



Case study



James Island Charter High School is at the Head of the Class for Security Screening With the Help of Evolv

James Island Charter High School

FOUND: 2003

LOCATION: Charleston, SC

STUDENTS: 1,600

RANK: Top 5% of Schools in SC in Education

WEBSITE: www.ccsdschools.com/jichs

Solution Snapshot

Goals

- Reduce long lines that formed at two entrances using traditional walkthrough metal detectors
- Minimize false alarm rates by intelligently differentiating between the majority of ordinary objects and potential threats
- Eliminate concerns involving potential racial, sexual orientation, and gender identity biases in security screening
- Reduce the number of school staff required to manage security screening
- Extend security screening to athletic events
- Create a streamlined, less invasive secondary screening process
- Capture analytics around screening flow and weapons detected at time intervals

Solution

People

- Helped configure and setup Evolv Express® single-lane systems at the front and rear atrium entrances
- Provided same-day deployment support
- Trained staff on setup, operation, teardown, and storage of the Express system

Technology

- 2 Single-Lane Evolv Express Systems
- 1 Outdoor Evolv Express System
- Evolv Cortex AI®
- Evolv Insights®

Process

- Evolv Engineering Solutions team deployed 2 Evolv Single-Lane Express Systems
- Trained administrators and volunteer teachers on Express system management and troubleshooting procedures
- Evolv Customer Success Manager trained Security Manager on using Evolv Insights analytics

Outcomes



Eliminated soft target of students waiting in backed up lines to pass through security screening



Reduced high metal detector secondary screening rates by more than 30%



Reduced school staff required to manage security screening by 33%—from 12 to 8



Reduced student concerns over racial, sexual orientation, and gender identity targeting



Leveraged mobile flexibility to use the Express system easily and quickly for athletic events for an additional layer of security



Optimized student flow through data analysis from Evolv Insights



James Island at the Head of the Class in South Carolina

James Island Charter High School is a leader in many ways. It ranks in the top 5% of high schools in South Carolina. Its high school graduation rate is more than 11 points higher than the average for high schools in the state. Eight out of 10 graduating seniors pursue college degrees, compared to an average of only 69% of seniors from other high schools in South Carolina.

When it comes to the safety of students, administrators, teachers, staff, parents, and visitors, James Island also ranks at the top of the class. The school began using hand-wand metal detectors in 2018 and walkthrough metal detectors in 2020. But these traditional metal detectors were problematic. Lines would form outside of the front and back atriums of the school that served as entrances, and

the pileups of students at the entrances were a security risk in themselves.

“While I wasn’t here at the time, I heard the horror stories about the long lines and students piling up before the metal detectors,” relates Clifton Wilson, Security Manager at James Island Charter High School. “The machines literally set off alarms for everything—three-ring binders, cellphones, you name it. You can only imagine the complaints we received, not to mention all the staff required to manage them.” Beyond the negative experience for students and the administrators operating the system, the soft target queues were something the James Island team viewed as a critical problem to fix.

“Our layers of security all contribute to safe learning and athletic environments. For example, we require and check IDs for all students in addition to having them pass through the Express lane.”

- Clifton Wilson, Security Manager, James Island Charter High School

Selecting and Implementing Evolv Express® Systems

Prior to Wilson joining the administrative team at James Island, the previous Security Manager selected and implemented two Evolv Dual-Lane Express® systems—one for the front atrium entrance and one for the back atrium entrance.

“Everyone was unhappy with the negative impact of the metal detectors,” Wilson says. “It took too long to get students through security screening and to their classes. Students felt the metal detectors were intrusive and introduced bias into the screening process.”

When the previous Security Manager attended a National Association of School Resource Officers Conference, they saw a demo of an Express system and were impressed. “He came back and told the administrative team about it, including Principal Tim Thorn,” Wilson relates. After further vetting of the Evolv system, the school board received and approved a proposal to acquire two Express single-lane systems.

“My predecessor implemented several security measures before I started,” notes Wilson, who grew up in James Island and graduated from James Island High School. “Our layers of security all contribute to safe learning and athletic environments. For example, we require and check IDs for all students in addition to having them pass through the Express lane.”

For the deployment of the Express systems last summer, an Evolv Solutions Engineer was on site with the James Island team. He worked with them to deploy each system and trained those who would be operating the Express systems on everything from setup and teardown to troubleshooting and managing both Flow Control and Threat Resolution positions. “All six members of our administrative team staff the Express systems in the morning, along with some volunteer teachers,” Wilson describes. “For athletic events, we leverage some additional teachers. In all instances, training has been extremely easy. The Express tablets are very intuitive to use. Training typically takes less than 15 minutes to complete.”



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Resolving “Chromebook Issues”

False alarms related to student Chromebooks are the biggest challenge James Island has experienced.

In response, the Evolv team worked with the James Island team to institute a pass-around screening method—whereby students place their Chromebooks on a table before entering the Express lane and retrieve them on the other side after passing through the Express lane. “This process works relatively well,” Wilson comments.

For the rollout of the new Chromebook process, James Island’s media class is producing a video that will be shared via email to all students as well

as played on monitors in each classroom during Trojan Checkin on Wednesdays—30 minutes each week right before lunch when students are in their homerooms. “Our media teacher actually came to us and asked if her students could produce the video,” Wilson says. “I thought it was a great idea. Principal Thorn will be featured in it, along with others.” In the meantime, Evolv continues to work with the school to implement alternative methods for Chromebook screening to ease the process.

“With the Express tablets, we know exactly where the issue is located and can focus on that area—whether a student’s bag, shoulder, ankle, or waist. With the metal detectors, we had to search everything. Now, we can focus on a specific area, which makes the secondary checks non-intrusive and much faster.”

- Clifton Wilson, Security Manager, James Island Charter High School

Communications Key to Deployment and Ongoing Management

One of the factors Wilson attributes to the success of the Evolv Express deployment is communication with parents, students, and teachers.

And it isn't just one communication channel that James Island leverages, but rather multiple ones. "All students have an email, and we send them notifications whenever changes occur in security screening processes," Wilson relates. "We also have large monitors throughout the campus and can deliver information and training over those. These are ideal to use during Trojan Check-in on

Wednesdays when students spend 30 minutes of their day before lunch in their homeroom. For example, we're able to educate students on what will and won't set off an alarm on the Express systems during Trojan Check-in over the monitors. This also serves as an educational event for teachers and staff."



“

I also use Evolv Insights analytics to determine what times most students are entering the school. As part of this process, we found that there is a sudden 'rush' at the front atrium entrance from students who sit in their cars until a few minutes before classes start.”

- Clifton Wilson, Security Manager,
James Island Charter High School

Benefits Flow Through the Express Systems

Compared to the prior walkthrough metal detectors, the Express system throughput is dramatically better.

Wilson notes that little more than 800 students are screened in a 45-minute interval every school day at the back atrium entrance. For their second playoff game of the season, about 2,500 fans were screened in a one-hour window. “This was simply impossible to do with the prior walkthrough metal detectors,” Wilson notes.

Additionally, the combination of walkthrough metal detectors and hand-held wands was resource intensive. “For just one entrance, we had to use a minimum of six staff to manage screening,” Wilson relates. “As our administrators and teachers have other responsibilities, this was a significant requirement for them. At a bare minimum, it was upwards of an hour every morning. And, due to all the alarms and a huge number of secondary checks, staffing them was very tedious.”

In contrast, the Evolv systems do not require as many staff to manage. “We currently use two staff in front of the Express lane for Flow Control and two others for Threat Resolution,” Wilson says.

The number of alarms generated by the Express systems is also significantly lower than those from the walkthrough metal detectors. “The Evolv

Cortex AI technology is constantly learning, and the Express systems differentiate between ordinary objects and those that are potential threats,” Wilson comments. “Currently, we are alerting on more than 30% fewer students than we were before.”

A high rate of false alarms was just part of the challenge with the metal detectors. Those screening students had no idea where the threat was located on a student. “With the Express tablets, we know exactly where the issue is located and can focus on that area—whether a student’s bag, shoulder, ankle, or waist,” Wilson observes. “With the metal detectors, we had to search everything. Now, we can focus on a specific area, which makes the secondary checks non-intrusive and much faster.”

“ Having an additional Express system saves us time and provides us with greater flexibility. Plus, as this will be an Outdoor Evolv Express System—designed to operate under adverse weather conditions—we have confidence that we can continue screening outdoors in wind and heavy rain settings.”

- Clifton Wilson, Security Manager,
James Island Charter High School



Building Relationships with Students

One qualitative outcome of the Express systems is the building of relationships with students.

Operating the Evolv system gives administrative staff an opportunity to have face-to-face interactions with each student daily, which they would not normally have. “Nobody talks to the guy with the gun,” Wilson jokes, who carries a handgun when on campus. “But with the Express system, I see the students every day and am able to greet and speak with them. Our Athletic Director is also one of the administrators who staff the security screening, and he was able to build on the relationships he has with members of the football team when they passed through security screening each day.”

The Express system has also reduced concerns from students regarding potential biases regarding race, sexual-orientation, and gender identity during the security screening process. “This was a concern of some students with the walkthrough metal detectors,” Wilson says. “The Express system identifies the location of the potential threat on the student’s body or bag, and we search only that area. Students see threat detection as an objective process now.”





Extending Security Screening to Athletic Events

One of the aspects Wilson likes about the Express systems is that they can be used indoors and outdoors.

"We wanted to add a layer of security at our football and basketball games to provide school administrators, our board, and attendees with peace of mind," he says. "Because of the portability of the Express system, we can quickly and easily disassemble our Express system at the back atrium entrance and set it up for football games. We had a really good football team this year and decided to launch that process for our playoff games. We screened around 500 fans for the first game and, as we won the game, over 2,500 fans at a subsequent game."

Wilson has found the effects of running the Express system at night surprising. "The lights on the Express, especially at night, have a profound effect,

and the positive feedback from fans going through the Express lane actually has been greater during screening after dark," Wilson remarks.

Pleased with the results, Wilson is getting ready to deploy the same Express system to screen people attending basketball games. "We placed an order for a third Express system that will be dedicated to athletics," he observes. "Having the additional Express will save us time and will provide us with greater flexibility. Plus, as this will be an Outdoor Evolv Express System—designed to operate under adverse weather conditions—we have confidence that we can continue screening outdoors in wind and heavy rain settings."

Getting Analytical with Evolv Insights®

Wilson especially likes the analytics he gets through Evolv Insights.

"I know how many fans actually attended the game, at what times they arrive, and details on any weapons that were found," he says. "We are getting ready to use the same Express system to screen people attending basketball games—and will certainly use an Express at our regular season football games next year," Wilson says. "Naturally, I also use Insights analytics to determine what times most students are entering the school. As part of

this process, we found that there is a sudden 'rush' at the front atrium entrance from students who sit in their cars until a few minutes before classes start. We're planning to address this during an upcoming Trojan Check-in. This will help us avoid having lines of students form at the last minute before classes. Our principal and board also appreciate the reports that I am able to generate using Insights."

“ At our second playoff game, we had one gentleman walk through the Express lane and stop. He turned to me and told me, 'Every school should have these in place.' I couldn't agree with him more.”

- Clifton Wilson, Security Manager,
James Island Charter High School



“Every School Should Have One of These”

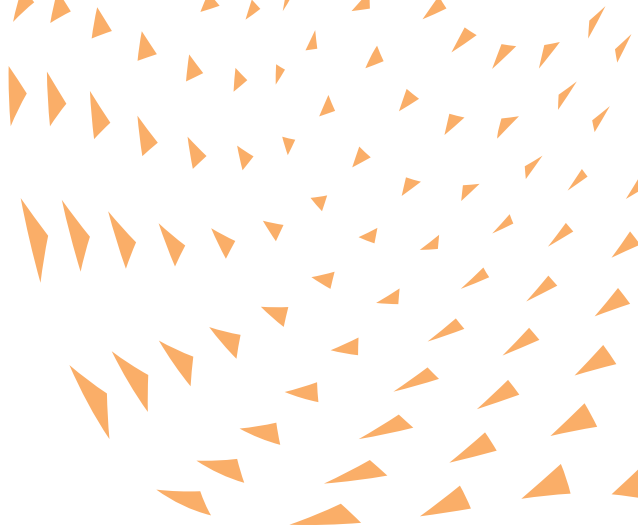
Everyone goes through an Express lane when entering James Island—students, parents, staff, administrators, and visitors.

“Only parents are allowed to come through the front atrium,” Wilson says. “The front atrium entrance is open throughout the day and managed once the classes begin by our Attendance Greeter. Everyone must pass through the Express system whenever they come to the school.”

Feedback on Evolv has been very positive. Administrators and teachers who manage them each morning find the process much better than the one with the metal detectors. Everyone in the school—students, administrators, and teachers—feels safer with them in place. “We’ve not received one complaint from parents,” Wilson relays. “Students now see the screening as an ordinary part of their day.”

The positive feedback even extends onto the football field. Wilson, law enforcement officers at the entrance to the field, and administrators and teachers managing the Express lanes have been told numerous times by parents and community members how much they appreciate the extra focus on security due to the Evolv systems. Wilson recalls one such instance in particular, “At our second playoff game, we had one parent walk through the Express lane and stop. He turned to me and told me, ‘Every school should have these in place.’ I couldn’t agree with him more.”





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

info@evolvtechnology.com +1 781.374.8100

