

Chasing crimes in real-time with city and community-sourced video.

Rockford Police Department partners with Axis Communications and Montel Technologies to help track, apprehend and prosecute lawbreakers.



Organization:

Rockford Police Department

Location:

Rockford, Illinois, USA

Industry segment:

City surveillance

Application:

Real-time investigation, law enforcement

Axis partner:

Montel Technologies

Tackling crime in real time

Just 80 miles northwest of Chicago lays the city of Rockford, Illinois. Like most urban centers in the Rust Belt, Rockford was hit hard by multiple recessions in the 1980s and 2000s. While city officials focused on revitalizing the community with new industry, the Rockford Police Department began pushing for more technology to help law enforcement turn the tide on crime.

"Chief Daniel O'Shea is a big proponent of technology as a force multiplier," said Lt. Robert Reffett of the Rockford Police Department Special Operations.

To that end, O'Shea established the Intel Unit and equipped its Rockford Intelligence Special Operations Center (RISC) with a wealth of technology tools to gather, collate, analyze and dispatch critical information to officers in the field in real time and help them investigate and solve crimes faster.

Crime analysts would be able to pass on intelligence from a variety of sources – radio reports from officers on patrol, social media, license plate databases, etc. One thing lacking from this crime stopping effort was a way to efficiently correlate video inputs from surveillance cameras across the city's three districts.

O'Shea turned to Montel Technologies, a custom security solutions provider and Axis partner, for help. The first thing Montel did was replace the PD's legacy analog cameras at city intersections with 20 high-speed HTDV-resolution AXIS Q61 PTZ Network Cameras. Their fast and precise pan, tilt and zoom action gives the police department the ability to surveil a wide area and capture critical details, a vast improvement over the fuzzy images coming from their old camera system.



"The AXIS Q61 cameras are a great fit for us," said Lt. Reffett. "Their built-in infrared LEDs and Lightfinder feature make it possible for us to conduct covert surveillance at night when criminals think they can hide their activity under cover of darkness." Equally important to the Intel unit has been the reliability of the cameras whether operating in blazing hot summers or minus 40°F winters.

Montel next installed MTOP, its integration portal system that aggregates video feeds from all the Axis cameras onto a single operations platform overseen by the department's Intel Unit. Analysts can view any camera or series of cameras linked to the platform, relay to officers what they see unfolding and push critical images out to police squad car computers to help them pursue suspects. Since the video is stored for about a month, analysts can intelligently search the archives by timeline or specific parameters like the color of a vehicle or an individual's tattoo to help detectives build a case for prosecution.

Pulling intel from everywhere leads to quicker arrests

"When an alert comes in, it's all hands on deck," said Lt. Reffett. "It could be an alert from our ShotSpotter acoustic sensors around the city that detect weapons fire, chatter we hear over a police radio, or maybe a sergeant calling in to give us a heads up."

Nolan Walker, an officer with the Intel Unit tells of a typical incident where ShotSpotter triggered an alert which included the location of the gunfire. "We were able to pull up the video from the Axis cameras in the area and see the suspect's vehicle," said Walker.

"Our analysts looked through our license plate database and pulled up an image of the registered owner. We then looked through Facebook and were able to tie in the rest of the suspects based on that information."

Being able to quickly filter through countless hours of video has been a real advantage for the four-person Intel Unit. "There was this murder investigation where we were looking for a specific red car," recalled Lt. Reffett.

"With weeks of video from our 20 Axis cameras, it would have taken a huge amount of man hours to watch it all." Using the smart search feature of the MTOP software, analysts were able to locate the vehicle multiple times as it moved in and out of town.

"We were able to verify its location throughout the day and the specific routes it took, which really helped our detectives focus their investigation on the relevant time period," said Reffett.

"The surveillance system has really helped us get quicker results for investigations," said Jocelyn Adams, Crime Analyst for the Intel Unit of the Rockford Police Department. "There was this armed robbery where we had the vehicle description caught on our license plate recognition program. Based on the video intel and other data we gave officers, they were able to arrest the guy within four hours."

"The quicker you bridge the information gap with the officers on the street, the bigger the payoff," said Kim Binder, another crime analyst in the Intel Unit. "The sooner you apprehend a suspect, the more likely you are to get a weapon or some other evidence before they have time to get rid of it."

Deploying mobile surveillance for special events

When Rockford hosts special events that draw large crowds into the city, the police department augments its camera system with a customized mobile security unit on loan from Montel Technologies. Montel's Mobile Surveillance Unit, which can be set up in minutes, is equipped with a mast-mounted HDTV-resolution AXIS Q60 PTZ Network Camera that streams video and audio to a mobile command center or the RISC Center via cellular or satellite communication.

"We can draw 150,000 people to the downtown area with our Fourth of July festival or our Stroll on State that kicks off the winter holiday season," said Lt. Reffett. "The portable unit gives us a lot of flexibility to deploy an extra set of eyes where and when it's needed most."





Actively partnering with the community

Another aspect to reducing crime and enhancing the quality of life in Rockford is the police department's active partnership with the community. To achieve that goal, Montel Technologies partnered with the department launch INTACT Community, a public safety initiative that expands the Intel Unit's crime stopping efforts by allowing local businesses to integrate their surveillance cameras with the intelligent video surveillance system.

"INTACT is a ground-breaking crime-fighting partnership between local businesses, Rockford Police and the community at large," said Ray Montelongo, President of Montel Technologies. "It not only improves public safety, it enhances the security capabilities of everyone who participates."

"The big draw has been that when they register their cameras with us they feel like they're helping make a difference in the community," said Lt. Reffett.

With both public and private cameras integrating into the system, the Intel Unit has increased its ability to track a suspect's or vehicle's movement through the city and direct officers to specific locations to make arrests. In one case, a private business' camera caught a shooting in the downtown area. The video not only showed the type of vehicle involved but also that it was missing a hubcap. That detail helped officers verify that the vehicle they located was the right car.

Another phase of this program is soliciting private citizens to register their home surveillance cameras with the Intel unit. "The cameras won't be integrated into MTOP," said Lt. Reffett. "They'll just be mapped so we can see where all the cameras in the city are. Then if an incident happens, we can see what cameras might be in the area and our detectives can follow up with those individuals to see if they caught the crime on their system."

While the program is still in its infancy, public response has been very positive. As a result, the Intel Unit has been able to rapidly expand its safety and security initiative with minimal additional capital investment.

Adding new capabilities to enhance public safety

Going forward the Intel Unit would like to add video analytics to the Axis cameras to detect unusual traffic flow. "For instance, if an accident happens or for some reason cars are stopped in the middle of an intersection, the camera will instantly detect the disruption and send us an alert," explained Lt. Reffett. "So we can quickly dispatch an officer or emergency responder to mitigate the problem."

In an effort to speed up response time to gunfire, the Intel Unit has integrated ShotSpotter system with the surveillance solution. This will enable video from the closest cameras to automatically pop up on the RISC Center monitor wall, rather than having analysts lose precious moments manually searching for which cameras to watch.

Bridging the information gap

Police work is often like solving a jigsaw puzzle. It takes a lot of pieces of information to build a complete picture of an incident or crime. With advanced technology tools like the Axis and Montel system helping the Intel Unit deliver real-time intel to officers and detectives on the street, Rockford police are bringing more criminals to justice than ever before.

"We've gotten a lot of positive feedback about the camera system because it's helping the PD solve cases and put criminals in custody," said Kim Binder. "Now I can't imagine working without these tools. It would be like trying to do our job in handcuffs."

"Our Axis cameras and MTOP system continue to play a critical role in our ability to build solid cases and successfully prosecute crime."

Lt. Robert Reffett, Rockford Police Department, Special Operations.

"If we had to work without Axis and Montel's MTOP, it would be like trying to do our job in handcuffs."

Kim Binder Crime Analyst for the Intel Special Operations Unit of the Rockford Police Department.



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 3,000 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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