

# Remote Asset Management for City Intelligent Transportation Systems (ITS)



## The Challenge

In smart cities, intelligent transportation systems are already an essential part of people's daily lives. Keeping such a complex system operating smoothly is a big challenge for city transportation authorities. Some of the challenges that are experienced in managing a ITS include:

### Monitoring Challenges

One of the main challenges with managing an ITS is actually knowing that a malfunction has occurred. City transportation authorities need to know when there has been a system failure and be able to remotely diagnose the problem in real time.

### Overhead Challenges

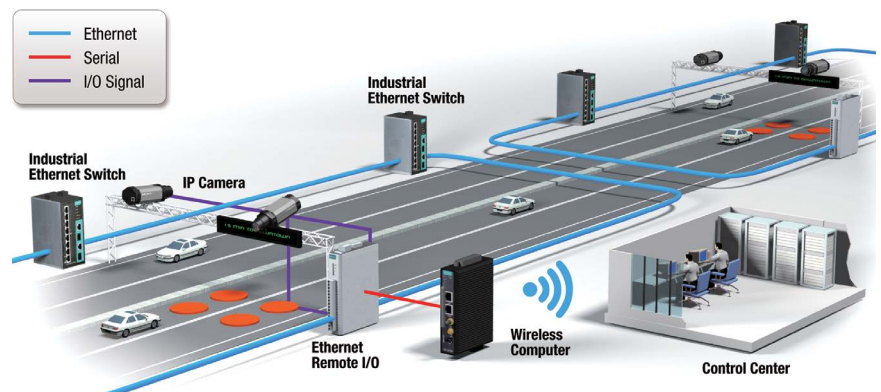
City transportation authorities typically incur high costs sending personnel to sites where equipment has malfunctioned.

### Control Challenges

Since there are often thousands of devices deployed across the city, they also need to be able to remotely reboot systems without deploying personnel unless it is absolutely necessary. In addition, they must keep track of the health of the equipment and provide preventative maintenance to avoid system failures, and be able to remotely configure and manage onsite equipment.

## The Solution

To address these issues, a field programmable gateway could be installed to access all of the field devices. Utilizing a combination of IP cameras and the data captured through the gateway, city transportation authorities can open up the doors to better monitoring and control of ITS assets.



## The Results

### Increased Remote Monitoring Capabilities

Through the utilizing the principles of connecting to the Industrial Internet of Things, City Intelligent Transportation Systems can now be remotely monitored for equipment malfunctions.

### Decreased Overhead

Through remote monitoring capabilities, personnel site visits for device checkups and reboots can be significantly reduced, thus decreasing overhead costs.

### Reduced System Downtime

Through the utilization of real-time remote monitoring and predictive analytics there are increased opportunities to address issues both before and shortly after they occur, which in turn can reduce the downtime of the system.