Teachers or Guards? The Cost of School Security

How much do schools spend on security—and for what?

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he 2012 tragedy at Sandy Hook Elementary School in Newtown, Connecticut, represents the deadliest school shooting in U.S. history, far surpassing the number of deaths that occurred at Columbine High in 1999.

Notwithstanding the deserved public attention that Columbine and other recent events engendered, scholars have long understood the effects of school violence on students and staff, drawing on data from the National

Center for Education Statistics (NCES) and others to demonstrate how students' real and perceived levels of victimization affect their psychosocial well-being and short-term and long-term performance.

Studies also show that teachers' and administrators' concerns about their personal safety negatively affect their engagement, their attitude toward students, and their job and career choice.

Together, high-profile school shootings and an improved understanding about the prevalence and effects of school violence have prompted policy action at many levels. No Child Left Behind requires schools to report violent incidents, labeling those that exceed state-defined thresholds as "persistently dangerous" a designation that enables students to transfer to other schools. NCLB also reauthorized the Safe and Drug-Free Schools Act (1994) and the Gun-Free Schools Act (1994).

At the district level, schools have used a multitude of strategies to reduce violence, including professional development in classroom management for teachers, behavioral support programs for students, and enhanced security measures. For example, NCES reports a steady increase in the percentage of schools that use cameras and metal detectors throughout the 2000s (NCES 2010).

Despite the well-meaning calls and policies to enhance school safety, education stakeholders have little insight into the costs that schools bear to support those initiatives. Although NCES provides guidelines to districts on how to account for such expenditures, state fiscal reporting requirements vary, and few specify dedicated account codes for safety and security. Despite this difficulty, we used data from NCES and the Texas Education Agency—the only known state to define a function code for school "security and monitoring services"—to answer three policy-relevant questions:

- How much do districts spend on school security?
- How do districts put those resources to use (e.g., security personnel or metal detectors)?
- Does security spending differ among districts?

Table 1. Average District Security Spending in Texas, Overall and by District Type

	All Districts (<i>n</i> = 1,030)	Urban (n = 67)	Suburban (<i>n</i> = 185)	Town (<i>n</i> = 159)	Rural (n = 619)
Total security expenditures	\$312,030	\$2,571,982	\$601,133	\$109,441	\$33,050
Security expenditures per pupil	\$28.49	\$73.81	\$51.36	\$32.81	\$15.64

Source: 2008-2009 district financial data from the Texas Education Agency's Public Education Information Management System.

The discussion that follows highlights what we learned.

How Much Do Districts Spend on School Security?

At the outset of our analyses, we learned that policy makers, the media, and the public use the terms school safety, school violence prevention, and school security without shared meaning. Some use these terms to describe violence prevention efforts and to describe schools' efforts to address health matters (e.g., H1N1), natural disasters, and fire. Others use these terms to describe educational and behavioral programs that serve students with known risk factors (e.g., gang involvement) that can be applied school-wide to groups of atrisk students or to individual, high-risk students (e.g., behavior management plans).

We limit our analysis to measures that independently or in concert make a school a less-desirable target for committing an act of violence, theft, or vandalism—a construct some refer to as "target hardening" (Astor, Guerra, and van Acker 2010) and we will refer to as "school security." Thus, for our purposes, school security comprises the use of dedicated personnel (e.g., law enforcement, security guards, hall monitors), monitoring devices (e.g., surveillance cameras, metal detectors), equipment (e.g., vehicles), and communication systems (e.g., confidential reporting system). These are expenditures that the Texas Education Agency accounts for in Function Code 52 (TEA 2010).

In Table 1, we report Texas security expenditures in two ways. First, we report the average level of security expenditures across all districts and by district type. As the table indicates, on average, Texas districts spent \$312,030 on school security, ranging from about \$2.6 million in urban districts to \$33,000 in rural districts. Average expenditure levels, however, mask notable spending differences within district types. One urban district, for instance, spent in excess of \$21 million on security, whereas a rural district spent nothing.

Overall spending levels are certainly affected by student enrollment. Thus, to account for differences in district size, we also calculated security expenditures

per pupil. Here, we found that urban districts spend the most per pupil—about 30% more than suburban districts—and nearly five times the amount of rural districts.

Viewed alone, the per-pupil security expenditure figures seem inconsequential. A different picture emerges, however, when we compare the level of security spending with other functional areas. Table 2 shows spending as a percentage of total operating expenditures by functional area. At 0.31%, statewide average school security spending is three times the level of spending on social work services, which involve attending to students' social needs, including funding truant officers and social workers. Table 2 also indicates that urban districts spend a far greater percentage of their resources on security than do other district types. And they spend, on average, nearly as much on school security as they do on student health services. In short, the figures in Table 2 remind us that spending on school security, all else being equal, diverts resources from other areas.

How Do Districts Put School Security Resources to Use?

Our analysis of Texas expenditure patterns revealed that, on average, most security spending was distributed among the following object codes:

- Professional Services (31%)
- Support Personnel (21%)
- Miscellaneous Contracted Services (17%)
- General Supplies (9%)
- Contracted Repair and Maintenance (5%)
- Employee Benefits (5%)
- Other Professional Personnel (4%)
- Furniture, Equipment, and Software (3%)

To gain a better understanding of how districts use security resources, we turned to NCES's School Survey on Crime and Safety (SSOCS). The SSOCS asks school administrators across the United States to report their use of a variety of school security measures, including security-related personnel.

Table 2. Mean Expenditures by Function as a Percentage of Operating Expenditures in Texas, Overall and by District Type

Function	All Districts (<i>n</i> = 1,030)	Urban (n = 67)	Suburban (<i>n</i> = 185)	Town (<i>n</i> = 159)	Rural (n = 619)	
Instruction	55.65%	57.40%	56.34%	56.10%	55.13%	
Maintenance & operations	11.88	11.14	11.56	11.48	12.16	
Food services	5.38	5.29	5.39	5.52	5.35	
General administration	5.29	2.84 3.55		4.25	6.34	
School leadership	5.28	5.34	5.44	4.99	5.30	
Extracurricular activities	4.15	2.70 3.54		4.39	4.43	
Transportation	3.60	2.61	3.26	3.51	3.84	
Guidance & counseling	2.55	3.55	3.32	3.03	2.09	
Instructional resources & media services	1.53	1.58	1.58	1.54	1.51	
Data processing services	1.47	1.52	1.52 1.49		1.49	
Curriculum/staff development	1.00	2.04 1.39		1.08	0.75	
Instructional leadership	0.93	1.73	1.34	1.44	0.58	
Health services	0.80	0.97	0.94	0.80	0.74	
Security & monitoring services	0.31	0.83	0.59	0.34	0.16	
Social work services	0.11	0.36	0.22	0.16	0.04	
Chapter 41 costs	0.06	0.05	0.01	0.03	0.08	
Payments to juvenile justice alternative education programs	0.02	0.06	0.04	0.01	0.02	

Source: 2008-2009 district financial data from the Texas Education Agency's Public Education Information Management System.

Schools employ three types of security personnel, either full-time or part-time: school resource officers (SROs), security guards, and sworn law enforcement officers. SROs are specially trained, active-duty law enforcement officers whose agency assignment is to work in schools. SROs serve a policing function and provide law-related counseling and education for students and staff (CPSV, n.d.).

Sworn law enforcement officers are assigned by police agencies to work in schools, but they are not specially trained like SROs. Security guards, alternatively, are not sworn law enforcement officers but are paid by the district to provide security and monitoring services. Though districts definitively bear the cost of security guards, it is unclear how the costs of SROs and sworn law enforcement officers are apportioned between schools and other government agencies (e.g., local police department).

Texas schools employed, on average, one full-time person for every 700 students, whereas U.S. schools

employed one person for every 1,000 students. Both Texas and U.S. schools also employed one part-time security person for about every 1,100 students. Nationally, urban schools used substantially more full- and part-time security personnel than suburban, town, and rural schools; they averaged about one full-time person for every 550 students compared with one for every 1,200 to 1,400 students in the other locales.

In Table 3, we use the SSOCS to reveal schools' use of nonpersonnel security measures, as well as to gain insight into some of the duties that security personnel perform. Here, we show that nearly all schools require visitor check-in and lock or monitor doors. And most schools close campus during lunch, enforce a strict dress code, and require staff to wear ID badges. The table also illustrates the widespread use of security cameras, twoway radios, and in-class telephones. Comparably few schools use metal detectors randomly or upon entry.

Table 3. Percentage of Schools Using Identified Security Practices in Texas and U.S. Schools, Overall and by District Type

	Texas Schools				U.S. Schools					
	All	Urban	Suburban	Town	Rural	All	Urban	Suburban	Town	Rural
Require visitor check-in	100%	100%	100%	100%	100%	99%	99%	99%	99%	97%
Lock or monitor doors	88	90	91	78	88	90	93	93	90	84
Close campus during lunch	83	82	83	82	86	65	67	63	71	65
Enforce strict dress code	77	82	67	82	79	54	64	51	52	51
Require staff to wear ID badges	73	79	84	65	54	59	63	72	63	41
Use security cameras	69	65	75	65	68	55	52	59	58	53
Provide two-way radios to staff	67	77	70	61	54	74	77	78	70	67
Use security personnel	65	84	67	48	44	46	58	48	46	35
Provide in-class telephones	56	66	67	22	46	72	71	79	66	67
Lock or monitor gates	49	60	58	26	33	42	55	47	36	29
Provide anonymous threat reporting system	43	51	47	30	32	31	38	31	32	26
Require student uniforms	25	44	16	17	9	15	35	12	6	6
Require students to wear ID badges	24	33	21	17	16	7	13	7	6	4
Perform random sweeps for weapons/ contraband	20	26	18	17	16	11	12	7	11	15
Require clear book bags or prohibit use of book bags	16	21	17	22	7	6	6	4	8	6
Use random metal detector checks	12	17	14	13	2	5	11	2	4	4
Use metal detectors at entry	4	9	3	0	0	1	4	<1	<1	<1
N	220	80	60	20	60	78,729	19,653	26,714	7,561	24,801

Does Security Spending Differ among Districts?

Our analyses reveal differences in security spending and measures used among district types. To better understand those factors that may be associated with these differences we used the Texas data to undertake a series of regression analyses. We learned that poorer districts and those serving larger percentages of disadvantaged students allocate a greater proportion of their resources to security than do their counterparts, all else being equal. It may be warranted that poorer districts allocate

more resources to school security than other districts; the phenomenon, however, raises questions of equity (or fairness).

Questions of equity prompt questions of adequacy; that is, do schools devote an adequate level of resources to school security? The

SSOCS offered us some insight into the answer to this question by asking principals to indicate whether inadequate funds limited their efforts to prevent crime. Only about one-third of U.S. school principals indicated that funding does not limit their ability to prevent crime. Alternatively, nearly one-quarter of U.S. principals stated that inadequate funds limited in a major way their ability to prevent crime.

So What?

Viewed simply, our study demonstrates that Texas districts allocated, on average, 0.31% of their expenditures to security in 2008-2009. One might be tempted to regard such spending as negligible. However, we strongly urge education stakeholders and policymakers to consider the implications of our findings. Foremost, security expenditures are greatest in urban schools with high concentrations of poverty.

Although this finding may reflect that urban communities have higher rates of violence and property crime, it does not follow that these districts should allocate a far greater percentage of their operating budget than other districts to keep schools secure. Though we could not determine how security spending affects spending in other areas, say, instruction, a dollar spent in one way cannot be spent in another.

Stakeholders also need to recognize that the Texas data afforded us only the opportunity to quantify amounts spent on school security. We could not account for other cost-bearing efforts to decrease school violence, such as the cost of school-wide positive behavioral support systems, small group strategies for at-risk students, and individually targeted interventions (Sprague 2007)—spending that is accounted for in multiple functional areas (e.g., instruction, guidance and counseling).

Districts also record spending for administrators whose role in full, or in part, is to address student discipline issues in administrative salary and benefit codes. We do not dispute these accounting conventions. Our point is simply that efforts to take stock of the full cost of school security and violence prevention likely understate the total expenditures devoted to these activities.

References

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For More Information

You can find the full account of our study in the following article: DeAngelis, K. J., B. O. Brent, and D. Ianni. 2011. The hidden costs of school security. Journal of School Finance 36 (3): 312-27.

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