Case study | 4 **CHAMPAIGN UNIT SCHOOL DISTRICT**
BETTER SCHOOLS BUILD BETTER COMMUNITIES

Champaign Unit 4 School District Builds Trust with Students While Increasing Safety By Leveraging Evolv Express® System

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Organization Overview

ORGANIZATION: Champaign Unit 4 School District

LOCATION: Champaign, Illinois

STUDENTS: Over 10,000

TEACHERS: Over 1,900

SCHOOLS: 12 elementary schools, 4 middle schools, 3 high school campuses

SECURITY STAFF: Over 20

URL: www.champaignschools.org

Solutions

Goals

- Create a feeling of trust among students, teachers, and administrative staff
- Foster positive engagement between security staff, administrators, and teachers with students when they pass through security screening
- Eliminate security screening queues that took students up to 2 hours to clear
- Get students into schools safely and to their classrooms in time
- Leverage portability of concealed weapons detection systems for outdoor events held at football and track and field stadium
- Streamline bag check processes without diminishing effectiveness of weapons detection
- Use teachers and administrative staff to help with weapons security screening at the beginning of school day

Solution

People

- Evolv team worked with Champaign Unit 4 IT and security teams to assess security requirements and build corresponding RFP proposal
- Trained security staff, teachers, and administrative staff on operating the Evolv Express® systems—with a focus on quickly and accurately assessing detected threats

Process

- Configured and deployed 6 Evolv Express systems for start of the winter semester, followed by 2 new systems in subsequent months
- Provided ongoing guidance around branding Evolv systems to reflect school spirit
- Integrate the Evolv systems into existing video surveillance systems and cybersecurity infrastructure

Technology

- Evolv Express - 4 Dual-Lane - 4 Single-Lane
- Evolv Cortex AI™
- Evolv Insights®
- Motorola Solutions Avigilon Control Center (ACC) video security management system consists of 700-plus cameras

Outcomes

Delivered seamless, free-flow weapons-detection experience for students, teachers, administrators, and visitors

Transformed students from feeling "targeted" to feeling "free"

Fostered a new sense of trust between students and security staff, teachers, and administrators

Screen over 3,000 students daily and get them to class on time within a 30-minute arrival window

Able to leverage teachers and administrative staff during 30-minute school arrival times to help manage weapons detection and screening

Reduced 50%-plus false alarm rate with walk-through metal detectors to 5% without any compromise of detection

Able to leverage portability and indoor and outdoor capabilities for concealed weapons screening at events such as football games, graduation, and school board meetings

Sustain always-on weapons detection and screening without any security queues

Enhanced security by integrating Evolv into video security management system and cybersecurity infrastructure

Return to School Demanded a Different Security Apporach

One year ago, Valarian Couch was hired as the CIO at Champaign Unit #4 Schools in Champaign, Illinois and given a joint charter—overseeing the district's IT infrastructure and operations, and managing the district's physical security.

With 19 schools consisting of 26 buildings serving students in grades pre-K through 12 in the district, Couch has a long list of responsibilities and priorities. His team of 22 IT professionals and 25 security professionals deliver IT services supporting 1,900 teachers and over 10,000 students while providing a safe and secure learning environment.

When he took the new role, Couch inherited a security team that was a bit of a mishmash of internal and external resources. He elected to build out his in-house security team and use the external police resources to train them on the best operational processes. "One of our key areas of focus has been on teaching de-escalation skills and how to employ them depending on the circumstances and the students in question," Couch says.

In advance of students returning to school in the fall of 2021, and following 18 months of virtual learning, Couch knew that security would need to be a key area of focus. "Community indicators revealed a spike in incidents involving weapons—everything from handguns to bb guns," he relates. "We had kids walking around town carrying bb guns and had a shooting with handguns involving three people at the edge of our high school campus. We needed to get out in front of the situation when the schools reopened." One of the steps Couch and his team took was to overhaul security policies and processes to take a proactive approach to security and minimize the risk of an incident occurring on or around campus. Part of this undertaking included the installation of more security cameras—going from 230 when he arrived to almost 700. "These give the security operations team a much broader view of our schools, one that we didn't have before," he says.

Random Screening and Walk-through Metal Detectors Failed

At the beginning of the fall semester, Couch initiated the use of hand wands.

"We started with random checks at football games and at our high schools," he says. "Yet, the school board and the security team concurred that random checks were insufficient." As a result, Couch and the school board elected to have all of the students at Central High School pass through a walk-through metal detector in early October. "We literally had some students waiting in line for two hours," he recalls. "The line went around the block with some students missing their first two classes of the day."

Hoping optimization of the process would ameliorate the lengthy lines, the Champaign Unit 4 team tried using walk-through metal detectors a couple more times—but with minimal improvements.

"We wanted to implement them at our two high schools and three middle schools," Couch observes. "We obviously needed to find a different solution."

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>
> — Valarian Couch, CIO, Champaign Unit 4 School District, Illinois

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AI-enabled, Touchless Concealed Weapons Screening

Couch didn't need to look very far. He is currently working on a Ph.D. in computer science, and his dissertation is on cybersecurity in K-12 schools and the use of artificial intelligence (AI).

"I did my research and identified Evolv as the answer," he says. He was particularly excited about the integrated AI software—Evolv Cortex AI™— powering Evolv Express. In its security program overhaul, the Champaign Unit 4 team had already consolidated its investments onto Motorola Solutions, including the Avigilon Control Center (ACC) video management system, which Couch learned can be seamlessly integrated with the Evolv system.

Couch was also excited about automated software updates to the Evolv Express. "I don't need to send someone physically out to one of the systems when software updates occur," he says. "These can happen from anywhere. It's something we simply don't need to worry about."

Couch worked with an integrated team from Evolv Technology to determine the number and type (viz., single or dual lane) of Evolv Express systems needed for each high school and middle school. "We also knew that we would want to use the Evolv Express for entrance to football games in the fall," he notes. "The portability of the Evolv Express and

ability to operate them indoors and outdoors is a big plus for us." Couch issued an RFP and worked with the Evolv team to construct a proposal to put in front of the school board for approval. The board approved the contract unanimously, and Couch and his team began working with Evolv to schedule the deployment and configure the systems. The target was the last week of December 2021, which was just a few short weeks after the purchase decision was made—which they hit.

The Evolv team coordinated with Couch's team on the delivery, set up, and configuration of each Evolv Express. In total, the school district purchased eight Evolv Express systems for its two high schools—Central High School with 1,690 students and Centennial High School with 1,480 students. At Centennial High School, Couch and his team deployed two dual-lane Express systems and one single-lane system. At Central High School, they deployed one dual-lane Evolv Express and two single-lane systems (Table 1). An additional Express dual-lane system will be used for entrance to football games in the fall, and the remaining Express single-lane system will be added at Central High School once campus renovations are completed later this spring.

> ▶ **"The Evolv Express completely changes this negative perception into a positive one of trust. It is time for us to enter into the 21st century, and the Evolv Express and its integration points with other security capabilities is an important facilitator of this trust."**
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SCHOOL	EXPRESS SINGLE LANE	EXPRESS DUAL LANE
Central High School Campus	2	2
Centennial High School Campus	2	1
Champaign Unit 4 Football Stadium	0	1

Table 1. Evolv Express distribution at the two high schools and football stadium in the Champaign Unit 4 School District.

A Seamless Launch at the Beginning of the Winter Semester

In advance of the launch in late December, the Evolv team coordinated with the Champaign Unit 4 security team, as well as teachers and administrators who would help manage the Evolv Express during a 30-minute window when students arrive at the two high schools.

"The training was seamless, and it was very easy for our staff to learn how to operate the Evolv Express," Couch relates.

As students at both high schools have Chromebooks, account leads from Evolv took a couple of them over to a deployment of the Evolv Express in a local sports stadium to test out different sensitivity settings in preparation for the launch. "Taking the information they gathered, we then worked together to create a policy where students must take the Chromebooks out of their bags when walking through the screening lanes," Couch says. In preparation for launch, Couch and the school administrative team took the time to educate the students and parents on the new changes and protocols they would experience at the start of winter semester. "Prior to deployment, we sent out communications to students and parents to let them know what to expect," he notes.

The Evolv Express systems were ready to launch January 3 when students returned to classes from holiday break. Starting at 7:30 a.m. when students began to arrive for class at 8:05 a.m., everything worked to plan. "All of our students were in the building and in their classes before school began," Couch reports. "The reception was very positive—parents, students, teachers, and administrators. Before, with hand-wanding and then the failed deployments with the walk-through metal detectors, the feedback from the students was that they felt targeted and untrusted. We had the exact opposite response when we went live with the Evolv systems. They told us they felt free. The Express systems help us keep them safe and secure, enabling them to focus on learning."

Students Go From Feeling "Targeted" to Being "Free"

Couch observes that his security team, teachers, and administrators are now able to build trust with the students as a result of the new screening process—which facilitates valuable facetime and interactions when students arrive at the school.

"By greeting them with 'hello' and asking them 'how their morning is going' might bring a smile to their face regardless of what they've been dealing with at home," he explains. On that note, recognizing the importance of establishing trust, Couch and the administrative team mandated that everyone must pass through the Evolv Express system when entering a school each morning—students, teachers, parents, visitors, and administrators. "This also made a longstanding impression and fosters ongoing trust with the students," Couch comments. "Everyone must pass through the concealed weapons screening system regardless of your status."

The reaction from teachers regarding the Evolv Express deployment was also very positive. "Teachers had expressed serious concerns about the safety of students and staff," Couch says. "Now, they tell us that they can focus on teaching rather than worrying about violence instigated by concealed weapons."

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Getting Into the Analytics of Evolv Insights™

To date, over 200,000 students, parents, teachers, administrators, and visitors have gone through the Evolv Express across Central and Centennial high schools.

"I really like the analytics we get from Evolv Insights™ around student arrival numbers and times at different entrances, system detection performance, and alarm statistics," Couch explains. "I review them every day and plan to put together regular reports to present to the school board. We also can use the analytics to determine staffing resources at each of our school entrances."

Compared to the walk-through metal detectors where upwards of 50% of students were flagged by false alarms, only 5% of students are identified with potential threats by the Evolv Express. In addition, unlike the walk-through metal detectors where "we had no idea where the threat was located, the box at the bottom of the wireless tablet shows the location on the student's body or bag and the team can quickly and easily determine if it is a real threat or something else," Couch says. "This touchless experience is really important for a school environment."

School spirit is important for students at both Central High School and Centennial High School. "Our marketing department created some fabulous displays for the panels on the Evolv Express systems that we're really excited about," Couch notes. "The ability to customize them adds a special touch. Instilling school spirit also helps students get their minds on learning as they return to in-person environments."

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Learning the Value of Integrated Cyber and Physical Security

Couch is a big proponent of integrating physical security and cybersecurity systems, which he is covering in his Ph.D. dissertation.

Accordingly, he and his team bolstered the district's cybersecurity with additional network firewalls, web application firewalls, and other security technologies. These protect not only digital assets but physical ones like video surveillance cameras and systems, which are deployed on school campuses, from malicious cyber-attacks. "Motorola Solutions Avigilon Control Center and the security cameras within it afford us with the ability to manage our security video cameras from a single pane of glass," Couch says.

The integrated protections between the district's investments in cybersecurity and physical security also extend to Evolv Express. For example, Couch and his team plan to add cameras on top of the Express towers later this semester and to integrate their feeds into the security operations center. "This will give us one more layer of security and demonstrates the intersections between cyber and physical security," Couch explains.

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21st Century Security Enables 21st Century Education

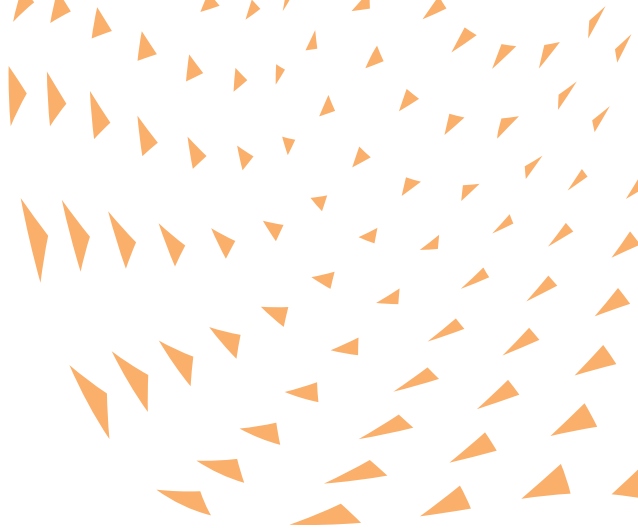**"The walk-through metal detectors gave everyone the feeling that they were walking into prison," Couch notes.**

"That is the last thing we wanted to convey. The Evolv Express completely changes this negative perception into a positive one of trust. It is time for us to enter into the 21st century, and the Evolv Express and its integration points with other security capabilities is an important facilitator of this trust."

Couch reflects on the long-term implications of Evolv as well, observing that "the students who pass through the Evolv Express screening lanes see these new technologies that we use, whether on the IT or the physical security side of the house, and they may truly be inspired to develop the technologies that will shape our lives in 10 or 15 years." And with staff and educators like those at Champaign Unit 4, these inspirations are certain to come to fruition.

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— Valarian Couch, CIO, Champaign Unit 4 School District, Illinois

Contact us to learn more about how to protect your students and staff with touchless security screening.

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