



Case study



Denver Performing Arts Complex Marries Security and Patron Experience with Evolv Express® Systems to Produce an Unforgettable Show

Snapshot of Denver Performing Arts Complex

LOCATION: Denver, CO

3 VENUES:

- **ELLIE CAULKINS OPERA HOUSE:** 2,225
- **TEMPLE HOYNE BUELL THEATRE:** 2,843
- **BOETTCHER CONCERT HALL:** 2,679

PATRONS ANNUALLY: Over 1 Million

SECURITY STAFF: Around 150 Contracted Staff

URL: www.artscomplex.com

Solution Snapshot

Goals

- Streamline ingress experiences by virtually eliminating security queues
- Accommodate final “rush” of patrons before show start times
- Reduce the number of secondary screening checks
- Improve weapons detection, especially 15 minutes before call times
- Transform patron and security staff ingress experiences

Solution

People

- Solutions Engineering Team: Helped configure and implement 5 Express systems at 3 different venues

Process

- Configured and deployed 5 Express systems and helped implement standard operating procedures for mobile stanchions
- Trained security staff on Express system

Technology

- 5 Evolv Express® Systems
 - 3 Dual-Lane Systems
 - 2 Single-Lane Systems
- Evolv Insights®
- Evolv Cortex AI®

Outcomes



Minimized security screening queues



Able to screen around 1,000 patrons in 15 minutes before show start times



Reallocated 60% of security staff managing ingress screening to other facility areas



Improved experience of security personnel managing ingress security screening



Reduced false positives, shrinking threat alerts from 40% to 12% of patrons



Detected concealed weapons not found by a walkthrough and hand-wand metal detectors

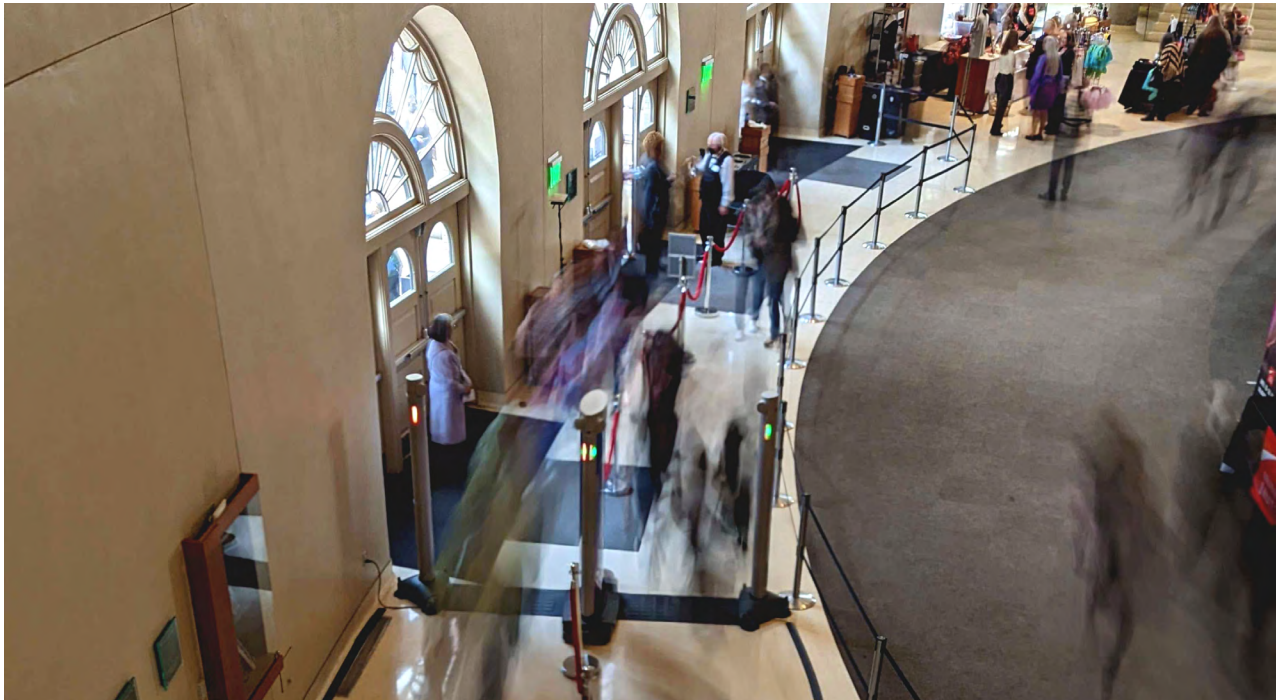
3 Venues on a 12-acre Campus

The Denver Performing Arts Complex is an impressive set of venues. Sitting on a 12-acre campus of 7 theaters and multiple event spaces in the heart of downtown Denver, the Arts Complex is home to four esteemed arts institutions—Colorado Ballet, Colorado Symphony, Denver Center for the Performing Arts, and Opera Colorado. They are also home to the Resident Companies and host national touring acts.

Over one million patrons attend events at the Arts Complex annually, with upwards of 15 shows taking place each week at the 3 large theaters.

Ensuring the safety of patrons for each of these performances is a significant undertaking. “There are a lot of elements involved in our patron

experience,” says Mark Heiser, the Venue Director at the Arts Complex. “We are focused on the entire experience. Security is one of them. While we aim to make security a crucial and visible part of the patron experience, we do not want it to be intrusive.”



“ For all three of our houses, we often see a push of almost 1,000 patrons during this 15-minute window. With the magnetometers and hand-held wands, this produced a lot of anxiety for security staff. But with the Express systems, no ingress queues form as patrons are able to walk through the screening lanes side by side.

- Aaron Eubanks, Director of Events Security, Denver Performing Arts Complex



Traditional Magnetometers Fail

The traditional magnetometers the Arts Complex employed for security screening were intrusive—which negatively impacted the patron experience.

A walk-through metal detector was used in the Temple Hoyne Buell Theatre, whereas hand-held metal detectors were employed in the Ellie Caulkins Opera House and Boettcher Concert Hall. Patrons had to stand in ingress queues for 10 or 15 minutes, and the screening process was an intrusive experience. “We were accustomed to being viewed—and told that we were—the ‘bad guy,’” notes Aaron Eubanks, the Director of Events Security for the Arts Complex. “Our security screening is a service we offer for the benefit of our patrons. Some would thank us for what we did, but many were upset that they had to go through the whole screening experience and simply couldn’t fathom a potential threat to one of the venues in the Arts Complex.”

But the reality is that such an event could take place, and the Arts Complex operations team took the risk quite seriously. “Security changes in performing arts go all of the way back to 9/11, and the number of events in Europe since then created even more focus on security,” Heiser says. “At the time, the best solution for security screening was magnetometers.”

The negative impact analog security screening processes had on the patron experience weighed heavily on the operations team. “Patrons had to empty their pockets and allow us to go through every one of their bags,” Eubanks comments. “Few think about what might happen if someone got a firearm into one of the venues, and thus they don’t think about needing to pass through security screening to see a show. It is intrusive. Many hated it, and we didn’t like it either.”

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Evolv Express Seen as a Game-changer

Lori Garza, the former Patron Services Manager at the Arts Complex, first saw an Evolv Edge® system in March 2019 and was excited about its potential.

When she attended a meeting of the International Association of Venue Managers a few months later, she got a sneak peek of the Evolv Express system on the iPhone of an Evolv team member attending the event. She immediately wanted to try the system at the Arts Complex and see how it compared to the venue's existing magnetometers. "We scheduled a side-by-side comparison between one Express system and three of the walkthrough metal detectors in Temple Hoyne Buell Theatre," recalls Garza, who recently joined Evolv Technology as a Customer Success Manager. "Lines formed behind the three walkthrough metal detectors, while people kept walking through the Express system lane. We immediately concluded that Evolv was a game-changer, offering us the ability to marry patron experience and security while at the same time improving both."

In early 2020, the Arts Complex moved forward with a rollout. The Arts Complex operations team targeted the Boettcher Concert Hall first. "We were about a week into the deployment, and everything got shut down because of the pandemic," remembers Eubanks. Once the shutdown from the pandemic was lifted, the Arts Complex operations team was ready to move forward with the new security screening system and surrounding processes.

The Boettcher Concert Hall has two dual-lane Express systems. The Temple Hoyne Buell Theatre has two single-lane Express systems. The Ellie Caulkins Opera House has one dual-lane Express system that is mobile to accommodate receptions and special non-ticketed events in the lobby. "It takes us about 20 minutes to move everything," Eubanks describes. "The portability of the Express systems enables us to get greater value from our investment—both operationally and in terms of the patron experience."

“ We immediately concluded that Evolv was a game-changer, offering us the ability to marry patron experience and security while improving both.”

- Lori Garza, Customer Success Manager, Evolv Technology (Former Patron Services Manager, Denver Performing Arts Complex)





Handling the Final 15-minute Rush

“Most of our patrons wait until the last 15 minutes before a show starts to go through security screening,” Eubanks comments.

“For all three of our houses, we often see a push of almost 1,000 patrons per house during this 15-minute window. With the magnetometers and the hand-held wands, this produced a lot of anxiety for security staff. But with the Express systems, no ingress queues form as patrons are able to walk through the screening lanes side by side. For those visiting the Arts Complex for the first time, they sometimes will stop and put up their arms as if they are going through airport screening. Patrons are able to arrive to their shows on time, which helps

security guards with feeling less overwhelmed due to last minute arrivals. Wanting to ensure our patrons get into their seats before shows start, our security staff went into overdrive right before the start of shows,” Eubanks says. “This was very stressful for many of them. With the Express systems in place, it has helped alleviate that stress.”

“ From the very start, it has been clear that Evolv is focused not only on security but the patron experience. This dual focus is what sets Evolv apart from other solutions.”

- Mark Heiser, Venue Director, Denver Performing Arts Complex

False Positives and Number of Walkthrough Metal Detectors Slashed

The Express systems have enabled the Arts Complex to reduce the number of false positives dramatically.

Eubanks and Heiser estimate that around 40% of patrons were flagged before with magnetometers. “Now, with the Express systems, we’re down to around 12%,” Eubanks says. “Thus, rather than needing to push around 1,000 people through secondary scans, we’re pushing 100 or 200. This has a huge impact on our patrons as well as security staff.”

With the magnetometers, the Arts Complex maintained six walkthrough metal detectors in the Temple Hoyne Buell Theatre alone. This ingress flow is now routed through two single-lane Express systems. Previously, 16 security staff were required to manage the security processes. With the deployment of the two Express systems, this number was cut to six—a 62.5% reduction (Figure 1). “We were able to allocate those 10 security staff throughout the Arts Complex for added security,” Eubanks says. “This extends our security presence and helps us improve our security posture.”

For Ellie Caulkins Opera House and Boettcher Concert Hall where the security team employed hand-held metal detectors, the resource savings at security screening ingress and risk reduction elsewhere through repositioned security staff are just as great. In the case of the Ellie Caulkins Opera House, six security screening lanes were staffed by 14 security personnel, which was reduced to 1 dual-lane Express system and four security staff (a 71% staff reallocation). In the case of Boettcher Concert Hall, four security lanes staffed by 10 security personnel were replaced with two dual-lane Express systems managed by six security staff (a 40% staff reallocation). Altogether, the Arts Complex was able to reallocate 60% of the security personnel managing ingress scanning to other areas of the facilities.

Venue	Capacity	Previous Security Screening Method	Security Staff Required	Evolv Express System(s)	Security Staff Required
Temple Hoyne Buell Theatre	2,843	6 Magnetometers	16	2 Single-lane Express Systems	6
Ellie Caulkins Opera House	2,225	Hand-held Metal Detectors with 6 Lanes	14	1 Dual-lane Express System	4
Boettcher Concert Hall	2,679	Hand-held Metal Detectors with 4 Lanes	10	2 Dual-lane Express Systems	6

Figure 1. Comparison of prior security screening versus post-Evolv deployment.

Improved Security Bolsters Security Staff Experience

In addition to transforming the patron experience, the Evolv Express systems have improved security for the Arts Complex.

“Operators begin to experience fatigue with metal detectors,” Eubanks says. “They also struggle to detect some of the latest weapon designs. We had one patron with a purse designed to conceal handguns. She comes every single time with her handgun and doesn’t notify us beforehand. With the magnetometers, we would miss it some of the time. Since deploying the Express systems, we’ve detected it every single time.”

“Unlike magnetometers that are dependent on security personnel to identify the location of the potential threat, that task is handled by the Express systems,” Garza explains. “The effectiveness of security checks by security staff with magnetometers diminishes over time as they become fatigued. Security screening using the Express system is not impacted over time but rather remains consistent—the same at the start and the end of ingress hours.”

The positive experience felt by patrons is also being felt by security personnel. “The Express system and wireless tablet are much easier to manage,” Eubanks observes. “In the past, security personnel would go out of their way to avoid managing security ingress. The rollout of the Express systems changed all of this. Security staff now want to work security ingress. Additionally, when we have a really busy day with concurrent shows running, our veterans just shrug it off. Their stress level is significantly reduced due to the Express systems.”

Like many other performing arts organizations, the Arts Complex found that many of its security staff from before the pandemic had retired or moved into new roles elsewhere. Thus, the Arts Complex had to recruit a number of new personnel post-pandemic. However, the ease of training and use of the Express system meant that rotating personnel reduced the bottleneck for the security team. “Having the Express systems in place makes it easier to recruit staff and to train them on how to use the Express system,” Heiser says.



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- Mark Heiser, Venue Director, Denver Performing Arts Complex





Intelligence Improves Security and Efficiencies

One of the things that Heiser likes about the Express systems is the Evolv Cortex AI™ software.

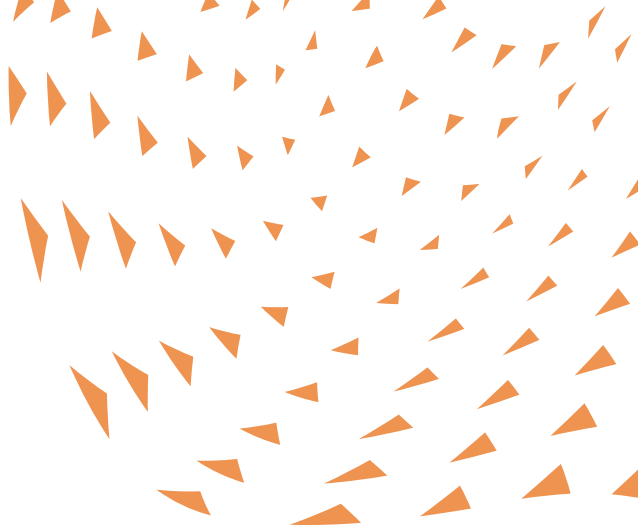
“Evolv is constantly updating its artificial intelligence (AI) capabilities and teaching the systems to detect new threats,” Heiser says. “This offloads an operational burden while improving security.”

“From the very start, it has been clear that Evolv is focused not only on security but patron experience,”

Heiser concludes. “This dual focus is what sets Evolv apart from other solutions. We have days when multiple and concurrent shows take place. Previously, these days were a heavy lift for the team. But with Evolv, it's easier. We're no longer known as the 'bad guys.'”

“When we have a really busy day with concurrent shows running, our veterans just shrug it off. Their stress level is significantly reduced due to the Express systems.”

- Aaron Eubanks, Director of Events Security, Denver Performing Arts Complex



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safer zones where you live, learn, work or play.

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