



AGT and Cisco Traffic Incident Management Solution: Improving Traffic Safety and Efficiency



The Challenge

Commuting and traffic are key issues for cities looking to attract investment, retain skilled workers, and generate wealth. Congestion in the European Union (EU) in and around urban areas costs nearly €100 billion or 1 percent of EU GDP, annually¹. What's more, 25 percent of traffic congestion is nonrecurring; it is caused by traffic incidents². By improving traffic flow, reducing congestion, and making roads safer, cities can lower costs and improve their livability.

The Solution

The AGT and Cisco® Traffic Incident Management Solution is part of the broader Cisco Smart+Connected™ City Traffic Solution. It addresses the two most important traffic challenges facing cities today: road safety and congestion. It helps traffic departments accurately detect more incidents, early on, before they become more serious, and enables quicker response by monitoring and analyzing traffic flow data. The solution stands out with two important innovations: the fusing of data from multiple sources to identify real incidents and reduce false alarms, and the integration of multiple applications into one comprehensive solution.

The AGT and Cisco Traffic Incident Management Solution:

- Collects data from a variety of sensors and stores it for processing
- Fuses, filters, and applies advanced analytics to the collected data to identify the most relevant information
- Visualizes the relevant information using layers to increase situational awareness
- Supports a wide variety of other integrated partner applications and analytics

It also provides operators with the following command and control tools (Figure 1):

- **Video:** Helps validate detected traffic incidents in real time to reduce false alarms
- **Situational awareness:** Highlights traffic conditions and their location on a map in real time
- **Incident management:** Handles events over their lifecycle and shares event details with responders using mobile applications

Figure 1 AGT's CityMIND Integrates Innovative Traffic Incident Management Solution Command and Control Tools



Key Capabilities

Traffic Monitoring

- Displays live video from any traffic camera and presents live traffic conditions on a map
- Collects data on average vehicle speed, traffic volume, and lane occupancy
- Monitors social media for relevant information

Incident Detection and Management

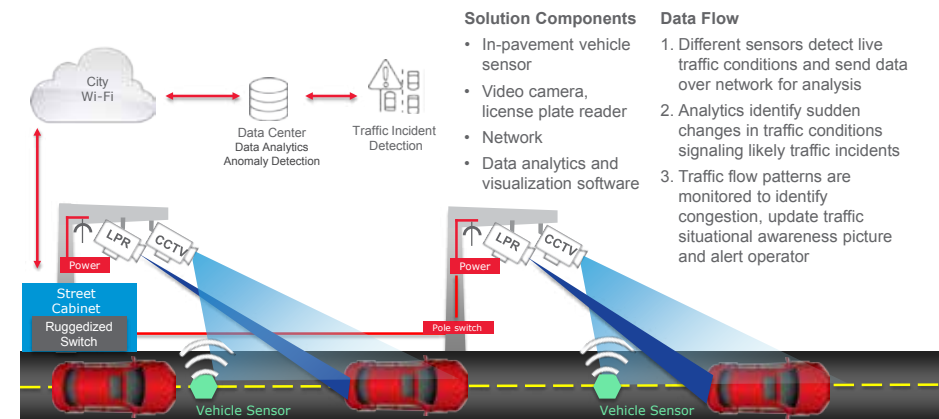
- Identifies traffic incidents by fusing multiple inputs, displays their locations on a map, and alerts operators
- Automatically creates an incident record and collects all relevant data into an incident management kit for operators
- Provides recommended procedures to guide operators quickly through the response process
- Helps ensure continuous communications with responders

Analytics, Reporting, and Administration

- Visualizes traffic incident trends to identify traffic flow issues
- Reports distribution of traffic incidents; reports and helps predict traffic flow patterns
- Configures and manages sensors, video infrastructure, and policy

How it Works

Figure 2 How the AGT and Cisco Traffic Incident Management Solution Works

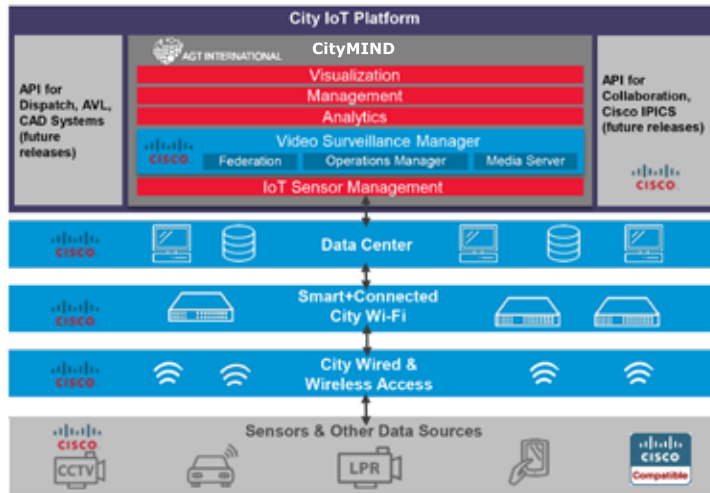


¹ Source: 2011 Transport White Paper, "Roadmap to a Single European Transport Area." ² Source: Federal Highway Administration.



Solution Architecture

Figure 3 Traffic Incident Management Solution High-Level Architecture



Technical Components

AGT

- CityMIND platform modules: visualization, management, analytics, and IoT sensor management
- Integrated license plate readers and microphones
- Integrated video analytics

Cisco

- Intelligent IP cameras, video encoders and Cisco Video Surveillance Manager
- Ruggedized wireless access points and industrial Ethernet switches
- Core network and end-to-end IoT architecture
- Unified data center infrastructure

Partner

- Vehicle sensors, gateway and management application

Services

The AGT and Cisco Traffic Incident Management Solution analytics and the unique concept-of-operations (CONOPS) service blend operational, technical, and design expertise based on a deep understanding and breadth of experience in traffic management objectives and issues. The solution is supported by a full suite of professional services, including consulting, design, integration and implementation services, as well as training, support, and maintenance.

Benefits

Cities	Traffic Departments	Citizens
<ul style="list-style-type: none"> • More efficient traffic flow • Fewer accidents, clearer roads, and improved road safety • Cleaner environment due to reduced emissions • Improved planning and resource allocation • Increased attractiveness to businesses and workers 	<ul style="list-style-type: none"> • Higher traffic situation awareness • More effective operations • Automated incident detection and quicker response • Better coordination of resources • Optimized budget 	<ul style="list-style-type: none"> • Better commuting experience • Shorter travel time • Less frustration and stress due to lost time and productivity • Lower fuel costs

Why AGT and Cisco?

AGT, a leader in analytics and prediction software solutions, and Cisco, the worldwide leader in IT, together deliver a pre-integrated, validated Traffic Incident Management Solution supported by professional services to help cities reduce congestion, improve traffic flow, and make roads safer. Important innovations such as data fusion to reduce false alarms and the integration of multiple applications into a comprehensive system, make it the solution of choice for today's demanding traffic departments and city planners.

For More Information

For further information contact your local AGT or Cisco sales representative, or visit:

www.cisco.com/go/smartconnectedcommunities

www.agtinternational.com/connectedcity