



CASE STUDY



Overview



Lavi and DFW partner to create a safer passenger experience

Transportation

Dallas Fort Worth International Airport (DFW)

Safety Solutions for Terminal Passengers

Amidst the COVID pandemic, **Dallas Fort Worth International Airport (DFW)** briefly became the world's busiest airport. To accommodate high volumes of foot traffic and enable a safe environment with COVID-era public health regulations in mind, the airport needed to modify its queuing strategy with safeguards protecting customers while they wait—and it needed to be budget-friendly and quick to install.

Lavi Industries leveraged DFW's existing queuing equipment for a highly effective solution implemented within a few weeks, keeping travelers safe and costs in line with resources.





The Situation

DFW International Airport has always been a busy travel hub. But in June 2020, it briefly became the world's busiest airport amid the COVID-19 pandemic. During the resurgence of passenger traffic, DFW officials foresaw a potential problem: How could the airport ensure the customers' comfort and safety while waiting in queues less conducive to social distancing without creating process bottlenecks? DFW realized it needed to proactively prepare for returning passengers by creating a safer environment compliant with local, state, and federal guidelines.

Here are the primary factors that the solution needed to address:



Space

The main obstacle was space—or lack thereof. DFW aimed to keep the existing terminal footprint intact in order to avoid congestion in the lobbies. Therefore, the solution should ideally work within the existing terminal footprint to maximize the customer's comfort.



Speed

Like almost every other airport, DFW's queuing strategy was designed pre-pandemic, and needed to be updated quickly and efficiently to accommodate the COVID landscape.



Compatibility

The solution had to accommodate the 3D people counting solution DFW uses to calculate passenger wait times.



Compliance

The airport needed a creative solution that would support the airport's voluminous foot traffic while creating a safe environment for travelers—all in accordance with fire department and TSA regulations.



Cost

DFW hadn't budgeted for a major infrastructure investment, nor was it looking to put considerable funds into a solution that might need to be discarded once the pandemic subsides. Since the airport already enjoys a 20-year relationship with Lavi, they turned to their Lavi DFW account team to explore leveraging existing equipment and arrive at a cost-effective queuing solution.



Disruption

Along with speed and budget, DFW faced another major hurdle: implementing the solution with minimal disruption to DFW's day-to-day operations, especially passenger service.



What We Did

The Physical Barrier Solution

Lavi designed and implemented DFW's COVID-compliant queuing strategy at its 15 TSA checkpoints across five terminals in just under one month—an incredible feat for such a high-volume airport.

Here's how we did it:

Fact gathering

A primary key to success entailed walkthroughs with representatives from the TSA, fire department, DFW airport, and the major airlines early in the process to ensure the queuing solution would comply with regulatory requirements—and that the process would make all stakeholders feel comfortable.

Leveraging existing materials

Instead of creating more space, Lavi created physical germ barriers. More specifically, Lavi improved upon the switchback queue layout already in use at its TSA checkpoints by attaching 48" by 48" acrylic [Queue Guard panels](#) to the

Lavi belted stanchions DFW was using. The new panels provide a physical barrier between people in adjacent rows without compromising visibility across the space or obstructing the airport's traffic analytics software.

Pre-COVID, DFW organized queues using Lavi's Beltrac retractable belt stanchions. The Queue Guard panels are attached to the stanchions by sliding the panels into the patented stanchions' dovetail grooves, thereby creating a barrier between passengers. To aid in emergency egress, Lavi installed belted stanchions at key intervals around the queue's perimeter.



Continued

Off-hours implementation

Most of the installation occurred during off-hours so as not to disturb busy daytime airport traffic. Despite the challenges, Lavi was able to install the new system in just four weeks.

All told, Lavi used over 700 Queue Guards, 315 stanchions, 220 tall posts, and 110 Rigid Rails to design a public health-compliant queue layout consisting of 3,000 feet, or just over eight football fields, of linear space.

Looking ahead

An added benefit of the queue guard system is its ability to be multi-purposed. For instance, the queue guards can be easily lowered to the ground if and when public health guidelines allow, instantly turning them into a standard post and panel barrier system (also known as portable partition walls). These “walls” are frequently used throughout airports to divide large open areas, as well as create secure pathways.

Lavi’s DFW Queuing Solution, By the Numbers:

700	200
Queue Guards	Tall Posts
315	110
+ Beltrac Stanchions	Rigid Rails

8 Football Fields

The result? One public health-compliant queue layout consisting of 3,000 square feet, or just over eight football fields of linear space.



The Results

With Lavi's new queuing strategy, DFW supports high volume foot traffic amid COVID-era public health protocols. What's more, airport staffers report high levels of passenger confidence and more organized flow.

“Safety and security have long been the foundation of everything that we do at DFW. The airport team knew steps would need to be taken to ensure the safety of customers in light of the COVID-19 pandemic. In partnering with Lavi on the installation of queue guards, we have been able to provide our customers with a measure that reinforces our commitment to their well-being, rebuilding their trust in DFW Airport, and the travel industry as a whole,” says DFW International Airport Senior Terminal Experience Manager James Dixon.

“Lavi’s responsiveness allowed us to ultimately install a product that met all of our critical needs.”

He added: “As an industry leader in using technology to elevate the customer experience, it was critical that the queue guards didn’t impact our checkpoint wait-time technology, which allows customers to view current wait times at checkpoints throughout our terminals. It was also important for us to ensure we could maintain frequent cleanings of the queue guards. We were able to conduct site walks at each checkpoint with Lavi’s team to identify the number of queue guards needed and best locations to place them. Lavi’s responsiveness allowed us to ultimately install a product that met all of our critical needs.”



The Results

Continued

Lavi's queuing solution is not only applicable to airport settings, but to any large venue environment where switchback queuing is typically used. As COVID levels ease and more of these venues re-open, Lavi stands ready to assist with safe and effective queuing solutions. To learn more, contact info@lavi.com or visit us online at <https://www.lavi.com/en/safety-security/queue-guard-germ-shield>.

“Every airport has unique configurations and needs,” notes Lavi Southwest account executive Jonathan Jennings. “We know no one wants to spend money in the middle of a pandemic, but we work within perimeters and budgets to provide an affordable and great product.”



DFW's Revamped Layout

Lavi's revamped DFW's queuing layout using the following products:



Queue Guard Protective Panels

4'x4' acrylic protective barriers safeguarding adjacent rows in a queue. The panels are configured to slide into dovetail grooves in Beltrac Standard-Height Stanchions.



Rigid Rails

Bracing rails designed to provide extra stability to the Queue Guard system.



Beltrac Standard-Height Stanchion for Queue Guard

The sturdy 40" post supporting the Queue Guard panels.



Beltrac Tall Bracing Post for Queue Guard

The sturdy tall post creating stability for large-area th Queue Guard installations.

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