

# traffic information

## MOBILE JOURNEY TIME SYSTEM – SCOTTISH EXECUTIVE



### OVERVIEW

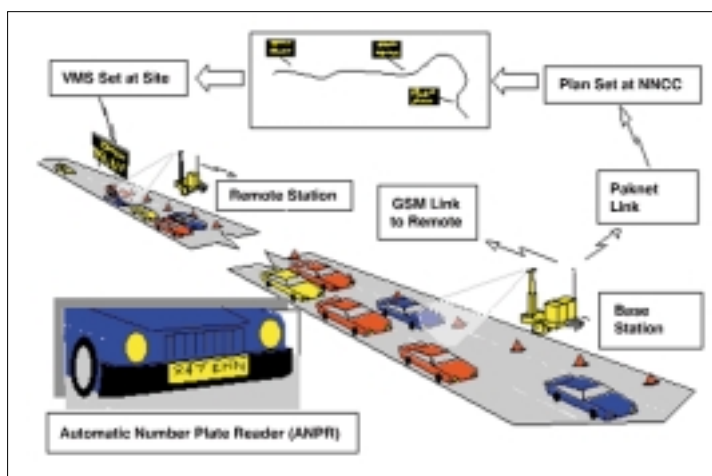
A project commissioned as an enhancement to the National Driver Information and Control System (NADICS). A section of the M8/A8 between Edinburgh and Glasgow is subject to significant roadworks projects over several years. Contractors are required to monitor and advise of any traffic delays at major roadworks sites on the trunk road network. In the past, this has been achieved by an on-site traffic supervisor who maintains contact with the National Network Control Centre (NNCC), informing them when traffic delays breach stated levels.

#### CUSTOMER

The Scottish Executive & European Union as part of a trans-European project called STREETWISE.

#### PROBLEM

The Scottish National Control Centre needs to monitor delays around temporary roadworks so that data can be used to inform the travelling public about congestion.



#### SCS SOLUTION

SCS developed a Mobile Journey Time System consisting of a pair of trailers sited before and after the roadworks area, each with an Automatic Number Plate Recognition (ANPR) camera.

Messages advising motorists of delays can be transmitted to a nearby remote Variable Message Sign.

## RESULTS

In addition to the messages displayed on the VMS, (real-time) pre-trip information can be provided via the NADICS web site, or other media outlets, which currently warn motorists of abnormal traffic conditions. Because the system is mobile, the MJTS can be moved to any location within the Scottish road network.



## TECHNOLOGY OVERVIEW

Each trailer-mounted ANPR camera records vehicle number plates, which are then logged and matched by the base station. The delay is calculated by comparing journey times against historical free-flow journey times held within the system. The system has been carefully designed to give full modular expansion of additional monitoring sites linked to a single base station. A single master trailer can command over 50 remote trailers.

Data is sent from the base station via NNCC to a remote VMS trailer sited upstream of the anticipated queue tail and communications infrastructure. Road-users are therefore warned in advance of the congested area about delays ahead.

## SOLUTION BENEFITS

Significant benefits of the system are:

- Removes the need for contractors to provide traffic supervisors to monitor traffic and relay information to the NNCC
- Improves the accuracy and consistency of information provided to road users; and
- Reduces levels of driver stress or frustration by allowing them to choose an alternative route where available

**“The Scottish Executive is planning ongoing trials of the journey time system for the purpose of congestion monitoring. The system is also to be trialled on the A720 (Edinburgh City Bypass). The system will be compared to other congestion and journey time monitoring methods, assessing its ability to provide the Scottish Executive with an index of congestion formed from historical data across the Scottish trunk road network.”**

(Ian Anderson, Scottish Executive)

## SCS OVERVIEW

Speed Check Services provides a range of Intelligent Transport Systems (ITS) to the UK's road network. Three operating divisions target key market sectors:

**traffic operations:** implementing solutions to manage traffic flow on the road network

**traffic information:** using technology to keep the public informed about road conditions

**traffic safety:** protecting road users and enforcing traffic law

Drawing on considerable experience and a diverse technology toolkit, Speed Check Services can consult, design, install and maintain a broad range of ITS solutions.