

A photograph of a university campus. On the left is a large, multi-story brick building with arched windows and a central entrance. A paved walkway leads from the foreground towards the building, flanked by green lawns and trees with yellowing autumn leaves. A black lamppost stands on the path. In the background, a modern glass-walled building is visible.

Best Practices for Keeping Students Safe

A Guide to Campus Security



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Securing a Campus *is* a Difficult Task

As an administrator on a K-12 or higher education campus, you've probably spent sleepless nights worrying about protecting the safety of your students. You worry about securing campus property. It's a big responsibility, one that affects the lives of the entire campus population.

For the past several years, statistics show overall campus crime is improving. Yet there has been a spike in school shootings in 2018 and 2019. While this increase may be an anomaly, it strongly reinforces the need for campuses to remain vigilant and continue to look for the best solutions to protect students and staff.

The Unforeseen Can Happen

Administrators have responded to multiple tragic events, such as Columbine, Virginia Tech, and Parkland. They are also responding to parents who expect schools to protect their children. Parents now put security on a level with academics when helping their college-bound children choose a campus to attend.

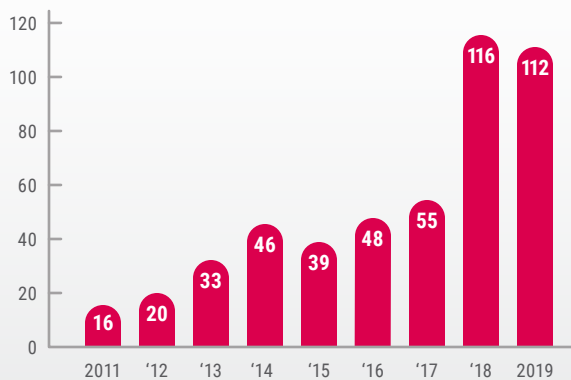
A large portion of secondary education students also include those of adult age who are as equally concerned about a consistently-safe learning environment. Like parents, these adult students want to know the campus they are selecting has their safety and well-being at top of mind.

Security industry solutions – many of them developed for use on campuses – offer help. That's what we do. Since 1970, Aiphone intercoms have protected those in classrooms, offices, dorms, and parking structures. Intercoms can now go wherever students and staff roam campus. Through its widespread use, the Aiphone name has become synonymous with campus security.

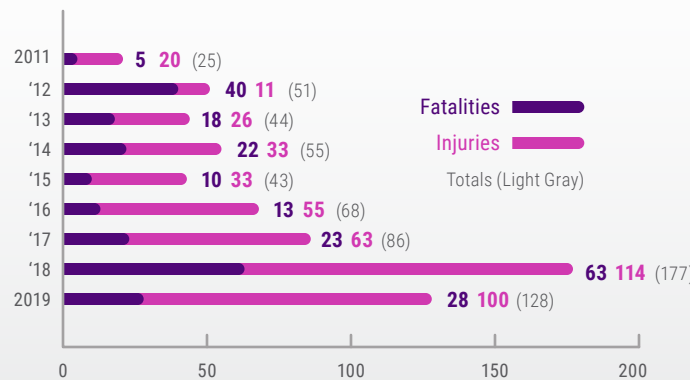
Our commitment to protecting students is why we've created this Campus eBook. Our goal is to provide you with a look at today's options and best practices for securing a campus.

Our students deserve nothing less than our best.

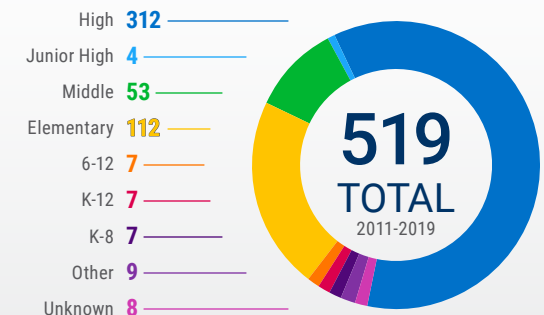
Shooting Incidents by Year



Combined Fatalities & Injuries by Year



Incidents by School Type



Source: Center for Homeland Defense and Security | chds.us/ssdb/category/shooting-incidents-2010-present

Where to Begin?

You've decided your campus needs a new security plan or an update to an existing one. So, where do you begin?

Determine Needs and Expectations



Any project will go much smoother when there is an early agreement from campus decision makers. Talk with top administrators and the IT group to determine needs, existing capabilities, and expectations. Also, don't forget the faculty, campus staff, security personnel, students, and parents. They'll live with the plan every day and likely offer valuable insight. Consider reaching out to your local first responders too. They are another great source of security information.

The support of these groups is critical, so keep them regularly updated as the plan is implemented. You want to get things done right the first time. Since most campuses are working with limited financial resources, effort in the early stages could help save time and money during the run of the project.

Tailor a Plan

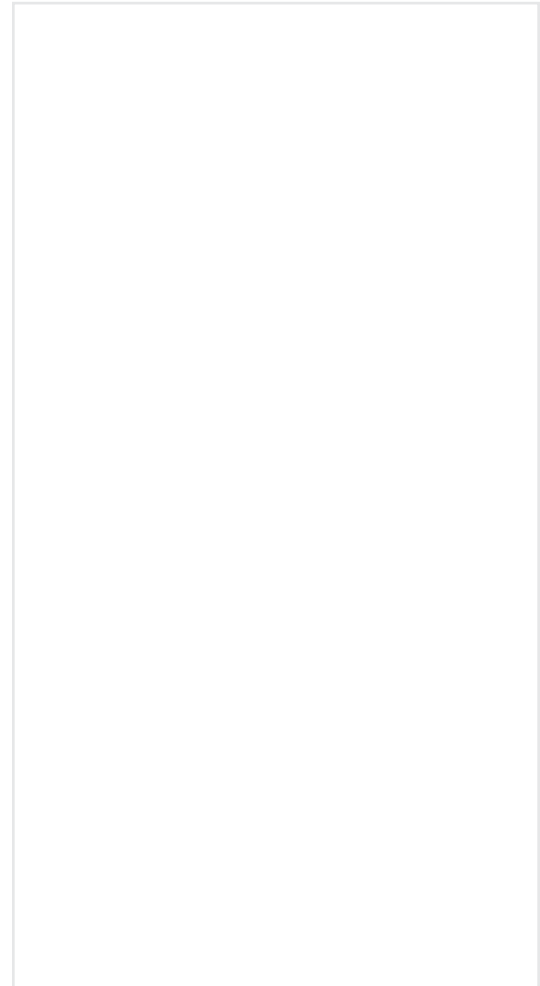
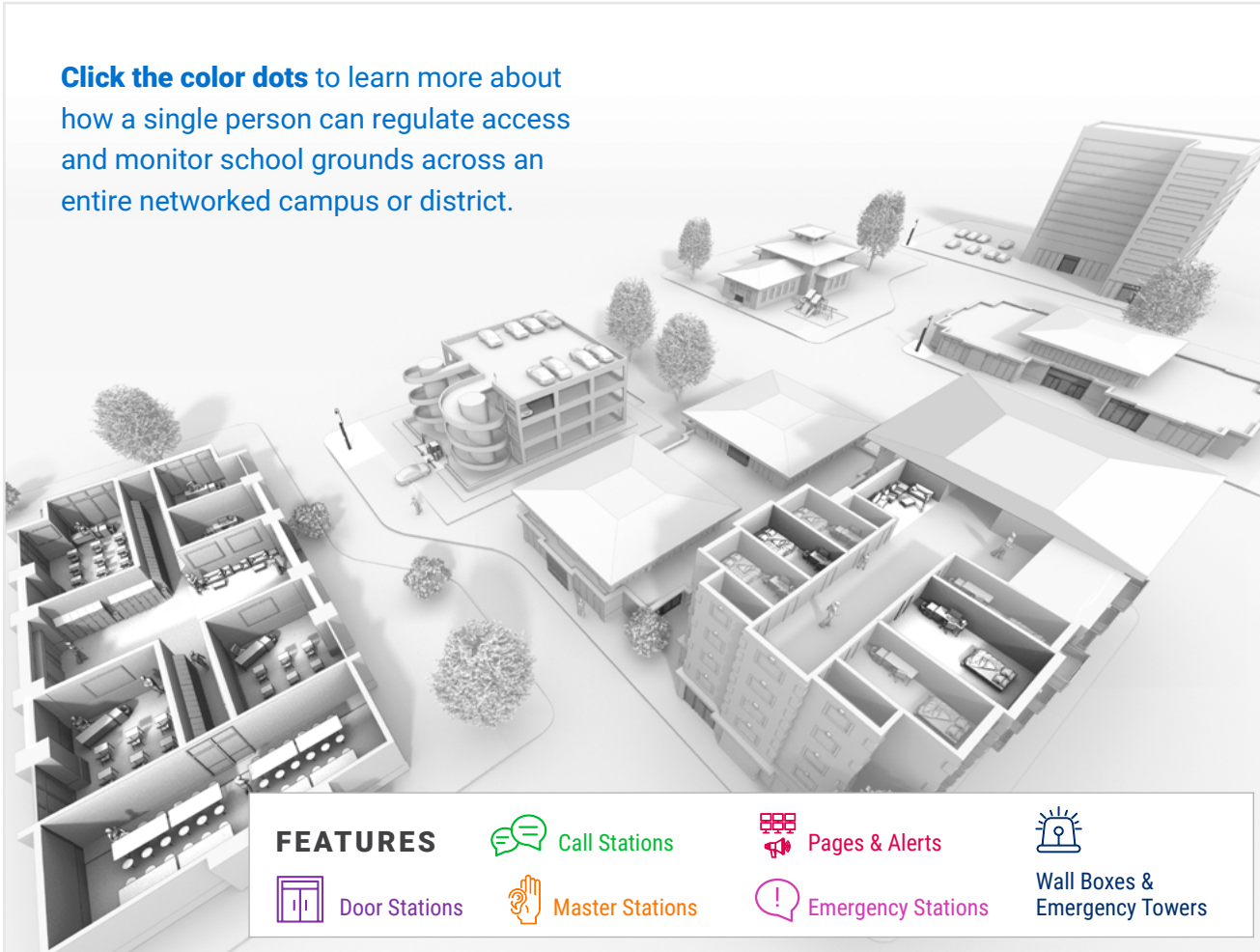


With input from your top stakeholders, you're ready to start thinking about equipment, budgets, and new policies. But security isn't sold as an off-the-shelf, one-size-fits-all plan. This means you'll likely be working with a security integrator to tailor a plan specifically for your campus.

Next up is how to protect your campus.

How to Protect Your Campus

Click the color dots to learn more about how a single person can regulate access and monitor school grounds across an entire networked campus or district.



Best Practices

The 1999 Columbine High School shootings deeply affected communities across the United States. Parents questioned if they could still safely send their kids to school. Concerned administrators asked for help in protecting their students.

Did You Know?

In the past decade, gun-related deaths on school campuses have risen in number, making security and policy efforts a top priority. The causes are being hotly debated in and around the education community.

For nearly 20 years, campus stakeholders – administrators, parents, elected officials, doctors, architects, law enforcement, and the security industry – have met to find answers. From these meetings, solutions – or best practices – began evolving.

Policies, Procedures, and Equipment

Best practices are policies, procedures, and equipment that have been proven to work on campuses of any size. A good example of this is securing building entries.



Most campus shootings happen after the gunman carries a weapon through an unlocked door.

More campuses are keeping doors locked. Controlled access points at key entries add an extra barrier of safety between criminals and students.

Written policies help staff understand how visitors are approved for entry; why doors can't be left propped open; and when to lockdown or evacuate during an emergency. Campuses should also consider training staff to look for signs of distressed, and potentially-violent, students while providing ways to get help for them.

While others have worked on best practices for mental health screenings, stricter discipline codes, and faster law enforcement responses, the security industry has created effective physical security solutions for protecting a campus.

BEST PRACTICE

Ask your security integrator to help set up a security plan specific for your campus and based on today's best practices. There is no one-size-fits-all plan. Assessment teams need to identify and remedy security issues which are unique to each campus.

Indoors

Think of a risk assessment as a road map for your current and future security planning. It's the foundation for security plans. Knowing where improvements are needed, you can channel resources into those areas.

Who's Involved? What Goes Into an Assessment?

Building a comprehensive plan can be a major undertaking. Most likely it will include representatives of campus security or police, administrators, faculty, staff, students, and their parents. Local first responders, along with nearby community residents and businesses get involved as well. Typically, an outside security integrator who can bring a fresh view to the project leads the effort. A good risk assessment is very comprehensive and involves a lot more than just checking the lights and rattling the doors.

Areas to Always Inspect

Building Interiors Security experts put an emphasis on entries and how campus staff controls who gets into classrooms, administrative facilities, and student housing. Doors, windows, and locks are checked to see if they can resist a criminal attack. Even ventilation ducts are looked at to make sure they can't be used by criminals to get inside.

Stairwells, Hallways, & Restrooms All common areas get inspected to make sure they aren't creating opportunities to hide weapons or contraband.

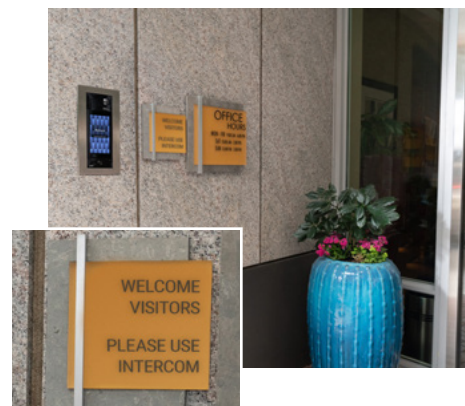
Security Systems Security systems such as access control, video surveillance, burglar alarms, and communications are checked to confirm they're working as expected.

Signage & Visuals An inspector also looks for signage and other visual indicators to aid the hearing impaired during an emergency.

What's Expected of Students and Staff?

Student and staff expectations should be outlined in written policies and procedures – a document the inspection team will want to review. This is just the tip of the iceberg. Don't be surprised if a risk assessment may take days to complete. A thorough inspection can greatly enhance security and save money in the long run.

SAFETY TIP



Lock all doors while classes are in session. Use signage, walkways, and fencing to funnel visitors to one approved public entry. From there, they can be buzzed in only after staff identifies and speaks with them using a video intercom.

Outdoors

Many tools used to protect building interiors are different than those used to secure outdoor spaces. Emergency stations, low-light cameras, and other equipment – even landscaping – take on greater importance.

SAFETY TIP

You may hear your assessor mention CPTED or Crime Protection Through Environmental Design. It includes practices, such as trimming back landscaping to installing fencing. There's more on this topic later.



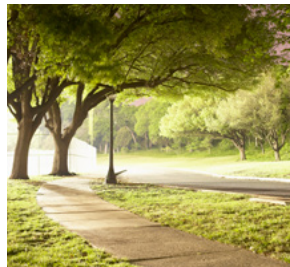
Parking Lots and Garages

Parking lots, garages, and other exterior areas require adequate lighting, fencing, emergency stations, and security cameras. The inspector wants to see that facilities are regularly patrolled or monitored by either campus security or other first responders.



Outdoor Facilities

It's easy to overlook athletic fields, playgrounds, walking trails, portable classrooms, and other campus outbuildings. These are not only frequent targets for illegal activity, but tend to be areas where health-related assistance may be necessary.



Surrounding Neighborhoods

Other environments, such as on- and off-campus student housing, businesses, open space, and traffic patterns can impact your security and should be included in an overall strategy plan.



Annexes and Urban Campuses

Remote annexes and larger urban higher-education campuses, which spread throughout a city, present more of a security and communication challenge. Look for network-based security systems to bring information into a centralized security operations center where officers can keep track of dispersed campuses.

Doors & Locks

Quality doors and locks are meant to effectively delay criminals from getting into campus buildings or classrooms. The most effective security comes from the combination of a solid core wood or metal door plus an electromechanical lock.



Challenges and Considerations

Unfortunately, glass doors are widely popular on campuses. The Sandy Hook Elementary School shooter found the front door properly locked. It took only seconds to shoot through the glass and reach in to unlock the door. It's best to replace glass doors. If that's not possible, put weapon-resistant security film or stainless-steel screens on the glass. This may delay criminal access long enough for the security plan to be implemented and first responders to arrive.

Electronic locks provide a high level of security. They integrate with access control and video intercoms so doors can be opened remotely. Staff members can use card readers and keypads to enter. Electronic locks eliminate the need for keys, which can be easily lost, stolen, or copied.

Increase security for classrooms, offices, and student housing with doors that can be locked from the inside. Quality doors and locks deter active shooters from reaching students and administrators.

A locked door is not part of a mass shooter's plan. It's considered an unforeseen circumstance and can potentially hinder the shooter from moving forward with their horrific intentions.

SAFETY TIP

Be sure your electronic locks operate in a "fail-safe, fail-secure" mode so they are locked to the outside during a power outage.

Access Control

Security experts agree that access control—using cards or PINs—is a vital part of any campus security plan.

3 Elements of Access Control

What you have—an ID/access card

What you know—a personal identification number (PIN)

Who you are—confirmed by biometrics or database reference

Look around a big campus and you'll see thousands of card readers and/or keypads at main entries, parking garage gates, office doors, labs, and music rooms.

“Access control can be as simple as a single door station with a video intercom and as complex as multiple authentication devices such as a keypad/reader combination deployed on multiple doors with software that allows administrators to manage all aspects of the system.”

Dario Santana

President, Layer 3 Security Services, San Diego

Two Trends Changing Access Control

Mobile credentialing is swiftly replacing badges with mobile devices. Security is enhanced as a person must have possession of a smartphone or tablet, a security code or biometric confirmation to open the device, the downloaded credential, and an app. Visitors can quickly be added using email. Mobile credentials save money by eliminating expenses for badges, printers, and ink. New hybrid readers work with both mobile devices and existing badges letting campuses make an orderly move to the new technology.

Biometrics such as, fingerprints, iris scans, or facial recognition, have become a new tool to authenticate students, staff, and campus visitors. There are no cards to lose or share. Students can use their meal plans or make bookstore purchases without needing to carry a card. Enrollment in the system takes only a minute or two. And just like cards, you can add time, day, and place restrictions on each person.

Combine card readers, key pads, and/or biometric readers for doors requiring absolute identity authentication.

BEST PRACTICE

Access control is also being used to protect what's called the logical side of security. Users can be required to present an access card and/or biometric authentication to be able to use campus computers.

Video Intercoms

All doors should now be locked. But what about visitors, volunteers, and others needing to get into campus buildings or offices? This is where a video intercom is an ideal solution.

To properly control access into a building, a door station is needed at the entrance. Depending on the system, you can select either master stations, guard stations, tenant stations, or mobile apps for visitor screening. A master or guard station can be at a receptionist's desk or part of a security guard's workspace. Roaming guards and campus security can use mobile apps in lieu of a physical master or guard station. Tenant stations and mobile apps are perfect for dorms and student housing.

A door station can be installed outside any entry. When visitors push the door call button their faces and surrounding area are displayed on the inside station or mobile app. A two-way conversation begins, and if the visitor is approved, the door can be conveniently unlocked with the push of a button or swiping the in-app slider.

Benefits of a Security Video Intercom

- ✓ Tardy students can quickly and easily be let into the building
- ✓ Food vendors can request access at loading docks or service entries
- ✓ Doors can be unlocked for staff members without ID badges

IP Multi-Tenant Video Intercom with Cloud-Based Mobile App

- ✓ Visitors can be seen from a broad surveillance camera or close-up intercom view
- ✓ Piggybacking can be controlled by staff if other people try to sneak in with approved visitors
- ✓ Pictures can be provided to police when investigating an incident
- ✓ Video intercoms add communication in niche places, giving a means to call for help or assistance anywhere on campus
- ✓ Emergency call stations are valuable for outdoors where remote security is needed (look for more on this topic later)



TECHNOLOGY TIP

Many modern networked video intercoms have a smartphone app that lets patrolling security guards remain in remote control of the system. Download it and increase the efficiency of security staff.

Visitor Management

The days of asking visitors to use pen-and-paper sign-in books are gone. Best practices now favor electronic visitor management systems (VMS). They're accurate, easy to operate, and enhance security.



Electronic Lists and Temporary Badges

Visitors are asked to produce a government-issued photo ID which is swiped through a visitor management system. Within seconds, the person's information is checked against federal and state criminal databases and the more than 700,000 names on the national sex offender registry.

A campus can also add its own custom watch lists. When properly implemented, watch lists provide protection from abuse orders, custodial issues, and the names of disgruntled former employees and students.

After the system clears a visitor, a temporary badge is printed with the person's name, picture, date/time, and area of campus approved to visit. Some badges automatically fade within a specific time frame to indicate the visitor's authorized time on campus has expired and prevent the badge from being reused.

Visitor management stations are typically found at main building entries, administration offices, healthcare facilities, dormitory lobbies, and other buildings. Visitor information from multiple campus stations is stored in a central database, and is easy to share with first responders during an investigation.

Cloud-Based Mobile Apps

Most of us use mobile devices every day. We use them to book travel plans, check the latest sports scores, and share news and photos with our families and friends.

Digital apps can also be a valuable security tool. Some apps stay connected to a network 24/7, allowing officers to remotely patrol the campus while remaining tethered to a security operations center. Security officers can monitor video, receive immediate notifications, open doors to approved visitors using a video intercom, and much more.

Companies—and even some campuses—now create apps providing direct communication links between students and a security officer with the touch of an icon.

Some apps let students or staff submit voice or video messages to report a potentially dangerous situation. Students can choose to share their location remotely with friends and family while traveling across campus.

Unfortunately, there are some downsides to these apps. Some remote campus areas may have poor cellular reception. A dead phone battery makes the app useless. And mobile devices are often the first thing criminals take from their victims.



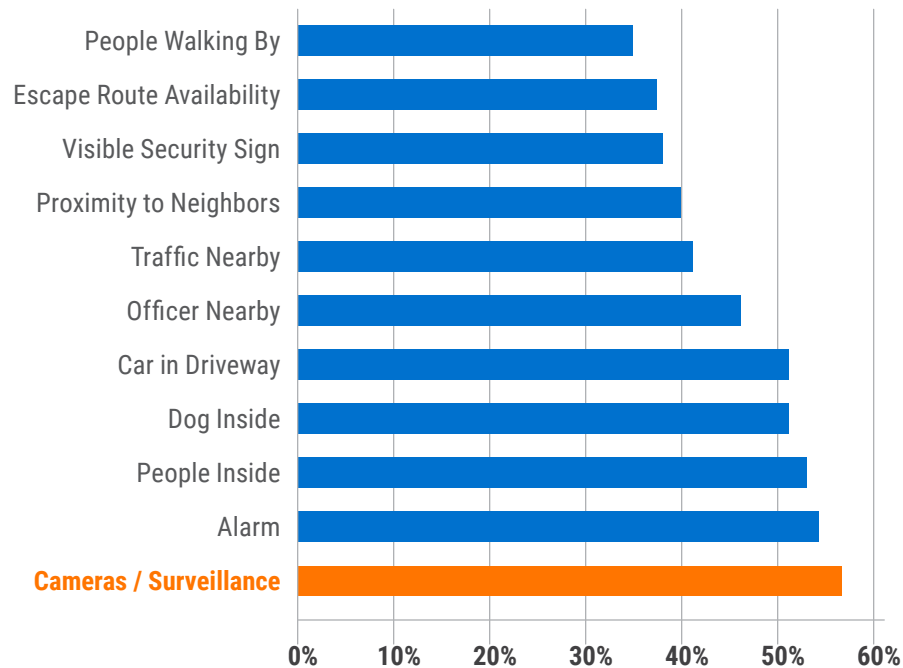
BEST PRACTICE

If using an app, make sure students are aware it exists and have downloaded it onto their phones. Remind them to remain situationally aware of what's going on around them, and know where the nearest emergency stations are located.

Video Surveillance

Numerous studies have shown the presence of cameras is enough to deter many criminals. Simply put, criminals don't want to commit crimes when they know they're being watched.

% of Criminals Considered Deterrents Before Action



Graph from Joseph B. Kuhn. *Understanding Decisions to Burglarize from the Offender's Perspective*

Security cameras provide security/police with round-the-clock, real-time views of campus buildings and outdoor areas. They help prevent dangerous incidents and can limit the damage when events do occur. Recorded video is useful in reviewing incidents and identifying suspects.

IP cameras are the obvious choice. Their high resolutions provide better image detail than their analog predecessors. Often powered over Ethernet (PoE), they don't need a local AC outlet like analog models.

Wireless IP cameras are ideal for remote installations, such as parking lots, where running cable would be costly or impossible. IP cameras and network video recorders (NVRs) become part of the campus network. Live and recorded video can be viewed remotely on smartphones and easily shared with first responders.

Today's cameras capture incredible detail. That means fewer cameras are needed to capture events in places such as stadiums. Software analytics can monitor live network-based video and create alarms for any number of user-defined events, such as a strange package left unattended in the library.

Video surveillance should cover building entries and perimeters, hallways, stairwells, cafeterias/commons, and libraries. Outdoor security cameras should monitor parking lots/garages, main campus thoroughfares, playgrounds, walking trails, and other remote areas.

Security cameras are ideal for confirming/disproving liability claims and helping with training and compliance issues.

Intrusion Alarms

Protect people and valuable assets 24/7 with intrusion systems.

Sensors create audible alarms when doors are forced open or windows are broken. Motion detectors sense people moving through buildings at night, during holidays, and weekends. Sensors protect HVAC and other campus equipment targeted by thieves.

SAFETY TIP

Intrusion systems should be monitored to be effective. Some large campus security/police departments monitor their systems, but most look to a professional central station. Your security integrator can help you choose a service provider.

Specialized Sensors Available



Barrier bars protect hard-to-secure windows, air conditioning ducts, or attic vents



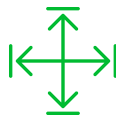
Cable sensors can be woven into fences to alert security of someone attempting to enter a protected or dangerous area



Flood/Freeze sensors monitor conditions in computer rooms and labs requiring a consistent environment



Carbon monoxide sensors warn of high levels of the odorless toxic gas



Wireless outdoor sensors can be used to protect building perimeters or campus outbuildings

Emergency Stations

Protecting students who live on campus, children on a playground, a student getting an early morning workout on a running trail, or a student leaving a remote parking lot at night require different outside security solutions than those used within buildings.

Locks, Alarms, and Access Control Solutions Have Minimal Impact Outdoors

Police or campus security need all the input they can get when assessing a threat. This is why security cameras are effective. Megapixel cameras can provide clear, real-time visibility to remote areas. Infrared cameras provide good images even in very dim light.

Emergency stations are easy to spot with their bright blue lights. A distressed person can use these to ask for help. Video intercoms provide two-way conversations, while the built-in cameras help dispatchers make decisions about how to respond to an emergency. Dispatchers immediately know the station's precise location when calls for assistance arrive. CCTV camera arms let a second IP security camera be attached to provide a broader view of the area. The stations also have a non-emergency button for people needing directions or other non-emergency information.

Tower and wall-mount emergency stations are ideal for use on pedestrian pathways, parking facilities, and perimeters around dorms and recreation centers.



SAFETY TIP

If possible, keep two emergency stations within view from any campus site. The nearest option may not always be the best choice in case of an emergency.

Crime Prevention Through Environmental Design (CPTED)

Fencing, gates, lighting, and landscaping are easy to overlook in designing a robust campus security plan. But CPTED can make a good plan even better.

Lighting, Fencing, and Trees

Lighting is important along pathways, in parking lots and garages, and surrounding building perimeters. It not only deters criminals, but allows security to get a better view of areas while using a security camera or video intercom.

Fencing and locked gates keep people from wandering into dangerous areas and can be used to funnel them into preferred building entries.



Trees or large bushes along the perimeter should be removed so they can't be used to climb over fences. Landscaping and foliage should be trimmed to not block views of doors and windows from the street. Low, thorny bushes directly beneath ground-floor windows can help discourage criminals from climbing through windows.

Sturdy concrete blocks or barriers, also known as bollards, help protect entries, student quads, and pedestrian trails from taking a direct hit from a vehicle. Bollards can be designed to serve as planters, trash receptacles, or benches, and blend in with the campus landscape plan.

Don't overlook the importance of clear signage. Lost or confused drivers and pedestrians are easier targets for criminals. Signage helps people locate the office, parking lots, classroom buildings, the library, commons, bookstore, and other facilities. Make sure signs have easy-to-read fonts, have consistent messages, and are visible throughout the campus.

BEST PRACTICE

CPTED measures are among the least expensive ways to enhance campus security. Be sure to include these ideas in your security plan.

Security Comes in Layers

There are many facets involved to ensure the safety of people and your assets. To properly secure a building, or even an entire campus, the right combination of layers are needed.

Emphasizing there is no one-size-fits-all plan, it's important to recognize everyone's security needs are different. Each situation requires its own evaluation and a best-plan approach for an overall solution.

When trying to keep people safe, it's recommended to look beyond just doors and hardware to help prevent criminal activity. Taking other preventative measures into account will help keep your property secure.

Preventative Security Measures

- ✓ Combine **sturdy doors** and **locks** to deter campus criminals
- ✓ Use an **access control system** with keypads and individual PINs, or card readers and access cards, to provide students and staff quick entry
- ✓ Install a **video intercom system** to see and speak with visitors before unlocking the door; approved guests can be let in with a push of a button
- ✓ Keep a record of who's been on your campus with a **visitor management system**; be sure your VMS is compatible with your video intercom system

- ✓ Choose an entry security system complete with a **cloud-based mobile app** to outfit your security personnel with a means to answer calls when roaming your campus
- ✓ Integrate a **CCTV** or **surveillance system** to monitor an entire campus at a high-level view and easily toggle to a close-up, detailed view of the video intercom
- ✓ Be sure **intrusion alarms** are part of your overall system to alert your security staff of any breaches, particularly in student housing and dorms
- ✓ Complement a video intercom system with **emergency stations**, **towers**, and **wall boxes** to give residents multiple points to call for help
- ✓ Practice **CPTED** (Crime Prevention Through Environmental Design) to ensure campus grounds and conditions hinder criminal intent, instead of aiding them



Student Housing

From a single dormitory building, to large student-housing complexes, to off-site boarding homes, keeping residents safe should be at top of mind.

Students Choose to Live in Dormitories

About 40% of students attending public colleges, and nearly 67% attending private universities, choose to live on campus. Making student housing and dormitories popular for both new and existing residents.

Why are Dormitories Popular?

Compelled Some campuses require first-year students to live in residence halls with minimal exceptions.

Cost Living on campus is generally less expensive than living in off-campus apartments, which aren't typically part of the school's infrastructure or network

Convenience Students can walk to classes, dining commons, and other campus locations or events. No need for transportation or shuttling!

Comfort For their first extended time away from home, students get an important sense of community, connection, and camaraderie.



BEST PRACTICE

Look for an all-encompassing security solution that provides your student residents with a mobile tenant app for visitor screening.

Special Events

Events of all types, can be fun and exciting. They can unite an entire community, but they can also put a strain on your security staff. Being prepared can help.

It's a big night on campus. Maybe it's a championship basketball game, a concert, or a Halloween party for neighborhood children. No matter what the event, you may have a lot of extra people on campus.

Be Ready

Equipping each public gate or door entry into the venue with metal detectors can help identify items that should be confiscated. Added fencing or other barriers keep people from roaming around the campus into unapproved areas. Extra lighting in remote areas deters criminals.

Surveillance cameras mounted on arms of portable trailers give your security team a broader view of outdoor activities. Video intercoms are valuable for identifying people wanting to enter cash rooms where money from ticket and concession sales are stored.

Have clearly defined policies that are reinforced by signage. Clear re-entry policies help prevent people from leaving the event and returning with prohibited items. And stop obviously intoxicated people from entering at any time.



In addition, having security personnel to inspect bags and backpacks prior to entering the event can reduce incidents.

If the number of expected people is more than your team is prepared to handle, hire private security guards to patrol the campus and parking lots. Also alert your local first responders and ask them for extra patrols of the area.

A campus is a neighborhood resource. It's a perfect location for election polls or meetings of community groups. In these cases, make sure a member of your team or a custodian is available to unlock and later relock doors. For frequently used rooms, a video intercom with remote door release makes it easy and convenient to control access when a team member can't be onsite for visitor screening.

Integration— Open Standards

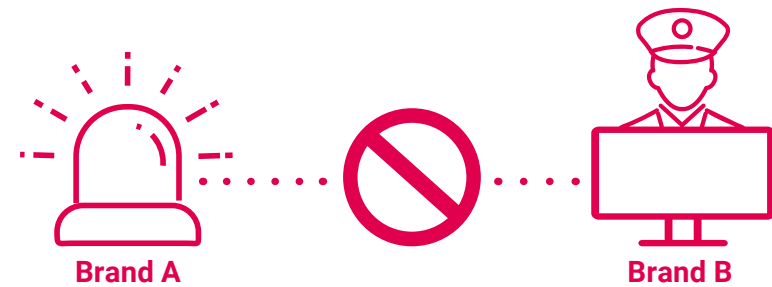
Open standards allow products from different manufacturers to work together, creating a more secure campus. That's long been the norm in the IT world and is becoming commonplace in security.

Make Your Security Operations Center (SOC) More Effective and Convenient

Alarms for many integrated systems can be received on a single platform – typically the access control system. This can reduce clutter on the desk of a security guard or SOC. A single point of control makes it easier for guards to follow events and respond more quickly if needed.

Security software lets you create alarms for pre-defined situations, such as a glass break or live video showing students fighting. Alarm notices can be sent to patrolling campus guards with mobile devices or to an off-site monitoring station.

With the use of open standards, hardware and software developers are able to share best practices, and continue to find new ways to make a campus more secure.



Proprietary systems lock you into using equipment from one manufacturer.



Open standards let you select equipment based on performance and price, knowing a system will be able to connect with other equipment already in use on your campus.

Other Uses for Security

There's no room in campus budgets for products and services that can't show a return on investment.

This is an area where security really shines. Cameras, access control, video intercoms, and other equipment can be used for a variety of non-security purposes. The results are savings, convenience, and a clear return on investment.

SAVINGS TIP

Check on your insurance policies. Many companies give significant discounts for a well-protected campus.

Alternate Security Benefits



Use recorded video from security cameras to reject or **reduce liability claims**, such as for slips and falls. The savings could reach into the thousands of dollars in each case.



Video is a powerful **training tool**. Use it to show faculty, staff, and volunteers how to perform tasks. Showing both good and bad examples helps reinforce the proper procedures.



Laboratories and other campus facilities may be regulated by local, state, and federal agencies. Use video, along with access control and intercom audit trails, to **show compliance**.



Biometric systems — a fingerprint or an iris scan — let enrolled students **make purchases** at dining commons or bookstores without the need or expense of ID cards or cash, reducing the risk of theft.

Today's Technology

As security has become more computer- and network-based, technological changes have come along at an almost dizzying pace. More companies have entered the market bringing with them an overwhelming number of choices.

However, there's a silver lining! Your campus is unlike any other, so you need solutions that fit your specific security needs. Look to your integrator to help sort through the many products to find the right combination that works best for your campus.

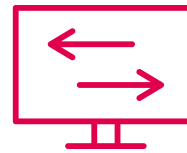
Considering different technologies? Things to Discuss with Your Integrator

Analog or Digital Is this an analog- or digital-based product? In some cases, analog may be less expensive and meet your needs today. But digital technology is the future of security. Choosing digital technology today is one way of future-proofing your investment.

Digital Benefits Digital technology also provides better performance. It allows for easier integration of various systems. And it may bypass analog technology's distance limitations, making it easier for linking other buildings to the main office.

System Size What is the required capacity? Will expansion be necessary in the future? Knowing the size of your application, with the potential to grow, helps to ensure you select a system that can scale at your pace.

Backward and Forward Compatibility Ask if the technology is backward and forward compatible. Many security projects are completed in phases. You'll likely want any new technology to work with your existing systems – either analog or digital. Look for a manufacturer that takes that into consideration when designing new products and updates.



Future-proof your investment. Choosing digital technologies that are backward and forward compatible will contribute to the longevity of your security system.

Analog vs. Digital

When it's time to update your security equipment you'll still see systems using older analog technologies. But their days are numbered.

Security is Rapidly Going Digital

Security now relies on the IT department and its network to move video, alarm, and access data between buildings and off-site locations.

Digital equipment communicates with other systems to create a more secure campus. Guards on one campus can easily share live or recorded digital video with security staff at another location.

Wireless systems can be set up in areas where running cable for analog equipment would be too expensive or even impossible.

You may hear analog data can be digitized with a digital signal processor, but they're not cheap. In many cases, there's little price difference between new digital and analog equipment. And in some cases, digital costs less. If your campus has recently received technology upgrades such as faster internet service or network wiring, you can take advantage of these to upgrade the performance of your security system.

Maximize and future-proof your security investment by choosing digital technology.



Scalability

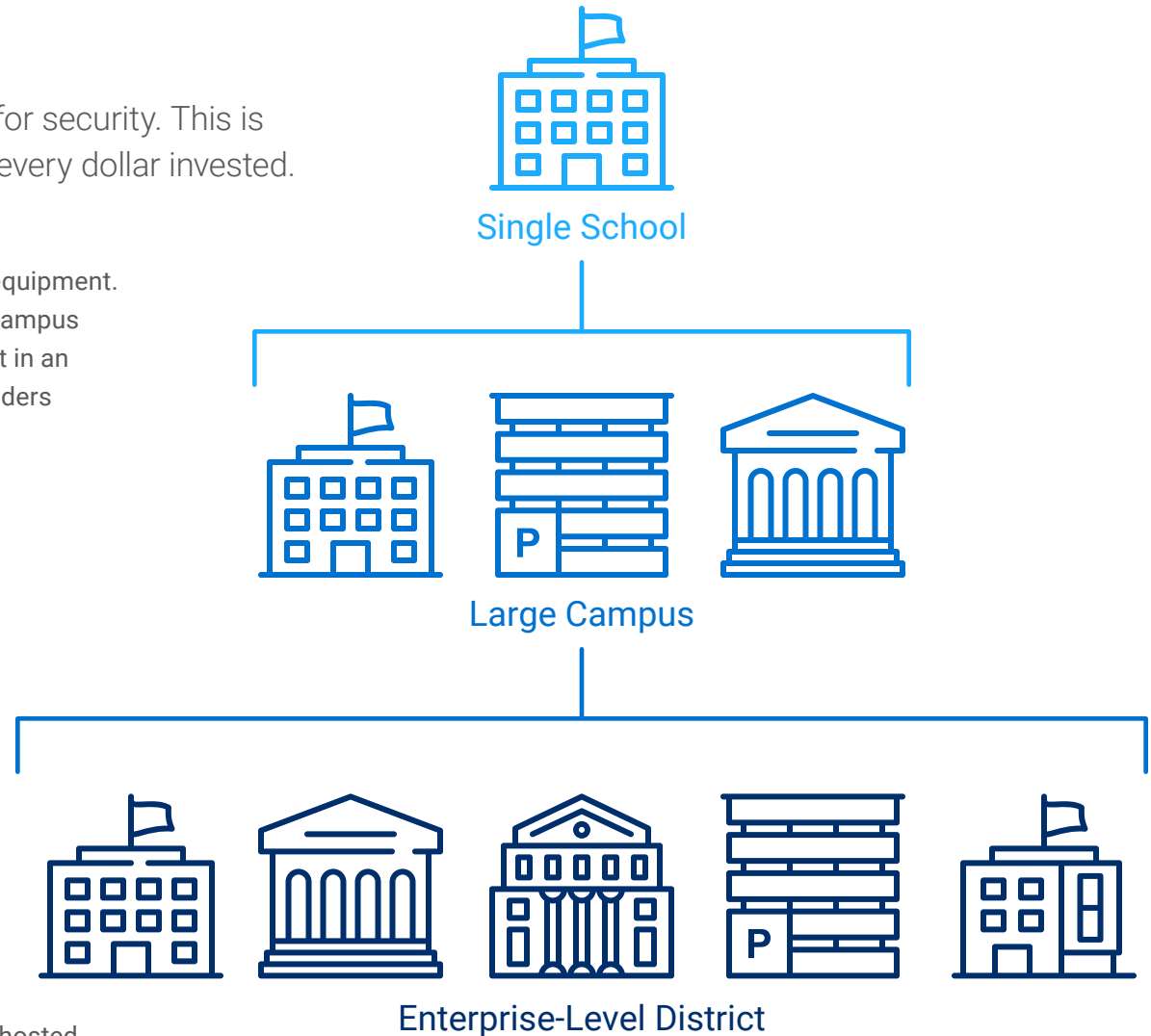
Very few campuses have an unlimited budget for security. This is why it's so important to get the best return on every dollar invested.

Scalability is a word you hear often in relation to security equipment. It refers to a product's or system's ability to keep up with campus growth or changing needs. For example, you want to invest in an access control system that can later handle more card readers or readers using a different, more efficient technology.

By not keeping scalability in mind, your only choice may be to remove and replace an existing system as the needs of your campus change. And that can be costly.

One way of ensuring scalability is to use a hosted system. This works when an organization, typically an integrator, maintains the servers required to operate a system. The service operates in the cloud so there's no need for the campus to store or maintain onsite servers. Regular firmware and software updates are made by the host, ensuring your system is always up-to-date.

Ask your integrator about scalability no matter where your security equipment is located. And consider a hosted system that will future-proof your investment by ensuring your campus is always secured by the latest, proven technology.



Maintenance

Today's security systems are extremely reliable. Systems operate better and last longer when well maintained.

Regular Maintenance by Experienced Technicians Helps Optimize Performance

In some cases, regular system checkups are necessary to maintain warranties. They also ensure your systems will be working when you need them most. One bad component can affect your entire system.

One of the easiest ways to ensure your system is always tuned and ready to go is to purchase a service and maintenance agreement from a security integrator. These plans guarantee you'll get regular system inspections. If you do need a repair, you'll likely get faster service if you have a plan. And a service contract provides a predictable annual expense for system maintenance.

Look for products that include line supervision and device check features. Line supervision enables the system to send you a notification when a device is offline or restarts. Device check manually tests components on a scheduled basis.

Consider manufacturers who provide great telephone, online, and on-site support. This saves a lot of time and trouble if you just have a quick question about operating the system – and can be a real lifesaver for those campuses that maintain their own security equipment.



Your Staff

Your people are an incredibly valuable security resource. Not much happens on campus that someone among your students, volunteers, faculty, and staff doesn't know about.

They see suspicious activities. They notice unlocked doors. They hear conversations about dangerous or illegal activities.

Your staff are valuable resources. Include them when creating a security task force and involve every major campus department.

For Example, They Might...

- Divert traffic from the campus during a lockdown
- Escort students to muster sites, which are designated areas to assemble in an emergency, during an evacuation
- Be a contact for local police and fire departments, keeping them informed of events on campus
- Provide checklists for department heads to follow during an emergency
- Help people learn their roles by conducting regular drills of various scenarios



BEST PRACTICE

Many people are hesitant to report problems in person, so create phone and/or website hotlines where they can leave anonymous information.

Cost of Ownership

When planning a security budget, don't forget to include all of the direct and indirect costs related to a new project. That gives you a project's total cost of ownership.

Equipment

This is the most obvious cost of any project. While still in the budgeting phase, you could ask your integrator if there are other reliable systems capable of doing the job for less. But reliable is the key word. Though maybe a little more expensive upfront, highly reliable equipment tends to be more cost-effective in the long term.

Warranties and Service

Ask about warranties before making a purchase. Longer warranties may save money. Look for a manufacturer with an industry reputation for service before, during and after the sale. Also, consider a service and maintenance agreement (SMA) from your integrator. A failed system can leave a dangerous hole in your security plan. With an SMA you'll likely receive faster service, but they do come with a cost.

Licenses and Software Updates

Not all, but many, manufacturers charge annual licensing fees for using their equipment. They may also charge for regular software updates.

Security Operations Center (SOC)

Your new project might require hiring more employees, buying more office furniture, along with added telephone lines and utilities.

Training

Your staff may need help in mastering new equipment. Training is typically available from either your integrator or the equipment manufacturer. In either case, remember to add in the costs. One way to save money is to make sure training will be conducted at your location. Keeping it in your facility saves travel costs and the related loss of productivity while security personnel are away. And remember, training is an ongoing process as employees join your staff.

Wiring

Find out if you can reuse your existing infrastructure to avoid the high cost of pulling new wire.

Scalability

Select a system with expansion capability. Only buy what is needed, when it is needed and scale when your company grows.

Backward & Forward Compatible

Find a system with the ability to work with legacy and new products to protect your security investment.

"If we had to run new cable for every project, the costs could double and may add weeks to the completion time."

Matthew Arnold,
President, Academy Mailbox, Hicksville, N.Y.

Being Prepared with Policies and Procedures

Emergencies rarely happen with advance notice. Even mundane day-to-day events can go off the track and create a security problem.

Expect the Unexpected

By creating written policies and procedures for handling emergencies – from natural or man-made disasters to an active shooter on campus – you’ll be better prepared to handle any security event.

Campuses vary in many ways and so will their policies and procedures. But here are some basics that should be part of all security plans.

✓ Create emergency roles for all faculty and staff members. This might include communications, traffic control, or overseeing evacuation muster stations to account for students and staff. Designate contacts and alternates for reaching out to first responders, the campus community, and the media in case of a major event.

- ✓ You never know who may be needed during an emergency. Be prepared with a list of all campus contact names with phone numbers and email addresses along with the jobs they will fill.
- ✓ Create a campus map and locate building blueprints to share with first responders.
- ✓ Conduct emergency drills considering different scenarios. Include first responders when possible. Practice makes perfect – and there are always new employees on campus – so repeat drills often.



Choosing an Integrator

If you don't already have a good working relationship with a security integrator, you should establish one before starting any major security installation or retrofit. Choosing one from dozens in a major metropolitan area might seem overwhelming. Here is a checklist of questions to ask to help you find the best integrator for your job.

Before the Project

- Has the integrator worked on a campus job similar to yours in size and scope?
- Can the integrator provide references from previous campus customers?
- Has the integrator walked your entire campus?
- Does the integrator sell from trusted manufacturers supporting open standards?
- Can the integrator show you certifications from those manufacturers?
- Has the integrator worked with networked security systems?
- Do employees have certifications from network providers such as Cisco, Microsoft, and IBM?
- Can the integrator effectively communicate with your campus IT department?
- Will you receive a detailed budget and firm completion date?

Service During the Project

- Will you have a single project manager throughout the job?
- Will the project manager handle all interactions with subcontractors?
- Can the job be completed during after-hours causing the least disruption to the campus?
- Can the integrator provide a detailed work schedule with milestone dates?

Service After the Project

- Can training be provided at your site, saving your team travel time and expense?
- Are service and maintenance agreements available?
- Are there enough technicians and trucks to provide service when you need it?
- Are technicians available 24/7, including weekends and holidays?
- Is warranty support provided?
- Will the integrator still be in business as your campus needs change?

What to Expect from an Integrator

An experienced security integrator should do much of the heavy lifting for any new campus security project.

Services You Should Expect:

- A team capable of conducting a thorough risk assessment
- Advice in selecting the best and most appropriate equipment for your job
- Thorough and complete installation services
- An ability to work with your IT staff
- Help with staff training once installation is complete
- Ongoing service and maintenance of your equipment

Integrator Score:

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Your Project Checklist

Make sure you're prepared for a major new security installation or retrofit job. Here's a checklist to help prepare before, during, and after.

Before the Project Begins

- Select a security integrator (See the previous checklist)
- Have a risk assessment conducted
- Look at all campus areas – indoors and out
- Involve campus decision makers including security, the network administrator, and other affected departments
- Obtain leadership buy in, so there are no surprises
- Involve faculty, staff, parents (K-12), and students
- Get input from the people that will be using the system every day
- Get a detailed budget
- Include a completion date
- Ask about any licensing and software update fees
- Get costs for an ongoing service and maintenance agreement
- Ask for open standard technology
- Make sure different systems will work together
- Future proof your investment – make sure products are scalable to meet your needs as your campus grows

During Project Installation

- Set up regular meetings with your project manager
- Involve IT and other departments critical to the project's success
- Prepare your security operations center (SOC)
- Arrange for any needed additions to utilities and telephone service
- Get IP addresses for the equipment from IT
- Ensure network drops are operational
- Make sure you're properly staffed
- Update your written security policies and procedures taking into account the new equipment

After Project Installation

- Walk through the campus, making sure all components are working
- Make sure the integrator has left the site free of debris – packing crates, cables, and wire clippings
- Begin training of appropriate SOC employees
- Arrange with the integrator for regular system checks
- Run emergency drills regularly, maybe even with the integrator onsite to evaluate

PROGRESS:



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Additional Resources

If you need more information about campus security, there are many public and private organizations offering useful websites.

Here are a few of the best:

Your local state board of education

[International Association of Campus Law Enforcement Administrators](#)

[National Association of School Resource Officers](#)

[National Association of School Safety and Law Enforcement Officers](#)

[National Center for Campus Public Safety \(U.S. Bureau of Justice\)](#)

[Campus Safety and Security \(U.S. Department of Education\)](#)

[Department of Homeland Security Campus Resilience](#)

[American Association of School Superintendents](#)

[Security Industry Association](#)

[ASIS International](#)

And here are a few publications which often focus on campus security issues:

[Campus Safety Magazine](#)

[College Planning & Management](#)

[School Planning & Management](#)

[American School & University](#)



About Aiphone

We're pleased to have brought you this eBook in the hope it will give you a better understanding of the many facets of securing a campus – from choosing an integrator to setting up, operating, and maintaining electronic security systems and using environmental design to enhance safety.

For over 50 years, Aiphone has solidified its position as the leading provider of security communication solutions. We're known for design simplicity, freakish reliability, and technical excellence. All backed by award-winning support. With a wide variety of systems for entry security, communication, and emergency applications, there is an Aiphone solution ready to accommodate your needs.

For more information, visit our website at aiphone.com or contact us at (800) 692-0200



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