

## Monitoring road conditions in the city.

Axis network cameras help the City of Verona to effectively keep track of traffic incidents and reduce travel chaos.



Organization:  
Municipality of Verona,  
Public Administration

Location:  
Verona, Italy

Industry segment:  
City surveillance

Application:  
Traffic monitoring

Axis partners:  
Reteco, Milestone

### Mission

Verona is one of the main tourist attractions in Northern Italy, largely owing to the wealth of history steeped in its town center, which is a UNESCO World Heritage Site. The large numbers of tourists combined with local traffic can cause delays in the city on certain days and in some areas, potentially resulting in chaos for city travel.

### Solution

Implementation of a focused and efficient video surveillance system requiring installation of 32 Axis network cameras placed strategically around the city, allows the Traffic Coordination and Management Unit to control any problems regarding road conditions in real time and act promptly in emergencies, communicating with users through mobile communication channels (web, SMS, e-mail, etc.).

### Result

The opportunity to intervene immediately in the event of a critical situation saves community resources. Furthermore, monitoring road conditions in real time allows for swift intervention, adopting specific strategies for traffic signal control.

"The reasons we are satisfied with Axis include the good price-quality ratio and versatility, with all due respect to their competitors. The option of using an extensive camera surveillance system actually allows the best adapted model to be employed, which varies, for example, according to when and where it is installed."

Mr. Bruno Pezzuto, Architect, Verona Traffic Coordination and Management.

## A new screen-based system for urban traffic control

The City of Verona chose Axis Communications to develop an inner city traffic video surveillance system. The system, managed and configured by Reteco, is developed on the Milestone XProtect® platform and is composed of 32 strategically placed network cameras and will be integrated to incorporate a total of more than 100 cameras. The models in use are AXIS 233D, AXIS Q6032-E and AXIS Q6034-E Network Cameras.

Installation of video surveillance links individual network cameras with the Central Traffic Unit where operators are in continuous contact with the City's Police control room. The use of video surveillance in the city center primarily allows rapid and effective monitoring of urban road conditions, but also plays a strategic role in traffic management through the use of cameras integrated with centralization of traffic signals and addressing users through traffic information panels, which can alter traffic flow at any given moment depending on requirements at that time.

The choice of models installed was governed by the requirement to monitor large areas, while at the same time, allowing the possibility of registering certain details at certain moments. AXIS 233D and AXIS Q6032-E Network Cameras have a powerful 35x optical zoom and a 12x digital zoom which enlarge small and distant objects up to 160 meters away, such as car number plates, and the AXIS Q6034-E Active Gatekeeper function allows the camera to continue to track an object recognized following certain movements.

A couple of the characteristics which make these models extremely practical for the role developed by the Municipality of Verona include High Power over Ethernet and Arctic Temperature Control. The first system simplifies installation, to the point where a single network cable is used for power supply, video transmission and PTZ commands. Arctic Temperature Control ensures that the cameras will work at temperatures ranging from -40° C to +55° C, but also enables them to restart at these temperatures following a power outage.

"Using Axis network cameras is the perfect compromise between surveillance requirements and traffic control owing to the highest quality images and their hugely versatile nature, also available in H.264 and HDTV," says Mr. Bruno Pezzuto, Head of the Verona Central Traffic Unit. "The potential to optimize camera operation remotely and use the images without requiring specific decoders means we can use them in real time on veronamobile.it".

The collaboration between Axis and the City of Verona was an opportunity to celebrate the 95th Giro d'Italia cycling event in this historic city: on this occasion, the municipality was able to monitor the vast numbers of people in the city center much more accurately using the three Axis network cameras strategically installed for the occasion, which had been lacking up until this point.

