Topic:
EDUCATION DEPARTMENT; GRANTS; SCHOOL SECURITY; SCHOOLS (GENERAL); SECURITY PERSONNEL;
Location:
SCHOOLS;

OLR RESEARCH REPORT

November 3, 2006   2006-R-0668

SCHOOL SECURITY TECHNOLOGIES

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You asked several questions about the viability and cost of various school security technologies.

WHAT ARE MOST VIABLE SECURITY TECHNOLOGIES FOR SCHOOLS AND WHAT DO THEY COST?

Systems Currently In Use in Connecticut

Although the State Department of Education (SDE) does not collect information on school security technologies in a systematic way, it was able to offer some anecdotal evidence of the types of security systems in use in schools and school districts in the state along with some of their pluses and minuses. We describe these systems below and include a cost estimate for each.

- **Cameras** — The types used in Connecticut are generally black and white with a fixed focus. These cameras are cheaper but they cannot scan an area and make it impossible to identify the color of a perpetrator's clothing. Thus, they are of limited usefulness. The estimated cost of a standard resolution camera sufficient for school applications ranges from $ 500 to $ 1,000. Higher resolution cameras can cost as much as $ 8,000. Most schools would require multiple cameras in order to provide adequate security. A full system for a smaller elementary school would cost an estimated $ 20,000 to $ 30,000. A project at a large high school with extensive grounds could have costs as high as $ 200,000.

- **Remote access for doorways ("buzzer systems")** —This is probably the most common type of safety technology in use in Connecticut schools. A "buzzer system" can be installed at entry points at an approximate cost of $ 10,000.

- **Metal detectors** — The most common type currently in use are hand-held "wand" detectors. The main disadvantage of this type of detector is that it takes a relatively long time to apply, reducing its utility for screening large groups of

people as they enter or leave a school building. The estimated cost of a portal metal detector is $ 35,000. Hand-held metal detectors would cost approximately $ 200 to $ 400. Each entrance with a metal detector would require at least two security personnel and preferably three. The average salary of trained security personnel would be approximately $ 25,000.

• **Videotaping** of common areas, usually cafeterias or gymnasiums. The cost of a good-quality VCR for security purposes would range from $ 500 to $ 1,500.

• **Scan cards** — These are relatively new to Connecticut schools. Early reports are that they are expensive and are easily lost or stolen, raising questions about their effectiveness as a security device. The cost of a scan card system would depend on the size of the school. A small school would likely see costs of approximately $ 30,000 for a system while a large high school could see costs as high as $ 200,000.

• **Electronic databases** — Several schools use a database that indicates a particular school's liabilities, vulnerabilities, and resources for responding to various crises. A recent *USA Today* article describes one such system, called Raptor, used by the Houston school system and schools in 19 other states. The system checks visitor ID cards against a national database of sex offenders. According to the article, Raptor costs $ 1,500 in start-up fees and $ 432 per year to access the system ("High-Tech School Security is on the Rise," *USA Today*, 10/25/06).

• ***Duress Alarms— This group of devices includes panic-button alarms (push-button alarms mounted in a fixed place), identification alarms (portable devices that identify the owners of the alarms), and identification/location alarms (portable devices that identify, locate, and track the person who activated it). The group also includes cell phones. These alarms are effective only when used in conjunction with a school crisis plan, according to a U. S. Department of Justice analysis of school security technologies (see below). The cost of a duress alarm system depends on the type of system that is utilized. Simple systems can be installed in-house for less than $ 1,000. However, a typical system would likely cost approximately $ 10,000.***

U. S. Department of Justice Analysis of School Security Technologies

The U. S. Department of Justice (DOJ) published a detailed report on many security technologies available for schools in 1999 (*The Appropriate and Effective Use of Security Technologies in U. S. Schools, A Guide for Schools and Law Enforcement Agencies.*) The following table summarizes DOJ's conclusions about the pros and cons of the major types of available security technologies.

Department of Justice Evaluation of Major Security Technologies for Use in Schools

SECURITY TECHNOLOGY	PROS	CONS
Video Cameras	• Good deterrence for outsiders who do not belong on campus, especially when used in	• The systems are expensive and can be logistically difficult to install.

	conjunction with warning signs. • Strong evidence is preserved on tape. • Less costly than human monitors. • Good documentation for liability claims.	• Choosing the correct camera requires some technical knowledge. • Cameras can be stolen or vandalized. • Ongoing maintenance and operational support are required. • Some communities or individuals may challenge their legality. • Insiders can circumvent the system. • Students may move misbehavior to different parts of the school or campus.
Metal Detectors	• Detectors work very well. They are a mature technology and can accurately detect most firearms and knives. • Hand-held detectors are affordable.	• Detectors are only as good as their operators. • They are usually not effective when used on purses, book bags, or suitcases. • Walk-through detectors require more space than most schools have available. • Walk-through detectors usually require use of hand-held scanners for those who trigger the alarm. • The screenings are slow. • Devices cannot discriminate between an actual weapon and a benign piece of metal.
X-Ray Baggage Scanners	• The systems are generally safe and effective in screening baggage for weapons. • They can generally scan between 10 and 20 items per minute.	• They require well-trained and motivated operators. • They require substantial space.
Fences	• Defines property boundaries. • Forces intruders to consciously trespass and use a ladder or wire clippers to enter. • Keeps out casual strangers wandering onto school grounds.	• Fences can be ugly. • Fences are expensive.
Coded ID Cards or Badges	• No manpower involved. • Technology is mature. • Cards can be switched off when lost or stolen. • Generally tamperproof.	• No way to determine that only a single person is entering. • Cards can be lent out. • Card swipe readers are subject to vandalism. • Card readers require maintenance. • Regular updating of authorized personnel database is essential.
ID Card Plus PIN	• PIN and ID can be turned off when no longer valid. • Stolen ID card is not enough to gain entry.	• More administrative effort is required. • Authorized people can let unauthorized people in.

	• Database automatically updates when ID is read and PIN entered.	• Users can forget their PINs or lend them out. • Keypads can malfunction or be vandalized.
Biometric IDs	• This form of ID cannot be lent to someone else. • ID can be deleted when person is no longer authorized. • Nothing for a user to forget.	• Not all systems are user friendly. • It is possible for authorized people to let unauthorized people in. • Sometimes the technologies malfunction and falsely reject an authorized person. • Devices are subject to vandalism. • They take longer to use than a card reader or keypad.

WHAT FEDERAL, STATE, OR OTHER FUNDING, OTHER THAN THE FEDERAL EDUCATION DEPARTMENT'S EMERGENCY RESPONSE AND CRISIS MANAGEMENT GRANTS, IS AVAILABLE FOR SCHOOL SECURITY?

Federal Grants

Safe and Drug-Free Schools and Communities Grants – U. S. Department of Education. States are eligible to apply for these grants, which can be used to pay for school security, including surveillance cameras and other technology, security personnel, and supporting safe zones of passage. The grants also can fund many other types of activities including substance abuse prevention programs, character education

programs, and employee background checks. (A full description of the grant is available at ***http: //www. ed. gov/programs/dvpformula/gtepdvpformula. pdf***). In FY 05, Connecticut school districts, RESCs, and charter schools received a total of $ 3,261,948 in grants under this program. So far for FY 07, 82 districts, RESCs, and charter schools have received a total of $ 428,848.

School Safety Grants – U. S. Department of Justice Office of Community Oriented Policing Services. These grants provide 50% of the cost to install metal detectors, locks, lighting, and other equipment to improve school safety. They also pay half the cost of security assessments, security training, and similar measures. In September

2006, the DOJ announced $ 14. 8 million in grant awards to enhance school safety. The following Connecticut towns have been awarded grants:

Town	Grant Amount
Clinton	$ 30,962
Granby	206,714
Hartford	24,185

Stamford Police Department	16,167
Connecticut Total	**$ 278,028**

State Grants

The state has two grants on the books that could be used for school security measures, but neither is currently funded.

General Improvements to School Buildings (§10-265h). These grants, which were established in 1998, were to assist priority school districts in paying for general building improvements that are not eligible for state school construction grants. The law specifies that grants can be used for installing security equipment, including video surveillance devices and fencing. The grants were funded by bonding. Six districts received a total of $ 1,317,239 in FY 02. In 2005, the legislature authorized $ 10 million in bonding over two years for similar improvements for charter school facilities.

Safe Learning Grant (§ 10-263e). This competitive grant, established in 2001, was to help school districts:

1. develop safe school environments where children can learn without fear of physical or verbal harm or intimidation;

2. develop activities encouraging respect for each student;

3. reduce early youth aggression;

4. establish student conflict and intervention policies and strategies;

5. eliminate student bullying;

6. extend safe environments to extra-curricular activities;

7. provide after-school programs that include (a) criteria for student participation, (b) leisure activities that help social and cognitive development, (c) safe environments, (d) staff trained and skilled in child development, (e) specific strategies and interventions for children with academic weaknesses to improve academic performance and reduce social promotion, (f) family involvement and assessment of transportation needs for families that use the programs, and (g) program evaluation; and

8. develop crisis and violence prevention polices and strategies to make schools safe.

Grants were made from FY 01 through FY 05, with most of the money given out in FYs 02 and 03. Over the four years, 27 districts received a total of $ 909,792.

ARE SECURITY MEASURES INCLUDED IN SCHOOL CONSTRUCTION FUNDING? IF NOT, COULD THEY BE?

School security measures are eligible for state school construction funding as long as they are integrated into the fabric of a building, according to David Wedge, chief of the

SDE's School Facilities Unit. Thus, alarm systems, security cameras, fences, and fixed metal detectors are eligible but such items as portable, hand-held metal detectors or portable walk-through detectors are not. Wedge said he would place a stand-alone security technology installation project in category 3 of the school construction priority list, but the legislature has historically funded all the projects on the list regardless of their priority, so the category had not mattered up to now.

DOES SDE PROVIDE ASSISTANCE TO DISTRICTS APPLYING FOR FEDERAL SECURITY-RELATED GRANTS (INCLUDING THE U. S. EDUCATION DEPARTMENT'S EMERGENCY RESPONSE AND CRISIS MANAGEMENT GRANTS)?

No.

HAVE OTHER STATES FUNDED PROGRAMS TO INCREASE THE USE OF SECURITY TECHNOLOGIES IN SCHOOLS? IF SO, WHAT DID THE PROGRAMS DO AND HOW WERE THEY FUNDED?

The following states provide aid specifically for school security measures, according to the Education Commission of the States and OLR computer searches.

California

California law authorizes school districts receiving aid for new school construction through state bond initiatives to use grants for, among other things, "equipment, including telecommunication equipment to increase school security" (Cal. Education Code § 17072. 25). In addition, districts may use state aid for school building improvements to pay for "furniture or equipment designed to increase school security" (Cal. Ed. Code § 100620).

Massachusetts

Regulations adopted by the Massachusetts School Building Authority require school districts seeking state aid for school construction to submit a Design and Educational Program for each construction project and to include a description of the "overall security and the security measures taken to safeguard the facility and its occupants" (963 CMR 2. 02).

Mississippi

The Mississippi legislature established a School Safety Grant Program in 2001. It requires the State Department of Education to administer the grant using only existing staff and resources. After school districts adopt mandatory safety plans, the program helps them to finance metal detectors and video surveillance cameras, communications, and monitoring equipment for classrooms and school buildings, grounds, and buses. Annual grants include a base amount plus an additional amount for each student attending school in the district. The amounts must be determined by the State Board of Education and based on annual state appropriations for the grants (Miss. Code § 37-3-83).

It appears from the department's website that the grants are currently funded mostly by federal Safe and Drug Free School grants.

New York

New York school districts may apply for competitive grants for school safety and extended

day activities through the Omnibus School Violence Prevention grant program. School safety activities eligible for funding under the program include installation of metal detectors, intercom and other intra-school communication devices, and other devices to increase school security and the safety of school personnel and students (NY Education Law §2814).

New York law also authorizes the education commissioner to provide school districts with additional building aid (in accordance with its building aid formula) for approved purchases of metal detectors, security cameras, electrically operated partitions, and other security devices (NY Education Law §3602). The statute requires the education commissioner to annually prescribe a special cost allowance for specific devices, which may not be exceeded. These grants are part of New York's regular school facility funding.

Virginia

Virginia law defines a state-aided construction project, including a school construction project, to include "any improvements, together with equipment, necessary to enhance public safety and security of buildings to be principally used by a public entity" (Va. Code § 56-575. 1)

In 2000, Virginia created the Virginia Center for School Safety to, among other things, review mandatory school safety audits and provide training and technical assistance to school districts. The center also oversees a program to provide school resource officers, who work with local police officers to foster school safety. In 2002, Virginia passed legislation requiring all school security officers employed in Virginia schools to be certified and to successfully complete entry-level and in-service training (Va. Code, §9. 1-184). The Virginia School Safety Center is largely funded by federal grants, although the state contributes some funding through the state Department of Criminal Justice Services, of which the center is a part.

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