



Case study



Wyoming Valley West School District Ensures Students Aren't Late to Class with the Help of Evolv

Wyoming Valley West School District

LOCATION: Kingston, PA

K-12 STUDENTS: Approximately 4,600

SCHOOLS: 4 Elementary, 1 Middle, and 1 High School

WEBSITE: www.wvwsd.org

Solution Snapshot

Goals

- Minimize long lines of students waiting outside schools to pass through security screening
- Reduce nuisance alarm rate
- Avoid class delays by getting students through security screening and to their first class on time
- Streamline security screening at football games, graduation, and other community events
- Foster a safer learning environment for students and teachers
- Improve security screening effectiveness and accuracy
- Facilitate more face-to-face interactions between teachers staffing security ingress and students
- Avoid intrusive, lengthy secondary screening checks

Solution

People

- Provided online training to security staff through Evolv Academy
- Delivered onsite training to security operators during installation and deployment
- Evolv Customer Success Manager trained Security Coordinator on how to use Evolv Insights analytics

Process

- Evolv Solutions Engineering worked with Wyoming Valley West to schedule delivery of the demo Express system for testing
- Evolv Solutions Engineering helped with the configuration and deployment of Express systems
- Worked with district Safety Security Coordinator and School Resource Officers to modify ConOps to align with new security screening processes

Technology

- 4 Evolv Express® Single-lane Systems
- Evolv Cortex AI®
- Evolv Insights®

Outcomes



Reclaimed entrance footprint taken up by security systems by going from 6 metal detectors to 4 Express systems



Decreased the number of teachers needed to staff security ingress by 33%



Screened over 1,000 people in approximately 30 minutes for graduation ceremony



Reduced nearly 50% nuisance alarm rate connected to metal detectors



Reduced long security lines, enabling students to enter school and proceed to breakfast and/or first-period classes



Minimized intrusive secondary security screening process



Created a safer environment for students, teachers, administrators, and staff

Experiencing the Short Comings of Legacy Metal Detectors

For a number of years, Wyoming Valley West used walkthrough metal detectors sporadically at the entrances to all of its schools—four elementary schools, one middle school, and one high school.

“We only use them for visitors at the elementary schools, but we used them for everyone at the middle school and the high school,” says Anthony Dicton, Safety and Security Coordinator at Wyoming Valley School District. Until a few months ago, the metal detectors at the middle school and high school were not used every day. “It was random, and only a small group of administrators knew what days they would be used each week,” he explains. “But following one of the school shootings we heard about in the media in late 2022, the school board concluded they should be used every school day.”

Wyoming Valley West operated three walkthrough metal detectors at both its middle school and high school. “We had three staff on each one as well as an additional security guard,” Dicton says. This meant that the district had to allocate 24 staff, who were paid a stipend, to manage the metal detectors each day. “The metal detectors had a real problem with nuisance alarms,” Dicton notes. “All different types of things would set them off—buttons on jean jackets, cell phones, there was a long list. We needed to perform secondary checks on as many as half of the students every day. None of the teachers who served as security staff enjoyed the assignment.”

The middle school and high school in the district have a combined enrollment of around 1,400 students. Getting them through the metal detectors and into the school buildings was a challenge. “Lines formed in front of the entrances to both schools as students queued for up to 40 minutes to pass through the metal detectors,” he describes. “We had to implement ‘delay’ schedules on those days and the start times to classes. Students would miss portions of their first class and some who ate breakfast at school were unable to do so due to being stuck in a long line. In addition, the students had to stand in the rain and snow on bad weather days. We needed something different.”



Evolv Was Top of Mind When the Security State Grant Was Issued

About midway through 2022, a large grant from the Pennsylvania Crime Commission became available to every school district in the state.

"The grant had a series of checkboxes for tiers one through three that reflected the maturity of security deployments at the district," Dicton recalls. "I was able to persuade the grant writers that we had completed tier one and most of tier two, and thus we qualified to purchase security screening systems. I was familiar with the Evolv Express technology and knew what we wanted."



Federal and State Grants

Both federal and state grants can be leveraged by educational institutions to purchase and implement advanced security measures. These grants aim to provide financial assistance, making it feasible for schools to enhance their security infrastructure and create a secure learning environment for all.

One notable example is the Pennsylvania Crime Commission, which has made grants available for schools within the state of Pennsylvania to improve their security systems. This initiative reflects the state's commitment to promoting school safety and preventing criminal activities in educational institutions. The Pennsylvania Crime Commission collaborates with local law enforcement, school administrators, and other stakeholders to identify areas where security improvements can be made and allocate funds accordingly.

In addition to state-level grants, federal grants are also accessible to schools nationwide. The U.S. Department of Education, for instance, offers the School Violence Prevention Program (SVPP) and the Student Support and Academic Enrichment (SSAE) grant. These programs provide financial assistance to schools for the acquisition and implementation of security screening technology, among other safety measures.

By leveraging state and federal grants, schools can invest in state-of-the-art security screening technology, such as security screening, surveillance cameras, and access control systems. These tools help deter potential threats and ensure the well-being of students and staff, fostering a secure and productive learning environment for all.



Getting to a Resounding “Yes” for Evolv

Dicton presented the proposal to migrate from traditional metal detectors to the Express systems to the school board when the large grant became available.

At the time, the cost of the systems was higher than today, and the school board elected to table the purchase until a later time.

In late 2022, when the middle school and high school began using the metal detectors every school day, the challenges associated with them piled up, causing the school board to revisit its earlier decision. More students were unable to get breakfast before classes started and missed part of their first class of the day. However, before Wyoming Valley West made a final decision to purchase the Evolv system, Dicton, and the school board wanted to observe an Express in use. In response, their Evolv account manager worked with Dicton to ship out a demo system.

“It arrived in a large pelican-type container, and we set it up in the middle school,” he recounts. “It took us maybe 25 minutes to have it up and running. The school board was there to observe it in action, and we pulled eighth-grade students out of study hall to help us test it. We had them walk through with the weapon props Evolv sent us in different locations on their bodies and bags. Everyone was extremely impressed how the system pinpointed the location of the weapon, which made secondary screening much easier and faster—as well as less intrusive.” That evening the board met and the decision was made to go forward with Evolv.



The metal detectors had a real problem with nuisance alarms. All different types of things would set them off—buttons on jean jackets, cell phones, there was a long list.”

- Anthony Dicton, Safety and Security Coordinator, Wyoming Valley West School District

Express Elevates School Experience

Dicton and the school board wanted to ensure all students could easily pass through the Express lane, including injured and disabled students, something they could not do with metal detectors.

With entry lanes that measure just under 40 inches, students with mobility needs can pass through the Express alongside their classmates. "They can get through the Express lane without any problem," Dicton adds. "It's wide enough for a wheelchair and for those on crutches to pass through."

The ability to brand the panels on the Express tower is something Dicton sees as a plus as well. "With the branded panels, the Express systems look like they are part of our school environment," Dicton notes. "We didn't want a security system that was intrusive and looked like it didn't belong here."

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Evolv is Ready for Any School Event

For the rollout of Evolv, Dicton scheduled the initial deployment at the high school and followed at the middle school three weeks later.

An Evolv Solutions Engineer worked with Dicton to assess the entrances at each school to determine the best position for each Express system. The two single-lane Express systems at the high school are in fixed locations. For the middle school, Wyoming Valley West elected to acquire two ruggedized single-lane Express systems.

"We wanted to have a set of Express systems that were mobile, easy to move between locations," Dicton says. "We plan to begin using them at football games in the fall and will use them at our graduation ceremony in June. The ruggedized Express systems are easy to move over rough and sloped locations, and they are built to withstand adverse weather conditions—moisture and wind. Our graduation event will be the first event where we use the Express, and we're really excited about it. Last year, we used hand-wand metal detectors to screen over 1,000 people and it was slow and troublesome. Everyone had to take everything out of their pockets, and every little item set off the alarms."

Even though Wyoming Valley West announced the rollout of the Express systems in the high school in the district's newsletter and social media accounts, students were unprepared for the simplicity of security screening. "It was very interesting to see students on the first day, who would stop after walking through the Express lane thinking they still needed to be screened," Dicton says. "We had to tell them to keep going. After the first couple of days, the kids understood the process."

For the deployment at the middle school, Dicton shot a video of an Express in operation at the high school and shared it with the school's teachers. "They were able to see how the kids walk through the Express lane efficiently and prepare their students before the rollout," he says. This helped the middle school deployment avoid some of the issues initially experienced at the high school.



Hands-on Training and Chromebook Pass Around

Dicton notes that an effective security approach is multilayered, requiring a mixture of people, processes, and technology.

Thus, training the teachers who manage security screening each morning on the Evolv technology before and during the deployment of the Express systems was a key requirement.

"The learning curve on the Express system is quick and easy," Dicton says. "The Express is very intuitive to use. Our security staff finds the Flow Control and Threat Resolution tables easy to manage. When an alarm occurs, the red box on the screen pinpoints the exact area on the body or bag where the threat was detected. In less than an hour, our staff was trained on the Evolv technology."

For ongoing training of staff, Wyoming Valley West leverages online training through the Evolv Academy. "This helps ensure that existing security staff remain current on Evolv technology while enabling us to train and onboard new security staff," Dicton relates.

Generating Reports to Enhance Decision Making

One of the capabilities of the Evolv technology that Wyoming Valley West liked when evaluating the Express system was Evolv Insights® analytics.

"We've been focused on the initial rollout at the high school and middle school but plan to begin generating reports with Evolv Insights to analyze flow at each of the different entrances during specified time intervals," Dicton says. "We'll use this data to make decisions on staffing and communications to students. We'll also use Insights to analyze the objects causing nuisance alarms and if we're reducing those over time with Cortex AI."



Evolv Team Ensures Transparent Communication

The relationship with Evolv has been very positive from the start.

"The Evolv account team was upfront right away on what the technology could and couldn't do," Dicton says. "For example, the Express system detects Chromebooks, and they told us those currently set off alarms. However, Evolv also gave us a couple of workarounds that have been proven out at other schools using the Evolv Express." Dicton, administrators, and the school board concluded that the Pass Around Method would work best to minimize Chromebook nuisance alarms. Here, students place their Chromebooks on a table managed by a staff member who hands them back to them after they pass through the Express lane.

Dicton trusts that the Evolv system will learn over time and will decrease the nuisance of Chromebook alarms. The evolution of technology is something he anticipates will add more value to the district over time. "Our IT team is very excited about the opportunity to integrate our camera system and mass notification system into the Evolv Express using Evolv's open API," he says. "Integration of our security systems speeds our ability to respond to a threat and bolsters our security posture."

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Objective Is to Detect Mass-casualty Weapons

Dicton emphasizes the focus of the Evolv solution is on preventing mass-casualty weapons from getting into the school.

"This is something that is important to point out early in the evaluation process of a security technology," he notes. "Evolv is extremely effective in detecting mass-casualty weapons. Damage that knives can do are already inside our schools—things like scissors and staplers. Pocket knives, for example, are not something that security screening technology is going to detect."

Because Dicton advocated for Evolv he felt all eyes were on him when the Express systems went live at the high school. "I sold the solution to the board and administration and was obviously nervous when we first went live," he says. "But I was confident it would work and the deployment proved this out. Even though the first couple of days had some issues, everything has worked seamlessly since then. While we have not found any mass-casualty weapons yet, we know that when one does pass through an Express lane it will be detected."

Smaller Facility Footprint for Security Technology

Wyoming Valley West is reaping rewards from the Evolv deployment in a number of different ways.

As a starting point, the school district shrank the number of screening systems to manage from six walkthrough metal detectors to four single-lane Express systems. This reduction results in less space being consumed in the middle school and high school by security screening. The Express system requires fewer staff to manage. With the metal detectors, the district had three security operators per machine. The same number of staff are used for the Express systems.

"We have one teacher in the Flow Control position, another in the Threat Resolution role, and another managing the pass-around table for Chromebooks," Dicton says. But with one less machine at each school, Wyoming Valley West was able to reduce the number of teachers for security screening each morning by 33%.

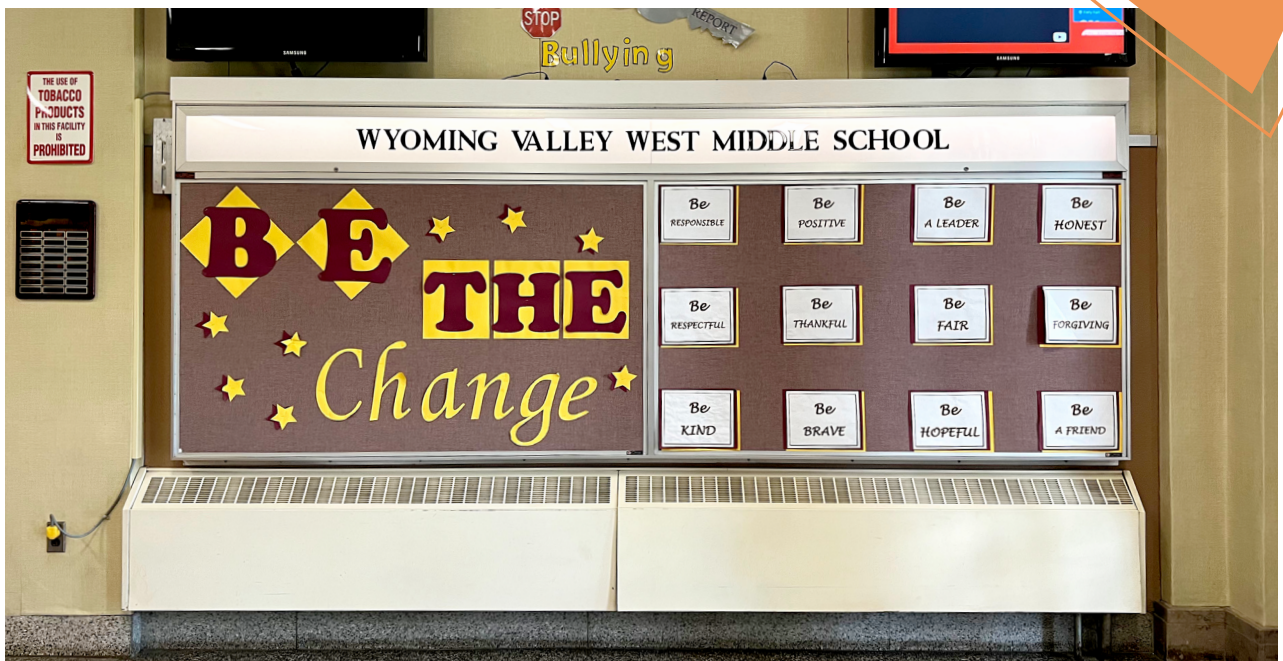


Getting to a Resounding “Yes” for Evolv

Nuisance alarms with the Express systems have been dramatically reduced from the 50% rate of the walkthrough metal detectors.

The Cortex AI technology differentiates real threats from false threats. “Evolv is able to tell the difference between a handgun and buttons on a jacket, keys, or cellphones,” Dicton says. “And for instances where a nuisance alarm occurs due to student softball players carrying bats in their backpacks or those who accidentally forget to remove their Chromebook from their backpack, the red box on the Evolv tablet enables us to easily resolve the nuisance alarm.”

The percentage of nuisance alarms is so much lower than with the metal detectors that Dicton and the teachers staffing the Express systems began to wonder if they are still working. “But then a security resource officer walks through the Express lane and the alarm goes,” Dicton laughs, “It just works.”



“ When we evaluated different options, we kept coming back to the fact that Evolv is used at some of the largest sports stadiums and most prestigious performing arts centers in the country. If it keeps their environments safe and scales to handle the volumes of guests they experience, then it is good enough for us.”

- Anthony Dicton, Safety and Security Coordinator, Wyoming Valley West School District

Students Needed Time to Access School-funded Meals Before Class

A regular 40-minute delay in ingress caused by standard magnetometers was detrimental to students in more ways than one.

Aside from needing adjusted class schedules to ensure the first period was not missed, some students at Wyoming Valley also rely on the school for basic resources, such as school-funded meals and a safe place to wait until school begins for the day.

Now, students are able to get breakfast and prepare for the school day because of Evolv. "We're a high-percentage poverty district," Dicton explains. "Before, with the metal detectors, some kids didn't have time to get breakfast after arriving at school, and others simply had to grab and go. Now with the Express systems in place, they have time to eat in the cafeteria and then go to class on time. Being able to get your day off to a good start makes a big difference when you're trying to learn."

The response from students has been very positive. "They love it because they can simply keep walking and when an alarm does occur, the secondary screening is unintrusive and quick," Dicton says. "When they do get flagged for a secondary check, the kids are actually curious to discover what caused it to occur and where the detected item was located."

The teachers who manage security screening are just as positive about Evolv. "Before Evolv, they had to focus on managing the technology and handing the students back everything they put in the basket rather than greeting the kids coming into the building," Dicton says. "Now, they are able to make eye contact with the students and have a conversation with them. In addition, when it came to secondary checks, all of us hated going through bags of students—which was uncomfortable for them as well as the students."

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Security Lines Virtually Gone

The 40-minute lines that formed in front of middle and high school entrances are almost nonexistent due to the speed of the Evolv Express.

"Most of our juniors and seniors would hang out in their cars until the security line died down, and then they would come into the school," Dicton comments. "Even though they were late to class, this was attributed to the metal detectors. But with the Express systems in place, they no longer have the excuse of being stuck in a security queue—and they are now being marked down as late."

In Good Company Using Evolv

Dicton concludes Wyoming Valley West is in good company.

"When we evaluated different options, we kept coming back to the fact that Evolv is used at some of the largest sports stadiums and most prestigious performing arts centers in the country," he reflects. "If it keeps their environments safe and scales to handle the volumes of guests they experience, then it is good enough for us. We're very happy to add our name to that list."

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Contact us to learn more about helping to create
safer zones where you live, learn, work, or play.

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