

# Building a Safer School Ecosystem

## *A Comprehensive Guide*



## TABLE OF CONTENTS

About This Guide .....	3
Who Is Eastern DataComm? .....	4
Parts of the School Safety Ecosystem.....	6
The Value of Integrating School Safety Ecosystem Components.....	11
The Value of Integrating Video Surveillance and Access Control.....	13
Addressing the Needs of All Populations.....	14
Eastern DataComm’s LENS + OPTICS .....	15
The Country’s Drive for Safer Schools.....	17
Key Takeaways .....	19

## About This Guide

Keeping our school communities connected and protected is a joint effort undertaken by entire communities. From administrators to teachers to parents, guardians, law enforcement officers, school board officials, PTA members, and all those in between, **when it comes to school safety, we're all in this together.**

With that unifying focus in mind, we invite you to use this document as a resource for better understanding the technology components that compose the School Safety Ecosystem. Leverage the knowledge held within to respond to the needs of your school community in ways that make sense. Employ this information to prevent potential issues from becoming challenges, or at worst, tragedies. And ultimately, look to this guide as a resource to empower swift and effective response during an emergency.

## An Introduction to the School Safety Ecosystem

Throughout this guide, you will see references made to the School Safety Ecosystem. This term posits a unique and different way to address school safety and security. It speaks to an approach that is holistic, robust, and thorough – one where different technologies work in unison to achieve the same goals.

When we look at schools from an ecosystem perspective, we recognize that comprehensive technology approaches are the best avenue to pursue for a multitude of reasons. They provide swift and effective notification and response during an emergency. They take into account the communications needs of all the key stakeholders who play vital roles in the response and corrective action needed to properly address emergency situations. And most importantly, they are easy to use, especially in moments when tensions are high.

In the wake of tragedies like those that occurred at Robb Elementary School in Uvalde, Texas, and Stoneman Douglas High School in Parkland, Florida, we believe it is vital to consider how we, as contributors in a variety of positions, can advocate for and implement the most complementary and effective emergency response and notification policies, procedures, and technology solutions.

Enclosed, you'll find relevant data, real examples (in the form of case studies), and expert insight in an effort to help leaders in education begin to assess their current school safety ecosystem (SSE) and recognize potential areas for improvement.



**WHEN IT COMES TO  
SCHOOL SAFETY,  
WE'RE ALL IN THIS  
TOGETHER.**

# Who Is Eastern DataComm?

## Eastern DataComm and the Society of Communications Technology Consultants International's Vendor Advisor Council

Eastern DataComm is a proud member of the Society of Communications Technology Consultants International's Vendor Advisor Council. The Society of Communications Technology Consultants International is a professional organization that includes only experienced, rigorously vetted consultants. As a member of the Vendor Advisor Council, Eastern DataComm and the council's other members dedicate themselves to sharing their expertise and guiding their clients toward the right-fit solutions to address their service, products, and informational needs.

Our Eastern DataComm<sup>1</sup> team is composed of experienced technology professionals. Over the span of 35+ years, our advisors and technicians have become experts in the tools that keep school, business, and municipal environments connected and protected. We engineer solutions built around safety – in response to customer needs and in reaction to tragedies across the country, our team remains steadfast in our commitment to making a safer tomorrow starting with the solutions we implement for our customers today.

We've also found that in circumstances where technology, policies, processes, or procedures fail to attain their safety objectives, disastrous and devastating results often follow. A door propped open, a garbled intercom message, blind spots on video surveillance footage, an SMS text emergency notification that doesn't reach every student or staff member: These seemingly small breakdowns in the school safety ecosystem can end in catastrophe – be that physical damage to buildings and grounds, emotional trauma resulting from unmitigated incidents, or at worst, loss of life.

At Eastern DataComm, we believe that right-fit technology can remove the potential for human error and avoid a variety of mishaps like those enumerated above. We take a diagnostic and consultative approach to working with clients, which allows us to pinpoint the solutions that work best to ensure the safety of their community. Furthermore, we assist with integrating these technology solutions so that they work in unison, fortifying the safety ecosystem.

We have watched as headline after headline pervaded our news outlets with the latest tragedy. We refuse to sit idly by when prevention is possible. While we cannot stop violence, we can create technology solutions that drastically reduce the potential for destruction and fatality.

At the core of the School Safety Ecosystem is emergency notification and response. As such, our focus is on designing, implementing, and refining these systems so that the rest of the SSE can function most effectively when every second counts. You will see that reflected in the information detailed within this guide.

## About Three Corners

Three Corners<sup>2</sup> is a consulting company that specializes in school district K-12 training and workshops for New Jersey and New York. The consulting firm has expanded to include student and parent presentations as well. Lieutenant Adam Drew is a certified police officer with a large New Jersey police agency and is in his 19th year of service. Adam is a certified School Resource Officer (SRO) and has dedicated his career to serving in New Jersey's school districts. Specifically, Adam has worked directly statewide with school administrators, teachers, students, and parents on a wide range of problem-solving solutions.

<sup>1</sup> Communication and Safety Solutions. Eastern DataComm. (2023, August 1). <https://easterndatacomm.com/>

<sup>2</sup> Three Corners. (2022, August 31). <https://www.three-corners.com/>

# Lessons Learned from Tragedy Light the Way to Safer School Ecosystems

As of August 2023, there have been over 20 school shootings in the current year alone. When we look at mass shooting incidents outside of schools, [that number grows to over 400 nationwide](#)<sup>1</sup>.

Heartbreaking statistics to report in themselves, but when taken along with the sheer trauma of such events for all those involved, the truth is clear: There has never been a more important time to protect our school communities.

*In light of that devastation, there are valuable safety [lessons to be learned](#)<sup>2</sup> including:*

- The need to leverage technology to remove as much potential for human error as possible
- The rationale for developing safety strategies that meld policy, procedure, and multimodal, clear, and effective communication systems
- The importance of access control and video surveillance to augment the SSE
- The benefits of integrating technology solutions so they work in unison during emergencies to deliver multi-modal messages that are consistent, clear, and actionable
- The challenges that dead zones and blind spots present for message delivery
- The limitations of only using one mode of emergency communication, like phone apps
- The availability of funding sources for safety technology enhancements

With lessons from past tragedies in mind, let's begin by exploring the School Safety Ecosystem.



<sup>1</sup> LeBlanc, P., & Choi, A. (2023, July 24). United States tops 400 mass shootings in 2023 | CNN politics. CNN. <https://www.cnn.com/2023/07/24/politics/us-400-mass-shootings/index.html>

<sup>2</sup> School Safety Lessons: Insights & Strategies from 2022–23. Eastern DataComm. (2023, May 10). <https://easterndatacomm.com/school-safety-lessons-learned-2022-2023/>

# Parts of the School Safety Ecosystem



**The School Safety Ecosystem**<sup>1</sup> provides a holistic perspective on school safety and physical security. This approach involves an interplay between personnel, policy, procedure, and technology. It includes, but is not limited to: key players like police and school safety officers, proper threat assessment, procedures, plans, and protocols. The SSE also includes technology and the corresponding infrastructure that impacts how fluidly and efficiently a school responds prior to, during, and after an emergency.

As with many things, one particular approach to school safety may not address all of the specific needs of an educational community. To put it succinctly: One solution does not fit all.

It's best to enhance the SSE by considering the unique attributes of a school population as a whole. Each school has its own geographic layout, student needs and abilities, etc. For this reason, customization is key when designing, constructing, and implementing the policies, procedures, and supporting technologies that compose the SSE for each school system or district.

With that caveat in mind, let's take a closer look at one foundational SSE technology component that enhances unified communication and emergency response – Paging Systems.

<sup>1</sup> Technology, School Safety Ecosystem: Fostering safer schools. Eastern DataComm. (2023, January 31). <https://easterndatacomm.com/technology-school-safety-ecosystem/>



## Paging Systems

**Paging systems**<sup>1</sup> are one of the most critical but frequently overlooked or neglected technology systems in place in many schools. Often, these systems are some of the oldest technology assets on campus grounds. Aging or defunct equipment can lead to a lack of reliability and less-than-optimal sound quality.

These systems are integral to emergency response and an essential piece of the overall SSE. This is because, when properly planned and implemented, paging systems can deliver automated and non-automated messages clearly, concisely, and quickly across buildings and grounds. This keeps communication fluid for daily use as well as providing life-saving message delivery in the event of an active threat.

## Bell + Clock Controllers

**Bell systems and clocks**<sup>2</sup> have been and continue to be a core feature of nearly every classroom across the country. So, how does this staple of school culture impact the SSE? For starters, they bring predictability, reliability, and accuracy to the daily agenda.

Bells and clocks that offer a user-friendly interface to program, adjust, and synchronize provide an added sense of security to schools. They make emergency or critical event reporting more effective. These systems can also integrate with intercoms, access control, and other systems to provide a comprehensive, holistic approach to school safety.

To learn more about Bell + Clock Controllers, scan the QR code below.



“Security procedures are our safety net, and paging systems are a vital thread in that net. When our procedures are well-planned and executed, paging systems become a seamless part of our emergency response, facilitating clear and concise communication. This is the linchpin that keeps our school community informed and safe in everyday situations and, crucially, during active threats.”

- Adam Drew  
Three Corners Consulting

To learn more about Paging Systems, scan the QR code below.



<sup>1</sup> Synchronized solutions for educational facilities. Eastern DataComm. (2022, November 7). <https://easterndatacomm.com/school-safety-paging-bells-and-clocks/>

<sup>2</sup> Synchronized solutions for educational facilities. Eastern DataComm. (2022, November 7). <https://easterndatacomm.com/school-safety-paging-bells-and-clocks/>



## VoIP Phone Systems

Effective voice over internet protocol, or [VoIP phone systems](#)<sup>1</sup>, provide crystal-clear call quality and integrate with a variety of other SSE technology solutions. The right-fit VoIP phone system is not only easy to program and use for daily communication, but it also becomes an effective tool in the event of an emergency by removing human error through automating response – and even initiating lockdown procedures.

Your VoIP phone is more than simply an extra piece of desk equipment. When an active threat is recognized, there is no time to decipher muffled or fragmented voice service. Clarity is key! For that reason, our team at Eastern DataComm always encourages our customers to view their VoIP systems as a powerful safety and communications asset and a critical component needed to complete their SSE.

## Lockdown + Emergency Notification Systems

Not all emergency notification systems are created equal.

In an effort to better protect their communities, many customers first come to us with systems they have pieced together themselves. And while this is a valiant effort, it often results in a lack of total coverage across the campus, delayed notifications, undelivered notifications, or notifications in one communication mode that only reach certain populations, not all as intended.

Our LENS + OPTICS solution changes all of that with push-button notification, simultaneous calls to the police, and multimodal notification so all students, faculty, and staff can respond effectively.

You'll find practical examples of our LENS + OPTICS system in action later in this paper. But for now, consider an integrated emergency notification system a vital part of your SSE.

EXPERT ADVICE

“Imagine the chaos of an active threat situation. In those crucial moments, there’s no room for muffled or fragmented communication. Clarity becomes the difference between confusion and a swift, coordinated response. VoIP phone systems ensure crystal clear call quality, removing any doubt or uncertainty when we need it the most.”

- Adam Drew  
Three Corners Consulting

EXPERT ADVICE

“As a school resource officer, I can attest to the critical importance of having an effective and comprehensive emergency notification system in place. Not all systems are created equal, and it’s not uncommon for schools to piece together their own solutions in an effort to protect their communities. While this is a well-intentioned approach, it often leads to gaps in coverage, delayed notifications, and a failure to reach everyone as intended.”

- Adam Drew  
Three Corners Consulting

To learn more about VoIP Phone Systems, scan the QR code below.



To learn more about Lockdown + Emergency Notification Systems, scan the QR code below.



<sup>1</sup> VoIP phone systems for school, business & government sectors. Eastern DataComm. (2023, August 11). <https://easterndatacomm.com/solutions/voip-phone-systems/>



## Video Surveillance

[Video surveillance solutions](#)<sup>1</sup> allow you to keep a watchful eye on your buildings and grounds around the clock. These systems are a core component of your SSE because they can act as a first line of defense and deterrence when it comes to unwanted intruders and potential emergencies. Despite protective efforts, should a breach or incident occur, video surveillance provides potential evidence that can be used in solving a case or presented in court should there be legal proceedings. Clearly, in these cases, an image is worth more than a thousand words!

## Access Control

[Access Control Systems](#)<sup>2</sup> keep schools connected and protected by ensuring you're in control of who has entry to your buildings and grounds.

While you can explore more about the best practices for [selecting an access control system](#)<sup>3</sup> in our blog, it bears noting that this solution also enhances the SSE by helping school communities to create routines and protocols related to how visitors access the buildings and grounds. Through authorizing or restricting permissions for access to specific areas of your campus, as well as locking down buildings should an emergency occur, the benefits of this system are obvious.

EXPERT ADVICE

"Video surveillance solutions play an invaluable role in our efforts to enhance school security. These systems are not just passive observers; they are active defenders and potential lifesavers."

- Adam Drew  
Three Corners Consulting

To learn more about Video Surveillance, scan the QR code below.



EXPERT ADVICE

"Implementing robust security procedures and a well-designed access control system are pivotal parts of your security procedures. It's not just about controlling who enters and exits our school; it's about creating a culture of security and a framework for efficient routines and protocols."

- Adam Drew  
Three Corners Consulting

To learn more about Access Control, scan the QR code below.



<sup>1</sup> *Video surveillance solutions.* Eastern DataComm. (2023, May 12). <https://easterndatacomm.com/solutions/video-surveillance/>

<sup>2</sup> *Access Control Systems.* Eastern DataComm. (2023, July 6). <https://easterndatacomm.com/access-control-technology/>

<sup>3</sup> *What to look for when selecting your access control system: Blog.* Eastern DataComm. (2023, February 2). <https://easterndatacomm.com/select-access-control-system/>



## Wired and Wifi Data Networks

Whether it's your [WiFi data network or a wired solution](#)<sup>1</sup>, the way you send and receive information within a school or district, or even a remote location, can greatly impact the safety and physical security of your students, staff, and visitors.

Above all, network stability and reliability are key elements of a truly sound SSE.

"As a school resource officer, I can't emphasize enough the pivotal role that robust security procedures play in ensuring the safety and well-being of our school community. Whether we're talking about WiFi data networks or wired solutions, how we transmit and receive information within our school or district, even in remote locations, has a profound impact on security."

- Adam Drew  
Three Corners Consulting

To learn more about [Wired and Wifi Data Networks](#), scan the QR code below.



## Structured Cabling and Wiring

Structured cabling and wiring provide schools with stability, integrity, availability, and reliability. This means that your school community can depend on the methods you use to send and receive vital information because a solid supporting core infrastructure is in place.

With proper installation, this part of the SSE provides yet another added layer of security and peace of mind.

To learn more about [Structured Cabling and Wiring](#), scan the QR code below.



<sup>1</sup> *Wired & Wireless Network Solutions*. Eastern DataComm. (2023, May 12). <https://easterndatacomm.com/solutions/wired-wireless-networks-and-infrastructure/>

## The Value of Integrating School Safety Ecosystem Components

Once we begin to look at school safety from a holistic ecosystem perspective, the importance of interconnectedness between supporting technology systems becomes clear.

Alternatively, potential avoidable vulnerabilities exist when we rely too heavily on one sole solution to address the entire emergency communications needs of a community.

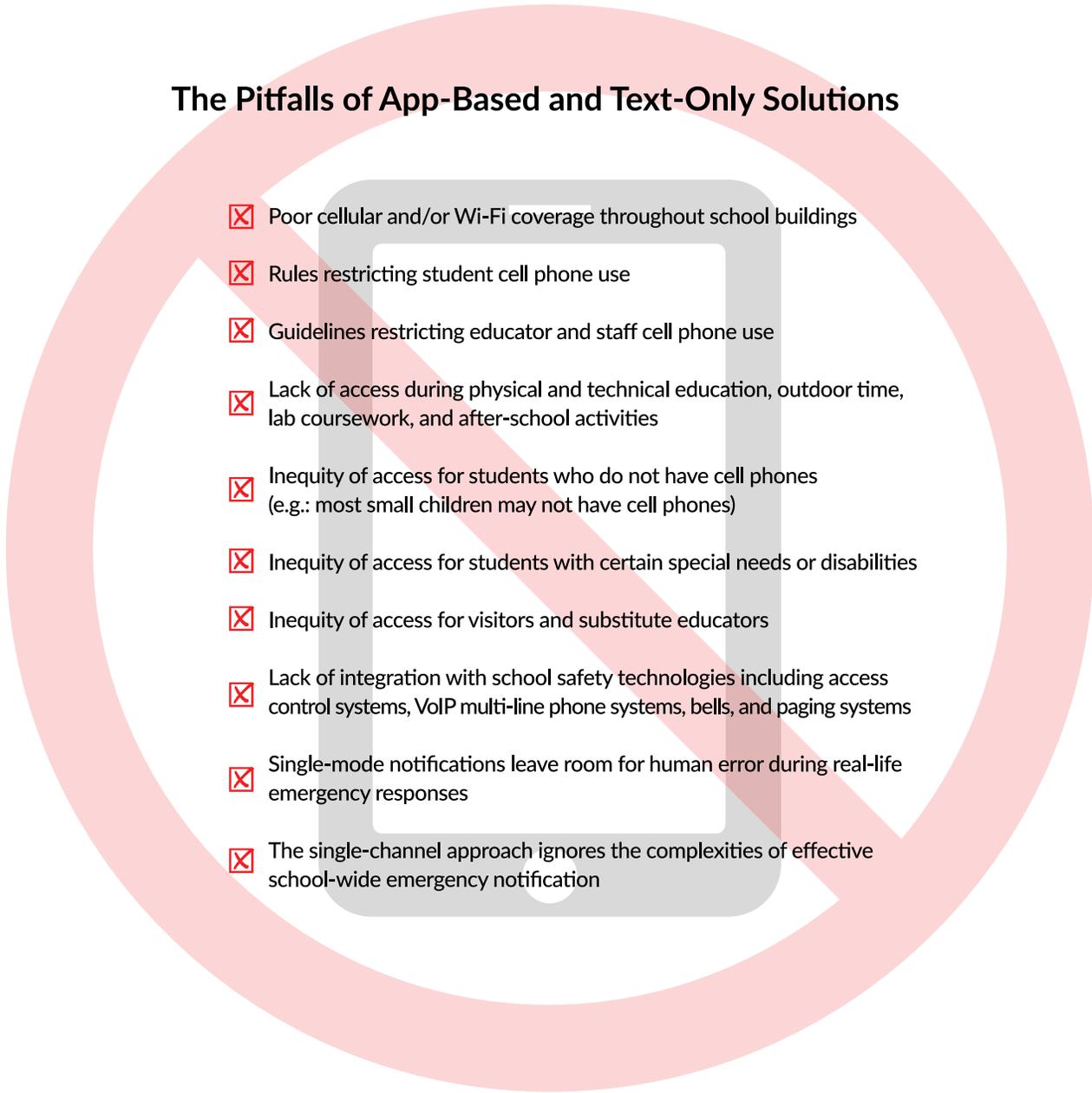
In this section, we'll explore the perils of unimodal solutions and the advantages of robust multimodal systems working in unison.

## The Problems with Single-Mode Solutions

An alarming trend our Eastern DataComm team has seen in response to the emergent needs for improved school safety environments is one that we strongly discourage our customers from pursuing – that is the selection of one 'be-all, end-all' solution to rely upon for notification dissemination.

Unfortunately, many tech companies in the education space praise app-based solutions as an 'easy and affordable' fix. However, this leads to unanticipated vulnerabilities that school leaders simply cannot afford to risk. Even the most robust app-based solutions cannot be relied upon as the sole mechanism for addressing the multifaceted needs of their campus population.

### The Pitfalls of App-Based and Text-Only Solutions

- 
- ❌ Poor cellular and/or Wi-Fi coverage throughout school buildings
  - ❌ Rules restricting student cell phone use
  - ❌ Guidelines restricting educator and staff cell phone use
  - ❌ Lack of access during physical and technical education, outdoor time, lab coursework, and after-school activities
  - ❌ Inequity of access for students who do not have cell phones (e.g.: most small children may not have cell phones)
  - ❌ Inequity of access for students with certain special needs or disabilities
  - ❌ Inequity of access for visitors and substitute educators
  - ❌ Lack of integration with school safety technologies including access control systems, VoIP multi-line phone systems, bells, and paging systems
  - ❌ Single-mode notifications leave room for human error during real-life emergency responses
  - ❌ The single-channel approach ignores the complexities of effective school-wide emergency notification

App- and text-based solutions provide many benefits, but when used in isolation, communications gaps become apparent. First, you're running under a false assumption that messages delivered by these means will get to everyone, everywhere on campus. These types of solutions are predicated on the fact that message recipients will have access to their phone or other smart device when an alert deploys. How often do teachers, staff, and students have their phones in their hands when they are in class, on the sports fields, etc? And without readily available means to receive that communication, many can be left in the dark.

Next, there is the all-too-common challenge of school building wifi and cellular service. Many schools across the country often have poor or spotty coverage in certain areas. For instance, remote parking lots, stairwells surrounded by concrete, and sports fields can fall into this category. That means app or text messaging may not get delivered to those who do have their devices handy when the notification is deployed.

Getting to a larger issue raised by these first two points, there's the clashing between app-based notifications and school policy. Many schools restrict the use of cell phones by their students and staff. In an emergency, those policies would be in direct opposition to the practice of receiving an urgent text or app-based message. Students or staff may not even have access to their phones simply due to compliance with school requirements. In addition, participation in labs and physical education classes often precludes the ability to readily access a phone, even if there isn't a restrictive policy in place.

Also worth mentioning: the matter of access inequity. Some students, especially those with financial considerations or special ability needs, may not have the same access to these app-based alerts.

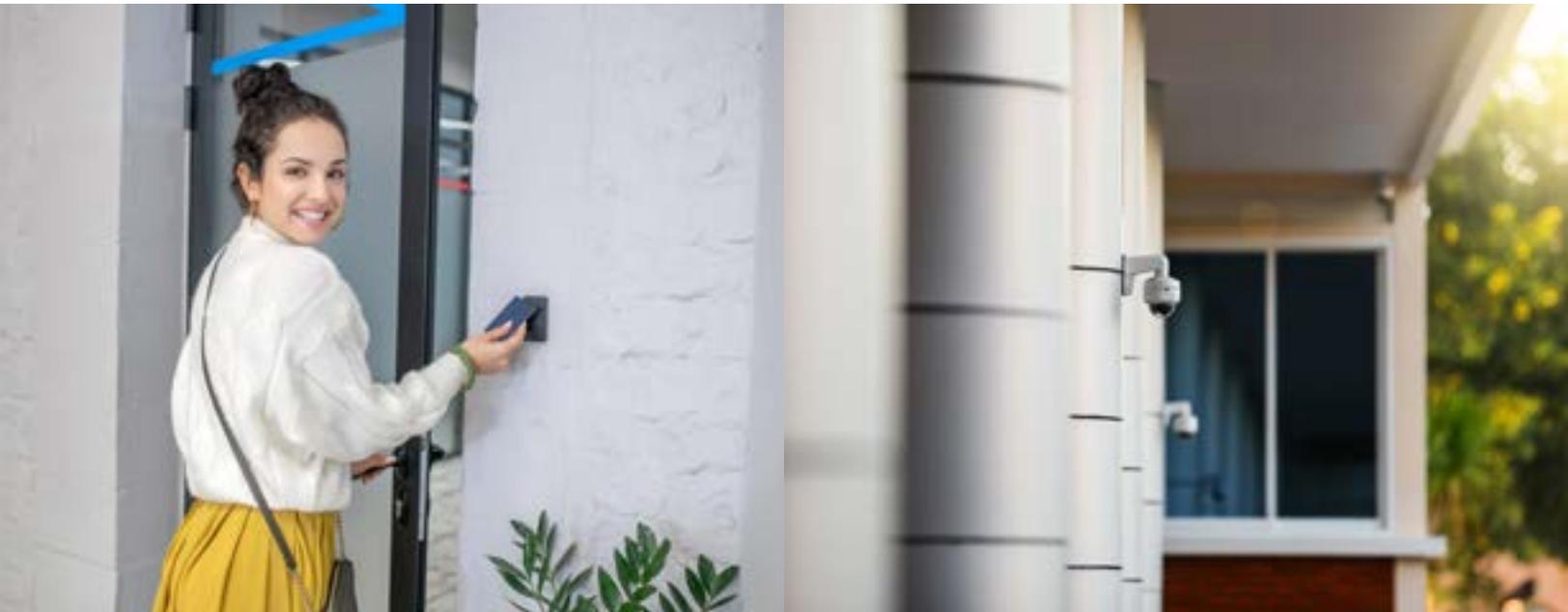
And finally, these systems may lack integration with systems like access control, VoIP phone systems, and automated paging systems, leaving open the door for destruction and further restricting what law enforcement and first responders can accomplish to achieve swift corrective action.

Simply put: Single-mode notifications are not a sufficient means of emergency notification.

"With my years of experience as a school resource officer, I want to emphasize the critical importance of avoiding the reliance on a single 'be-all, end-all' solution for school safety. The quest for an easy fix in the form of app-based solutions may seem tempting, but it introduces unforeseen vulnerabilities that we cannot afford to overlook.

"While app-based and text-based solutions have their merits, they fall short when used in isolation. The assumption that everyone will have their phones readily available during an emergency is a risky one. In the chaos of a crisis, not everyone will be holding their device, leaving some in the dark."

- Adam Drew  
Three Corners Consulting



# The Value of Integrating Video Surveillance and Access Control

## The School Safety Benefits of Video Surveillance and Access Control

### ADDRESS POTENTIAL AREAS OF VULNERABILITY

Video surveillance and access control systems allow you to identify potential safety blindspots and help to prevent incidents before they occur.

### INTEGRATING THESE SYSTEMS DELIVERS PEACE OF MIND WHEN IT MATTERS MOST

When using access control and video surveillance together in your school safety ecosystem, you can be confident that your organization is equipped to respond with speed and efficiency when every second counts.

### THOUGHTFULLY MITIGATE RISK AND PROTECT YOUR SCHOOL COMMUNITY

Incident prevention and response planning are essential. Consider potential risks and implement video surveillance and access control systems that address those areas of potential liability to take your school's safety profile to the next level of protection.

### POTENTIAL FOR HOLISTIC INTEGRATION OF OTHER SOLUTIONS

Solutions that integrate seamlessly leave the door open for future additions (like visitor management systems, gunshot detection systems, and even facial recognition). Streamlined integration means solutions scale with you and with other safety technological advancements as they become available.



Video surveillance solutions provide a uniquely holistic view, giving you insight on the happenings within your buildings and on your grounds. These systems offer a way to monitor employee, staff, student, and visitor traffic, create records of daily activities, and protect against potential threats. Access control systems allow administrators to require credentials of those who wish to access your buildings, or areas within them. As an added benefit, these systems offer insight on a multitude of activities and events, including identification of potential threats and security breaches.

Furthermore, integrating these two technologies compounds their benefits. The result is a more robust safety and physical security solution that provides you with actionable insights that deepen the strength of your SSE as whole.

As we explore in a recent article on [video surveillance and access control integration](#)<sup>1</sup>, there are a variety of benefits to harnessing the power of both solutions, allowing them to work in unison to your advantage. These systems offer school administrators the ability to address potential areas of vulnerability by identifying possible security blind spots. Correcting for those vulnerabilities ultimately leads to preventing issues before they occur.

"Video surveillance provides a watchful eye, capturing the daily activities of employees, staff, students, and visitors. It allows us to monitor traffic, create records, and, most importantly, detect and deter potential threats. Access control systems, on the other hand, ensure that only authorized individuals can enter specific areas, adding an extra layer of security and accountability."

- Adam Drew  
Three Corners Consulting

EXPERT ADVICE

<sup>1</sup> *Enhancing school safety with video surveillance and access control*. Eastern DataComm. (2023, April 25). <https://easterndatacomm.com/the-benefits-of-enhancing-your-districts-comprehensive-school-safety-ecosystem-with-video-surveillance-and-access-control/>

## Addressing the Needs of All Populations

Communication only goes as far as the ability for that message to be acknowledged and understood. For this reason, addressing the varying sensory abilities of your population is crucial and requires a multimodal approach. Another benefit of integrating safety and communications technology solutions is the ability to provide equitable access to vital resources and information during emergencies.

Students with special needs including visual or auditory impairments, those without access to a cell phone, and those who have physical or developmental challenges are best served by a holistic approach to emergency notification and response. Providing multiple modes of communication and notification ensures that all members of your community are given information in a way that they can understand and interpret without losing the message in translation.

Here is an example of the accessibility-related value of integrating these technology solutions to create a multimodal approach to safety.

### School for the Blind

[A Hudson County New Jersey School for the Blind](#)<sup>1</sup> serves a unique population of students – those with visual impairments. Keeping their school community safe requires an approach that is truly sensitive and understanding of the abilities of their population. When our Eastern DataComm team partnered with this school to address their safety ecosystem needs the results included:

- A school-wide and streamlined communication system including VoIP phone system, upgraded PA system, and integrated clock controller
- The LENS system for enhanced emergency response complete with ADA-compliant and accessible technology approaches for the visually impaired
- Pre-recorded announcements, audio recordings, and simultaneous calls to 911 and the police

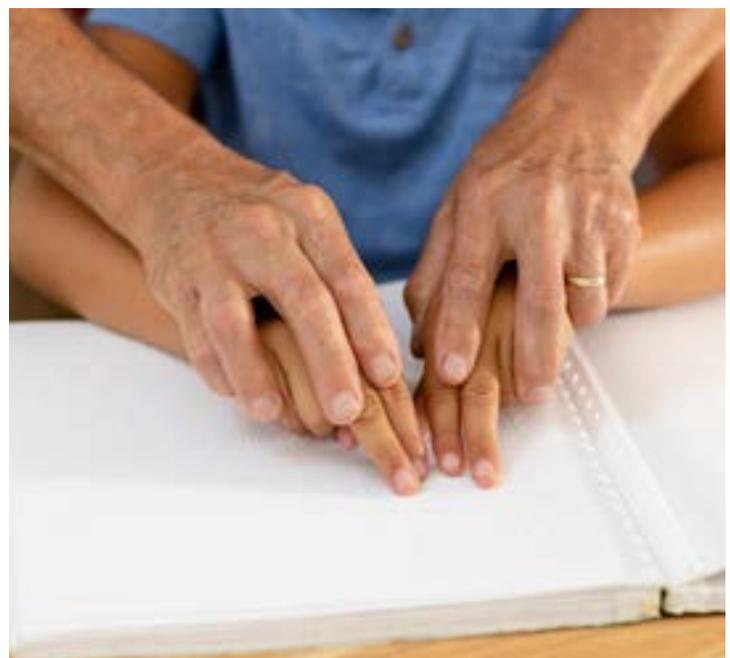
“It really is the total package. They have the right equipment. They have a great team, each with their own area of expertise. They say they’re going to do something in a certain amount of time and they do it within that time. Whenever we have had a problem, even if it isn’t their responsibility, they have helped us. I would highly recommend Eastern DataComm.”

- Facilities Director

“I’ve witnessed firsthand the importance of addressing the diverse needs of our school population when it comes to security procedures. Effective communication is not just about sending a message; it’s about ensuring that the message is received and understood by everyone, regardless of their sensory abilities. Integrating safety and communications technology solutions is a game-changer in this regard, as it allows us to provide equitable access to vital resources and information during emergencies. We must remember that our school community is composed of students with a wide range of needs, including visual or auditory impairments, limited access to cell phones, and physical or developmental challenges.”

- Adam Drew  
Three Corners Consulting

To read more about this case study, scan the QR code below.



<sup>1</sup> A Hudson County New Jersey School for the Blind. Eastern DataComm. (2022, October 13). <https://easterndatacomm.com/st-josephs-school-for-the-blind/>



## Eastern DataComm's LENS + OPTICS: An Example of Streamlined Emergency Notification Technology Integration

Now that we've established the value of integrating your school's emergency notification and communication technology solutions, it's time to review a practical example of that integration.

As 35+ year veterans of the industry, we can think of no better way to demonstrate powerful benefits of integration than with our own [Lockdown and Emergency Notification System](#)<sup>1</sup>, LENS + OPTICS.

While you can review our in-depth article on this topic to discover exactly [what sets LENS apart from other solutions](#)<sup>2</sup>, here is a brief overview of how this system integrates key assets within the SSE so that human error is reduced and swift, effective responses are facilitated when they matter most.

LENS + OPTICS allows you to immediately alert everyone during an urgent situation. At the press of a button, school districts can automatically initiate a lockdown, evacuation, or shelter-in-place during an active threat or any other emergency situation.

The solution includes a self-monitoring feature so you can keep a constant eye on your system. Its rapid response, comprehensive coverage, and multimodal integrations allow for near-instantaneous and holistic notification with crystal clear sound, visual cues, and calls to emergency personnel.

System Features Include:

- One-button notification (through an app, phone, or physical button throughout the buildings and grounds)
- Scalable integrated technology
- Automated notifications both visual and auditory
- Classroom and office phone activation and simultaneous 911 call placement

Wondering what this level of integration can do to protect your school or district? Let's review the case study on the next page:



To learn more about  
**LENS + OPTICS**,  
scan the QR code below.



<sup>1</sup> Emergency notification system. Eastern DataComm. (2023, May 12). <https://easterndatacomm.com/solutions/emergency-notification/>

<sup>2</sup> Selecting an emergency notification system. Eastern DataComm. (2023, April 25). <https://easterndatacomm.com/selecting-your-emergency-notification-system-what-sets-lens-optics-apart/>

## A Hunterdon County New Jersey High School

One of our customers, a Hunterdon County New Jersey High School, is home to one of the most beautiful campuses in the state. That includes its sprawling grounds full of sports fields and outdoor mixed-use spaces. That expansive outdoor space presented unique safety challenges that Eastern DataComm met with a holistic and integration-focused approach to emergency notification and response. Results included:

- Integration of diverse technologies that provided automated communications in the event of an emergency
- Implementation of a VoIP communications platform that served as the foundation of the solution, enabling notifications and lockdown procedures to be triggered by entering a code on a phone or smart device app
- Installation of an upgraded PA system working in concert with phones and Eastern DataComm's Lockdown and Emergency Notification System (LENS) to automatically play certain pre-recorded announcements
- Use of strobe lights and digital signage for visual notification
- Integration of a radio-based solution that allowed for speakers and strobe lights across the campus, including outdoor areas
- Utilization of a smart device app that enables administrators and other personnel to initiate lockdown procedures remotely, summoning help in the event of an emergency

"We couldn't have done this without Eastern DataComm's help. I hope to God we never have to use this system, but in the event that we do, we all feel better knowing that we're better prepared. It's all about saving lives."

- IT Manager

Words on a page only go so far to convey just how crucial this system is to preserving the safety of a school campus. To view a video of the system in action, scan the QR code below.



## What an Industry Expert Has to Say about Integrating Lockdown and Emergency Notification Systems

"As a school resource officer, I understand the paramount importance of having streamlined and effective security procedures in place. One prime example of such integration is Eastern DataComm's Lockdown and Emergency Notification System, LENS + OPTICS, which serves as a testament to the power of combining emergency notification and communication technology solutions.

"Some of the notable features of this system include one-button notification, scalable integrated technology, automated visual and auditory notifications, and the ability to activate classroom and office phones while simultaneously placing a 911 call. These features exemplify the level of precision and efficiency that is achievable when integrating advanced technology solutions into our School Safety Ecosystem."

-Adam Drew  
Three Corners Consulting

EXPERT ADVICE



## The Country's Drive for Safer Schools

With the multitude and severity of violence plaguing schools across the country, state and federal resources to support protective measures on campuses are growing by the day. Read on to learn more about opportunities that can help you fortify your campus.

## An Increase in Funding Sources

One sign of hope comes from the emergence of available funding for school safety technology. As Eastern DataComm shares in greater detail [in our article on the topic](#), there is now a wealth of grant opportunities focused on school safety improvements. To read the full piece, scan the QR code below.



But even as more opportunities continue to appear, the challenge for many schools and districts at this moment is two-fold: 1.) Stakeholders need to be made aware of the existence of grants and other funding programs. 2.) School leaders need to know what grants and funding sources make the most sense to address their unique safety and communications needs.

Eastern DataComm helps our customers to respond to a [variety of emergencies](#)<sup>1</sup> and to do so in a way that respects their goals and budgets.

To keep apprised of funding opportunities worthy of pursuit, stay connected with the Eastern DataComm team by following our social media accounts.



## Enhancements in FCC Regulations for Phone System Capabilities

Recent legislation governing phone systems and how they must function in the event of an emergency also indicates our nation's continued push for safer schools.

RAY BAUM'S Act and Kari's Law place additional regulations on multi-line phone systems.

**RAY BAUM'S Act** requires all multi-line phone systems to send a dispatchable location along with a "call back" number each time a 911 call is placed. This helps to ensure that police and other emergency responders know where to send resources in an emergency. It helps these professionals to get a clear sense of the best possible response.

**Kari's Law** requires those who use a multi-line phone system to allow users to dial 911 without entering a prefix. It also necessitates that notification to another resource (for many schools this may be a security office) is received whenever a 911 call is placed.

For many schools and districts, the implications of these regulations are clear: Determine if your existing multi-line VoIP phone system offers this functionality. If not, work with a team of experienced professionals to make the necessary upgrades to improve our safety profile and keep you within FCC compliance.



[facebook.com/EasternDataComm](https://facebook.com/EasternDataComm)



[twitter.com/easterndatacomm](https://twitter.com/easterndatacomm)



[www.instagram.com/easterndatacomm](https://www.instagram.com/easterndatacomm)



[linkedin.com/company/eastern-datacomm-llc](https://linkedin.com/company/eastern-datacomm-llc)

<sup>1</sup> *Emergency notification technology responds to emergencies.* Eastern DataComm. (2023, January 31). <https://easterndatacomm.com/effective-emergency-notification-tech/>

## Real Schools Are Taking Steps to Protect Their Learning Communities

Schools just like yours are making strides in the effort for improved campus safety. Acknowledging the interplay between policy, personnel, procedure, and technology, the tide is now turning to take proactive measures to better safeguard school communities.

You can find a wealth of real-life case studies on our website. View our library by scanning this QR code.



Below is one example of the ways our school customers are creating stronger SSEs through integrated, responsive, and customized security and communications technology solutions.

## A Morris County New Jersey School District

A [Morris County New Jersey School District](#)<sup>1</sup> partnered with Eastern DataComm to enhance how the school community communicates, especially during an emergency.

The results included:

- 20-second lockdown and shelter-in-place response time
- LED signs and beacons as well as pre-recorded announcements to reduce the chance of human error during an emergency to achieve multi-modal notification
- Placement of phones in all buildings and rooms from offices to classrooms and beyond
- Reduced costs by removing the need to perform costly repairs on older technology

“The system has created a nice communication flow with the police ... When we’re doing drills, we can tell them there’s no need to respond or we can say ‘Why don’t you guys go ahead and come in?’

“It creates a nice, ongoing conversation about security because of that constant back and forth.”

-Assistant Superintendent



<sup>1</sup> A Morris County New Jersey School District. Eastern DataComm. (2022, September 1). <https://easterndatacomm.com/dover-school-district/>

## KEY TAKEAWAYS:

### Administrators and Superintendents

- Approaching the enhancement of school or district-wide security and emergency notification from an ecosystem perspective – one that acknowledges the importance of procedure, personnel, and technology working in unison – allows for the safest school environment possible.
- When used in isolation, apps and text-based emergency notifications are not sufficient in emergencies.
- Unique populations benefit from a multimodal approach to emergency notifications; there is no one-size-fits-all solution.
- Integrating SSE technology solutions reduces the potential for human error.
- Funding is available for schools to enhance their safety technology systems.
- Partnering with an experienced technology firm that understands school safety is essential to successfully achieving a connected and protected learning environment.

### Teachers and Staff

- An ecosystem-focused view allows all stakeholders to recognize potential areas of need or strength holistically.
- Educators bring a unique perspective to the table and a practical understanding of the day-to-day within a classroom and on a campus. Use your influential voices to lobby for safety improvements that make sense for your community.
- Solely app-based emergency response or notification systems have limits. Review school policy relating to phone access to ensure policy and practical use do not conflict. Demand more robust solutions if they do.
- Advocate for integrated, multimodal communications systems to ensure all of your students can receive and comprehend emergency messaging.
- Reduce the chance for human error by leveraging technology systems that facilitate clear and rapid communication.

### Parents, Guardians, PTA and School Board Members, and Those Looking to Affect Positive Change in Their Communities

- Understanding the ways that the school or district is staying connected and protected allows you to recognize the campus strengths and potential vulnerabilities. Ask administrators to share their policies, procedures, and supporting technologies so that you comprehend the current safety landscape and can request improvements be made to address potential threats.
- If your school or district is relying solely on app-based or text-based emergency notification, neglecting key communication elements opens the door to safety risks.
- Parents, guardians, caregivers, and those involved in student life play a key role in helping children and young adults to understand the importance of following directives related to emergency situations.
- PTA, School Board, and community members play a pivotal role in advocating for enhanced safety and physical security in their schools and districts.
- All stakeholders should explore and develop familiarity with the power of integrating emergency response technologies so that all messaging is clearly communicated and understood when every second counts.



Stay Connected & Protected with:



Eastern DataComm provides schools, businesses, and municipalities nationwide with end-to-end technology solutions that are the right fit for ever-evolving safety and communications needs. With over 35 years of experience designing, installing, and supporting safety and communications solutions for hundreds of our customers, we remain committed to building a safer tomorrow.

Work with our knowledgeable team to find the best technology solutions for your organization's unique needs.

Connect with our team to address your safety and communications needs.

e: [inquiry@easterndatacomm.com](mailto:inquiry@easterndatacomm.com)

p: 888-902-4091

w: [easterndatacomm.com](http://easterndatacomm.com)