Intelligent Traffic Monitoring
Cities around the world are experiencing increasingly complex, chaotic traffic issues. Roads are choked with congestion, with alternate routes getting busier due to traffic optimization apps like Waze. And the influx of ridesharing services are only adding to the problem, new research suggests.

More than that, just look at how overwhelmed transportation systems have an oversized impact on the world around us:

**The Economy:** The average American worker spends 42 hours a year idling in traffic — more than a full workweek. [Source: CNBC]

**The Environment:** The average commuter burns 21 gallons of fuel per year due to traffic jams, contributing to climate change and poor air quality. [Source: Annual Urban Mobility Scorecard]

**People:** Globally, 1.25M people a year die in traffic accidents, and 20-50 million are injured. The excess fuel also led to record rates of respiratory illnesses (asthma, chronic bronchitis). [Source: WHO]

In major cities, there is limited space left to add new roads. In other words, we cannot build our way out of the traffic crisis. The solution is not a bigger transportation system, but a smarter one.

### Avoid Traffic Management Jams

A more chaotic traffic system is inevitable, and not a choice you can make. How you monitor and manage that traffic is, however. Pelco’s traffic management solutions empower cities to move people and vehicles more quickly and more safely than ever before. We offer smart technology that makes roads more efficient and makes people traveling on them happier, healthier, and safer.

With Pelco’s Intersection, Roadway, and Bridge/Tunnel Management solutions, you’ll be able to...

- Eliminate gaps in video coverage
- Overcome light & weather obstructions
- Get Traffic Anomaly Alerts
  - Pedestrian Detection
  - Traffic Congestion
  - Traffic Gridlock
  - Wrong Way Driving
  - Smoke & Fire Detection (Tunnels)
- Collect Data for Engineering Studies
  - Count cars, pedestrians, bicycles, and other objects
The Road Ahead for Traffic Management

Pelco works diligently with traffic officials to ensure the needs of a city are met with a comprehensive traffic management solution that protects both drivers and pedestrians. The scalability and flexibility of Pelco’s traffic monitoring solutions allow officials to add cameras, integrate with third-party systems, share video across organizations, and extend analytic capabilities as the city grows.

Key to the Highway Savings

Busy highways to and from downtown areas can prove challenging for both drivers and traffic management operators. A high volume of traffic congestion during a daily commute benefits no one. For instance, in major cities the average commuter spends two full work weeks stuck in traffic, at the cost of $1,834 per commuter annually. The estimated cost of the 42 hours per year the average person wastes in idle traffic in the U.S. is $160 billion, or $960 per person!

Daily commutes are brutal but add in a special event or festival, and the traffic situation becomes more complicated. However, with Pelco’s trusted traffic management solution, much of the headache can be managed. With a robust network of cameras monitoring the situation (and providing invaluable analytics about what’s causing congestion), operators can work with law enforcement to shut down exits entering the downtown district and update the digital traffic signage to alert drivers of closures miles in advance -- all in an effort to avoid traffic gridlock or serious congestion.

Over Bridges and Through Tunnels

Congestion at a bridge or tunnel can have a cascading effect on traffic delays, possibly even leading to gridlock traffic. What’s more, prolonged congestion can also drastically increase pollution from idle vehicle emissions, which is linked to higher medical costs and even death in vulnerable populations. For the average driver, every tank of gas burned costs $18.42 in hidden health and climate costs, while pollution from passenger vehicles is attributed to 109,000 asthma exacerbations annually, according to an American Lung Association study.

Yet, armed with a trusted and proven traffic management solution, a traffic operations manager can use video from cameras to determine if the congestion is caused by a crash, a distressed motorist, or heavy volume. That, in turn, will lead to the proper fix, which could be dispatching first responders to anyone injured or an adjustment to the traffic light timing to get traffic flowing again.

Alternately, if the bridge or tunnel is leading into a densely populated metropolitan city requiring tolls, traffic management teams can instruct more toll booths to remain open to alleviate congestion. Pelco’s Tunnel Management solution can also provide alerts if there is smoke or fire present, which allows for a rapid response that could save lives.
Deep Into the Heart of Cities & Intersections

Densely populated cities around the world all share one thing in common, which is that they have a large population moving about the city in every manner of vehicle: cars, buses, trains, motorcycles, and bicycles. Safety is an important factor, as nearly half of fatal injuries on the world’s roads are pedestrians, cyclists, and motorcyclists, according to data from the World Health Organization.

Having a reliable network of cameras to monitor intersections is a necessity. Fixed IP cameras placed at intersections leave gaps in coverage, which could hinder a traffic operations manager from fully understanding any problems or identifying traffic anomalies with sufficient time to react accordingly.

With Pelco’s Traffic Management solutions, operators not only have reliable cameras but also powerful analytics that keep track of how many pedestrians cross a particular intersection, as well as the time of day. Such information is useful in formulating traffic light timing algorithms to ensure the safety of foot traffic.

Additionally, roundabouts with cameras that eliminate the gaps in coverage are also important for operators. This is especially true since research indicates roundabouts are known to reduce costs, reduce accidents, and improve the flow of traffic in most instances. Thus, not being able to identify crashes effectively and efficiently could eliminate some benefits, like alleviating traffic congestion.

Let us help with our traffic management solutions

At Pelco, we believe that surveillance video is about more than just protecting people and property—we believe it is a source of insights that helps you solve a wide range of problems from preventing critical incidents from occurring to making the world a better place to live in. We do this by adding new levels of intelligence to our video analytics and pairing them with a full suite of automation and analysis tools to help you visualize past behaviors and trends so you can respond to emerging situations more efficiently and even predict future behavior. Of course, our cameras have excellent image quality and reliability, and our world class video management systems can handle everything from individual cameras all the way up to tens of thousands of cameras across a city.

For more information about Pelco Traffic Management solutions, please visit our website pelco.com

About Pelco

Pelco is a global leader in the design and development of video surveillance solutions including video management and analytics software, infrastructure, cameras, and related services. From Pelco's VideoXpert video management platform to their industry-leading selection of IP cameras and accessories, Pelco is committed to designing and delivering a broad range of high-quality, IP video security products and systems that make the world safer and help put your business in focus.