

Managing the Road network to support policy objectives



Essex's Local Area Agreement

- **Between** – *Essex Partnership, Essex County Council, Health Authorities, Fire & Police Services, Learning & Skills Council, 12 local Strategic Partnerships, district & borough Councils & other (including Central Government)*
- **LAA has 14 priorities divided into 4 blocks**
 - *Children & Young People*
 - *Safer & Stronger Communities*
 - *Healthier communities & Older People*
 - *Economic development*
 - **priority 5 – generate inward investment & stimulate business development & innovation**

- **PSA runs from April 2006 – March 2009**
- **Pump-priming grant funding**
 - *£161,072.00 over 3 years*
- **Reward funding – up to approximately £2.8m**
(£0.77m for each of the 4 Targets)

As part of the Local Area Agreement, Essex County

Council is committed to:

- reduce journey times by 1% across the board
- increase journey time reliability to 95% (or over)

These Targets apply to two separate networks

- Specified inter-urban routes
- Radial routes into and out of Chelmsford

Network Performance Board

- **2 PSA target areas:**
 - *Safety*
 - *Congestion*
- **Board Members**
 - *Cabinet Member H&T*
 - *Head of Service H&T*
 - *Lead Officers for each Target area*
 - *Chairman of Essex Police*
 - *Chief Superintendent – Essex Police*
 - *Chairman of Essex Fire & Rescue*
 - *Senior Officer of Fire & Rescue*
 - *Highways Agency – Network Performance Manager*

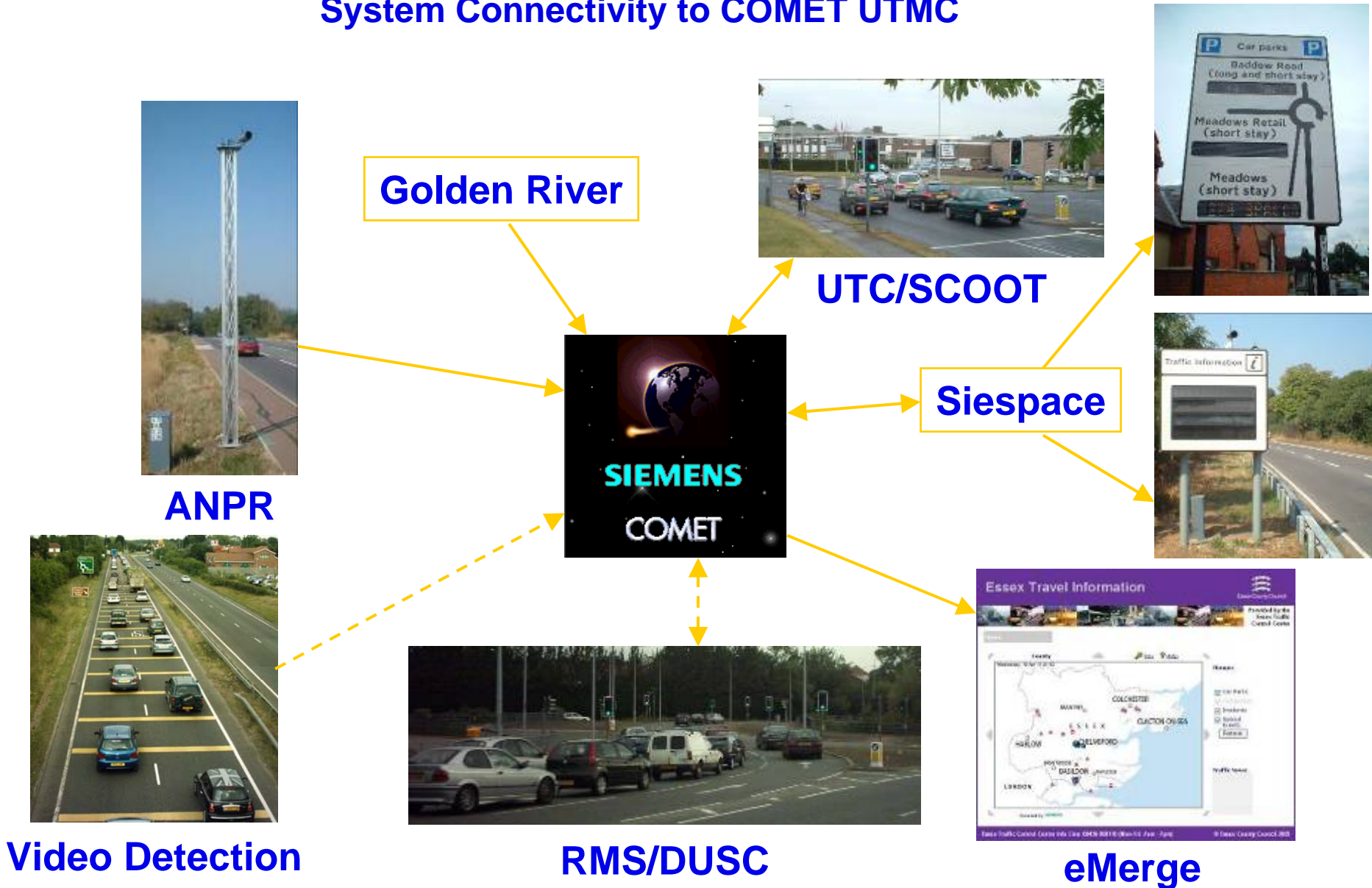
Essex Traffic Control Centre

is the focus for all our work on TMA
and on the targets we set

- Utilise all sources of information through COMET UTMC common database.
- Control strategies
 - *Routine, planned and unexpected*
 - *Intervention modelling*
- Multi modal travel advice
 - *Variable message signs*
 - *Internet / Radio broadcasts*
 - *Telephone/visitors*



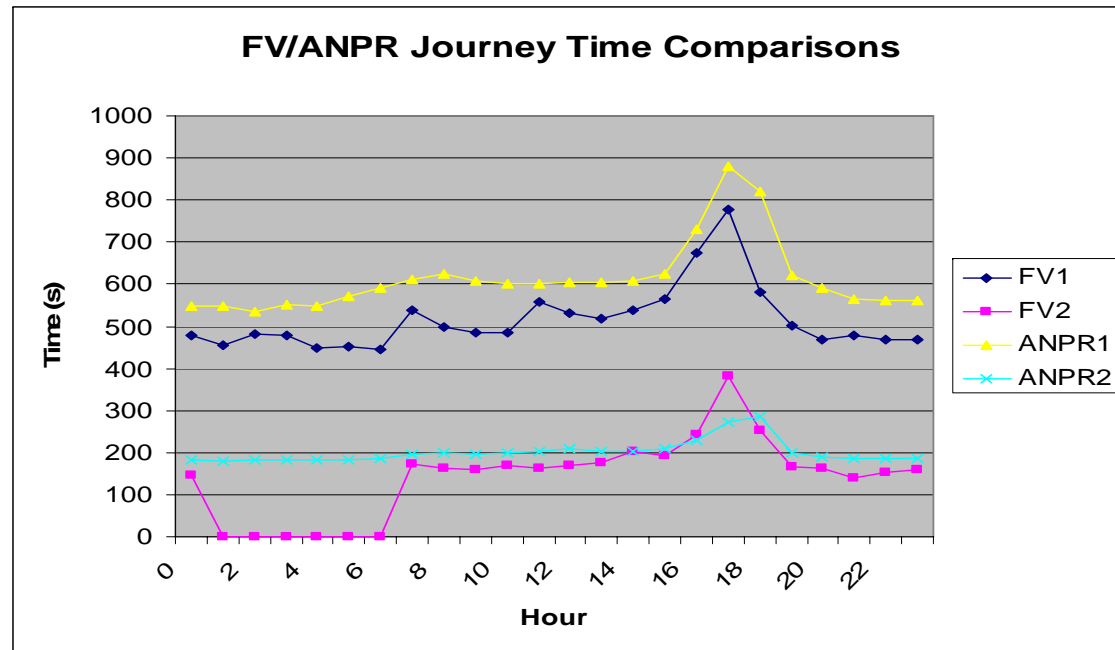
System Connectivity to COMET UTMC



How do we measure Journey Times?

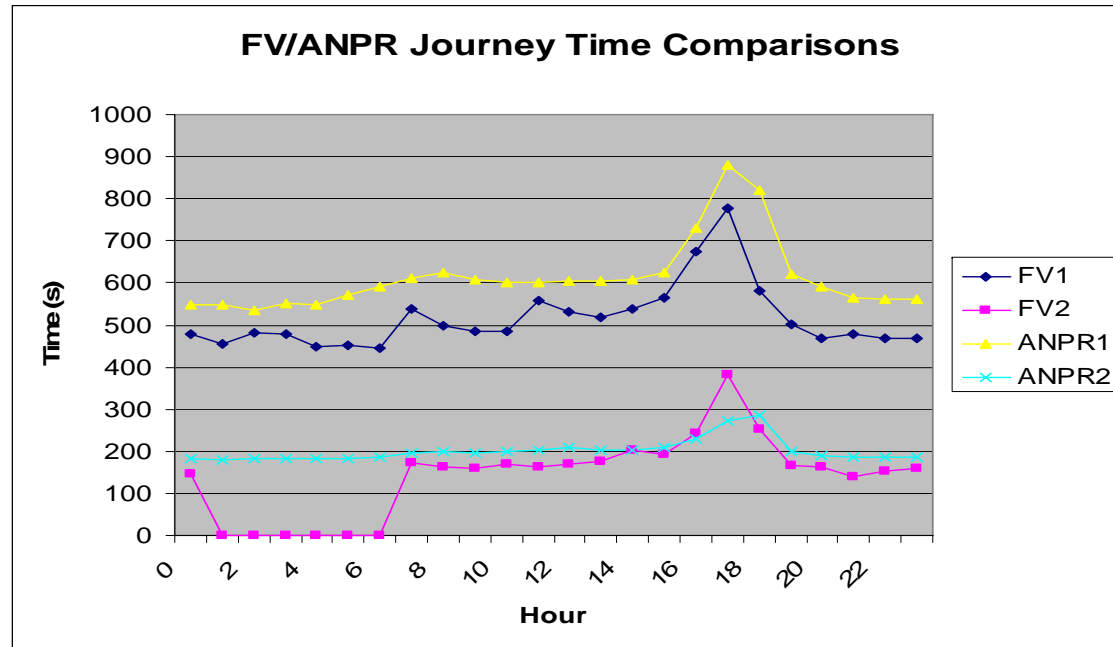
- **Norwich Union data**
- **ITIS data**
- **ANPR cameras**

Current Measures



- ANPR Cameras – (Number)
- ITIS data (FVD)
- Norwich Union (FVD Pilot)
- Quarterly data updates to monitor progress

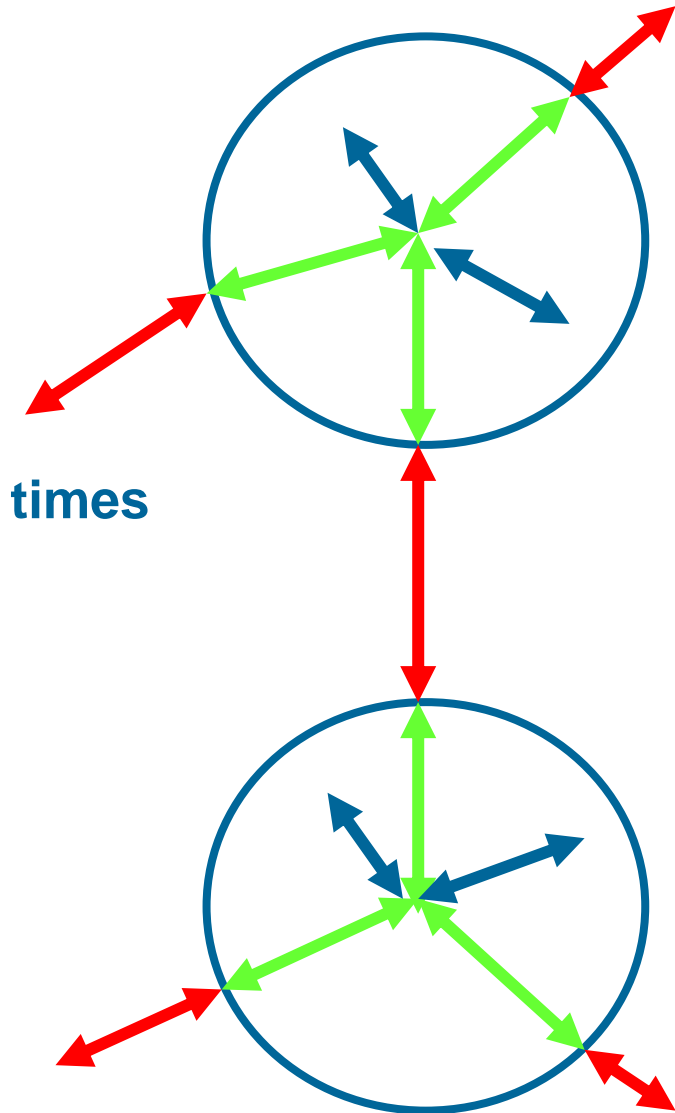
Next Steps



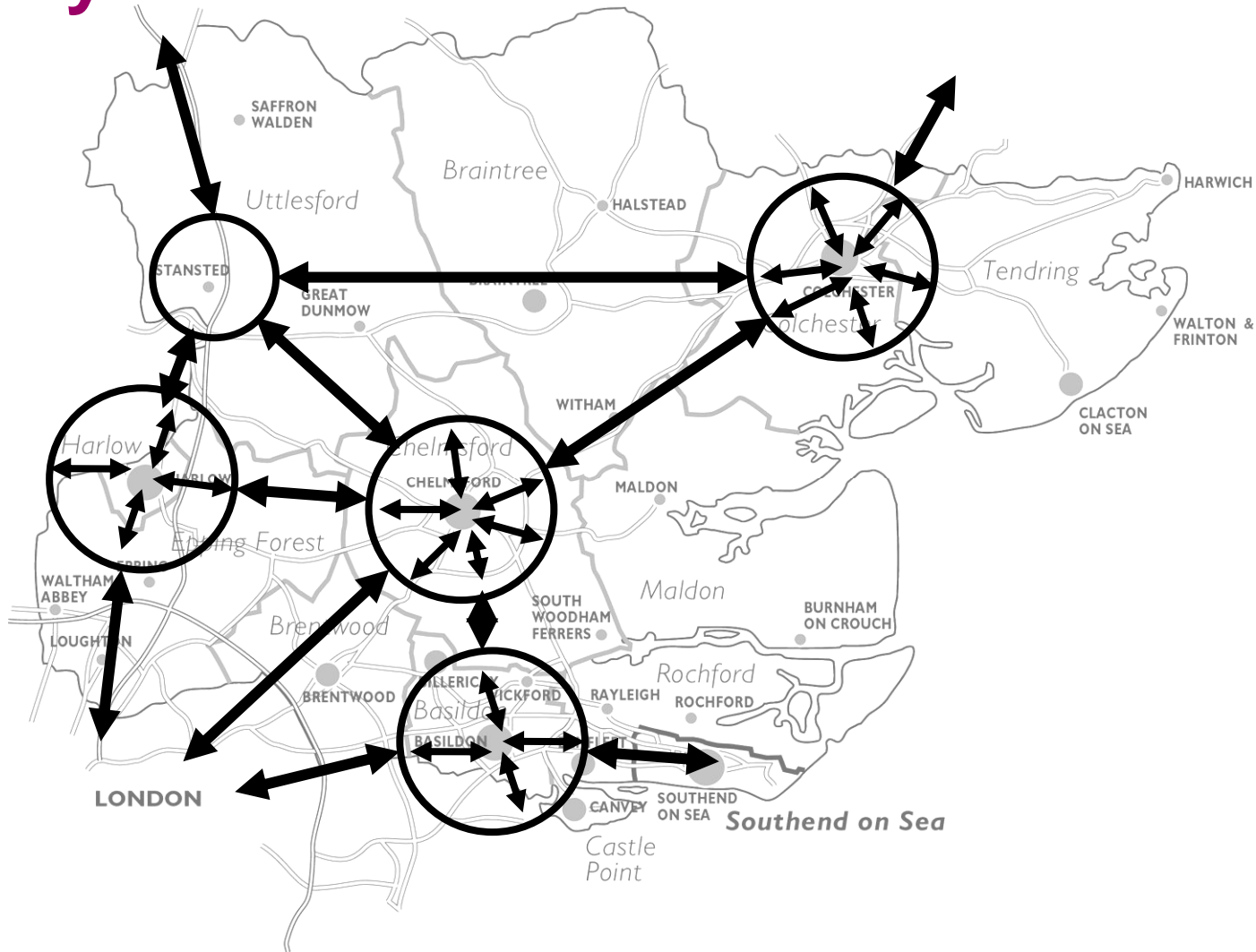
- Gather data, interpret and set targets
- Model interventions and profile trajectories
- Validate targets to road user requirement / perception
- Management tools for performance reporting
- New initiatives to achieve the targets
- Impact assessment of new development aligned to protecting or achieving the journey time targets

Judge performance

- Government targets
 - Local indicators and targets
- Improve reliability / reduce journey times
- *Radial urban access*
 - *Inter-urban travel*
 - *Internal access*
- Statistically robust
 - Take account of interventions



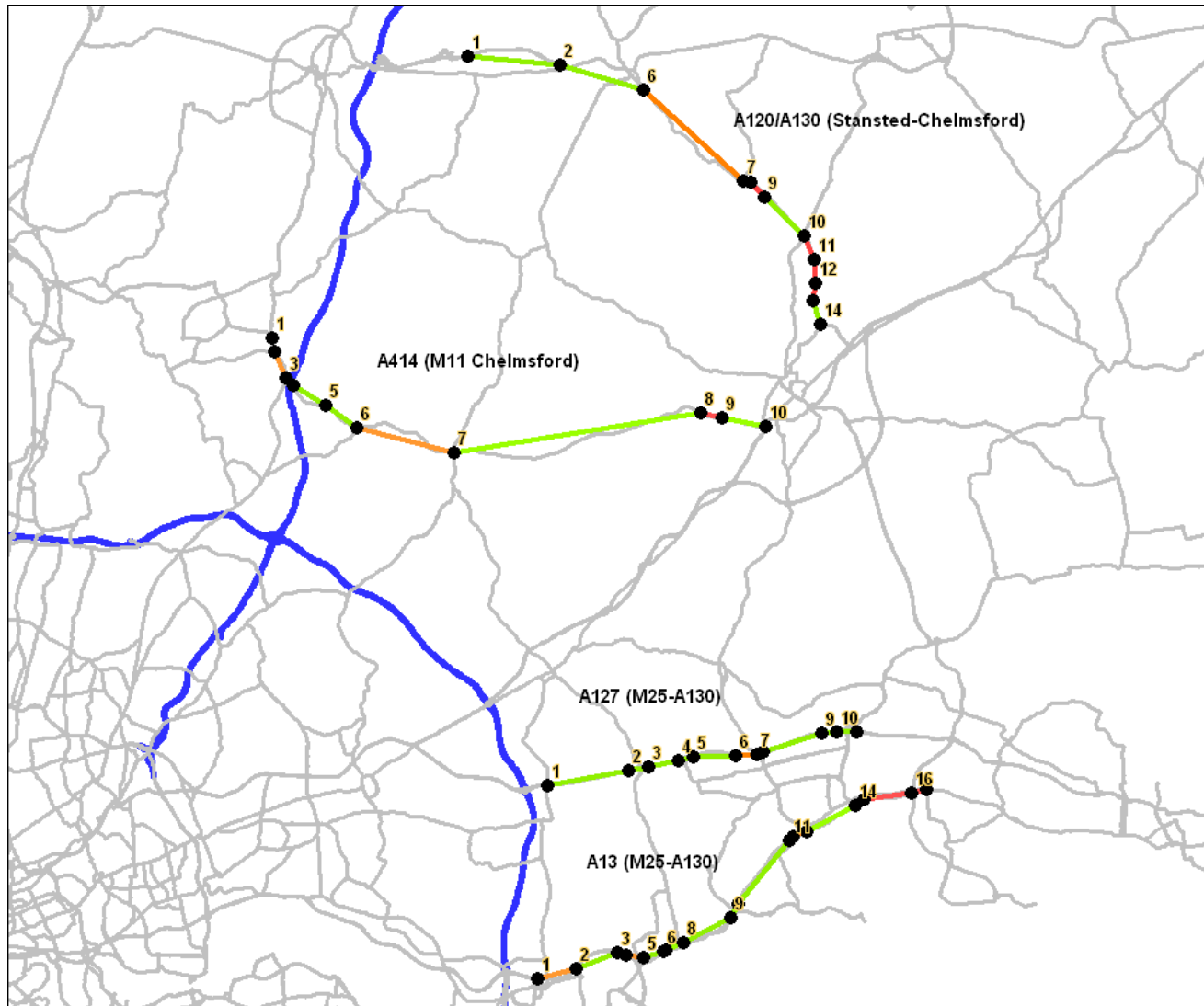
Key corridors



Performance Maps

Colour	Meaning	Limits
Green	On/above target	RI between 62% and 100%
Amber	Just under target	RI between 62% and 95%
Red	Severely off target	RI between 0% and 62%

Performance mapping colour code



Eastbound inter-urban performance map

Quarterly Reporting

Can drill down to non-performing links and identify delays due to:-

- Accidents
- Breakdowns
- “Bottlenecks” (capacity issues)

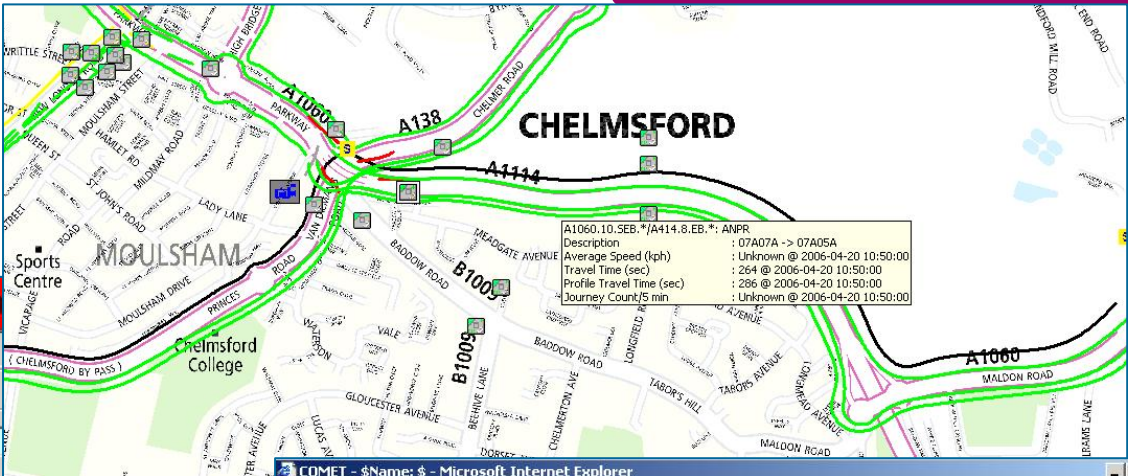
Intervention plan based on those areas failing to achieve targets
(quick wins).

Intervention and Control Strategies

- Over 80 identified for Chelmsford
- Now being reviewed and implemented via the Essex Traffic Control Centre
- Focus will initially be on Chelmsford then Countywide



Essex County Council



Profile Configuration

Data Type:

Day Type:

System Code Number:

Incident - 11405

ID: Create Date: Login:

Operator: Source ID:

Start Time: End Time: Infinite: State:

Type: Equipment SCN:

Other Ref:

Description:

Publish?

Entry History

```

==== 20/04/06 08:34:02 By Operator : null Login : simon.groom ====
Incident Closed

==== 20/04/06 07:44:07 By Operator : Login : jon.colley ====
ID set to '11405'
Create Date set to '2006-04-20 07:43:15.151'
Source set to 'COMET'
  
```

New Entry:



Current uses of COMET

Real time control

- Setting VMS legends

 - Journey times

 - Incident /accident notification

 - Diversion routes

 - Park & Ride information

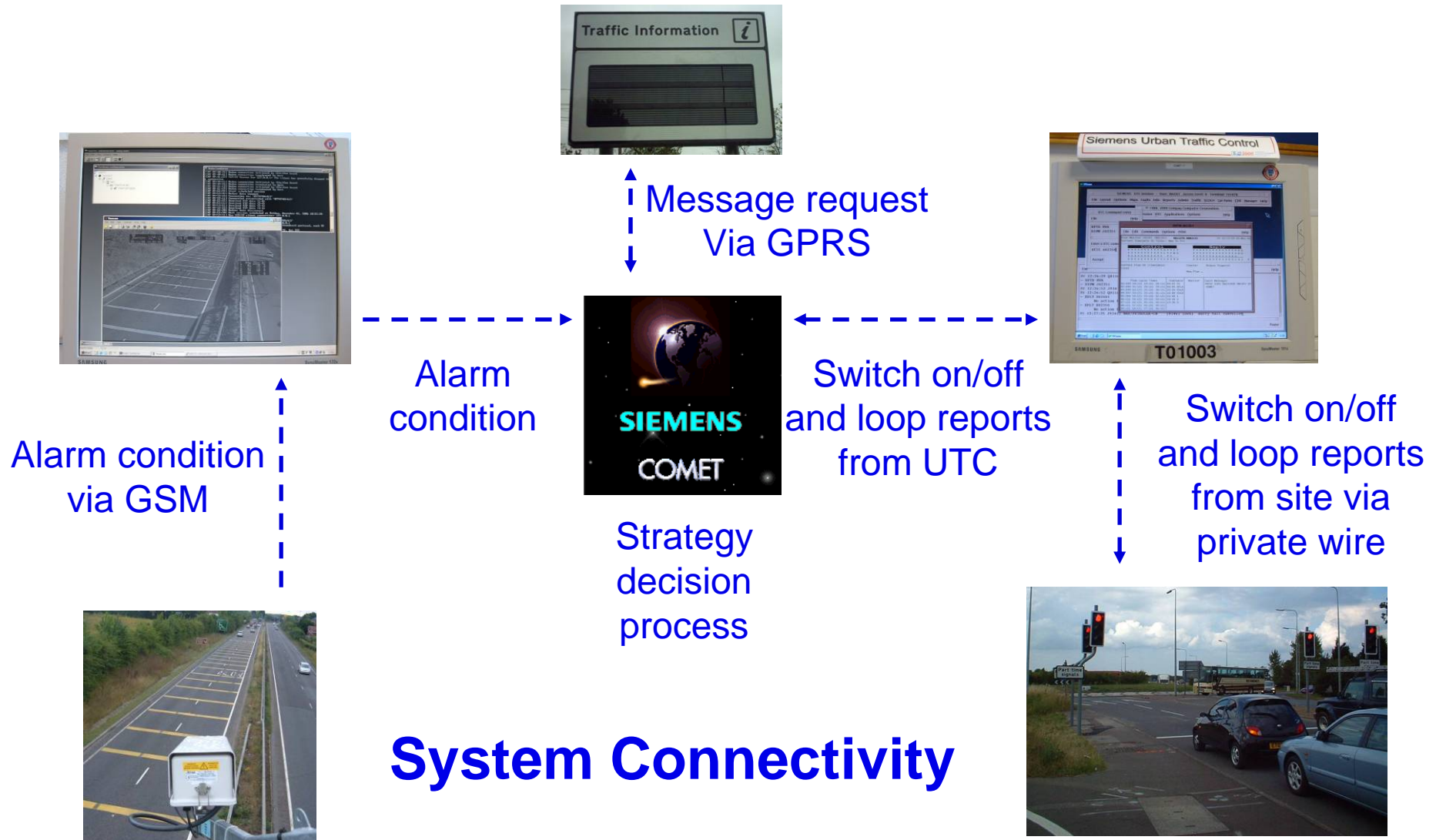
- Manual control of signals

 - M11 J7 & J8 clearance plans

Automatic control of signals

SCOOT plan changes automatically introduced based on critical link congestion

A120 Galleys Roundabout



System Connectivity

COMET UTMC Screen strategy selection

The screenshot displays the COMET UTMC interface. On the left, a map shows the Danbury area with a red line representing the A14 road. A yellow icon on the map has a context menu open. The menu includes options for 'Strategy Management', 'Incident Management', and 'Journey Time Measurement'. Below these are 'Action' and 'Display Details'. The 'Action' menu is expanded, showing options like '30706 : 07Z06 A414 Westbound - Free Text Legend 4 x 12 characters', 'Accident', 'Incident', and 'Roadworks'. The 'Incident' option is selected, and a list of incident details is shown on the right. The list includes incident IDs and descriptions, such as '7600 : 07Z06 A414 Westbound - ***Sign****Under****Test***' and '7637 : 07Z06 A414 Westbound - Park Ride Car Park XXX Spaces'. The '7637' entry is highlighted in blue.

Incident ID	Description
7600	07Z06 A414 Westbound - ***Sign****Under****Test***
7601	07Z06 A414 Westbound - No Reported Incidents
7602	07Z06 A414 Westbound - Essex Traffic Control 08456 000110
7603	07Z06 A414 Westbound - Blank Sign
7605	07Z06 A414 Westbound - Dartford Crossing Clockwise Closed
7607	07Z06 A414 Westbound - Accident Parkway Eastbound Closed
7609	07Z06 A414 Westbound - Parkway Eastbound Closed
7611	07Z06 A414 Westbound - Accident Parkway Westbound Closed
7613	07Z06 A414 Westbound - Parkway Westbound Closed
7615	07Z06 A414 Westbound - Army Navy Flyover Closed
7616	07Z06 A414 Westbound - Accident A12 Northbound Closed
7618	07Z06 A414 Westbound - A12 Northbound Closed
7620	07Z06 A414 Westbound - Accident A12 Southbound Closed
7622	07Z06 A414 Westbound - A12 Southbound Closed
7624	07Z06 A414 Westbound - Accident A130 Southbound Closed
7627	07Z06 A414 Westbound - A130 Southbound Closed
7632	07Z06 A414 Westbound - Free Park Ride Give It A Try
7633	07Z06 A414 Westbound - Park Ride Open
7637	07Z06 A414 Westbound - Park Ride Car Park XXX Spaces
7638	07Z06 A414 Westbound - Park Ride Car Park Almost Full
7639	07Z06 A414 Westbound - Park Ride Car Park Full
7640	07Z06 A414 Westbound - Expected time to Army Navy xx Minutes

Route: A1114 Baddow Bypass		Link: Maldon Road to Army and Navy		InBound	
Incident: Accident, breakdown or other obstruction on approach to roundabout downstream of flyover entry diverge (see Link ID 3A for incident upstream of flyover diverge)				ID:	3
Immediate Action: Inform radio and display general message "Delays at Army and Navy" on all Chelmsford VMS				Essex Traffic Control Centre We're getting Essex moving	
Contacts: Organisation Person Telephone No. Email address					
Scenario 0 <i>Link Blocked</i>		Scenario 1 <i>Link Partially Blocked</i>		Scenario 2 <i>Link Partially Blocked</i>	
No traffic can pass through link but roundabout circulating flow not affected		Some traffic can pass through and roundabout circulating flow not affected. Flyover open inbound.		Some traffic can pass through. A12 flowing, flyover closed or delays on Baddow Bypass greater than 10 minutes	
Diversion	Divert A414E and Park and Ride buses to use A12/A138 Divert A130S to A12/A414/A1016	Diversion	Divert A12N/A138 traffic to use B1137 Divert Chelmer Village/local traffic to B1137	Diversion	A414E to use A12/A130/A138CVS A130S to use A12/A414S/A1016
VMS Settings	A414E - "A1114 closed use A12/A138" 07203 - "A1114 closed use A12/A414S/A1016" Retain general warning on other Chelmsford signs.	VMS Settings	General warning of delays on all Chelmsford VMS (A138 and CV VMS)	VMS Settings	A414E "Long delays use A12/A138" 07203 - "Long delays use A12/A414S/A1016"
Traffic Control	Inbound priority plan for B1137 Springfield Rd. Inbound priority plan for B1007 New London Rd.	Traffic Control	((Use A138 Chelmer Road Pre signals))	Traffic Control	Inbound priority plan for B1137 Inbound priority plan for B1007
Emergency Response	Attendance to support Police and update ETCC Immediate removal of obstruction. If flyover open inbound direct all suitable vehicles on A1114 to use flyover.	Emergency Response	Attendance to support Police and update ETCC Immediate removal of obstruction.	Emergency Response	Attendance to support Police and update ETCC Immediate removal of obstruction.
Monitoring Requirements	Journey times on A1114 Baddow Bypass and A12 Chelmsford Bypass to be monitored every 5 minutes				

Traffic Management Strategy

- Clear vision linked to corporate objectives
- Multi-modal inter-connecting trips
 - *People and goods*
- Priority routes with managed conflicts
- Capacity provision and protection
- Asset management
- Performance indicators / regular review



What Opportunities does it present?

- Re-focus service delivery
- Policy review
- Greater control of the network
- Corporate support
- Engage stakeholders
- Develop new partnerships



Actions and Activities

- **Developing a suite of intervention strategies**
- **Short-term low cost schemes at known congestion hotspots**
- **Working with Essex Police to improve recovery & re-opening of the network after incidents**
- **Work place travel plans & practices**
- **Initiatives such as P&R**
- **Emergency recovery service**
- **Permit system**
- **Enforcement of moving traffic offences**