

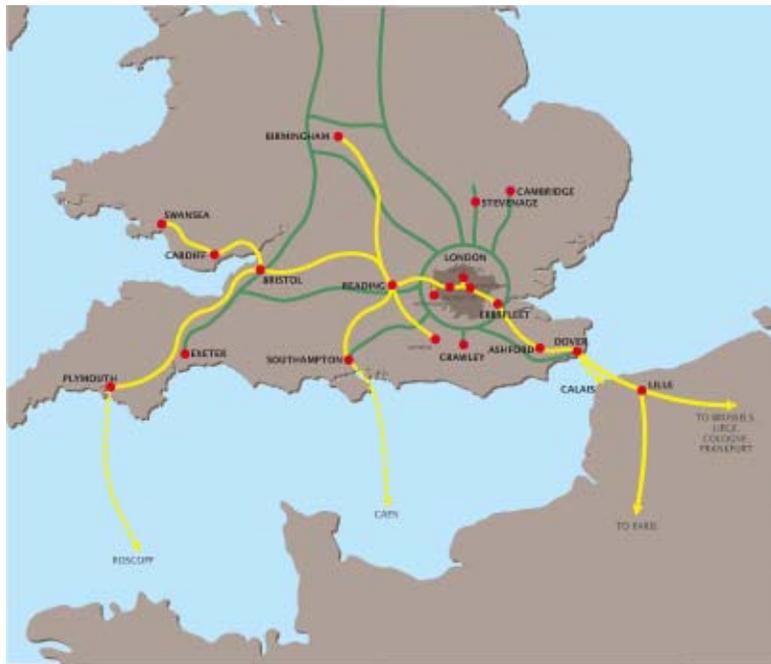


----- MEMBER IN THE SPOTLIGHT 6 - JANUARY 2008 -----

READING – A CENTRE FOR EXCELLENCE IN TRANSPORT PLANNING

Reading is a concentrated urban community of over 200,000 people in the southeast of the UK, some 60km west of London. As a major employment and retail centre, with an extensive travel to work area, Reading is a regional transport hub, attracting daily trips from a wide hinterland.

Reading also boasts the second busiest railway station in the UK outside of London and offers key public transport links to Heathrow and Gatwick airports, making it a major transport interchange.



Effective traffic and transport management and efficient use of transport infrastructure is essential to Reading's ability to accommodate the volume of trips which come into and through Reading on a daily basis.

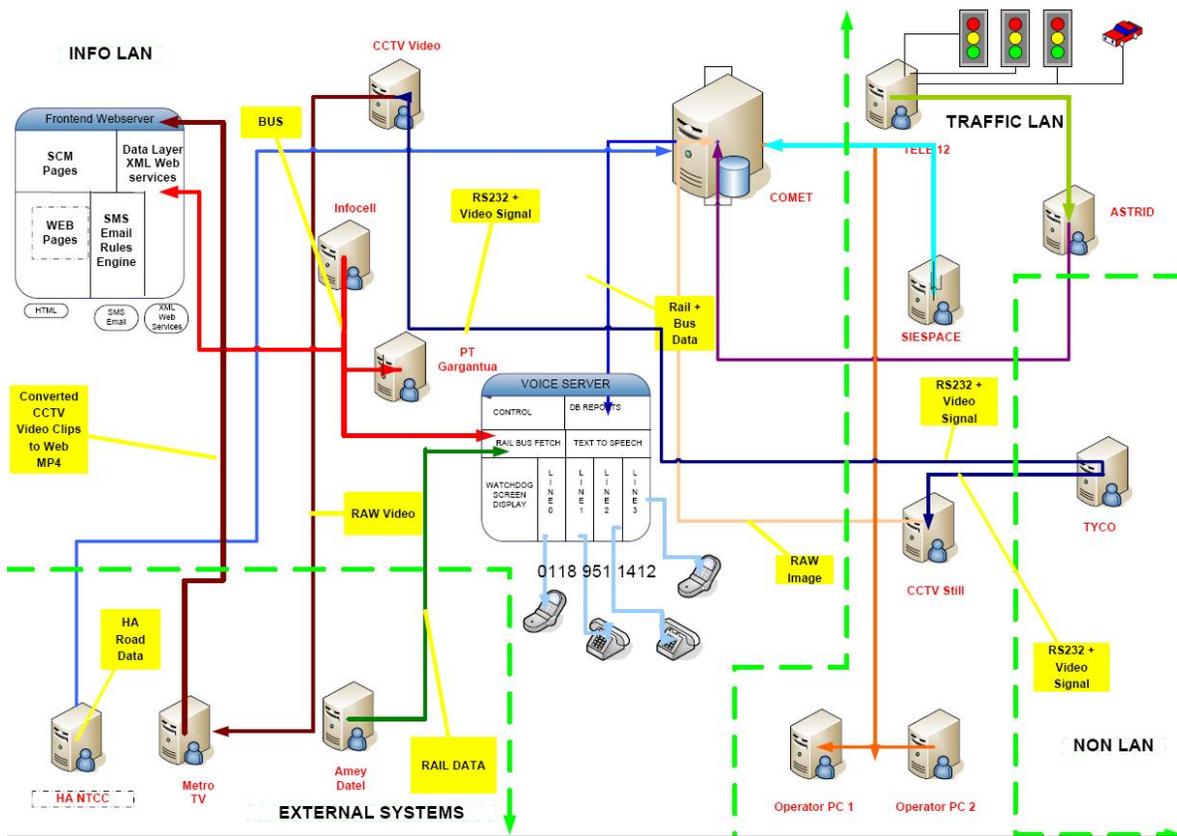
Reading has therefore long embraced the use of Intelligent Transport Systems (ITS) in various forms to help manage traffic and reduce congestion, to keep travellers well-informed, to improve road safety and to encourage change in travel behaviour.

UTMC Demonstrator Project

Reading Borough Council introduced an Urban Traffic Management and Control (UTMC) system in the early 1990's and was one of four demonstrator projects funded by the Department for Transport (DfT) between 1997 and 2003. This has enabled Reading to use UTMC to integrate different aspects of ITS in a common database, providing real-time, multi-modal information to promote network management and Reading's transport information strategy.

ITS elements of Reading's UTMC system include:

- Traffic Signal Control
- SCOOT congestion and car park occupancy monitoring and signal optimisation
- CCTV for network monitoring and road safety
- Travel/Traffic Information (provided through www.reading-travelinfo.co.uk and via mobile phones and email to registered users)
- Variable Message Signs (VMS) along key radial routes
- Real Time Passenger Information (RTPi) at bus stops, on buses, at Reading Station and available through the travel traffic information system
- SmartCard products for all bus services
- Bus Priority through traffic signals
- Automatic Number Plate Recognition (ANPR) for bus lane enforcement



These ITS elements are linked back to a control centre, where the database is programmed to feed information from one system to another.

For example, if SCOOT detects that a car park exceeds a certain occupancy level, the VMS on the relevant routes to that car park will automatically be triggered to display a message indicating that the car park is full and motorists should divert to an alternative car park.



Trained members of staff are also on hand to monitor the system and put out relevant information when it is needed by travellers, transport operators and event managers. A workstation of the UTMC database is set up at Reading Football Club's Madejski Stadium, where fans can quickly be diverted between car parks as queues increase and fans arriving by public transport are guided onto dedicated buses to shuttle them between the stadium and Reading Station.

Travel/Traffic Information

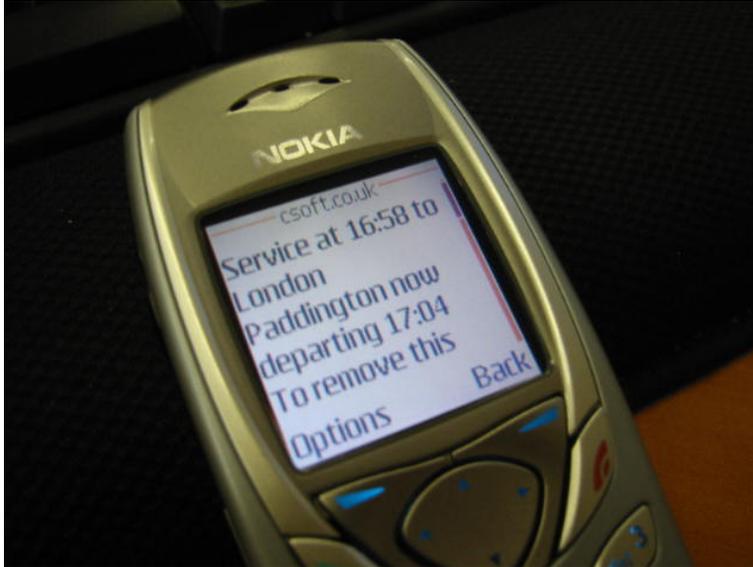
While ITS can offer obvious benefits for traffic management and road safety in terms of camera enforcement, traffic signal control and bus priority through traffic lights, Reading Borough Council believes that the best way to manage the network is to give travellers the information to manage their own behaviour.

If motorists know that there is an accident or congestion in time, they can take an alternative route. If they have information before they begin their journey, they may even switch to an alternative mode. If they can access information in any location before or during their journey, then they can make travel choices on the move.

Reading's travel information website is extensive and comprehensive, including real time information on all modes, such as:

- Live information about bus departures from stops across Reading
- Live 'departure board' information on trains from Reading Station
- Up-to-date information on the number of car parking spaces available in central Reading car parks;
- Traffic flow and journey time information on routes to and from Reading;
- Links to the South East regional journey planner;
- TrafficCam images providing snapshots of current traffic conditions at junctions in Reading and the M4
- Warnings of incidents, accidents or roadworks currently underway

The website also includes more typical travel information, such as bus timetables and car park charges. Travel information can be accessed for free from a WAP-enabled mobile phone handset (WAP being an application allowing internet access from a mobile phone). Registering with the website allows travellers to request travel alerts sent to their mobile phone or email address.



SEEDA WiMax Project

Reading is now participating in the development of the Reading Area Transport Information Network. This project is being led by Reading's term consultants, Peter Brett Associates and is funded through a grant from the South East England Development Agency (SEEDA). At the core of the project is an enhanced communications network which will use emerging WiMAX wireless communications technology in combination with Wi-Fi and the use of the latest mobile phone 3G communications services.

This technology will further integrate Reading's ITS, creating a metropolitan network which will communicate with traffic signal controllers, VMS, CCTV, bus location Global Positioning Systems (GPS) and RTPI. Another part of the system will allow for web-based (and mobile phone-based) payment for SmartCard top-up and car park payments.

Again, however, travel information is a key objective of the project, and the system will allow wireless transfer of more detailed and personalised travel information to mobile phones, personal digital assistants (PDAs), computers and GPS systems, giving real time network performance and location / navigation directions. This will allow even pedestrians to receive advice on the optimum route between locations, no matter where they are in Reading.



Installation and trials are underway, and Reading will be looking to work with its business partners to extend the project beyond the pilot stage. Future applications of the technology may include use in enforcement, as the system is expanded to work with ANPR, vehicle location detection and secure payments.

Conclusion

Reading Borough Council's ongoing innovation in the use of ITS and UTMC is one of the key reasons why we are recognised as a Centre for Excellence in Transport Planning by the UK government.

Reading was one of the first authorities outside London to manage its own bus lane enforcement using bus lane cameras and ANPR. Reading was one of the four UTMC demonstrator projects in the UK, resulting in more inter-connected ITS elements, a better UTMC system and a high standard of travel information. Now Reading is involved in a unique project to further improve UTMC and travel information provision through the use of cutting edge technology. Therefore, Reading is the Home of the Intelligent Traveller.

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