

Bringing service to life



# National Traffic Control Centre, England

Scott White, Head of Services

# Overview of NTCC

- Why do we need a National Traffic Control Centre?
- How was it established? – PFI
- What we do
- How we do it
- How are we measured?
- The Difference we have made
- Summary – Lessons Learnt

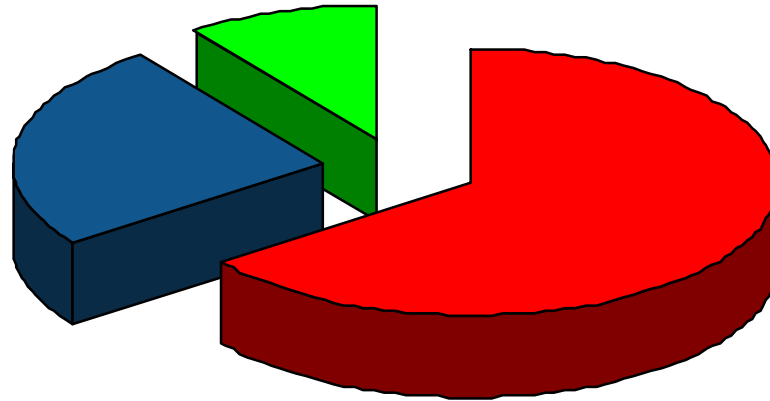


# Why do we need a NTCC

- Most congested routes in Europe
- 28m Cars 33m Vehicles
- 4,530 miles of motorways & trunk roads in England
- Just 2% of national roads but carries 33% of all traffic and 66% of all freight



# Why do we have Delays?



Accidents 25%



Congestion 65%

Roadworks 10%

# How was NTCC Established?

Government Agency £160M 10 Year PFI until 2011

Serco, Design build & Operate

Client – Highways Agency responsible for England's Motorways & Trunk road Network

Unique Concept – 1<sup>st</sup> of it's kind in the world!



# Role of NTCC

Improve journey time reliability

Influence choice of route, time and mode of travel

Provide alternative route advice

Reduce disruption caused by major incidents

Minimise delays because of road works



# Operational Role of NTCC

Collect traffic data using  
Stakeholder relationships &  
technology

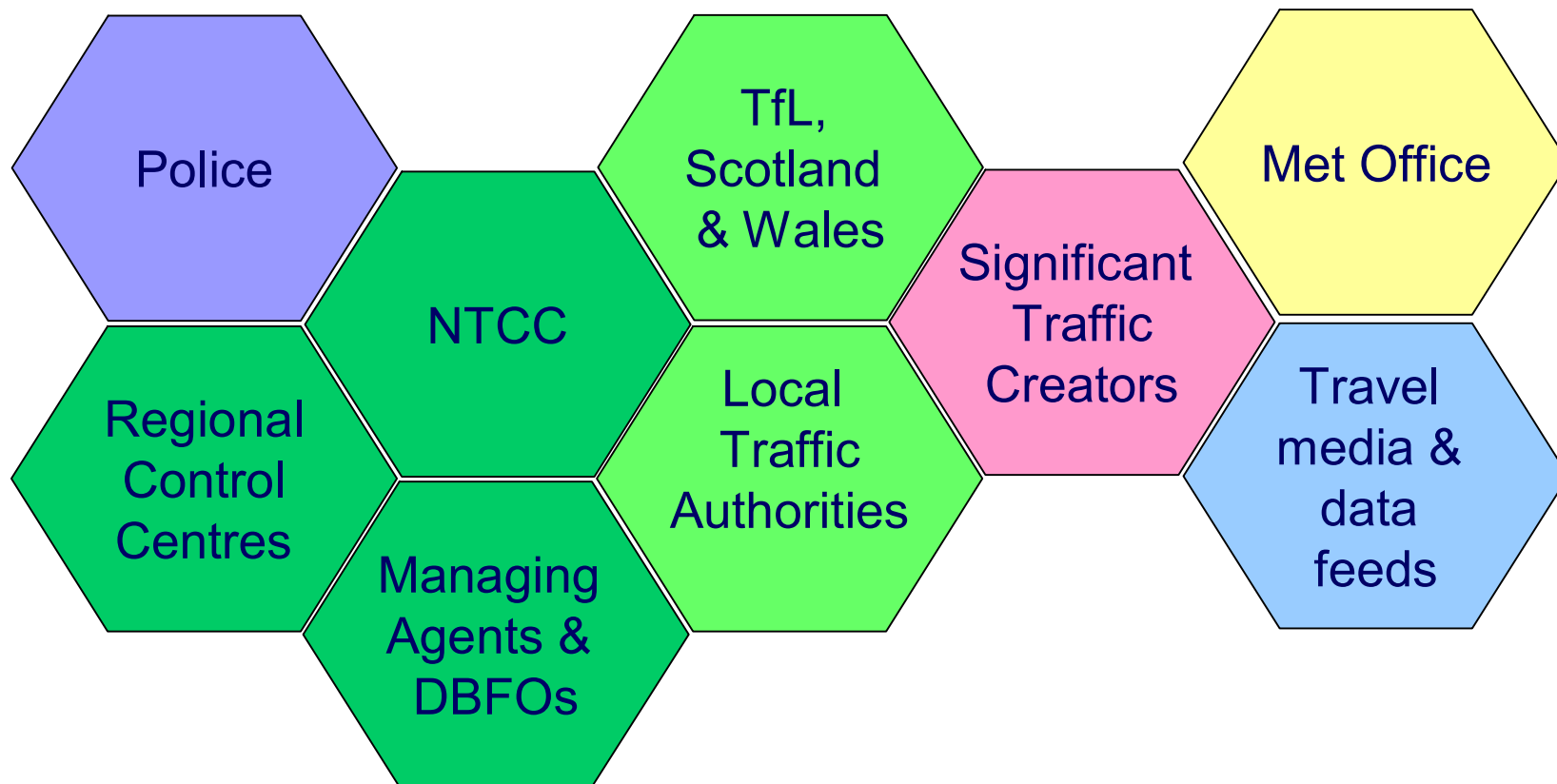
Analyse the data and formulate  
the most appropriate response

Disseminate information about the  
events to the public & partner  
organisations

Use historical data and  
operational knowledge for  
planned event management



# Collecting Data 1 – > 250 Operational Partners



# Collecting data 2 – technology

4,450 traffic sensors

1,033 ANPR cameras for journey times (448 sites)

1,000 CCTV cameras

1,250 MIDAS sites

1,470 other outstations to measure flow



# Operations – Unplanned Events



*Event that last 15 minutes or more and has a 'material effect' on capacity*

*Could include:*

*Accidents*

*Major debris*

*Adverse weather conditions*

# Operations – Planned Events

Also lasting >15 minutes with a ‘material effect’ on the network *planned events include:*



Roadworks and abnormal loads that *reduce capacity.*

Major entertainment and sporting events that *generate extra traffic.*

# Response

Receive alert

Gather information

Validate reports/readings

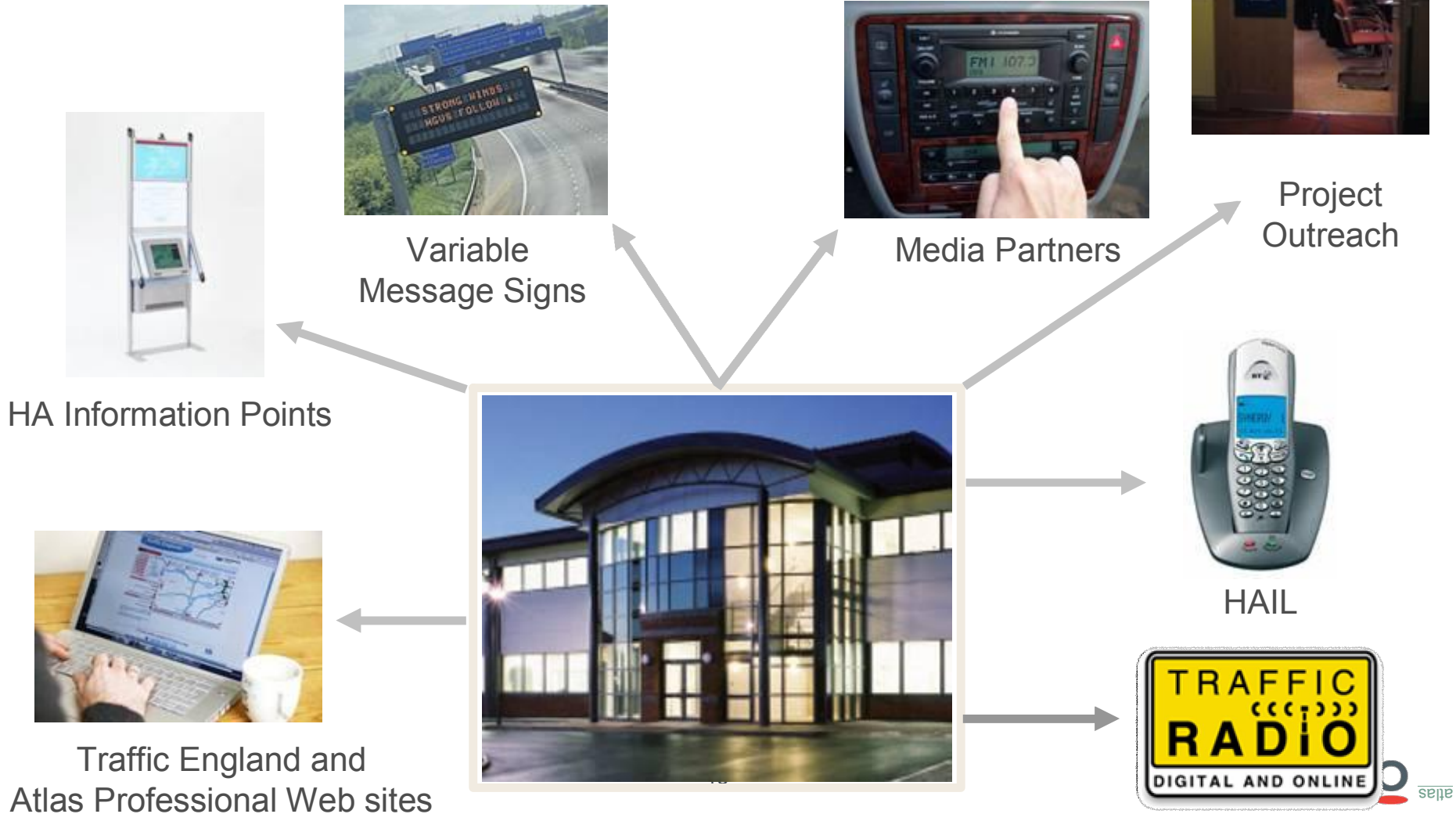
Create Event

Select best response plan

Implement plan and communicate



# Distribution of information



- Home
- Traffic Map
- Motorway Traffic Flow
- Disruptions Search
- Traffic Alerts
- FAQs

### Real-Time Traffic Information



#### View Traffic Information By Area

Click on the map or select a link from the list below:

- ▶ **North**  
eg. Newcastle, Carlisle, Sunderland
- ▶ **Central North**  
eg. Leeds, Manchester, Liverpool
- ▶ **West Midlands**  
eg. Birmingham, Wolverhampton, Coventry
- ▶ **East Midlands**  
eg. Norwich, Nottingham, Leicester
- ▶ **South West**  
eg. Exeter, Plymouth, Truro
- ▶ **South East**  
eg. London, Brighton, Dover
- ▶ **South**  
eg. Southampton, Bournemouth, Portsmouth

#### View Traffic Information By Road

Click to view the most popular motorways:

- M25
- M1
- M4
- M5
- M6
- M40

#### Real Time Traffic Alerts

Currently there are no Traffic Alerts to display.

#### Motorway Traffic Flow



The [Motorway Traffic Flow](#) displays the latest real time traffic information for your selected motorway.

#### Disruptions Search



[Disruptions search](#) shows future planned roadworks and current traffic information for motorways and A roads.

30 | September | 2008

Search

**Live Updates**  
24 hours a day  
**08700 660 115**

**TRAFFIC RADIO**  
DIGITAL AND ONLINE  
**Traffic Radio**  
Setting out on a journey? Before you go, listen to Traffic Radio to hear the latest ...

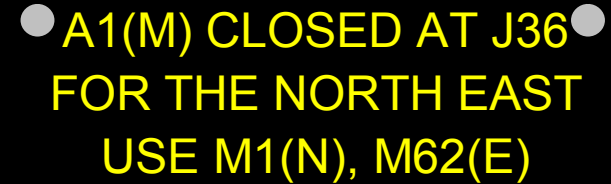
[Customer Feedback Form >>>](#)

# Variable Message Signs

NTCC uses 350 variable message signs at strategic nodes

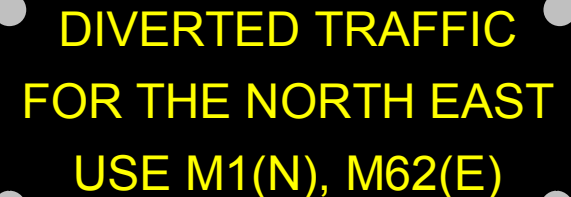
Access to a total of 2,566 VMS

- Travel time information – 313 VMS
- Improving the predictability of travel times for drivers
- Improve the traffic flow on the network
- Enhance the credibility of VMS



A1(M) CLOSED AT J36  
FOR THE NORTH EAST  
USE M1(N), M62(E)

A black rectangular sign with rounded corners and four white circular markers at the corners. The text is in yellow, bold, uppercase letters.



DIVERTED TRAFFIC  
FOR THE NORTH EAST  
USE M1(N), M62(E)

A black rectangular sign with rounded corners and four white circular markers at the corners. The text is in yellow, bold, uppercase letters.

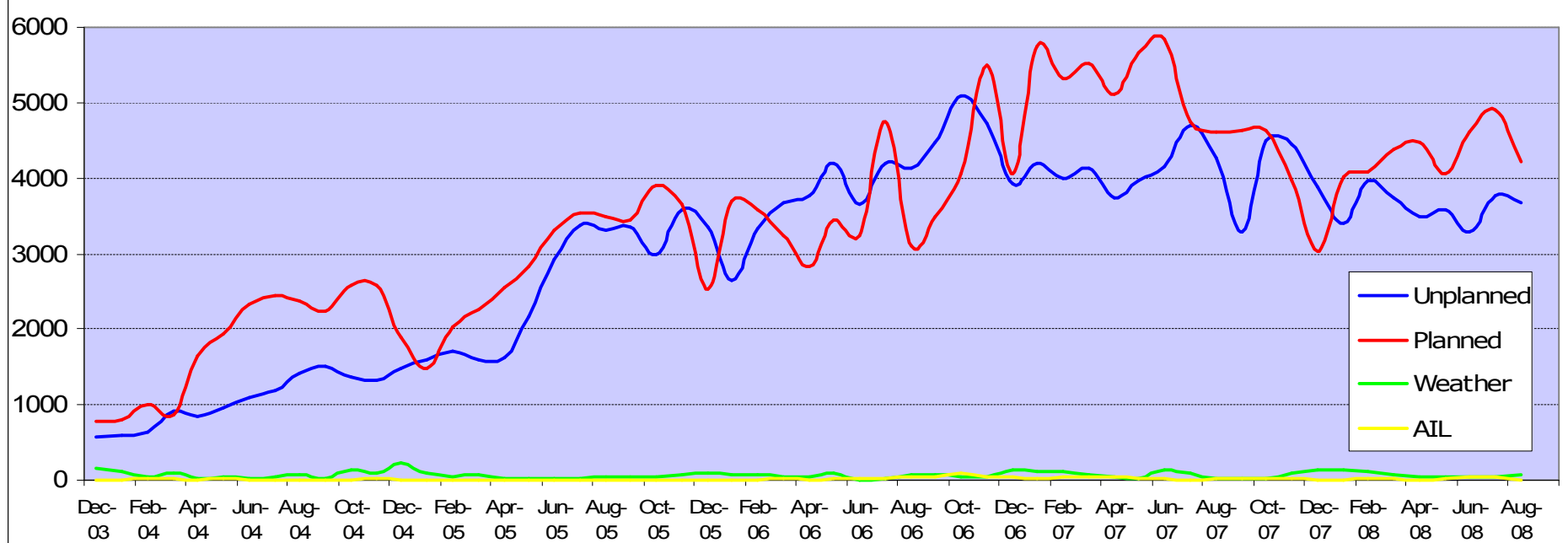


TO SCOTCH CORNER  
25 MILES  
26 MINS

A black rectangular sign with rounded corners and four white circular markers at the corners. The text is in yellow, bold, uppercase letters.

# How busy are we

## Event Handling by NTCC since start of operations



# NTCC – Contract Service Performance

22 Contract Services covering all aspects of Service Delivery including

49 different / diverse measures within those Services

Self-monitoring regime in place to ensure Services meet and exceed customer expectations and provide best information available to stakeholders and road users

All Services reported on monthly

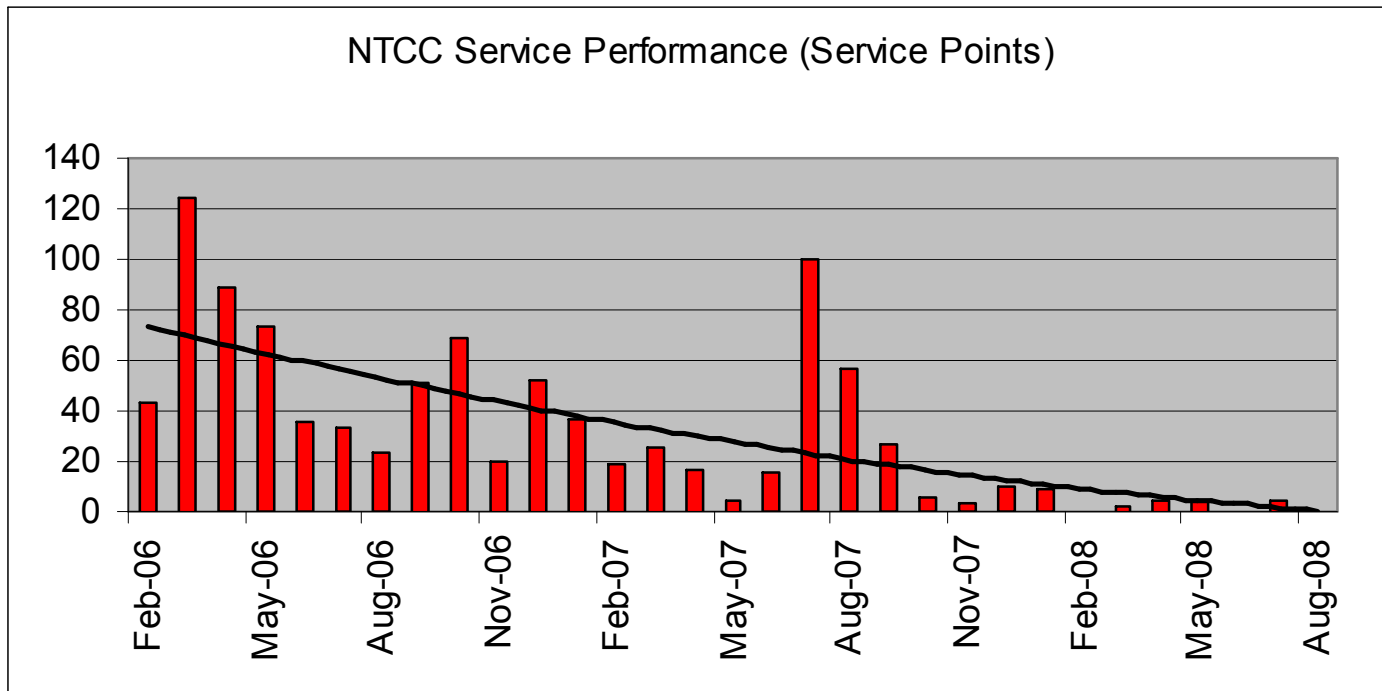
Service Points incurred if Contract Service Level Targets not achieved

Service Points incur financial penalties

All measures are designed to provide assurance that Services are being delivered to requirements and beyond

Early contractual difficulties experienced due to conceptual variation and changing technology

# NTCC Actual Performance



- Demonstrating commitment to improve and build on performance of Services
- By driving Service Points Down and
- Performance up

# The difference NTCC has made

Strategic Approach to managing traffic across boundaries

Key role in Major Incidents

Information hub for strategic and in the future local events

Consistent message going out to Media partners

Vast repository of data for future planning

Continually increasing the credibility of VMS

Consolidation of knowledge and experience

# Summary – Lessons Learnt

Successful PFI continuously improving with tangible benefits

Information delivery vital in helping reduce congestion

Stakeholder engagement key to success

ITS development continually enhancing our services

PFI's must be about progress over time and allow for continual improvement with mechanisms for change.

**Thank You**

**Questions?**