

**SMARTER
TRAFFIC
MANAGEMENT**

TRAMS
TRAFFIC MANAGEMENT SYSTEMS

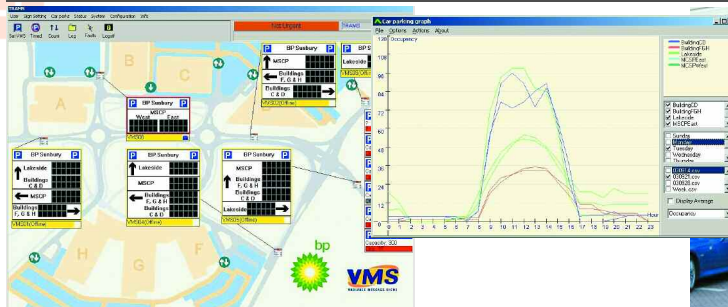
TRAMS is a Windows® software System Integration package that works with standard desktop PCs easily enabling Variable Message Signs Limited to configure and tune bespoke solutions to meet specific traffic management needs. **TRAMS** provides clear and concise information to aid network capacity optimisation.

It is suitable for an extensive range of applications and controls most roadside equipment.

The Sage, Gateshead



BP Sunbury



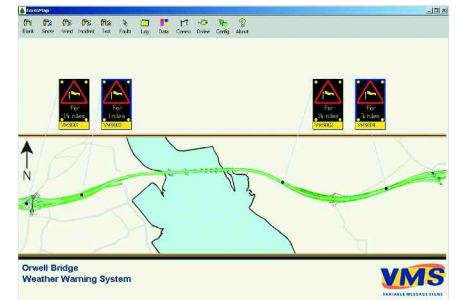
TRAMS Projects

- Athens, Greece (Olympics)
- BP Sunbury
- Braehead
- Bucks County Council
- Carlisle
- Durham A66
- Foyle Road Bridge
- Gateshead (Heworth and Sage)
- Heathrow (car park)
- Heathrow M4
- New Zealand
- Orwell Bridge
- Penrith
- South Wales
- Stirling
- Swansea
- Sydney, Australia (Olympics)
- Tay Road Bridge
- Uxbridge
- York

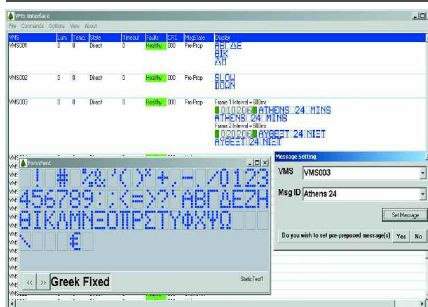
Orwell Bridge



Picture courtesy of Suffolk County Council

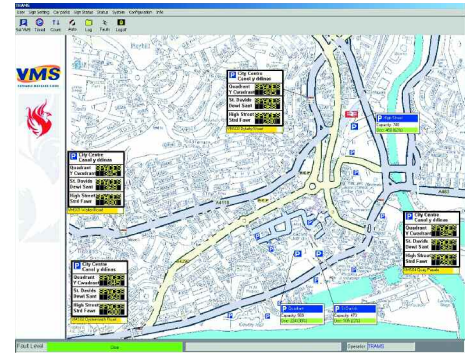


Athens



TRAMS

- Bespoke solutions
- Flexible and varied communications
- Applications include:
 - UTMIC
 - Car Park Guidance
 - Driver Information
 - Bridge management systems
- Complete system integration with:
 - Variable message signs
 - Access control
 - Bus-lane violation monitors
 - Pollution/weather monitors
 - Car park information
 - Over height vehicle detectors
 - MIDAS vehicle detectors



TRAMS FEATURES

Car park vehicle counting

- Collect car parking vehicle counts
- Ability to change maximum capacity of car parking in TRAMS
- Ability to change vehicle count of car parks in TRAMS
- Automatic control of car park message signs
- Auto-recalibration of car parking vehicle count at a preset time to a preset value.

Message signs

- Control car parking variable message signs
- Manual car park message sign override
- Control standard NMCS2 Motorways/Trunk Road variable message signs
- Run timetabled messages
- Automatically set messages on outer city VMS with messages dependant upon car parking status
- Set more than one message from a preset plan.

Car park areas

- Group car parks into "car park areas"
- Collect statistics for a car park area
- Have a messages on a car park sign dependant upon a car park area.

Polling frequency

- Polling of car parking equipment is timetabled so that at expected busier 'delta' periods, the equipment can be polled more frequently and at other times less frequently. For PSTN or Paknet communications, control of polling frequency is particularly important in keeping costs down.

Password protection

- Give operators individual passwords
- Different levels of operation depending on authorisation.

Fault indication

- Faults categorised by level of urgency
- Time and date stamped
- Numerical fault identification.

Log events

- Logs for faults, operator actions, communications, and parking
- Logs stored as text files that can be loaded into Microsoft Excel for analysis.

Communications

- Communication using NMCS2 protocol
- Extended NMCS2 communication to car park counters
- Facility to implement further protocols
- Mix or choose between Free Radio (limited range), Vodafone Paknet PSTN (telephone) or RS485
- NCP/IP, GPRS, UTMIC.

Statistics

- Weekly occupancy levels per hour for each car park
- Graph car park statistics by week or day
- Compare car parking levels by generating graphs of all car parks by week or day on the same chart
- Graph average occupancy per week for a car park
- Car parking occupancy, vehicle count, status, car park capacity is logged so that the data can be analysed
- Use Excel Macros to speed up the process of generating graphs.

TRAMS display

- Full colour display
- Easy to add new screen displays
- Easy to move equipment displayed on screen
- Easy to add new equipment to the display.

Configuration

- Ability to add new equipment to the system
- Configuration stored within Microsoft Access databases
- Add new sign messages
- NMCS2 upgradable to UTMIC.

Operator alerts

- SMS and email automatic alerts of system activity for operators.

