

Preventing gridlock with Axis: Blending modern security with Southern hospitality.

City of Savannah creates safe, welcoming environment for residents and visitors with Axis network cameras and video encoders.



Organization:

City of Savannah

Location:

Savannah, Georgia, USA

Industry segment:

City surveillance

Application:

Public safety and security

Axis partner:

OnSSI

Mission

With up to a million visitors flocking to Savannah's quaint historic district each month, managing traffic and safety through a congested maze of one-way streets never designed to handle high-volume traffic was a real challenge. Attempts to redirect events at one intersection often caused a cascade of traffic jams elsewhere in the bustling downtown area. Both the Savannah/Chatham Metropolitan Police and the Traffic Engineering Department for the City of Savannah realized that they needed help seeing the bigger traffic picture.

Solution

The city deployed Axis network cameras at key intersections to monitor the flow of cars and pedestrians through the downtown area. The cameras stream over fiber and wireless connections to the city's data center, and the police department and traffic engineering use an OnSSI video management system (VMS) to view real-time traffic patterns, monitor safety concerns and extract recorded footage for forensic investigations.

The cameras also assist police in event management, allowing them to keep tabs on the density and temperament of crowds during festivals and other popular city-wide activities.

Result

With better real-time traffic intelligence, the city is able to judge when to open and close certain streets to vehicular traffic and when to change the timing of signal lights to accommodate the ebb and flow of pedestrians and cars. As a result, outings to the downtown area have become more pleasant, safer experiences for residents and visitors alike.



Introducing new technology to a historic city

Savannah, Georgia is a study in contrast. The state's oldest city was founded long before the American Revolution. Yet, beneath its cobble-stoned streets lie 38 miles of fiber optic cable, evidence of a metro-region firmly rooted in modernity. Touted by national and international press as a trendy travel hot spot, nearly a million visitors a month flock to the city for music and cultural arts festivals, business summits, creative cuisine and to experience a place where Southern hospitality has been raised to an art form.

Because this quaint, historic city was never designed to handle such a large influx of people and cars, Savannah needed a force multiplier to assist police in maintaining public safety and security. In 2004, the city strategically installed a handful of analog cameras on buildings to help police monitor roadways during the G8 Conference.

However, relying on DVR recordings proved to be an awkward proposition. The next year, Savannah used Axis video encoders to stream the cameras to the city's data center. They also added seven AXIS 213 PTZ and AXIS 214 PTZ (pan/tilt/zoom) Network Cameras, with wireless connections to police headquarters. The city integrated the cameras with an OnSSI VMS, replacing less intuitive legacy recording software.

Every subsequent year, as budget permits, the city adds more sophisticated Axis camera technology. Today, more than 25 Axis network cameras – including a mix of AXIS Q6032-E and AXIS Q6034-E PTZ Dome Network Cameras and AXIS P3344 Fixed Dome Network Cameras – dot the Savannah landscape to monitor roadways and buildings, entertainment venues, parking garages, community centers, cemeteries, landfills, and even police interview rooms. The majority of the cameras stream video to nine Dell servers in the city's data center. A few of the remote facilities maintain standalone servers connected to the city's wide area network so that police can remotely access the live cameras and stored video as needed. The system is managed through the aforementioned ONSSI VMS platform.

"We've found Axis cameras to be really durable and simple to set up. They just plug into the network via PoE switches," said Mike DiSanza, Network Technician in the IT Department for the City of Savannah. "We like how easy they are to custom configure. Plus, you can adjust the focus and field of view remotely." The IT Department also noted that with H.264 compression of the video, the city is able to use storage resources far more efficiently.

Keeping traffic flowing like dyed-green water from a fountain

Each year, the City of Savannah hosts one of the biggest St. Patrick's Day celebrations in the United States with over a million spectators attending the parade. Axis network cameras play a key role in helping officers manage the crowds.

"We really appreciate the big picture the Axis cameras provide, especially on heavy traffic nights like St. Patrick's Day," said Lieutenant David Gay, Special Events Office of the Savannah/Chatham Metropolitan Police Department.

AXIS Q6032-E PTZ Dome Network Cameras mounted on telephone poles in key downtown intersections give police and traffic engineers in the command center a 360-degree view of the area. As garages fill up and downtown parking becomes scarce, the police department notifies the public through social media to seek parking elsewhere.



During the celebration, police are sometimes forced to close major roadways due to surges in pedestrian traffic. Yet, rerouting cars can cause significant congestion elsewhere. The Axis cameras provide a comprehensive overview of the streets so the police and traffic departments can coordinate when it is safe to reopen normal routes.

"We actively monitor the cameras so that when we see the pedestrian surge subsides, we can immediately reopen the street and alleviate the congestion," said Gay.

Real-time, integrated city security

While camera access is typically restricted by department, the metropolitan police can access all city-owned cameras. Real-time video helps them synchronize their efforts, and the video evidence can be crucial for investigating incidents, especially if they occur in big crowds or during dynamic events. If the need arises, the police can push video from any camera to mobile devices in the field.

"It's been a huge asset for our SWAT team," said Jason Pagliaro, Emergency Management Liaison for the City of Savannah. "Having that situational awareness immediately at hand can be a real life saver."

Video transmitted wirelessly from county helicopters is also brought into the network with Axis video encoders.

Discreetly observing police interrogations

The police department has also upgraded the analog camera system in its interview rooms with discreet, tamper-resistant AXIS P3344 Fixed Dome Network Cameras with built-in microphones. "This is a much better setup for us," said Gay. "Now officers not directly involved in the interview can watch the proceedings live from their desktops and call up archived video for forensic investigations at the touch of a button."

The small form factor of the camera allows it to remain unobtrusive, while the HDTV-quality video delivers a much higher picture quality. In addition, the sound levels in the built-in microphone can be adjusted remotely to avoid disrupting the interview in progress.

Interdepartmental cooperation yields results

Savannah's success with its video surveillance system is due to a collaborative effort between law enforcement, the IT department, traffic engineers, and others. "The police and traffic engineering folks pick the locations and IT coordinates the process," said Damien Hoffman, Network Manager in the IT Department for the City of Savannah. "We look at the network connectivity challenges, arrange permissions for camera placement and determine how to can get power to the site. Then it's just a matter of implementation and configuration. The system wouldn't exist as it is without the close relationship between departments."

"Savannah's layout involves a number of one-way streets which really complicates any large-scale effort to control traffic. Our Axis cameras help us in real-time to understand the big picture, how rerouting vehicles at one intersection will impact traffic throughout the downtown area."

Lieutenant David Gay, Special Events Office of the Savannah/Chatham Metropolitan Police Department



About Axis Communications

Axis offers intelligent security solutions that enable a smarter, safer world. As the global market leader in network video, Axis is driving the industry by continually launching innovative network products based on an open platform - delivering high value to customers through a global partner network. Axis has long-term relationships with partners and provides them with knowledge and ground-breaking network products in existing and new markets.

Axis has more than 2,000 dedicated employees in more than 40 countries around the world, supported by a network of over 75,000 partners across 179 countries. Founded in 1984, Axis is a Sweden-based company listed on NASDAQ Stockholm under the ticker AXIS.

For more information about Axis, please visit our website www.axis.com.