School and 36 Yogananda Street, Newtown, Connecticut on December 14, 2012"; Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*; Langman, "Luke Woodham: The Search for Justification"; Mark R. Leary et al., "Teasing, Rejection, and Violence: Case Studies of the School Shootings," *Aggressive Behavior* 29 (2003), 206; Newman et al., *Rampage: The Social Roots of School Shootings*.

[442] Saul, "An Armed Principal Detained a Campus Gunman. But He's against Arming School Staff."

Important threat assessment practices should be learned from these cases as well. Carneal told several classmates of vague plans and warned them to stay away from the lobby of Heath High the next Monday.[443] Golden and Johnson also alerted several classmates of their deadly plan.[444] Many shooters hint at their plans and warn friends to avoid a certain part of the school; this serves as a significant warning sign useful to threat assessment practitioners.

[443] Baxter, *Killers in the Classroom: Case Studies of School Rampage Shooters*, 48.

[444] Ibid., 70.

V. ANALYSIS OF OTHER SECURITY SECTORS: LESSONS FOR ENHANCED SCHOOL SECURITY

So far, this thesis has scrutinized security in the school environment. Other government and private institutions' security practices can also prove useful in analyzing school security measures, as they can highlight beneficial security practices that might be adopted by schools. Although schools will not typically have the resources that are available to a government agency such as DHS or to a professional football team, they may benefit from incorporating security practices seen elsewhere.

For example, most schools implement a gun-free zone on campus, but they may be able to learn lessons about gun-free environments from the commercial aviation community. In addition, federal government institutions such as courthouses and military bases also enforce gun-free zones, with fewer shootings and other attacks than schools have suffered. Large arenas hosting private events such as NFL games and the Olympics also depend on weapon and crime-free environments. Private event security measures allow these businesses to succeed relatively free from incident. And several states have begun initiatives towards improving school campus security, and these efforts serve as helpful examples for other states and school districts to follow.

Airports, federal government buildings, and sports complexes operate differently than schools do, but they all face significant security challenges and take appropriate measures to address them. Schools should draw useful elements from these systems to effectively enforce gun-free zones and bolster security. This chapter analyzes the security of the aviation sector, federal facilities, sports arenas, and state programs. In each case, the chapter compares and contrasts security contexts, physical security, administration, resources, organization, and management for schools to potentially learn from.

A. AVIATION SECURITY

The aviation sector serves a much different purpose than schools, but administrators and local law enforcement can learn from security measures at airports and implement them to increase school safety. Airports screen for weapons, utilize robust physical security

methods, and adjust tactics to new threats. Schools would benefit from aviation's security programs even though they lack the funding and federal support airports enjoy.

Airport security changed drastically after the 9/11 attacks. The federal government took ownership of security through the Transportation Security Administration (TSA) under the Department of Homeland Security (DHS).[445] Prior to 2001, the Federal Aviation Administration held jurisdiction over civil aviation security.[446] Some criticize aviation security methods effectiveness, however security incidents and fatalities continue to decrease.[447] Policy changes sparked by 9/11 directed airport security managers to identify and respond to the terrorist threat with the backing of a learning organization, the TSA.[448] Cost-effective security enhancements to aviation security after 9/11 include hardened cockpit doors and the federal flight deck officer program (FFDO).[449] The Federal Air Marshal Service (FAMS) proves costlier and scarcer than FFDOs,[450] and a comparison of the FAMS and FFDO programs can inform school security decisions for cost-effective armed security programs.

1. Security Context and Resources

Air travel comprises over 5 percent of America's Gross Domestic Product.[451] Airports face a variety of threats due to the transient status of their customers. Travelers vary from day to day, providing airports different threat environments every day, as opposed to schools and office buildings which can implement more rigorous screenings for employees and visitors. The TSA incorporates risk-based security through various methods

[445] Daniel Diehl, "Measuring Security Effectiveness and Efficiency at U.S. Commercial Airports" (master's thesis, Naval Postgraduate School, 2013), 4, https://calhoun.nps.edu/handle/10945/32812.

[446] Ibid.

[447] Ibid., 2–4.

[448] Thomas Birkland, "Learning and Policy Improvement after Disaster: The Case of Aviation Security," *American Behavioral Scientist* 48, no. 3(November 2004): 341–364, Sage Publications.

[449] John Mueller and Mark G. Stewart, *Chasing Ghosts: The Policing of Terrorism* (New York, NY: Oxford University Press, 2016), 148.

[450] Ibid., 208.

[451] "The Economic Impact of Civil Aviation on the U.S. Economy," Federal Aviation Administration, accessed April 24, 2018, Washington, D.C., 2016, 3. https://www.faa.gov/air_traffic/publications/media/2016-economic-impact-report_FINAL.pdf.

including: passenger screening, no-fly list, canines, body scanners, and baggage checks.[452] These efforts construct what TSA refers to as "layers of security."[453] The aviation sector faces terrorism threats as well as more common crimes, including mass shootings.[454] Airports remain desirable targets due to the large number of people congregated in a confined area. Shooting attacks present the highest success rate at an airport. Mueller and Stewart note that shooting attempts succeed 85 percent of the time, while bombings succeed 30 percent of the time or less.[455] Because of the nature of the threat they face, airports dedicate significant resources to rapid response by armed officers. Resources dedicated to airport security heavily outweigh funding for schools. The TSA operates on a budget of $7.4 billion while federal school safety spending amounts to $75 million.[456] Even though schools remain deficient in federal support for their security, they can learn from aviation security implementations and practices to enhance student and staff safety.

School institutions differ from aviation entities in that the federal government has not established an overarching organization responsible for security. The TSA makes up 20 percent of the DHS budget for homeland security (excluding disaster relief), second only to Customs and Border Protection.[457] Airlines also benefit from standardized security regulations and capable management. School security remains locally owned and operated with little to no regulation across district lines. Budget constraints continue to plague schools, commonly forcing a trade-off between education resources and security efforts.

As stated earlier, FFDOs provide armed response on more civilian aircraft than FAMS. Mueller and Stewart state, "the same expenditure allows 440 FFDO missions to

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[452] Thomas Randolph Cotten IV, "Increasing Effectiveness and Efficiency through Risk-Based Deployments" (master's thesis, Naval Postgraduate School, 2015), 10–11; Paul Oldham, "Securing the Aviation Transportation System" (master's thesis, Naval Postgraduate School, 2007), 55–56.

[453] Mueller and Stewart, *Chasing Ghosts: The Policing of Terrorism*, 205.

[454] Cynthia Lum, Breanne Cave, and Jordan Nichols, "Are Federal Security Efforts Evidence-Based?," *Security Journal* 31, no. 1 (2018): 146, http://cebcp.org/wp-content/evidence-based-policing/LumCaveNicholsFederalSecurity.pdf.

[455] Mueller and Stewart, *Chasing Ghosts: The Policing of Terrorism*, 234.

[456] Ibid., 200; "Fiscal Year 2018 Budget Summary and Background Information," Department of Education, accessed April 30, 2018, 10, https://www2.ed.gov/about/overview/budget/budget18/summary/18summary.pdf.

[457] Mueller and Stewart, *Chasing Ghosts: The Policing of Terrorism*, 234

the single FAM mission."[458] Their analysis suggests these financial savings could be mirrored in school districts lacking the funding for SROs through training and arming licensed staff in schools.

2. Physical Security

Hardened cockpit doors became standard in 2003, along with Installed Physical Secondary Barriers (IPSB) to reinforce flight decks against unauthorized entry, or hijackings.[459] IPSB barricades the hardened flight deck door to provide added protection while pilots and aircrew transit in and out for bathroom breaks and meal times. While classrooms encounter much more traffic than an airline flight deck, robust locking mechanisms have been shown to prevent shooter entry. Notably, no shooter has entered a locked classroom during any recorded school shooting.[460] Attackers favor soft targets and move on when faced with a barrier or insurmountable obstacle, just as shooters at Columbine and Sandy Hook bypassed locked rooms in favor of accessible targets.[461]

The commercial aviation sector increased efforts to build layered security and physical security measures that enhance airport safety using a process to test for weak spots. Given additional considerations of potential enemy actions, red teaming became popular among security professionals after 9/11 in order to build robust plans for those scenarios. Malone and Schaupp define a red team as "a group of subject-matter experts (SME)…that provides an independent review of products and processes, acts as a devil's advocate, and knowledgeably role-plays the enemy and outside agencies, using an iterative, interactive process during operations planning."[462] Red teaming enables security forces to plan for anticipated enemy actions and increase resiliency.

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[458] Mueller and Stewart, *Chasing Ghosts: The Policing of Terrorism*, 234

[459] Ibid., 207–209.

[460] Sandy Hook Advisory Commission, "Final Report of the Sandy Hook Advisory Commission," *State of Connecticut* (2015), A-1, http://www.shac.ct.gov/SHAC_Final_Report_3-6-2015.pdf; Jaclyn Schildkraut and H. Jaymi Elsass, *Mass Shootings: Media, Myths, and Realities*, ed. Frankie Y. Bailey and Steven Chermak, Crime, Media, and Popular Culture (Santa Barbara, California: Praeger, 2016), 126.

[461] *Mass Shootings: Media, Myths, and Realities*, 126.

[462] Timothy Malone and Reagan Schaupp, "The "Red Team": Forging a Well-Conceived Contingency Plan," *Air & Space Power Journal* 16, no. 2 (2002), 23, ProQuest.

Red teaming also affords security officials with a metric to test breaches in a protective system. The TSA and Government Accountability Office began red teaming airport security in an effort to gauge its effectiveness against penetration.[463] These experiences suggest school security officials should implement red teaming practices to expose vulnerabilities and proactively address them because SROs and law enforcement agencies gain valuable insight from learning security gaps.

B. FEDERAL GOVERNMENT BUILDINGS

The U.S. federal government spends a great deal of money and effort to ensure the security of its buildings. Federal facilities receive public funding, and they operate with significant security budgets and federal oversight. The Interagency Security Committee (ISC) coordinates efforts between government agencies in the areas of security level identification, "risk assessments, countermeasures, and procedures," and performance feedback.[464]

Buildings owned and operated by the federal government utilize ever-improving and robust security measures to prevent potential attacks. The Oklahoma City bombing of the Alfred P. Murrah Building resulted in security standardization across federal buildings after 1995.[465] DHS now regulates security practices in federal buildings as part of critical infrastructure protection efforts across multiple government agencies.[466] The Interagency Security Committee, initiated in 1995, now falls within DHS organization to consolidate federal security efforts within government buildings.[467] ISC guidelines include the "use of physical security performance measures, facility security level determinations, security standards for leased spaces, security design criteria for new federal office buildings and

[463] Oldham, "Securing the Aviation Transportation System," 64.

[464] Interagency Security Committee, *The Risk Management Process for Federal Facilities: An Interagency Security Committee Standard*, (Washington, D.C.: Department of Homeland Security, 2016), iv, https://www.dhs.gov/sites/default/files/publications/isc-risk-management-process-2016-508.pdf.

[465] Michael Donaghey, "Protecting Our Future—Developing a National School Security Standard" (master's thesis, Naval Postgraduate School, 2013), 58, https://calhoun.nps.edu/handle/10945/38917.

[466] Ibid.

[467] Shawn Reese and Lorraine H. Tong, *Federal Building and Facility Security*, CRS Report No. R41138 (Washington, D.C.: Congressional Research Service, 2010), 3.

major modernization projects, and…safe mail handling."[468] Schools remain deficient of the oversight and coordination used by the federal building security sector, but school security practitioners benefit from facility security designations, protections, and standard resources aimed at protecting students against potential shooters.

1. Security Context and Resources

Federal building security managers operate in various agencies including the Federal Protective Service (FPS), Department of Defense (DoD), Central Intelligence Agency (CIA), Federal Bureau of Investigation (FBI) and many more. The ISC maintains coordination and standardization for security efforts among all agencies. Resources mainly originate from the DHS budget with additional funding from facility owners as well. For example, the FPS (a subsidiary agency within DHS) secures 48 percent of all General Services Administration (GSA) facilities and coordinates facility security efforts with the CIA's Security Protective Service and DoD's Pentagon Police Directorate.[469] CIA and DoD fund their own facility security, but the buildings are limited in size and scope compared to facilities assigned to the FPS. The FPS also coordinates with the U.S. Marshals Service (USMS) for courthouse security through "a series of memoranda of agreement and understanding (MOA and MOU) between GSA and DOJ."[470] These organizations responsibly secure the nation's most vital facilities such as military bases, research labs, courtrooms, and other critical infrastructure nodes.[471]

Administration and standardization strengthen security in government facilities by ensuring a unity of effort among responsible parties. After 1995, the U.S. Marshals Service classified facilities into five levels to adjust security resources applied to each building.[472] The categories distinctly separate buildings by square footage, organizational purpose,

[468] Reese and Tong, *Federal Building and Facility Security*, 4.

[469] Ibid., 4.

[470] Ibid., 8.

[471] "Critical Infrastructure Sectors," Department of Homeland Security, accessed April 30, 2018, https://www.dhs.gov/critical-infrastructure-sectors#.

[472] Reese and Tong, *Federal Building and Facility Security*, 1–2.

number of employees, and access to the general public.[473] DHS assigned the ISC with coordination responsibility for critical infrastructure and key resources (CI/KR). DHS designated the FPS as the lead "Government Facilities Sector Agency for the National Infrastructure Protection Plan."[474] The FPS contains 1,225 law enforcement personnel and contracts security services from almost 15,000 civilian guards.[475] Guard contracts occupy most of the FPS budget at $487 million.[476] States, counties, and school districts certainly spend less on security personnel, but best practices for vetting and employing contractors should be established based on FPS programs on the scale most appropriate for each school district.

2. Physical Security

Physical measures and layered defense comprise federal building security systems. Perimeter boundaries, identification procedures, lockdown enforcement, and rapid reaction force deployments provide government facilities with a networked organization to address threats. The FPS guards over 9,000 government buildings nationwide, consisting of 48 percent of physical security agents across the interagency.[477] The FPS reports its mission statement as, "detecting, deterring, disrupting, and investigating threats using law enforcement authorities…through a risk assessment process."[478] Standard security measures among industry professionals include: single point-of-entry, inspection point, robust locking devices, and cordoned areas.[479] Correspondingly, schools should consider implementing additional physical security measures as funding becomes available because

[473] Ibid.

[474] Reese and Tong, *Federal Building and Facility Security*, 5.

[475] Ibid.

[476] Ibid., 7.

[477] Lum, Cave, and Nichols, "Are Federal Security Efforts Evidence-Based?," 141.

[478] Ibid.

[479] Jorge D. Hevia, "Impediments to U.S. Educational & Public Institutions Ameliorating the Mass Shooting Epidemic with Effective State-of-the-Art Security Solutions & the Introduction of a School Access-Control Vulnerability Index, (S.A.V.I™) Audit and Certification Process, as a Solution," (Amityville, NY: Napco Security Technologies, 2018), 10–11.

school facility security managers benefit from layered security, establishing a hardened perimeter, and implementing vetted entry protocols for occupants and visitors alike.

Planning and rehearsal efforts take place regularly for security forces to readily apprehend perpetrators and maintain a safe operating environment. Schools should consider implementing practices such as monthly planning meetings and regular security drills for likely threats as well as active shooter situations. Coordination with local law enforcement and best practices from institutions such as *ALICE* (alert, lockdown, inform, counter, and evacuate) serve as valuable starting points.[480]

Historically, federal security agencies largely disregarded outside recommendations for improvements compared to local law enforcement's "evidence-based policing."[481] Aside from the TSA, the FPS became one of the first federal criminal justice agencies to implement external evaluations of their security practices.[482] Lum et al. posit, "using past events and information, statistics, intelligence reports, and crime data, the [ISC] report added empirical elements to justify threat assessments."[483] Federal building security practitioners make an effort to calculate threats to match resources to those threats accordingly. In addition, the FPS secures buildings based on risk standards at all levels of a facility.[484] For example, high risk buildings require additional external security for parking areas and vehicle access controls.[485] Additional screening measures and personnel bolster high risk facilities against larger threats, referred to as "countermeasures." The ISC prescribes 86 countermeasure standards for federal facility security to meet baseline requirements.[486] School security authorities would benefit from cost-effective security measures statistically proven to reduce violence such as FPS and ISC efforts.

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[480] "Alice Training: Active Shooter Response Training," ALICE Training Institute, https://www.alicetraining.com/. ALICE provides a free active shooter vulnerability self-assessment on their website and various products aimed at enhancing active shooter response in schools and other institutions.

[481] Lum, Cave, and Nichols, "Are Federal Security Efforts Evidence-Based?," 139.

[482] Ibid., 141.

[483] Ibid., 144.

[484] Ibid., 142.

[485] Ibid., 143.

[486] Ibid., 142.

C. SPORTS COMPLEXES

Sports matches face significant terrorist threat levels from a variety of sources. Events such as the 1996 Atlanta Olympics and the 2013 Boston Marathon bombings demonstrate the potential devastation attacks present to sporting events.[487] Gehring states, "there were 168 sports-related terrorist events between 1972–2004 to assert the strong ties between terrorism and sports."[488] Yet even though they face a larger risk compared to other public venues, professional sports franchises continue to operate successfully, and schools can benefit by learning from some of the security practices used by organizations such as the National Football League (NFL).

1. Security Context and Resources

NFL games regularly host large crowds in a relatively high threat environment. Football stadiums across the country draw fans in by droves, presenting significant challenges to screen for weapons and provide safety during weekly events. Bolstad states, "the threat of terrorism at sporting events is high because of its cultural significance in society, let alone the large attendance at given events."[489] Despite these threats, the NFL profits more than any other sports league in the world, and it commits to further growth in the decades to come.[490] Part of the reason for its success is that fan and player safety rank as high priorities for the NFL.

The NFL's championship game, the Super Bowl, attracts the most viewers of any televised program in U.S. history.[491] The NFL designates a city host for the Super Bowl by stadium eligibility based on security systems capable of screening and handling large

[487] James Gehring, "Sports Venue Security: Public Policy Options for Sear 4–5 Events" (master's thesis, Naval Postgraduate School, 2014), 51, 53, https://calhoun.nps.edu/handle/10945/42632.

[488] Ibid., 62.

[489] Jeffrey Bolstad, "Enhancing the Nfl's Counter-Terrorism Efforts: Is the League's Security Scheme Able to Effectively Thwart Terrorist Attacks?" (master's thesis, Naval Postgraduate School, 2016). 4, https://calhoun.nps.edu/handle/10945/50493.

[490] Ibid., 50.

[491] Kimberly Schimmel, "Protecting the Nfl/Militarizing the Homeland: Citizen Soldiers and Urban Resilience in Post-9/11 America," *International Review for the Sociology of Sport* 47, no. 3 (January 2012). 342, Sage Publications.

crowds.[492] Stadiums must readily enforce strong security standards to handle increased threats. The 2014 Super Bowl operated with a $17.7 million security budget, illustrating the importance of safety within the league.[493] The NFL coordinated with over 40 federal agencies and 4,000 security professionals for the 2017 Super Bowl.[494] Large profits enable franchises to invest in updated technology, facility security, and employees driven towards secure events.

2. Physical Security

NFL arena security implements layered physical measures ranging from outer layers including vehicle access and tailgating areas to core areas next to players and coaching staff with significant screening efforts in between. Each franchise remains responsible for security system funding and implementation, but stadiums receive assistance from federal, state, and local entities for bigger games such as the Super Bowl. For the 2017 Super Bowl the NFL "installed 2.8 miles of concrete barrier to help secure the perimeter."[495] NFL franchises implement similar boundaries for games throughout the season. Tailgate area security measures vary across teams, presenting potential problems for fans before and after games.[496] Physical security measures around the league include the latest technologies, screening procedures, and crowd control to ensure safe and profitable games for each franchise.

Stadiums implement robust screening methods as fans enter from parking and tailgating areas inside the arena. The NFL implements a Clear Bag Policy to enhance screening and security efforts among fans.[497] Schools often implement similar policies,

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[492] Ibid., 342.

[493] Bolstad, "Enhancing the Nfl's Counter-Terrorism Efforts: Is the League's Security Scheme Able to Effectively Thwart Terrorist Attacks?," 9.

[494] Noah Frank, "The Unseen Investment in Keeping American Sporting Events Safe," *Washington's Top News*, February 3, 2017, https://wtop.com/nfl/2017/02/the-unseen-investment-in-keeping-american-sporting-events-safe/.

[495] Ibid.

[496] Bolstad, "Enhancing the Nfl's Counter-Terrorism Efforts: Is the League's Security Scheme Able to Effectively Thwart Terrorist Attacks?," 77.

[497] Ibid., 61.

such as Marjory Stoneman Douglas High School in Parkland, Florida, did after the shooting there.[498]

Additionally, the NFL mandates franchises to screen patrons with metal detectors.[499] These detectors are faster than both handheld wands and pat downs.[500] Time remains critical to avoid large crowds of fans at the entrance of a stadium. Crowd size and flow management prevent injuries, panic, and targets for potential shooters. The same principle applies to schools, which contain large amounts of students screened at similar times before classes begin. Research remains inconclusive as to metal detector effectiveness at reducing school violence.[501] On the other hand, metal detectors reduce the number of guns brought to school almost by half.[502]

Collegiate sports games consistently gather large crowds, but they garner less federal support than NFL games.[503] Similar to airports, DHS conducted security probes as red teams to identify security system weaknesses at state university arenas.[504] The red teams found that decreasing training levels and failures to follow emergency plan practices had reduced security measure effectiveness.[505] This indicates that enacting security practices is not enough. Institutions must continue training and rehearsing scenarios to maintain safe operating environments, whether at the Rose Bowl or the local high school.

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[498] Dianne Gallagher, Emanuella Grinberg, and Paul P. Murphy, "How Parkland Students Feel About Their New Mandatory Clear Backpacks," *CNN*, April 2, 2018, https://www.cnn.com/2018/04/02/us/marjory-stoneman-douglas-clear-backpacks/index.html.

[499] Bolstad, "Enhancing the Nfl's Counter-Terrorism Efforts: Is the League's Security Scheme Able to Effectively Thwart Terrorist Attacks?," 60.

[500] Ibid.

[501] Abigail Hankin, Marci Hertz, and Thomas Simon, "Impacts of Metal Detector Use in Schools: Insights from 15 Years of Research," *Journal of School Health* 81, no. 2 (February 2011), 105, https://secure.edweek.org/media/hankin-02security.pdf.

[502] Ibid., 103.

[503] Gehring, "Sports Venue Security: Public Policy Options for Sear 4–5 Events," 2.

[504] Ibid., 60.

[505] Ibid., 61.

D. GUN-FREE ZONES

Each of the sectors above provide an example of security efforts leading to an effective gun-free environment. Schools should interpret best practices from each sector and apply them based on the size, threat environment, funding, and political will of their districts. The Gun-Free School Zone Act of 1990 established gun-free zones in schools but states maintain the ability to excuse licensed permit holders from gun-free zone regulation.[506] Policy officials' opinions differ on gun-free zone effectiveness toward public safety.[507] Gun-free zones refer to locations prohibiting civilian firearm carry in a certain location. States enforcing gun-free zones maintain a "special duty of protecting its disarmed citizens in areas where those restrictions apply."[508] Gun-free restrictions necessitate protection of the citizens, students and staff in the case of schools, against violence because of the vulnerability imposed by the state.[509] Commercial airports, government buildings, and sports complexes largely enforce weapons bans and are therefore responsible for the security of their patrons.[510] Each institution illustrates valuable implementations of gun-free security methods for schools to learn from.

Federally imposed gun-free zones prohibit open and concealed carry of firearms within 1,000 feet of schools with exceptions of firearms that are "unloaded and encased, for target practice on school shooting grounds, carried by law enforcement or school security officers, allowed with the consent of school authorities, or on private property not

[506] Amy Hetzner, "Where Angels Tread: Gun-Free School Zone Laws and an Individual Right to Bear Arms," *Marquette Law Review* 95, no. 1 (2011), 387, http://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=5099&context=mulr.

[507] Andrew R. Morral, Terry L. Schell, and Margaret Tankard, *The Magnitude and Sources of Disagreement among Gun Policy Experts*, RR 2088/1-RC, (Santa Monica, CA: RAND Corporation, 2018), xi, https://www.rand.org/pubs/research_reports/RR2088z1.html. Policymakers' opinions differ on whether the focus should be restricting gun access to potential shooters, or proliferating gun ownership and addressing mental health and structural issues within schools.

[508] Timothy Hsiao, "The Ethics of 'Gun-Free Zones,'" *Philosophia* 45, no. 2 (January 2017): 665, Springer.

[509] Carl Rizzi, "A Duty to Protect: Why Gun-Free Zones Create a Special Relationship between the Government and Victims of School Shootings," *Cornell Journal of Law and Public Policy* 25, no. 2 (2015), 501, https://scholarship.law.cornell.edu/cjlpp/vol25/iss2/5/.

[510] Hsiao, "The Ethics of 'Gun-Free Zones,'" 660.

part of school grounds."[511] Legal tension emerges through citizens wishing to carry loaded weapons outside of their homes if they live within the 1000-foot perimeter, with most court cases siding with gun-free zone legality for transporting firearms.[512] Gun-free zones at schools only apply to citizens aware, or reasonably aware, of the boundary.[513] These legal nuances present difficulty enforcing some violations where perpetrators remain unaware of the zones and restrictions that accompany them.

In commercial aviation, the FFDO program highlights potential security changes for schools facing budgetary constraints. Armed pilots board aircraft at a rate five times greater than air marshals.[514] The FFDO operates on 3 percent of the budget given to FAMS, highlighting the unique affordability of arming and training pilots to resist attacks on airplanes.[515] If schools face challenges hiring SROs and round-the-clock law enforcement at schools then training and arming teachers would be another option to increase security at a low cost. Several states and school districts already operate under an armed teacher system, although the efficacy over law enforcement programs remains unclear.[516] Schools would need to overcome legal and liability challenges with such a program prior to implementation.

Federal government building security efforts highlight several useful implications for schools. The FPS reliance on contracted security guards and liaison relationships with different law enforcement agencies would benefit school administrators seeking to implement low-cost programs proven to be effective at the federal level. The ISC and FPS conduct frequent assessments internally and with the help of external organizations.

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[511] Hetzner, "Where Angels Tread: Gun-Free School Zone Laws and an Individual Right to Bear Arms," 393.

[512] Ibid., 399.

[513] Ibid., 403.

[514] Mueller and Stewart, *Chasing Ghosts: The Policing of Terrorism*, 208.

[515] Ibid.

[516] Ronn Johnson et al., "Risk Assessment of School Police Officers in Addressing Public Safety Related to School Violence: A Biopsychosocialcultural Perspective," *Journal of Forensic Research* 5, no. 1 (February 2014), 2, http://dx.doi.org/10.4172/2157-7145.1000213.

Schools should learn from evidence-based practices to secure their facilities closer to federal government building levels.

Sports franchises remain deeply concerned over safety within their stadiums and dedicate significant resources to security efforts. Staff implement robust screening policies, stadium design includes measures for layered security, crowd control, screening stations, and monitoring to enable fans to safely enter the game with the least risk possible. Larger schools seeking to implement new facility design and robust physical security measures such as metal detectors should draw practices in use by the NFL to quickly screen students and visitors and maintain a hardened perimeter.

Some schools may wish to revise facility design with new construction to increase perimeter security, contracted security officers, controlled access points, metal detectors, automatic locking classroom doors, external red-teaming apparatus, and outside evaluation of security measures. Other schools might lack funding for those implementations and instead favor cost-effective locking mechanisms, arming and training school staff, and self-assessments in coordination with law enforcement. Each school's threat environment varies, but security measures should increase resiliency to shootings and probably violent attacks.

E. EXAMPLE STATE PROGRAMS

Many states provide additional legislation and funding to school districts in order to enhance school safety. Meanwhile, districts within each state operate within relatively common political and legal frameworks to implement security upgrades. States currently leading efforts to improve school safety include Ohio, Indiana, and Connecticut.

While federal legislation through the Gun-Free School Zone Act of 1990 requires gun-free zone implementation across all states, federal funding for school safety remains limited at $75 million.[517] State funding efforts enhance security programs in school districts requiring shooting prevention and response upgrades. For example, Ohio has spent $21.1 million within the last five years on facility security upgrades including emergency

[517] Department of Education, "Fiscal Year 2018 Budget Summary and Background Information," 10.

communications, entrance systems, and remote facility access.[518] Indiana expended almost $10.5 million per school year since 2014 for SROs, threat assessment resources, and weapon detection systems.[519] Connecticut has spent over $20 million per school year since 2013 on school entrance upgrades including "ballistic glass, solid core doors, double-door access, computer-controlled electronic locks, [and] entry door buzzer systems."[520] While these improvements are not all-inclusive, other states should implement and adapt these efforts to increase security in school districts statewide.

The security measures schools benefit from the most include emergency action planning, SROs, and threat assessment processes. While school administration largely takes place at the local level, states play critical roles in establishing requirements for school districts to meet. Currently, 32 states legally require any form of emergency plans, but most schools remain unfamiliar with the plans themselves and do not participate in a feedback loop with the state.[521]

Ohio requires schools to develop "comprehensive school safety plans" and electronic building floor plans accessible to law enforcement in emergency situations.[522] Schools must submit emergency plans to local law enforcement and first responders for approval.[523] Schools must also train regularly with first responders to enhance resiliency in crises.[524] The state recommends each responsible party understand actions needed in case of emergencies to ensure unity of effort and coordinated response.[525] Ohio calls for schools

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[518] J. Cramer, M. Lemon, P. Wanner, and C. Hicks, *Funding for Safety and Security in Schools: A Fifty-State Review*, Olympia, WA: Washington State Institute for Public Policy, 2017, 34, http://www.wsipp.wa.gov/ReportFile/1676/Wsipp_Funding-for-Safety-and-Security-in-Schools-A-Fifty-State-Review_Report.pdf.

[519] Ibid., 30.

[520] Ibid., 29.

[521] Rebekah Elliot, "The Real School Safety Debate: Why Legislative Responses Should Focus on Schools and Not on Guns," *Arizona Law Review* 57, no. 2 (2015), 540, http://arizonalawreview.org/pdf/57-2/57arizlrev523.pdf.

[522] Mike DeWine, *School Safety Task Force: Recommendations and Resources*. Colombus, OH: Ohio Attorney General's Office, 2013, 1, www.ohioattorneygeneral.gov.

[523] Ibid., 9.

[524] Ibid., 13.

[525] Ibid., 4.

to consult with local "safety partners" such as fire and police departments for physical security audits of school buildings.[526] Schools in Ohio also receive standards for threat assessment team formation and best practices.[527]

Indiana enacted legislation through the School Resource Officers Act of 2013 to enhance security among school districts.[528] The SRO Act "provides matching grant funding to school districts for safety programs; sets out requirements for school resource officers; creates a school safety commission and school safety specialists to oversee school safety plans; and indemnifies public schools for certain actions of [SROs]."[529] The legislation requires baseline SRO training, requirements to receive state grants, and protections to schools against insurance liabilities.[530]

Connecticut followed suit, passing the Act Concerning Gun Violence Prevention and Children's Safety Act of 2013.[531] The bill focuses primarily on physical security measures, emergency planning, and school security teams.[532] Connecticut provides schools under construction to meet physical security standards such as entry control, remotely-controlled electronic locks, and video monitoring systems.[533] Schools must also establish security teams and complete security assessments at least once every two years.[534] Connecticut's efforts emerged largely from Sandy Hook, but they serve a prominent model for other states to adopt.

An examination of Ohio, Indiana, and Connecticut school security reforms shows several commonalities. In each state, legislative efforts prioritize emergency planning and

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[526] Ibid.

[527] Ibid., 5.

[528] Elliot, "The Real School Safety Debate: Why Legislative Responses Should Focus on Schools and Not on Guns," 541.

[529] Elliot, "The Real School Safety Debate: Why Legislative Responses Should Focus on Schools and Not on Guns," 541.

[530] Ibid., 542–543.

[531] Ibid., 543.

[532] Ibid.

[533] Ibid., 544.

[534] Ibid.

rehearsals. School infrastructure and physical security measures are mandated by the states to enhance school access control and threat deterrence. In addition, SRO implementation and security assessments provide schools with improved shooting responses. Every state should ensure school districts conduct effective security programs in coordination with law enforcement to prevent and respond to shooter situations and more common acts of violence. Other states should emulate these endeavors to build effective school security programs across the country. Overall, the experience of these states suggests every state should establish security baselines for schools to meet in coordination with local law enforcement to emphasize security.

F. CONCLUSION

Funding and resource allocation continue to challenge schools seeking to improve safety, but schools can learn lessons from important safety measures used in other businesses. Aviation security practices, for example, illustrate the benefit of management, self-assessment, and layered security. An analysis of federal government building security highlights physical security practices that schools can implement on a smaller and individual level. And sports arena security presents methods for crowd management, entry control point implementation, and emergency drills to prepare for potential violence. Each school's threat environment varies, but administrations and law enforcement agencies maintain several options for security measure employments to address probable threats as well as high risk/low impact threats such as school shooters.

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VI. CONCLUSION

A. SCHOOL SHOOTING IMPACT

Mass murders presented a challenge to homeland security during the Great Depression, they increased in numbers during the 1960s, and their threat has grown even greater from the 1990s to the present day. Although the threat has been with us for nearly a century, the nature and the cause of mass murders has changed. Multiple murders during the 1920s and 1930s were attributed to economic hardship through familicide, while the 1960s and 1990s brought about numerous rampage and mass killings at schools such as UT Austin and Columbine. These more recent attacks necessitated updated law enforcement tactics and security considerations for secondary schools and universities. For example, SWAT utilization and active shooter training has changed drastically in recent decades in order to equip LEOs with improved tools to counter developing threats. But upgrades need to continue in order for schools to prevent shootings and enact an effective response when they occur.

Schools and law enforcement cannot completely eliminate school shootings from ever happening. Targeted school violence with multiple victims on campus remain statistically low, but shootings remain a growing problem that security practitioners and educators need to address. Mass shooting incidents, and school shootings in particular, continue to increase in frequency and lethality. The best security efforts significantly reduce violence while others lack proven effects, and some remain counterproductive.

Several issues have been attributed to increased mass school shootings including weapon access and attempts to profile shooters. Debates include gun control and mental health as causal factors. Schools and law enforcement influence policy, but security implementations should center around readily available upgrades including facility security, threat assessments, evidence-based crime prevention, and vulnerability analysis such as red teams. This chapter recommends schools implement security teams and learn from previous case studies and other institutions, and it concludes with recommendations for further study and final remarks.

B. SCHOOL SECURITY TEAMS

School shootings remain a significant problem for students as well as for homeland security as a whole. Safety improvements need to focus on reducing violence at schools, not on policymaker perceptions. Legislative efforts centered on one or two elements such as gun control or mental health fail to incorporate additional school security measures such as SROs, school security teams, and threat assessments as proven factors towards reducing violence. SRO programs enable rapid emergency response on campuses. Some of the worst shootings involve delayed law enforcement response. Efforts to shorten time between dispatch and active shooter engagement provide the best protection for potential shooting victims. Meanwhile, school security teams coordinate efforts among school staff to appropriately assess and handle threats.

1. Threat assessments

Attempting to develop profiles of potential shooters has been shown to be an ineffective way to reduce attacks. Research indicates school security practitioners reduce violence by addressing recognized threats, rather than by focusing on perceived checklists of problem students. Schools benefit from threat inquiries, coordination with law enforcement, and proper response to threats to prevent alienating problem students and exacerbating perceptions of injustice. Shooters come from various backgrounds with unclear motivations for targeting classmates and teachers. Most shooters prior to Columbine were white males, but singling out one demographic over others is problematic for security practitioners. Instead, schools should concentrate on threats made by students with the opportunity and capability to carry out an attack on campus.

Research shows most shooters discuss plans of an attack with peers beforehand. School security teams should take advantage of these remarks and incorporate identification strategies based on valid threat discoveries. Schools and law enforcement should develop relationships with students and parents to expose potential shooting plans in order to possibly prevent them.

The U.S. Secret Service and Department of Education published a series of documents describing effective threat assessment practices. Schools should implement

these recommendations as soon as practicable. Threat assessments enhance school security through a unity of effort for threat identification, counseling resources, mental health treatment, and appropriate disciplinary efforts. Reactive efforts toward school security are important after an event begins, but prevention efforts through threat assessments improve chances for the identification of a would-be shooter. Considerations for effective threat assessments include: administrator/law enforcement handoffs through inquiries and investigations; objective assessment capabilities; and coordinated interrelations within and outside of the school. Threat assessment practitioners need to avoid using overly tight or loose parameters that can create false positives and negatives in threat identification. Law enforcement and administrations benefit from structured divisions of labor to concentrate shooting prevention and response efforts.

2. Information Sharing

A critical factor in shooting prevention is information sharing. Students, parents, counselors, mental health professionals, educators, administrators, and law enforcement should coordinate security efforts without barriers to effective communication. Students should break the code of silence in order for school security authorities to address issues before an attack starts. Educators and administrators foster information flows by taking student reports seriously and initiating appropriate action early. School staff benefit from shared information regarding student issues to refrain from missing troubled students through clean slate policies and dialogue barriers. Lines of communication prove critical from students to adults and within all staff roles within schools. Almost all cases analyzed as near-misses were stopped by students coming forward to receptive school officials with actionable information on a shooter's plan.

3. School Climate

Most shooters express feelings of isolation and heightened sensitivity to wrongdoings. Zero-tolerance policies serve to push struggling students closer to the edge. Instead, schools should incorporate inclusive strategies in dealing with student issues to foster community ties within the school. Effective discipline and security strategies create buy-in from students and staff alike. Healthy school climates foster inclusivity and

enhanced security in a comfortable environment. Schools should not emulate prisons, instead security systems should embolden educational efforts instead of detracting from them. School resources should aim to improve counseling and mental health capabilities as well as SRO programs and facility security enhancements.

C. KEY TAKEAWAYS FROM CASE STUDIES

The fastest response against an active shooter stems from a deliberate neutralization through the appropriate use of force. The shooters at Columbine, Sandy Hook, and Westside went unengaged by school occupants or law enforcement. Meanwhile shooters at Thurston, Pearl, and Heath were apprehended as soon as possible. Each case presents unique challenges to school security, but they highlight timeliness as *the* critical factor in subduing a shooter.

As stated in Chapter III, there remains no accurate profile or checklist of characteristics to expose a potential shooter. Schools retain the responsibility to understand threats, how to identify them, and how to appropriately respond in a timely manner. Shooters in these events maintained unhealthy obsessions with firearms, explosions, and acts of violence such as animal abuse. Every perpetrator developed plans to carry out their attack with few specific targets at school. Shooters also shared perceptions of isolation and injustice from others. Most shooters authored or recorded disturbing scenes of violence or episodes of psychosis lending to a loss of empathy or even reality. Schools should be aware of potential warning signs in order to be able to address students' issues before they turn to targeted violence.

School security teams have several options besides armed response to counteract shooters. Mental health, counseling, information sharing, and threat assessment practices improve the chances to identify and address potential shooters. Threats of violence should not be taken lightly. Students should understand the nature of violent remarks and inform a responsible adult as soon as possible. School officials should understand valid threat identification and potential precursors to violence. Administrators, educators, and counselors should maintain channels of communication to initiate threat queries and know when to hand them over to law enforcement for further investigation.

D. BEST PRACTICES FROM OTHER INSTITUTIONS

Operating environments vary considerably between the aviation, federal government building, NFL, and school sectors. Each institution encounters different security challenges, but schools benefit from some cost-effective best practices from other gun-free locations. Tools from other sectors for schools to implement include: FFDO implications for training and arming teachers, red teaming strategies, vulnerability assessments, layered security systems, and student screening options.

Gun-free zones should not necessarily go away. Schools retain responsibility for student and staff safety within the gun-free zones. Schools should improve emergency planning and preparation to enhance security programs as well as physical security measures to protect against shooting attacks. Campuses need to present a hard target and improve deterrence against any would-be shooters. Administrations and law enforcement should increase resilience and protection against school shooters. Similar to a shooter avoiding a locked classroom, shooters might avoid a protected school if they knew they would be met with rapid resistance.

E. RECOMMENDATIONS FOR FURTHER STUDY

Further study should focus on gun control and gun-free zone effectiveness. As mentioned in Chapter III, some policy analysts claim 98 percent of public mass shootings occur in gun-free zones while others assert the frequency is 13 percent. Gun access to shooters affords them tools to carry out mass shootings at school. Schools do not possess options to control gun ownership off campus. This thesis contends children should not have unregulated access to firearms. The relationship between gun control and school violence is not clear, and it should be studied more closely.

Universities have different options for active shooter response than primary and secondary schools. Administration and public access change security requirements and program implementation. For example, high schools may restrict access to controlled entry points with additional vestibules, metal detectors, and screening areas while most public universities sprawl large areas over numerous buildings open to the local population.

Additional study should focus on university security program improvements with consideration of the different threat environment.

As mentioned in Chapter V, the TSA trains and arms pilots through the FFDO program. FFDOs secure many more airplanes than air marshals on a much smaller budget. Schools unwilling to implement costly security systems including facility upgrades and SROs should consider arming teachers as an alternative. The legal and efficiency challenges should be studied further to analyze whether such a strategy would lower incidents of targeted school violence.

Chapter III covered SRO program details, but federal funding ceased for SROs after 2009. Additional research should analyze SRO funding programs for states and the federal government. Analysis should include identifying which schools contain the highest demand for SROs, the potential benefit of multiple SROs, and any program setbacks.

Experts present mixed reviews as to the effectiveness of metal detectors in schools. Some studies illustrate their reduction of weapons violations on campus, but point out that metal detectors on school grounds can do nothing to reduce the number of weapons outside of school campuses. Further analysis of metal detector success at schools should be conducted including other measures such as entry control points, multiple guards, and penetration-resistant vestibules.

Most shooters analyzed in Chapter IV shared suicidal ideations and signs of personal anguish. Further study should analyze whether increased mental health resources would address these issues or exacerbate them. Some shooters displayed significant psychiatric issues and remained untreated or disregarded treatment. Additional study should also apply psychological resources to suicidal and depressed students lacking connections to violence.

F. FINAL REMARKS

School shootings have recently garnered significant media and policymaker attention. In order to prevent and respond to violence security improvements must continue to be analyzed and implemented based on evidence. Systems put in place out of fear or

misperceptions of threat environments, such as profiles and zero-tolerance punishments, are counterproductive to school security. Administrators and law enforcement should coordinate efforts to improve safety through following the best practices of other public and private sectors. School security teams should focus on continual emergency planning, drilling, and evaluation to bolster violence reduction effectiveness. Resources should be allocated according to proven security measures, and states should assist schools with the security demand and willingness to improve. SRO programs should become standard across all medium and large suburban and rural schools. Schools unable to fund SRO programs should consider training and arming teachers as the TSA has done with pilots through FFDO. Facility security measures might also prove untenable for some school districts, but cost-effective options exist for locking classroom doors to restrict a shooter's freedom of movement.

Shootings present great challenges to school security, and there is no one-size fits all or silver bullet answer. There are many solutions to the school shooting problem within the legal and financial boundaries present in districts across the country. Schools with the initiative to improve safety can do so through threat assessment practices, facility security options, and a coordinated approach with law enforcement.

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LIST OF REFERENCES

ALICE Training Institute. “Alice Training: Active Shooter Response Training.” Accessed April 24, 2018. https://www.alicetraining.com/.

Amman, Molly, Matther Bowlin, Lesley Buckles, Kevin C. Burton, Kimberly F. Brunell, Karie A. Gibson, Sarah H. Griffin, Kirk Kennedy, and Cari J. Robbins. *Making Prevention a Reality: Identifying, Assessing, and Managing the Threat of Targeted Attacks.* Washington, D.C.: U.S. Department of Justice, 2016. https://www.fbi.gov/file-repository/making_prevention_a_reality_identifying_assessing_managing_threats_of_ta.pdf.

Anklam, Charles, Adam Kirby, Filipo Sharevsky, and J. Eric Dietz. “Mitigating Active Shooter Impact; Analysis for Policy Options Based on Agent/Computer Based Modeling.” *Journal of Emergency Management* 13, no. 3 (April 2014): 1–24. ResearchGate.

Arluke, Arnold, and Eric Madfis. “Animal Abuse as a Warning Sign of School Massacres: A Critique and Refinement.” *Homicide Studies* 18, no. 1 (2014): 7–22. Thousand Oaks, CA: Sage Publications.

Atwater, Paul A. “Force Protection for Fire Fighters: Warm Zone Operations at Paramilitary Style Active Shooter Incidents in a Multi-Hazard Environment as a Fire Service Core Competency.” Master’s Thesis, Naval Postgraduate School, 2012. https://calhoun.nps.edu/handle/10945/6764.

Ausdemore, Steve A. “Eliminating the Lost Time Interval of Law Enforcement to Active Shooter Events in Schools.” Master’s Thesis, Naval Postgraduate School, 2015. https://calhoun.nps.edu/handle/10945/47227.

Baxter, Jenn. *Killers in the Classroom: Case Studies of School Rampage Shooters.* Independently published, 2017.

Bird, Chris. *Surviving a Mass Murder Rampage: When Seconds Count, Police Are Still Minutes Away.* San Antonio, TX: Privateer Publications, 2016.

Birkland, Thomas. “Learning and Policy Improvement after Disaster: The Case of Aviation Security.” *American Behavioral Scientist* 48, no. 3 (November 2004): 341–364. Thousand Oaks, CA: Sage Publications.

Bjelopera, Jerome P., Erin Bagalman, Sarah W. Caldwell, Kristin M. Finklea, and Gail McCallion. *Public Mass Shootings in the United States: Selected Implications for Federal Public Health and Safety Policy.* CRS Report No. R43004. Washington, D.C.: Congressional Research Service, 2013. https://fas.org/sgp/crs/misc/R43004.pdf

Blair, Pete J., and Katherine W. Schweit. *A Study of Active Shooter Incidents, 2000–2013*. edited by U.S. Department of Justice. Washington, D.C.: Texas State University, Federal Bureau of Investigation, 2014. https://www.fbi.gov/file-repository/active-shooter-study-2000-2013-1.pdf.

Boissoneault, Lorraine. "The 1927 Bombing That Remains America's Deadliest School Massacre." *Smithsonian*. May 18, 2017. https://www.smithsonianmag.com/history/1927-bombing-remains-americas-deadliest-school-massacre-180963355/.

Bolstad, Jeffrey. "Enhancing the Nfl's Counter-Terrorism Efforts: Is the League's Security Scheme Able to Effectively Thwart Terrorist Attacks?," Master's Thesis, Naval Postgraduate School, 2016. https://calhoun.nps.edu/handle/10945/50493.

Borum, Randy, Dewey G. Cornell, William Modzeleski, and Shane R. Jimerson. "What Can Be Done About School Shootings? A Review of the Evidence." *Educational Researcher* 39, no. 1 (February 2010): 27–37. Thousand Oaks, CA: Sage Publications.

Bovsun, Mara. "Nurse Hides as 8 Friends Raped, Murdered in 1966." *NY Daily News*. July 9, 2016. http://www.nydailynews.com/news/crime/nurse-hides-8-friends-raped-murdered-1966-article-1.2705565.

Bray, Bethany. "U.S. Student-to-School Counselor Ratio Shows Slight Improvement." *Counseling Today*. October 20, 2017. ct.counseling.org/2017/10/u-s-student-counselor-ratio-shows-slight-improvement/.

Brimi, Hunter. "Academic Instructors or Moral Guides? Moral Education in America and the Teacher's Dilemma." *The Clearing House* 82, no. 3 (February 2009): 125–130. Taylor & Francis.

Burns, Ronald, and Charles Crawford. "School Shootings, the Media, and Public Fear: Ingredients for a Moral Panic." *Crime, Law & Social Change* 32 (October 1999): 147–168. Boston: Springer.

Canady, Maurice, Bernard James, and Janet Nease. *To Protect & Educate: The School Resource Officer and the Prevention of Violence in Schools*. Hoover, AL: National Association of School Resource Officers, 2012. https://nasro.org/cms/wp-content/uploads/2017/10/NASRO-Protect-and-Educate.pdf

Capellan, Joel A. " Lone Wolf Terrorist or Deranged Shooter? A Study of Ideological Active Shooter Events in the United States, 1970–2014." *Studies in Conflict and Terrorism* 38, no. 6 (January 2015): 395–413. Taylor & Francis.

City of Houston Mayor's Office of Public Safety and Homeland Security. "Responding to an Active Shooter Crisis Situation." Federal Bureau of Investigation, 2012.

Connecticut State Police. “After Action Report - Newtown Shooting Incident.” December 14, 2012. http://www.ct.gov/despp/lib/despp/dsp/csp_aar.pdf.

Cotten IV, Thomas Randolph. “Increasing Effectiveness and Efficiency through Risk-Based Deployments.” Master’s Thesis, Naval Postgraduate School, 2015. https://calhoun.nps.edu/handle/10945/47926.

Cramer, J., M. Lemon, P. Wanner, and C. Hicks. *Funding for Safety and Security in Schools: A Fifty-State Review*. Olympia, WA: Washington State Institute for Public Policy, 2017. http://www.wsipp.wa.gov/ReportFile/1676/Wsipp_Funding-for-Safety-and-Security-in-Schools-A-Fifty-State-Review_Report.pdf.

Cummings, Janet R., Hefei Wen, and Benjamin G. Druss. “Improving Access to Mental Health Services for Youth in the United States.” *Journal of the American Medical Association* 309, no. 6 (February 2013): 553–554. National Institute of Health.

Department of Education. “Fiscal Year 2018 Budget Summary and Background Information.” Accessed April 30, 2018. https://www2.ed.gov/about/overview/budget/budget18/summary/18summary.pdf.

Department of Homeland Security, “Active Shooter Pocket Card.” Washington, D.C., July 11, 2017. https://www.dhs.gov/sites/default/files/publications/active-shooter-pocket-card-508.pdf

Department of Homeland Security. “Critical Infrastructure Sectors.” Accessed April 30, 2018. https://www.dhs.gov/critical-infrastructure-sectors#.

DeWine, Mike. *School Safety Task Force: Recommendations and Resources*. Colombus, OH: Ohio Attorney General’s Office, 2013. www.ohioattorneygeneral.gov.

Diehl, Daniel. “Measuring Security Effectiveness and Efficiency at U.S. Commercial Airports.” Master’s Thesis, Naval Postgraduate School, 2013. https://calhoun.nps.edu/handle/10945/32812.

Donaghey, Michael. “Protecting Our Future—Developing a National School Security Standard.” Master’s Thesis, Naval Postgraduate School, 2013. https://calhoun.nps.edu/handle/10945/38917.

Doss, Kevin T., and C. David Shepherd. *Active Shooter: Preparing for and Responding to a Growing Threat*. Oxford, UK: Butterworth-Heinemann, 2015.

Dreal, John Van. *Assessing Student Threats: A Handbook for Implementing the Salem-Keizer System.* Edited by Salem-Keizer Public Schools. Lanham, MD: Rowman & Littlefield Education, 2011.

Duwe, Grant. *Mass Murder in the United States: A History.* Jefferson, NC: McFarland & Company, Inc., Publishers, 2007.

Eagan, Sarah Healy, Faith VosWinkel, Julian D. Ford, Christopher Lyddy, Harold I. Schwartz, and Andrea Spencer. “Shooting at Sandy Hook Elementary School.” Connecticut Office of the Child Advocate, 2014.

Eisenbraun, Kristin D. “Violence in Schools: Prevalence, Prediction, and Prevention.” *Aggression and Violent Behavior* 12 (January 2007): 459–469. ScienceDirect.

Elliot, Rebekah. “The Real School Safety Debate: Why Legislative Responses Should Focus on Schools and Not on Guns.” *Arizona Law Review* 57, no. 2 (2015): 523–550. http://arizonalawreview.org/pdf/57-2/57arizlrev523.pdf.

Elsass, H. Jaymi, Jaclyn Schildkraut, and Mark C. Stafford. “Studying School Shootings: Challenges and Considerations for Research.” *American Journal of Criminal Justice* 41 (October 2015): 444–464. Boston: Springer.

Ergenbright, Charles E., and Sean K. Hubbard. “Defeating the Active Shooter: Applying Facility Upgrades in Order to Mitigate the Effects of Active Shooters in High Occupancy Facilities.” Master’s Thesis, Naval Postgraduate School, 2012. https://calhoun.nps.edu/handle/10945/7337.

Erickson, William H. *The Report of Governor Bill Owens’ Columbine Review Commission*. Denver, CO: State of Colorado, 2001. https://schoolshooters.info/sites/default/files/Columbine%20-%20Governor’s%20Commission%20Report.pdf.

Federal Aviation Administration. “The Economic Impact of Civil Aviation on the U.S. Economy.” Accessed April 24, 2018. Washington, D.C., 2016. https://www.faa.gov/air_traffic/publications/media/2016-economic-impact-report_FINAL.pdf.

Federal Bureau of Investigation. *Columbine High School; Firearms Act - Homicide*. Washington, D.C.: U.S. Department of Justice, 1999. https://vault.fbi.gov/Columbine%20High%20School%20/Columbine%20High%20School%20Part%201%20of%204.

Federal Bureau of Investigation. Violence Prevention in Schools. Washington, D.C.: U.S. Department of Justice, 2017. https://www.fbi.gov/file-repository/violence-prevention-in-schools-march-2017.pdf/view.

Fein, Robert A, Bryan Vossekuil, William S. Pollack, Randy Borum, William Modzeleski, and Marisa Reddy. *Threat Assessment in Schools: A Guide to Managing Threatening Situations and to Creating Safe School Climates.* Washington, D.C.: United States Secret Service, United States Department of Education, 2002.

Fox, Cybelle, and David J. Harding. “School Shootings as Organizational Deviance.” *Sociology of Education* 78 (January 2005): 69–97. Thousand Oaks, CA: Sage Publications.

Fox, James Alan, Jack Levin, and Kenna Quinet. *The Will to Kill: Making Sense of Senseless Murder*. 4th ed. Upper Saddle River, NJ: Pearson Education, 2012.

Frank, Noah. “The Unseen Investment in Keeping American Sporting Events Safe.” *Washington’s Top News*. February 3, 2017. https://wtop.com/nfl/2017/02/the-unseen-investment-in-keeping-american-sporting-events-safe/.

Gallagher, Dianne, Emanuella Grinberg, and Paul P. Murphy. “How Parkland Students Feel About Their New Mandatory Clear Backpacks.” *CNN*. April 2, 2018. https://www.cnn.com/2018/04/02/us/marjory-stoneman-douglas-clear-backpacks/index.html.

Gehring, James. “Sports Venue Security: Public Policy Options for Sear 4–5 Events.” Master’s Thesis, Naval Postgraduate School, 2014. https://calhoun.nps.edu/handle/10945/42632.

Gorman, Michele. “Do Mass Shooters Target Gun Free Zones? It’s Complicated.” *Newsweek*. Last modified January 14, 2016. www.newsweek.com/mike-huckabee-mass-shooters-gun-free-zones-416016.

Gostanian, Ali, Alex Johnson, and Corky Siemaszko. “Kentucky School Shooting: Two Dead after Attack at Marshall County High School.” *NBC News.* January 23, 2018. https://www.nbcnews.com/news/us-news/one-dead-after-shooting-kentucky-high-school-multiple-victims-reported-n840171.

Gray, Sarah. “The House Passed a School Safety Bill While Students Walked out of Class. Here’s What’s in It. And What’s Not.” *Time*. March 15, 2018. http://time.com/5201713/what-is-stop-school-violence-act/.

Gun Violence Archive. “Mass Shootings.” March 20, 2018. www.shootingtracker.com.

Haider-Markel, Donald P., and Mark R. Joslyn. “Gun Policy, Opinion, Tragedy, and Blame Attribution: The Conditional Influence of Issue Frames.” *Journal of Politics* 63, no. 2 (May 2001): 520–543. https://www.journals.uchicago.edu/doi/pdfplus/10.1111/0022-3816.00077.

Hammack, Maria Esther, Keisha Lanee Brown, Miguel Daza, Alejandra Garza, Rebecca Johnston, Justin Krueger, John Lisle, *et al.* “Behind the Tower: The Victims.” The Public History Seminar at UT Austin, http://behindthetower.org/the-victims/.

Hankin, Abigail, Marci Hertz, and Thomas Simon. “Impacts of Metal Detector Use in Schools: Insights from 15 Years of Research.” *Journal of School Health* 81, no. 2 (February 2011): 100–106. https://secure.edweek.org/media/hankin-02security.pdf.

Harper, Timothy. “Shoot to Kill.” *The Atlantic Monthly* 286, no. 4 (October 2000): 28–33. ProQuest.

Hernandez, Thomas J., and Susan R. Seem. “A Safe School Climate: A Systemic Approach and the School Counselor.” *Professional School Counseling* 7, no. 4 (2004). http://www.biomedsearch.com/article/safe-school-climate-systemic-approach/116734817.html.

Hetzner, Amy. “Where Angels Tread: Gun-Free School Zone Laws and an Individual Right to Bear Arms.” *Marquette Law Review* 95, no. 1 (2011): 359–408. http://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=5099&context=mulr.

Hevia, Jorge D. “Impediments to U.S. Educational & Public Institutions Ameliorating the Mass Shooting Epidemic with Effective State-of-the-Art Security Solutions & the Introduction of a School Access-Control Vulnerability Index, (S.A.V.I™) Audit and Certification Process, as a Solution.” Amityville, NY: Napco Security Technologies, Inc, 2018.

Hewitt, Bill. “The Avenger — Murder, Real People Stories.” *People Weekly*, 3 November 1997.

Hsiao, Timothy. “The Ethics of ‘Gun-Free Zones.’” *Philosophia* 45, no. 2 (January 2017): 659–676. Boston: Springer.

“Integrated Response to Mass Shootings.” Paper presented at the Emergency Medical Services Trauma System, Phoenix, AZ, 2016.

Interagency Security Committee. *The Risk Management Process for Federal Facilities: An Interagency Security Committee Standard*. Washington, D.C.: Department of Homeland Security, 2016. https://www.dhs.gov/sites/default/files/publications/isc-risk-management-process-2016-508.pdf.

James, Nathan, and Gail McCallion. *School Resource Officers: Law Enforcement Officers in Schools*. CRS Report No. R43126. Washington, D.C.: Congressional Research Service, 2013. https://fas.org/sgp/crs/misc/R43126.pdf.

Jennings, Wesley G., David N. Khey, Jon Maskaly, and Christopher M. Donner. “Evaluating the Relationship between Law Enforcement and School Security Measures and Violent Crime in Schools.” *Journal of Police Crisis Negotiations* 11 (2011): 109–124. Routledge.

Johnson, Ronn, Andrea Fessler, Magdalene Wilhelm, and Alejandra Stepensky. “Risk Assessment of School Police Officers in Addressing Public Safety Related to School Violence: A Biopsychosocialcultural Perspective.” *Journal of Forensic Research* 5, no. 1 (February 2014). http://dx.doi.org/10.4172/2157-7145.1000213.

Johnston, David, and Scott Shane. “U.S. Knew of Suspect’s Tie to Radical Cleric.” *The New York Times*, November 9, 2009. https://www.nytimes.com/2009/11/10/us/10inquire.html.

Kalish, Rachel, and Michael Kimmel. “Suicide by Mass Murder: Masculinity, Aggrieved Entitlement, and Rampage School Shootings.” *Health Sociology Review* 19, no. 4 (December 2010): 451–464. ProQuest.

Klarevas, Louis. *Rampage Nation: Securing America from Mass Shootings*. Amherst, NY: Prometheus Books, 2016.

Kleck, Gary. “Mass Shootings in Schools: The Worst Possible Case for Gun Control.” *American Behavioral Scientist* 52, no. 10 (June 2009): 1447–1464. Thousand Oaks, CA: Sage Publications.

Keneally, Meghan. “The Only Two Living Us Mass School Shooters Who Are Not Incarcerated.” *abc News*. February 17, 2016. http://abcnews.go.com/US/living-us-mass-school-shooters-incarcerated/story?id=36986507.

PBS. “The Killer at Thurston High. Frontline.” Video, 56:34. January 18, 2000. https://www.pbs.org/wgbh/pages/frontline/shows/kinkel/

Kopel, David B. “Pretend “Gun-Free” School Zones: A Deadly Legal Fiction.” *Connecticut Law Review* (2009). LexisNexis.

Kramen, Alissa J., Kelly R. Massey, and Howard W. Timm. “Guide for Preventing and Responding to School Violence.” Alexandria, VA: International Association of Chiefs of Police Bureau of Justice Assistance, U.S. Department of Justice, 2007.

Kupchik, Aaron, and Nicole L. Bracy. “The News Media on School Crime and Violence.” *Youth Violence and Juvenile Justice* 7, no. 2 (April 2009): 136–155. Thousand Oaks, CA: Sage Publications.

Langman, Peter. “The Enigma of Adam Lanza’s Mind and Motivations for Murder.” *The Journal of Campus Behavioral Intervention* 3 (2015): 1–11. https://schoolshooters.info/sites/default/files/lanza_enigma_1.1_0.pdf.

———. “Expanding the Sample: Five School Shooters.” (2015). https://schoolshooters.info/sites/default/files/expanding_the_sample_1.5.pdf.

———. “Luke Woodham: The Search for Justification.” (2012). https://schoolshooters.info/sites/default/files/woodham_search_for_justification_1.1.pdf.

———. “Multi-Victim School Shootings in the United States: A Fifty-Year Review.” *The Journal of Campus Behavioral Intervention* 4 (2016). https://schoolshooters.info/sites/default/files/fifty_year_review_1.1.pdf.

———. *School Shooters: Understanding High School, College, and Adult Perpetrators.* Lanham, MD: Rowman & Littlefield, 2015.

———. “The Search for Truth at Columbine.” *School Shooters* (2008). www.schoolshooters.info.

———. *Why Kids Kill: Inside the Minds of School Shooters.* New York, NY: St. Martin’s Press, 2009.

Lankford, Adam. “Public Mass Shooters and Firearms: A Cross-National Study of 171 Countries.” *Violence and Victims* 31, no. 2 (2016): 187–199. ProQuest

Lawrence, Regina G., and Thomas A. Birkland. “Guns, Hollywood, and School Safety: Defining the School-Shooting Problem across Public Arenas.” *Social Science Quarterly* 85, no. 5 (December 2004): 1193–1207. ResearchGate.

Lawrence, Richard, and David Mueller. “School Shootings and the Man-Bites-Dog Criterion of Newsworthiness.” *Youth Violence and Juvenile Justice* 1, no. 4 (October 2003): 330–345. Thousand Oaks, CA: Sage Publications.

Leary, Mark R., Robin M. Kowalski, Laura Smith, and Stephen Phillips. “Teasing, Rejection, and Violence: Case Studies of the School Shootings.” *Aggressive Behavior* 29 (2003): 202–214. Wiley InterScience.

Leavitt, Michael, Margaret Spellings, and Alberto R. Gonzales. “Report to the President on Issues Raised by the Virgina Tech Tragedy.” edited by Health and Human Services. Washington, D.C., 2007.

Lenz, Ryan. “Age of the Wolf: A Study of the Rise of Lone Wolf and Leaderless Resistance Terrorism.” edited by Mark Potok. Montgomery, AL: Southern Poverty Law Center, 2015.

Lott, John. “More Misleading Information from Bloomberg’s Everytown for Gun Safety on Guns: “Analysis of Recent Mass Shootings,” Showing How Mass Public Shootings Keep Occurring in Gun-Free Zones.” *Crime Prevention Research Center* (2014). https://crimeresearch.org/2014/09/more-misleading-information-from-bloombergs-everytown-for-gun-safety-on-guns-analysis-of-recent-mass-shootings/.

Lum, Cynthia, Breanne Cave, and Jordan Nichols. “Are Federal Security Efforts Evidence-Based?.” *Security Journal* 31, no. 1 (2018): 139–162. http://cebcp.org/wp-content/evidence-based-policing/LumCaveNicholsFederalSecurity.pdf.

Lynch, Caitlin G., Randy R. Gainey, and Allison T. Chappell. “The Effects of Social and Educational Disadvantage on the Roles and Functions of School Resource Officers.” *Policing: An International Journal of Police Strategies and Management* 39, no. 3 (June 2016): 521–535. ProQuest.

Malone, Timothy, and Reagan Schaupp. “The “Red Team”: Forging a Well-Conceived Contingency Plan.” *Air & Space Power Journal* 16, no. 2 (2002): 22–33. ProQuest.

Mass Shooting Tracker. “Mass Shooting Tracker.” June 10, 2017. https://www.massshootingtracker.org/.

McDonnell, Jeanne. “Boiled Alive: What We Can Learn from a Frog.” *Small Wars Journal* (2013). http://smallwarsjournal.com/node/14301.

McKenna, Joseph M., Kathy Martinez-Prather, and Scott W. Bowman. “The Roles of School-Based Law Enforcement Officers and How These Roles Are Established: A Qualitative Study.” *Criminal Justice Policy Review* 27, no. 4 (2016): 420–443. Thousand Oaks, CA: Sage Publications.

Metzl, Jonathan M., and Kenneth T. MacLeish. “Mental Illness, Mass Shootings, and the Politics of American Firearms.” *American Journal of Public Health* 105, no. 2 (February 2015): 240–249. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4318286/?utm_source=Yahoo&utm_medium=Beauty&utm_campaign=kirstie-alley-las-vegas-shooter-stephen-paddock-psychiatric-medications.

Midlarsky, Elizabeth, and Helen Marie Klain. “A History of Violence in the Schools.” Chap. 3 In *Violence in Schools*, 37–57. Boston, MA: Springer, 2005.

Mijares, Thomas C., and Ronald M. McCarthy. *Significant Tactical Police Cases: Learning from Past Events to Improve Upon Future Responses.* Springfield, IL: Charles C. Thomas, 2015.

Morral, Andrew R., Terry L. Schell, and Margaret Tankard. *The Magnitude and Sources of Disagreement among Gun Policy Experts*. RR 2088/1-RC. Santa Monica, CA: RAND Corporation, 2018. https://www.rand.org/pubs/research_reports/RR2088z1.html.

Morris, Charles A., and Jonathan B. Miller. “Broken Hearts and Opened Eyes.” *The New England Journal of Medicine* 378 (February 2018): 1078–1080. https://www.nejm.org/doi/full/10.1056/NEJMp1802509.

Morrison, Gale M., Michael J. Furlong, and Richard L. Morrison. “School Violence to School Safety: Reframing the Issue for School Psychologists.” *School Psychology Review* 23, no. 2 (1994): 236–256. https://www.researchgate.net/profile/Michael_Furlong2/publication/232514481_School_violence_to_school_safety_Reframing_the_issue_for_school_psychologists/links/54b4935f0cf26833efd02747/School-violence-to-school-safety-Reframing-the-issue-for-school-psychologists.pdf.

Mueller, John, and Mark G. Stewart. *Chasing Ghosts: The Policing of Terrorism.* New York, NY: Oxford University Press, 2016.

Muschert, Glenn W. “Frame-Changing in the Media Coverage of a School Shooting: The Rise of Columbine as a National Concern.” *The Social Science Journal* 46 (2009): 164–70. http://www15.uta.fi/arkisto/aktk/projects/sta/Muschert_2009_Frame-changing-in-a-Media-Coverage-of-School-Shooting.pdf.

National Center for Education Statistics. “Spotlight 1: Prevalence, Type, and Responsibilities of Security Staff in K–12 Public Schools.” Accessed April 16, 2018. https://nces.ed.gov/programs/crimeindicators/ind_S01.asp.

Newman, Katherine S., Cybelle Fox, David Harding, Jal Mehta, and Wendy Roth. *Rampage: The Social Roots of School Shootings*. New York: Basic Books, 2004.

O’Toole, Mary Ellen. *The School Shooter: A Threat Assessment Perspective*. edited by Arnold R. Isaacs. Quantico, Virginia: Federal Bureau of Investigation, 1999. http://www.publicsafety.ohio.gov/links/ohs-TheSchoolShooter.pdf.

Oldham, Paul. “Securing the Aviation Transportation System.” Master’s Thesis, Naval Postgraduate School, 2007. https://calhoun.nps.edu/handle/10945/3155.

Perline, Irvin, and Jona Goldschmidt. *The Psychology and Law of Workplace Violence: A Handbook for Mental Health Professionals and Employers.* Springfield, IL: Charles C. Thomas, 2004.

Perlstein, Daniel. “Saying the Unsaid: Girl Killing and the Curriculum.” *Journal of Curriculum and Supervision* 14, no. 1 (1998): 88–104. ProQuest.

Peterson, Reece L., and Russell Skiba. “Creating School Climates That Prevent School Violence.” *The Clearing House* 74, no. 3 (February 2001): 155–163. ProQuest.

Pollack, William S., William Modzeleski, and Georgeann Rooney. *Prior Knowledge of Potential School-Based Violence: Information Students Learn May Prevent a Targeted Attack*. Washington, D.C.: United States Secret Service and United States Department of Education, 2008. https://files.eric.ed.gov/fulltext/ED511645.pdf.

Raymond, Barbara. *Assigning police officers to schools*. Washington, DC: Department of Justice, Office of Community Oriented Policing Services, 2010.

Reese, Shawn, and Lorraine H. Tong. *Federal Building and Facility Security*. CRS Report No. R41138. Washington, D.C.: Congressional Research Service, 2010. https://fas.org/sgp/crs/homesec/R41138.pdf.

Reinke, Wendy M., Melissa Stormont, Keith C. Herman, Rohini Puri, and Nidhi Goel. "Supporting Children's Mental Health in Schools: Teacher Perceptions of Needs, Roles, and Barriers." *School Psychology Quarterly* 26, no. 1 (2011): 1–13. ResearchGate.

Rizzi, Carl. "A Duty to Protect: Why Gun-Free Zones Create a Special Relationship between the Government and Victims of School Shootings." *Cornell Journal of Law and Public Policy* 25, no. 2 (2015): 499–526. https://scholarship.law.cornell.edu/cjlpp/vol25/iss2/5/.

Rocque, Michael. "Exploring School Rampage Shootings: Research, Theory, and Policy." *The Social Science Journal* 49 (2012): 304–313. https://www.scottbarrykaufman.com/wp-content/uploads/2012/12/Rocque_2012_SSJ.pdf.

Ryan, Joseph B., Antonis Katsiyannis, Jennifer M. Counts, and Jill C. Shelnut. "The Growing Concerns Regarding School Resource Officers." *Intervention in School and Clinic* 53, no. 3 (June 2017): 188–192. Thousand Oaks, CA: Sage Publications.

Sack, Kevin. "Southern Town Stunned by Arrests in Murder Plot." *The New York Times*, October 9, 1997. https://www.nytimes.com/1997/10/09/us/southern-town-stunned-by-arrests-in-murder-plot.html.

Sandy Hook Advisory Commission. "Final Report of the Sandy Hook Advisory Commission." *State of Connecticut* (2015). http://www.shac.ct.gov/SHAC_Final_Report_3-6-2015.pdf.

Saul, Stephanie. "An Armed Principal Detained a Campus Gunman. But He's against Arming School Staff." *The New York Times*, February 21, 2018. https://www.nytimes.com/2018/02/21/us/school-shootings-teachers.html.

Schildkraut, Jaclyn, and H. Jaymi Elsass. *Mass Shootings: Media, Myths, and Realities.* Crime, Media, and Popular Culture. Edited by Frankie Y. Bailey and Steven Chermak. Santa Barbara, California: Praeger, 2016.

Schildkraut, Jaclyn, and Tiffany Cox Hernandez. "Laws That Bit the Bullet: A Review of Legislative Responses to School Shootings." *American Journal of Criminal Justice* 39 (June 2014): 358–374. Boston: Springer.

Schimmel, Kimberly. “Protecting the Nfl/Militarizing the Homeland: Citizen Soldiers and Urban Resilience in Post-9/11 America.” *International Review for the Sociology of Sport* 47, no. 3 (January 2012): 338–357. Thousand Oaks, CA: Sage Publications.

Sedensky, Stephen J. “Report of the State’s Attorney for the Judicial District of Danbury on the Shootings at Sandy Hook Elementary School and 36 Yogananda Street, Newtown, Connecticut on December 14, 2012.” Office of the State’s Attorney Judicial District of Danbury, 2013.

Snell, Clete, Charles Bailey, Anthony Carona, and Dalila Mebane. “School Crime Policy Changes: The Impact of Recent Highly-Publicized School Crimes.” *American Journal of Criminal Justice* 26, no. 2 (2002): 269–285. Boston: Springer.

Sullivan, Kevin, Samantha Schmidt, and David A. Farenthold. “What Happened in the 82 Minutes between Nikolas Cruz’s Arrival and Arrest During Florida Shooting.” *Washington Post.* February 15, 2018. http://www.chicagotribune.com/news/nationworld/ct-82-minutes-florida-shooting-20180215-story.html.

Thompson, Stephen, and Ken Kyle. “Understanding Mass School Shootings: Links between Personhood and Power in the Competitive School Environment.” *The Journal of Primary Prevention* (September 2005): 420–438. ProQuest.

Tierney, Martin. “Facilitating the Medical Response into an Active Shooter Hot Zone.” Master’s Thesis, Naval Postgraduate School, 2016. https://calhoun.nps.edu/handle/10945/49402

The University of Texas at Austin Police Department. *Active Shooter/Suicide After Action Report*. Austin, TX, 2010. https://police.utexas.edu/sites/police.utexas.edu/files/utpd_after_action_report.pdf

Verhovek, Sam. “Teenager to Spend Life in Prison for Shootings.” *The New York Times*, November 11, 1999. https://www.nytimes.com/1999/11/11/us/teenager-to-spend-life-in-prison-for-shootings.html.

Verlinden, Stephanie, Michel Hersen, and Jay Thomas. “Risk Factors in School Shootings.” *Clinical Psychology Review* 20, no. 1 (2000), 3–56, http://www15.uta.fi/arkisto/aktk/projects/sta/Verlinden_Hersen_Thomas_2000_Risk-Factors-in-School-Shootings.pdf.

Vidmar, Neil. “When All of Us Are Victims: Juror Prejudice and “Terrorist” Trials.” *Chicago-Kent Law Review* 78 (2003).

Vossekuil, Bryan, Robert A. Fein, Marisa Reddy, Randy Borum, and William Modzeleski. *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*. Washington, D.C.: United States Secret Service and United States Department of Education, 2004. https://www2.ed.gov/admins/lead/safety/preventingattacksreport.pdf.

Wallenfeldt, Jeff. "Texas Tower Shooting of 1966." Encyclopedia Britannica. Last modified February 15, 2017. https://www.britannica.com/event/Texas-Tower-shooting-of-1966.

Warnick, Bryan R., Benjamin A. Johnson, and Samuel Rocha. "Tragedy and the Meaning of School Shootings." *Educational Theory* 60, no. 3 (2010): 371–390. ProQuest.

Wood, Mike. "Why 'Run, Hide, Fight' Is Flawed." *PoliceOne*. Jun 15, 2016. https://www.policeone.com/active-shooter/articles/190621006-Why-Run-Hide-Fight-is-flawed/.

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