Raising rail ridership with better service and security.

Sacramento Regional Transit District deploys Axis cameras and horn speakers for public announcement along with ELERTS software in initiative to improve ridership experience.



Organization:

Sacramento Regional Transit District

Location:

Sacramento, California, USA

Industry segment:

Transportation

Application:

Safety and security, customer experience

Axis partners:

ELERTS, Cisco

Mission

The Sacramento Regional Transit District (SacRT) needed to address safety and cleanliness issues contributing to a dramatic decline in ridership on its light rail system. Transit authorities felt that any solution put in place should involve a partnership with the public using their services. In addition to a major upgrade in surveillance cameras on platforms and in parking lots, SacRT was looking for technology that riders could use to instantly report problems. By including the public in the solution, SacRT was able to create a more pleasant and secure environment for customers.

Solution

SacRT's Information Technology department undertook the challenge of building a system to streamline the process of receiving and resolving issues reported by riders. To improve situational awareness, additional Axis high-definition network cameras were added at each light rail station. The solution also included the placement of Axis network horn speakers to broadcast general announcements and targeted messages.

IT also incorporated a two-way incident management system from ELERTS to provide riders the ability to report incidents to the SacRT Security Operations Center.

Result

Since the new system was put in place, SacRT has been experiencing a steady increase in ridership on its light rail. The combination of extra cameras, horn speakers and incident management software is helping authorities quickly locate and stop undesired behavior. With situational awareness reports from the public, problems like damaged fare boxes, broken digital messaging signs, and unsightly trash are getting resolved faster.





Maintaining a world-class transit system

The Sacramento Regional Transit District (SacRT) is considered an industry leader in mobility solutions, providing the people of Sacramento County with transportation services that include more than 80 bus routes, 52 light rail stations, quality paratransit services, as well as on-demand micro-transit services. Its service area, which covers 400 square miles, operates 365 days a year with an annual system-wide ridership of approximately 21 million passengers.

In recent years, transit authorities began noticing a dramatic decline in light rail ridership. It was stemming from safety concerns about the rise in nuisance behavior like people drinking or smoking on the station platform. Customers also complained about the general cleanliness of the stations, issues with broken fare vending machines, out-of-order digital message signs and other problems that made ridership an unpleasant experience.

"When Henry Li, our new CEO, came on board four years ago, he was determined to quickly turn the situation around and put customers first," said Sandy Bobek, SacRT AVP of Technology, Innovations and Performance Monitoring. "Under Li's direction, our push to add cameras throughout the system went into overdrive. At the same time we started seeking other technology we could use to help us make our riders feel SacRT is clean, safe and secure and therefore an enjoyable commute."

Aggressively pursuing a better detection and deterrence solution

The aggressive push for security, safety and cleanliness involved more than doubling the number of surveillance cameras at the stations. "We use a mix of models depending on the particular task. For instance, we use the fixed dome network cameras to monitor our fare vending machines and pan/tilt/zoom cameras to keep an eye on the parking lots. We use other Axis high-definition camera models to monitor the entire length of the platform," said Bobek.

SacRT deploys at least two AXIS 3003-E Network Horn Speakers at every light rail station as part of its Cisco voice-over-IP public address system. Because the horn speakers are IP addressable, security can broadcast announcements to multiple speakers on the platform or direct a targeted message to a single speaker.

"This gives us the flexibility to inform everyone on the platform of schedule delays or other updates," said Bobek. "Or, for instance, if security staff monitoring the cameras sees someone in a green jacket smoking, they can direct a verbal warning to a specific network speaker that's closest to that person and tell them to put out their cigarette."

Bobek says that this active response is proving to be a very effective and low-cost way of policing bad behavior.

"Using the public announcement system to deter the small annoyances frees up police staff to concentrate on monitoring the system," said Lisa Hinz.

Another security enhancement is a two-way incident management system from ELERTS, a software developer and Axis partner. A mobile version developed for SacRT called Alert SacRT allows riders or anyone else with the app on their smartphone to report safety and security concerns and other problems that need immediate attention.





"We all marvel at the positive impact the Axis cameras, horn speakers and ELERTS software have had on our light rail ridership. When customers see us holding people accountable for uncivil behavior they feel a lot more comfortable using our transit system."

Lisa Hinz, VP of Safety, Security and Customer Satisfaction for Sacramento Regional Transit District. The reports automatically stream to the dispatcher at the SacRT Security Operations Center in downtown Sacramento along with the coordinates of the Axis camera and horn speaker closest to where the report originated. This allows the security officer to pull up a live stream from the appropriate camera, quickly see what's happening and respond accordingly.

"Before the ELERTS system provided the associated camera and speaker data, SacRT security staff had to spend precious time scanning to find the right camera views and flipping through pages of a reference manual to see what speaker corresponded to that location," said Ed English, CEO of ELERTS Corp. Now reports coming in through the Alert SacRT app automatically include all the pertinent geo-location information.

"Allowing the public to take an active role in improving station safety and cleanliness can be very empowering," said Lisa Hinz. "We're getting good participation in the Alert SacRT app, because these are the people who have a personal stake in the outcome. And they're seeing their involvement paying off."

Using technology to further enhance the rider experience

SacRT is also focusing on how to use technology to better foster collaboration with riders. A recent enhancement to the ELERTS app gives customers the option of automatically receiving timely alerts on their smartphones regarding changes to train schedules, unexpected service disruptions, alternate transportation recommendations, and other important information.

SacRT expects to continue evolving its safety and security program by adding more innovative technology into the system. Among their many initiatives is to further automate communication between all of their technologies to improve the overall customer experience.

Today, SacRT's light rail ridership averages about 40,000 on any given weekday. "We have made a historic transformation over the last three years to stabilize ridership," said Hinz. "We will continue to look for innovative solutions to keep that ridership on an upward trajectory."









About Axis Communications

Axis enables a smarter and safer world by creating network solutions that provide insights for improving security and new ways of doing business. As the industry leader in network video, Axis offers products and services for video surveillance and analytics, access control, and audio systems. Axis has more than 3,500 dedicated employees in over 50 countries and collaborates with partners worldwide to deliver customer solutions. Axis was founded in 1984 and has its headquarters in Lund, Sweden.

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