Best Practices in School Security

Prepared for School XYZ

January 2013







In the following report, Hanover Research investigates different kinds of barriers that schools and districts have in place to restrict access to classrooms. We first review available literature on the prevalence and effectiveness of various forms of security, and then profile the security measures used by five best practice districts.



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EXECUTIVE SUMMARY AND KEY FINDINGS

"Our nation's schools should be safe havens for teaching and learning, free of crime and violence. Any instance of crime or violence at school not only affects the individuals involved, but also may disrupt the educational process and affect bystanders, the school itself, and the surrounding community." Issues of school security have increased exponentially in recent decades, as events such as Columbine and the more recent attack at Sandy Hook have left school administrators struggling to develop the most effective systems to protect the safety of students and staff.

In this report, Hanover Research investigates different kinds of barriers that schools and districts have in place to restrict access to classrooms. We first review available literature on the prevalence of various forms of security, and then evaluate their effectiveness as reported in scholarly literature. Next, we describe common school district responses to the recent shooting in Newtown, Connecticut, as well as profile the security measures used by five best practice districts.

KEY FINDINGS

- As reported by the National Center for Education Statistics' most recent School Survey on Crime and Safety, the most common types of security measures at all levels of schooling are locked buildings (92 percent of all schools), requirements for faculty and staff to wear ID badges (63 percent), video surveillance cameras (61 percent), and electronic notification systems (63 percent). Larger schools are more likely than smaller schools to control access to grounds during school hours, require students to wear badges or picture IDs, use random or daily metal detectors on students, and use security cameras for monitoring. Additionally, the use of many of these security measures has markedly increased since 1999.
- According to the NCES, nearly 70 percent of middle and high school students attend a school that has at least one security guard or assigned police officer, up from 54 percent in 1999. The New York Times also reports that approximately one-third of public schools have an armed security guard. Policies regarding armed security vary by district: some districts arm their own school resource officers while others bring in local law enforcement personnel.
- There is no clear consensus regarding the effectiveness of the security measures investigated in this report. Regarding overall safety measures, studies have found that more severe and pervasive security practices can actually result in increased violence and disorder. Conversely, the most effective security practices are based on a firm but positive school climate in which students are cognizant of school rules as well as consequences for infractions.

¹ Henry (2000). As cited by: "Indicators of School Crime and Safety: 2011." National ICenter for Education Statistics and Bureau of Justice Statistics. February 2012. p. iii. http://bjs.ojp.usdoj.gov/content/pub/pdf/iscs11.pdf

- The effects of personnel-based security appear to be largely dependent on the circumstances of a school or district. Some studies have found that campus security guards are associated with reduced school violence, while others have found that security personnel are ineffective at preventing violence for various reasons.
- Similarly, there is no agreement in the literature regarding the effects of access control systems and other physical barriers. Overall, however, it appears that if a district has the finances to obtain security devices and the personnel to operate them, barriers such as metal detectors, video cameras, and access control systems can serve as effective deterrents for school violence.
- In the weeks following the Sandy Hook shooting, school districts nationwide have attracted media attention for improving and expanding existing security measures. The most common short-term response was to increase security personnel on school campuses, though some districts have demonstrated that increasing security or arming existing personnel may be a long-term solution.
- Among the "best practice" districts featured in this report, districts utilize a variety of safety tactics including armed or unarmed security guards, camera systems, access-control systems with visitor background checks, and picture IDs for staff, among others.

SECTION I: REVIEW OF BEST PRACTICES

In this section, we provide a review of best practices in school security. We first describe the prevalence of different kinds of security measures, and then follow by evaluating their effectiveness.

PREVALENCE OF SECURITY MEASURES

The National Center for Education Statistics (NCES) explains that "public schools use a variety of practices and procedures to promote the safety of schools and staff." Specifically, "certain practices, such as locked or monitored doors or gates, are intended to limit or control access to school campuses, while others, such as metal detectors, security cameras, and limiting access to social networking websites, are intended to monitor or restrict students' and visitors' behavior on campus." In the NCES' biennial School Survey on Crime and Safety, public school principals report on the safety and security measures and procedures used in their schools. The figure below provides a summary of safety and security measures reported by different levels of schools in 2009-10, the most recent year for which data are available. As shown, the most common types of security measures are locked buildings and grounds, requirements for faculty and staff to wear ID badges, video surveillance cameras, and electronic notification systems.

Figure 1: Percentage of Public Schools Using Safety and Security Measures

SELECTED SAFETY AND SECURITY MEASURES	TOTAL	SCHOOL LEVEL			
SELECTED SAFETY AND SECURITY IVIEASURES	TOTAL	PRIMARY	MIDDLE	High	COMBINED
CONTROLLED ACCE	CONTROLLED ACCESS DURING SCHOOL HOURS				
Buildings (e.g., locked or monitored doors)	91.7%	93.8%	94.4%	85.9%	80.6%
Grounds (e.g., locked or monitored gates)	46.0%	50.8%	41.9%	42.8%	25.4%
REQUIRED TO WEA	R BADGES OR	PICTURE IDS			
Students	6.9%	2.4%	11.9%	19.0%	6.2%
Faculty and staff	62.9%	67.6%	62.8%	58.3%	35.9%
METAL DETECTOR CHECKS ON STUDENTS					
Random checks	5.2%	1.9%	9.4%	12.0%	6.9%
Required to pass through daily	1.4%		1.5%	4.8%	3.8%
SWEEPS A	ND TECHNOL	OGY			
Random dog sniffs to check for drugs	22.9%	4.0%	43.3%	60.1%	47.5%
Random sweeps for contraband	12.1%	3.6%	20.1%	28.7%	25.6%
Electronic notification system for school-wide	62.10/	61.1%	70.9%	66.69/	52.8%
emergency	63.1%	01.1%	70.9%	66.6%	52.8%
Structured, anonymous threat reporting system	35.9%	30.1%	47.7%	45.6%	33.2%
Use of security cameras to monitor school	61.1%	50.6%	73.4%	84.3%	67.2%

Source: National Center for Education Statistics³

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² "Indicator 20: Safety and Security Measures taken by Public Schools." 2012. Indicators of School Crime and Safety: 2011, National Center for Education Statistics.

http://nces.ed.gov/programs/crimeindicators/crimeindicators2011/ind_20.asp

³ "Fast Facts: School safety and security measures." 2012. Indicators of School Crime and Safety: 2011, National Center for Education Statistics. http://nces.ed.gov/fastfacts/display.asp?id=334

When examining security measures by size of school or type of setting, the NCES also revealed that larger schools (1,000 or more students) were more likely than smaller schools to report the use of controlling access to grounds during school hours; requiring students to wear badges or picture IDs; metal detector checks on students (including both random checks and requiring students to pass through checks daily); and using security cameras to monitor the school. Additionally, higher percentages of urban schools reported that they controlled access to school grounds during school hours compared to schools in suburban, town, and rural areas.

The NCES also reported on how trends in security measures have changed over time; according to the NCES, between 1999-2000 and 2009-2010, there was an increase in the percentage of public schools reporting the use of the following safety measures:

- Controlled access to the building during school hours (from 75 to 92 percent)
- Controlled access to school grounds during school hours (from 34 to 46 percent)
- Faculty required to wear badges or picture IDs (from 25 to 63 percent)
- The use of one or more security cameras to monitor the school (from 19 to 61 percent)4

A specific type of barrier that is gaining in popularity is Raptor V-soft, an access control system that allows schools to track and document all visitors. Using Raptor's web-based platform, schools can quickly:

Scan a visitor's Driver License (or other state issued ID) and web-based V-soft instantly screens for registered sex offenders, domestic dispute offenders and other trespassers. When a visitor is cleared, V-soft prints a badge featuring their name, photo, date and time, and destination. If a potential threat is identified, V-soft's system instantly alerts designated officials, such as administrators and law enforcement, via email, telephone, text messaging and/or page.

Approximately 8,000 schools nationwide currently use V-soft, though the company's CEO recently reported that it "has been 'flooded' with calls" following the Newtown shooting.⁶ The experiences of two districts that use the Raptor system are described in Section II of this report.

In addition to the security measures shown in Figure 1 above, the NCES reported that the use of security personnel on campus has increased since 1999, with over two-thirds of students now reporting that their middle or high school has at least one security guard or assigned police officer (see Figure 2). With regard to armed security in particular, the New York Times writes that approximately 23,200 schools, or "about one-third of all public

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⁴ "Indicator 20: Safety and Security Measures taken by Public Schools." Op. cit.

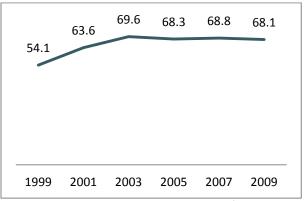
⁵ "V-soft." Raptor. http://www.raptorware.com/vsoft.html

⁶ Perez, A. and Jaffe, M. "School Safety: Inside One School's Extraordinary Security Measures." ABC News, December 19, 2012. http://abcnews.go.com/blogs/headlines/2012/12/school-security-one-schools-extraordinary-safetymeasures/

schools, had armed security staff in the 2009-10 school year." ⁷ The *Times* further explains that "according to the Council of the Great City Schools, cities including Albuquerque, Baltimore, Dallas, Houston, Los Angeles, Miami and St. Louis have armed officers in schools, either contracting with local police forces or recruiting their own dedicated security staff." Additional examples of districts with armed security include:⁸

 Charlotte-Mecklenburg Schools (North Carolina) stations armed security guards at the district's
 28 high schools though not at its

Figure 2: Percentage of Students, Age 12 to 18, Reporting the Presence of Security Guards and/or Assigned Police Officers at School



Source: National Center for Education Statistics 9

28 high schools, though not at its 88 elementary schools.

- Harrold Independent School District (Texas) allows teachers and administrators with a concealed carry license and who agree to additional training to bring concealed weapons in school.
- All three of Richland County's (South Carolina) school districts have armed school resource officers in every middle and high school. An additional armed officer covers two elementary schools in the county.
- Approximately 118 of Pennsylvania's 498 school districts employ armed guards.¹⁰

EFFECTIVENESS OF SECURITY MEASURES

In the following pages, we review the effectiveness of various security measures as described by available literature. Overall, we found that **information regarding the effectiveness of different kinds of security is generally mixed**. In 2006, the RAND Corporation examined the literature regarding various measures to improve school safety such as metal detectors, security guards, and student conduct regulations, "and found that only a handful have been evaluated, and even fewer have been deemed effective or even promising." Furthermore, a 2011 review of scholarly literature concerning school crime prevention concluded that "despite these well-intended efforts of prevention practices, the

⁷ Rich, M. "School Officials Look Again at Security Measures Once Dismissed." *The New York Times*, December 18, 2012. http://www.nytimes.com/2012/12/19/education/after-newtown-shootings-schools-consider-armed-security-officers.html?_r=0

⁸ Ibid.

^{9 &}quot;Table 21.1: Percentage of students ages 12–18 who reported selected security measures at school: Various years, 1999–2009." 2012. Indicators of School Crime and Safety: 2011, National Center for Education Statistics. http://nces.ed.gov/programs/crimeindicators/crimeindicators2011/tables/table 21 1.asp

¹⁰ Santoni, M. "Butler school districts get OK to arm guards." *Pittsburgh Tribune-Review*, December 16, 2012. http://triblive.com/news/allegheny/3145448-74/butler-district-districts#axzz2FKMu4ybB

¹¹ Juvonen, J. 2006. "School Violence: Prevalence, Fears, and Prevention." Rand Issue Paper, p. 1. http://www.rand.org/content/dam/rand/pubs/issue_papers/2006/IP219.pdf

literature remains mixed as to their effectiveness in reducing both actual crime and fear of crime."12

Figure 3 below summarizes the findings of two studies that examined the effectiveness of overall security measures. First, a 2008 study revealed that, at best, a school security program has a "small and nonsignificant" impact on school crime, and at worst, a policy that is "tough on crime" can result in increased violence. Additionally, a 1999 study demonstrated that implementing a combination of physical barriers and personnel-based security can lead to more disorder. Interestingly, both studies advocated security practices based on a firm but "positive school climate" that is characterized by "student knowledge of school rules and consequences for infractions."

Figure 3: Effectiveness of General Security Measures 13

STUDY	OVERVIEW AND FINDINGS
Chen, 2008 ¹⁴	This study investigated how community characteristics, student background, school climate, and zero-tolerance policies interact to affect school crime and found that the school security program is correlated with lower school crime, but the effect is small and nonsignificant. In fact, a "tough on crime" policy is associated with a higher level of school crime, controlling for community and school variables. Chen ultimately recommends "a positive school climate in combination with necessary security control" to improve school safety and reduce school crimes.
Mayer and Leone, 1999 ¹⁵	This study examined a model of school violence by analyzing data from the 1995 School Crime Supplement to the National Crime Victimization Survey. The "System of Law" construct, a derived variable for student knowledge of school rules and consequences for infractions, was shown to lead to less disorder. On the other hand, a construct of "Secure Building," that included physical (metal detectors, locked doors, etc.) and personnel-based (security guards, etc.) actions to run a secure building, led to more disorder.

Police and School Resource Officers

The use of security guards and police officers has been cited as "among the most common physical surveillance measures currently used in schools." The responsibilities of school resource officers typically range from assisting administrators with student discipline issues to patrolling school grounds, and there have even been noted cases of campus officers successfully intervening in school shootings. ¹⁷ The benefits of security guards, however, are

¹² Jennings, W., Khey, D., Maskaly, J., and Donner, C. 2011. "Evaluating the Relationship Between Law Enforcement and School Security Measures and Violent Crime in Schools." Journal of Police Crisis Negotiations, 11:2. http://www.tandfonline.com/doi/full/10.1080/15332586.2011.581511

¹³ Table contents quoted with slight variation from sources.

¹⁴ Chen, G. 2008. "Communities, students, schools, and school crime: A confirmatory study of crime in U.S. high schools." Urban Education, 43:3, pp. 301 – 318. As cited by Jennings et al., 2011.

¹⁵ Maver, M. and Leone, P. 1999. "A structural analysis of school violence and disruption: Implications for creating safer schools." Education and Treatment of Children, 22:3, pp. 333-356.

http://www.popcenter.org/problems/bomb_threats/pdfs/mayer%26leone_1999.pdf As cited by Theriot, 2011.

¹⁶ Juvonen. Op. cit., pp. 2-3.

¹⁷ Ibid.

widely contested in the literature. While some sources have argued that school officers serve as a deterrent to violence, others are far more skeptical and warn against potentially detrimental effects on students. Figure 4 summarizes notable studies on the effectiveness of personnel-based security measures.

Paul Kelly, a retired Secret Service Agent who helped edit a 2002 federal report on managing school threats, explained to Boston's *NPR* station that while a uniformed presence "is a very big psychological deterrent as an authority figure," this may not always be the case. Overall, it seems that there is no unanimous agreement regarding the effects of school officers, and it **depends on the circumstances of a particular school or district**: according to Kelly "the key thing for any school is to examine their options based on the emotional climate and the culture of their individual school because different schools will have different threats and vulnerabilities." ¹⁸

Figure 4: Effectiveness Police and School Resource Officers¹⁹

STUDY	Overview and Findings
Fein et al., 2002 ²⁰	This report done by the Secret Service in response to the Columbine shooting revealed that despite prompt law enforcement responses, most shooting incidents were stopped by means other than law enforcement intervention. In fact, a law enforcement officer successfully ended the violence in just 8 percent of the 41 examined school attacks; in most cases, the attack was so quick that it could not be stopped. ²¹ Another important finding was that incidents of targeted violence at school are rarely sudden, impulsive acts, and most shooters shared their plans with classmates. ²²
Hopkins, 1994 ²³	This paper analyzed 81 14-year-old students' perceptions of the police officers working in their schools through a police-schools liaison program. Hopkins found that students clearly differentiated between the school officers and those 'on the street.' In particular, they perceived that school police exercised less power and fewer authoritative tactics when dealing with youth than their counterparts on the streets. ²⁴

¹⁸ Pfeiffer, S. and Jolicoeur, L. "Newtown 'To School Security as 9/11 Was To Airport Security." *90.9WBUR*, December 19, 2012. http://www.wbur.org/2012/12/19/school-violence-security-kelly

¹⁹ Table contents quoted with slight variation from sources.

²⁰ Fein, R., Vossekuil, B., Pollack, W., Borum, R., Modzeleski, W., and Reddy, M. 2002. "Threat Assessment in Schools: A Guide to Managing Threatening Situations and to Creating Safe School Climates." United States Secret Service and United States Department of Education. http://www.secretservice.gov/ntac/ssi_guide.pdf

²¹ Hoyer, M. "NRA plan would change security in most schools." *USA Today*, December 21, 2012. http://www.usatoday.com/story/news/nation/2012/12/21/nra-newtown-police-in-schools/1784953/

Ross, S. "Cameras, Panic Buttons, and Guns: The Future of School Security." *NBC New York*, December 20, 2012. http://www.nbcnewyork.com/news/national-international/Sandy-Hook-Tragedy-School-Security-183826061.html

Hopkins, N. 1994. "School pupils' perceptions of the police that visit schools: Not all police are 'pigs.'" Journal of Community and Applied Social Psychology, 4:3, pp. 189-207.

²⁴ Ibid. As cited by Theriot, 2011.

STUDY	Overview and Findings
Jackson, 2002 ²⁵	This study evaluated the impact of school resources officers on young people's views and attitudes about the police using a sample of 271 students from four schools in the southeast region of Missouri. The results suggest that the use of an SRO in schools does not "change students' perceptions of the police generally or their beliefs about the seriousness and acceptability of committing certain delinquent acts." Jackson concludes that it would thus "behoove school administrators to utilize their financial resources for counseling, student-faculty crime prevention programs or delinquency awareness programs."
Jennings et al., 2011 ²⁷	The data used in this study were collected as part of the 2006 School Survey on Crime and Safety (SSOCS) by the National Center for Education Statistics, an arm of the U.S. Department of Education. The authors found that the presence and number of SROs is significantly associated with a lower incidence of serious school violence , perhaps an indication that the presence of SROs may to some degree serve as a deterrent for serious crime. Therefore, this result may suggest that having an SRO independent of having security guards may be an effective strategy to prevent serious school violence.
Johnson, 1999 ²⁸	This study evaluated a School Resource Officer Program in a southern city and its impact on school violence and school disciplinary problems. The data revealed that the placement of police officers in city schools has a positive effect on school violence and disciplinary infractions . More specifically, the total number of intermediate and major offenses in high schools and middle schools decreased from 3,267 in 1994-95 (before the SROs were permanently assigned to city schools) to 2,710 in 1995-96 (after the SROs were permanently assigned to city schools).
Theriot, 2010 ²⁹	Theriot surveyed approximately 2,000 students at middle and high schools with an SRO and found that more interactions with the SROs increased students' positive attitudes about the officers, yet decreased their level of school connectedness, or sense of caring and attachment to school.
Theriot, 2011 ³⁰	Theriot argues that the use of SROs in the middle grades poses challenges for successful implementation while also creating invaluable opportunities to develop positive collaborations between police and students, improve the school environment, and reduce school violence. With intentional efforts to establish open and regular communication, promote community involvement, foster meaningful collaborations with students, and offer comprehensive services to smooth the transition to the middle grades, SROs can become crucial supports for decreasing violence, enhancing safety, and improving the middle grades experience for students, teachers, administrators, staff, and parents.

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²⁵ Jackson, A. 2002. "Police-school resource officers' and students' perception of the police and offending." *Policing: An International Journal of Police Strategies and Management*, 25:3, pp. 631-650.

²⁶ Ibid. As cited by Theriot, 2011.

²⁷ Jennings, W., Khey, D., Maskaly, J., and Donner, C. "Evaluating the Relationship Between Law Enforcement and School Security Measures and Violent Crime in Schools." *Op. cit.*

²⁸ Johnson, I. M. 1999. "School violence: The effectiveness of a school resource officer program in a southern city." *Journal of Criminal Justice*, 27:2, pp. 173 – 192. As cited by Jennings et al.

²⁹ Theriot, M. 2010. "The impact of school resource officer interaction on students' feelings about school, safety, and school police." Manuscript submitted for publication. As cited by Theriot, 2011.

³⁰ Theriot, M. 2011. "School Resource Officers in Middle Grades School Communities." *Middle School Journal*, 42:4. Retrieved from ProQuest.

ACCESS CONTROL AND OTHER SAFETY MEASURES

In addition to personnel-based security, districts are increasingly utilizing physical access control mechanisms and other technology-based security tactics to protect students. Examples of common safety measures include video surveillance cameras, closed circuit television systems, weapon detection systems (such as metal detectors), and access-control systems (such as electronic key cards). Similar to security personnel, there are several noted benefits and drawbacks associated with physical and technology-based safety measures. Paul Timm, president of RETA Security Inc., a school security consultancy, argues in a *National Public Radio* (NPR) article that while metal detectors attract a great deal of media attention, "their effectiveness has long been questioned." In particular, Timm asserts that because schools typically have multiple exterior doors, "if a student knows there's a detector at one entrance, they will try to bring in contraband through another way." displaying the properties of the proper

Figure 5 below summarizes the effectiveness of physical barriers and technology-based security measures as evaluated by scholarly research. The general consensus appears to be that if districts can afford physical barriers and have the personnel to operate them, security measures such as weapons detectors, surveillance cameras, and access control mechanisms can serve as an effective deterrent for campus violence.

Figure 5: Effectiveness Physical Barriers and Security Measures³⁴

STUDY	Overview and Findings
Brown, 2005 ³⁵	Brown surveyed 230 high school students within the Brownsville Independent School District in 2000-01. While most students reported that school police officers and security officers helped keep the schools safe, there was no clear consensus on whether video surveillance cameras increased safety , whether police and security officers should search students with metal detectors, or whether there should be more police and security officers in the schools. In particular, just half of the students agreed that schools should utilize metal detectors to reduce weapon possession and crime in schools. ³⁶ Brown concluded that school police officers and other security strategies had little effect on the presence of weapons or drugs in schools. ³⁷

³¹ Jennings et al. Op. cit.

³² Juvonen. Op. cit., pp. 2-3.

Neuman, S. "Schools Have Become More Secure Since Columbine, Experts Say." National Public Radio, December 14, 2012. http://www.npr.org/blogs/thetwo-way/2012/12/14/167276746/schools-have-become-more-secure-since-columbine-experts-say

³⁴ Table contents quoted with slight variation from sources.

³⁵ Brown, B. 2005. "Controlling crime and delinquency in the schools: An exploratory study of student perceptions of school security measures." *Journal of School Violence*, 4:4, pp. 105 – 125.

³⁶ Ibid. As cited by Jennings et al., 2011.

³⁷ Ibid. As cited by Theriot, 2011.

STUDY	Overview and Findings
García, 2003 ³⁸	This survey used data collected from a national telephone survey of SSAs. The survey revealed "a definite 'disconnect' between the perceived effectiveness of certain technologies and the number of districts wishing/planning to acquire the technology in the future." In particular, while 90 percent of the districts sampled utilized video cameras, just two-thirds believed them to be the most effective device. Nearly half (45 percent) found metal detectors to be the most effective, while 33 percent thought entry-control devices were the most effective.
Jennings et al., 2011 ⁴⁰	The data used in this study were collected as part of the 2006 School Survey on Crime and Safety (SSOCS) by the National Center for Education Statistics. The relationship between the school security measures and school violence and serious school violence was mixed; in particular, the installation of weapon-detection devices appears to stymie generalized violence but has no significant impact in preventing serious violence.
Johnson, 2000 ⁴¹	Johnson argues that: metal detectors are effective for detecting weapons and helping schools disarm students.
Roundcount, 2010 ⁴²	This study focused on the need for and/or helpfulness of implementing Geographic Information Systems (GIS) into crisis response procedures for participating Illinois school districts and emergency responders. As a whole, superintendents and emergency responders believed GIS would be useful and had a place in Illinois School District's crisis response. The cost, however, is a barrier in the eyes of the superintendents. Bigger districts and districts with high school age students perceived GIS as more useful than their counterparts. Emergency responders and superintendents had similar views of the overall usefulness but emergency responders had differences in what the benefits of GIS in crisis response would be.
Tillyer, Fisher, and Wilcox, 2011 ⁴³	This study examined the effects of school-based crime prevention strategies aimed at reducing criminal opportunity by analyzing self-report data from 2,644 seventh-grade students nested within 58 schools. The authors found that the prevention practices did not significantly reduce the likelihood of experiencing violent victimization or perceptions of risk. Meanwhile, metal detectors were found to significantly reduce feelings of fear among students.

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³⁸ García, C. 2003. "School safety technology in America: Current use and perceived effectiveness." *Criminal Justice Policy Review*, 14:1, pp. 30 – 54.

³⁹ Ibid. As cited by Jennings et al., 2011.

⁴⁰ Jennings et al. Op. cit.

⁴¹ Johnson, R. S. 2000. "Metal detector searches: An effective means to help keep weapons out of schools." *Journal of Law & Education*, 29:2, pp. 197 – 203.

⁴² Roundcount, T. 2010. "The perceptions of superintendents and emergency responders concerning the usefulness of geographical information systems in Illinois school district's crisis response procedures." Dissertation presented to the Faculty of the Graduate School of Saint Louis University, pp. 37, 91-92. Retrieved from ProQuest.

⁴³ Tillyer, M., Fisher, B., and Wilcox, P. 2010. "The effects of school crime prevention on students' violent victimization, risk perception, and fear of crime: A multilevel opportunity perspective." *Justice Quarterly*, 27:5.

SECTION II: CASE PROFILES

In this section, we review common district and school responses to the recent events in Connecticut. We then describe the safety and security measures used by five K-12 school districts that have been highlighted as best practices in school security.

DISTRICT RESPONSES TO SANDY HOOK

In the days following the Sandy Hook massacre, the most common response from school districts was to increase security personnel on school campuses. Some districts did this by inviting local law enforcement to patrol their schools. For example, Hillsborough County Public Schools in Florida reported that "unmarked and marked cars will patrol the schools along with deputies in plain clothes." A number of districts throughout the Washington, DC metropolitan area also reportedly increased patrols in their schools, including elementary schools. Other districts took measures to arm existing security personnel: two districts outside of Pittsburgh "got special permission to arm their security officers when classes resumed" on the Monday following the attack. The superintendent of one district explained that the district had wanted "to have at least one armed officer at each of our schools, starting tomorrow and every day thereafter. It was our intent to do this anyway; (the Newtown shooting) caused us to think about it and work over the weekend to expedite that process."

Other districts sought more aggressive and long-term solutions. Over the winter break, the Vigo County School Corporation (VCSC) in Indiana installed "locked front entrances at the elementary and middle schools" as well as "buzzer and video" access systems for visitors. ⁴⁷ Additionally, VCSC administrators will continue to collaborate with law enforcement officers to identify areas where security can be improved, with preliminary plans to have three full-time deputies patrol the district's middle and elementary schools. An additional district in Indiana reportedly "canceled its open lunch policy that allowed parents and relatives to enter buildings to dine with students."

The notion of **expanding law enforcement in schools** has attracted a great deal of attention, particularly in response to the National Rifle Association's recent proposal to station armed police in every school.⁴⁹ Just minutes after the news conference, the NRA

⁴⁴ "Schools Increase Security in Wake of Conn. Attack." *The Associated Press via National Public Radio*, December 16, 2012. http://www.npr.org/2012/12/16/167397124/schools-increase-security-in-wake-of-conn-attack

⁴⁵ Spencer, D. "Local School Districts Reassure Parents About School Security." NBC Washington, December 17, 2012. http://www.nbcwashington.com/news/local/Local-School-Districts-Reassure-Parents-About-School-Security-183572421.html

⁴⁶ Santoni. Op. cit.

⁴⁷ "W. Ind. District plans tighter school security." *The Associated Press* via WFTV.com, December 30, 2012. http://www.wftv.com/ap/ap/crime/w-ind-schools-plan-tighter-school-security/nTh6H/

⁴⁸ Ibid.

⁴⁹ "Remarks from the NRA press conference on Sandy Hook school shooting, delivered on Dec. 21, 2012 (transcript)." *The Washington Post*, December 21, 2012. http://www.washingtonpost.com/politics/remarks-from-the-nra-

reportedly received "500 calls to its headquarters... from local members pledging to help pursue the school safety initiative." One voice in favor of increasing school security guards is Mo Canady, Executive Director of the National Association of School Resource Officers. Canady argues that "when you're dealing with an armed assailant bent on harming people, the best defense you have is a person who is trained and armed to deal with that situation." ⁵¹

Meanwhile, opponents of increasing armed security "quickly denounced the NRA proposal." According to the *Washington Post*,

New York City Mayor Michael R. Bloomberg (I), co-chairman of the Mayors Against Illegal Guns campaign, said LaPierre was offering "a paranoid, dystopian vision of a more dangerous and violent America where everyone is armed and no place is safe." Randi Weingarten, head of the American Federation of Teachers, called the NRA's proposal "irresponsible and dangerous" and accused the group of not seriously addressing gun violence. ⁵²

Aaron Kupchick, an associate professor of criminal justice at the University of Delaware, wrote in a *Washington Post* opinion piece that while the NRA's proposal was "greeted with derision" by politicians, political commentators, and other critics, "this negative reaction runs contrary to bipartisan school policy choices over the past two decades." In fact, though Kupchick argues that "the expansion of police into schools is a flawed policy that can have harmful effects on students," he acknowledges that he found such expansion to be **popular among administrators, teachers, and even parents** in his own research. ⁵³

Overall, while there has been a surge in efforts to expand security measures in the weeks following the events at Sandy Hook, Paul Timm of RETA Security Inc. asserted that "the whole culture of school security has undergone a revolution since the 1999 Columbine school shooting." Timm explained to *NPR* that "schools are far more secure than they were at the time of Columbine. For one, they keep most exterior doors secured, which is something they didn't pay much attention to before." Furthermore, districts have upgraded their physical security and are increasingly practicing "lockdown procedures intended to isolate students and teachers from an active threat," all considered to be effective practices in keeping schools secure. As such, the biggest response from some districts to the

press-conference-on-sandy-hook-school-shooting-delivered-on-dec-21-2012-transcript/2012/12/21/bd1841fe-4b88-11e2-a6a6-aabac85e8036 story.html

Nakamura, D. and Hamburger, T. "Put armed police in every school, NRA urges." *The Washington* Post, December 21, 2012. http://www.washingtonpost.com/politics/put-armed-police-officers-in-every-school-nra-head-says/2012/12/21/9ac7d4ae-4b8b-11e2-9a42-d1ce6d0ed278 story.html

⁵¹ Hoyer, M. "NRA plan would change security in most schools." *USA Today*, December 21, 2012. http://www.usatoday.com/story/news/nation/2012/12/21/nra-newtown-police-in-schools/1784953/

⁵² Nakamura and Hamburger. Op. cit.

⁵³ Kupchik, A. "The flaws in the NRA's school-security proposal." The Washington Post, December 30, 2012. http://www.washingtonpost.com/opinions/the-nras-faulty-school-security-proposal/2012/12/30/b5b73fc0-5054-11e2-950a-7863a013264b_story.html

Neuman, S. "Schools Have Become More Secure Since Columbine, Experts Say." National Public Radio, December 14, 2012. http://www.npr.org/blogs/thetwo-way/2012/12/14/167276746/schools-have-become-more-secure-since-columbine-experts-say

Newtown massacre was simply to communicate existing and ongoing security measures to parents and the community in order to alleviate concerns about the safety of students. 55

BEST PRACTICE DISTRICTS

Below, we profile four of the top-ranked districts for security services, as identified by Security Magazine's most recent Security 500 Benchmarking Survey. Security Magazine ranks school districts using the following measures:

- Security Spending/Person
- Security Spending/Revenue
- Security Officers/Employee
- Security Officers/Facility⁵⁶

Los Angeles (California), Montgomery County (Maryland), and Fairfax County (Virginia) topped the list this year; Keller ISD, ranked 10th, is also included to demonstrate the security measures implemented within a Texas district. Although the final district included in this section, Skokie School District 73.5 (Illinois), was not ranked by Security Magazine, it was recently featured in an ABC News article for having "extraordinary security measures" that merit attention in this best practices guide.

LOS ANGELES UNIFIED SCHOOL DISTRICT

The Los Angeles School Police Department⁵⁷ (LASPD) is a full service police department that provides 24/7 law enforcement services to the Los Angeles Unified School District (LAUSD).⁵⁸ Notable offerings of the LASPD are described below.

First, the Critical Response Team (CRT) addresses issues including school shootings, workplace violence, and concerns of terrorist threats by "supporting, assisting, and training LASPD personnel in their role as first responders to critical incidents [that] affect the safety of the students and staff of LAUSD." ⁵⁹ The CRT assignment "is ancillary to the primary duties of LASPD personnel," and "LASPD personnel must undergo a rigorous series of qualifications (i.e., physical agility, shooting qualification, practical assessments, etc.)" in order to be selected for the CRT. Responsibilities of the CRT include:

Providing LASPD personnel with advanced training and tactics in areas such as Immediate Action Rapid Deployment (IARD) for active shooters, Multi-Assault

⁵⁵ Spencer. Op. cit.

⁵⁶ "2012 Security 500 Rankings." *Security Magazine*, November 1, 2012.

http://www.securitymagazine.com/articles/83677-security-500-rankings

⁵⁷ Los Angeles School Police Department. http://www.laspd.com/index.html

⁵⁸ "Police Services Guide." Los Angeles School Police Department.

http://www.laspd.com/police/publicFiles/LASPDServicesGuide.pdf

⁵⁹ "Critical Response Team." Los Angeles School Police Department. http://www.laspd.com/critical-responseteam.html

- Counter-Terrorism Attack Capabilities (MACTAC), and Mobile Field Force (MFF)/crowd control, etc.
- Providing support to the LASPD K-9 Unit and assisting the LASPD Detective Unit in serving search warrants.
- Providing mutual aide assistance to various law enforcement partners during unusual occurrences.

The LASPD also offers a *School Safety Officer* (SSO) program; SSOs are "civilian non-armed employees of the Los Angeles School Police Department that receive additional training and equipment enabling them to provide a safe educational environment when assigned to a school campus or other LAUSD site." SSOs work with LASPD personnel and many go on to become police officers. Meanwhile, the LASPD's *Campus Police Officer* program stations uniformed officers at secondary schools in the district.⁶¹

Finally, the LASPD's *Canine Unit* consists of six police officers and their canine partners who "assist in the **detection and location of suspects and or narcotics**." ⁶²

Additional examples of services provided by the LASPD include:

- Police Communications/Dispatch: Receiving and coordinating all LASPD calls for service, dispatching and overseeing all field operations, and making appropriate notifications.
- Campus Support: Providing support to six geographic Divisions during the day and three off-hour watches. Providing law enforcement services to students and staff at primary schools, LAUSD offices, and as a backup resource to campus police officers.
- Motor Unit (Safe Passages): Providing traffic enforcement and traffic safety presentations, and serving as a rapid response team for strategic incidents.
- Parking Enforcement Unit: SSOs provide parking enforcement and traffic control at primary and secondary schools.⁶³

In response to the Connecticut shootings in December 2012, the LAUSD increased security presence at each school. According to one source, "In addition to the existing 300 police and resource officers already stationed at LAUSD high schools, an officer will now visit every elementary and middle school at least once a day at an unannounced time. 64

⁶⁰ "School Safety Officer." Los Angeles School Police Department. http://www.laspd.com/school-safety-officer.html

⁶¹ "Police Services Guide." Op. cit.

⁶² "Canine Unit." Los Angeles School Police Department. http://www.laspd.com/canine.html

⁶³ Bulleted points taken verbatim with some changes from: "Police Services Guide." Op. cit.

⁶⁴ "LAUSD Increases Security After Connecticut Shooting As Students Go Back To School." *The Huffington Post*, January 7, 2013. http://www.huffingtonpost.com/2013/01/07/lausd-increased-security_n_2425873.html

MONTGOMERY COUNTY PUBLIC SCHOOLS

The Montgomery County Public Schools (MCPS) Department of School Safety and Security promotes a "safe and secure environment for students and staff" by leveraging technology and partnering with public safety and law enforcement agencies. Specific offerings include:

- Coordinating and implementing comprehensive safety and security programs for the school district;
- Providing 24-hour security for MCPS and school system assets;
- Liaising with local, state, and federal law enforcement agencies; and
- Developing and implementing security initiatives for closed-circuit television camera, visitor management, and access control systems.⁶⁵

According to the 2009-14 Capital Improvements Plan, the Department of School Safety and Security is collaborating with the MCPS Information Technology Services staff to implement several new security initiatives. 66 Examples include:

- The new digital closed-circuit camera systems provide a high image resolution and are designed for future system expandability. These camera systems can be remotely monitored, after normal school hours, by the Electronic Detection Section (EDS)—the MCPS monitor and alarm unit—located at the Carver Educational Services Center. EDS has been upgraded with up-to-date monitoring and reporting technology that provides the ability for accurate monitoring of alarms and allows for more accurate and efficient responses to after-hours incidents and emergencies. The camera systems will be added in secondary schools.
- The **visitor management system** is a network-based computer that provides schools with the software and equipment to sign-in and monitor all visitors during the school day; enable staff to scan a visitor's driver's license or identification card to produce a visitor badge; and cross reference visitors' names with the state and local sex offender registries. The visitor management system will be implemented in all schools.
- The access control systems (ACS) at elementary schools consist of surveillance cameras at the front entrance with a remote strike release entry system connected to an audio device that provides office staff the ability to remotely grant access from the main office. Each elementary school will have the ACS installed at the main entrance and at a designated secondary entrance. EDS also will have remote access to the control systems in the schools.⁶⁷

According to *NBC Washington*, Montgomery County police had increased patrols in schools following the shooting in Connecticut. ⁶⁸

⁶⁵ Bulleted points taken verbatim with slight variation from: "Department of School Safety and Security." Montgomery County Public Schools. http://www.montgomeryschoolsmd.org/departments/security/

⁶⁶ "Capital Improvements Project Descriptions, Fiscal Years 2009-2014." 2012. Montgomery County Public Schools. http://www.montgomeryschoolsmd.org/uploadedFiles/departments/security/CIP%20for%20web%20site.pdf

⁶⁷ Bulleted points taken verbatim with slight variation from: Ibid.

⁶⁸ Spencer. Op. cit.

FAIRFAX COUNTY PUBLIC SCHOOLS

Fairfax County Public Schools (FCPS) has been "cited as a national model of school emergency preparedness" by the U.S. Department of Education, the U.S. Department of Homeland Security, and the American Prepared Campaign⁶⁹ for its extensive "safety and security plans designed by school security, local law enforcement, emergency management, and public health officials." According to a district publication after the shooting in Connecticut, examples of specific security initiatives at FCPS include:

- Close coordination and emergency planning with Fairfax County police and fire departments
- Comprehensive division-wide crisis management plan
- Individual school crisis plans updated within the last 12 months that include evacuation, shelter-in-place, and parent reunification plans
- Employee training in crisis management and communication
- Strict visitor controls, including required employee and contractor IDs
- Door access technology to aid in visitor control for all elementary and middle schools⁷¹

Furthermore, FCPS places various types of security staff in the district's schools. Fairfax County police officers (as **school resource officers**) are placed in all secondary schools, high schools, and middle schools; **school-based security staff** are placed in all secondary, high, and middle schools; and **uniformed security staff** are placed in all elementary schools during regular school hours and in all FCPS facilities after hours.

The district has also incorporated a number of safety and security issues into the design of its buildings. For example:

- All middle and elementary schools are equipped with door access technologies that allow the building exterior to remain secure
- Fire and intrusion alarm components are located throughout each building and are monitored by FCPS security personnel, 24 hours each day
- Communication capabilities and public address systems
- Updated high security padlocks on out-buildings and gates⁷²

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^{69 &}quot;Emergency Preparedness and Support." Fairfax County Public Schools, December 14, 2012. http://www.fcps.edu/emergencyplan/index.shtml

⁷⁰ Bove, V. "National Model of School Emergency Preparedness." *The Sentinel*, November 10, 2006. http://vincentbove.blogspot.com/2006/11/national-model-of-school-emergency.html

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⁷² Bulleted points taken verbatim from: "Capital Improvement Plan, Fiscal Years 2013-17." Fairfax County Public Schools, p. 5. http://www.fcps.edu/fts/planning/cip/prioryears/cipbook2013-17.pdf

Additional security measures specified by the Facilities and Transportation Services Safety Manual include:

- All exterior doors, except the main doors and those necessary for modular access, must remain locked.
- Signs are posted on all doors directing visitors to report to the main office.
- Every school must establish and maintain a log to record each visitor and contractor entry, as well as the badge issue and return for each individual.
- All visitors and contractors are required to present identification and wear the issued badge in an obvious location at all times while in the school buildings.
- Employees must wear their issued identification at all times while in school facilities and on school grounds.⁷³

One notable security measure is the district's **door access technology** system. Introduced in 2001, FCPS has implemented "variations and combinations of three types of door-access systems—proximity access card readers, keypads, and video intercom devices" at 18 district facilities, including elementary school campuses, central office administration buildings, and warehouses.⁷⁴

During the pilot program introducing these measures, the Director of the Office of Safety and Security noted that people "seem to feel more secure," as "door-access technology helps schools strike a balance between convenience and security." However, he cautioned that "teachers or students who participate in extracurricular activities may need to enter the school building after hours or through doors other than the main entrance. If no provision is made for them, they may be tempted to prop doors open." Other drawbacks include the high cost of these devices, "the potential administrative burden" of lost access cards and forgotten passwords, and the need for "a strong commitment to security at the local level." To

In the days following the shooting at Sandy Hook, FCPS reportedly placed additional police patrols in and around schools. Superintendent Jack Dale explained that this measure was "not in response to any specific threat but rather a police initiative to enhance safety and security around the schools and to help alleviate the understandably high levels of anxiety." ⁷⁶

^{73 &}quot;Facilities and Transportation Services Safety Manual." 2010. Fairfax County Public Schools, pp. 24-25. http://www.fcps.edu/fts/safety-security/publications/safetymanual.pdf

^{74 &}quot;Special Report Safe Schools: A Technology Primer." 2003. TechBeat, pp. 5-6.

https://www.justnet.org/pdf/SafeSchWint03.pdf

⁷⁵ Ibid.

 $^{^{76}}$ "FCPS Resources for Community Support in Response to the Connecticut Tragedy." Op. cit.

KELLER INDEPENDENT SCHOOL DISTRICT

Keller Independent School District's (KISD) Safety and Security Department aims "to incorporate dedicated personnel, state of the art technology, insightful planning, and the utilization of 'best practices' while ensuring the safety and security of its students, staff, and visitors."⁷⁷ In doing so, the district has implemented several security measures.

First, KISD actively monitors over 1,300 **security cameras** throughout the district "for the protection of assets, intrusion detection, crime prevention, student discipline issues, and as an overall deterrent to potential security and safety risks for KISD."⁷⁸

Second, KISD "adopted a comprehensive, multi-hazard, **Emergency Operations plan** that addresses emergency mitigation/prevention, preparedness, response, and recovery procedures relevant to natural and human-caused disasters." The plan prepares staff and students for the actions necessary during an emergency, and "establishes teams, chains of command, and specific steps to take in an emergency situation."⁷⁹ As part of the plan, the KISD Safety and Security Director personally conducts "intruder and lockdown drills" on each of the district's 39 campuses twice a year. While one of these drills is announced, the other is not. Following these drills, the Director of Safety and Security discusses strengths and areas for improvement with the Principal and campus Crisis Team."⁸⁰

Additional safety procedures are in place at all campuses, and include the following:

- Officials consult regularly with local law enforcement and first responders about school safety
- All schools have campus-specific Emergency Operations Plans that are evaluated annually and updated as needed
- Each school has a Crisis Team to address safety issues on their campus as they arise
- Four officers are assigned to the high schools along with 14 security specialists assigned throughout the district that provide a security presence and protection for our schools.
- All visitors must use the school's front entrances when visiting campuses throughout the day
- Exterior doors remain closed and locked during normal school hours

⁷⁷ "KISD Safety and Security Department." Keller Independent School District.

http://www.kellerisd.net/district/business/Pages/SafetyandSecurity.aspx

⁷⁸ "KISD Security Cameras, Intrusion and Fire Alarms." Keller Independent School District.

http://www.kellerisd.net/district/business/Pages/SecurityCamsAlarms.aspx

⁷⁹ "Emergency Operations." Keller Independent School District.

http://www.kellerisd.net/district/business/Pages/EmergencyOperations.aspx

^{**}WKISD Proactive in Keeping Students, Employees Safe." Keller Independent School District. http://www.kellerisd.net/community/communications/news/Pages/KISD-Maintains-Proactive-Approach-to-Keeping-Students,-Employees-Safe.aspx

- Several communication tools are used to inform parents and staff about emergencies⁸¹
- All visitors must go through the RAPTOR V-Soft Visitor Management System, a visitor screening/sign-in process that checks each visitor's information against national sex offender databases⁸²

KISD was the 2010 recipient of the Texas Safe Schools award, given by the Texas Schools Safety Center at Texas State University-San Marcos to the district with the most comprehensive security plan. Keller was recognized for its **access control system**, "where campus doors are locked and visitors are buzzed in at one or two locations. At most schools, visitors are routed directly to the office where drivers' licenses are scanned through the Raptor System." The Raptor System compares each visitor's identification with sex offender databases, prints out a sticker with the person's name and driver's license photo, and issues an alert if necessary. School staff may enter buildings by scanning their badges on a control panel, which records the name of the employee, the entrance location, and the time of entry.⁸³

SKOKIE SCHOOL DISTRICT 73.5

Skokie School District 73.5 in suburban Chicago was recently highlighted by *ABC News* for its "extraordinary security measures," which feature the **Raptor V-soft** in addition to other safety tactics. ⁸⁴ Regarding the District's stringent access control system, *ABC News* reported that:

The security measures at Middleton Elementary School start the moment you set foot on campus, with a camera-equipped doorbell. When you ring the doorbell, school employees inside are immediately able to see you, both through a window and on a security camera... Once the employees let you through the first set of doors, you are only able to go as far as a vestibule. There you hand over your ID so the school can run a quick background check using a visitor management system devised by Raptor Technologies. If you pass the background check, you are given a new photo ID — attached to a bright orange lanyard — to wear the entire time you are inside the school. Even parents who come to the school on a daily basis still have to wear the lanyard... The security measures don't end there. Once you don your lanyard and pass through a second set of locked doors, you enter the school's main hallway, while security cameras continue to feed live video back into the front office. ⁸⁵

⁸⁴ "Visitor Check-in Procedures." Skokie School District 73.5.

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⁸¹ Bulleted points taken verbatim with slight variation from: Ibid.

^{**}Raptor Visitor Management System." Keller Independent School District. http://www.kellerisd.net/district/business/Pages/RAPTORSystem.aspx

⁸³ Engelland, S. "Keller ISD Gets Texas Safe Schools Award." *Keller Citizen* via Raptor, May 25, 2010.

http://www.raptorware.com/news_detail.aspx?newsID=77

http://www.sd735.org/education/components/scrapbook/default.php?sectiondetailid=7727&&

⁸⁵ Perez and Jaffe. Op. cit.

The structure of Middleton Elementary was built such that "classroom doors open inward — not outward — and lock from the inside, providing teachers and students security if an intruder is in the hallway." Some employees have digital two-way radios to allow them to communicate with other teachers or administrators throughout the building. Additionally, the school's parking lot is lined with barricades that prevent cars from coming too close to the entrance. The school is now considering installing bullet-resistant glass for added security.

The district, which only has three schools, has spent more than \$175,000 on creating this security system in the last two years. The superintendent explained "I don't know that there's too big a pricetag to put on kids being as safe as they can be... So often we hear we can't afford it, but what we can't afford is another terrible incident."

⁸⁶ Ibid.

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