

Safe roads, Reliable journeys,  
Informed travellers



# Applying Technology to Roads Management

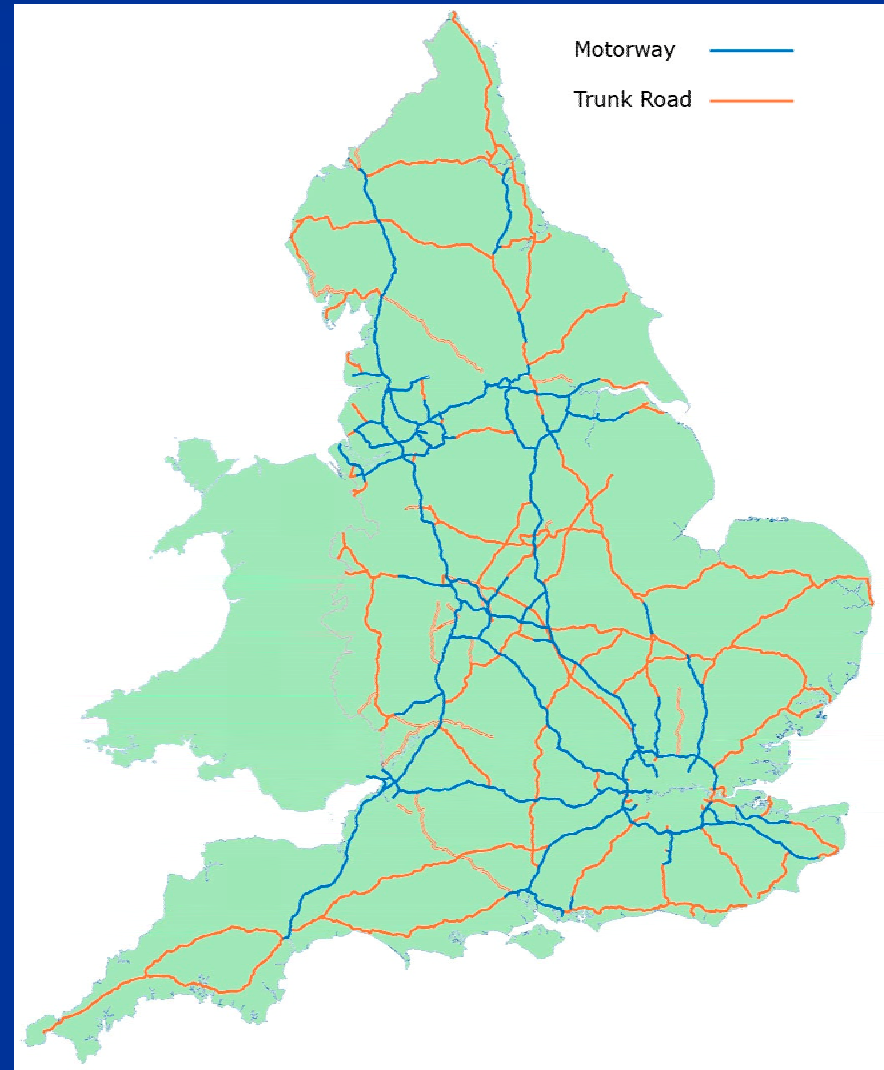
Archie Robertson

Chief Executive  
Highways Agency

# Highways Agency Network



- 4818 miles (7754 km)
- 2.8% of roads in England
- 31% of all road traffic and 62% of all freight



# Roads agency 'too timid to tackle jams'



## SLOW TRAFFIC, QUICK THINKING

The Highways Agency must do more to reduce congestion

The HA appears to be a slow driver in the fast lane. It should either accelerate change or be prepared to get out of the way.

## Highways Agency 'too slow' to tackle congestion

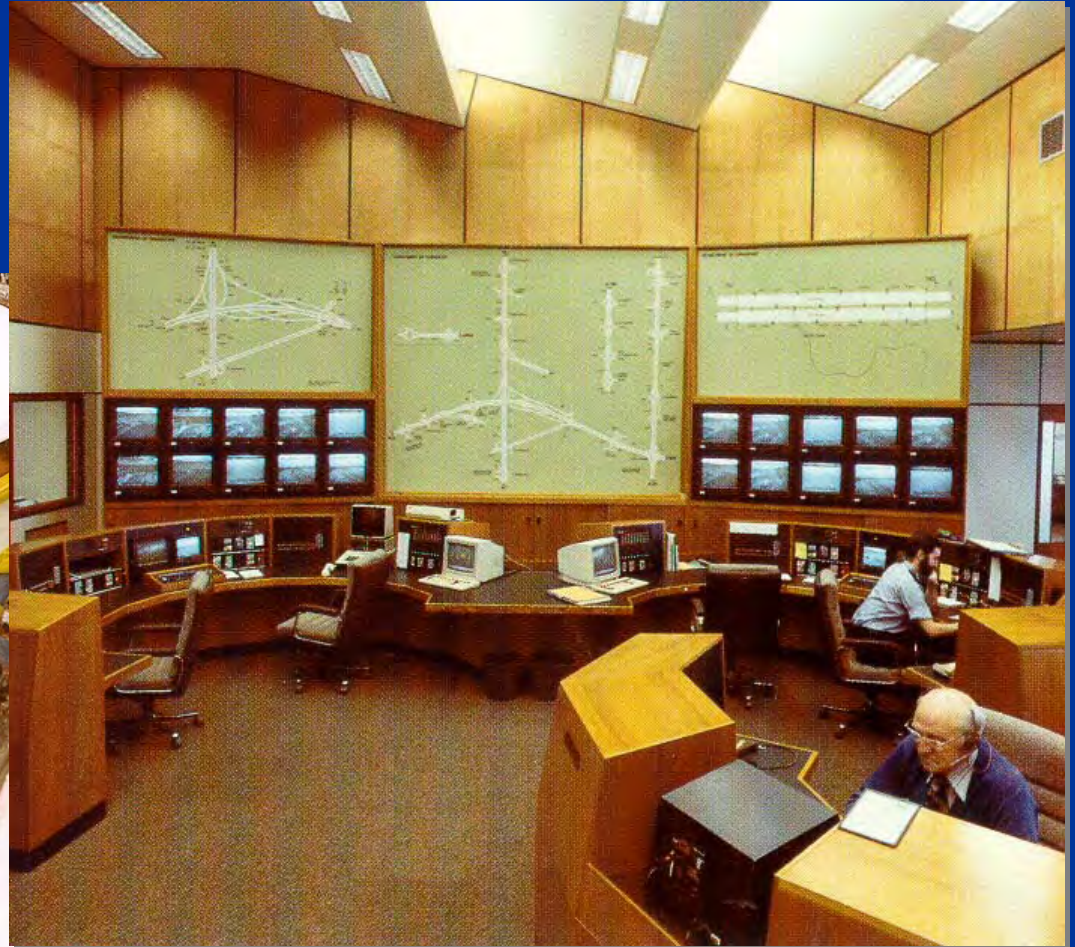
# 40 Year History

1959 – First  
emergency phones  
1964 – First signals  
1990 – New  
generation of signal





# Communications and Control Centres



# RCCs and Traffic Officers





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# Queue Protection





# Ramp Metering



# Controlled Motorways





# Active Traffic Management





# MTV – Motorway Traffic Viewer

Figure D9 - Improved Weekly Thumbnail Sketch of Speeds

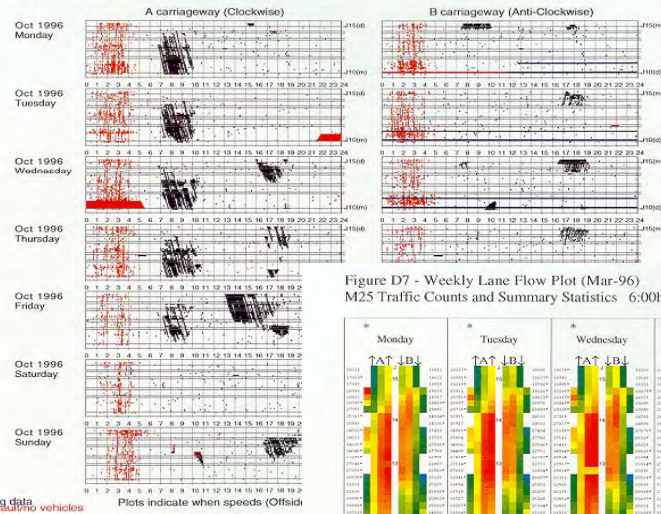


Figure D7 - Weekly Lane Flow Plot (Mar-96)  
M25 Traffic Counts and Summary Statistics: 6:00hr to 11:00hr

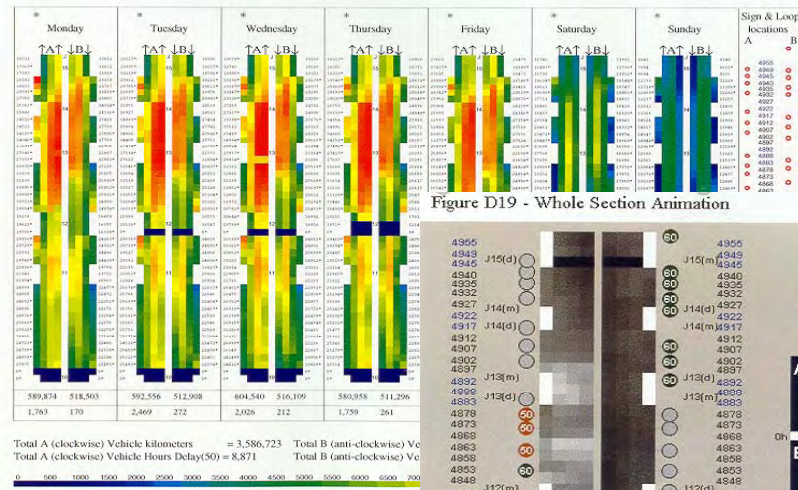
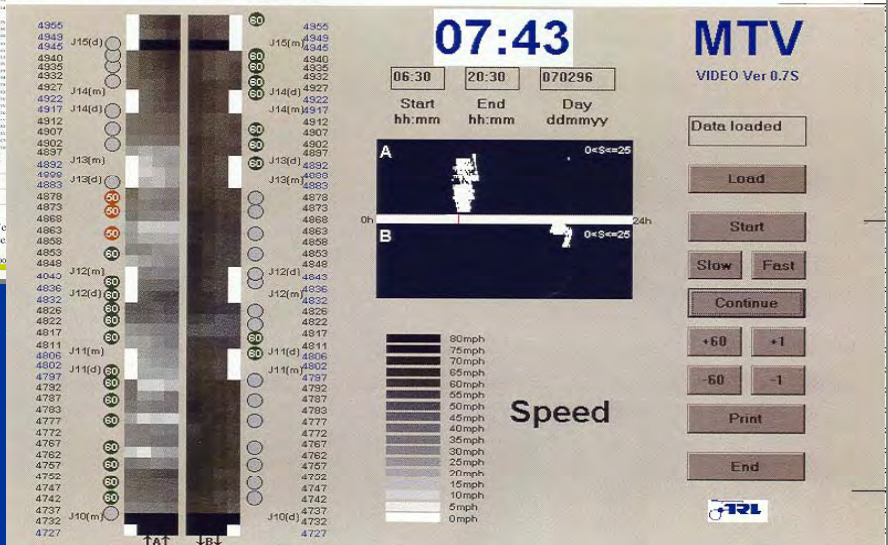
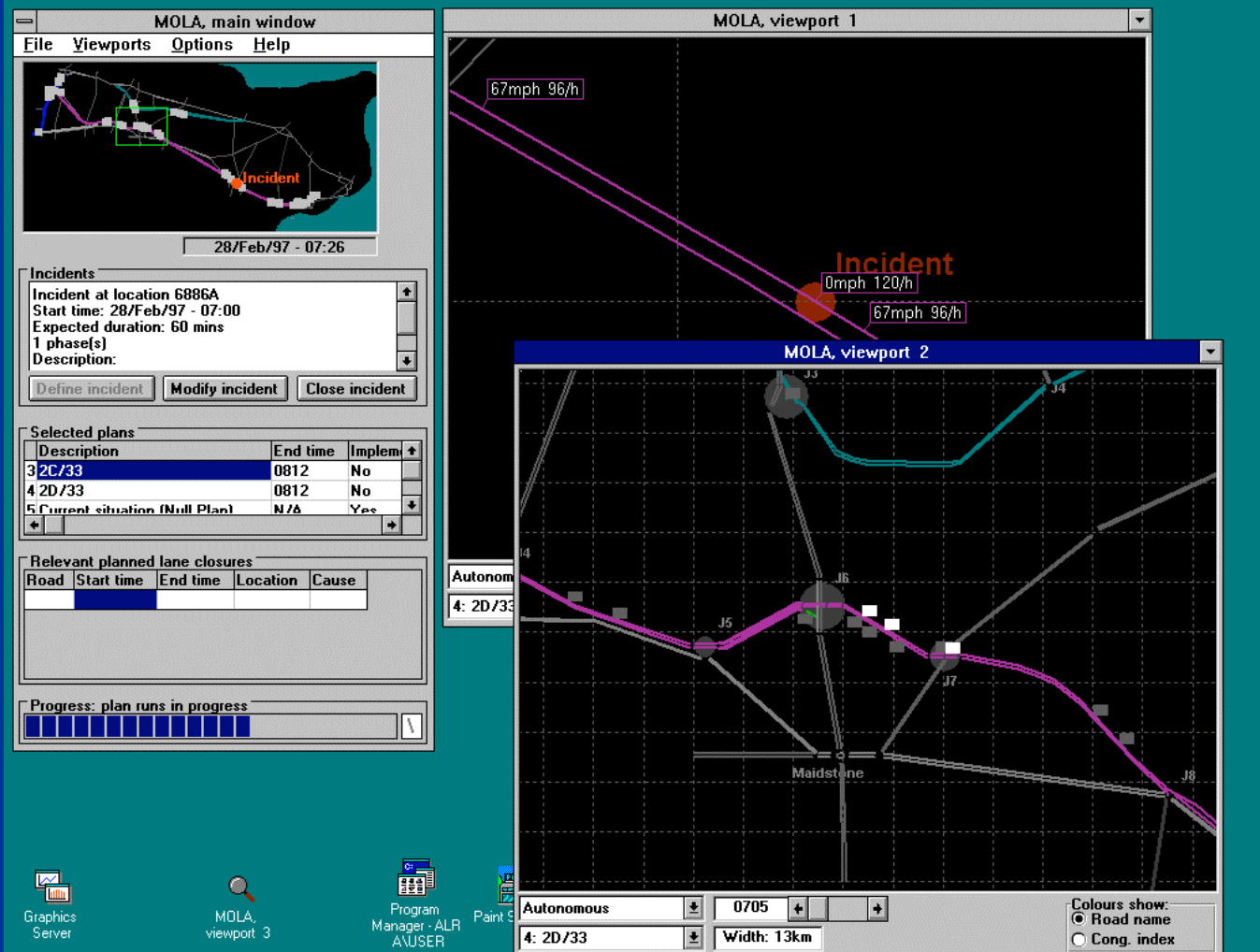


Figure D19 - Whole Section Animation



# MOLA – Motorway On-Line Assistant



# National Traffic Control Centre

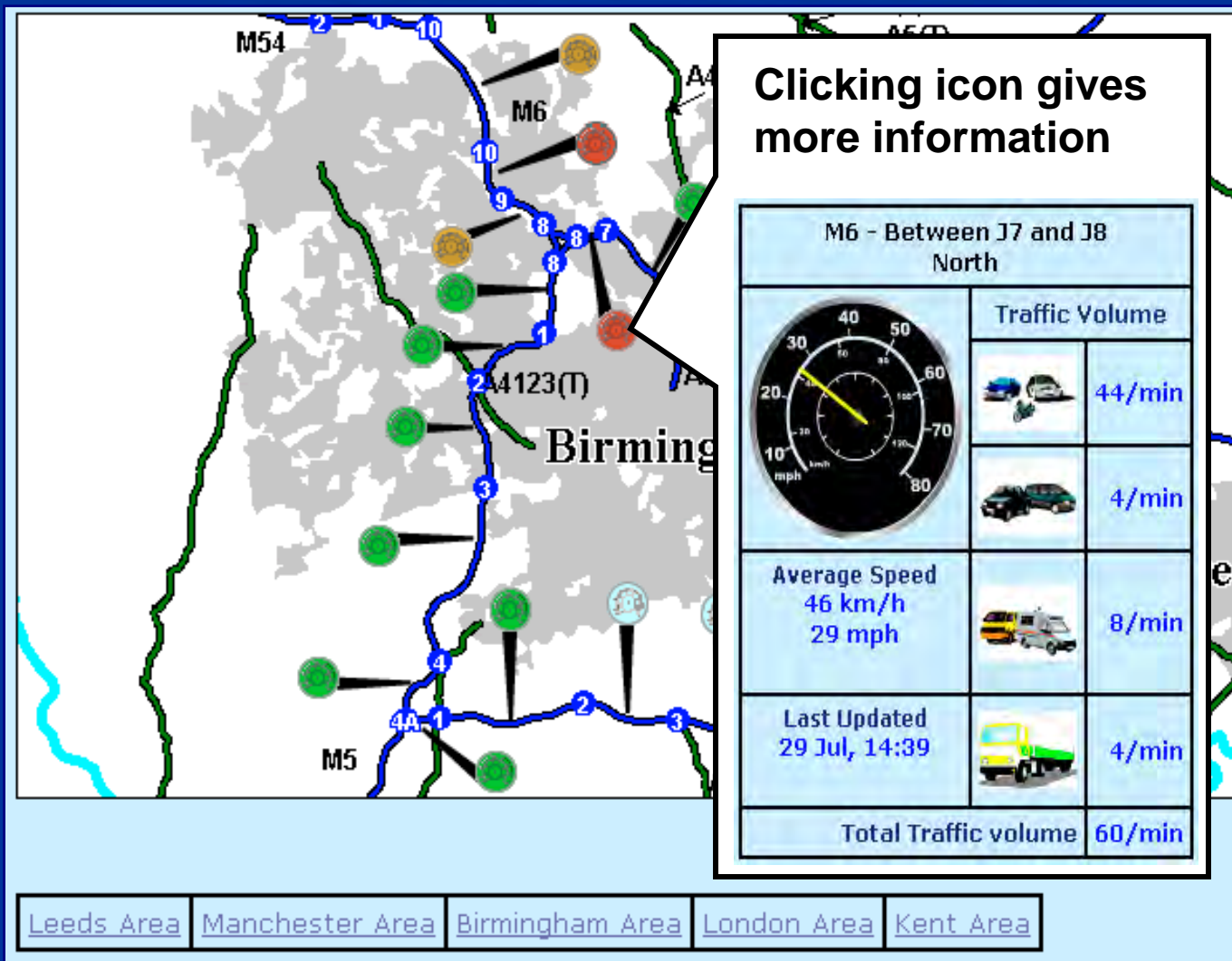




# Strategic Traffic Management



## Information on the Web



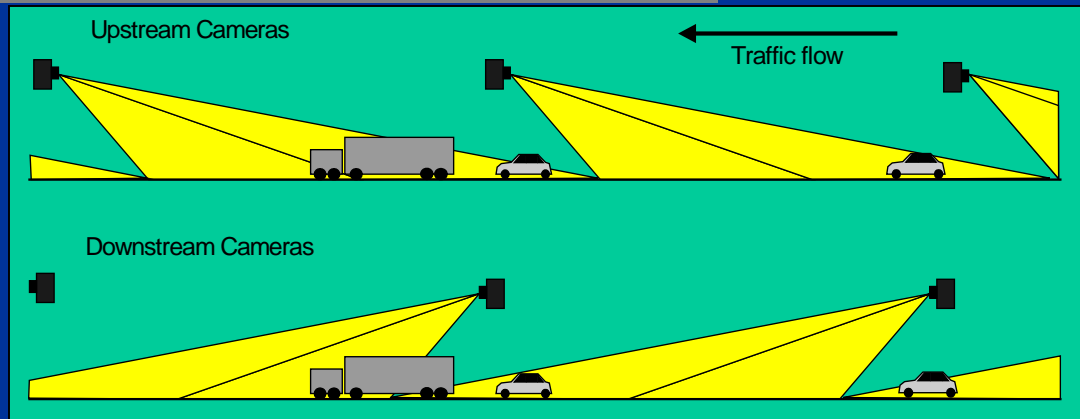
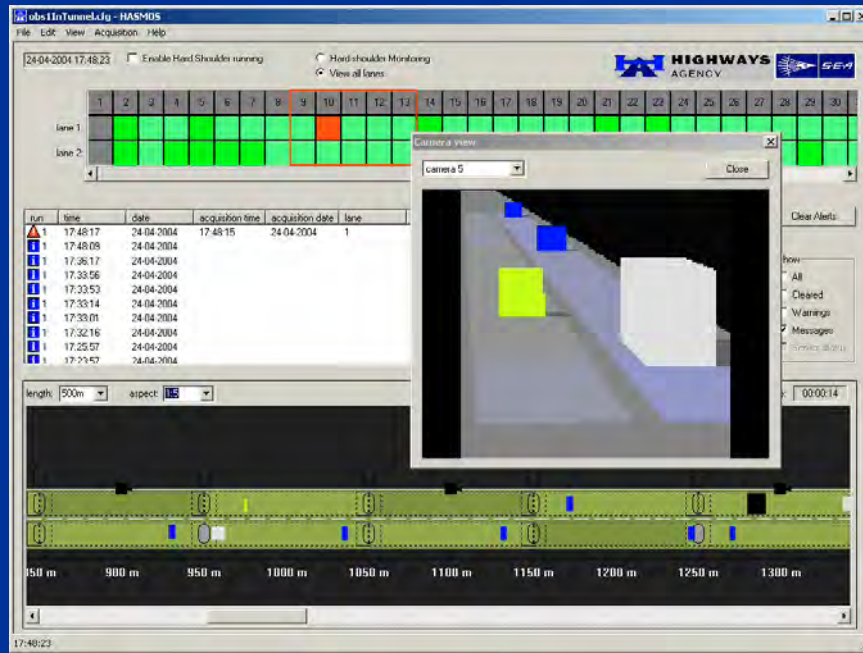
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A large, semi-transparent blue 'HA' monogram serves as a background for the central text. The letters are thick and blocky, with a slight gradient.

The Future



# Improved Monitoring



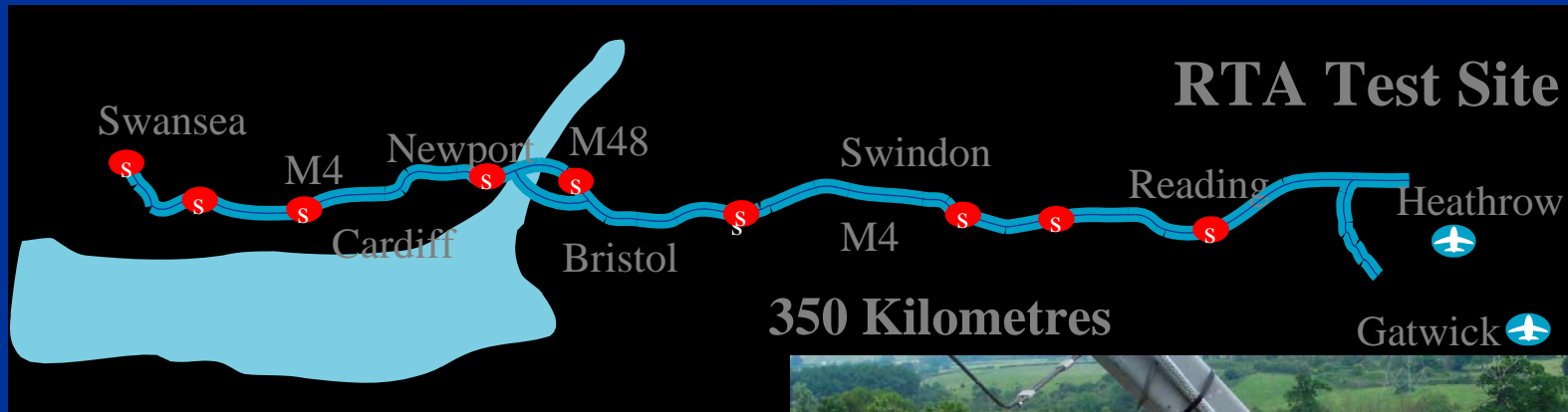
# Video Information Highway

The screenshot shows the Highways Agency Video Information Highway (VIH) website. At the top is the Highways Agency logo and a navigation bar with links: Home | About Us | News | Travel Info | Road Projects | Contracts | Education | Search | About this Site. Below this is a 'NAVIGATION' section with a 'MAP' button. The main area displays a map of the Bristol region, showing major roads like the M4, M5, and A4. Various road status icons (yellow for active, red for inactive) are placed along the routes. A 'KEY' section on the left explains the icons: Active (yellow circle), Inactive (red circle), Motorways (blue line), Primary Routes (orange line), Towns (yellow square), Land (green square), and Water (blue square). An 'INFORMATION' section at the bottom left provides links: VIH HOME, ABOUT VIH, HOW VIH WORKS, and YOUR FEEDBACK. At the bottom, a 'Site Navigation' section includes a 'back to top of page' link and the same navigation bar as the top. A red line is drawn across the map area, pointing towards the live image window on the right.



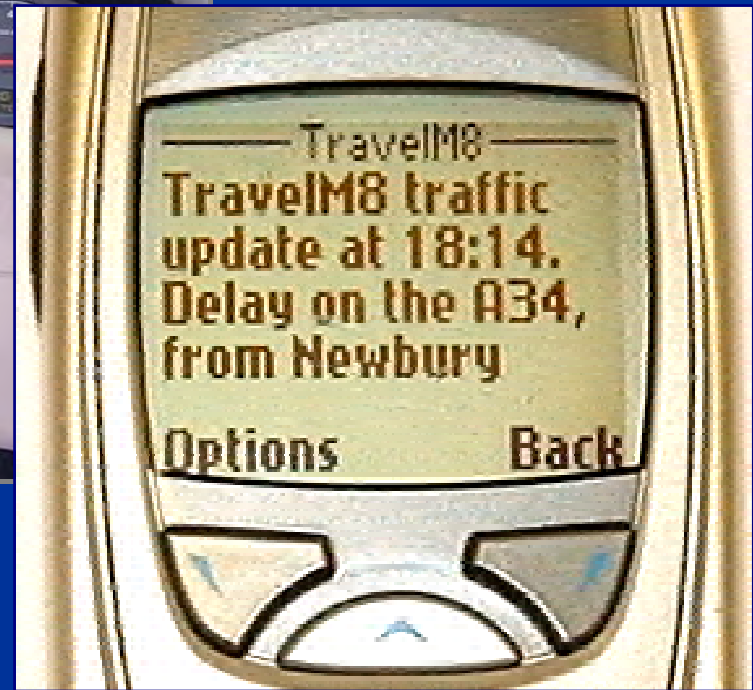
This block displays a live video feed from a highway camera. At the top, it says 'LIVE IMAGE' and 'HIGHWAYS AGENCY'. Below this, a timestamp reads 'Image taken on: 10/02/2004 9:54:22 PM'. The video shows a multi-lane highway at night, with traffic lights and road markings visible. A text overlay at the top of the video frame reads '511 M5/A4 Spur 142/0J E'. Below the video, the camera location is identified as 'Camera Location: CAM511 - M5 J18 LAWRENCE WESTON INTERCHANGE'. A 'CLOSE' button with a right-pointing arrow is located at the bottom right of the live image window.

# Road Traffic Advisor





# Information in the Vehicle



# Co-operative Vehicle Highway Systems



Safety – Are we too risk averse?

Should we take greater risks with  
taxpayers money?

Should we spend more on technology and  
less on tarmac?



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A large, semi-transparent blue 'HA' monogram serves as a background for the central text. The 'H' and 'A' are stylized, with the 'A' having a triangular cutout at the top.

Discussion