

Mankato, MN Deploys Arecont Vision® Megapixel Cameras for City Surveillance

The Customer

Public safety and the protection of property initiatives led the city of Mankato, Minnesota to deploy a city-wide IP-based video surveillance system. Founded 1852, the city is the seat of Blue Earth County. It encompasses 18.26 square miles of land and water, and supports a population of about 41,000 (2015 US census estimate). Home to a variety of natural landmarks and higher educational institutes, Mankato provides a dynamic lifestyle for its citizens year round.



The new city surveillance system uses a range of Arecont Vision megapixel cameras to cover key areas of the community, with the largest concentration of cameras deployed in the popular downtown entertainment district. Surveillance is also in place throughout Mankato's city hall, civic event center, shopping areas, parking ramps, public safety center, municipal water plant, public works center,

regional airport, and for multiple public parks and community streets.

The Project

The limitations of the previous surveillance system inspired extensive enhancements and capabilities for the new project. The original system NVR supported primarily analog technology cameras, with a small percentage of early generation IP cameras supporting only JPEG video. The image quality of megapixel cameras could not be matched by this system, nor could it be cost effectively grown to address city requirements.

In order to enjoy enhanced security, increased public safety, and the protection of property, a more modern and capable surveillance system was required. The city thus engaged security and communications integrator WW Communications to design and deploy such a project. WW Communications' COO Mike Bales led the effort and selected Arecont Vision's IP megapixel cameras as the core of the new project.





With regards to why Arecont Vision was selected for the project, Bales explained: "A variety of factors led to the use of Arecont Vision, not least of which was the commitment and quality they provide as an American-based manufacturer. They are one of the few vendors who design and build their cameras in the U.S., and their cameras' features and reliability reflect that." Delving further into what features specifically appealed to them, Bales concluded, "Simplified installation features such as remote focus, along with advanced features such as true WDR (wide dynamic range) were key factors in the decision. Additionally, the SurroundVideo camera series' cost effectiveness and coverage capabilities placed Arecont Vision ahead of its competitors for the job."



Street Cameras – Taxi Pick Up Lanes (180 Degree View)

SurroundVideo[®] cameras were first designed and pioneered in the surveillance industry by Arecont Vision in 2006. Now in their fifth generation, they provide non-stop coverage with four individual megapixel sensors for superior situational awareness and image quality while reducing the total number of cameras required for surveillance projects.

After deciding on a manufacturer, Milestone Systems was then brought on as the video management software for Mankato's new surveillance system. Arecont Vision and Milestone are proven integration partners, having completed thousands of seamlessly-integrated city surveillance projects around the world. Additionally, Milestone is a top-tier participant in the Arecont Vision Technology Partner Program and its VMS software is among those used in Arecont Vision's MegaLab™.



180-Degree View - Cherry Street Parking Ramp

"The close technology and support integration between Arecont Vision and Milestone helped ensure that a best-in-class surveillance system was delivered to the Mankato," commented Bales. "The result is a single system for the city that is second to none in capabilities and can grow with the community's needs."

The Process

Phase one of the project included deploying thirteen cameras to the newly built public safety center. Phase two resulted in the deployment of thirty-seven cameras in the city's entertainment district. The effectiveness of





these cameras led to additional installations at city sites which greatly assisted in reducing common vandalisms and other public safety crimes.

Phase three of the project involved the installation of twenty-three MegaDome[®] 2 single sensor cameras onto the fourth floor of a brand new, four-story parking facility in the downtown area. Surveillance of the structure was further enhanced

through use of a SurroundVideo[®] Omni — a unique omni-directional camera introduced to the industry by Arecont Vision in 2014.

The Omni camera series offers four megapixel sensors that are mounted on three-axis gimbals inside a low profile dome enclosure. The sensors can be individualized to cover virtually any direction, providing unmatched surveillance capabilities with a single high-resolution camera that is fully integrated with the VMS.

With the recent Public Works Center campus construction project, another three MicroDome[®] G2 and five SurroundVideo Omni cameras were added to the city's overall surveillance



Night View LPR - Water Treatment Plant Driveway

system. Five SurroundVideo Omni cameras and MicroDome G2 cameras were also installed along a pedestrian walkway that stretches from local hotels to the city's civic center and entertainment district. The system is expected to continue growing in order to address public safety and property protection concerns as they arise.

The Result



Depending upon the location and local requirement, the city of Mankato surveillance system uses a range of Arecont Vision cameras. These include singlesensor 2 – 5MP MegaDome 2 and MicroDome G2 cameras. 20MP SurroundVideo multi-sensor cameras provide 180o situational awareness coverage, while omni-directional SurroundVideo Omni G1 and G2 cameras cover an even wider range of deployments.



The city surveillance system is managed and monitored from a command center with a multitude of large screens displayed across a wall.

"The surveillance system and the screens are critically important during high-traffic events in the city," said Mr. Bales. "With three colleges here in town, homecoming is a very busy time of the year. There are also numerous festivals that take place in the city combined with a very dynamic downtown. Our staff is able to view the activities as they happen, enhancing security and city-wide situational awareness."



Night View - Impound Lot Far North



Night View - Impound Lot Far South

It is not just the security center that can monitor this system either — video can also be streamed to mobile devices and can be monitored for official use all over the city.

The system provides public monitoring as well. There are about a half dozen locations downtown with indoor walkways and skyways that are covered by Arecont Vision cameras with live video, providing the public with supplementary awareness and security.

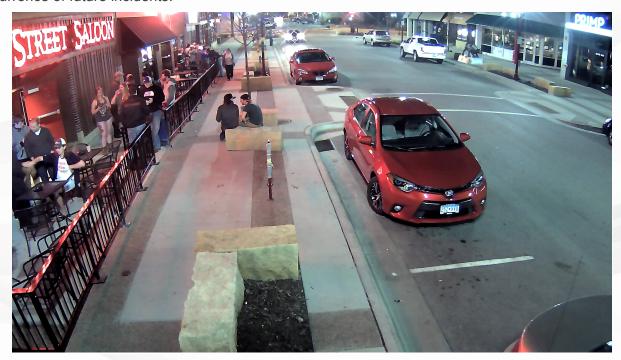




Riverfront Park Parking Area Day (Left) & Night (Right)



The surveillance system has exceeded the expectations of the city to protect both people and property. An example of the system's usefulness was evident in a recent incident that made national news. After a Mankato bar closed for the night, a major altercation took place, where the Arecont Vision Cameras were crucial in solving that crime. The city surveillance system caught the incident on camera, providing detailed video evidence which assisted law enforcement in proceeding accordingly. The cameras prompted the ideal outcome in an unfortunate situation, helping make the legal process more efficient and serving to greater deter the occurrence of future incidents.



Street Cameras - 500 Block South Street

When probed on how the system has performed to date, Bales responded that Arecont Vision "exceeded the expectations." We look forward to continuing this legacy throughout our work with the City of Mankato.