SCHOOL SAFETY AND SECURITY, A BEST PRACTICES REPORT

Prepared for Utah Leading through Effective, Actionable, and Dynamic Education (ULEAD)

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In the following report, Hanover Research and ULEAD provide an overview of different safety and security policies and practices that can be leveraged to make students and staff safer at school and to help assuage family and community anxieties about student and staff safety at school. Findings from this report can assist Utah's districts and schools in evaluating their own practices around safety and security and having constructive discussions with various stakeholder groups about those practices.

ULEAD EDUCATION

HANOVER RESEARCH

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INTRODUCTION

Without any doubt, school safety and security are major, multi-faceted challenges confronting district and school leaders, federal and state policy makers, and local communities.[1] The issue of safety and security has become increasingly embedded in the national psyche in the wake of high-profile school shootings, resulting in responses such as the formation of the Federal Commission on School Safety.[2] However, experts, researchers, and policymakers "acknowledg[e] there can be no one-size-fits-all solution to th[e] complex problem" of school safety and security, necessitating that educational leaders consider—with stakeholder input—"the best ways to prevent, mitigate, and recover from acts of violence in schools."[3] Specifically, local education agencies and their larger communities will need to evaluate best practices to support students' and staff's mental and physical wellbeing, prevent and respond to bullying and school-based violence, and build internal capacity and external partnerships to better prepare for, respond to, and guide students and staff following small- and large-scale traumatic events and personal crises.[4]

GROWING SECURITY CONCERNS

High profile acts of violence are increasing the anxiety students, families, staff, and community members have regarding school safety. At a time where concerns are high, it is important that districts and schools remain vigilant to ensure a safe and secure learning environment while also seeking appropriate solutions for their unique contexts.

Student safety is a growing concern among the nation's parents, putting added pressure on education decision-makers. According to the 2018 PDK Poll of the Public's Attitudes Toward the Public Schools (PDK Poll), the current level of parental fear for students' safety at school is 34 percent, nearly triple the 12 percent that was measured in a 2013 iteration of the study (see Figure A on the next page).[5] Relatedly, the PDK Poll finds that just 27 percent of parents are "extremely or very confident" in their school's security against gun violence, compared to

[1] Cai, J. "More School Security Measures: Is It a Good Strategy for School Safety?" National School Boards Association, October 4, 2018. https://www.nsba.org/newsroom/nsbawire/more-school-security-measures-it-good-strategy-school-safety

[2] [1] "School Safety and Security." Department of Homeland Security, August 7, 2018. https://www.dhs.gov/school-safety-and-security [2] "Federal Commission on School Safety." U.S. Department of Education. https://www.ed.gov/school-safety

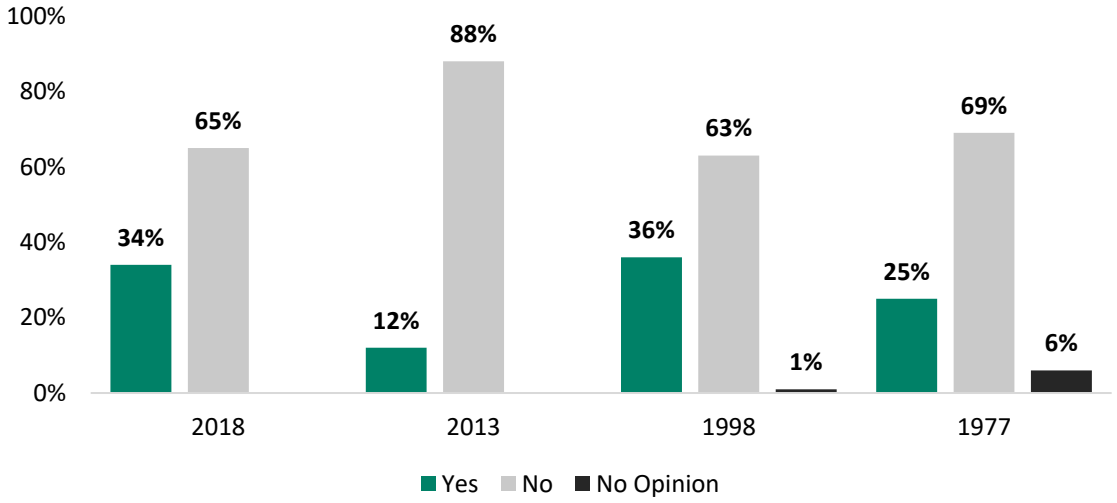
[3] "Federal Commission on School Safety Releases Comprehensive Resource Guide for Keeping Students, Teachers Safe at School." U.S. Department of Education, December 18, 2018. https://www.ed.gov/news/press-releases/federal-commission-school-safety-releases-comprehensive-resource-guide-keeping-students-teachers-safe-school

[4] [1] "School Safety and Crisis." National Association of School Psychologists. https://www.nasponline.org/resources-and-publications/resources/school-safety-and-crisis [2] "School Safety." National Education Association. http://www.nea.org//home/16364.htm [3] Greenberg, M. "Coping After Disaster." Harvard Graduate School of Education, August 31, 2017. https://www.gse.harvard.edu/news/uk/17/08/coping-after-disaster

[5] Blad, E. "'You Better Make These Schools Safe': As School Starts, Violence Is Top of Mind." Education Week, August 30, 2018. https://www.edweek.org/ew/articles/2018/08/30/you-better-make-these-schools-safe-as.html

41 percent of parents who are "somewhat confident" and 31 percent who are "not so or not at all confident."[6] The survey also found that the top three security measures supported by respondents were having armed police on school campuses (80 percent), mental health screenings (76 percent), and metal detectors installed at school entrances (74 percent).[7] Given these statistics and the growing fear around school safety, it is no coincidence that legislatures in 43 states considered 371 bills or resolutions in areas related to school safety and security in 2018.[8]

Figure A: Percentage of Parents Expressing Fear for Their Child's Safety at School



Source: Multiple[9]

To support Utah districts and schools in determining the best safety and security measures for their local contexts, Hanover Research (Hanover) and ULEAD (Utah Learning through Effective, Actionable, and Dynamic Education) have developed this report. Specifically, this report provides an overview of different safety and security policies, practices, and design features that can be leveraged to make students and staff safer at school and to help assuage family and community anxieties about student and staff safety at school. The report is organized into two sections:

- **Section I: Building Safety and Security** explores existing literature and recommendations around physical features, technology, school policies, and staffing

[6] "The 50th Annual PDK Poll of the Public's Attitudes Toward the Public Schools, Teaching: Respect but Dwindling Appeal." PDK Poll, Phi Delta Kappan, and Langer Research Associates, September 2018. p. 10. http://pdkpoll.org/assets/downloads/pdkpoll50_2018.pdf

[7] Richmond, E. "Parents Fear for Kids' Safety in Schools Reaches Two-Decade High." U.S. News and World Report, July 17, 2018. https://www.usnews.com/news/education-news/articles/2018-07-17/parents-fear-for-kids-safety-in-schools-reaches-two-decade-high

[8] "School Safety." National Conference of State Legislatures, August 13, 2018. http://www.ncsl.org/research/education/school-safety.aspx

[9] Figure data taken directly from: [1] "The 50th Annual PDK Poll of the Public's Attitudes Toward the Public Schools, Teaching: Respect but Dwindling Appeal," Op. cit., p. 10. [2] Blad, E. "One-Third of Parents Fear for Their Child's Safety at School." Education Week, July 17, 2018. https://www.edweek.org/ew/articles/2018/07/17/school-safety-parents-concerns.html

to provide increased security on school campuses. Hanover and ULEAD encourage Utah's districts and schools to leverage this information to evaluate their own building safety and security and have meaningful conversations with stakeholders—students, staff, families, and community members—about appropriate changes to existing policies and infrastructure.

- **Section II: Risk Assessment and Response** describes strategies that district and school personnel can use to identify and assess potential risks to staff and student safety and to respond to threats before, as, and after they occur. Utah's districts and schools could examine the presented strategies to determine if any are adaptable to their unique community contexts.

RECOMMENDATIONS

Based on our research findings, Hanover and ULEAD recommend that Utah districts and schools consider:

- **Involving community stakeholders—including students, their families, school and district staff, and emergency services personnel—in conversations around school safety and security.** Collaboration and communication with impacted stakeholder groups can help build support and buy-in for proposed solutions while helping to ensure that any implemented safety and security measures appropriately address local needs and preferences.
- **Conducting a risk assessment to identify potential threats, vulnerabilities, and risks to students, staff, and property.** Careful examination of factors that could impact students' and staff's physical and emotional well-being or the security of district, school, and individual property can help decision-makers identify the most prevalent risks in their local communities and explore potential strategies to mitigate those risks.
- **Reassessing existing emergency plans and safety and security infrastructure to identify potential gaps and their continuing effectiveness in preventing and mitigating a variety of risks.** In particular, districts and schools will benefit from examining safety and security infrastructure relative to local contexts and with consideration to prevalent risks within their communities, as identified by a comprehensive risk assessment.

KEY FINDINGS

- **Experts emphasize that no one solution will prevent all threats.** To maximize their potential impacts, the sum total of all security measures and safety protocols a district or school enacts should encompass precautionary and preventative actions, thorough crisis planning and management, and the ability to make swift and decisive decisions when tragedy does strike. Given that security and safety threats can have both immediate and long-term impacts, consideration of multiple safety and security measures is vital to create a comfortable and safe environment that is conducive to learning. Importantly, districts and schools will likely see greater buy-

in to and support for enacted security measures if those measures are selected with input from local stakeholders—including students, staff, families, and community members. Likewise, effective safety and security solutions will consider both the physical and psychological safety of students and school staff.

- **Physical security features, including strategic technology deployments, can be valuable as deterrents to potential threats, as mitigating factors when school campuses encounter threats, and as monitoring tools to detect concerning behaviors.** These measures can be deployed across five layers of school security—district-wide perimeters, school property perimeters, parking lot perimeters, building perimeters (e.g., entrances, windows), and interior perimeters (e.g., classrooms, offices). Importantly, when embedding physical and technological security measures in educational settings, districts and schools should prioritize balancing student and staff safety with the maintenance of a welcoming learning environment. Attention must also be given to student privacy and free speech, especially in the case of more intrusive technologies.
  - **Experts recommend that a school building and property possess certain features to maximize the security of students and staff.** Key features include a layout and architecture that are conducive to natural surveillance (e.g., open sight lines) and that help control access to the school. Likewise, welcoming décor and a positive climate can help support students' and staff's sense of security. Other recommended facets of school design include safe and secure lockdown spaces, limited roof access, designing offices and meeting spaces with multiple exits, and having appropriate traffic equipment.
  - **Security technologies are a recommended component of any comprehensive safety strategy.** Such technologies can include, but are not limited to, emergency communication systems, electronic building and property access control, video surveillance, alarms to detect emergencies or security breaches, and violence prediction software. By providing for both physical and technological security measures, districts and schools can augment the strength of their safety provisions, as building architecture and technology can work in tandem to ensure proper surveillance of and access to educational settings.
- **Given the lack of evidence supporting positive impacts due to school security personnel and the existence of evidence of negative impacts, schools and districts should cautiously approach any proposal to hire security staff or have onsite law enforcement.** Notably, research finds that the presence of law enforcement or security personnel at schools can be ineffective in protecting students and may, in fact, increase school-based violence, crime, disruption, and disorderly conduct. Comparatively, research also finds no evidence that the presence of security staff improves students' academic or attendance outcomes in middle or high school. At the same time, however, experts suggest that any positive impacts resulting from the presence of any security personnel as part of a broader safety plan depend significantly on personnel selection.

- **The Federal Commission on School Safety recommends that districts and schools establish a designated security management team, which can direct risk assessments, work with third parties to identify needs, and lead the development of a comprehensive safety and security plan.** The team should consist of representatives from various stakeholder groups, including district and school staff, parents, students, community members, and local emergency response personnel. Once a team is formed, it can engage in a holistic evaluation of a district's or school's physical environment, social-emotional climate, existing safety and security policies and procedures, and ability to respond effectively to crises. Such an assessment can include gathering qualitative data from students, staff, and parents about their perceptions of safety via surveys, interviews, and focus groups. Likewise, the security management team can collect and analyze quantitative data around student risk behaviors and school-based and community crime.

- **Effective risk assessment focuses on identifying threats, vulnerabilities, and risks in order to explore potential strategies to mitigate them and, ultimately, make an informed decision on what measures to implement after conducting a careful costs and benefits analysis.** In particular, districts and schools will need to determine those persons, properties, physical assets, and information that require protection before identifying potential threats or hazards that could impact them. From there, security management teams can conduct analyses to gauge the likelihood of specific threats or hazards occurring and impacting students and staff and examine potential vulnerabilities or weaknesses in existing infrastructure or safety and security policies that exacerbate the risk associated with a specific threat or hazard. Using all of this information, security management teams—with input from other stakeholders—can explore measures that will reduce risks and mitigate the consequences of specific threats or hazards should they materialize.

- **Districts and schools require accurate and comprehensive plans and protocols for using available security measures, minimizing potential risks, and responding to threats in real-time.** Thoughtful planning can help decrease the risks associated with certain threats or hazards, making them an integral part of any safety and security solution. Plans are essential to direct responding personnel regarding the specific actions they should take in specific emergency situations, how resources should be deployed to minimize the negative impacts of an emergency, and when and how to communicate with stakeholders about emergency responses. Within the banner of school safety and security, districts and schools need to consider an array of possible emergencies threats and hazards and should solicit feedback from additional stakeholders.

SECTION I: BUILDING SAFETY AND SECURITY

In this section, Hanover and ULEAD explore existing literature and recommendations around physical features, technology, school policies, and staffing to provide increased security on school campuses.

TRENDS IN SAFETY AND SECURITY MEASURES

By 2021, experts expect the market for security equipment and services in K-12 education to reach $2.8 billion in total revenue.[10] New products and services continue to flood the market, ranging from bulletproof whiteboards to facial-recognition software to former law enforcement officers acting as undercover teachers. However, **little research has been done on many of these solutions, leading to a dearth of evidence beyond the theoretical to justify any specific investment over another for safety and security purposes.**[11]

PREVENTION, PREPARATION, RESPONSE, AND RECOVERY

When it comes to safety and security measures, districts and schools should consider ways to minimize the potential for unsafe or crisis situations, prepare for and respond to incidents of all types, and enact procedures to assist affected parties with both their short- and long-term recovery.

Expert guidance trends toward policies and measures in four areas: *prevention* of incidents that threaten student and staff safety at school; *preparation* for potential crisis situations; *responses* to potential crises; and *recovery* from potential crisis situations—both short- and long-term.[12] Likewise, guidance also emphasizes that school-based violence and other crises can occur in any and all educational contexts, regardless of geography and socioeconomic conditions, requiring preparation and vigilance in all schools and districts.[13]

Data compiled by the National Center for Education Statistics identify the percentage of public schools with written plans to support their response to specific crisis scenarios (see Figure 1.1 on the following page). The prevalence of plans for shootings and bomb threats or incidents

[10] Dearing, J. "School Security Systems Industry - U.S. Market Overview." IHS Markit, February 26, 2018. https://technology.ihs.com/600401/school-security-systems-industry-us-market-overview

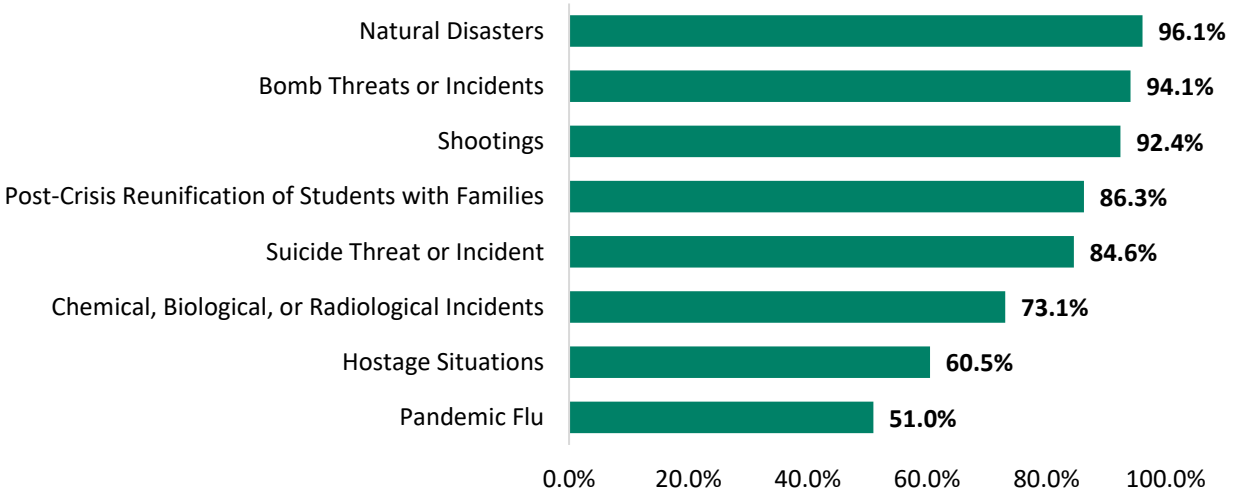
[11] Cox, J.W. and S. Rich. "Armored School Doors, Bulletproof Whiteboards, and Secret Snipers." The Washington Post, November 13, 2018. https://www.washingtonpost.com/graphics/2018/local/school-shootings-and-campus-safety-industry/

[12] "Responding to a School Crisis." Healthy Futures | National Education Association. http://healthyfutures.nea.org/get-informed/school-safety/responding-to-a-school-crisis/

[13] "Statement of Principles on School Safety and Security." American Legislative Exchange Council, September 18, 2018. https://www.alec.org/model-policy/statement-of-principles-on-school-safety-and-security/

tops 90 percent, while over 96 percent of schools plan for natural disasters.[14] Importantly, having emergency response plans to a variety of events and a team to direct implementation of those plans is highlighted as a best practice in school building security by the Federal Commission on School Safety.[15]

Figure 1.1: Percentage of Public Schools with Written Plans for Selected Scenarios: 2015–2016



Source: National Center for Education Statistics, Institute of Education Sciences[16]

In addition, the National Center for Education Statistics identifies the percentage of public schools—by level—using specific safety and security measures, as shown in Figure 1.2 on the following page. According to the data, relatively common safety and security measures include controlled building access, the use of security cameras, and identification requirements for staff. Less common measures include the use of metal detectors and identification requirements for students.[17] Notably, per the previously discussed PDK Poll, parents are overwhelmingly in favor of proposals involving armed police in schools, mental health screenings for students, and metal detectors at school entrances, with less support given to proposals involving arming teachers or other staff members.[18]

To maximize their potential impacts, **the sum total of all security measures and safety protocols a district or school enacts should encompass precautionary and preventative actions, thorough crisis planning and management, and the ability to make swift and**

[14] "Indicators of School Crime and Safety, Indicator 20: Safety and Security Measures Taken by Public Schools." National Center for Education Statistics, Institute of Education Sciences, March 2018. https://nces.ed.gov/programs/crimeindicators/ind_20.asp

[15] "Final Report of the Federal Commission on School Safety." The Federal Commission on School Safety, December 18, 2018. p. 120. https://www2.ed.gov/documents/school-safety/school-safety-report.pdf

[16] Data taken directly from: "Indicators of School Crime and Safety, Indicator 20: Safety and Security Measures Taken by Public Schools," Op. cit.

[17] "Fast Facts: School Safety and Security Measures." National Center for Education Statistics, Institute of Education Sciences, 2018. https://nces.ed.gov/fastfacts/display.asp?id=334

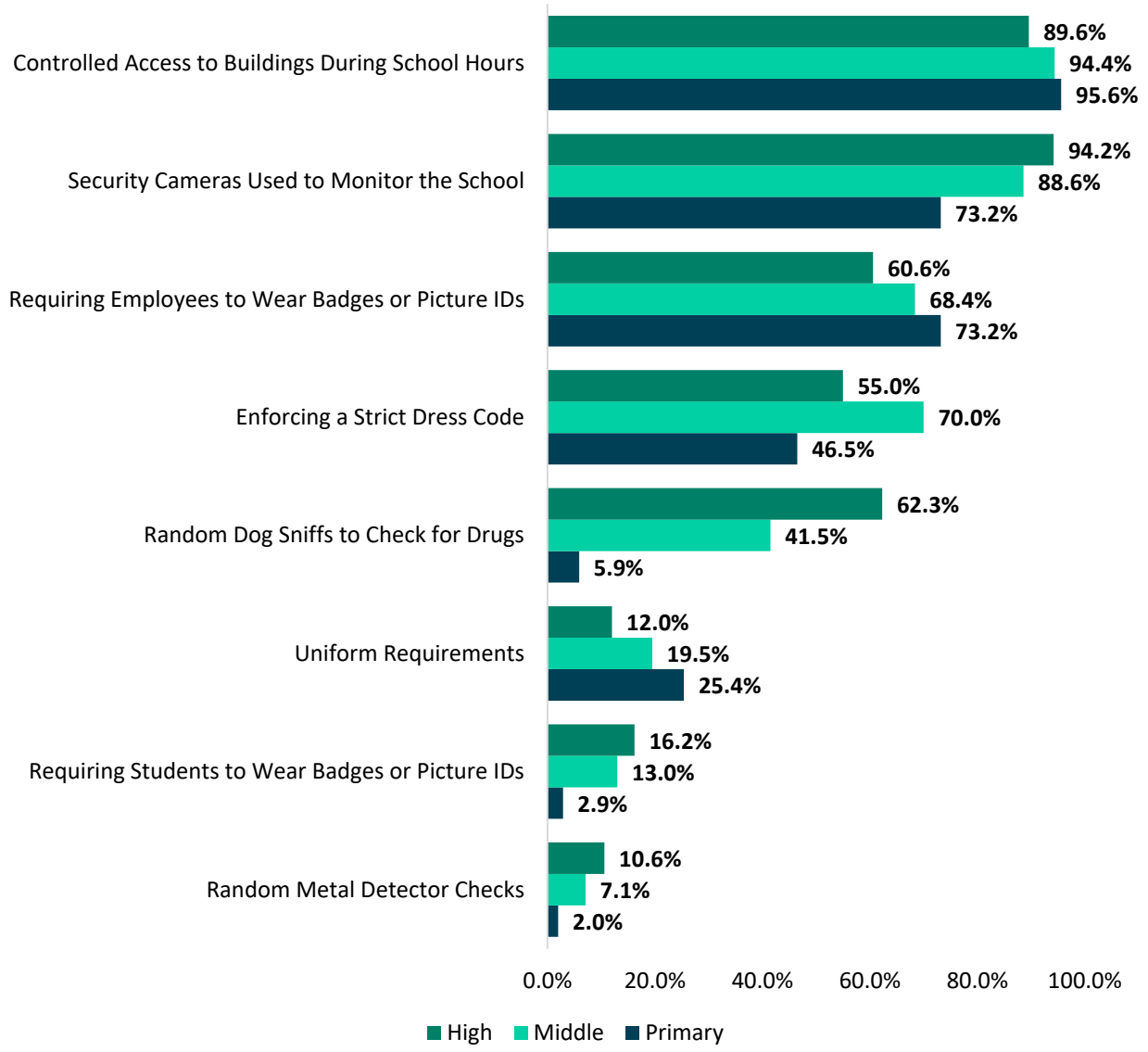
[18] "The 50th Annual PDK Poll of the Public's Attitudes Toward the Public Schools, Teaching: Respect but Dwindling Appeal," Op. cit., p. 11.

decisive decisions when tragedy does strike.[19] Because security and safety threats can have both immediate and long-term impacts, consideration of multiple safety and security measures is vital to create a comfortable and safe environment that is conducive to learning. Importantly, districts and schools will likely see greater buy-in to, support for, and comfortability with enacted security measures if those measures are "locally determined, collaborative, [include] input from students, parents, and families[,] and take into account a variety of factors[,] including the physical and psychological safety of students."[20]

[19] "School Safety Resources." National Association of Elementary School Principals. https://www.naesp.org/school-safety-resources

[20] [1] "School Safety: Students Deserve a Safe Environment." National Parent Teacher Association. https://www.pta.org/home/family-resources/safety/School-Safety [2] "Position Statement - Safe and Supportive Schools." National Parent Teacher Association, 2018. https://www.pta.org/home/advocacy/ptas-positions/Individual-Position-Statements/safe-and-supportive-schools

Figure 1.2: Percentage of Public Schools, by Level, Using Safety and Security Measures: 2015–2016



Source: National Center for Education Statistics, Institute of Education Sciences[21]

[21] Data taken directly from: "Indicators of School Crime and Safety, Indicator 20: Safety and Security Measures Taken by Public Schools," Op. cit.

Spotlight on Utah Practices: Canyons School District

Location: Sandy, Utah
Number of Schools/Programs: 46
Total Enrollment: 34,134

% Economically Disadvantaged Students: 28.7%
% English Learners: 6.9%
% Students with Disabilities: 10.5%

Canyons School District was the first new school district created in the state of Utah in nearly a century when it began serving students in July 2009. Since its inception, the district has emphasized five areas as priorities: student achievement, innovation, community engagement, fiscal responsibility, and customer service. Specifically, the district operates 29 elementary schools, eight middle schools, five high schools, and four specialized programs to serve the needs of its students.

According to the district website, Canyons School District has an entire department devoted to risk management which oversees operations and procedures in several areas, including building security and safety, property insurance, indoor air quality, and the district's vehicle fleet. The department also maintains a 24-hour security services hotline, as well as an inventory of forms for employee use such as the Classroom Preparedness Checklist (located **here**), which provides teachers with a list of supplies to have on-hand in case of emergency. Similarly, Canyons School District has a department devoted to responsive services, which maintains a variety of behavioral, health, and safety supports such as counseling, restorative justice, and crisis management.

Notably, the district has developed a Crisis Response Manual (located **here**) that has been highlighted by the Utah State Board of Education on its Crisis Response webpage. The manual outlines appropriate action steps for designated crisis response team members and a variety of other district and school employees—such as administrators, counselors, teachers, and administrative assistants—in the event of a crisis or emergency. Similarly, the manual provides guidance on a three-tiered crisis intervention framework that encompasses universal (i.e., provided to all students), selected (i.e., provided to moderately and severely traumatized individuals), and indicated (i.e., provided to severely traumatized individuals) crisis interventions. The manual also provides documents to support response efforts, including a Crisis Incident Student Meeting Log and Crisis Communication Guidelines.

Source: Canyons School District and Utah State Board of Education[22]

PHYSICAL DESIGN FEATURES AND TECHNOLOGY DEPLOYMENTS

Physical security features, including strategic technology deployments, can be valuable as deterrents to potential threats, as mitigating factors when school campuses encounter threats, and as monitoring tools to detect concerning behaviors.[23] Likewise, effective use of physical and technological security measures can eliminate the need for staff to perform more mundane tasks (e.g., security cameras in hallways may limit the need for hall

[22] Figure adapted from: [1] "Reports: Fall Enrollment by Demographics." Utah State Board of Education, October 1, 2018. https://www.schools.utah.gov/data/reports?mid=1424&tid=4 [2] "Supporting Safe and Positive Utah Schools: Crisis Response." Utah State Board of Education. https://www.schools.utah.gov/scep/safeschools?mid=3929&tid=6 [3] "About Us." Canyons School District. http://www.canyonsdistrict.org/ailc/itemlist/category/46-about-us [4] "Canyons District: Celebrating Educational Excellence." Canyons School District. http://www.canyonsdistrict.org/about-us [5] "Risk Management." Canyons School District. http://www.canyonsdistrict.org/risk-management [6] "Risk Management Forms." Canyons School District. http://www.canyonsdistrict.org/risk-management-forms [7] "Classroom Preparedness Checklist." Canyons School District, March 14, 2014. pp. 1–2. http://www.canyonsdistrict.org/risk-management-forms/4156-classroom-prepardness-checklist/file [8] "Responsive Services." Canyons School District. https://responsiveservices.canyonsdistrict.org/ [9] "Crisis Response Manual, 2017-2018." Canyons School District, 2017. pp. 4–5, 10, 13–14. https://responsiveservices.canyonsdistrict.org/docs/Crisis_Response_Manual.pdf#a=

[23] [1] "School Safety and Security," Op. cit. [2] "School Safety and Security Checklist." Partner Alliance for Safer Schools, 2018. pp. 2–7. https://passk12.org/guidelines-resources/pass-school-security-guidelines/

monitors).[24] Physical and technological security measures can range from relatively simple and non-intrusive tools (e.g., motion-activated lights, locks on doors) to more complex and intrusive mechanisms (e.g., metal detectors, social media tracking software, infrared detection).[25] Specifically, physical and technology security and safety features can be divided into five layers of protection, as displayed in Figure 1.3 below. These include district-wide measures, as well as those at different perimeters on school campuses.

Figure 1.3: Layers of Protection for K-12 Campuses

Layer	Description
 District-Wide Perimeter	Leadership and coordination at the district level are integral to the successful development and adoption of school safety processes, plans, and technologies and for ensuring these measures are updated for consistency with evolving best practices. Most school safety measures have district-wide components or responsibilities. It is critical for districts to understand the fundamental link between readiness for day-to-day emergencies and disaster preparedness. School districts that are well prepared for individual emergencies involving students or staff members are more likely to be prepared for complex events like a community disaster or an active shooter incident.
 Property Perimeter	The property perimeter begins at the school property boundary and extends to the parking lot. This area includes playgrounds, sporting fields, and other facilities that are often used by the public after school business hours end. The physical security of a school facility begins at the property perimeter, where the most outwardly visible security deterrents to an external threat can be implemented. The boundary should be clear to the public and provide visible notice of the rules and responsibilities for individuals entering school property.
 Parking Lot Perimeter	Within the parking lot perimeter, staff, students, and visitors park their vehicles or arrive and depart by bus or other means. Just like the property perimeter, the parking lot perimeter should always be clearly defined. In many cases, this area is where schools experience the most safety issues. Falls, car accidents, dangerous driving, theft, vandalism, and assault are just some of the events that can take place in these areas.
 Building Perimeter	The building perimeter begins with school grounds adjacent to the exterior structure of a building and consists of the perimeter of a building itself, including exterior doors and windows. Securing a building perimeter can be complex, especially for middle or high schools with multiple buildings or open campuses. Key functions take place within this layer, as it encompasses all areas where people enter and exit a school building.
 Interior Perimeter	The interior perimeter consists of a school's entire interior, including classrooms, gymnasiums, cafeterias, media centers, hallways, stairwells, and other parts of the building. This is both the last layer of defense against external threats, and the first protection against internal threats to student, staff, and visitor safety.

Source: Partner Alliance for Safer Schools[26]

[24] Green, M.W. "The Appropriate and Effective Use of Security Technologies in U.S. Schools: A Guide for Schools and Law Enforcement Agencies." National Institute of Justice, U.S. Department of Justice, September 1999. p. 1. https://www.ncjrs.gov/school/178265.pdf

[25] "A Comprehensive Report on School Safety Technology." Johns Hopkins Applied Physics Laboratory, Johns Hopkins School of Education, Johns Hopkins Bloomberg School of Public Health, and National Institute of Justice, U.S. Department of Justice, October 2016. p. 2.2. https://www.ncjrs.gov/pdffiles1/nij/grants/250274.pdf

[26] Figure text quoted verbatim, with minor adaptations, from: "Safety and Security Guidelines for K-12 Schools." Partner Alliance for Safer Schools, 2018. p. 12. https://passk12.org/guidelines-resources/pass-school-security-guidelines/

Importantly, **experts emphasize that no one solution will prevent all threats**, especially given the variability inherent in districts and schools across the country and even within the same state.[27] In addition, the dynamics of school-based violence and natural and man-made threats continue to evolve over time, often with distinct differences in the particularities of seemingly similar events.[28] Consequently, experts advise that schools and districts:[29]

- Take a balanced approach to safety, recognizing that a combination of strategies, rather than one or two extreme solutions, can be most effective in keeping students and staff safe;
- Balance the need to secure and control access to school facilities with the need to maintain an open space for learning; and
- Account for the features of the school and the surrounding community when planning for and implementing safety and security measures.

Solving the problem of school safety and security is not easy, requiring solutions which encompass multiple variables, procedures, personnel, and resources. Adding to or eliminating certain measures from a comprehensive safety and security strategy can also disrupt a district's or school's entire framework, necessitating thorough reflection on current needs. A 2016 report from various departments at Johns Hopkins University notes that current local needs should be considered to identify those risks and issues that are most applicable within local contexts and to determine appropriate solutions that can address those risks and issues.[30] Likewise, the Final Report of the Federal Commission on School Safety—released in December 2018—finds that:[31]

> *"In attempting to provide secure learning environments through school design and physical hardening, schools must balance many different objectives. These include reducing risks, maintaining open access for students and staff, facilitating a learning environment, and complying with required buildings codes and standards. However, most schools present a variety of avenues for "designing in" layers of security, starting with controlling access at the school's perimeter and working inward to secure individual classrooms and other internal spaces."*

Embedding security features in the architecture of a school building and the physical features of school properties presents challenges regarding the appropriate balance between safety and a welcoming environment that promotes learning.[32] Despite this difficulty, it is important to consider the physical attributes of educational facilities as an

[27] "A Comprehensive Report on School Safety Technology," Op. cit., p. ES.11.
[28] "K-12 School Security: A Guide for Preventing and Protecting Against Gun Violence." U.S. Department of Homeland Security, 2018. p. 14. https://www.dhs.gov/sites/default/files/publications/K12-School-Security-Guide-2nd-Edition-508.pdf
[29] Bulleted text quoted verbatim, with minor adaptations, from: "ABC's of School Safety." American Association of School Administrators. http://www.aasa.org/content.aspx?id=7354
[30] "A Comprehensive Report on School Safety Technology," Op. cit., p. ES.11-ES.12.
[31] Quotation taken verbatim, with minor adaptations, from: "Final Report of the Federal Commission on School Safety," Op. cit., p. 119.
[32] Passy, J. "Schools Rethink Building Design to Protect Students from Mass Shooters." MarketWatch, February 25, 2018. https://www.marketwatch.com/story/how-schools-are-being-designed-to-protect-students-and-teachers-from-mass-shooters-2018-02-16

integral part of any safety and security solution.[33] Beginning below, Figure 1.4 describes seven building design features identified by Safe Havens International—a nonprofit organization that advises K-12 schools on safety solutions and publishes guidance on school safety for a variety of other organizations.[34] Overall, the identified features emphasize natural sight lines, proper designation of educational spaces, access control into and within school buildings, and protected spaces from which to launch and manage emergency responses.[35]

Figure 1.4: Building Design Features to Enhance Safety and Security

Design Feature	Description
Positive School Body Language	Positive school body language created through décor and culture is an inherent and important part of school security. Relevant and appropriate murals, artwork, and color schemes help improve school climate and culture. Research shows that when students feel a connection to the building, they are less likely to vandalize it and more likely to prevent or report vandalism. Importantly, a school should visibly and distinctly give the appearance of a place of learning, even after safety measures are implemented.
Natural Surveillance	Research shows that natural surveillance can deter crime because aggressors are afraid of being seen. Natural surveillance primarily involves the ability of people to see each other and to be seen by others without technology. It can even exist where a person who is considering committing a crime merely perceives that they are being watched. Likewise, the ability for people to hear one another is included in natural surveillance.
Natural Access Control and Front Office Setup	Natural access control creates boundaries between public and private spaces and directs people to appropriate areas. Fences, hedgerows, walls, and other geographic or building features can be used to define the edge of campuses and guide visitors to main entrances. At the main entrance or front office, natural surveillance, visibility using cameras or mirrors, and a method for staff to speak to visitors can enhance access control and entry and exit management. Additional features such as high counters and ballistic windows can further harden entrances against threats.
Traffic Safety Equipment	Design features relating to traffic safety should be thoughtfully implemented, well-maintained, visible, and easily understandable. Signage, poles, roll stops, raised crossings, and other physical features can be used to make parking areas and access roads safer and easier to navigate. The key is to use signage, design features, and campus layout in an integrated fashion to direct users to appropriate areas. Schools should strive for positive boundary definition around parking lots and access roads to deflect persons and trespassers to designated openings where they can be observed.
Safer Lockdown Rooms	It is important schools have offices, storage rooms, and other areas that staff can quickly retreat to, secure themselves in, and communicate from. These features make it easier for office staff to protect themselves, so they can warn others, implement protective actions, and summon emergency assistance. Without this option, staff may be forced to decide between protecting themselves and warning others in the building. An ideal lockdown area has a strong door that can be quickly accessed and secured, at least one means of communication, and a secondary exit that is also secure. In schools with security cameras, lockdown areas should also have access to monitor and control them. Food, water, and emergency supplies including copies of the school's crisis plan should be accessible from this area. All staff should practice using these areas during drills and consider asking a third party to evaluate it.

[33] "School Safety." Council of Chief State School Officers. https://ccsso.org/topics/school-safety
[34] [1] "About Us." Safe Havens International. https://safehavensinternational.org/about-us/ [2] "Our Team." Safe Havens International. https://safehavensinternational.org/about-us/our-team/
[35] "Safety and Security Guidelines for K-12 Schools," Op. cit., p. 13.

Design Feature	Description
Design of Offices and Meeting Rooms	Administrative offices and meeting spaces are generally safer if they have a secondary exit or the ability for staff members to exit the room if a visitor becomes volatile or tries to trap them in the space. In existing schools where there is no secondary exit and the size of offices do not allow for strategic furniture placement, risks can be mitigated by holding all meetings in conference rooms or other areas with a secondary door. Discussing emergency procedures as a team can also help staff members know to be alert to danger in nearby offices and call for help at the first sign of danger.
Roof Access Features	One common security gap in schools is easy roof access, both from the exterior and the interior of the building. Low roof sections, catwalks, exposed gutters, utility boxes, and railings are building features that allow easy roof access. Roof access can also be gained through loose items left on the campus, such as pallets, milk crates, ladders, unsecured benches, or tables. In many cases, roof access can also be gained from the interior of the school via mechanical rooms, mezzanine areas, or other locations that are not properly secured. Thus, interior ladders leading to mechanical areas, crawlspaces, catwalks, or roof access should be secured by lockable gates, metal plates, or other hardware to prevent unauthorized access.

Source: Safe Havens International and Indiana School Safety Specialist's Academy, Indiana Department of Education[36]

To complement a building's physical architecture and property features, **security technologies are a recommended component of any comprehensive safety strategy.** Such technologies can include, but are not limited to, emergency communication systems, electronic building and property access control, video surveillance, and alarms to detect emergencies (e.g., fire, carbon monoxide) or security breaches.[37] By providing for both physical and technological security measures, districts and schools can augment the strength of their safety provisions, as building architecture (e.g., a distinct, locked, and secure main entrance) and technology (e.g., security cameras, a door buzzer to admit entrants) can work in tandem to ensure proper surveillance of and access to educational settings.[38] Importantly, technology measures need not be complex. For example, additional lighting in poorly lit hallways or stairwells can improve school staff's ability to monitor the space, both through video and natural surveillance.[39]

Notably, a 2016 study completed by the RAND Corporation provides a synopsis of 12 different technologies that districts and schools can deploy as part of a comprehensive safety and security strategy, as displayed in Figure 1.5 on the following page. The highlighted technologies include more common solutions such as entry control equipment and video surveillance, as well as innovative measures such as violence prediction systems and social media monitoring.

[36] Figure text quoted verbatim, with minor adaptations, from: Dorn, M. et al. "Seven Important Building Design Features to Enhance School Safety." Safe Havens International and Indiana School Safety Specialist's Academy, Indiana Department of Education, November 19, 2014. pp. 2–18. https://www.doe.in.gov/sites/default/files/safety/seven-important-building-design-features-enhance-school-safety-and-security-isssa-2014.pdf

[37] "Safety and Security Guidelines for K-12 Schools," Op. cit., pp. 13–14.

[38] "School Safety and Security Toolkit: A Guide for Parents, Schools, and Communities." National Crime Prevention Council and Bureau of Justice Assistance, U.S. Department of Justice, December 2009. pp. 11–12. https://www.ncpc.org/wp-content/uploads/2017/11/NCPC_SchoolSafetyToolkit.pdf

[39] "A Comprehensive Report on School Safety Technology," Op. cit., p. 2.2.

Figure 1.5: Overview of School Safety Technologies

Examples	Rationale	Procedures	Prevalence
Entry Control Equipment			
-Electromagnetic door locks that can be remotely locked -Mobile barricades -Restricted areas	-Makes it easier to restrict school access to authorized users	-Lock targeted doors as desired -Facilitate entry into school at desired access points	-Approximately 80% of public and private schools report controlled access to buildings
Identification Technology			
-Student/staff identification -Visitor badges -Parking stickers -Palm scanners	-Distinguishes those who have authorized access to school property from those who do not	- ID distinguishes authorized access to school grounds -Visitor badges signify temporary access -Parking stickers signify access to specific lots	-Commonly used, generally on school property and at relevant school events (e.g., dances, football games)
Video Surveillance Technology			
-Cameras -Closed circuit television -Video recording -Video–motion detection systems	-Used to record student actions, identify perpetrators, and deter crimes by suggesting that perpetrators are being monitored	-Cameras monitor vulnerable areas -Video-motion detection system can produce alarms and continuously record -Portable cameras can be quickly installed and/or relocated	-Approximately 60% of public and 40% of private schools report using cameras
Communication Technology			
-Walkie-talkies -Phones -Emergency communication systems -Radios	-Allows students/staff to notify school office and law enforcement about incidents, unauthorized individuals, and dangers/ risks	-School communication network links classrooms, schoolyard supervisors, and bus drivers with the front office, security staff, and local emergency services	-Intercoms and two-way, handheld radios are thought to be used extensively
School-Site Alarm and Protection Systems			
-Scream alarms -Motion/sound/heat detectors	-Alerts those at school and emergency responders -Protects those in school during an attack	-Alarms sound when detectors signal abnormal motion, sound, or heat	-Unknown, but potentially prevalent given that they can leverage existing alarms (e.g., fire alarms)
Emergency Alerts			
-Automated text messages -Automated emails -School TV stations	-Alerts stakeholders -Prevents rumors using mass messaging	-School staff send messages to students, parents, and community during a crisis	-Most schools have lists of emails and phone numbers
Metal Detectors and X-Ray Machines			
-Hand-held and walkthrough metal detectors -X-ray machines to scan book bags	-Prevent weapons from being brought into school	-Students are inspected when entering school -Metal detectors search the person's body; X-ray machines search bags -Weapons are confiscated -Used by school security staff for daily searches of all students, random searches of all students at set intervals, and random inspections of individuals	-Approximately 5% of public schools and 1%of private schools report doing random metal detector checks -Approximately 3% of public schools and fewer than 1% of private schools have students walk through detectors daily

Examples	Rationale	Procedures	Prevalence
Anonymous Tip Lines			
-Toll-free phone hotline -Voicemail system -Website with anonymous posts	-Relies on students to be a source of information for addressing/solving incidents	-Hotline/voicemail/website serves as a one-stop-shop or point of contact for reporting information on incidents and problems	-Likely more prevalent in areas where district/state has provided the service
Tracking Systems			
-Smart phone applications -Global Positioning System (GPS) devices	-Allows parents/schools to keep up-to-date on students' movements	-Students carry tracking device with them to/from school -School bus contains tracking device	-No reliable estimates of prevalence found, although potentially prevalent with smart phones
Maps of School Terrain and Bus Routes			
-Geographic Information System (GIS)	-Helps emergency responders prepare for crisis	-Software used to plot school terrain and transit routes used for school purposes	-No estimates of prevalence found
Violence Prediction Technology			
-Data-driven software	-Helps predict locations and times of violence	-Information is collected about individual or group demographics and/or behaviors, which is used to detect and predict possible future violent behavior	-Use of this type of technology is not very common
Social Media Monitoring			
-Automated scans of online content for bullying, threats, and evidence of self-harm	-Searches for problems online, where bullying often occurs	-Information posted on social media is collected and used to detect and capture crimes or violence that has already occurred or prevent possible future violent behavior	-No estimates of prevalence found

Source: Rand Corporation[40]

Despite the potential value of technology measures for school security, **experts caution decision-makers to determine the benefit of technologies as compared to possible infringement on students' rights.** Specifically, the use of technology such as social media monitoring or video surveillance may raise concerns about students' right to privacy.[41] To help alleviate these concerns, districts and schools must carefully consider students' privacy and free speech in consultation with various stakeholder groups.[42] Likewise, districts and schools may consider using security technologies from vendors that have committed to the K-12 School Service Provider Pledge to Safeguard Student Privacy.[43]

[40] Figure text quoted verbatim, with minor adaptations, from: Schwartz, H.L. et al. "The Role of Technology in Improving K–12 School Safety." RAND Corporation, 2016. pp. 10–11. https://www.rand.org/pubs/research_reports/RR1488.html

[41] Rapp, D. "Privacy vs. Security." Scholastic. http://www.scholastic.com/browse/article.jsp?id=3751958

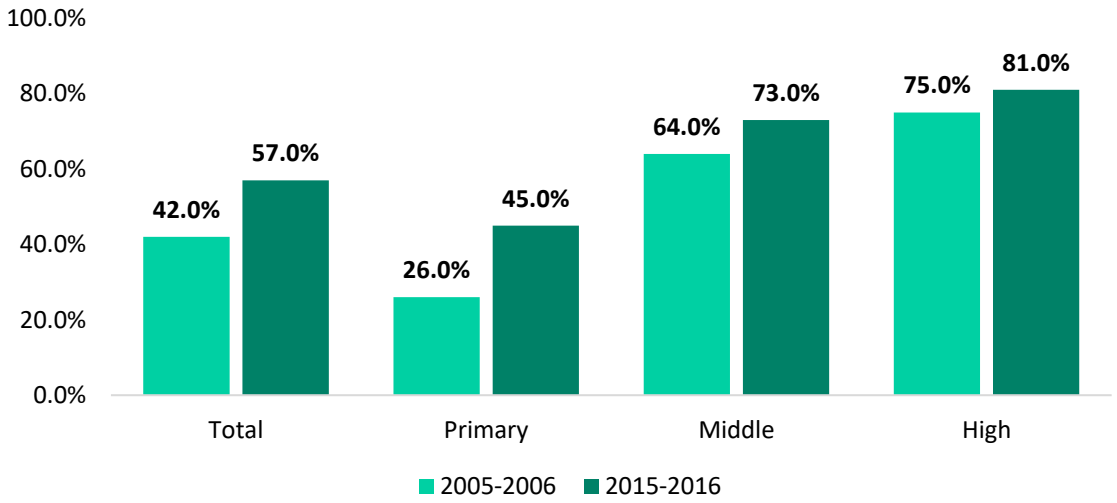
[42] "Schools Are Watching Students' Social Media, Raising Questions About Free Speech." PBS NewsHour, June 20, 2017. https://www.pbs.org/newshour/show/schools-watching-students-social-media-raising-questions-free-speech

[43] "Privacy Pledge: K-12 School Service Provider Pledge to Safeguard Student Privacy." Future of Privacy Forum and Software and Information Industry Association. https://studentprivacypledge.org/privacy-pledge/

SECURITY STAFFING

As an additional layer of protection and security, **many schools employ staff such as school resource officers, security guards, and hall monitors to conduct in person surveillance and perform disciplinary tasks.**[44] In fact, the number of security staff present at U.S. schools on at least a weekly basis has been trending upward at all levels of schooling from the 2005-2006 school year to the 2015-2016 school year (see Figure 1.6). Specifically, 15 percent more U.S. public schools now have one or more security staff present on a weekly basis than did so in 2005-2006.[45] Similarly, approximately 70 percent of students aged 12 to 18 (i.e., middle and high school students) report that police officers or security guards are employed by or present at their schools.[46] Notably, at schools with security personnel, sworn law enforcement officers are the most common. In addition, secondary schools tend to have more security staff, with the number of security staff increasing with school size, regardless of level, as shown in Figure 1.7 on the following page.[47]

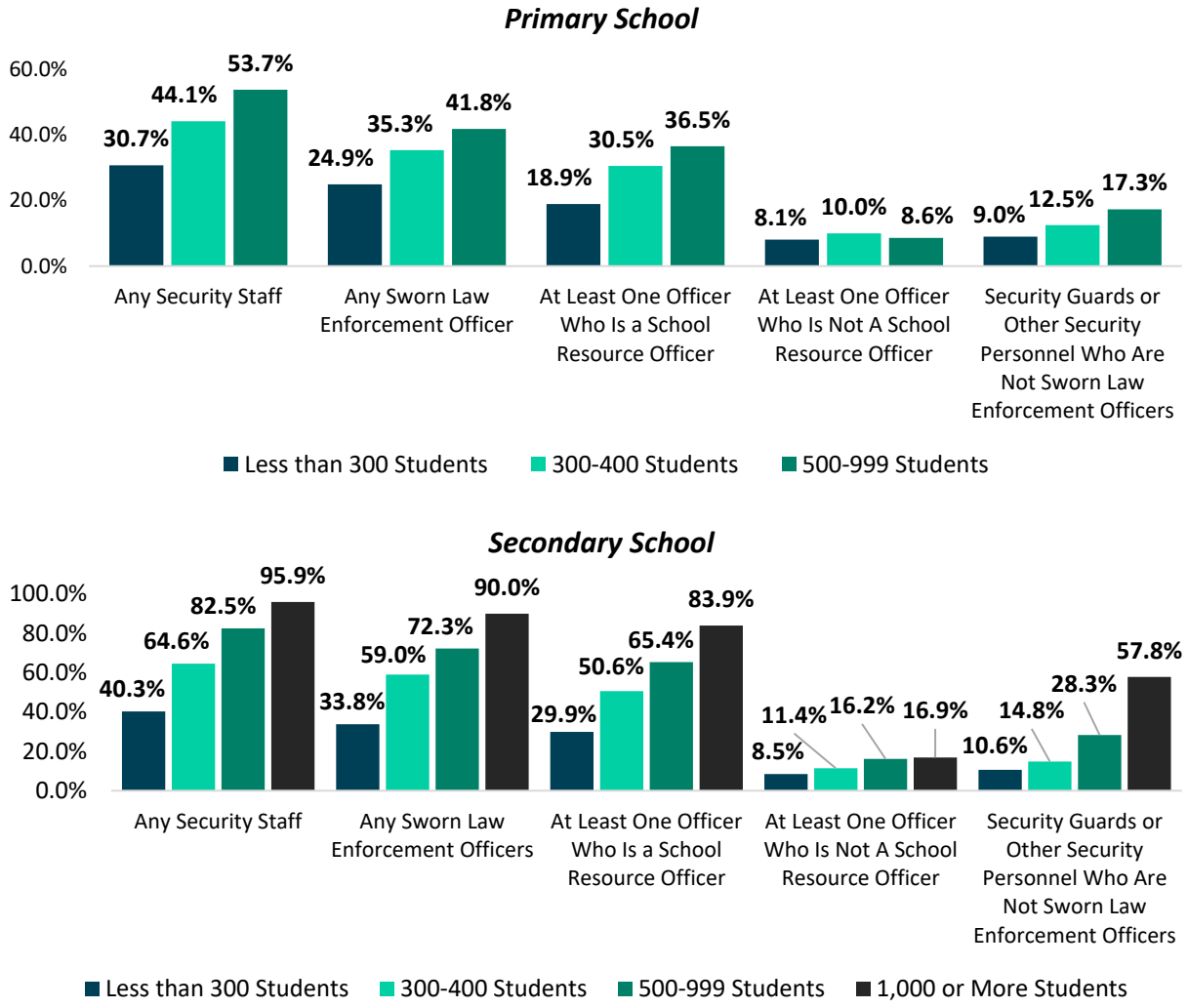
Figure 1.6: Percentage of Public Schools with One or More Security Staff Present at Least Once a Week, by Level: 2005–2006 and 2015–2016



Source: National Center for Education Statistics, Institute of Education Sciences[48]

[44] Hill, G. "Properly Trained School Security Guards." Security Today, March 2, 2015. https://securitytoday.com/articles/2015/03/02/properly-trained-school-security-guards.aspx
[45] "The Condition of Education: School Crime and Safety." National Center for Education Statistics, Institute of Education Sciences, April 2018. https://nces.ed.gov/programs/coe/indicator_cld.asp
[46] "Research Summaries: School Security Measures and Their Impact on Students." National Association of School Psychologists, 2018. p. 1. https://www.nasponline.org/Documents/Research%20and%20Policy/Research%20Center/School_Security_Measures_Impact.pdf
[47] Musu-Gillette, L. et al. "Indicators of School Crime and Safety: 2017." National Center for Education Statistics, Institute of Education Sciences, March 2018. p. 10. https://nces.ed.gov/pubs2018/2018036.pdf
[48] Figure data taken directly from: "The Condition of Education: School Crime and Safety," Op. cit.

Figure 1.7: Percentage of Public Schools with Security Staff Present at Least Once a Week, by Level, Type of Security Staff, and Enrollment Size: 2015–2016



Source: National Center for Education Statistics, Institute of Education Sciences[49]

Notably, research finds that the presence of law enforcement or security personnel can be ineffective in protecting students and may negatively impact students. In fact, some research suggests that having any security staff at a given school may increase school-based violence, crime, disruption, and disorderly conduct.[50] Comparatively, research finds "no evidence that visible security measures[, including the presence of security personnel,] have any sizeable effects on academic performance, attendance, or postsecondary aspirations among U.S. middle and high school students."[51] **Given the lack of evidence supporting positive impacts**

[49] Data taken directly from: Musu-Gillette et al., Op. cit., p. 10.
[50] "Research Summaries: School Security Measures and Their Impact on Students," Op. cit., pp. 1–2.
[51] Tanner-Smith, E.E. and B.W. Fisher. "Visible School Security Measures and Student Academic Performance, Attendance, and Postsecondary Aspirations." *Journal of Youth and Adolescence*, 45:1, January 2016. p. 2. https://files.eric.ed.gov/fulltext/ED556165.pdf

and existing evidence of negative impacts, schools and districts should cautiously approach any proposal to have onsite security staff or law enforcement.[52]

At the same time, experts suggest that **any positive impacts resulting from the presence of any security personnel as part of a broader safety plan depend significantly on personnel selection**.[53] The National Association of School Resource Officers recommends careful selection of officers for assignments, with provisions for a minimum of 40 hours of specialized training on policing strategies for school settings.[54]

[52] [1] Thomas, P.L. "Radical Eyes for Equity: School Safety and Security: Research and Evidence." National Education Policy Center, March 2, 2018. https://nepc.colorado.edu/blog/school-safety [2] Keels, M. "The False Comfort of Securing Schools." The New York Times, September 6, 2018. https://www.nytimes.com/2018/09/06/opinion/school-shootings-security-violence.html

[53] Winn, Z. "In Rush to Add School Security Officers, Don't Lose Sight of Best Practices." Campus Safety Magazine, May 14, 2018. https://www.campussafetymagazine.com/safety/florida-school-security-officers/

[54] "Frequently Asked Questions." National Association of School Resource Officers. https://nasro.org/frequently-asked-questions/

Spotlight on Utah Practices: Granite School District

Location: Salt Lake City, Utah
Number of Schools/Programs: 92
Total Enrollment: 64,281

% Economically Disadvantaged Students: 54.1%
% English Learners: 22.6%
% Students with Disabilities: 11.0%

Granite School District operates 63 elementary schools, 15 junior high schools, nine high schools, and five specialized schools. Notably, the district has its own dedicated police force—the Granite School District Police Department. Officers in the department focus on crime and violence reduction programs, including work related to promoting community involvement in schools, maintaining a safe and secure school climate, and encouraging greater cooperation between Granite School District's staff, students, and families and law enforcement entities serving the larger district community.

The district also has two departments that support larger safety and security initiatives: Prevention and Student Placement and Risk and Property Management. Prevention and Student Placement helps students avoid destructive and harmful behaviors such as drugs, bullying, physical violence, or suicide. The department also offers services and training to help improve district- and school-level emergency response and safety plans. Comparatively, the Risk and Property Management Department's duties include creating safe routes for elementary and junior high school students to walk to and from school.

In July 2018, the district published its Pre-Disaster Mitigation Plan (located **here**), which is highlighted on the Utah State Board of Education's Crisis Response webpage. This plan features risk assessments for a variety of threats such as floods, wildfires, hazardous material events (e.g., chemical exposure), and human-caused events (e.g., active shooter). In addition, the plan includes a Mitigation Actions Matrix, which outlines current and future district activities designed to limit risks to life, health, and property.

Source: Granite School District and Utah State Board of Education[55]

[55] Figure adapted from: [1] "Reports: Fall Enrollment by Demographics," Op. cit. [2] "Supporting Safe and Positive Utah Schools: Crisis Response," Op. cit. [3] "2018-2019 School Phone List." Granite School District, August 6, 2018. pp. 1–2. https://cdn-59bd6cf5f911c923e82ee0ee.closte.com/wp-content/uploads/2018/08/2018-19-School-Phone-List.pdf [4] "Granite School District Police." Granite School District. https://www.graniteschools.org/police/ [5] "Prevention and Student Placement." Granite School District. https://www.graniteschools.org/psp/ [6] "Risk and Property Management." Granite School District. https://www.graniteschools.org/riskmanagement/ [7] "Pre-Disaster Mitigation Plan." Granite School District, July 12, 2018. pp. 69–77, 93–97, 111–123. https://cdn-59bd6cf5f911c923e82ee0ee.closte.com/wp-content/uploads/2018/07/GSD-Pre-Disaster-Mitigation-Plan-7.12.18.pdf#a=

SECTION II: RISK ASSESSMENT AND RESPONSE

In this section, Hanover and ULEAD describe strategies that district and school personnel can use to identify and assess potential risks to staff and student safety and to respond to threats, before, as, and after they occur.

RISK ASSESSMENTS

According to guidance from the Partner Alliance for Safer Schools, a risk assessment "is the first step toward developing a comprehensive security plan and thus a prerequisite for decisions regarding deployment of security solutions."[56] Districts and schools can use threat assessments to determine areas of vulnerability, identify individuals who may pose a future threat, and select appropriate strategies and interventions to address those vulnerabilities or deter individuals from harmful behaviors.[57] In particular, threat and risk assessments attempt to identify those threats, vulnerabilities, and risks that exist within their local educational and community contexts (see Figure 0.1 below).

Figure 0.1: Relationship Between Threats, Vulnerabilities, and Risks

Source: Partner Alliance for Safer Schools[58]

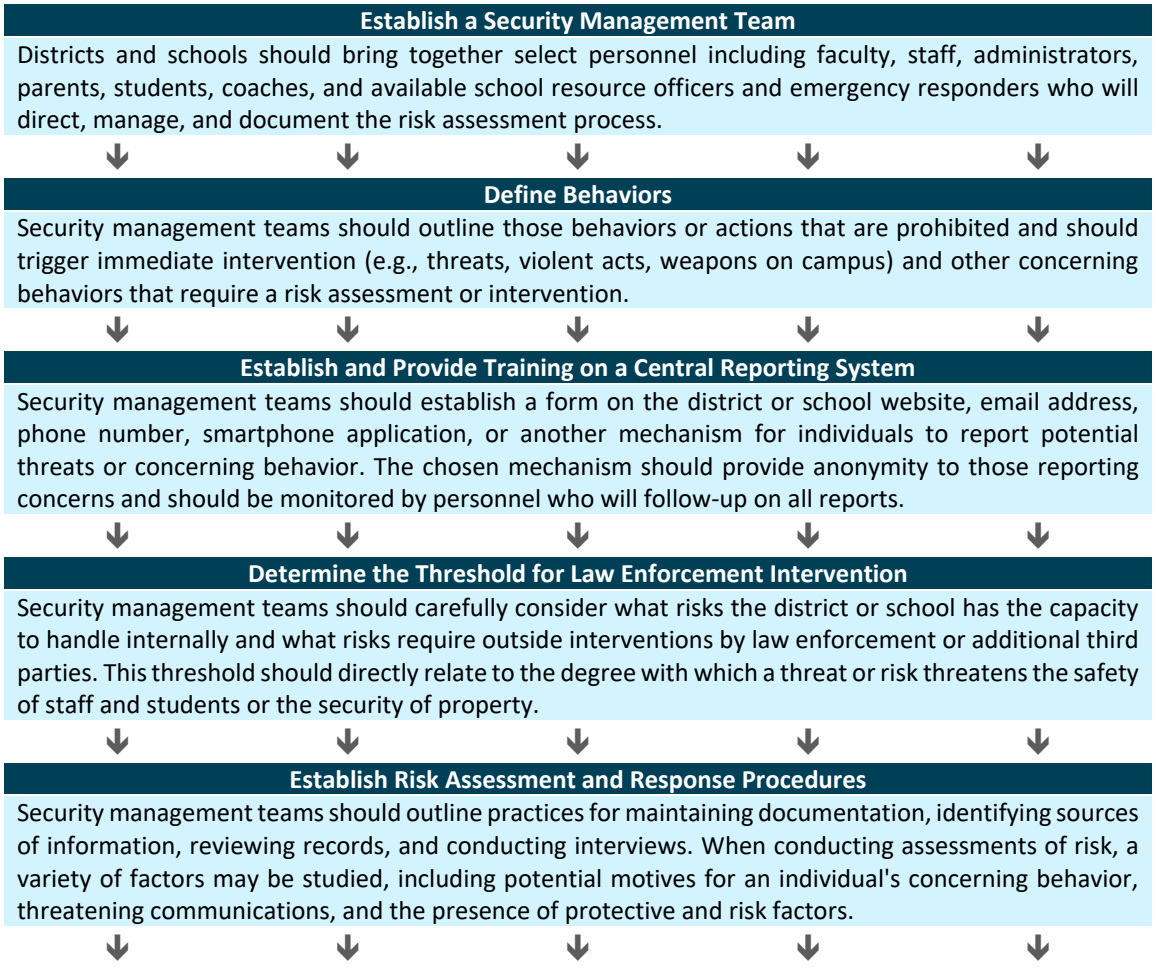
The Federal Commission on School Safety recommends that districts and schools establish a designated security management team, which can direct risk assessments, work with third parties (e.g., independent consultants, security design firms) to identify needs, and lead the development of a comprehensive safety and security plan.[59] The team should consist of representatives from various stakeholder groups, including district and school staff, parents, students, community members, and local emergency response personnel (e.g., police, fire department).[60] Once a team is formed, it can engage in a holistic evaluation of a district's or school's physical environment, social-emotional climate, existing safety and security policies and procedures, and ability to respond effectively to crises. Such an

[56] "Safety and Security Guidelines for K-12 Schools," Op. cit., p. 10.
[57] Borum, R., R. Fein, et al. "Threat Assessment: Defining an Approach to Assessing Risk for Targeted Violence." *Behav. Sci. Law*, 17, July 1999. p. 327. https://scholarcommons.usf.edu/cgi/viewcontent.cgi?referer=http://theconversation.com/threat-assessments-crucial-to-prevent-school-shootings-93636&httpsredir=1&article=1145&context=mhlp_facpub
[58] Figure adapted from: "Safety and Security Guidelines for K-12 Schools," Op. cit., p. 10.
[59] "Final Report of the Federal Commission on School Safety," Op. cit., p. 120.
[60] [1] "A Comprehensive Report on School Safety Technology," Op. cit., pp. 2.5-2.6. [2] "School Safety and Security Toolkit: A Guide for Parents, Schools, and Communities," Op. cit., p. 3. [3] "Safety and Security Guidelines for K-12 Schools," Op. cit., p. 10.

assessment can include gathering qualitative data from students, staff, and parents about their perceptions about safety via surveys, interviews, and focus groups. Likewise, the security management team can collect and analyze quantitative data around student risk behaviors and school-based and community crime.[61]

Beginning below, Figure 0.2 displays a violence prevention plan—specifically related to identifying students of concern or the risk of students performing harmful actions—which incorporates risk assessment and the formation of a security management team. While this framework focuses on identifying individuals of concern within a school community, many of these processes and procedures can be applied to safety risks more broadly. For example, schools and districts can define risk management options for a variety of scenarios (e.g., fires, contagions, an intruder in a school building).

Figure 0.2: Creating a Violence Prevention Plan



[61] [1] "NEA's School Crisis Guide." National Education Association, 2018. p. 7. http://www.nea.org/assets/docs/NEA%20School%20Crisis%20Guide%202018.pdf [2] "K-12 School Security: A Guide for Preventing and Protecting Against Gun Violence," Op. cit., p. 9.

Develop Risk Management Options

Once a risk assessment has identified specific areas of need or concern, security management teams can create individualized management and response plans to prevent and mitigate identified risks. Plans may include notifying law enforcement, ensuring the safety of potential targets, creating a situation less prone to violence, redirect the threatening individual's motive, and reducing the effect of stressors on a threatening individual.

Create and Promote a Safe School Climate

Districts and schools should strive to maintain a culture of safety, respect, trust, and emotional support for all students, families, staff, and community members. Specifically, they should encourage communication, intervene in conflicts and bullying, and empower stakeholders to share their concerns.

Provide Training for All Stakeholders

Districts and schools should provide appropriate training for students, staff, families, and community members on identifying potential risks and communicating those risks to the security management team and other responsible personnel (e.g., law enforcement).

Source: National Threat Assessment Center, U.S. Secret Service[62]

A broader strategy around risk assessment—beyond person-based threats—focuses on identifying threats, vulnerabilities, and risks in order to explore potential strategies to mitigate them and, ultimately, make an informed decision on what measures to implement after conducting a careful costs and benefits analysis, as displayed in Figure 0.3 on the following page. In particular, districts and schools will need to determine those persons, properties, physical assets, and information that require protection before identifying potential threats or hazards that could impact them. From there, security management teams can conduct analyses to gauge the likelihood of specific threats or hazards occurring and impacting students and staff, and examine potential vulnerabilities or weaknesses in existing infrastructure or safety and security policies that exacerbate the risk associated with a specific threat or hazard. Using all of this information, security management teams—with input from other stakeholders—can explore measures that will reduce risks and mitigate the consequences of specific threats or hazards should they materialize. Then districts, schools, and communities can make informed decisions about how to manage and plan for risks.[63]

Research emphasizes that threat and risk assessments are a promising practice, though further study is needed on the impacts of specific forms of threat and risk assessment (e.g., individual student risk).[64] Studies also find benefits to managing threats of violence from students with disabilities and students in the general population and the viability of training staff in threat assessments.[65]

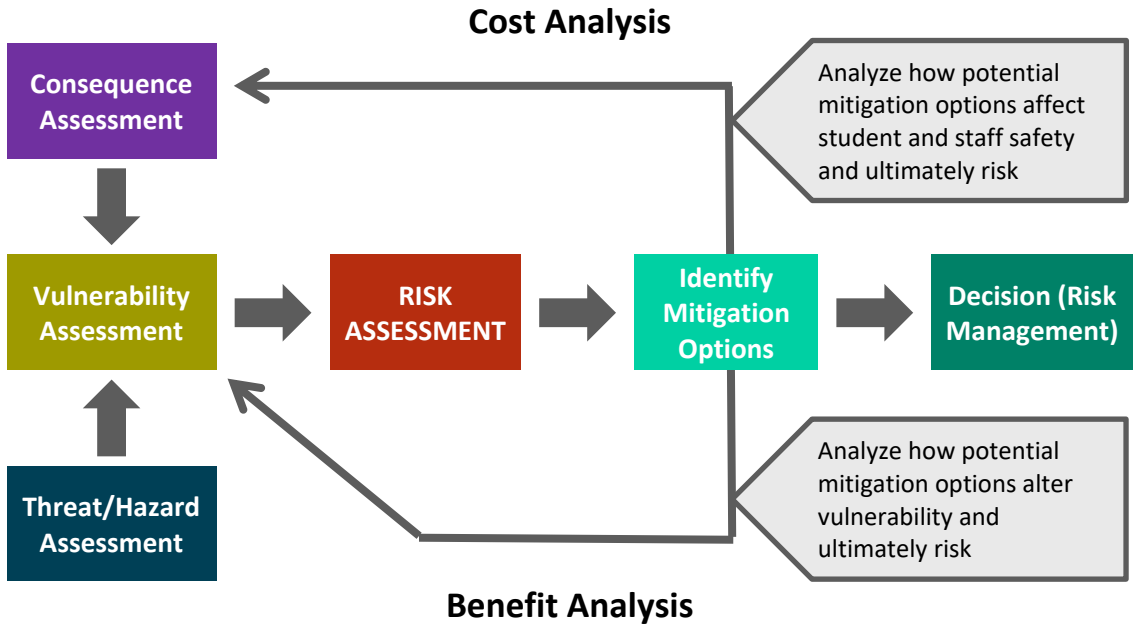
[62] "Enhancing School Safety Using a Threat Assessment Model: An Operational Guide for Preventing Targeted School Violence." National Threat Assessment Center, U.S. Secret Service, July 2018. pp. 1–2. https://www.dhs.gov/sites/default/files/publications/18_0711_USSS_NTAC-Enhancing-School-Safety-Brief.pdf

[63] "A Comprehensive Report on School Safety Technology," Op. cit., pp. 2.7-2.19.

[64] Borum, R., D.G. Cornell, et al. "What Can Be Done About School Shootings?: A Review of the Evidence." *Educational Researcher*, 39:1, 2010. p. 27. Accessed via SAGE Journals.

[65] [1] Kaplan, S.G. and D.G. Cornell. "Threats of Violence by Students in Special Education." *Behavioral Disorders*, 31:1, November 2005. p. 107. https://curry.virginia.edu/sites/default/files/images/YVP/Threat%20Assessment%20Research%20Publications%2

Figure 0.3: Risk Assessment Process



Source: Multiple[66]

EMERGENCY PREPAREDNESS AND RISK MANAGEMENT

Regardless of the presence of security features and safety technology or the successful completion of a risk assessment, **districts and schools require accurate and comprehensive plans and protocols for using available security measures, minimizing potential risks, and responding to threats in real-time.** In fact, thoughtful planning can help decrease the risks associated with certain threats or hazards, making them an integral part of any safety and security solution.[67] Plans are essential to direct responding personnel regarding the specific actions they should take in specific emergency situations, how resources should be deployed to minimize the negative impacts of an emergency, and when and how to communicate with stakeholders about emergency responses.[68] Within the banner of school safety and security, districts and schools need to consider an array of possible emergencies, threats, and hazards. These can include active shooters in a school to natural disasters occurring during school hours (e.g., tornados, earthquakes) or even fights between students.[69] Notably, the National

0updated%2011-24-18.pdf [2] Strong, K. and D.G. Cornell. "Student Threat Assessment in Memphis City Schools: A Descriptive Report." *Behavioral Disorders*, 34:1, November 2008. p. 42. https://curry.virginia.edu/sites/default/files/images/YVP/Threat%20Assessment%20Research%20Publications%20updated%2011-24-18.pdf [3] Allen, K. et al. "Response of School Personnel to Student Threat Assessment Training." *School Effectiveness and School Improvement*, 19:3, September 2008. p. 319. https://curry.virginia.edu/sites/default/files/images/YVP/Threat%20Assessment%20Research%20Publications%20updated%2011-24-18.pdf

[66] Figure text quoted verbatim, with minor adaptations, from: "A Comprehensive Report on School Safety Technology," Op. cit., p. 2.7.

[67] "Safety and Security Guidelines for K-12 Schools," Op. cit., p. 13.

[68] "A Comprehensive Report on School Safety Technology," Op. cit., pp. 2.3-2.5.

[69] "Multihazard Emergency Planning for Schools Toolkit." Federal Emergency Management Agency, U.S. Department of Homeland Security. https://training.fema.gov/programs/emischool/el361toolkit/siteindex.htm#item9

Education Association emphasizes seven principles for effective planning to address a wide range of potential threats and hazards, as shown in Figure 0.4. These principles include considering prevention, immediate reaction, and long-term responses to emergencies and accounting for the needs of all potentially impacted parties when planning.

Figure 0.4: Core Principles of Emergency Planning and Risk Management

- Planning must be supported by leadership at the district and school levels.
- Planning uses assessment to customize plans to the building level, taking into consideration the school's unique circumstances and resources.
- Planning considers all threats and hazards, addressing safety before, during, and after an incident.
- Planning provides for the access and functional needs of the whole school community, including children, individuals with disabilities or access and functional needs, those from religiously, racially, and ethnically diverse backgrounds, and people with limited English proficiency.
- Planning considers all settings and all times, accounting for incidents that may occur during and outside the school day, as well as on and off campus (e.g., sporting events, field trips).
- Creating and revising a model emergency operation plan is done by following a collaborative process that is flexible enough to be used as a framework by all school emergency planning teams to meet their unique needs and concerns.
- Planning should include local law enforcement as part of joint-planning efforts. This ensures that everyone has the same understanding of how crises should be responded to, minimizing confusion or potentially contradictions in crisis response efforts.

Source: National Education Association[70]

Importantly, **when designing emergency response and prevention plans and selecting strategies to include in those plans, districts, schools, and their designated security management teams should solicit feedback from additional stakeholders.** Stakeholder input can be beneficial in providing additional scrutiny to plans or proposing alternative solutions that may not have been considered by educators. However, stakeholder input also increases the potential for challenges to specific safety and security measures—requiring districts and schools to be responsive and empathetic toward community concerns.[71] It is important to account for stakeholder concerns in designing safety and security solutions and constructing emergency prevention and response plans in order to promote positive communication around safety and security, as well as strengthen the possibility for a coordinated response in times of crisis.[72]

Beginning on the next page, Figure 0.5 displays a comprehensive overview of how to organize emergency plans and what content to include, as compiled by the U.S. Departments of Justice, Education, Homeland Security, and Health and Human Services. Districts, schools, and their respective security management teams may consider using this guidance to support development of their own plans for responding to a variety of threats, hazards, and emergencies.

[70] Figure text quoted verbatim, with minor adaptations, from: "NEA's School Crisis Guide," Op. cit., pp. 15–16.
[71] "School Safety and Security Toolkit: A Guide for Parents, Schools, and Communities," Op. cit., p. 14.
[72] "NEA's School Crisis Guide," Op. cit., pp. 20–21.

Figure 0.5: Recommended Content and Organization for District and School Emergency Plans

SECTION	DESCRIPTION
Introductory Material	Introductory material can enhance accountability with community partners, including first responders, local emergency managers, and public and mental health officials, and make a plan easier to use. Cover Page: The cover page includes the title of the plan, a date, and the school(s) covered. Promulgation Documenter Signature Page: This document or page contains a signed statement formally recognizing and adopting the plan. It gives both the authority and the responsibility to school officials to perform their tasks before, during, or after an incident, and therefore should be signed by the school administrator or another authorizing official. Approval and Implementation Page: The approval and implementation page introduces the plan, outlines its applicability, and indicates that it supersedes all previous plans. It includes a delegation of authority for specific modifications that can be made to the plan and by whom they can be made without the school administrator's signature. It also includes a date and should be signed by the authorized school administrator. Record of Changes: Each update or change to the plan should be tracked. The record of changes, usually in table format, contains, at a minimum, a change number, the date of the change, the name of the person who made the change, and a summary of the change. Record of Distribution: The record of distribution, usually in table format, indicates the title and the name of the person receiving the plan, the agency to which the recipient belongs, the date of delivery, and the number of copies delivered. Other relevant information could be considered. The record of distribution can be used to prove that individuals and organizations with specified roles have acknowledged their receipt, review, and acceptance of the plan. Copies of the plan can be made available to the public and media without sensitive information, in accordance with public records laws. Table of Contents: The table of contents is a logically ordered, clearly identified layout of the major sections and subsections of the plan that will make finding information within the plan easier.
Purpose and Situation Overview	This section describes the purpose for the associated plan, including the specific hazard, threat, or emergency the plan is meant to address. Purpose: The purpose sets the foundation for the rest of the plan. The basic plan's purpose is a general statement of what the plan is meant to do. The statement should be supported by a brief synopsis of the basic plan and accompanying annexes. Situation Overview: The situation section explains why a plan is necessary. It covers a general discussion of the threats and hazards that pose a risk to the school and would result in a need to use this plan and dependencies on parties outside the school for critical resources.
Concept of Operations	This section explains in broad terms the school administrator's intent with regard to an operation. This section is designed to give an overall picture of how the school will protect the students, staff, and visitors, and should: ▪ Identify those with authority to activate the plan (e.g., school administrators, department heads); ▪ Describe the process by which the school coordinates with all appropriate agencies, boards, or divisions within the jurisdiction; ▪ Describe how plans address the architectural, programmatic, and communication rights of individuals with disabilities or access and functional needs; ▪ Identify other response and support agency plans that directly support the implementation of this plan (e.g., city or county plans, school plans from schools co-located on the campus); ▪ Explain that the primary purpose of actions taken before an emergency is to prevent, protect from, and mitigate the impact on life or property;

Section	Description
	▪ Explain that the primary purpose of actions taken during an emergency is to respond to the emergency and minimize its impact on life or property; and ▪ Explain that the primary purpose of actions taken after an emergency is to recover from its impact on life or property.
Organization and Assignment of Responsibilities	This section provides an overview of the broad roles and responsibilities of school staff, families, guardians, and community partners (e.g., first responders, local emergency managers, public and mental health personnel), and of organizational functions during all emergencies. The section: ▪ Describes the broad roles and responsibilities of individuals and organizations that apply during all emergencies, including principals and other school administrative leaders, teachers, support personnel (e.g., instructional aides, counselors, social workers, psychologists, nurses, maintenance staff, school resource officers, cafeteria workers, bus drivers), parents and guardians, and community-based organizations; and ▪ Describes informal and formal agreements in place for the quick activation and sharing of resources during an emergency (e.g., evacuation locations to a nearby business' parking lot) between the school and response groups (e.g., fire department, police department), neighboring schools, organizations, and businesses.
Direction, Control, and Coordination	This section describes the framework for all direction, control, and coordination activities. It should explain: ▪ The Incident Command System structure as used by the school; ▪ The relationship between the school plan and the district, or the broader community's emergency management system; and ▪ Who has control of the equipment, resources, and supplies needed to support the school plan.
Information Collection, Analysis, and Dissemination	This section addresses the role of information in the successful implementation of the activities that occur before, during, and after an emergency. The section should: ▪ Identify the type of information that will be helpful in the successful implementation of the activities that occur before, during, and after an emergency, such as: o *Before and During*: Weather reports, law enforcement alerts, National Oceanic and Atmospheric Administration radio alerts, and crime reports. o *After*: Mental health agencies' and emergency management and relief agencies websites and hotlines assisting in all aspects of recovery. ▪ For each of the identified types of information, provide answers to the following questions: o *What* is the source of the information? o *Who* analyzes and uses the information? o *How* is the information collected and shared? o *What* is the format for providing the information to those who will use it? o *When* should the information be collected and shared?
Training and Exercises	This section describes the critical training and exercise activities the school will use in support of the plan. This includes the core training objectives and frequency to ensure that staff, students, faculty, parents, and community representatives understand roles, responsibilities, and expectations. This section also establishes the expected frequency of exercises to be conducted by the school. Content may be influenced based on similar requirements at the district and local jurisdiction level(s). Exercises may range from basic fire and shelter-in-place drills to full-scale communitywide drills that realistically portray a crisis and show the role the school plays in school district and municipal planning.
Administration, Finance, and Logistics	This section covers general support requirements and the availability of services and support for all types of emergencies, as well as general policies for managing resources. It should identify and reference policies and procedures that exist outside the plan. This section should: ▪ Identify administrative controls (e.g., budget and acquisition policies and procedures) and requirements that will be used to provide resource and expenditure accountability;

SECTION	DESCRIPTION
	▪ Briefly describe how the school will maintain accurate logs of key activities; ▪ Briefly describe how vital records (e.g., student records) will be preserved; and ▪ Identify general policies for keeping financial records, tracking resource needs, tracking the source and use of resources, acquiring ownership of resources, and compensating the owners of private property used by the school.
Plan Development and Maintenance	This section discusses the overall approach to planning and the assignment of plan development and maintenance responsibilities. This section: ▪ Describes the planning process, participants in that process, and how development and revision of different sections of the school plan (basic plan and annexes) are coordinated before an emergency; ▪ Assigns responsibility for the overall planning and coordination to a specific position or person; and ▪ Provides for a regular cycle of training, evaluating, reviewing, and updating the school plan.
Authorities and References	This section provides the legal basis for emergency operations and activities, and includes: ▪ Lists of laws, statutes, ordinances, executive orders, regulations, and formal agreements relevant to emergencies; and ▪ Provisions for the succession of decision-making authority and operational control to ensure that critical emergency functions can be performed in the absence of the school administrator.

Source: Multiple[73]

[73] Figure text quoted verbatim, with minor adaptations, from: "Guide for Developing High-Quality School Emergency Operations Plans." U.S. Department of Education, U.S. Department of Health and Human Services, U.S. Department of Homeland Security, and U.S. Department of Justice, 2013. pp. 23–28. https://rems.ed.gov/docs/REMS_K-12_Guide_508.pdf

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