GoodMaps at Airports

Success at Louisville International Airport



Louisville Muhammad Ali International Airport (SDF) is the first airport in the U.S. to offer passengers GoodMaps inclusive indoor wayfinding with accurate turn-by-turn directions from their smart device. The technology is providing all visitors with a more convenient airport experience – and empowering those with low vision, blindness, and other disabilities to find their way safely and independently from entrance to gate and all points in between.

"We are proud to be the community's gateway, providing a warm welcome and a less stressful environment that enhances the ease of going from the gate to baggage claim and onto the final destination."

Dan Mann, Executive Director, Louisville Regional Airport Authority

The Opportunity

SDF has long been an advocate for technology-enabled services for passengers. The airport wanted to ensure a welcoming experience for those who are blind or visually impaired as well as those who simply desire a more stress-free way to navigate the terminals. A solution that was convenient to deploy and use, accurate, and had no intrusive hardware to maintain were important to the airport in seeking an indoor navigation technology.

A 2017 pilot project with GoodMaps in collaboration with the American Printing House for the Blind enabled user experience testing of the GoodMaps app at the airport. Lessons learned became a win-win for GoodMaps and for SDF, leading to refinements in both the technology and the plans for a full rollout completed in 2022.



"When you're navigating a busy place, it can be hard to find things when there's a lot going on and things are ever changing. GoodMaps takes the guesswork out and tells you: in 40 feet on your right will be the restroom. That's exactly what blind and low vision people need."

Tai Tomasi, GoodMaps user at SDF



GoodMaps at SDF Fast Facts

- Number of annual visitors: 4+ million
- Size of airport mapped: 300,000 square feet
- Points of interest mapped: 170
- Routes included: 750+ to date
- Venue LiDAR scanning process: 4 hours
- Digital map creation process: 2 weeks
- On-site hardware: None
- Maintenance: Simple updates as needed to secure digital maps (no hardware maintenance required)

The Solution

The GoodMaps mapping team took LiDAR scans of SDF's terminals in just a few days on site with no interruption to airport operations or service. Over the next several weeks they used the data collected to create secure digital maps, including points of interest and routing. Next up: QA/QC processes, tutorials for airport personnel, and user experience testing. The airport provided visitors with download information for the GoodMaps mobile app, which uses camera-based positioning technology to provide turn-by-turn directions with accuracy unmatched by other indoor wayfinding solutions.

No beacons or other hardware were needed, and updates are simple using GoodMaps Studio's customer portal, providing secure access to the venue's digital maps in multiple views: 2D floorplan, 3D model, and LiDAR point cloud. In the event of major renovations or reconfigurations, rescans of the airport terminals can be completed efficiently.

Success & Looking Ahead

With GoodMaps fully deployed, SDF has become a pioneer in accessibility at U.S. airports. Blind and visually impaired users rely on the app to navigate to the final few feet of any restroom, shop, or gate without needing sighted assistance. Visitors using wheelchairs or strollers enjoy the app's stair-free mode, with directions to routes without stairs or escalators. And other users looking for points of interest can download the app at the airport's Information Desks. Personnel report that the app's accuracy has instilled trust in users – they can count on the information provided by the GoodMaps app.

Looking ahead, SDF sees GoodMaps as a value-add for businesses at the airport and the community. The technology provides an accessible first impression of the city, and also helps all users find their way to businesses with ease, even when airport eateries and shops may frequently change locations.

