

Mobile Intelligent Transport Systems for Roadwork's



JOURNEY TIME • INCIDENT DETECTION • QUEUE WARNING

Problem

Congestion, incidents and delays through roadwork's or adverse road weather impacting driving conditions.

Solution

MVMS create a bespoke mobile ITS solution by **monitoring** traffic data and **managing** road works and areas where adverse weather (fog, surface water) impact driving conditions. We **maintain** these systems with **24/7** access and control. Our market leading solar mobile variable message signs, solar mobile traffic sensors, solar mobile CCTV, solar mobile lighting towers and patented JamLogic™ real-time traffic management software form the complete mobile ITS solution.



How it works

Our Mobile temporary ITS applications include many key elements to help promote better safety and mobility through roadwork's and stretches of roadway adversely affected by weather. Using real-time journey information, to provide queue warning, incident detection and journey time on a stretch of road means utilising existing roadside sensor technologies (including weather sensors) and blending multiple types of sensor data /traffic information. The very nature of mobile solar powered ITS equipment means it can be deployed in minutes and operate 24/7.

Features

- Real-time mobile temporary ITS suitable for all road conditions
- Real-time Queue Warning, Incident Detection and Journey Time
- Tailored to specific road projects
- Scalable to reflect changes to road conditions throughout a works period
- Quick easy deployment of mobile VMS, traffic sensors and CCTV
- Full Integration with existing roadside hardware including weather sensors and ANPR Cameras
- Capable of managing traffic during adverse weather
- Integrate external data sources e.g. Highways England, Datex 2, Inrix, TomTom and ANPR



MVMS understand that all traffic management requirements are different. With an intrinsic knowledge of the unique problems faced during roads projects, we have the capability to offer a flexible, bespoke temporary ITS solution.

Benefits

- Rapid deployment of fully portable ITS
- Flexible, bespoke system to control cost and vehicles at road works
- Increased driver and worker safety
- Real time journey information
- Queue warning
- Incident detection
- Increased traffic capacity
- Speed management
- Reduces road rage
- UTMC and NTCIP compliant and conform to EU standard 12966
- HE approved VMS
- Latest LED and solar technology
- GPS, Microwave, Radar, Bluetooth and CCTV
- JamLogic™ traffic management software
- Real-time remote project access and control
- Improved traffic control
- Over 100 successful mobile ITS projects
- Timely completion of works with associated project cost saving

Traffic Responsive

This allows the continuous monitoring of real-time traffic conditions with an appropriate response to motorists via our mobile variable message signs. Examples of information provided include: Journey time; delay time; highway management information; stopped traffic warning; dynamic speed display; dynamic lane merge for slow or stopped traffic and advance queue warning.



Condition Responsive

Our tailored ITS is programmed to identify real-time, atypical roadway conditions and provide motorist advance warning and guidance on hazardous or unique roadway weather conditions. The system can utilise existing hardware including weather and speed sensors. Motorists are then informed to reduce speed only during poor weather conditions or where road workers are present. This allows the safest, most efficient use of the road network throughout roadwork's or during periods of adverse weather (fog or increased surface water on a roadway).



Large Scale Events

Another application of our mobile ITS is controlling traffic at large events. across the road network, our JamLogic™ software will inform and direct pedestrians, road workers and motorists alike. This is accomplished by having one user interface, JamLogic™, which then communicates with our VMS and other devices. Our system can ease congestion and control crowds.



Do you have a roads project?

We have a mobile ITS solution

Mobile Variable Message Signs

MVMS offer a range of VMS suitable for all roads where the provision of Journey time, queue warning or incident information is key to effectively utilising the increasingly busy road network.



Mobile CCTV

Our CCTV is a specialised mobile trailer mounted solar powered camera, designed to provide all the height and stability necessary for the rapid deployment of outdoor dynamic video surveillance at road works or large scale events.



Sensing Traffic

RTMS Microwave Sensors are usually positioned high above the road and are capable of obtaining bi-directional traffic data on multiple lanes, making them extremely versatile. Gathering data on up to 12 lanes, the RTMS can determine speed, vehicle length (in bins), occupancy of lanes (in % form), volume (car counts) & gap/headway.

Radar Dopplers are positioned at car level and pointed directly at approaching vehicles. They are ideal for speed only studies or a simple ITS solution where the logic is driven only by speed. Dopplers can be mounted on both our sensor trailers and variable message signs as they do not require a tall mast.

Bluetooth Sensors provide the features and flexibility to collect vehicle data for real-time monitoring and travel time information via our JamLogic™ traffic management software.

Weather Sensors Our VMS and software can integrate with a variety of weather sensing devices.

External Data Sources Mobile VMS can integrate Datex 2, Inrix, TomTom and ANPR.

Combined with our range of mobile variable message signs and JamLogic™ traffic management software the MVMS range of sensor trailers can provide a bespoke ITS solution.



JamLogic™ traffic & asset management software (VMS/Sensor fleet)

What is JamLogic™ for Mobile ITS?

JamLogic is a 'real-time' application that remotely collects data from field sensing devices (cctv; 'speed' radar doppler; 'volume' RTMS microwave; weather stations) and 3rd party traffic flow analysis. It analyses data and outputs automated messages to motorists via variable message signs.

- Award winning Jamlogic™ collects, analyses, automates and delivers real-time information to the motoring public
- Equip any sign with our high speed modem and GPS
- Maximise productivity, efficiency & profitability at road works
- Transparent real-time traffic data; Download historical data and graphics; Export to excel
- Monitor, maintain, manage remotely from PC, Laptop, tablet or Smartphone



JamLogic™ Features

- View a list and GPS map of your equipment
- Manage your VMS / Sensor fleet remotely from your smart phone or tablet.
- Communicate with multiple signs at once – status and message display
- View your messages & battery voltages
- Group your signs in folders (by customer, location, project etc)
- Create your own message library
- Schedule your messages daily, weekly or monthly.
- View your VMS messages, sensor data and camera images on a single screen
- Generate/Export customized traffic statistics and graphs.
- Automated messaging for ITS roadwork's – optional.
- e-Alerts of 'real-time' incidents
- Logging and history of sensor data, signs and events
- GPS location
- Road segment congestion coding
- Streaming video
- Unlimited users with various access and control levels
- Communications diagnostics

Summary

Our Mobile ITS solutions are designed to provide detection and automated alerts to increase safety and mobility in advance of and through a roadwork's zone or a roadway affected by adverse weather. These areas are the most critical in the road network and deserve greater attention and effort utilising mobile ITS technologies that are proven and cost effective when properly designed and procured, providing safer roads and more efficient traffic flow.

