
Transport
for London

Managing London's Road Network

London TravelWatch
Board Meeting
27 September 2011

Garrett Emmerson

Chief Operating Officer Surface Transport

TfL's Road Management Responsibilities

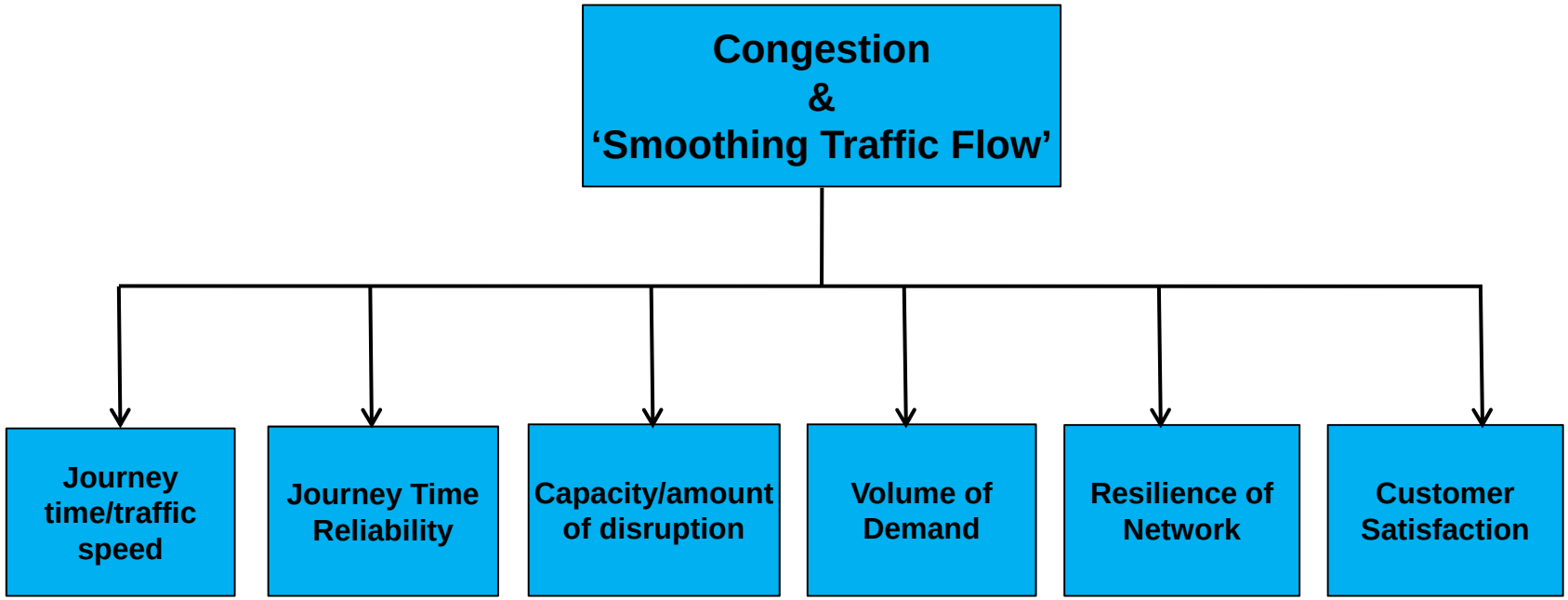
- Full operational responsibility for the Transport For London Road Network (TLRN – the 'Red Routes'), consisting of:
    - 5% (580km) of London's total road length, but;
    - Carrying over 30% of its traffic, and;
    - Up to 40% of the total economic value (GVA) of traffic movement across the city.
- Through the Traffic Management Act, a strategic responsibility for coordinating works and ensuring the free flow of traffic on the Strategic Road Network (SRN) – a further 500 km of Borough maintained and heavily trafficked major ('A') roads.
- Responsibility for the maintenance, management and operation of all of London 6000 traffic signals on all roads across London, and for the real time operational control of the road network through the London Streets Traffic Control Centre (LSTCC).

The Economic Significance of the Road Network

Over 80% of all passenger journeys (including around 10m car trips/day), and nearly all freight movements, use the road network in London

- London's strategic roads are on average 40% more densely trafficked than roads in other UK conurbations
- London has around 20% of the UK congestion, costing London's economy at least £2bn a year
- Over 3/4 of this is on the Transport for London and Borough Principal Road Networks.
- 15% of UK congestion is therefore concentrated on around 1500km of the country's 400,000km of road network!

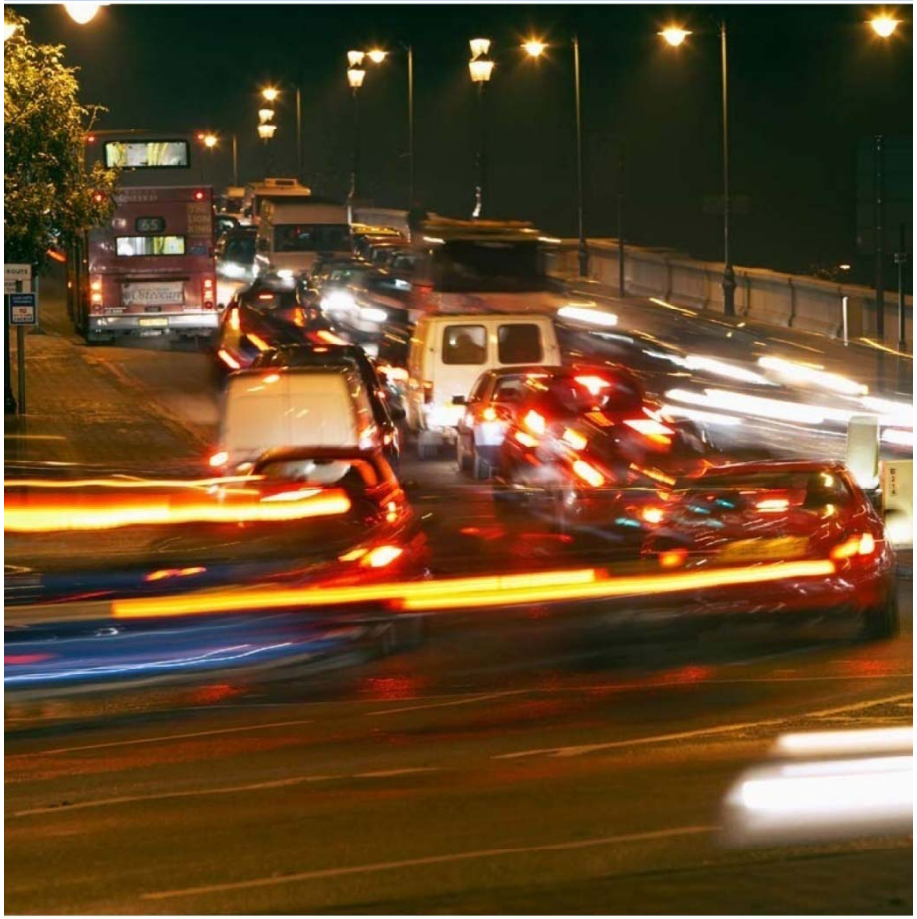
Measuring the Performance of the Road Network



Draft Network Operating Strategy

Information and technical guidance to local highway authorities and others on Transport for London's operational management of the road network in London

May 2011



MAYOR OF LONDON

Transport for London

Contents of the NOS

1. Maximising the Efficient & Reliable Operation of the Road Network
2. Minimising the Impact of Planned Interventions
3. Minimising Disruption from Unplanned Events
4. Managing Demand & Achieving Modal Shift
5. Measuring Outcomes

1. Maximising the efficient and reliable operation of the Road Network

Signal Timing Reviews

Over the last two years TfL has reviewed 2,011 traffic lights resulting in a **7% reduction in stop start delay** for traffic, with no net dis-benefit to pedestrians.

SCOOT Programme

SCOOT technology has now been installed and optimised at a further **314 locations**.

These new sites are delivering, on average, a **12.4% reduction in delays.**

Pedestrian Countdown at Traffic Signals (PCaTS)

8 Trial sites introduced in London in summer 2010.

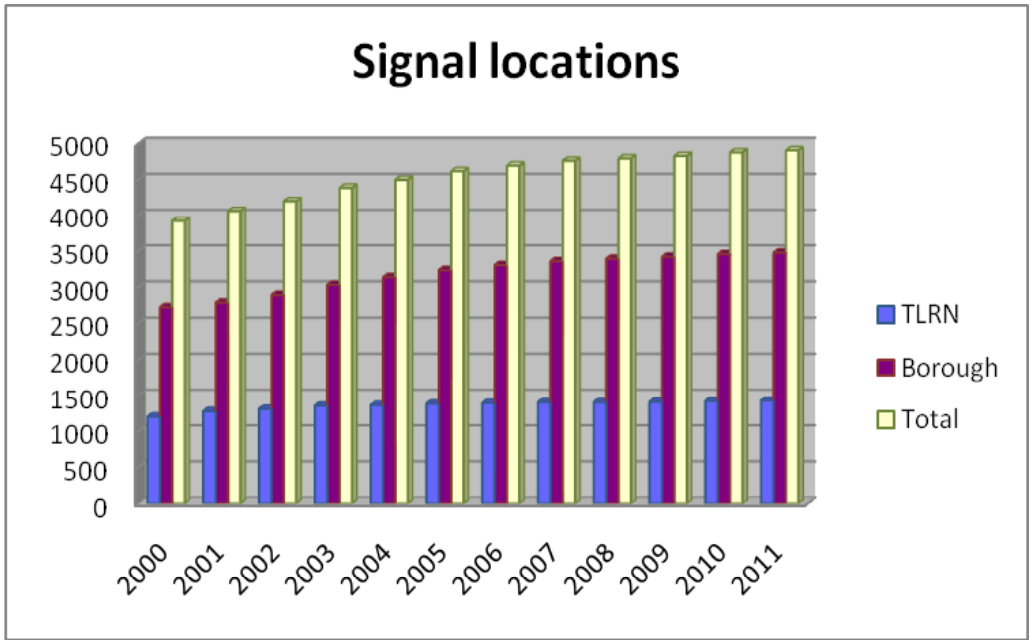
A full report has been finalised to seek approval for a wider roll-out; results are very encouraging:

- 77% of pedestrians (and 94% of mobility impaired pedestrians) positive about PCaTS.

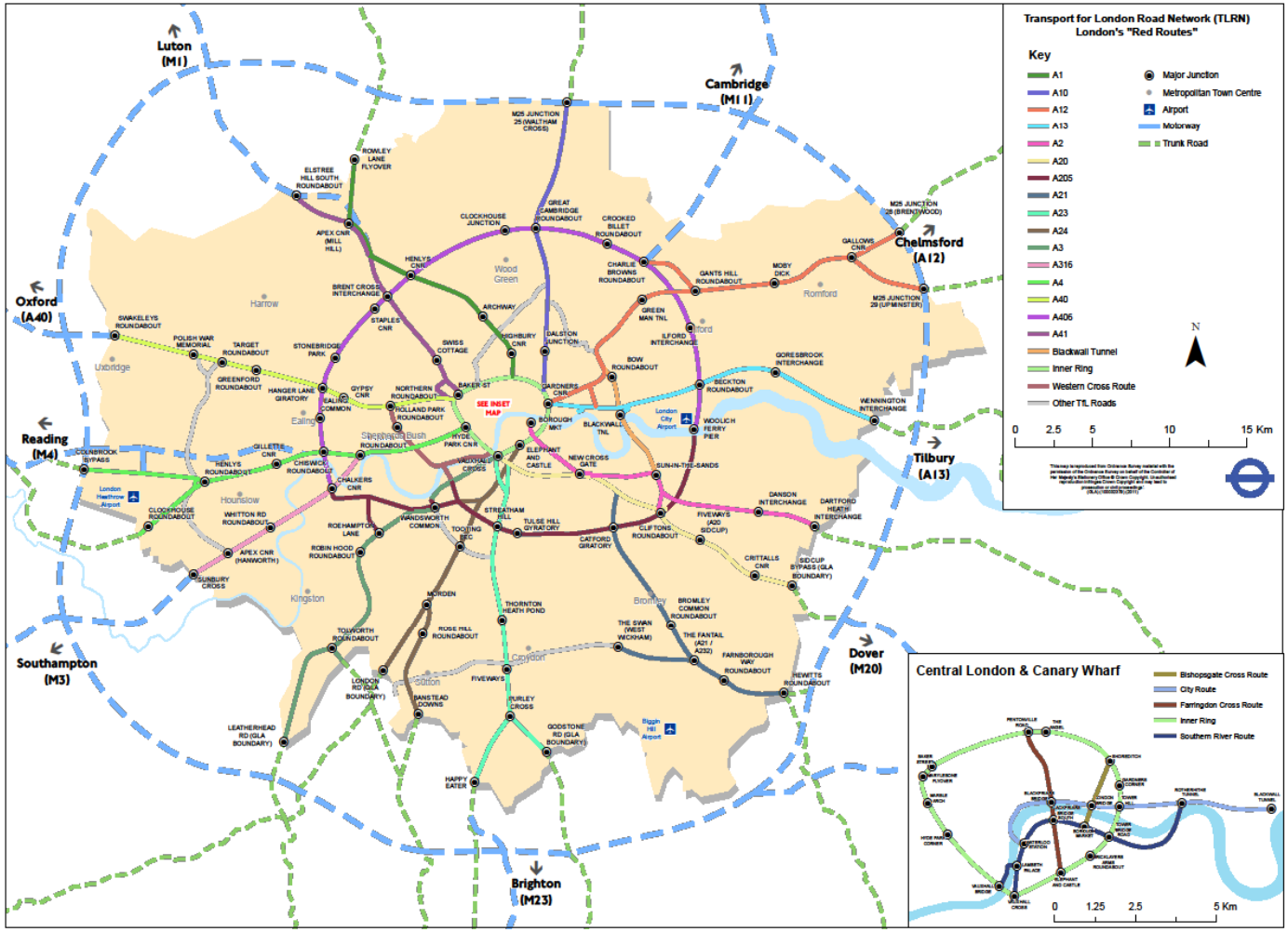
Removal of Unnecessary Traffic Signals

Traffic signals have been removed from 14 locations (5 on the TLRN and 9 on borough roads) this year.

Growth has slowed significantly in the last few years.



Corridor Management Approach & Improving Journey Time Reliability



Journey Time Reliability

AM Peak		Year / Period	2010/11									2011/12							
Route Type	Corridor	Direction	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5
Radial	A4	Inbound	90.7%	88.0%	86.4%	87.3%	91.1%	87.3%	85.9%	88.1%	85.8%	91.7%	88.3%	90.0%	89.0%	91.4%	86.4%	88.0%	88.3%	91.9%
Radial	A40	Inbound	79.5%	75.8%	76.8%	76.9%	78.3%	78.2%	76.7%	78.9%	75.3%	83.5%	81.0%	78.5%	80.9%	77.8%	78.6%	77.7%	78.0%	81.2%
Radial	A41	Inbound	87.9%	81.3%	87.0%	88.2%	92.4%	82.9%	83.2%	84.7%	86.9%	88.7%	89.0%	89.9%	81.2%	82.6%	79.9%	82.0%	86.9%	93.6%
Radial	A1	Inbound	79.4%	79.0%	84.0%	82.3%	83.6%	79.3%	76.5%	81.3%	81.9%	81.1%	81.5%	82.8%	81.0%	78.2%	85.2%	81.4%	84.4%	81.6%
Radial	A10	Inbound	89.1%	87.9%	87.4%	87.4%	88.0%	86.6%	83.1%	84.3%	86.7%	87.3%	87.5%	84.8%	86.8%	89.4%	88.5%	89.7%	89.4%	90.7%
Radial	A12	Inbound	89.2%	86.3%	87.6%	87.6%	87.8%	86.0%	84.9%	83.8%	85.3%	89.9%	84.5%	86.8%	85.0%	86.8%	83.9%	86.8%	86.0%	87.2%
Radial	A13	Inbound	90.9%	87.3%	86.0%	87.4%	87.9%	88.9%	86.3%	82.9%	79.9%	87.7%	88.7%	87.4%	85.2%	88.9%	91.7%	86.7%	85.7%	87.9%
Radial	A2	Inbound	91.1%	89.8%	82.7%	86.0%	91.1%	84.9%	82.2%	82.6%	84.2%	88.3%	84.1%	82.2%	83.7%	81.9%	86.9%	81.6%	87.6%	88.8%
Radial	A20	Inbound	90.0%	89.9%	92.2%	89.6%	90.2%	86.7%	86.6%	89.0%	85.2%	90.0%	90.0%	91.3%	90.8%	87.4%	91.6%	89.5%	92.0%	90.5%
Radial	A21	Inbound	87.4%	90.4%	91.9%	85.4%	94.0%	88.7%	90.3%	90.6%	84.4%	86.3%	86.4%	90.4%	89.2%	86.9%	89.1%	90.8%	89.4%	92.9%
Radial	A23	Inbound	86.3%	84.8%	85.8%	82.9%	81.7%	81.7%	84.5%	83.0%	85.4%	86.8%	85.0%	86.1%	84.7%	88.0%	85.8%	87.2%	87.2%	87.4%
Radial	A24	Inbound	91.5%	89.5%	84.8%	90.2%	88.0%	87.6%	88.7%	90.2%	87.1%	93.5%	85.9%	88.8%	85.5%	87.3%	83.4%	86.6%	87.0%	92.9%
Radial	A3	Inbound	87.2%	85.5%	86.9%	84.0%	91.0%	86.0%	82.3%	88.0%	88.0%	91.2%	82.9%	89.0%	89.1%	94.3%	81.9%	88.4%	93.4%	95.9%
Radial	A316	Inbound	96.3%	78.1%	78.8%	80.3%	84.7%	89.0%	82.1%	89.3%	81.9%	86.9%	84.4%	88.7%	85.8%	86.3%	85.1%	87.4%	84.0%	85.1%
Radial	Blackwall	North	71.8%	77.3%	78.7%	73.8%	77.9%	74.3%	69.6%	78.5%	75.3%	79.4%	76.5%	77.2%	74.7%	69.6%	77.8%	74.4%	79.3%	80.3%
Future	*Consideration*	*n/a*	*87.2%*	*87.8%*	*87.2%*	*86.6%*	*87.2%*	*86.4%*	*85.4%*	*85.0%*	*83.9%*	*85.2%*	*89.0%*	*87.9%*	*88.2%*	*89.6%*	*87.3%*	*86.6%*	*88.2%*	*88.9%*
Orbital	A406	Clockwise	92.9%	88.5%	92.0%	91.0%	92.5%	91.4%	87.8%	88.3%	89.2%	91.6%	90.6%	90.0%	90.0%	88.1%	86.9%	88.2%	90.3%	94.6%
Orbital	A406	Anti-clockwise	89.7%	88.5%	88.3%	85.8%	88.8%	86.0%	84.5%	86.0%	86.5%	91.7%	87.2%	86.5%	88.7%	90.1%	84.6%	87.6%	90.0%	90.9%
Orbital	A205	Clockwise	87.3%	87.8%	83.8%	84.8%	86.4%	86.1%	84.3%	88.0%	86.9%	86.8%	88.2%	84.2%	85.8%	84.0%	86.7%	87.7%	86.9%	87.3%
Orbital	A205	Anti-clockwise	90.1%	87.9%	88.2%	89.5%	91.0%	87.7%	87.9%	88.2%	86.4%	90.0%	87.5%	87.1%	87.9%	89.3%	88.3%	89.0%	87.4%	90.8%
Orbital	Inner Ring	Clockwise	84.9%	83.6%	83.1%	83.7%	85.0%	83.3%	84.0%	84.1%	83.8%	87.6%	83.5%	84.0%	85.1%	83.9%	82.3%	82.4%	82.0%	83.8%
Orbital	Inner Ring	Anti-clockwise	85.3%	82.9%	82.2%	81.6%	84.3%	83.1%	81.9%	80.6%	81.6%	87.1%	83.7%	83.7%	83.2%	82.8%	81.9%	82.8%	82.7%	84.7%
Central	Bishopsgate	North	85.5%	86.3%	84.0%	85.0%	90.0%	82.9%	85.6%	85.1%	84.9%	88.0%	86.4%	87.2%	84.9%	85.7%	85.5%	84.2%	84.8%	83.4%
Central	City	West	77.8%	77.6%	81.6%	80.8%	80.7%	78.2%	78.3%	78.3%	73.9%	83.0%	79.1%	79.1%	81.5%	79.8%	80.0%	78.9%	79.7%	86.0%
Central	Farringdon	South	90.1%	87.4%	87.5%	87.9%	89.9%	89.0%	88.3%	85.6%	88.4%	88.2%	89.2%	88.1%	87.4%	90.5%	88.2%	88.1%	90.5%	90.3%
Central	South river	East	83.7%	81.4%	83.2%	81.1%	84.1%	83.6%	83.1%	82.7%	81.3%	85.3%	84.7%	84.9%	81.4%	83.1%	79.2%	80.4%	81.0%	84.2%
Central	West	East	90.3%	89.9%	85.9%	88.0%	88.7%	88.3%	79.3%	87.3%	88.6%	85.6%	86.3%	83.9%	82.6%	86.7%	84.1%	83.5%	83.5%	85.7%
Central	Central	All Above	85.0%	84.4%	84.2%	84.7%	85.8%	84.1%	80.8%	83.5%	82.6%	85.2%	84.1%	83.1%	82.8%	84.4%	82.8%	82.2%	82.8%	86.0%
Central	Central	All Directions	88.4%	87.3%	87.4%	86.7%	87.5%	86.4%	83.4%	84.8%	85.7%	88.5%	87.2%	87.4%	86.5%	87.4%	85.6%	85.7%	85.2%	87.9%
TLRN	TLRN	All Above	88.6%	86.1%	86.5%	86.1%	88.3%	85.9%	84.0%	85.5%	85.0%	89.0%	86.5%	86.6%	86.4%	86.5%	85.3%	86.0%	87.4%	89.6%
TLRN	TLRN	All Directions	90.5%	88.9%	89.0%	88.4%	90.3%	88.5%	86.5%	87.6%	87.1%	90.2%	88.9%	89.0%	89.1%	89.2%	88.2%	88.6%	89.9%	91.3%
Pan London	All	All Directions	90.3%	88.8%	88.7%	88.4%	90.2%	88.4%	86.5%	87.6%	87.1%	90.1%	88.6%	88.9%	88.8%	89.0%	88.2%	88.4%	89.6%	91.0%

2. Minimising the Impact of Planned Interventions

Mayor's Code of Conduct on Roadworks

Over 90% of the works undertaken on the TLRN are now covered by the Code.

Collaborative working has saved over 1300 days of disruption this year.

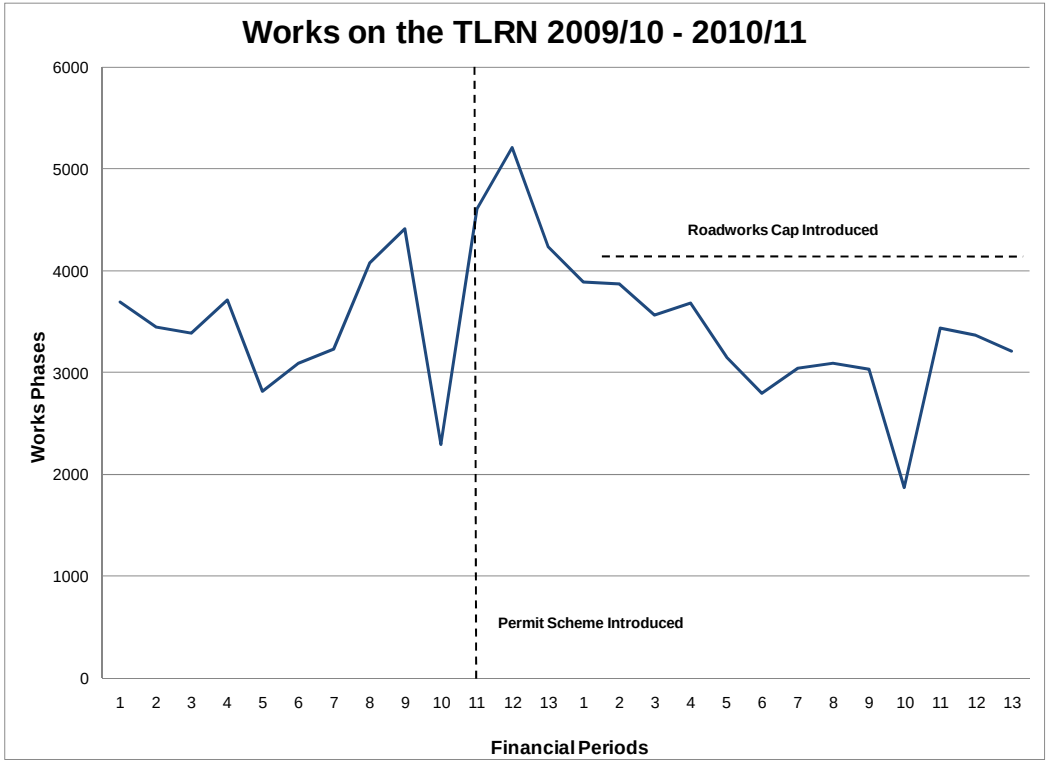
A 3% increase in the proportion of out of hours working.

London Roadworks Permit Scheme

TfL granted around 48,000 and refused around 10,000 roadworks permits in 2010/11.

On the TLRN, TfL has recorded:

- a 13% reduction in the overall number of works taking place; and
- a 25% reduction in peak levels of roadworks activity, compared with 09/10.



Improving Enforcement and Compliance

Over 200 Red Route Officers now report on roadworks taking place on the TLRN.

- 454 Fixed Penalty Notices have been given to works promoters, including 160 for working without a permit.

- In addition, TfL recorded 858 days of works over-runs, a 29% increase on last year.

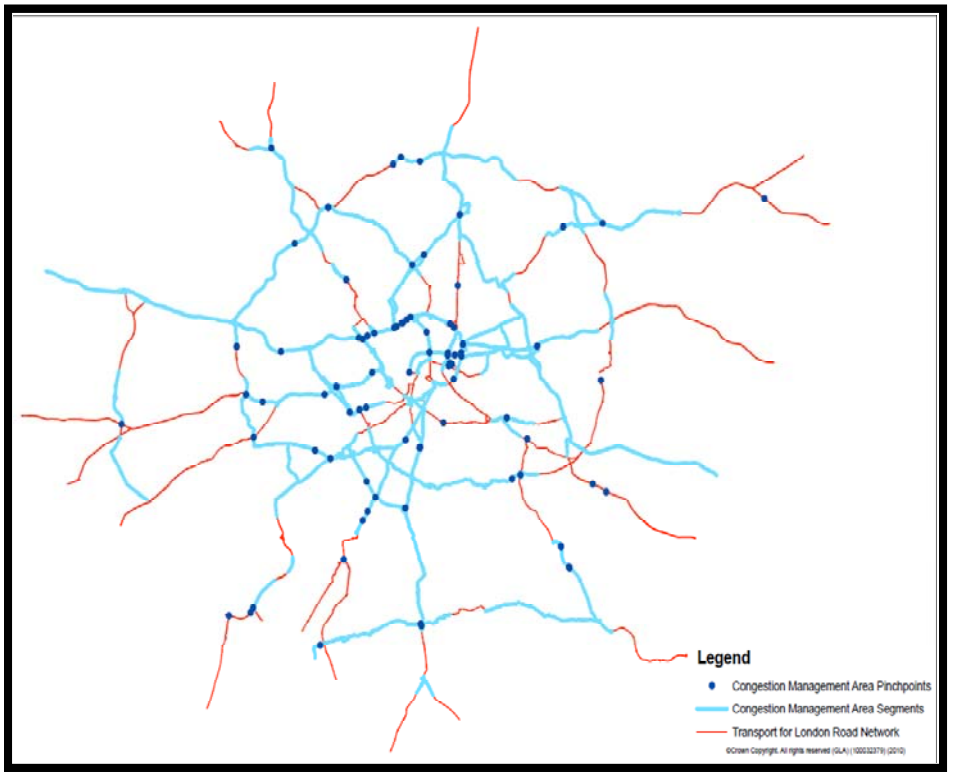
Lane Rental

However, more still needs to be done.

67% of all road and streetworks, accounting for 76% of disruption - representing 85% (£255m) of the total economic cost - take place on just over 50% (300km) of the TLRN.

TfL has identified these areas, representing less than 3% of London's overall road network, as 'Congestion Management Areas' (CMA's).

It will be within the CMA's where TfL will look to introduce its *targeted* and *avoidable* Lane Rental scheme.



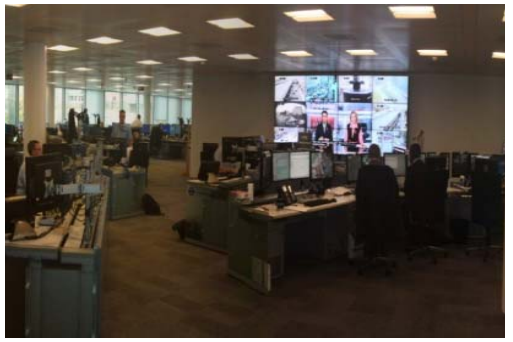
3. Minimising Disruption from Unplanned Events

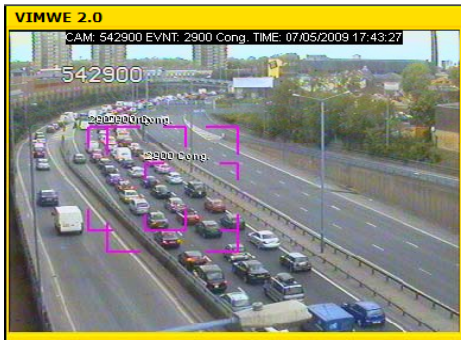
London Streets Traffic Control Centre (LSTCC) and London Streets Tunnels Operations Centre (LSTOC)

Real-time operational management of the road network:

- **Eliminating the causes of unplanned disruption**
- **Improving incident response**
- **Managing around incidents**

Improving real-time public information





An ‘Actively Managed’ Road Network

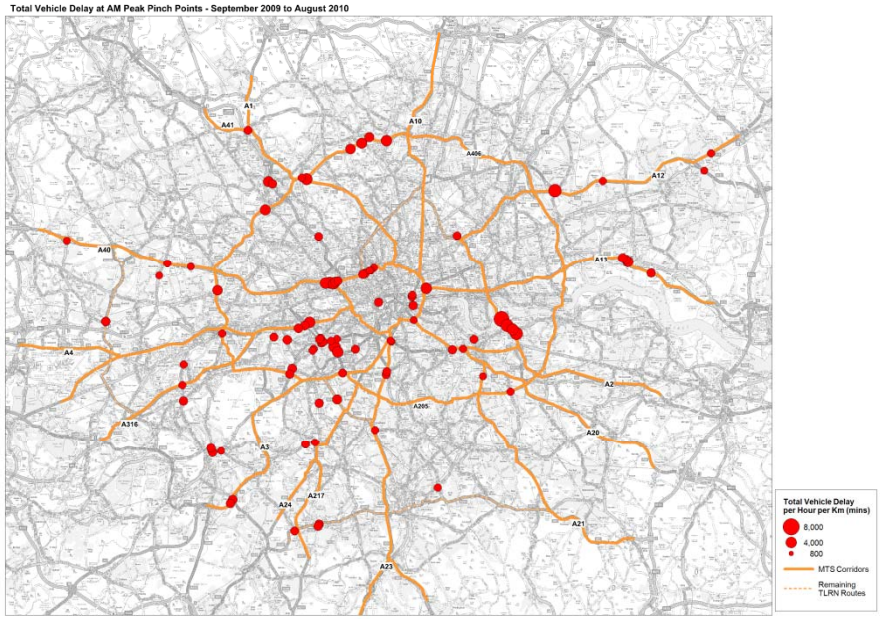
- London Streets Traffic Control Centre (LSTCC) – a 24/7, 365 day a year operation
- 6000 sets of traffic signals, over half directly controllable from LSTCC
- Some of the most sophisticated traffic signals technology in the world
- Over 1400 CCTV Cameras
- 140 roadside variable message signs
- Traffic Radio Broadcasting live from LSTCC

4. Managing Demand & Achieving Modal Shift

TfL is working hard to manage travel demand and encourage modal shift to more sustainable transport.

The NOS focuses on more tactical and locally targeted measures on key corridors of high demand and key traffic pinch points.

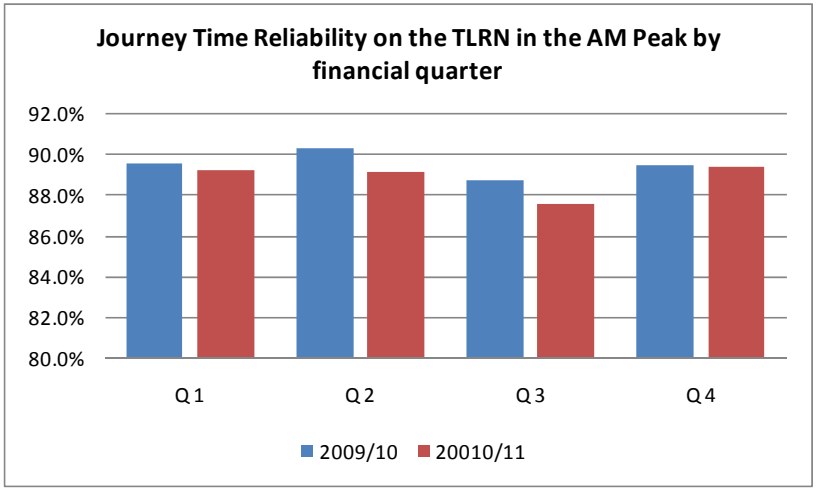
FORS
FREIGHT OPERATOR RECOGNITION SCHEME



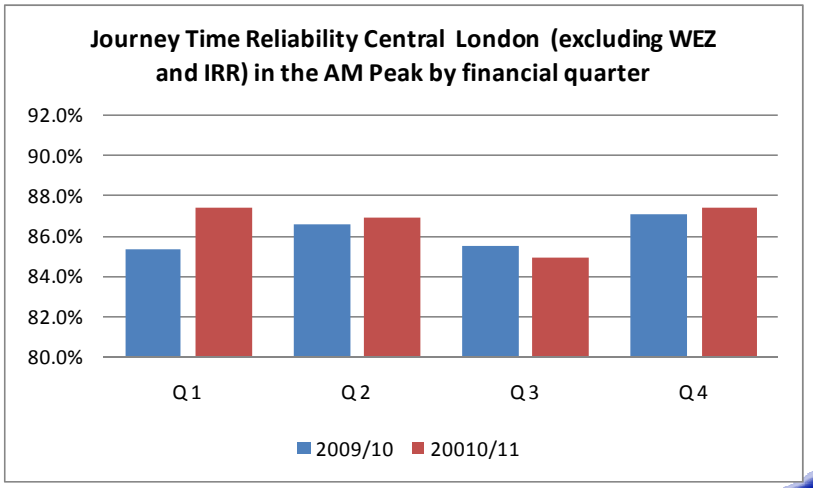
5. Measuring Outcomes

Journey Time Reliability

Journey time reliability on the TLRN in the AM peak stands at 88.72% (down 0.58 percentage points on 2009/10).



Journey time reliability in Central London in the AM peak stands at 86.62% (up 0.44 percentage points on 2009/10).

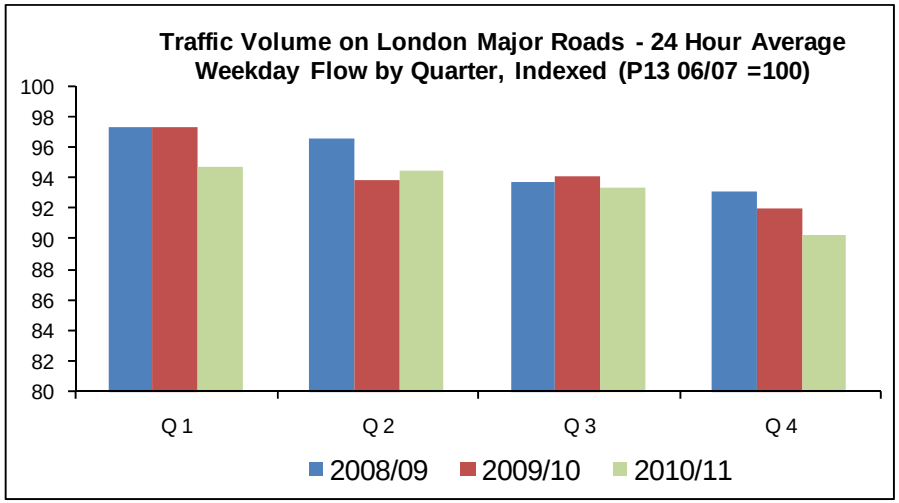


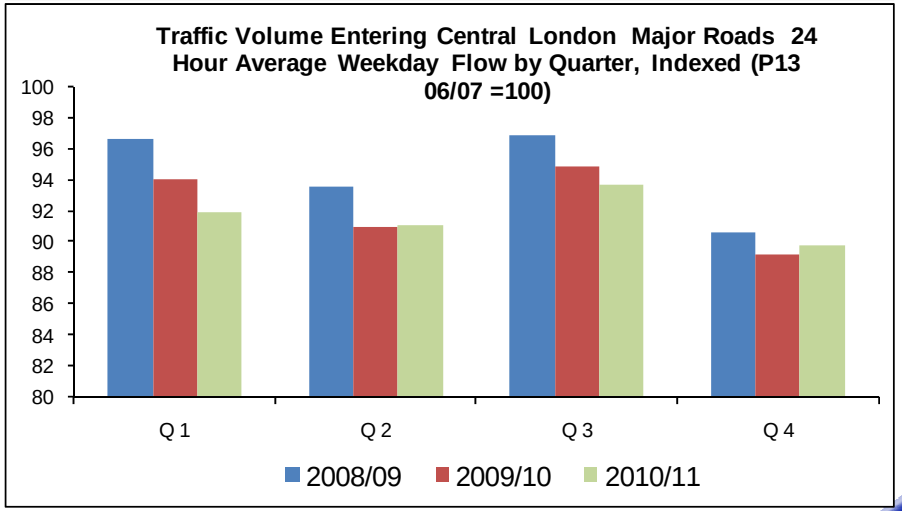
Traffic Volumes

Traffic volumes continue to fall.

In 2010/11, traffic has:

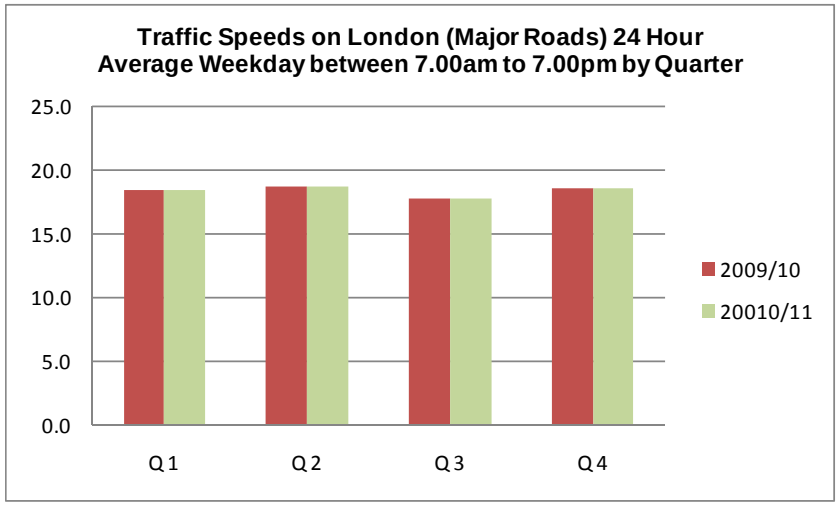
- fallen by 1.2% across London; and
- by 0.6% in Central London.



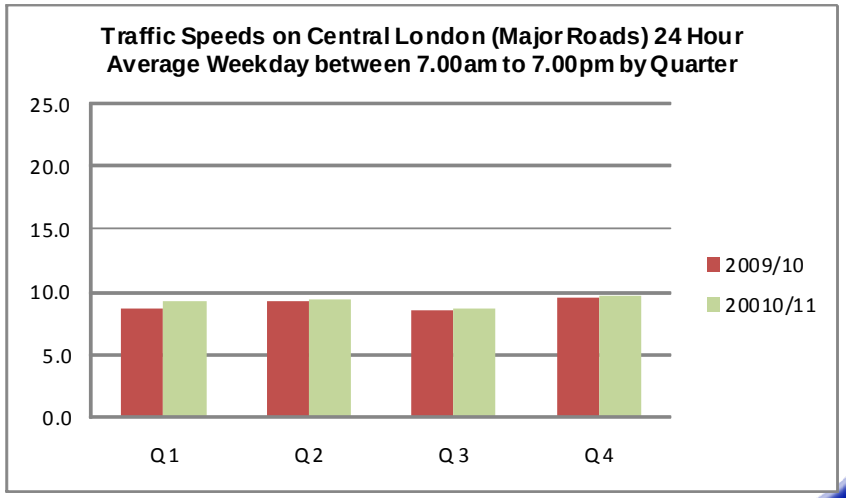


Traffic Speeds

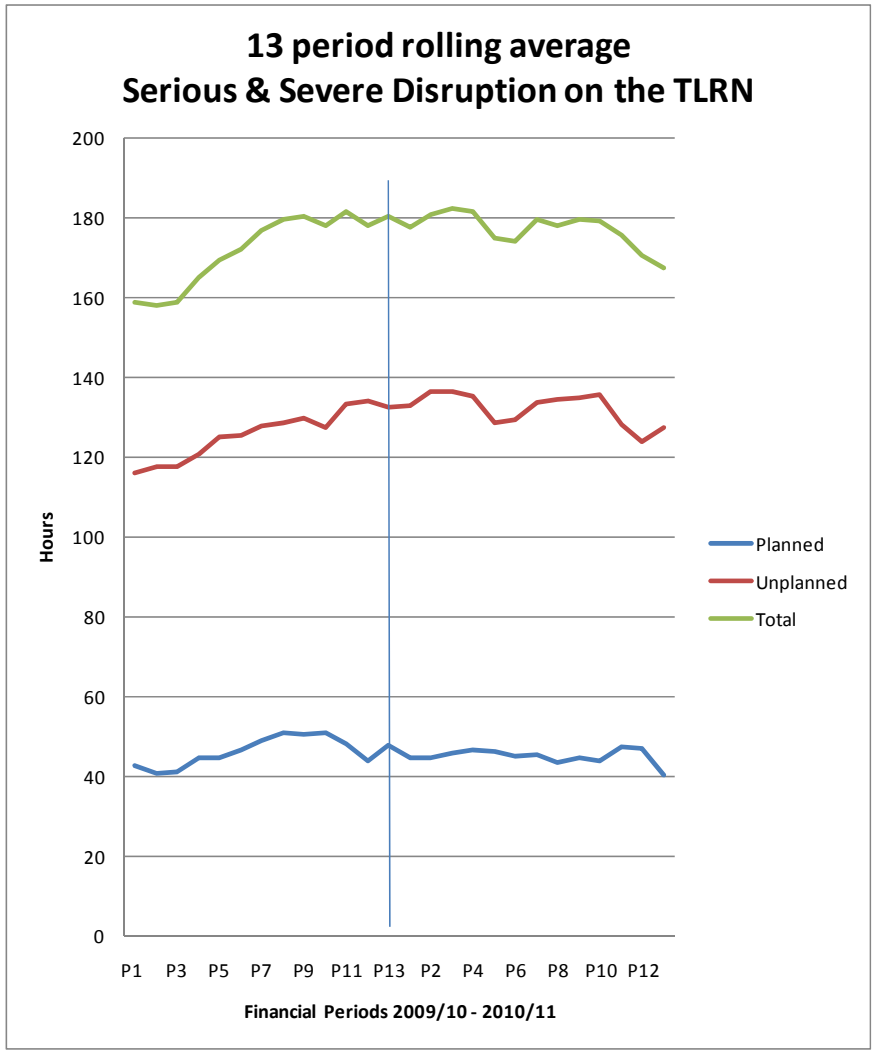
In 2010/11, average (7am-7pm) traffic speeds increased across London by just less than 1%.



Speeds in Central London increased by 2.5%.



Recorded Serious & Severe Disruption on the TLRN

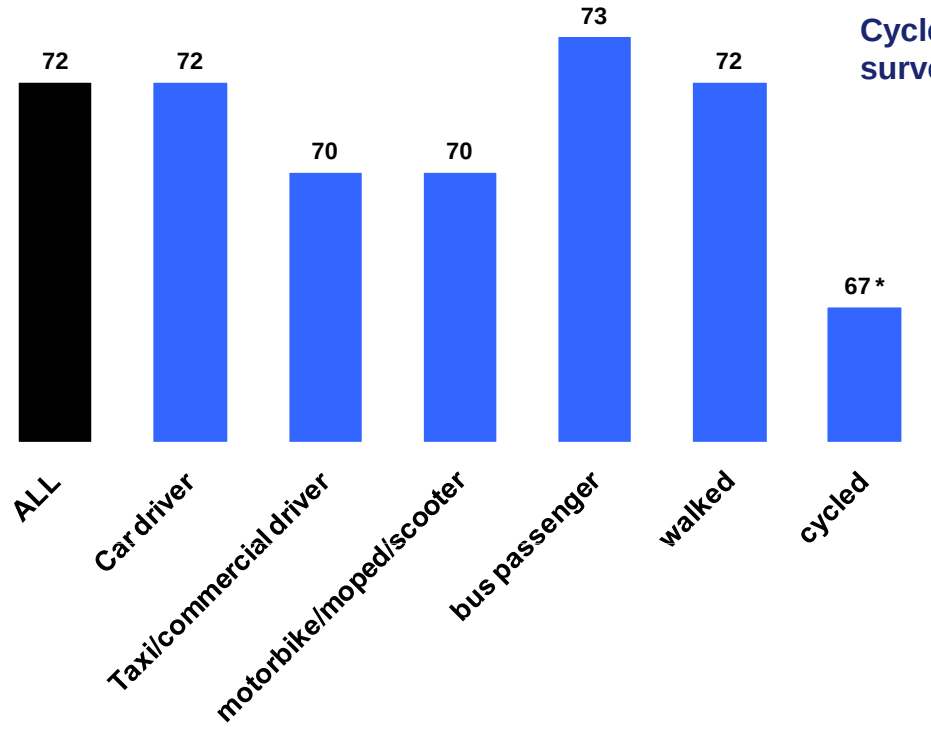


- Overall hours of serious and severe disruption down 7% on 09/10
  - Planned down 16%
  - Unplanned down 4%

Customer Satisfaction on the TLRN by Mode

Overall, 72% very/fairly satisfied.

Compares well with satisfaction levels on other modes.



Comparative scores from other research:

Bus CSS = 81

Cycle Hire survey = 70

tfl.gov.uk