

MAKE THE
WORLD SEE

◆ milestone

LET'S RETHINK CITY LIVING

CONNECTED VIDEO TECHNOLOGY FOR SAFE CITIES

Discover how video technology can help cities achieve greater safety, mobility and sustainability.



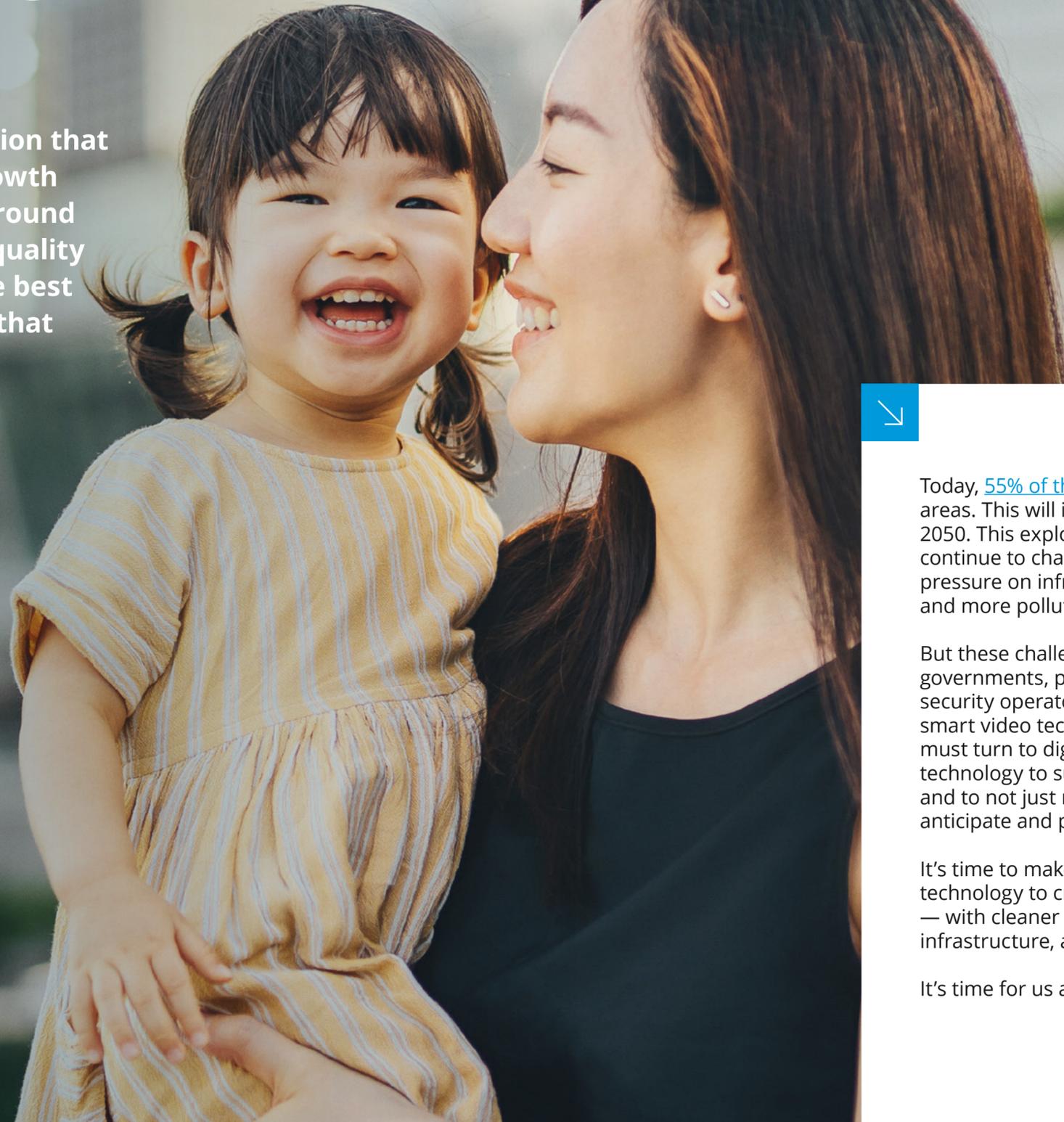
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Let's rethink city living

The future is no longer what it used to be

We can no longer count on the comforting assumption that the future will resemble the past. The explosive growth of urban areas is affecting how people live, move around as well as their sense of safety. To ensure a better quality of life in the future, we must all act now. One of the best avenues open to us is to explore the opportunities that smarter, data-driven video technology offers.



Today, [55% of the world's population](#) live in urban areas. This will increase to a jaw-dropping 70% by 2050. This explosive growth in populations will continue to challenge city living – with immense pressure on infrastructures, increased risk of crime and more pollution.

But these challenges can be overcome if governments, policy makers, urban planners and security operators realize what's possible with smart video technology. As a starting point, we must turn to digital tools, data, and intelligent video technology to successfully address these issues — and to not just react to incidents and trends but anticipate and prevent them as well.

It's time to make the most of smart video technology to create a better urban life for all — with cleaner urban areas, well-functioning infrastructure, and all-round safer environments.

It's time for us all to **rethink city living**.

Let's rethink city living

We need to break down silos and start connecting

These days data is more available than ever, with the data from video technology being particularly invaluable for cities. But it needs to be a shared asset that enables citywide operators, authorities and decision makers to act faster, smarter — and together. This calls for cities to ensure that all their diverse video installations are connected and under centralized management.



Urban video systems can be potentially made up of thousands of geographically dispersed cameras, devices and sensors. That adds up to a lot of data and complexity.

Too often that data is lost in a siloed infrastructure, where teams and technology simply can't talk to one another. The results are inefficiencies and miscommunication. And, even worse, accidents and injury that need not have happened.

Create situational awareness across cityscapes

With centralized solutions all the data being generated by cameras and sensors is channeled into central, connected video management systems. This enables operators to monitor, analyze and examine camera footage throughout the coverage areas in a single interface that can be viewed in an intelligent control room, or a connected remote device.

This provides full situational awareness that allows operators to act quickly on critical decisions to not only react to events, but to proactively prevent them. It also enables different functions – from security operators to city authorities, law enforcement and governmental agencies – to communicate and collaborate using the same information.

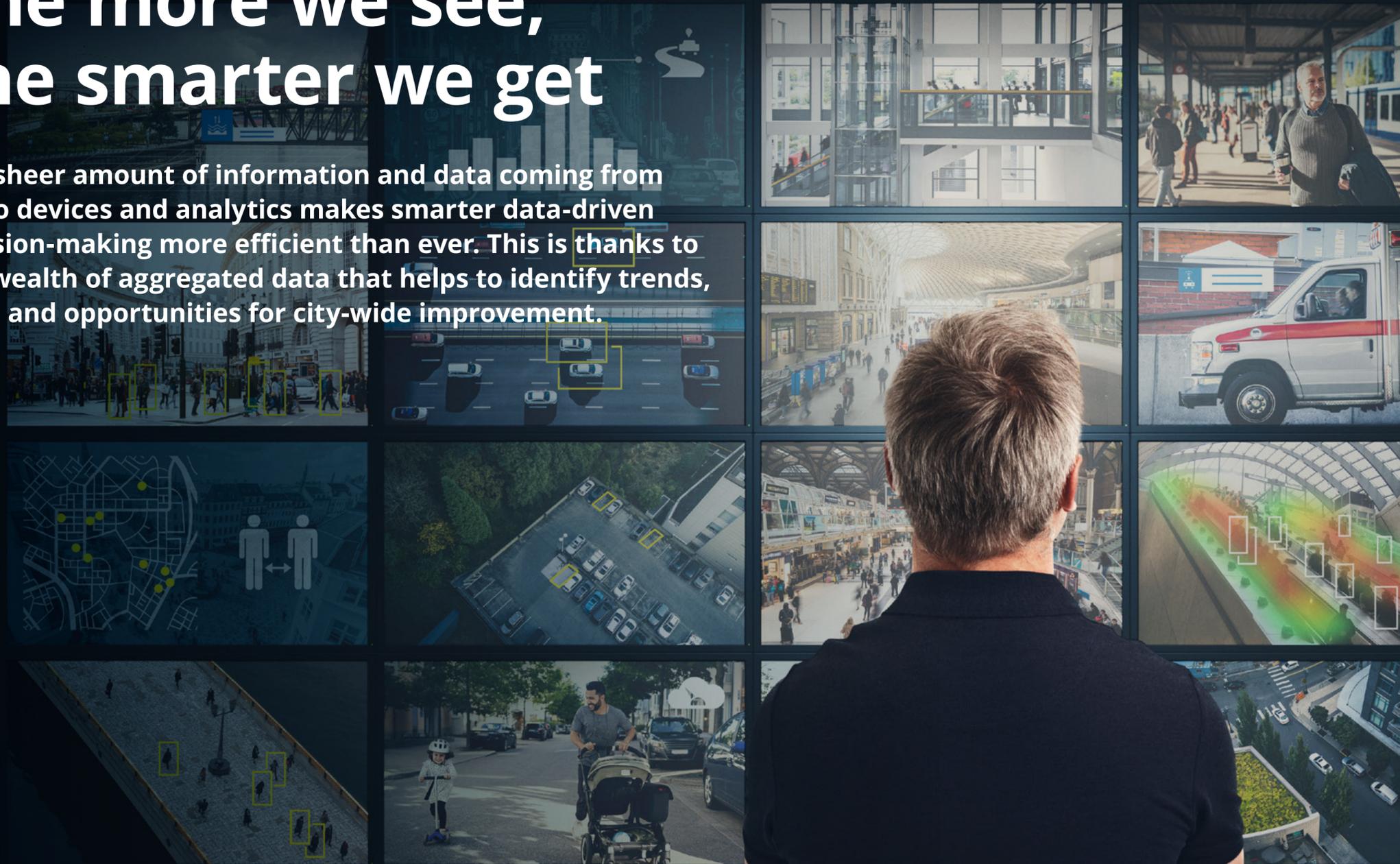
Improve daily life, and quality of life

Aside from improving day-to-day operations, the benefits created by centralized and connected video technology solutions enable cities to become smarter. The result is the ability to make both incremental and sweeping improvements to residents' quality of life.

Let's rethink city living

The more we see, the smarter we get

The sheer amount of information and data coming from video devices and analytics makes smarter data-driven decision-making more efficient than ever. This is thanks to the wealth of aggregated data that helps to identify trends, risks and opportunities for city-wide improvement.



Advancements in intelligent cameras and sensors, advanced analytics and AI have improved the ability to extract actionable insights from video data. When processed, refined and analyzed it leads to a far more complete picture of what's happening in the city.

But perhaps most importantly for city safety, it gives decision-makers, operators and first-hand responders the ability to make better decisions faster. They can also predict and prevent events before they happen.

Intelligent control rooms - the engine of safe cities

Control rooms offering dashboards with real-time event alerts, data and video feeds are the beating heart of safe city operations. In addition to the increased communication and collaboration these make possible, this is where all the real-time and historical data produced by connected video solutions can be analyzed in one place.

This includes the full spectrum of monitoring options: heatmaps, crowd counting, traffic flow analysis, etc. All of which offer invaluable insights on trends, or potential risks and opportunities.

Another huge advantage with centralized control rooms is how they enable multiple sites to be remotely managed from one place, saving a lot of time and staff costs.

Let's rethink city living

Build your safe city with Milestone's open platform

Choosing Milestone XProtect® as your safe city foundation means choosing a scalable video management software (VMS) platform that can help solve the challenges facing a city now – and in the future.

Trusted around the world

XProtect is a world-renowned VMS platform that is already in use in 500,000 installations worldwide. It is ideal for creating large-scale, end-to-end connected video solutions covering a wide variety of safe city use cases.

Fully open platform offering total flexibility and scalability

XProtect's open architecture means no lock-in and the ability to customize the connected video solution that will accomplish the job. It integrates with the software and hardware of Milestone's 2,500+ technology partners so you can continue adding functionalities as needs evolve.

With XProtect as your connected video core you can:

Rethink city safety

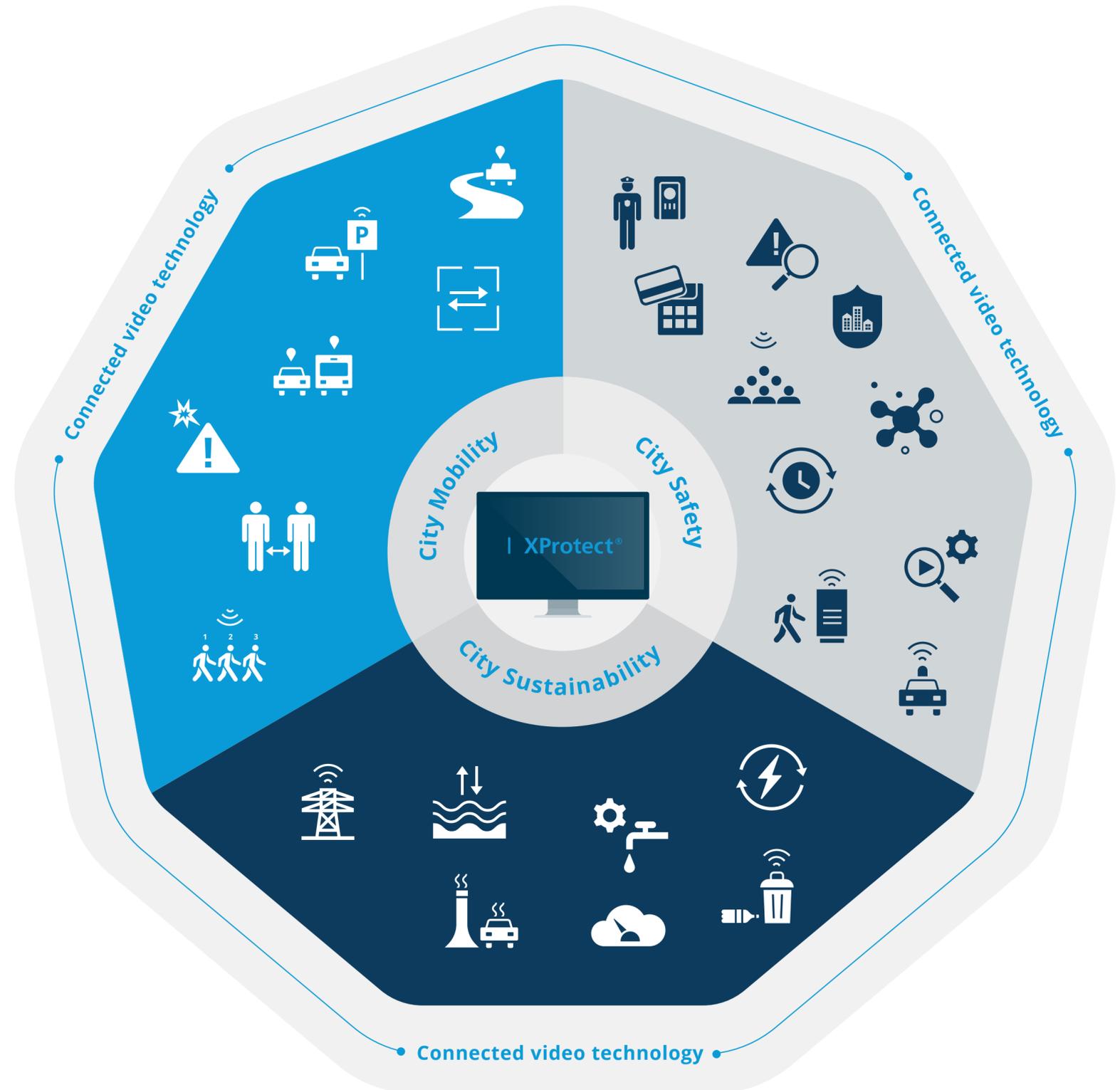
to ensure public safety and security on multiple levels – from citywide law enforcement and crime prevention to risk analysis and crowd management.

Rethink city mobility

to ensure smoother-running city infrastructures by reducing congestion and parking issues; and speeding up emergency response and incident management.

Rethink city sustainability

to ease environmental pressures through new approaches to energy, waste, noise and air quality monitoring and management.



Let's rethink city safety

Because not every city has a superhero to protect it

To live, work and raise families without worry, city residents should feel safe and secure. Video technology is now aiding law enforcement, security operators and others in protecting public welfare in ways that go far beyond simple camera surveillance.



The smart approach to safety

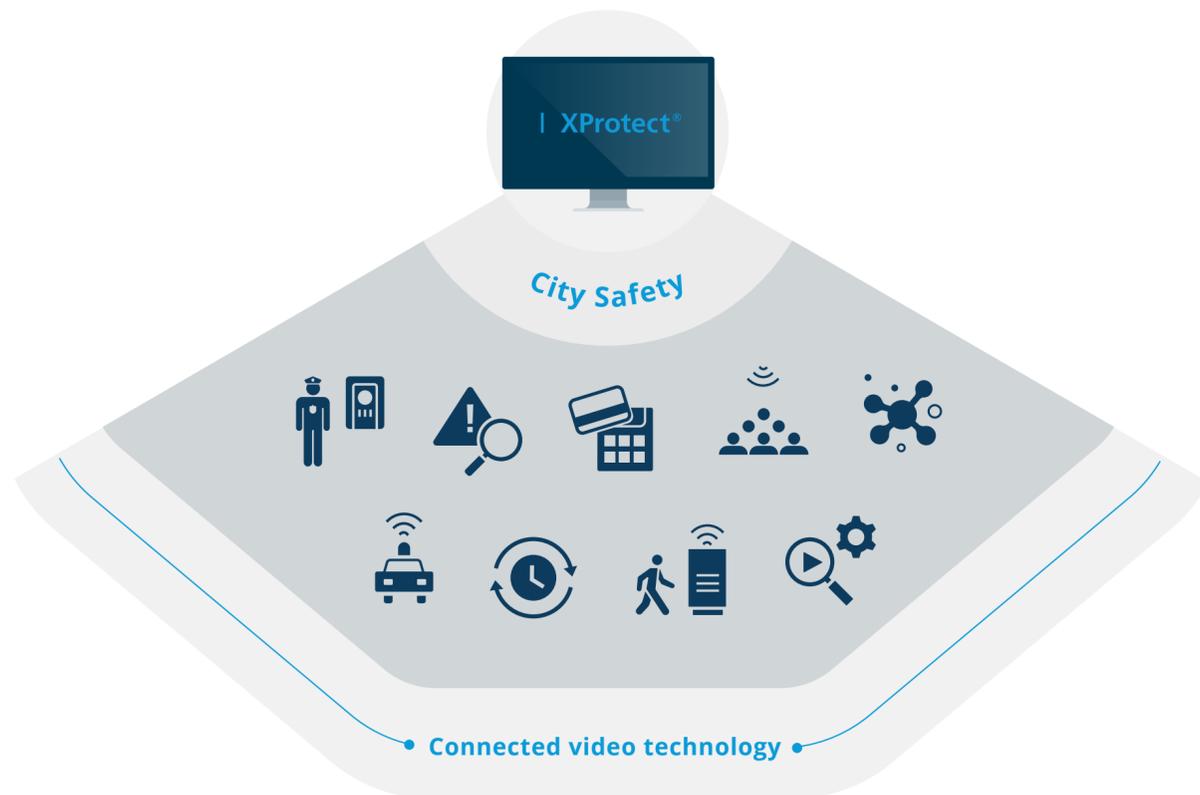
Safety in cities has many aspects. Alongside crime prevention and investigation there is emergency response and crowd management — which took on a whole new level of importance with the onset of Covid-19.

Video technology is applicable to all these challenges. With solutions comprising cameras, sensors, and other IoT devices, video is no longer just a reactive tool. The data, audio and metadata that can now be captured provide new insights and analytics that allow a shift towards more preventative measures. These in turn have a positive effect on budgets, resource allocation and work hours. Not to mention the greater wellbeing and sense of security among the general public.

Let's rethink city safety

Connected video solutions for city safety

Video technology can play a key role in improving city safety, far beyond the realm of surveillance. Alongside its standard functions, XProtect® allows the integration of a broad range of software and hardware options that improve safety across the board.



Emergency response
Give first responders enhanced situational awareness to deploy resources more effectively, together with advanced post-event evidence gathering and analytics.



Event management
Mitigate the damage of critical events by ensuring the clearest lines of communication and situational awareness across departments and jurisdictions



Real-time visualization
Establish centralized control centers to help you understand what's happening in real time, identify any risks or emergencies, and increase communication and collaboration.



Crowd management
Maintain safety or simply provide a more convenient and smoother experience with technologies ranging from digital signage to heat mapping and crowd counting.



Citizen engagement & information
Use digital signage and traffic signals keep people informed in real time, with the option to reroute them in crowd situations to ease congestion.



Crime prevention, detection & investigation
Exploit the full potential of cameras, sensors and analytics to quickly investigate and resolve crimes. Ideal for developing preventative measures as well.



Pandemic response
Enforce social distancing and masks using heat mapping, digital signage and facial recognition. Includes no-contact access and infected individual tracking.



Real-time patrol monitoring
Deploy body-worn cameras to help law enforcement and security teams gain full situational awareness and conduct post-event investigations.



Access control & authorization
Protect property by ensuring that only authorized people can enter areas or sites at the right times of day.



Public building safety
Monitor public buildings' entry points and occupant behavior. Also allows movement analysis while preventing unauthorized access.

Case story

Fighting crime with cameras in Vicente López, Buenos Aires

Victims of crimes almost always hope for a clear and decisive response from the authorities. The Vicente López district in Buenos Aires initiated a project to increase security by upgrading their existing video surveillance system.

Customer

Secretariat of Security, district of Vicente López

Location

Buenos Aires, Argentina

Milestone product

XProtect® video management software

Cameras

1,100+ from Axis, Bosch and Pelco

Integrations

AgentVI video analytics, Amped IV forensics, BriefCam Synopsis, Neural Labs

Partners

Exanet S.A.

As a local government, we must work to ensure that people live better every day, and we can do so by employing trustworthy, high-quality technology like the XProtect platform.”

- Santiago Espeleta, Vicente López's Secretary of Security

Challenge
The district of Vicente López needed to modernize, expand and unify its video surveillance and monitoring. Along with the ability to capture criminal activity on camera, the project's other goal was to reduce crime through preventative measures.

Solution
Because of the platform's ability to support multiple existing security systems, XProtect® video management software (VMS) was chosen to manage the city's demands.

The system moves captured video images to storage servers. While an urban monitoring center is at the heart of the video system, it is supported by ten local preventive units that rely on their own monitoring centers.

Result
The ability to use video analytics technology has led to much improved results in terms of crime prevention. These analytics speed up investigations and crime resolutions. The open design of the VMS platform is adaptable, so it's long-lasting, which guarantees its use in future government administrations and public policies. Local administrators were pleased with how the project successfully combined the human element with Milestone's advanced technology to guarantee the community's well-being for years to come.

Let's rethink city mobility

Because traffic jams cost a lot more than just time

Roads, public transport systems and thoroughfares are key to a city's prosperity and livability. And video technology and analytics have a huge role to play in ensuring free movement and safety on them.



Solve mobility problems with new technologies

The challenges associated with unclogging roads, improving safety and simply finding a parking space are being increasingly solved with new technologies. These are simple in concept but cutting-edge in technology.

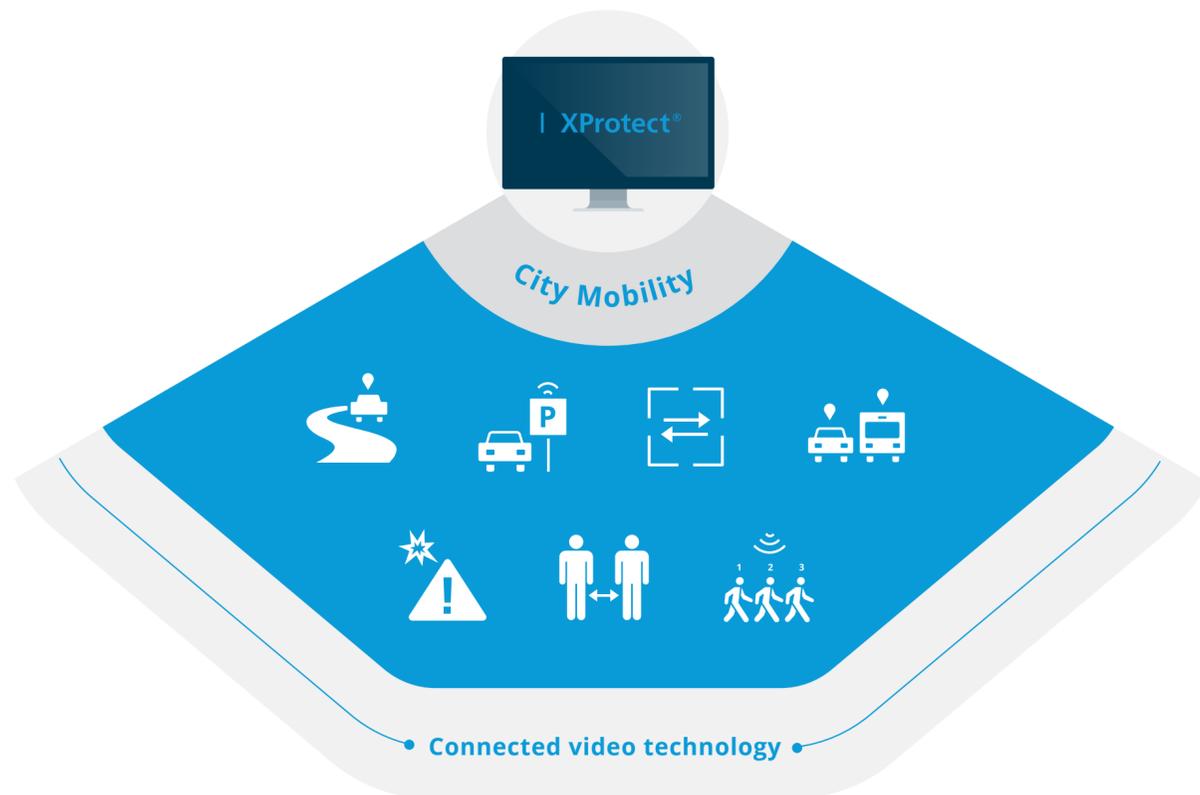
Maintaining situational awareness over roads, intersections and transport hubs is a natural measure to detect incidents as well as queues and other disruptions. Then there is license plate recognition (LPR) that provides details on the movements of vehicles throughout a city, as well as being useful for access control to protected areas and premises. The data gained is invaluable in improving citywide mobility to avoid congestion and improve peoples' experience.

The experience of using public transport can also be improved through technologies that monitor overcrowding and improve foot traffic mobility through stations.

Let's rethink city mobility

Connected video solutions for city mobility

Whether it's saving lives on the roads or easing congestion, video technology has a largely untapped role to play in city mobility.



Traffic & road monitoring
Employ real-time road and vehicle monitoring to track movement and trends and to identify traffic violations such as speeding or potential risks to drivers.



Smart parking
Sensors, video, or radar inform drivers of unoccupied spaces. Payment capabilities and real-time parking rate changes can also be integrated.



Traffic flow analysis
Use video and sensor data to monitor and understand traffic and vehicle patterns to anticipate trends and improve traffic flow and infrastructure.



Route & planning optimization
Improve freight and passenger transportation with video data. This lowers costs, delivery time and environmental impact.



Pandemic response
Create safer environments in transportation sites as well as detect, track and mitigate potential infection spreads.



Mobility analysis & optimization
Discover how to improve general mobility by identifying congestion points and the potential for more efficient and safer transport infrastructure.



Traffic incident control
Provide a more rapid and coordinated incident response, armed with all relevant information thanks to centralized video solutions.

How a transit authority reduces costs and boosts safety with video

When the Utah Transit Authority (UTA) decided to expand their rail lines, they knew their surveillance systems would need a major upgrade to keep both passengers and property safe and secure.

 **Customer**
UTA

 **Location**
Salt Lake Valley,
Park City, Provo, and
Brigham City, Utah

 **Milestone product**
XProtect® video
management software

 **Cameras**
1000+ from Axis

 **Integrations**
HP Servers

 **Partner**
Stone Security



Milestone has saved us thousands of dollars by allowing us to better monitor and investigate transit incidents and accidents.”

– Video Security Administrator at the UTA

Challenge

Recognizing that a top-notch public transit system makes a region more desirable for businesses, the UTA began work on a new rail line. An improved surveillance system that involved a 500-camera expansion was a key part of this and required a flexible and efficient VMS.

Solution

The XProtect platform became the engine of a 1,000+ cameras operating with HP servers. Alarm systems were installed in 19 locations, some of which were very remote. The open platform provides best-of-breed software integration so the UTA can continue to adapt and scale the system.

Result

Thanks to the Milestone installation, costly incidents such as damaged gate arms can be resolved. In addition, remote monitoring and alarms have saved money and staff time.

But more importantly it has helped avert at least one serious, potentially life-threatening accident.

Let's rethink city sustainability

Because our environment is our joint responsibility

The air and waterways around us are as integral to city wellbeing as any structures. There are many factors, both natural and manmade, that make environmental monitoring crucial. Video technology is helping make that a simpler and more reliable process.



Streamline monitoring and services

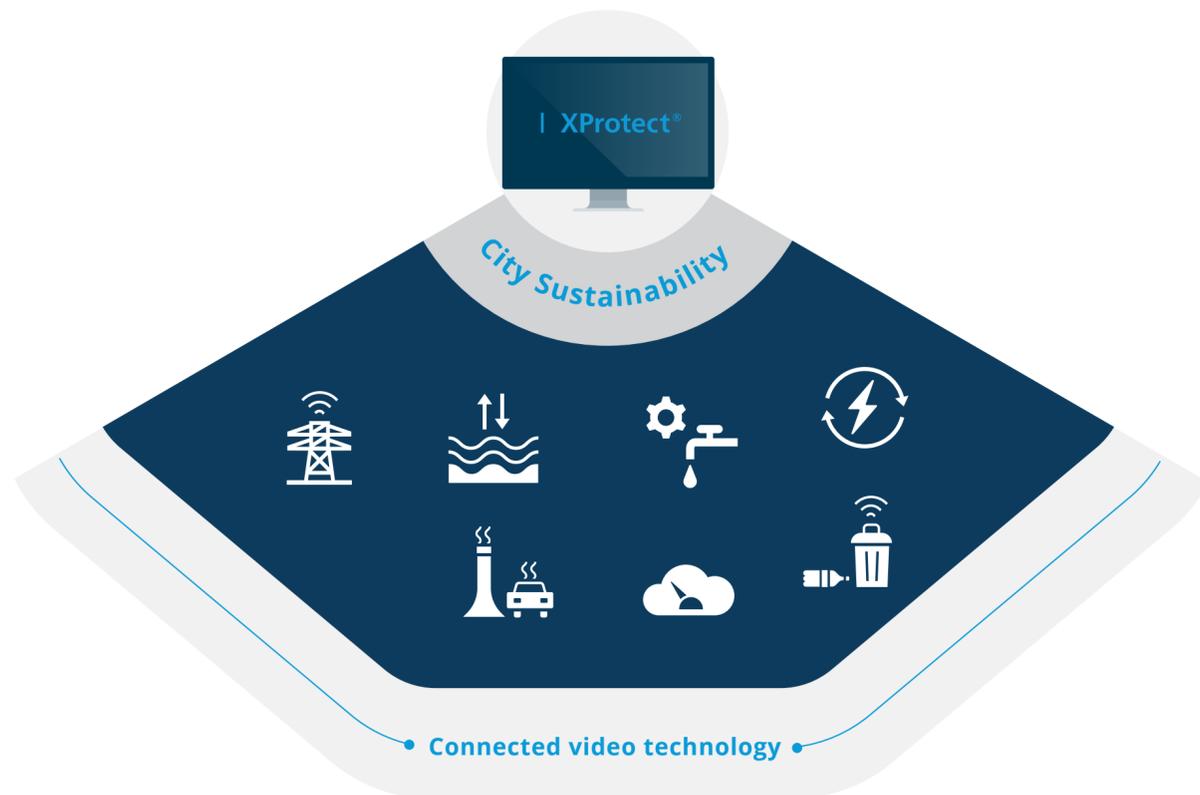
The larger the city the greater the strain on air quality is likely to be. Monitoring enables city authorities to gauge the magnitude of the issue and identify a source. Meanwhile, other cities have challenges with water levels. In both cases, video technology helps to reduce the legwork involved and provide more reliable data to guide further action.

Waste and water supply management are other areas where cities can make great leaps in efficiency using video analytics. Many are turning to smart waste collection where bins are only emptied when full thanks to intelligent sensors. In other cases, water supply networks are monitored to detect leakage or potential shortfalls.

Let's rethink city sustainability

Connected video solutions for city sustainability

Environmental monitoring is a must for cities who wish to optimize resources and prevent surprises. XProtect® helps to reduce much of the labor here while highlighting areas for improvement.



Waste management
Use resources more effectively and improve route and schedule planning. Smart bin collection is just one way to avoid excessive waste.



Water level monitoring
Monitor water levels in local waterways to evaluate and predict flood risks. Aside from safeguarding people and property this eliminates the need for manual testing.



Air quality control
Gather real-time information on air quality using sensors and be alerted when pollution reaches unhealthy levels.



Water supply management
Optimize water supply and reduce leakage waste by monitoring water supply networks with sensors. Predictive analytics aid water conservation planning.



Pollution control
Improve city environments and resident wellbeing by monitoring noise, chemical and waste pollution with a combination of cameras, sensors and analytics.



Critical infrastructure monitoring
Monitor sites for changes in temperature, water content, humidity or smoke to ensure structural integrity and functionality.



Temperature and energy control
Optimize energy with automated monitoring and control of climate and other energy consuming functions.

Running clean power plants in Thailand safely

The surveillance of hydroelectric power plants and their environments requires a huge investment of manpower and resources, and security is always an issue. The Electricity Generating Authority of Thailand (EGAT) needed a future-proof solution for their power generation sites.

Customer
Electricity Generating Authority of Thailand (EGAT)

Location
Thailand

Milestone product
XProtect® video management software

Cameras
200+

Integrations
Network video cameras from Axis Communications

Partner
8-Bit Solution



Implementing a comprehensive video surveillance system with Milestone solutions allows us to

mitigate many potential dangers our staff may face, especially in highly sensitive zones such as hydropower plants and water dams.”

– Director of Safety and Security, EGAT, Thailand

Challenge

Managing power plants efficiently presents a major challenge. For example, the water levels at and around hydropower plants must be observed regularly, and authorities must be quickly alerted if it is either too high or too low. With some sites located over an hour’s drive away from the city, in-person monitoring visits became prohibitively expensive. With fewer people monitoring water levels, safety had been compromised several times. The goal for EGAT was to implement a safe and secure surveillance system to reduce the possibilities of accidents.

Solution

Milestone’s open platform VMS replaced the previous analog recording software, to manage over 200 AXIS network video cameras at six hydropower plants. The new system provides simultaneous viewing across the sites – from one centralized monitoring station. The platform supports a wide network of hardware and cameras. And with endless integration possibilities, EGAT has the freedom to add new technologies as it continuously pursues the best security and safety for its power plants.

Result

EGAT can now remotely monitor the volume of water, greatly reducing the time and money previously spent when employees had to be physically sent out. Additionally, the cameras now provide 24/7 vigilance, especially important when opening water gates. Now fishermen can be spotted in the vicinity and warned off, to avoid injury or capsizing the boats. The 35% reduction in manpower and labor costs EGAT now enjoys has enabled the redistribution of resources toward advancements in clean technology.

Getting started

The open VMS platform for complex city solutions

Building a safer city takes a reliable video management platform that makes complex technology intuitive and accessible to everyone. Pair that with a Marketplace that makes it easy to source products and expertise and you are well on your way to realizing your safe city aspirations.

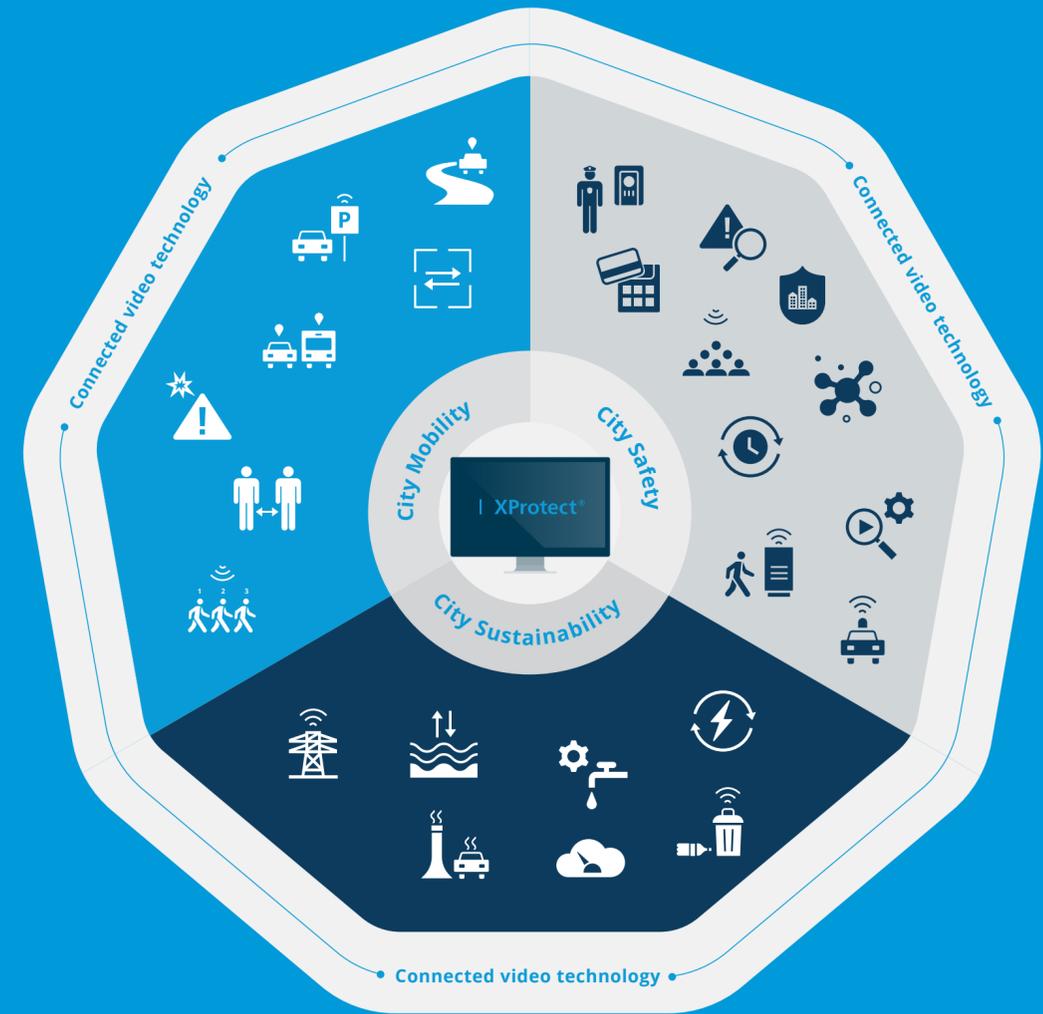
XProtect Corporate is designed for large-scale and high-security deployments. Entire connected cityscapes can be efficiently administered from a single management interface. It features advanced video grooming functions and encryption capabilities that help organizations reduce video storage costs, while ensuring the integrity of video evidence and compliance with industry and federal regulations. Like all XProtect products, Corporate is an open platform with no lock-in. You are free to build and evolve the connected video technology solution you need.

Create your ideal solution at Milestone Marketplace

Marketplace is our online market for XProtect partners and end-users. You can quickly find and compare the XProtect hardware, software and expertise you need for safe city solutions.

The intuitive filtering and reviews make it easy to find the ideal software or solution services partner, no matter where you are located. With 2,500+ technology partners present on Marketplace you have a wealth of expertise and hands-on experience to benefit from.

All the featured software and hardware has been verified or certified by Milestone as tested to be compatible with XProtect.



Why choose XProtect?

What makes XProtect® ideal for safe cities?

Why is XProtect so popular for solving safe city challenges?
We break it down here.



XProtect Corporate

XProtect Corporate is an open platform IP-VMS that is specifically designed for large-scale and high-security deployments. It ensures end-to-end video integrity protection while maximizing hardware performance. The single management interface enables the efficient administration of all cameras and devices, regardless of the solution's size.



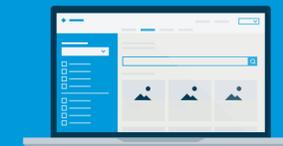
Integrate third-party applications

The Milestone Integration Platform Software Development Kit (MIP SDK) makes it easy to create applications or device drivers that work with XProtect. This is perfect for cities that need to expand and customize their systems while sticking to a single interface. Device manufacturers can also develop their own drivers using the Driver Framework. This is how cities can get the best out of the latest IoT devices while streamlining their operations.



Manage multiple sites and systems centrally

Milestone Federated Architecture allows the centralization and interoperability of widely dispersed systems with unlimited scalability and flexibility. In addition, Milestone Interconnect makes it possible to unite widely dispersed systems into a single, centrally operated and managed solution. This greatly reduces the complexity involved in managing city installations and can substantially reduce costs.



Find everything you need in one place

Marketplace in our online market for XProtect software, hardware and services. The intuitive filtering and reviews make it easy to find the ideal technology and expertise match to make end-to-end safe city video solutions a reality.

Why choose XProtect?

Highlighted features & functions

XProtect® offers a rich selection of features and functions to make city operations more efficient and responsive. These are intuitive to use and ensure operators can focus on the right things at the right time. Here are some core XProtect functions that help improve city safety, mobility and sustainability.

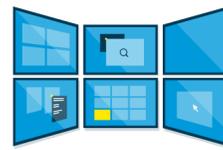


Smart Maps in XProtect

Get the full overview of city installations

Maintaining any sort of overview over cities is a huge task. Smart Maps in XProtect gives security operators a single, connected picture of widely dispersed installations, while making their jobs easier. Thanks to its GIS maps, CAD drawings, Google and Bing Maps compatibility, Smart Map visualizes surveillance systems with real-world imagery. Operators can achieve situational awareness over widely dispersed security installations and rapidly react to threats or emergencies. The intuitive UX allows navigating between cameras, streets, floors and sites with ease.

- Increase situational awareness over multiple sites
- Improves decision-making and coordination
- Supports Google Maps, custom CAD drawings and more



XProtect Smart Wall

Centralize all video views in one location

The sheer size of cities encourages the silos that negatively impact collaboration and response times. XProtect Smart Wall breaks these down with an intuitive video wall that centralizes and displays entire cityscapes of video data. Video feeds, maps, alarms and text messages are all supported to give operators a real-time overview of the city. When safety risks or incidents do arise, Smart Wall ensures rapid response and efficient collaboration between teams and departments based on reliable information.

- Flexible and versatile video wall application
- Improves decision making and coordination
- Reduces response time in critical situations



Centralized search

Rank results by relevance

Find specific video clips at a moment's notice. A function in XProtect Smart Client, centralized search makes finding a specific incident or video sequence easier by aggregating all data types registered in the platform. You can search through ONVIF-compliant metadata with three new categories: people, vehicles, and locations.



XProtect License Plate Recognition

Track vehicles and save motorists a lot of hassle

Milestone's XProtect LPR (licence plate recognition) is a highly effective way to take the pressure off clogged roadways. The software has multiple applications: from real-time road monitoring, to automating access control, toll booths and parking fees, as well as crowd counting and trespassing prevention. At the same time, it is invaluable in the fast resolution of investigations into criminal incidents, accidents or dangerous behavior.



Alarm Manager

Be instantly alerted to any events

Alarm Manager can be programmed to recognize any kind of incident or technical problem and manage these in real time. That extends to environmental factors such as water and air pollution levels — primary concerns for many cities. By placing sensors in key positions relevant authorities can eliminate the need for regular manual testing. Any triggered alarms are instantly displayed.



Privacy masking

Protect identity and privacy in video

Ensure users see only what they need to. Privacy masking is an easy and cost-efficient way to protect privacy without compromising security. It lets you conceal selected sections in live and playback video, as well as in exported material.

Why choose XProtect?

Make privacy & responsibility integral to your video solution

Complex connectivity naturally gives rise to questions about privacy, cybersecurity and the responsible use of data. With Milestone and XProtect®, you can be assured you're covered on all counts.

Cybersecurity

Our XProtect VMS products are designed to provide you with the highest security protection against external and internal security threats. Tiered administrator and user rights, enforced on the server side, combined with the use of standard IT security procedures, make XProtect the perfect choice for organizations with a focus on cybersecurity.

XProtect offers secure end-to-end handling of exported forensic material, as well as secure third-party application integration. It is also GDPR-ready certified and can be operated in FIPS 140-2 compliant mode.

Privacy protection

On top of the cybersecurity features already covered, XProtect offers privacy masking. This protects the identity of people in footage. You can easily conceal certain parts of the image, in both live and playback video and in exported material.

Responsible use of technology

We believe that being a leading provider of video technology puts us in a unique position to make a positive difference within the responsible use of technology. As one example, we're a signatory of the Copenhagen Letter, a manifesto calling for technology to put people ahead of business. This has even been added to our End User License Agreements.



Recognize these challenges?



Want to learn more about how connected video technology can enhance safety, mobility and sustainability in safe cities?



Go visit: [Milestonesys.com/letsrethink-cityliving](https://milestonesys.com/letsrethink-cityliving)

Or get in touch with us [here](#) and let's talk about what kind of solution is right for you.

About Milestone Systems

Milestone Systems is a leading provider of open platform video management software; technology that helps the world see how to ensure safety, protect assets and increase business efficiency. Milestone enables an open platform community that drives collaboration and innovation in the development and use of network video technology, with reliable and scalable solutions that are proven in more than 500,000 installations worldwide. Founded in 1998, Milestone is a stand-alone company in the Canon Group. For more information, visit: www.milestonesys.com