# Video Security: Delivering a Curb-to-Core Line of Defense

*Not long ago, security concerns for most schools involved student conflicts, vandalism, theft and liability — now the foremost concern is life safety.*

Domestic terrorism has become a major motivator for improving the security of school districts in the US. Increasing outbreaks of active shooter and other security incidents in recent years have prompted parents, administrators and law enforcement to take a hard look at improving campus safety.

According to EveryTown Research, since 2013 there have been more than 300 school shootings in the US — an average of about one per week. A recent article published by Campus Safety Magazine states that nearly all US schools now have planned responses in the event of a school shooting. In 2016, the US Department of Education found nearly 90 percent of public schools had a written plan for responding to school shootings and 70 percent of those schools had drilled students on the plan. This is for good reason: shootings are among the deadliest types of emergencies a school could face.

One of the best ways to mitigate this risk is to deploy policies, procedures and technologies that keep unauthorized visitors from gaining access to a campus in the first place. Video security, access control and a wide range of integrated open platform security technologies are combining to create an efficient and effective first line of defense for education facilities and save valuable time during an emergency event.

**Organization**
School Facilities

**Location**
Districts Across the US

**Industry Segment**
K-12 Education

**Milestone Partner(s)**
The Open Platform
Community

**Solutions**
Video Management Software
Networked Cameras
Access Control Systems
Audio/Video Intercoms
Mobile and Remote Clients
Video Analytics

## Seeing the Layers

Security professionals agree that physical security can be thought of in layers, with the perimeter being the first line of defense. Schools must detect and prevent unwanted intruders from entering their secure space. For example, a trend that is happening more and more in schools is the creation of entry vestibules — a single, controlled access point that prevents visitors from moving past that point without authorization.

This approach creates a control point where a visitor comes into the vestibule, is visually verified via cameras, or speaks with someone at the front desk who greets and identifies the visitor, and then is either allowed or denied access into the controlled area.

## Connecticut Calamity Ushered Change

Following the 2012 tragedy in Newtown, Connecticut-based Advanced Security Technologies worked with several of its manufacturer and technology partners to donate products and labor to install a new video security system for the school district. The Advanced Security Technologies team and its partners were able to outfit the entire district with protection layers: at least 30 cameras at each school, doors with electronic access control, intercoms and intrusion detection systems.

Tom Marino, Director of Operations and Integrated Systems Architect, Advanced Security Technologies, has worked with many school districts around the region to design and install security systems. He is an advocate of the comprehensive layered approach to security.

"We can't anticipate all possible events, but an effective strategy ultimately boils down to time. If we can save time in an emergency, we can save lives," said Marino. "Even just five seconds could make all the difference between life and death."

Of the many physical security options available, network video surveillance offers the unique ability to provide real-time visual verification of situational awareness and recorded video data for incident evaluation. Additionally, this data can be monitored on-site, on mobile devices or remotely. Open platform video also enables integrated operations with a wide range of other security and information systems, including access control and video analytics such as motion detection, directional monitoring and virtual periphery tripwires to alert for faster response time.

## Three Components of School Security

Marino stresses that there are essentially three components to an effective security program: the organization's safety and security policies and procedures, trained personnel to enforce the policies and procedures, and technology tools to help the personnel execute the policies and procedures.

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> **Director of Operations**
> **& Integrated Systems**
> **Architect, AST**

"You can mitigate the damage in an emergency event by slowing down the assailant and providing a quicker response," said Marino. "Combining the use of policies, people, and technology can make a very real difference in the outcome of these events."

Milestone Systems, along with many of its integration and development partners, has worked with school districts across the country to deploy effective security solution. While each school faces its own set of challenges, video surveillance and the open platform partner community have come together to provide flexibility, reliability and leading technology for meeting those requirements. Video surveillance, integrated systems and new ways of thinking about security are helping districts provide more secure learning environments and reduce emergency response time.

## NY District Deploys Mobile Video for First Responders

"Unfortunately, what happened at Sandy Hook could happen anywhere, and our district wanted to be as proactive as possible," said the director of IT for a school district in New York.

Several years ago, this school district began planning an upgrade for its schools' existing access control and wanted to deploy a new video security system at the same time. From the beginning, the safety committee insisted that the district work with local emergency responders, including the police and fire departments, and local homeland security officials. The committee wanted to work with anyone involved with incident response, to ensure the ability to give needed access to see what is going on, live or recorded.

Provided with a map-based interface to the district's video management software, officers can quickly navigate campus buildings and click on logically-named camera locations. This capability would save valuable response time in the event of an emergency.

The school's video intercom system is integrated with the video management system, so administrators can control access into the building. They can view video of the person at a door, communicate with two-way audio, and release the door.

Streaming real-time video from the cameras has been made available at the police department, fire department and in police mobile units. In the event of an emergency any dispatch center, car or fire authorities that have computer access can see what is happening to evaluate optimal actions.
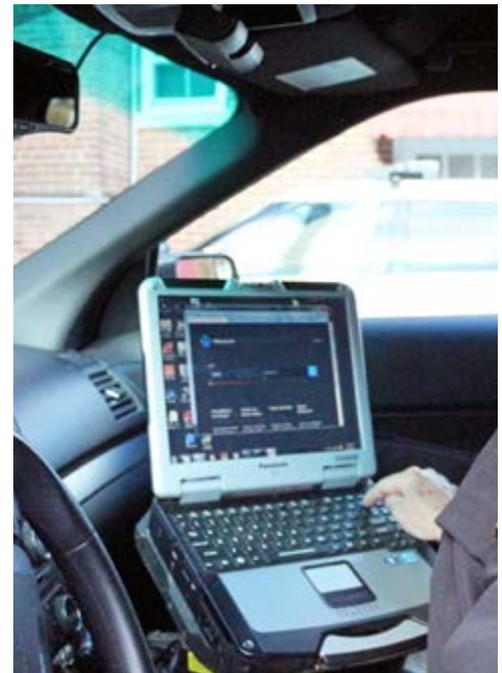
## Texas Border District Upgrades to IP Video

"Sandy Hook had a huge effect on our district. It brought into sharp focus the fact that we need to do everything we can to ensure the safety of our children, teachers and parents. With new cameras and the Milestone software, [intruders] can't just sneak into a side or back door anymore. We can keep track of everyone and have a visual log of who goes in and out," said the Security Management Coordinator at Mission CISD.

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> **Director of IT, for a New York school district**

The Mission Consolidated Independent School District (CISD) in Texas serves almost 16,000 students in four high schools, four junior high schools, 14 elementary schools, two special needs schools, and includes administrative offices and several other departments.

After years of evaluating IP camera management software systems, the district created a command center manned by two certified technicians. The technicians each have seven monitors and oversee maintaining the cameras and ensuring the servers are fully operational. Some of the camera features include motion detection, day/night functionality, vandal-resistant housings and remote focus/zoom.

Mission CISD uses more than 600 IP network cameras and 260 legacy analog cameras, with encoders to convert analog video to digital. Each campus has a dedicated server, with multiple servers in select locations. Their security solution provides perimeter protection around each campus, and cameras are deployed at various points of entry in school gymnasiums, cafeterias, libraries, hallways and playgrounds.

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> **Security Coordinator, Mission CISD**

## Rural District Improves Security With New Integrated System

Since its founding in 1959, the Sands Consolidated Independent School District (SCISD) in Ackerly, Texas, had operated without a security system. There were no cameras to monitor the flow of its 256 students, 44 teachers and others as they entered and exited the buildings, and there was no access control system to secure school doors. The recent elevation of school violence has all changed that.

Located in a rural area, the campus is about 20 minutes away from any law enforcement response, so the district wanted to implement an integrated access control and video surveillance system to keep the main campus and neighboring school gymnasium secure.

A local solutions provider helped design and install a multifaceted network-based system which included 36 security cameras and nine access control reader/controllers integrated with Milestone video management software (VMS). The cameras cover all areas around the school buildings, bus transportation, gym parking and the football field, and enable administrators to maintain extensive coverage of the cafeteria and all doorways, hallways, entryways and common areas. All cameras record on motion detection only, as configured in the VMS to allow for recorded video storage of at least 30 days.

The district also integrated their voice-over-IP telephony solution into the security system so when an individual hits the intercom key at the front entrance door station, the person appears in the video interface displayed on the screen of an administrator, who can verify and authorize entry. This protocol keeps school personnel from getting locked out and ensures that only approved visitors are let in.

The Pure IP access control system from ISONAS has also been configured to unlock and lock the main door for an hour at the beginning and end of the school day, so parents can drop off and pick up their children without waiting to be buzzed in, since Sands CISD staff are present in the entry areas.

## Deploy, Plan and Prepare

It is important to stress that schools should not depend on physical security technology alone to ensure occupant safety. Schools need trained personnel in place who know the procedures and can guide everyone to safety during an emergency.

It is highly recommended that school administrators work with local law enforcement, security consultants, systems integrators, manufacturers and other available experts to assure their systems and procedures are based on best practices and that the technology involved is deployed to its fullest potential.

Having a successful security strategy in place means making sure that all physical aspects of a security system — cameras, remote and mobile monitoring applications, access control systems, networks, intercoms, emergency exits, perimeter sensors, lighting and all other safety aids — are installed properly and fully functional. Within the layers of a security plan, the total solution is only as strong as the weakest point.

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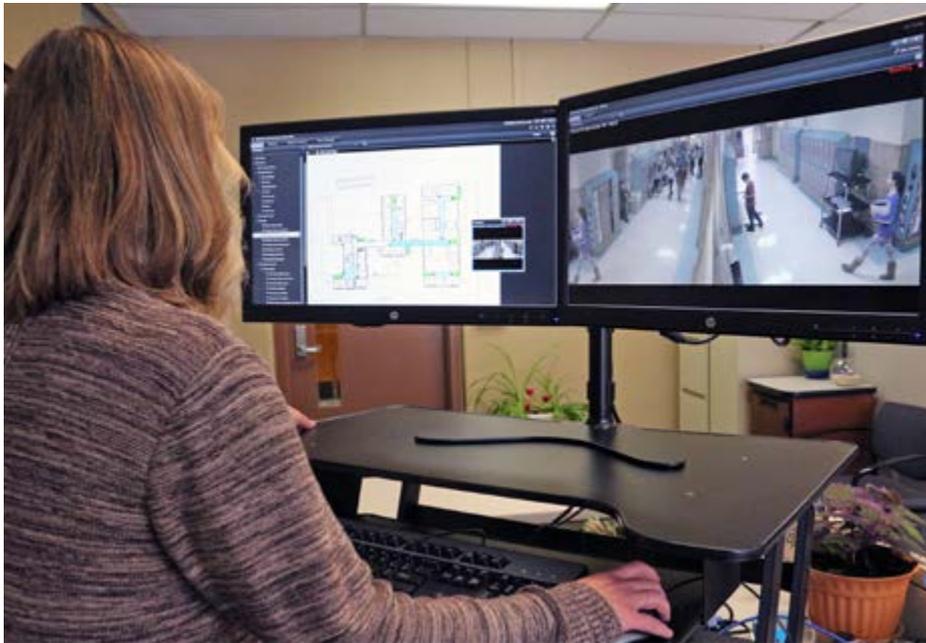>
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Milestone Systems is a leading provider of open platform video management software; technology that helps the world see how to ensure safety, protect assets and increase business efficiency. Milestone enables an open platform community that drives collaboration and innovation in the development and use of network video technology, with reliable and scalable solutions that are proven in more than 150,000 sites worldwide. Founded in 1998, Milestone is a stand-alone company in the Canon Group.

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