



# Safer and smarter traffic

TRAFFIC AND  
URBAN MOBILITY

**AXIS**<sup>®</sup>  
COMMUNICATIONS



# Better traffic flow

Whether you are responsible for keeping traffic moving or involved when emergencies hit or road infrastructure planning, Axis solutions make road transport safer and smoother in the city and beyond. Axis can help urban mobility and traffic with improved traffic safety, ensuring an efficient traffic flow, and data collection for actionable insights. By reducing congestion and promoting smoother vehicle movement, our technology not only addresses environmental concerns by cutting idle time but also helps pave the way for sustainable infrastructure planning.

At Axis, we have a broad portfolio of innovative cameras and smart analytics to keep traffic moving safely and efficiently, including solutions like license plate recognition and radar-video fusion technology. From detecting incidents to deterring traffic offenders and enforcing violations remotely, Axis together with trusted partners provide comprehensive traffic control both in urban and rural areas. Our technology delivers real-time data for for immediate decision-making and valuable insights for long-term urban planning – helping to create safer, more efficient transportation now and for the future.





# How Axis keeps traffic flowing safely



## Parking management

Optimize parking with Axis license plate recognition for frictionless access, automated payments, and improved traffic flow. Paired with partner analytics, Axis cameras act as sensors to monitor available parking in lots or rest areas, providing data for navigation apps or digital signage.



Axis bullet cameras are brilliant for multipurpose surveillance, including high-quality license plate identification for free-flowing traffic.



## Emergency management

Respond quickly and remotely to ongoing incidents and emergencies thanks to real-time situational awareness. Axis, together with partner analytics, delivers reliable incident detection to minimize false alarms. All Axis cameras offer excellent quality video footage that holds up as evidence in forensic investigations.



Axis PTZ cameras deliver real-time monitoring for wide areas thanks to pan, tilt, and zoom functionality.



### Intersection control

Make intersections safe and efficient for cars, pedestrians and cyclists. Axis cameras with partner analytics can be used as smart sensors that provide real-time traffic data to traffic management systems, enabling actions that improve traffic flow.



**Axis bullet cameras** are brilliant for multi purpose surveillance, including high-quality license plate identification for free-flowing traffic.



### Traffic data collection

Collect traffic data for actionable insights to plan road infrastructure projects in and outside the city. Axis cameras with partner analytics and deep learning can be used to collect and process reliable data efficiently at the edge. Traffic statistics can include, for example, traffic volume statistics, average speed, occupancy, vehicle counting, vehicle classification, and detection of unsafe areas with frequent near-misses or areas with a high environmental impact.



**Axis box cameras** provide excellent image quality for a fixed angle of view and are great for covering vehicle lanes, bike lanes, pedestrian paths, junctions, and crossings.

# Improving traffic in the city and beyond



## Traffic management

Prevent gridlocked traffic with congestion control, lane control, and speed control to keep traffic flowing. Axis cameras together with partner analytics provide high-quality and reliable data to traffic operators for real-time traffic management. Video footage and insights processed on the edge can optimize traffic flow, control speeds, manage lanes, and reduce congestion, improving efficiency and reducing environmental impact.



**Axis PTZ cameras** deliver real-time monitoring for wide areas thanks to pan, tilt, and zoom functionality.



**Axis radars** are network-based devices suitable for wide-area protection or traffic monitoring regardless of visibility, monitoring speeds up to 200 km/h (125 mph).



## Incident management

Detect accidents, congestion, a stopped vehicle, pedestrians, or smoke and debris on roads, highways, bridges, and in tunnels. Axis, together with partner analytics, turns cameras into automatic incident detectors, identifying incidents in seconds to support operations with actionable real-time traffic data. Axis cameras with deep-learning capabilities can efficiently collect and process reliable data at the edge.



**Axis PTZ cameras** include heavy-duty cameras that stand up to all weather conditions, making them ideal for highways and bridges.



## High-speed tolling

Enable free-flowing traffic through toll plazas for highways, bridges, and tunnels. Axis license plate capture cameras combined with partner analytics software automatically detect and read license plates in real time in free-flowing traffic in all weather conditions. On reading the license plate, the analytics then takes appropriate action, such as opening a barrier, automating a payment, or generating an alert. LPR can identify the vehicle, while analytics can detect the vehicle type, and automatically generate appropriate toll fees.



**Axis bullet cameras** are brilliant for multi-purpose surveillance, including high-quality license plate identification for free-flowing traffic.



## Violation detection

Catch traffic violations with automatic detection and issue fines automatically. Axis cameras together with partner analytics can capture red-light violations, wrong-way driving, speeding, or wrong parking in all weather, speed, and light conditions. Radar-video fusion technology can accurately identify vehicles at high speeds and in low-light environments. Together with license plate recognition, the system can trigger fines automatically, promoting future traffic compliance.



**Axis radar-video fusion cameras** are devices that provide enhanced detection in challenging weather and lighting, monitoring vehicle speeds up to 200 km/h (125 mph).



## Lane control

Control lanes when you see queues forming by opening lanes or the smart shoulder to ensure an efficient traffic flow. Axis cameras together with trusted partner analytics provide high-quality and reliable data to know when to open and close lanes to keep traffic flowing and reduce congestions and environmental impact.



**Axis box cameras** provide excellent image quality for a fixed angle of view and are great for covering vehicle lanes, bike lanes, pedestrian paths, junctions, and crossings.



## Wrong-way detection

Detect a car driving in the wrong direction at any speed. Axis cameras together with partner analytics can increase your efficiency in detecting wrong-way driving. With radar-video fusion technology, you can monitor high speeds, detect someone driving in the wrong direction, even in the dark, and identify the vehicle using license plate capture software.



**Axis radar-video fusion cameras** are devices that provide enhanced detection in challenging weather and lighting, monitoring vehicle speeds up to 200 km/h (125 mph).

# Why Axis for traffic and urban mobility

- An open, flexible, and scalable platform compatible with various partners, hardware, and software
- Durable, high-quality products with clear imaging in all conditions, including bad weather and dark tunnels
- Sustainable innovation aligned with new policies, including energy efficiency
- Proven leader in cybersecurity solutions, ensuring traffic data remains safe, secure, and compliant

**For more information, please contact your Axis representative and let us know how we can support your needs.**