

PENNSYLVANIA STATE POLICE

SCHOOL SAFETY REPORT



DOMESTIC SECURITY DIVISION

RISK AND VULNERABILITY ASSESSMENT TEAM



Domestic Security Division  
Pennsylvania State Police



We are reminded once again with the tragic event that unfolded at Sandy Hook Elementary School in Newtown, Connecticut, to evaluate safety measures in our school systems. Unfortunately, there is no easy solution. To foster a culture of school safety, everyone needs to be committed. The Pennsylvania State Police (PSP) stands firm in this commitment to protect the lives and safety of our Commonwealth's students and staff.

The PSP initiated the Risk and Vulnerability Assessment Team (RVAT) in 2004, with a mission to provide comprehensive assessments to harden targets against, and possibly even prevent, terroristic acts. In leading this battle against terrorism and criminal acts, the PSP RVAT has developed safety guidelines which can be used as a reference tool. I hope you find these safety guidelines useful. Together, we can create a culture where our schools are safe.

*Col Frank Noonan*

Colonel Frank Noonan  
Commissioner  
Pennsylvania State Police



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# REPORT ON PENNSYLVANIA SCHOOLS PUBLIC/PRIVATE

## EXECUTIVE SUMMARY

A key mission of the Pennsylvania State Police (PSP) is the identification and reduction of vulnerabilities within the Commonwealth to terrorist attacks, and the minimization of damage should such an attack occur. The PSP accomplishes this task through various means, including the service of risk and vulnerability assessments. The PSP Risk and Vulnerability Assessment Team (RVAT) has conducted over 300 school assessments since its inception in 2004. In addition, the PSP RVAT has conducted over 20 assessments at colleges and universities across the Commonwealth. The information gained from these assessments and the subject matter expertise of each RVAT member has aided in gathering guidelines for this report.

Through the experience of PSP RVAT assessments, several common vulnerabilities in schools have been identified. An assessment provides general recommendations to mitigate those identified vulnerabilities. This report will provide guidelines and information in the following areas:

- ❖ Roles and Responsibilities.
- ❖ School Security Forces.
- ❖ Access Controls.
- ❖ Lockdown and Evacuation Procedures.
- ❖ Family Reunification/Media/Communications.

All schools are unique and present difficult challenges for security professionals based on their location, size, design, year of construction, student population, and the availability of police/security professionals. Technology and comprehensive all-hazards plans supported by training and education are vital for an effective response during any emergency situation.

There may never be perfection, as no security measure is perfect; however, risks can be significantly reduced. The intent of enhancing one's security posture is to prevent and prepare for a possible attack. In the event prevention security measures do not prevent the threat, school officials must be prepared to respond effectively to any given emergency situation. While this report outlines safety guidelines, school administrators should seek individualized risk and vulnerability assessments to address security concerns specific to their school.



## INTRODUCTION

As society reacts to the tragic acts of violence that take place in our schools, we must remain committed in keeping our children safe. In the wake of each of these violent events, law enforcement professionals and security officers must reevaluate potential threats and preventive measures to mitigate the threats, and work with school administrators to prevent further acts of violence in our schools.

Each incident of violence taking place at our schools adds to the lives lost and the costs of suffering experienced in our communities. The 2012 Sandy Hook incident marks the 18<sup>th</sup> mass shooting or threat of gun violence at a school or university in the United States. The following information is being provided as sample references illustrating that no school is safe:

- ❖ **December 14, 2012** – Adam Lanza, age 20, fatally shot 20 children and six adult staff members in a mass murder at Sandy Hook Elementary School in the village of Sandy Hook in Newtown, Connecticut. Before driving to the school, Lanza shot and killed his mother at their Newtown home.
- ❖ **April 2, 2012** – One L. Goh, age 43, allegedly fired a .45-caliber semiautomatic handgun at Oikos University in Fullerton, California. He is accused of killing seven people and injuring three others, before fleeing the scene. Goh drove to a supermarket, where he surrendered to police.
- ❖ **February 27, 2012** – T.J. Lane, age 17, used a .22-caliber semiautomatic Ruger handgun taken from his uncle's home to kill three students and injure two others in a cafeteria at Chardon High School in Chardon, Ohio. Lane, who is being tried as an adult, faces three counts of aggravated assault, two counts of attempted aggravated murder, and one count of felonious assault.
- ❖ **February 14, 2008** – Steven Kazmierczak, age 27, entered a lecture hall at Northern Illinois University in DeKalb, Illinois, killing five people and injuring 21 others, before committing suicide.
- ❖ **April 16, 2007** – Seung-Hui Cho, age 23, killed 32 people before committing suicide on the Virginia Tech campus in Blacksburg, Virginia.
- ❖ **October 2, 2006** – Charles Carl Roberts IV, age 32, took a Springfield XD .9mm handgun and entered an Amish one-room schoolhouse in Bart Township, Lancaster, Pennsylvania. Roberts killed five girls and injured five others, before committing suicide.



- ❖ **March 21, 2005** – Jeffrey Weise, age 16, used a .22-caliber pistol to kill his grandfather and his grandfather's girlfriend. Weise then took his grandfather's .40-caliber Glock pistol and a Remington 870 12-gauge shotgun, and drove to Red Lake Senior High School in Red Lake, Minnesota. There, Weise killed five students, a teacher, and a security guard, and injured five students. After a shootout with police, he committed suicide.
- ❖ **April 20, 1999** – Eric David Harris, age 18, and Dylan Bennet Klebold, age 17, opened fire at Columbine High School in Littleton, Colorado, killing 12 classmates and a teacher, and wounding 26 others before killing themselves in the school's library.
- ❖ **May 21, 1998** – A day after killing his parents with a .22 Ruger rifle, Kipland "Kip" Phillip Kinkel, age 16, took a .9mm Glock 19 pistol, a Ruger .22-caliber semiautomatic rifle, and a .22-caliber Ruger MK II pistol to Thurston High School in Springfield, Oregon, where he killed two more people and injured 25 others. Kinkel later pleaded guilty to murder and attempted murder just before a trial was to begin.
- ❖ **March 24, 1998** – Mitchell Scott Johnson, age 13, and Andrew Douglas Golden, age 11, drove to Westside Middle School near Jonesboro, Arkansas, where they killed four students and a teacher, and wounded nine other students and a teacher. The boys were sentenced to confinement until they reached age 21.
- ❖ **December 1, 1997** – Michael Carneal, age 14, fired a .22-caliber pistol at a youth prayer group meeting, which is held before the school day begins, at Heath High School in Paducah, Kentucky. Three people were killed and five were injured. The victims' ages ranged from 14 to 17.
- ❖ **May 25, 1994** – Clay Shroud, age 17, took a .380-caliber pistol and killed his mother, father, and two sisters in their Florence, Kentucky home. Shroud then drove to his prom date's house and kidnapped her. Shroud took her to Ryle High School, where he held 22 students and a teacher hostage. The ordeal ended after 17 minutes when Shroud surrendered to a police officer.
- ❖ **May 1, 1992** – Eric Christopher Houston, age 20, went to Lindhurst High School in Olivehurst, California. There, he used a 12-gauge shotgun and a .22-caliber rifle to kill three students and one teacher, and injure ten other people.
- ❖ **November 1, 1991** – Gang Lu, age 28, went to the University of Iowa in Iowa City, Iowa, and opened fire with a .38-caliber revolver. Lu killed four faculty members and one student, and injured another student. Afterward, he committed suicide.



- ❖ **January 17, 1989** – Patrick Edward Purdy, age 24, opened fire with a Type 56 assault rifle at Cleveland Elementary School in Stockton, California. He killed five students, and injured 29 other students and one teacher. Purdy used a pistol to commit suicide.
- ❖ **January 29, 1979** – Brenda Ann Spencer, age 16, took a .22-caliber rifle that her father had given her as a Christmas present and went to a window in her San Diego, California home, and began firing at Grover Cleveland Elementary School which was across the street. She killed a principal and a teacher, and injured eight students and a police officer.
- ❖ **July 12, 1976** – Edward Charles Allaway, age 37, a custodian at California State University, Fullerton, California, killed seven coworkers and wounded two others. Allaway was found not guilty by reason of insanity and committed to a mental institution.
- ❖ **August 1, 1966** – Charles Joseph Whitman, age 25, climbed a clock tower at the University of Texas in Austin, Texas, carrying various weapons, including three rifles and a shotgun. He killed 16 people and injured 32 others, before being shot to death by a police officer.

Unfortunately, these tragic events alert us that, “it can happen here.” Through all of these events, much emphasis has been placed on behavioral indicators exhibited by each perpetrator. However, there is no established protocol or standardized behavioral signs available to prevent every tragedy. In analyzing historical active shooter events, we look for patterns or commonalities that may identify predictable, maladaptive behavior. This growing body of active shooter incidents highlights the need for continued vigilance in keeping our schools safe.

An “active shooter” is defined by the U.S. Department of Homeland Security as “an individual actively engaged in killing or attempting to kill people in a confined and populated area; in most cases, active shooters use firearm[s], and there is no pattern or method to their selection of victims.”

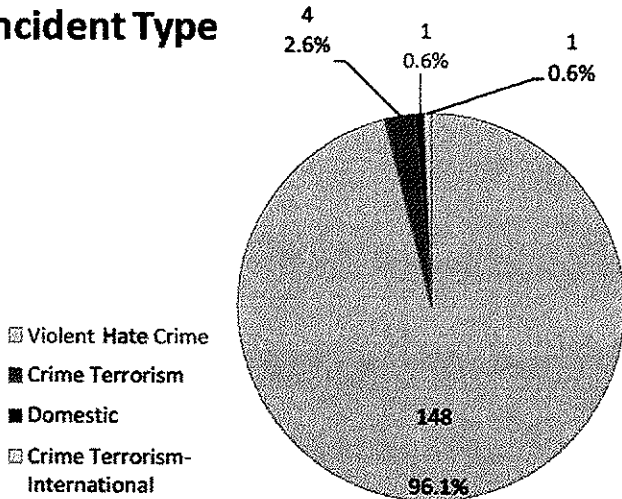
The following charts illustrate the incident type, location, outcome, and motivation of active shooters in the U.S. from 2002-2012. This information was compiled by the Federal Bureau of Investigation (FBI), Criminal Investigative Division, Violence/Crimes against Children Intelligence Unit.



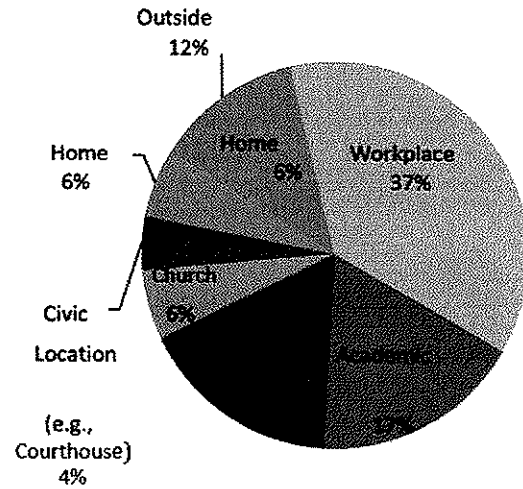
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## Active Shooters in the U.S., 2002 - 2012

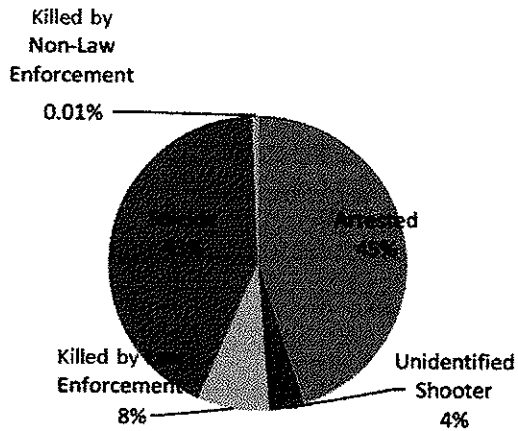
### Incident Type



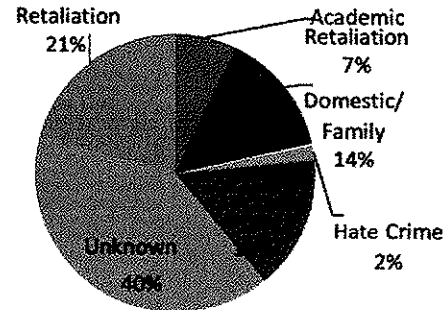
### Incident Location



### Active-Shooter Outcome



### Active-Shooter Incident Motivation







## THREAT POTENTIAL

- ❖ **Armed Intruder:** The primary historical threat at all schools is the introduction of a weapon into the building by a student, parent, visitor, criminal, or terrorist.
- ❖ **Emplacement of an Improvised Explosive Device (IED):** The placement and detonation of an IED in areas where people congregate could cause significant injury or death.
- ❖ **Terrorist Act:** Based on the tactics used by terrorists worldwide, a terrorist attack on a school in the U.S. is likely. A school-related terrorist attack will cause fear and panic nationwide and create worldwide media attention, in addition to significant loss of life and property.

## IMPACT FROM LOSS

The greatest impact in a school-based active shooter event would be the loss of life. Depending on the level of violence, the long-term psychological impact on our society would be significant in every school violence incident. Each school killing incident not only attracts worldwide attention, but also has a significant impact on students returning to the classrooms, and their families who are in fear for the safety of their loved ones.

The next several pages of this report discuss the current school security profile, and provide guidelines to assist school districts in making their schools safer.

## CURRENT SECURITY PROFILE

### I. Roles and Responsibilities

When an emergency occurs, it is critical to immediately implement the school's all-hazards plan to contain and mitigate the effects of the incident. Immediate implementation can only be achieved if the plan is clear, concise, and has well-defined roles and responsibilities for key faculty and staff. Having predetermined positions and teams prior to an emergency greatly reduces the initial confusion and shock at event onset and long-term severe emotional trauma. The initial confusion common at the onset of a traumatic event can be reduced through the use of the Incident Command System (ICS).

The ICS is a standardized concept for on-scene management utilized by emergency responders. The ICS concept is highly adaptable and may be used for a minor incident involving only a single entity, or expanded for complex emergencies involving multiple jurisdictions and agencies.



The flexibility and success of the ICS can be attributed to the use of established roles and responsibilities, which are not unique to any particular discipline. Uses of ICS universal roles are beneficially useful in any school emergency. ICS roles can be broken down into three levels: the Incident Commander, the command staff, and the general staff.

#### **Incident Commander:**

The Incident Commander has overall responsibility for the incident and sets the incident objectives, priorities, and strategies to ensure scene stabilization, life preservation, and the conservation of property. For a school environment, this position would likely be filled by the school principal, and in many instances the Incident Commander is the only role that needs to be staffed. Depending on the size and complexity of an incident, the Incident Commander may also establish a command staff.

#### **Command Staff:**

The function of the command staff is to aid the Incident Commander in performing specific tasks, such as providing information, liaison support, and protecting the health and safety of emergency responders. The command staff reports directly to the Incident Commander.

The command staff positions may be filled by members of the school's administration. The assistant principals and the school resource officer may be best suited to fill these positions. The command staff consists of: Public Information Officer, Safety Officer, and Liaison Officer.

**Public Information Officer:** The Public Information Officer gathers, verifies, coordinates, and disseminates accurate, accessible, and timely information on the incident's cause, size, and current situation; the resources committed; and other matters of general interest for both internal and external audiences.

**Safety Officer:** The Safety Officer monitors incident operations and advises the Incident Commander on all matters relating to operational safety, including the health and safety of emergency responders. The Safety Officer is also responsible for the systems and procedures that provide ongoing assessment of environmental hazards. A Safety Officer also leads the preparation of an Incident Safety Plan, coordinates multiagency safety efforts, and implements measures promoting emergency responder safety, as well as the general safety of incident operations.



**Liaison Officer:** The Liaison Officer serves as a point of contact for representatives from other organizations, both public and private, to provide input on their agency's policies, resource availability, and other incident-related matters.

#### **General Staff:**

The general staff is responsible for the functional aspects of the ICS. The general staff typically consists of the Operations, Planning, Logistics, and Finance/ Administration Sections. In the initial stages of a school based active shooter incident, all general staff positions may not be needed. However, as an event transitions from an initial operations focus, a wider recovery-based structure may be needed.

**Operations Section:** The Operations Section is responsible for the execution of all tactical activities focused on reducing the immediate hazard, saving lives and property, establishing situational control, and restoring normal operations. The Operations Section is often overseen by a Chief, who oversees all of the Section's activities and ensures the Incident Commander is made aware of any unmet needs and each team's progress. As the size and scope of the incident dictates, the Operations Section can be broken down into teams to perform specific functions. The following are examples of teams that could be used during a standard school incident response:

- ❖ **Evacuation Team:** This team assists in the evacuation, shelter, and care of students during and after the initial evacuation of the school. The evacuation team assists in the accountability of students after an evacuation, and also establishes and secures on and offsite evacuation areas. Teachers and Teacher's Aides are normally responsible for these evacuation site activities.
- ❖ **Medical Team:** This team provides basic first aid and psychological services. The medical team sets up a casualty collection point used to triage and track students and staff in mass casualty incidents. A school nurse or faculty members trained in advanced first aid are best skilled to staff the medical team.
- ❖ **Facilities Management Team:** This team is responsible for the shutdown of the school's utilities and assisting first responders with hazardous material locations and isolation. This team also acts as site advisors; aiding first responders to gain resources to navigate the school. Lead members of the school's custodial staff are best equipped to support this role.



- ❖ **Family Reunification Team:** This team is responsible for overseeing the family reunification process. The family reunification process entails set up and security of the reunification area, and tracking the release of students to their parents or guardians. Family reunification teams are best staffed by school guidance counselors, school psychologists, and often school office administrative staff.

**Planning Section:** In an emergency, Planning Section personnel collect, evaluate, and disseminate incident situation information and intelligence to the Incident Commander and incident management personnel. This section also prepares status reports, displays situation information, maintains the status of resources assigned to the incident, and prepares all incident documents. In larger and more complex incidents, the Planning Section can be broken down into the following four primary units, as needed:

- ❖ **Resource Unit:** This unit is responsible for tracking resources committed to the incident.
- ❖ **Situation Unit:** This unit is responsible for the collection, organization, and analysis of incident status information, and for the analysis of the situation as it progresses.
- ❖ **Demobilization Unit:** This unit is responsible for ensuring orderly, safe, and efficient demobilization of incident resources.
- ❖ **Documentation Unit:** This unit is responsible for collecting, recording, and safeguarding all documents relevant to the incident.

During a major incident at a school, the Planning Section works closely with the Operations Section to ensure the accurate accountability, status, and tracking of all students.

**Logistics Section:** The Logistics Section is responsible for all service support requirements needed to facilitate effective and efficient incident management, including ordering resources from offsite locations. This section typically provides facilities, transportation, supplies, equipment maintenance and fuel, food services, communications and information technology support, and emergency responder medical services. During a major incident, the Logistics Section may be helpful in dealing with any issues at offsite evacuation areas, and the transportation to those sites.

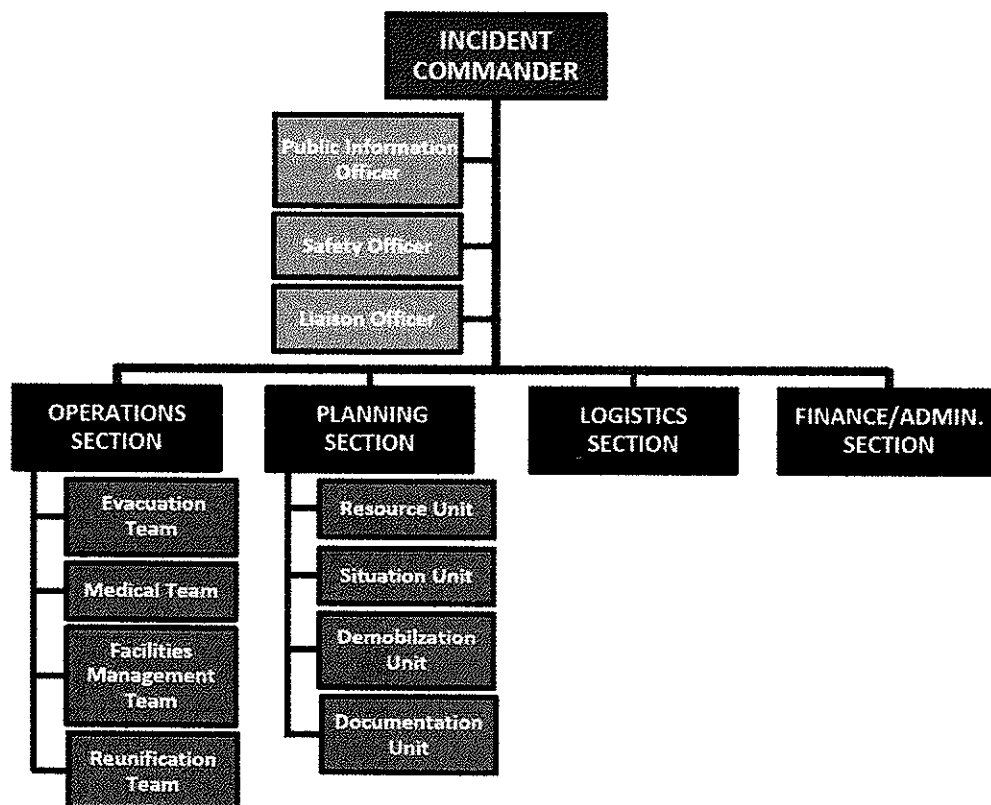
**Finance/Administration Section:** The Finance/Administration Section is established when the incident management activities require on-scene or incident-specific finance and other administrative support services. Some of the functions that fall within the scope of this section are the recording of personnel



time, maintaining vendor contracts, administering compensation and claims, and conducting an overall cost analysis for the incident. If a separate Finance/Administration Section is established, close coordination with the Planning and Logistics Sections is also essential so that operational records can be reconciled with financial documents. The Finance/Administration Section is a critical part of the ICS in large, complex incidents involving significant funding originating from multiple sources, and will typically not be established for most events.

Although some suggestions to staff these specific roles were presented, a survey of the school's administration should be conducted to recruit the best possible candidate for the aforementioned positions. This survey should focus on identifying any special skills, training, and capabilities possessed by the school's administration that may play a critical role in managing the effects of a serious incident or emergency.

### SAMPLE OF AN INCIDENT COMMAND SYSTEM STRUCTURE FOR A SCHOOL



As an incident intensifies and additional agencies arrive on scene, the ICS may change from a single Incident Commander to a Unified Command System (UCS). During a UCS, agencies with different jurisdictional and functional responsibilities work as a team to coordinate, plan, and interact effectively to



accomplish the incident objectives. For example, during an active-shooter incident, the initial ICS would be a single incident command, with the school providing the Incident Commander (Principal).

As police and emergency medical services arrive on scene, a UCS may be formed. Likewise, upon arrival of law enforcement personnel at an active shooting incident, the single incident commander role may transfer from the school principal to a law enforcement lead, or possibly assigning law enforcement to lead operations functions.

Although the structure may change, many of the school administration's responsibilities may not. In the ICS, each participating agency maintains its authority, responsibility, and accountability. Many of the previously mentioned general staff teams and units will still be critical in a UCS for the successful management of the incident.

## II. School Security Forces

School security force practices differ greatly throughout the Commonwealth of Pennsylvania among school districts. There are many factors that influence a school's decision to institute a security force. Although financial considerations often take forefront, in some instances the perception of an armed law enforcement officer is another factor. Perceptions aside, all school districts should have some form of a security force. This force may be armed or unarmed private security, and may or may not be staffed with sworn school resource officer(s). No matter which type of security force is implemented, each one should be managed by a school district.

### **Security Manager:**

The security manager role is critical to the effectiveness of a school security force. The security manager contributes several vital functions, such as planning, organizing, staffing, directing, and controlling the security force. A school security manager implements the security program and develops contingency plans. It is critical for the security manager to organize the security force into a professional team by developing regulations, staffing the team with qualified personnel, and providing daily direction to accomplish desired goals. Additionally, an effective security manager establishes controls to ensure compliance with the security plans and policies.

### **Security Officer:**

Security officers may provide a variety of functions that improve the security of the school. In addition to enhancing the safety of students, faculty, and visitors,



they may also be used to safeguard school property and equipment. Other security officer functions may include:

**Access control:** Security officers should be posted at all unsecured entrances to actively monitor the arrival and dismissal of students. By positioning a security officer at these entrances, they can challenge and deny unauthorized access. Additionally, during the active school day, security officers should ensure that all doors are properly secured, and provide escort for students exiting the building to retrieve items from their vehicle prior to reentering the school.

**Traffic duties:** Security officers may also be utilized to direct traffic during peak hours to alleviate traffic congestion and improve vehicular and pedestrian safety.

**Enforcement of school policies:** Security officers actively patrol school premises to enforce a variety of school policies and procedures. Enforcement may include violations of parking permits, visitor policies, and other prohibited offenses.

Security officers are either school employees or provided by a contract service. The decision to use in-house or contracted security officers may depend on several factors, such as training and/or cost. The hiring of in-house security officers may cost more due to the school being responsible for hiring and training costs; likewise, the school retains more control over their personnel. Contract security officers may be less expensive, but the quality and service provided by such personnel may not be of the same as in-house security officers, in addition to possible higher turnover rates.

Another critical consideration is whether to arm school security officers. The roles and responsibilities that are placed upon the security officers determine if they will be armed. An unarmed security officer is less effective in dealing with a more serious security incident, such as a violent intruder. An armed security officer provides a higher echelon of protection to deal with more serious emergencies. Armed security officers possess a use-of-force option to stop an armed individual and the means to defend themselves and others from an armed assault. All armed security personnel in Pennsylvania are required to participate in Act 235, Lethal Weapons Training Program, as terms of employment.

#### **School Resource Officer:**

Another viable option for school districts is to enter into an agreement for a school resource officer from the police force that has primary jurisdiction for a given school/district. A school resource officer program places sworn police officer(s) into a school on a full/part-time basis. The presence of a uniformed and armed school resource officer ensures a timely response to criminal activity and deters criminal behavior from taking place. A school resource officer may



perform many of the same functions as a security officer, in addition to the following:

- ❖ Helps to prevent crime and enhances the safety of students, faculty, and visitors.
- ❖ Enhances the delivery of law enforcement related education to students.
- ❖ Fosters cooperation and positive relations with students and parents by providing law enforcement related information, guidance, and referrals to other agencies, as needed.
- ❖ Promotes a greater understanding between youths and law enforcement; thereby, obtaining voluntary compliance from students in obeying the law and facilitating communication between the student population and law enforcement.
- ❖ Reduces juvenile crime in program schools and surrounding communities through education, prevention, and investigative efforts.
- ❖ Assists school administrators in assessing the effectiveness of building security and emergency response plans.

In addition to the previous functions, the major difference between a security officer and a school resource officer is their ability to affect arrest. Security officers can respond to criminal acts on school property, but can only enforce school policy. Another benefit of having a school resource officer is their ability to directly communicate with local emergency responders. Interoperable communication is critical during a major incident by providing situational awareness and the timely request for additional resources.

There are a variety of options for school districts to implement when it comes to security forces. No matter what decision is made regarding security forces, fostering a good relationship with the local law enforcement is critical. Local law enforcement should be welcomed not only when there is a police incident or a drill, but also during school days. School district and local law enforcement leads must continually work to enhance positive relations and build mutual respect to partner in all aspects of school safety.

### **III. Access Controls**

All schools within the Commonwealth have various means for persons to gain access to their buildings. This section focuses on the various access control systems available. It is important to have a modern access control system in place to prevent an unlawful intruder from entering the school.

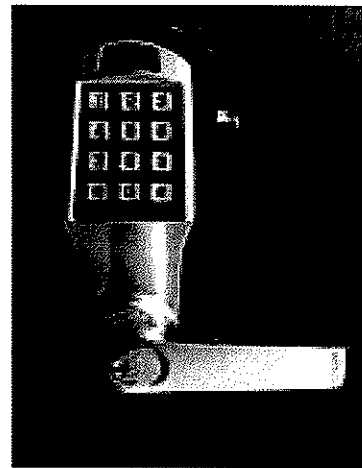




### **Cipher Lock (Punch Code System):**

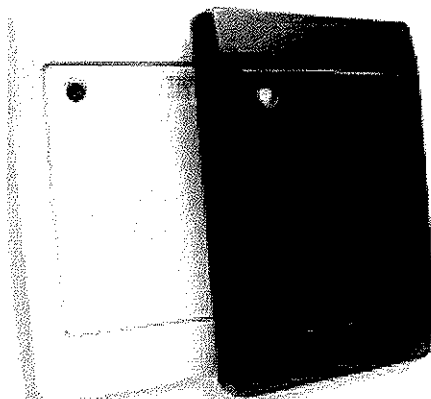
A cipher lock is a door-locking mechanism that is opened by entering a specific number on a programmable keypad. Cipher locking systems are an attractive security measure because they eliminate the necessity of keys. Not only does implementing a cipher lock system eliminate the risk of keys falling into the wrong hands, many cipher locks also can be programmed with single-use codes. Single-use codes provide personnel access to a room or building to perform a task, and then the single-time access code can be deleted. With key-operated locks, there is always the risk that a person with criminal intent working in the building might make copies to regain entry.

Depending on the manufacturer of the cipher lock, the devices can have up to 12 pushbuttons. A code can be as long as one to five digits, allowing for an almost infinite number of codes. When the cipher lock is set up for usage, the code is programmed and can be changed at any time. Cipher locks are used on a regular basis in places like schools, offices, computer server rooms, weapons storage areas, laboratories, and sensitive areas in places like banks and other financial institutions. Cipher locks can also be used in residential or commercial settings.



### **Key Fob/Proximity Card Reader Systems:**

Key Fob/Proximity Card Readers are electronic devices that “read” a Fob or card (credential). When an individual presents an authorized credential, the reader sends a signal to open a gate or entrance door. Both fob and card systems are considered a proximity reader, which means that credentials simply need to be waved near the reader in order for it to scan the credential. If the credential is authorized, the door or gate locking mechanism is released. The benefit of a Key Fob/Card Reader system is that credentials are easy to use and offer a higher level of security, as the credential can only be in one person’s possession at a time, so it is less likely to be passed along to an unauthorized person.



There are two types of proximity cards that can be used to secure a gate, room, or building. Those are the Passive Card and the Active Card. The Passive Card is the more widely used type of proximity card used to secure doors and gates in commercial buildings, schools, and residential settings. In Passive Card systems, radio frequency signals are sent from the reader, but the readers have



a limited range. The card must be held close to the reader to function. Active Cards have a much greater range and are powered by a battery. As a result of the greater range, Active Cards are often used in applications, such as a proximity card in a vehicle, that sends a signal to open a security gate or to automated toll collection booths to activate without having to stop and exit the vehicle.

The Key Fob system is a small hardware device with built-in authentication mechanisms. It has the same dimensions as a typical key, and is usually kept on a key chain with other hard keys. The Fob operates in the same way as the proximity card. The reader sends out a low range radio frequency to the proximity Fob, which must be held in close proximity to the reader to function properly. When the user presses the button on the Fob, the embedded antenna sends a code via a radio signal to the reader. If the code is authorized, the door or gate is unlocked.

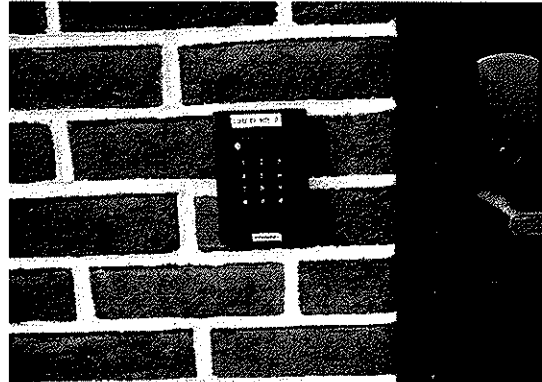
Some of the advantages to a keyless proximity card or key fob system include the following:

- ❖ Eliminates the need to produce, issue, track, collect, or replace keys.
- ❖ Provides complete accountability of the date, time, location, and identity of the person that entered a certain door.
- ❖ Eliminates the need to carry several different keys that can be lost.
- ❖ Certain areas can be custom tailored to provide only certain people access.
- ❖ Employees who were terminated or pose a threat to the school can be deleted immediately to prevent access.
- ❖ Proximity cards can be incorporated into the staff identification card so that only one card has to be carried. Identification cards should be displayed at all times while on campus.
- ❖ Eliminates the need to have certain doors monitored by a staff member.

Ideally, all exterior doors should remain secured at all times when not in use, and all students, staff, and visitors should be required to enter the school from the main entrance. The main entrance should be equipped with a secured vestibule that requires all people entering the school to do so through the main office. In the main office, visitors should be required to sign-in and be vetted before being granted access to the interior of the building. The door from the main office that leads to the interior should also be controlled with a remote locking device that can be released from behind the main office desk. Authorized personnel with an



authorized proximity card are approved to access the building through other entrances equipped with a proximity card reader. Any entrance doors that are unsecured when students arrive in the morning or depart at the end of the school day should be monitored by authorized personnel equipped with keys and cellular telephones, or portable radios, for emergency communications. All schools should



endeavor to use as few entrances as possible for entry into the school. All visitors should be guided to the main entrance to gain access to the school. Signage should be posted on all exterior entrance doors that advise visitors to use the main entrance to enter the school.

Common school access control problems are students, teachers, and other staff propping doors open. Students, teachers, and staff often compromise school security by propping doors open with a rock, wooden wedge, or other object. Authorized personnel should be assigned to check all exterior entrances at select times throughout the day to ensure the doors are not propped open.

Another access control problem found in assessments is "piggy-backing." "Piggy-backing" occurs when an authorized person enters the building and another person walks in behind them before the door is secured. All personnel should be trained that "piggy-backing" is a significant security risk and the behavior should be discouraged. Likewise, all staff members should monitor and address the events of "piggy-backing" by the students.

An additional access control area is the kitchen delivery door or loading dock area. Delivery and loading dock doors should have a small window or peephole, so kitchen personnel can see who is at the door before it is opened. Ideally, every delivery area/kitchen door should have an intercom system that allows staff to speak with the person at the door, and a means of safely seeing the person as well. In addition to intercom and window measures, a closed-circuit television (CCTV) camera should also be installed at all access doors to enhance monitoring capabilities in delivery areas.

#### **Key Lock System:**

The administration of a key control system is a security concern in many Commonwealth schools. Common key control issues include keys being issued with inaccurate records, and keys being lost, stolen, or not returned when required. Therefore, many schools have an unknown number of unaccountable keys jeopardizing school security. Schools that use key locks should implement a strict written key-control policy that addresses at least the following:

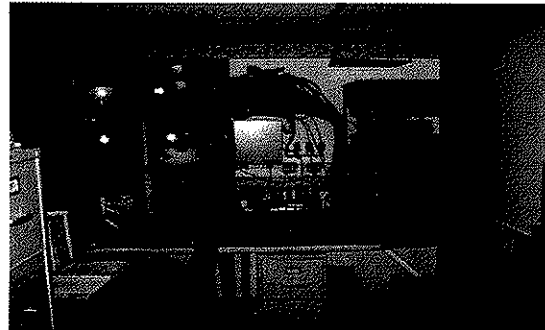


- ❖ Personnel vetted for authorized access to specific individual key areas.
- ❖ Scheduled inventory of all keys.
- ❖ Key issuance and return records.
- ❖ Lost or stolen key reporting.
- ❖ Re-key locks of stolen or lost keys records.
- ❖ Security procedure of master keys and master key access.
- ❖ Five-year interval of exterior door rekeying schedule.
- ❖ Exterior locks should be rekeyed upon the installation of an electronic keyless access control system.

#### **Closed-Circuit Television System:**

Schools should be equipped with a comprehensive digital CCTV system that monitors and records activity at the following areas:

- ❖ All entrance doors.
- ❖ Common areas such as the auditorium, library, cafeteria, gymnasium, and lobbies.
- ❖ Hallways and stairways.
- ❖ Parking areas.
- ❖ Delivery/loading dock areas.
- ❖ Building perimeters.



CCTV cameras should have the ability to pan, tilt, and zoom for better coverage of the campus. The CCTV system should be web-based so the cameras can be monitored from an off-site location. Ideally, access to the school's CCTV system should be provided to the primary law enforcement agency with jurisdiction over the school campus. This will provide law enforcement with valuable intelligence information prior to entering the school during an emergency. All digital video recording (DVR) equipment should be kept secured at all times when not in use, preferably in a locked room, closet, or cabinet. Access to DVR equipment should be limited to a select quantity of staff members. The system should have the



ability to retain recorded images for a period of at least 15 days. The CCTV system should be supported by the emergency generator during power outages.

#### IV. Lockdown and Evacuation Procedures

##### Lockdown Procedures:

There are a variety of different lockdown procedures implemented in schools throughout the Commonwealth, and they all range in form and complexity. Although there is no single procedure that can cover all possible contingencies, the following recommendations will be beneficial in any lockdown situation.

All school districts shall have written comprehensive lockdown procedures. All authorized personnel shall receive instruction on these procedures and be prepared for any given emergency that may arise. The following are some suggested points to be included in your school district's lockdown procedures:

- ❖ Alternate securable evacuation areas that provide protection for personnel within the common areas shall be identified.
- ❖ Plans shall note all communication will be in plain language, in place of codes, and communicated utilizing the public-address system. In areas where a public-address system may not be adequately heard (e.g., gymnasium, cafeteria), an identifiable audible tone should precede the announcement.
- ❖ All plans shall have means of communication between teachers and office personnel through the most expedient means available (e.g., classroom phone, cellular phone, or a hand-held radio).
- ❖ Lockdown drills shall be conducted during each semester with the assistance of the local law enforcement agency. These drills shall be conducted at various times throughout the day (e.g., during class change, while students are participating in outside activities).
- ❖ Lockdown procedures shall address the techniques for administrative, exterior threat, and interior threat lockdowns. These three lockdown types are clearly defined as follows:

**Administrative Lockdown:** An administrative lockdown is utilized to restrict movement within the school. It can be implemented for a variety of reasons, such as during the onset of severe weather or conducting random searches for contraband by law enforcement canines. During an administrative lockdown,



everyone should continue with normal business, with the exception that all students and faculty are required to report to their classrooms, and no one is authorized to leave until the "all clear" message is given.

**Exterior Threat Lockdown:** An exterior threat lockdown is utilized when there is a threat outside of the school, but there is no immediate risk to the students inside. This lockdown would be appropriate if there was a serious police incident occurring in close proximity to the school. The same steps would be taken as with an administrative lockdown, with the exceptions that the doors are locked, the exterior shades are closed, and the perimeter of the building is secured by authorized personnel. Students participating in outdoor activities shall be directed to a pre-determined site as indicated in each school's individual all-hazards plan.

**Interior Threat Lockdown:** An interior threat lockdown is the most serious, and shall be employed in response to an intruder inside the school or a severe imminent threat. During an interior threat lockdown, authorized personnel shall direct students to clear the hallways and proceed into the nearest classroom. Students are locked in the classrooms, and are seated out of sight of the windows and doors and should remain silent. The exterior window shades should be raised to allow responding law enforcement to see inside the building. School administrators should be made aware not to immediately leave the classroom if the fire alarm is activated and they should follow the procedures set forth in the school's all-hazards plan.

Unlike the previous two lockdown procedures, an interior threat lockdown is not cleared over the public-address system alone. In conjunction with the "all-clear" message, authorized personnel must wait for school officials and a uniformed law enforcement officer to unlock the classroom door. Students participating in outdoor activities shall be directed to a pre-determined site as indicated in each school's individual all-hazards plan.

An effective active shooter plan also addresses the ability to secure classrooms and common areas (e.g., gymnasiums, cafeterias, libraries, auditoriums) during a lockdown situation. Doors leading into these areas should be equipped or retrofitted with a lockset that can be secured from within the room. If it is not possible to change door locks, doors should be pre-locked and propped open as practicable. Pre-locking doors provides the staff the ability to quickly secure the door(s) in the event of a lockdown emergency, minimizing exposure to a potential threat. Common areas should be limited to one entrance when occupied and secured when vacated; this will ensure the area is secured quickly.

Classroom doors with large windows or side lights can be easily breached; therefore, door windows should be replaced with shatter resistant or reinforced glass. Some common areas, such as libraries and cafeterias, have large windows in the interior of the school, which provides an unobstructed view into



these spaces. If these common areas do not have an accessible exit to evacuate or an alternate securable location to use in an event of a lockdown, window coverings, such as blinds or tint, should be installed to obscure the occupants from the view of an intruder.

### **Evacuation Procedures:**

In certain instances or locations, a lockdown might not be practical. On these occasions, as with a fire or other emergency, an evacuation may be necessary. Evacuation drills shall be extensively rehearsed throughout the school year. Due to the frequency of these drills, individuals may become complacent; therefore, someone wanting to do harm may take advantage of this situation. During an evacuation, the need to remain vigilant is crucial.

When planning for an evacuation of your school, primary and alternate assembly areas should be developed. These locations should be made known to all faculty and staff, and utilized to minimize predictability. These assembly areas should not be identified in any manner (e.g., signage, pavement markings) to ensure they are not used by an individual who is looking to use an evacuation for nefarious deeds.

When an evacuation is necessary, an advance team should sweep the routes and assembly areas for suspicious items. Authorized personnel leading students out of the building shall be vigilant of any items that seem out of place.

Evacuation drills should include blocked primary and alternate evacuation routes. In doing so, this technique not only battles complacency, but also conditions faculty and staff with the ability to quickly change their actions during an unpredictable situation.

Areas of refuge should be clearly labeled and properly equipped. An area of refuge is a location in a building designed to hold occupants during a fire or other emergency, when evacuation may not be safe or possible. Occupants can wait in these areas of refuge until rescued or relieved by emergency personnel. Ideally, an area of refuge will have a fresh or filtered supply of air, emergency lighting, and a means of communication such as a call box or telephone.

The facility should be equipped with "Go Bags/Kits" for emergency evacuations. "Go Bags/Kits" are a collection of emergency and informational items. These "Go Bags/Kits" may include two-way radios, class rosters for accountability, emergency student data profiles, first aid items, flashlights, etc. The contents of "Go Bags/Kits" can be determined by the roles and responsibilities of the person who is carrying them, or for each specific school location. Schools with adjoining campuses may not need as extensive "Go Bags/Kits" as schools whose location is isolated from the rest of the school district. Urban schools will also have different needs than rural schools. The contents of these kits can also be



determined by the roles and responsibilities of the person who is carrying the kit. For example, separate kits can be developed for administration, the nurse or medical teams, and teachers. These kits should be inventoried quarterly.

In the event of a long-term evacuation, local offsite evacuation areas and transportation assets should be identified. These will be school specific. Along with previously mentioned determining factors, additional issues that may need to be addressed would be whether transportation is needed or if the students can walk to the alternate location. If transportation is needed, this service should be stipulated in any bussing contract. Alternate routes should be planned in case the specific emergencies primary route is blocked. Memorandums of agreement or understanding should be drawn up between the school and the alternate facility if a long-term evacuation site is off school district property. All of these and other issues should be addressed and incorporated into the school's all-hazards plans, reviewed annually and, if possible, tested with either a tabletop exercise or a drill.

## **V. Family Reunification, Media, and Communication and Notification Systems**

A subject often overlooked by school administrators in their all-hazards plans are the needs of family reunification, media response, and community notification planning.

### **Family Reunification:**

School administrators should attempt to identify areas on and off campus that can accommodate the number of family members in accordance with the size of the student population. If one large area is not available, multiple smaller areas should be identified and listed in the school's all-hazards plan. Depending on the situation, the decision of where to reunify families or stage the media might be made during the incident, so multiple areas should be predetermined and available. The family reunification areas should be a reasonable distance from the school if possible, but not in close proximity to the media staging area. This will facilitate the dissemination of information to the family members, without the media hearing private details not meant for public dissemination.

### **Media:**

A separate media staging area should be identified off campus that accommodates a large number of media personnel and their news-broadcasting vehicles. If this is not feasible, multiple smaller locations on campus should be identified and listed in the school's all-hazards plan. The media staging areas should be a reasonable distance from the family reunification areas and the actual incident. Depending on the nature of the incident, the exact staging area





for the media may be determined during the incident. Therefore, several areas should be predetermined to facilitate the decision-making process and to disseminate this information to the media.

### **Communication and Notification Systems:**

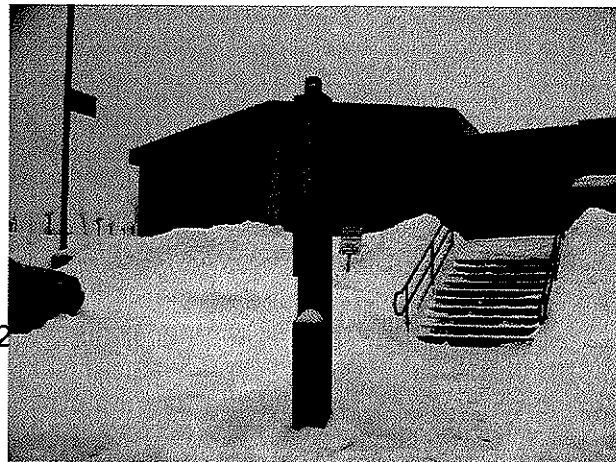
Proper communication and notification systems shall be in place at the school to ensure authorized personnel are aware of these procedures to effectively handle all emergency situations. The systems will inform them of what is happening at the school, what actions to take during the emergency, and the proper locations to assemble to meet family members. The systems would also be used for any other information deemed necessary for the public to know during the emergency situation.

The communication and notification systems implemented should be similar to those being used at many college campuses across the country. Schools should be equipped with a multi-layered campus-wide system.

**Text-Messaging System:** One of the most popular systems used today is the text-messaging system. This is an acceptable option for mass communication; however, it should be supported by other forms of mass communication, due to the fact that it is voluntary and not all students have access to text messaging. If text messaging is used, the information technology (IT) specialists for the school district should ensure they have a complete and updated list of all students and family members enrolled to receive emergency text messages. The IT specialists should attempt to have emergency messages prepared in advance for potential incidents that have been identified during the all-hazards planning process. The formation of prepared messages saves valuable time during the emergency. Alternate staff members should be identified and trained to send the text messages in the event the IT specialists are not available.

**Electronic Mail System:** Electronic mail, cellular phones, and landline telephone systems can also be utilized to communicate in a school emergency. In planning, considerations should address the need that all students, staff, and parents will have access to their e-mail or cellular telephone during the entire school day. Electronic message boards installed at key locations in the school are another alternative method to enhance emergency communication.

**Alert Siren/Alarm System:** An alternative to electronic communications that provides instant notification to an entire school campus is an alert siren or alarm system. Alert siren or alarm systems should be installed at key locations in the school and around





the campus to alert students, employees, family members, and the surrounding community of an emergency situation at the school. An alert siren/alarm system, in conjunction with the public address system, could be used to communicate voice messages campus-wide, while also sounding an audible alert tone for individuals outside the range of the voice systems. All alert siren/alarm systems and public address systems should be supported by emergency generator power.

**Public Address Message System:** Public address messages should provide detailed instructions for authorized personnel and the surrounding community to follow during an emergency situation. If possible, authorized personnel and family members should receive training during their orientation period that provides them with guidance on the proper procedures to follow after notification of an emergency situation at the school. Follow-up training should be provided to all authorized personnel and family members at a time determined by the school district.

**Emergency Call Box System:** Another notification system to consider in school planning is the installation of emergency call boxes. Most college campuses have installed these systems to provide an emergency notification system for students in remote areas of the campus, such as parking lots or walkways. Emergency call boxes should be installed in certain school locations, such as remote parking areas, athletic fields, or walkways. Some schools have already installed emergency call boxes in some of their classrooms as well. When activated, the system allows a student to communicate directly with a staff member in the main office, or with the police department, to relate the nature of their emergency.

If the school employs police or security personnel, the most senior on-duty police/security officer on campus should have the responsibility of transmitting emergency messages over the previously mentioned systems. Defining this authority will allow the emergency messages to be transmitted quickly, without having to wait for approval from the school district. If the school district has concerns with such an arrangement, the most senior on-duty police/security officer onsite must have direct access to the district superintendent to obtain immediate dissemination approval.



## CONCLUSION

The primary assets of the school are the students and the employees working on the campus. Current events around the world indicate that schools in the United States are also vulnerable to terrorist acts. Many schools are vulnerable to violent intruders entering the building with a weapon and causing harm to the occupants. A secondary threat to the school is the introduction of a portable explosive device into the building to cause mass casualties.

Based on the current security posture, the risk of a violent act against students, faculty, and staff must be considered real; however, with the implementation of the suggested recommendations, the likelihood of such events can be diminished.

This report on Pennsylvania Schools, both public and private, was prepared to provide schools throughout the Commonwealth with general guidelines to enhance the overall security posture to their individual school(s), and improve responses to emergency situations affecting the school(s) and the surrounding communities.

## PENNSYLVANIA STATE POLICE RISK AND VULNERABILITY ASSESSMENT TEAM INFORMATION

The 9/11 attacks of 2001 and the tragic acts of violence that have taken place in our schools over the years stands as a continual reminder of our need for vigilance in protecting our Commonwealth's critical infrastructure and key resources.

The PSP RVAT was formed in 2004. Since formation, the team has performed over 300 assessments for small and large businesses, commercial facilities, event stadiums, shopping malls, activity parks, schools, colleges, hotels, and hospitals. Additionally, the PSP RVAT provides presentations to educate the public on physical security at conferences, universities, and for private and state agencies.

The PSP RVAT mission is to provide in-depth vulnerability assessments to improve the security posture of any facility within the Commonwealth. The PSP RVAT is comprised of State Troopers specifically trained on assessment procedures related to physical security, explosive effects on structural design, threat analysis, and practical target hardening techniques.

The PSP RVAT has completed the following security-related training:

### **Federal Law Enforcement Training Center:**

- ❖ Physical Security Training Program.
- ❖ Weapons of Mass Destruction Training Program.

**American Society for Industrial Security (ASIS):**

- ❖ Facility Security Design.
- ❖ Transportation Security.
- ❖ RVAT members are official members of ASIS.

**Public Agency Training Counsel:**

- ❖ School Bomb Threat.
- ❖ Suicide Bomber Terrorism Threat.

The PSP RVAT has been instrumental in bringing school security to the forefront within the education community. Any school official interested in learning more about a risk and vulnerability assessment can contact the PSP RVAT at telephone number 717-346-4085, or via e-mail at [ra-pspoffdomesticsecurity@pa.gov](mailto:ra-pspoffdomesticsecurity@pa.gov).