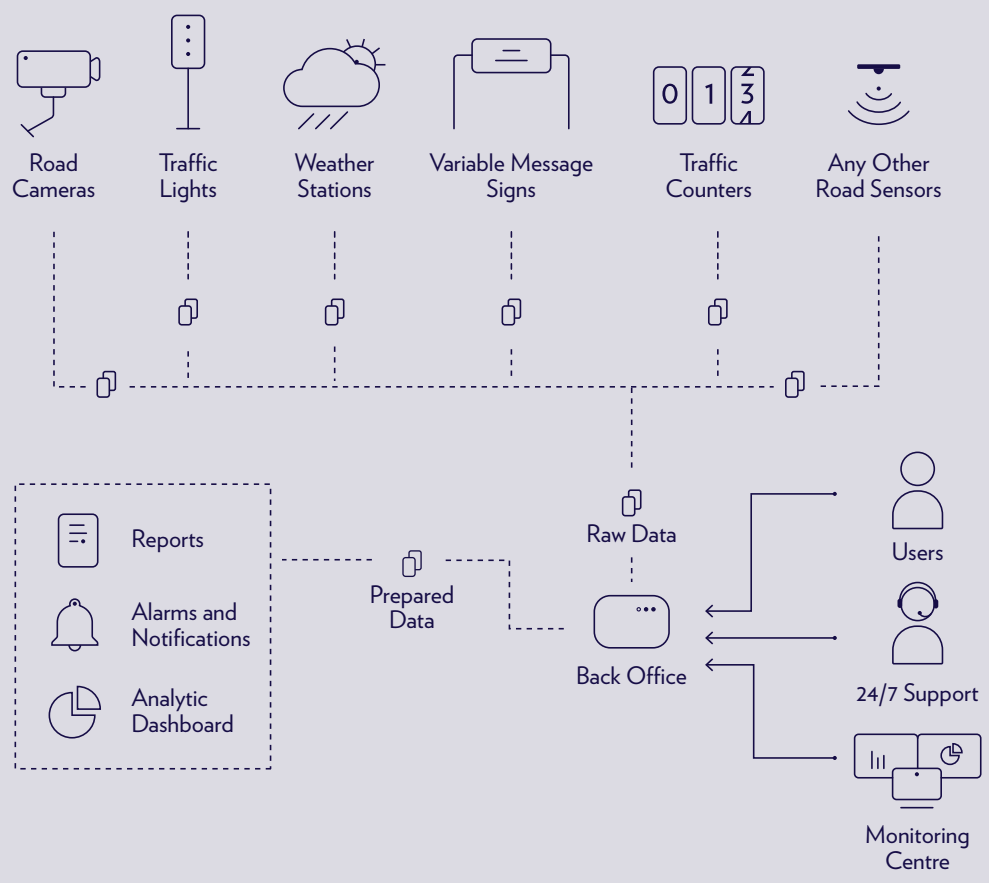# Fits.hub

**Fits for Road
Sensor Monitoring**

If an organization plans to deploy or already has hundreds of various road-side sensors, but it must use different solutions to manage them, centralized monitoring platform can help achieve superior service operation.

By connecting different road-side sensors through a single platform, organizations are able to maintain sensor operational status, quickly detect sensor faults or anomalies. That leads to a more efficient maintenance processes, and decreased costs and a better overall service to road network participants.

What problem does it solve?

Road-side sensors usually come with their own management and monitoring software. That causes inefficient maintenance processes, due to necessity to use multiple monitoring solutions. Hence, the ability to react fast, if any sensor goes out of operation, is impacted. Centralized sensor monitoring provides a consolidated view of all of the sensor infrastructure and enables efficient service operation.

How does the system work?

Road Cameras

Traffic Lights

Weather Stations

Variable Message Signs

Traffic Counters

Any Other Road Sensors

Reports

Alarms and Notifications

Analytic Dashboard

Prepared Data

Raw Data

Back Office

Users

24/7 Support

Monitoring Centre

Key features

Centralized monitoring of CCTVs, Speed Cameras, Traffic Lights, Weather Stations, Environmental Sensors, Variable Message Signs, Traffic Counters, Weight in Motion sensors.

Dashboard-view of the sensor map.

Integrated notification workflows with real-time alarm transmission.
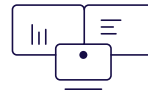
Vendor-independency and existing support of market leading sensor vendors with a possibility to integrate new ones.

Who would benefit?

Urban, regional and national Road Administrations

Traffic Management Centers

Key benefits

Increased road-safety due to faster reaction times to fix faulty sensors.

Improved service operation, decreased complexity and overall operational costs.

More efficient hardware sensor maintenance process.

Implementing Road Sensor Monitoring | Fits.hub

Client

The Latvian State Roads performs the management of the state road network, administration of the State Road Fund and organisation of public procurement in order to provide the public with profitable, durable, safe and environmentally friendly state road network. Maintenance and development of parish, company and household roads are supervised, as well.

The Challenge

The Latvian State Roads focuses on three fundamental principles: sustainability, mobility and technological advancement.

In order to boost the road users' safety and effectively advance the road environment state authorities sought the ways how to achieve these goals as efficient and cost-effective as possible. Unfortunately, problems originated due to outdated systems that are too expensive to replace, difficult to improve and arduous to replicate and because of a large amount of unsorted (raw) data, gathered manually from mutually independent systems, what lead to uncertainty and errors in decision making.

The Solution

The Latvian State Roads managed to design a solution, in which all road-related sensors (road cameras, traffic lights, weather stations, variable message signs, traffic counters, weight-in-motion etc.) are monitored and managed from one complete system for 24/7 and in real time. Within the scope of the project, 30 different road signs and 13 new weather observation stations were set up along with 11 cameras that were replaced and 10 traffic lights - modernized, allowing lights to switch over according to traffic intensity. Moreover, the real-time traffic surveillance and accident prevention solution was also created and implemented.

The Outcome

As a result, the Latvian traffic system has become broadly updated, modernized and automated according to today's standards. For road authorities, it means a unified system for data transparency, reduction in manual work, agile sensor maintenance and rapid and quick replacement of the outdated sensor. For road users, it means a safer environment with fewer hazards, congestions and overloaded vehicles that cause damages in the road surface.

« By developing a mobile, safe and environmentally friendly transport system, cities not only rejuvenate the road infrastructure but also lessen the time spent staring out the windshield and prolong the time spent with the family, friends or doing something more content. »

Outdated systems that are too expensive to replace, difficult to improve and arduous to replicate

An unified traffic management system to monitor and manage all road-related sensors (road cameras, traffic lights, weather stations, variable message signs, traffic counters, Weight-in-Motion etc.)

Modernized, unified and automated 24/7 traffic sensor monitoring system

Traffic data transparency

Rapid and quick replacement of the outdated sensor