Genetec Traffic portfolio

Unified solutions to keep your roads and operations flowing



Rising urbanization and increasingly interconnected cities are pressuring traffic agencies to modernize. To provide better driving conditions, traffic agencies need to collaborate with other agencies, as traffic operators require a complete picture of events to stay up to date. But with overwhelmed staff, limited operational oversight, and slow adoption of new technology, how do you keep up the pace?



How traffic is evolving







Complex road usage

Expanding urbanization will increase traffic on our city roads, but the nature of this traffic is also changing. Connected automated vehicles, micro-mobility, multimodal public transit, and ridesharing are only a few of the trends that change how roads are used and by which type of vehicle. Decision makers working in the traffic industry need to adapt to their field's swelling complexity and often turn to new technologies for inspiration in their quest for better traffic flow. Do you have the right technology to support your operations while they face unexpected shifts?

Aging monolithic infrastructure

Traffic infrastructure includes all the roadside utilities and technologies deployed by traffic management organizations to help accomplish their task, but also the backend software systems used for data collection, command, and control. These backend systems are monoliths of an older age; custom-built solutions designed to integrate into various aged systems to provide surface-level consistency. These systems are old, hard to maintain, and costly to upgrade. Additionally, the inflexibility of these systems makes them resistant to the integration of cutting-edge technologies. Is your current infrastructure slowing down progress toward your vision?

Emerging automation

One of the significant changes traffic management organizations need to face in the coming years is increasing automation. The desired outcome for vehicular automation is the development of self-driving vehicles. This technology has the potential to improve the efficiency of our road networks. However, roadside technologies also need to adapt to take advantage of improved computing power and robust software development, which allow for an increasing amount of automated tasks. Are your agency's intentions for the future reflected in its infrastructure?

Security should optimize the flow of your traffic operations

Most traffic management systems are proprietary and built on closed architecture, making it expensive to upgrade or customize and difficult for your agency to grow and evolve. Connecting the different systems in your traffic management agency to a unified open platform enables your agency to evolve and adopt new technologies as they emerge. Unified systems also free up your operators' time and help your roads bounce back from incidents more quickly.

Your focus is on keeping road users safe and helping those who monitor the road stay alert and on top of events, which is why your infrastructure and systems should support this objective. Having a lot of data is good, but are your operators and security systems able to extract insightful information from it?

Your traffic management system should take your agency further. Genetec offers a traffic-specific portfolio designed to optimize operations, promote growth, and collaborate with city-wide agencies – all through a single, intuitive interface. This ultimately reduces your cost of operation while increasing traffic flow and city prosperity.

Travel by personal vehicle remains the most popular mode of transportation — and it's growing.

With the increased usage of personal vehicles, how do you plan to account for the additional cars on the road?



* Source: Statistics Canada, 2020 Commuting to work during Covid-19

Run your traffic agency without any roadblocks

Building a smoother driving experience starts with optimizing your internal operations and promoting city-wide collaboration. Separate systems cause operational lags that traffic management agencies can't afford. Having efficient operations means giving your operators a unified view to help identify incidents rapidly, respond to events swiftly, and optimize traffic flow.

Open IP-based video monitoring

Monitor road infrastructure with an IP-based video system – one built on an open platform that helps you protect vehicles on the road with your preferred hardware.



Informative Travel Times Reports

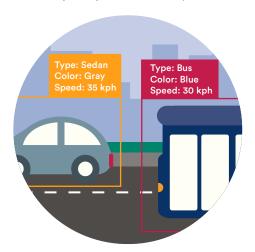
Gather, investigate, and react to travel time data in real time. Travel time reports also enable agencies to set thresholds to react to evolving traffic conditions.





Digitized Standard Operating Procedures (SOPs)

Standardize and integrate your SOPs and all other security operations into the same system. This helps you guide response teams and improve security, safety, and internal compliance.



Insightful Traffic Sensor Management

Store sensor data and gather object counts and classifications, vehicle speeds, and traffic volumes. You can even set thresholds for automated alerts when tracking area occupancy, speed, and volume.

Customizable Digital Road Signs

View and control message signs from one location to manually or automatically change signs, using pre-set message libraries or custom messages for special events.



Fleet Monitoring

Configure and interact with the different devices onboard your mass transit fleet, patrol, or maintenance vehicles to monitor live video, GPS localization, and vehicle telematics.

Secured unmanned infrastructure

Track who's accessing your unmanned infrastructure with IP-based locks and keys that give you real-time information on activity concerning your equipment cabinets.





Real-time parking management

Enforce parking restrictions by locating and counting vehicles of interest like buses, taxis, and car-sharing services.

The Genetec Traffic Portfolio

The traffic portfolio allows your agency to rely on roadside sensor traffic data to generate travel time reports, operate traffic lanes and dynamic message signs, and manage incidents — all from one single interface. The traffic operations solution, built on open architecture, allows your agency to evolve and add new technology with little integration effort. The unification of all systems allows your agency to normalize large amounts of data collected from traffic sensors so that your operators can have a clear view of events and respond to incidents more quickly.



Security Center is the unified security platform from Genetec that blends IP security systems within a single intuitive interface to enhance traffic operations. From access control, video surveillance, and automatic license plate recognition to communications, intrusion detection, and analytics, Security Center empowers your staff with unified command and control.



Security Center Omnicast™ IP video management system (VMS) provides traffic agencies of all sizes the confidence of knowing that their VMS is functioning as it should. Through deep, open support for a wide range of industry-leading cameras, encoders, and CCTV equipment, the Omnicast system scales and adapts to the evolving demands of your traffic environment.



Security Center Synergis™ IP access control system (ACS) heightens your traffic agency's security by building on secure architecture. This gives your cardholders confidence while leveraging any existing network and third-party access control devices. This module also allows you to manage your unmanned infrastructure from a distance, enabling you to monitor its security with flexibility and complete control.



Security Center AutoVu™
automatic license plate
recognition (ALPR) system
automates license plate reading
and identification, making
it easier for your parking
management team to locate and
count vehicles of interest like
trucks, taxis, and car-sharing
services, as well as enforce
parking restrictions.



Security Center Digital Sign Management

Security Center Digital Sign Management module gives you the tools to centrally manage your message signs while linking them to information collected in a unified platform, in order to inform drivers of travel times, emergencies, and other critical public announcements like Amber alerts.

Security Center Travel Times

Security Center Travel Times module calculates travel times based on vehicle detection or average speed data. It visually presents the gathered information so that your operators have valuable and actionable insights, as well as the ability to create alerts based on congestion levels.

Security Center Fleet Monitoring

Security Center Fleet Monitoring module provides a unified, non-proprietary experience to configure and interact with the different devices onboard each vehicle of your fleet, including live video, GPS localization, and vehicle telematics.

The Genetec Traffic Portfolio



Security Center Traffic Sensor Management

Security Center Transportation Sensor Management module will equip your agency with actionable insights through one unified platform, based on the data captured by your various roadside sensors.



Case management can help traffic agencies track a large variety of events including routine maintenance, emergency response, and legal evidence collection.



Making sense of all the data collected by the unified system helps traffic agencies support operational decisions based on verified, real-time data. Genetec Mission Control™ is a key component for traffic agencies seeking rapid, consistent, and well-defined incident response

Capabilities for traffic management agencies

Our built-in-key features

Visual tracking tool

Quickly locate and track an accident or vehicle of interest to swiftly determine the threat level of an event, based on quick access to your cameras' live video.

Real-time map-based monitoring

Visualize your security environment with real-time dynamic maps. Navigate your infrastructure, monitor access control, onboard vehicle events, view live or recorded video, and manage alarms directly from your maps.

Unified communication management

Extend your security with SIP-based communications. Manage incoming and outgoing calls with intercom devices, and collaborate with colleagues through embedded audio and video calls.

Visualize traffic sensor data

Visually review real-time data from nearby traffic and weather sensors to enhance situational awareness from a single intuitive platform.

Built-in unified failover and redundancy

Count on the availability of your security system, camera video recording, and access to your doors whenever you need them. Built-in failover and redundancy mechanisms protect against hardware failure and network interruptions

Decision-support tools

Guide traffic operators in their decision making with customizable decision-support tools such as standard operating procedure reminders and automated incident responses.

Review in-vehicle data

Easily monitor and investigate your vehicle fleet's actions by relying on our onboard software to collect and review all vehicle data (GPS location, telematics, and video).

Mobile and web apps

Keep staff and operators in sync with live location tracking, built-in messaging, one-click video streaming, and archive sharing. View live and recorded video, control PTZ cameras, manage alarms, and unlock doors on the go.

Health monitoring

Receive real-time notifications of system status and health-related events, and generate statistics about your system's health through a dedicated engine that optimizes system performance.

End-to-end data security and privacy

Protect your video, as well as cardholder and system data with secure communications between clients, servers, and edge devices. Security Center encrypts video in transit, at rest, and when exporting evidence.

Who benefits



Traffic Operator

Manages traffic congestion, planned events, and unplanned incidents in a Traffic Operations Center.



IT Director

Secures and ensures efficient operation of all information technology assets in use by the traffic agency.



Transportation Planning Engineer

Designs and maintains safety of roads and highways, as well as determines the roads most economical and conducive to traffic flow.



Electronic Technician specializing in light signals

Maintains and installs all traffic signal equipment, and more.

Managing a traffic agency is a constantly evolving task. To meet the demands of road users while dealing with unexpected industry challenges, you need to stay organized and up to date with events occurring throughout your city. With a unified security platform, you can obtain the holistic view that you need to respond to incidents promptly and give commuters the best experience possible. The Genetec traffic portfolio supports your growth. It helps you lower security risk, improve your response times, and inform your planning and performance through one unified, traffic-specific portfolio.

