

Use Case for Public Safety: Enhance Security with Technology at K-12 Schools



Same Schools, New Problems

The first bell rings, signaling to students the start of their school day. School administrators watch the entrances for anyone out of place as kids hurry in before getting a tardy slip. Some teachers hustle along teenagers in the hallway and give knowing looks through pursed lips at couples lingering for every last second together. For students, teachers and staff, every day feels much like the one before it.

Supervisors patrol the hallways, looking to catch inappropriate behavior between students meeting up during their class hours. They watch for bullying, intent to stop harmful behavior before someone gets hurt. They walk past bathrooms and around the back of the buildings to watch for illegal substances and prevent circulation of anything dangerous on their campus. As long as teenagers have been in high school, administrators have been resolving age-old problems such as these.

However, school districts have become increasingly concerned about weaponized attacks on their school grounds. Recent violent events taking place at schools has stirred national attention and left school staff wondering what they can do to improve security measures on their campus. With limited resources available, schools can turn to new technology as an attainable way to enhance safety and security for their staff and students.

Key Problem: Balancing Budget and Safety

In response to mounting concerns about safety from parents and students, schools have made increased efforts to improve their overall security measures with the limited budgets they have. Schools have exponentially increased their preparedness to address these concerns and mitigate constant or persisting threats, such as weather, bullying, suicide and racially motivated vandalism.

To make the most of funds, schools have employed some technology to secure their campus. In the 2015-16 school year, it was reported that [81% of high schools used security cameras](#) to monitor school grounds. Another 94% of schools reported that they lock or monitor doors during the school hours for additional security. These measures do provide an extra means of surveillance, but still leave schools open to violent attacks.

In [2003-04, 79% of schools had procedures in place](#) in the event of a weaponized attack. By 2015-16 that number rose to 92%. However, incident response plans alone may not be enough to quell the anxious minds of students and their parents. A study found that [81% of students and 89% of adults](#) are concerned over violent attacks. Of the parents who were surveyed, 75% said they would pay out of their own pocket to increase security, and another 54% said they felt school safety deserved the most additional funding.

Some campuses have taken steps to have armed officers physically present. At one [New York school](#), officials made the decision to implement new technology in combination with armed security. For many schools constrained by budget, having one or more officers present may not be fiscally feasible. According to the National Association of School Resource Officers (NARSO), [42% of public schools claimed they had at least one security resource officer](#) (SRO) present on campus at least one day a week during the 2015-16 school year.

Unfortunately, fiscal constraints means the majority of public schools in the U.S. do not have a designated armed officer. Of the schools that can afford to employ a security officer, their presence is limited to one, maybe two, days a week, which leaves the campus vulnerable in the event of an emergency. Ultimately, current security measures has staff, parents, and students feeling exposed to threats on school grounds.



The Solution: A Safer Environment With Technology

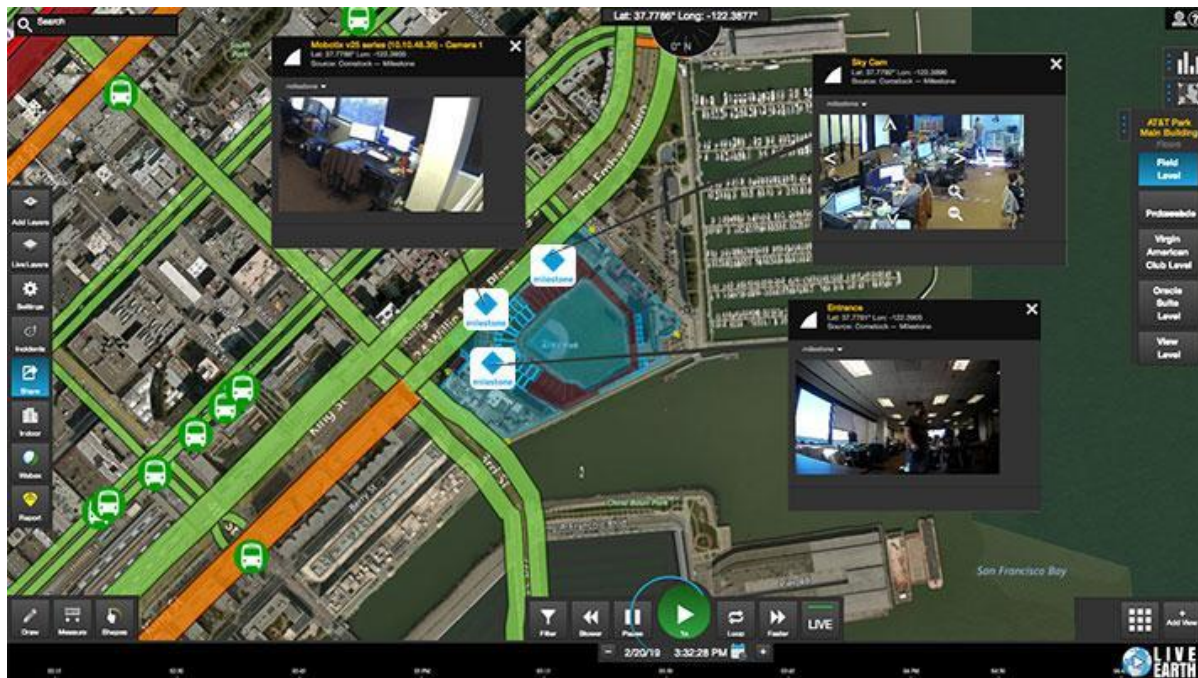
For school administration across the nation, security is one of the greatest concerns. In order to maintain a healthy learning environment and address the fears of students, officials need to implement a solution that is both practical and economically feasible. Schools have already started to implement technology that secures their grounds—such as security cameras and door access—but still require a more effective way to monitor these measures and take fast action when necessary.

School administration should consider these 6 technologies to enhance security:

- Video management system (VMS)
- Door access control
- Radio GPS
- Texting tips
- Emergency alerting system
- IoT visualization platform

Many schools have adopted cameras as an added security measure. There are many benefits to having cameras, with a major one being that they act as additional eyes across the campus at entry points and in the buildings. [Video surveillance provides the unique capability for administrators to watch the perimeter of their school](#), which many consider to be the first line of defense. Schools require a VMS that offers real-time visualization into activity happening in and around the campus.

Milestone Systems provides a VMS solution that can truly give administration another layer of security. They offer a real-time visual verification solution that includes recorded video footage for incident evaluation. Their advanced product integrates well with access control and motion detection, which can help to improve response times. Leveraging a VMS gives administrators situational awareness and the capability to better monitor for suspicious activity or individuals with real-time video feeds.



Door access controls offer another effective technology that [schools can immediately benefit from](#) for a variety of reasons.

Some of these include:

- Ability to immediately lock down access to a single door, or a whole building
- Central location to manage access points
- Data insights into how access points are being used

This is especially true when combined with a VMS, where the two systems can be integrated for a more holistic approach. Solutions like the one provided by Tyco gives schools the power limit unauthorized access to campus grounds through controlled access points. If the school does not have the funds or staff to monitor all entry points, they can choose to lock entrances and direct traffic through secure entries. This alleviates strain on the staff and allows schools to make the most of their resources.

Additionally, the capability to lock down entire buildings can vastly improve the safety of students in the event of a weaponized attack. If administration knows where the attacker is, they can lock all other buildings, greatly limiting the attacker’s access to more students and staff. This tangible layer of security not only creates a safer environment but provides students with a greater peace of mind.

School administration can also benefit from radio GPS as a form of expedient communication and insight into where their staff is at all times. In the mornings, officials could communicate with supervisors to let them know when entrance points will be locked. If a threat on the campus occurs, administration can identify what security officials are closest to the incident, ensuring faster response times. In a crisis situation like a violent attack, a



fast, dedicated channel of communication with GPS enhances awareness for school officials and allows them to jump into action faster.

Schools can also employ technology that gives students a way to voice their concerns about perceived and real threats on campus. The advent of texting as a viable means of communication—and one of the fastest ways in emergencies—has given students an outlet to be proactive about their own safety. School Text Tips is one of these solutions and helps students take control of their own safety.

The way it works is a school is given a dedicated local number that students can use to send texts. Students can then choose to identify themselves to be contacted, or remain anonymous. These texts are monitored 24/7; if alarming content is identified, designated officials are notified and can take immediate action. This bridges the communication gap between school administrators and students, and can help officials address serious threats in the event of bullying, vandalism, or a weaponized attack.

Another way to give students more ability to protect their own security and the safety of others is to install emergency alerting points. Blue towers have been installed across many university campuses and are an expedient way to contact law enforcement in an emergency. K-12 schools can use these around the perimeter of the school grounds. For inside the campus, emergency speakerphones can be installed in classrooms and hallways as another means of communication to alert school officials.

Code Blue offers a variety of security solutions such as these to make reporting a serious incident more accessible. In the event of a dangerous emergency, the person reporting has two-way communication with a dispatcher and can offer them details about the emergency. [With real-time insights into the event](#), law enforcement and first responders can arrive equipped to jump into action and handle the problem. This also allows administrators to focus primarily on putting the incident response plans into action with the knowledge that law enforcement has been dispatched to the scene.

Schools can make the most of these technologies by investing in an IoT visualization platform. Live Earth is a data agnostic mapping platform that consolidates existing data streams onto a single screen. This allows users to see a holistic, real-time image of daily operations. Live Earth can integrate with any VMS, door access control, radio GPS, texting solutions, and emergency alerting systems and visualize these one separated data streams in one place. This gives administrators a command and control center where the safety and security of their campus, students, and staff can be monitored at all times.

The Live Earth platform comes with out-of-the-box data layers, such as weather, as well as useful features that can be used to enhance security. Features that would be useful for schools include real-time alerts, play, pause, and rewind, and share. With alerts, administrators would get notifications as soon as the parameters of an alert are met.



For instance, with integrated door access control, school officials can get a customized alert if unauthorized door access occurs. They would get notification by text, email, or in-platform, and would be able to pull up their integrated cameras to see activity at and around the breached entry. The play, pause, and rewind feature would allow officials to go back on the timeline with all their integrated systems in sync for deeper understanding as to what triggered the alarm. If it was an unauthorized individual trying to gain entry, they could then take immediate action to lock down buildings and limit the person's access. Live Earth's share features would also allow administrators to send information in real-time to law enforcement at their discretion, ensuring swift involvement if necessary.

Key Takeaway: New Technology and Data Insights Gives Public Schools Power Over Their Security

When students walk through the campus entrance and take a seat at their desk, they deserve to be in a safe environment free from concerns of threats like bullying, vandalism, or worse, a violent attack. Educators, administrators and school safety officials are tasked with maintaining an environment that is secure and conducive to learning.

Though budget constraints may limit safety resources in the realm of physically present armed officers, new technology provides many solutions that can enhance the security of a campus immediately. Schools that adopt a combined technology solution will be able to handle the threat of violent attacks better, and will also be able to mitigate the pervasive daily threats such as the illegal substances on campus, or bullying.

Schools looking to increase security within their budgetary means need a centralized command center that gives them eyes and control of their campus. Leveraging VMS, door access, radio GPS, texting, and emergency alerting systems are extremely valuable investments. When these systems are visualized on an IoT platform such as Live Earth, school administrators have a central point for security that gives them enhanced awareness and actionable insights. With a combined technological solution such as this, students will be walking into a safer environment, parents will be reassured their children are safe, and school staff and administrators can focus on providing the best level of education possible.

[Schedule A Demo](#)