

Transport for London  
**London Streets**



**PERFORMANCE REPORT**  
**Quarter 3 2012/13**



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**Summary of Network Performance for Quarter 3 2012/13**

London wide traffic speeds (07:00 to 19:00) increased by 0.46 mph to 19.48 mph between Quarter 3 this year and last year, while there was a 1.0 index point increase in the volume of traffic on London’s major roads.

There were 416 hours of serious and severe disruption on the network London-wide in Quarter 3 2012/13. This compares to 520 hours in Quarter 3 of the previous year 2011/12, a decrease of 104 hours (20%) year-on-year.

The JTR on the TLRN in the AM peak in all directions for Quarter 3 was 89.22%; this is 1.13 percentage points higher than the same quarter last year.

Cycle flows on the TLRN in Quarter 3 2012/13 were 1.5% higher than the same quarter last year.

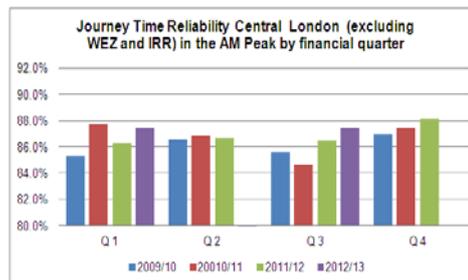
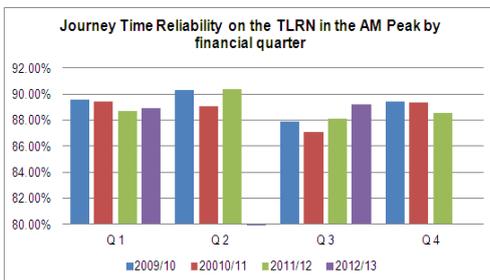
The number of killed and seriously injured casualties from road collisions on the TLRN increased compared to the previous year, but still decreased by 10.0% compared to the 2005-2009 Quarter 1 baseline.

Annual customer satisfaction scores (reported in this quarter) for all aspects of the TLRN have improved significantly. Overall satisfaction with TfL’s operation of the TLRN improved to 76% in 2012 from 72% in 2010.

Journey time reliability was recorded for Games Family Vehicles (GFVs) and non-GFVs throughout the Games. GFVs achieved a JTR of 95.6% and 97.8% during the Olympics and Paralympics against a target of 95%, whilst non-GFVs achieved a JTR of 91.1% and 89.5% during the Olympics and Paralympics.

## 1. RELIABILITY

The key measure set out in the Mayor's Transport Strategy for monitoring smoothing traffic flow is journey time reliability (JTR). It is defined as the percentage of journeys completed within an allowable excess of 5 minutes for a standard 30 minute journey during the AM peak. This is calculated from recorded journey times between Automatic Number Plate Recognition (ANPR) camera pairings across the Transport for London Road Network (TLRN).



The JTR on the TLRN in the AM peak in all directions for Quarter 3 was 89.22%; this is 1.13 percentage points higher than the same quarter last year. This improvement came across all three periods 7-9.

The JTR for Central London (excluding WEZ and the Inner Ring Road) in the AM peak for Quarter 3 was 87.41%; this is 0.91 percentage points higher than the same quarter last year.

Note due to changes to the ANPR camera network, the core ANPR links that are used to generate JTR figures has also been changed, notably incorporating sections that previously had no coverage. A validation exercise has shown that these changes have had negligible effect on the overall TLRN JTR figure, but that some individual corridors have experienced slight changes to what might have been expected with the previous coverage.

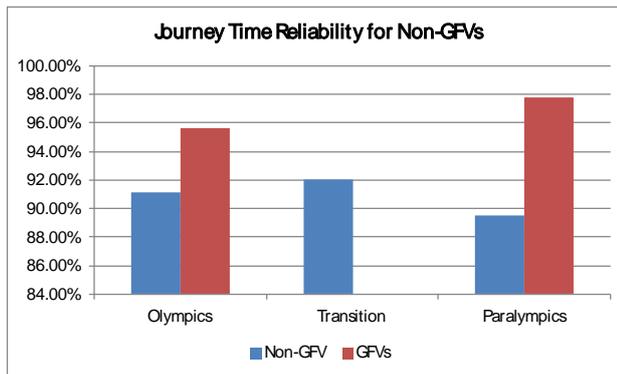
Journey time reliability was not recorded on the TLRN using the normally reported metric during Quarter 2 which included the Olympics and Paralympics. Large parts of the TLRN were transformed to be either the Olympic Route Network (ORN) or Paralympic Route Network (PRN). This would have made it difficult to produce results that would have been directly comparable to results published for previous quarters.

Journey time reliability for general traffic or Non-Games family vehicles (Non -GFVs) during Games time was measured in the same way as described above for the TLRN.



JTR for Games family vehicles (GFVs) was measured using the same principles as our traditional JTR metric but these were applied to individual vehicles and their JTR was measured against their expected venue to venue scheduled journey times.

### Journey Time Reliability during the Olympics and Paralympics



The JTR for general traffic was 91.1% during the Olympics and 89.5% during the Paralympics. This shows that the Games, and associated traffic management measures, had little perceptible effect on journey time reliability for general traffic.

A target to achieve 95% JTR was also agreed for Games Family Vehicles (GFV) travelling between venues. The JTR for GFVs was 95.6% for the Olympics and 97.8% for the Paralympics

## Journey Time Reliability on the TLRN

The JTR values on each of the main radial routes on the TLRN in the AM and PM peaks in both directions are:

AM Peak		Inbound								Outbound							
Route Type	Corridor	2011/12 Q1	2011/12 Q2	2011/12 Q3	2011/12 Q4	2012/13 Q1	2012/13 Q2	2012/13 Q3	2012/13 Q4	2011/12 Q1	2011/12 Q2	2011/12 Q3	2011/12 Q4	2012/13 Q1	2012/13 Q2	2012/13 Q3	2012/13 Q4
Radial	A4	88.6%	89.8%	87.7%	88.8%	87.7%		90.6%		92.3%	92.4%	90.5%	91.9%	91.3%		89.5%	
Radial	A40	78.0%	79.0%	78.5%	77.9%	81.7%		78.9%		95.1%	96.2%	94.6%	93.7%	95.2%		89.1%	
Radial	A41	81.5%	89.6%	85.0%	83.3%	84.3%		84.5%		91.0%	92.3%	90.1%	90.6%	91.5%		90.4%	
Radial	A1	81.6%	81.8%	80.4%	82.2%	83.8%		83.1%		87.9%	92.3%	88.2%	92.0%	90.2%		86.8%	
Radial	A10	89.2%	89.2%	88.0%	86.6%	83.8%		84.4%		89.8%	90.4%	89.0%	88.4%	91.5%		86.8%	
Radial	A12	85.8%	86.3%	84.8%	86.3%	88.6%		87.4%		95.9%	97.9%	95.5%	97.1%	95.9%		95.0%	
Radial	A13	89.1%	87.0%	86.7%	85.6%	84.7%		90.3%		98.0%	98.9%	98.4%	99.0%	98.8%		96.3%	
Radial	A2	83.4%	87.1%	81.4%	84.6%	85.2%		84.1%		96.8%	99.5%	98.7%	98.6%	98.7%		96.4%	
Radial	A20	89.5%	91.6%	87.4%	87.9%	87.9%		88.0%		97.3%	97.3%	97.1%	97.2%	98.2%		96.6%	
Radial	A21	88.9%	91.0%	85.1%	87.5%	89.5%		87.2%		95.3%	96.2%	92.1%	93.6%	95.1%		94.6%	
Radial	A23	87.0%	87.6%	86.5%	87.3%	90.1%		88.8%		92.4%	92.5%	90.5%	92.7%	91.4%		89.6%	
Radial	A24	85.8%	89.4%	87.8%	89.5%	88.4%		89.6%		92.8%	95.2%	93.5%	95.1%	92.8%		89.1%	
Radial	A3	88.2%	92.5%	84.3%	87.1%	88.3%		88.7%		95.0%	97.3%	92.6%	94.2%	96.0%		94.6%	
Radial	A316	86.3%	86.8%	83.2%	85.8%	87.0%		88.8%		97.9%	96.6%	97.3%	96.5%	96.6%		96.7%	

PM Peak		Inbound								Outbound							
Route Type	Corridor	2011/12 Q1	2011/12 Q2	2011/12 Q3	2011/12 Q4	2012/13 Q1	2012/13 Q2	2012/13 Q3	2012/13 Q4	2011/12 Q1	2011/12 Q2	2011/12 Q3	2011/12 Q4	2012/13 Q1	2012/13 Q2	2012/13 Q3	2012/13 Q4
Radial	A4	91.0%	90.3%	90.2%	88.4%	88.3%		88.9%		81.1%	82.6%	81.0%	88.1%	87.5%		81.3%	
Radial	A40	84.1%	84.6%	84.4%	85.2%	84.1%		82.8%		85.1%	84.3%	85.2%	85.2%	84.7%		85.8%	
Radial	A41	84.1%	89.6%	88.2%	89.9%	89.4%		86.7%		84.7%	86.1%	83.9%	87.7%	82.5%		83.7%	
Radial	A1	87.1%	86.0%	84.9%	86.3%	88.9%		82.9%		79.7%	81.0%	82.7%	85.5%	83.0%		82.0%	
Radial	A10	92.9%	93.3%	91.9%	90.6%	89.5%		88.2%		84.6%	85.7%	83.8%	82.4%	79.6%		80.8%	
Radial	A12	88.8%	87.7%	89.7%	88.0%	88.0%		86.7%		86.1%	85.7%	82.6%	84.1%	82.6%		86.4%	
Radial	A13	89.0%	88.7%	88.8%	89.3%	94.3%		96.1%		86.3%	86.5%	87.6%	87.0%	83.8%		84.4%	
Radial	A2	95.2%	95.2%	91.3%	93.7%	93.3%		93.6%		88.8%	88.9%	86.0%	85.4%	87.5%		86.9%	
Radial	A20	92.3%	91.8%	89.8%	93.5%	92.0%		89.5%		87.7%	87.8%	88.0%	87.6%	90.7%		91.5%	
Radial	A21	93.9%	97.9%	94.2%	95.4%	98.0%		95.2%		90.8%	95.2%	90.9%	92.4%	92.8%		88.4%	
Radial	A23	86.6%	88.2%	87.7%	89.2%	90.8%		89.8%		84.7%	85.4%	83.8%	85.3%	83.0%		81.6%	
Radial	A24	90.7%	91.2%	93.8%	93.4%	93.6%		91.1%		87.8%	91.2%	88.5%	89.8%	90.7%		87.6%	
Radial	A3	92.2%	93.7%	91.8%	92.0%	96.0%		89.8%		91.0%	91.0%	84.8%	88.3%	89.2%		86.7%	
Radial	A316	94.3%	93.4%	92.1%	91.3%	91.1%		85.2%		92.9%	89.7%	89.3%	93.1%	92.9%		90.3%	



The JTR values on each of the main orbital routes on the TLRN in the AM and PM peaks in both directions are:

AM Peak		Anti-Clockwise								Clockwise							
Route Type	Corridor	2011/12 Q1	2011/12 Q2	2011/12 Q3	2011/12 Q4	2012/13 Q1	2012/13 Q2	2012/13 Q3	2012/13 Q4	2011/12 Q1	2011/12 Q2	2011/12 Q3	2011/12 Q4	2012/13 Q1	2012/13 Q2	2012/13 Q3	2012/13 Q4
Orbital	A102 B. Tunnel	73.9%	80.0%	73.8%	76.8%	75.0%		75.5%		96.8%	97.6%	97.6%	98.1%	96.9%		98.1%	
Orbital	A406	87.4%	89.9%	88.2%	87.4%	87.8%		86.5%		87.8%	92.1%	88.6%	87.9%	86.4%		89.1%	
Orbital	A205	88.9%	88.9%	87.3%	86.6%	85.6%		86.6%		86.1%	86.4%	85.3%	85.8%	84.0%		82.4%	
Orbital	Inner Ring	82.5%	84.1%	82.9%	84.4%	83.1%		85.5%		82.9%	82.9%	82.8%	84.1%	84.8%		84.9%	
PM Peak		Anti-Clockwise								Clockwise							
Route Type	Corridor	2011/12 Q1	2011/12 Q2	2011/12 Q3	2011/12 Q4	2012/13 Q1	2012/13 Q2	2012/13 Q3	2012/13 Q4	2011/12 Q1	2011/12 Q2	2011/12 Q3	2011/12 Q4	2012/13 Q1	2012/13 Q2	2012/13 Q3	2012/13 Q4
Orbital	A102 B. Tunnel	79.2%	83.5%	77.0%	81.1%	80.1%		79.4%		83.2%	82.1%	78.1%	82.5%	80.3%		82.5%	
Orbital	A406	85.3%	88.7%	88.2%	87.6%	87.1%		85.7%		84.9%	86.9%	84.5%	84.7%	85.1%		83.5%	
Orbital	A205	85.7%	83.8%	82.3%	84.9%	82.4%		83.1%		90.3%	89.8%	86.5%	88.5%	86.6%		84.3%	
Orbital	Inner Ring	78.2%	79.5%	78.1%	79.7%	78.8%		79.4%		77.9%	79.2%	77.8%	80.0%	80.6%		80.0%	

The JTR values on the TLRN and in Central London all directions combined in the AM and PM peaks are:

Central London	2011/12 Q1	2011/12 Q2	2011/12 Q3	2011/12 Q4	2012/13 Q1	2012/13 Q2	2012/13 Q3	2012/13 Q4
All Directions								
AM Peak	86.2%	86.7%	86.5%	88.2%	87.4%		87.4%	
PM Peak	81.7%	82.6%	81.0%	85.4%	85.1%		84.3%	
TLRN	2011/12 Q1	2011/12 Q2	2011/12 Q3	2011/12 Q4	2012/13 Q1	2012/13 Q2	2012/13 Q3	2012/13 Q4
All Directions								
AM Peak	88.7%	90.3%	88.1%	88.6%	88.9%		89.2%	
PM Peak	86.4%	87.1%	85.9%	87.0%	86.6%		85.9%	

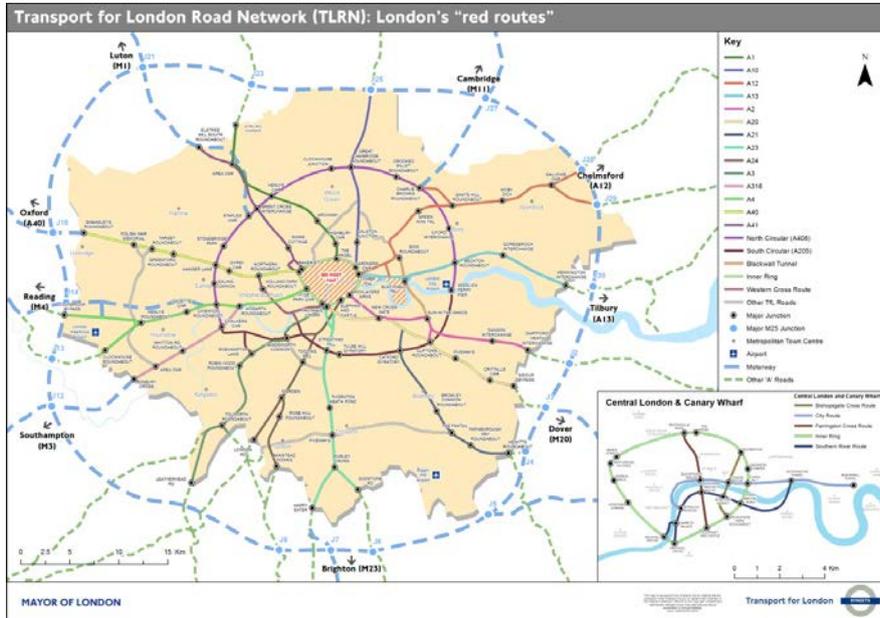
### Legend

#### Journey Time Reliability

>=90%	More than 9 out of 10 journeys are "on time"
80%-89.9%	
<80%	Less than 4 out of 5 journeys are "on time"

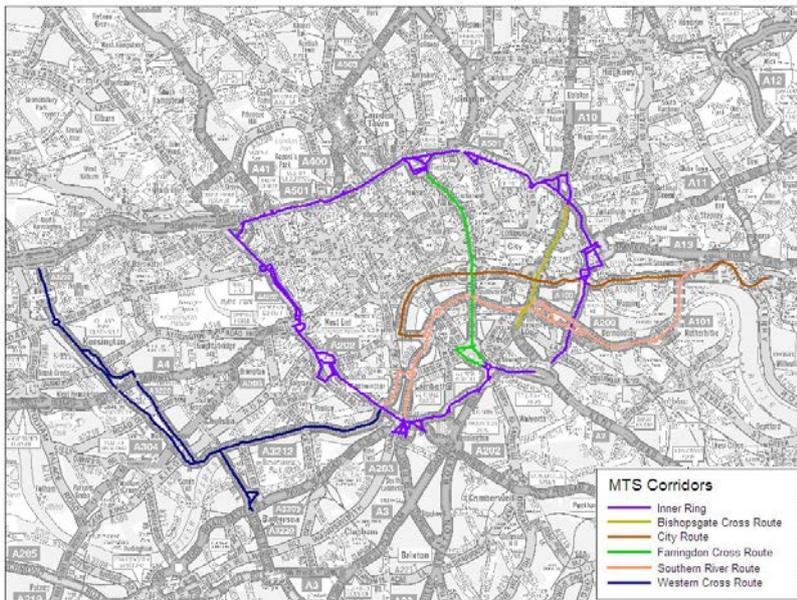


## Map showing the TLRN by MTS Corridors across London



Note: The named corridors do not exactly replicate the road number in the legend, but reflect the strategic radial and orbital corridors set out in the Mayor's Transport Strategy. (E.g. the "A12 corridor" includes the A11 Mile End Road into central London).

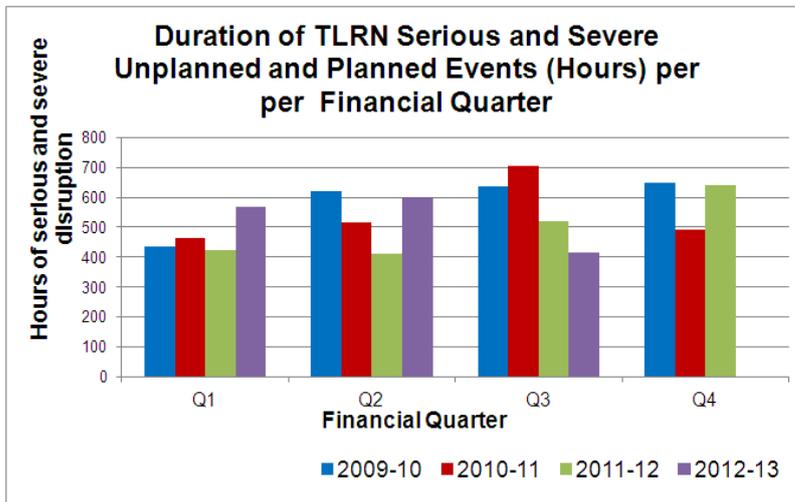
## Map showing the TLRN by MTS Corridors in Central London





**2. NETWORK DISRUPTION**

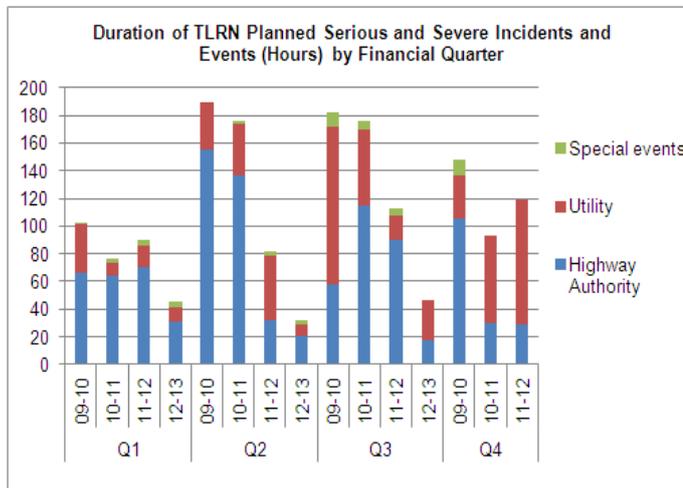
**Total Serious and Severe Unplanned and Planned Disruption Hours on the TLRN**



Overall in Quarter 3 there were 416 hours of serious and severe disruption from unplanned and planned events spread across 223 separate incidents. This compares to 520 hours spread across 245 incidents in Quarter 3 of the previous year. This is a decrease in traffic disruption of 104 hours compared to Quarter 3 in 2011/12 – a 20% decrease year-on-year. This is broken down between planned and unplanned events as shown below.



## Planned Incidents and Events – TLRN



In Quarter 3 2012/13 there were 46 hours of serious and severe disruption from planned events spread across 18 separate incidents (an average of 2 hours 33 minutes duration per event). This compared to 113 hours spread across 37 events (an average of 3 hours 3 minutes duration per event) in Quarter 3 of the previous year.

### TLRN planned events recording over 10 hours of serious and severe disruption:

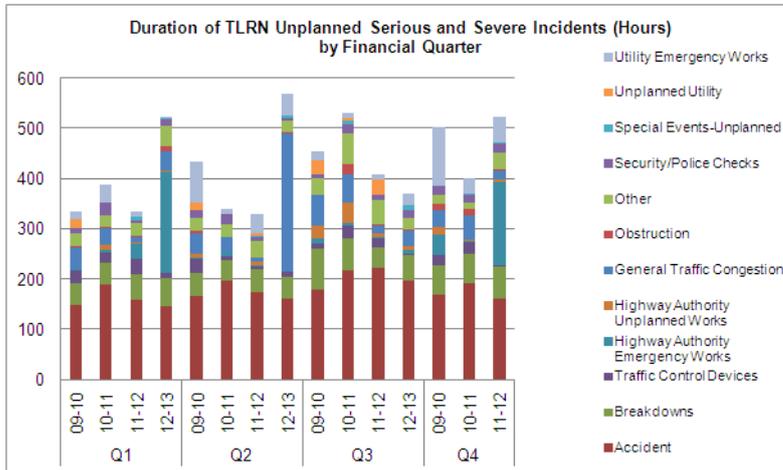
In Quarter 3 there was 1 planned event recording more than 10 hours of serious and severe disruption:

Friday 23<sup>rd</sup> November, 09:55 in the morning peak, gas works took place in the A3211 Upper Thames street tunnel. The Upper Thames Street Tunnel was closed westbound. National Grid completed their works on Sunday and handed closure over to Network Rail who were on site completing planned works as part of Blackfriars Station upgrade. These closures and traffic management were lifted by 16:46 on Sunday 25<sup>th</sup> November.

**10.27 hours**



**Unplanned Incidents and Events - TLRN**



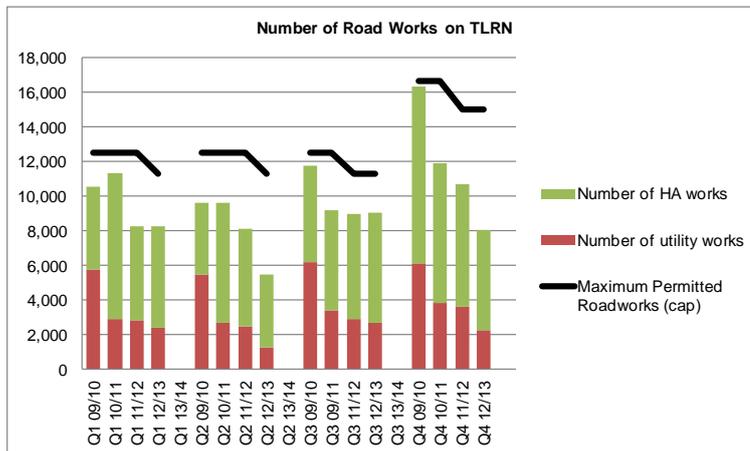
There were 370 hours of unplanned serious and severe disruption, spread across 205 separate events (an average of 1 hour 48 minutes duration per event) on the network London-wide in Quarter 3 2012/13. This compares to 407 hours, spread across 208 events (an average of 1 hour 57 minutes duration per event) in Quarter 3 of the previous year 2011/12.

**TLRN unplanned incidents recording over 10 hours of serious and severe disruption:**

In Quarter 3 there were no unplanned incidents recording over ten hours of serious and severe disruption.



**Number of Road Works on the TLRN**



The London Permit Scheme (LoPS) for road works was introduced in February 2010. Its purpose was to improve authorities’ abilities to minimise disruption from street and highway works. It requires works promoters to apply for a permit to work in the highway. Highway Authorities’ own works are also included in the scheme.

To manage the cumulative impact of road works on the TLRN, the total number of new road works permitted in any one period was capped to 4,170 from the start of 2010/11. This was 20% below the peak level of road works activity experienced in 2009/10 (5,212 works in Period 12 of that year).

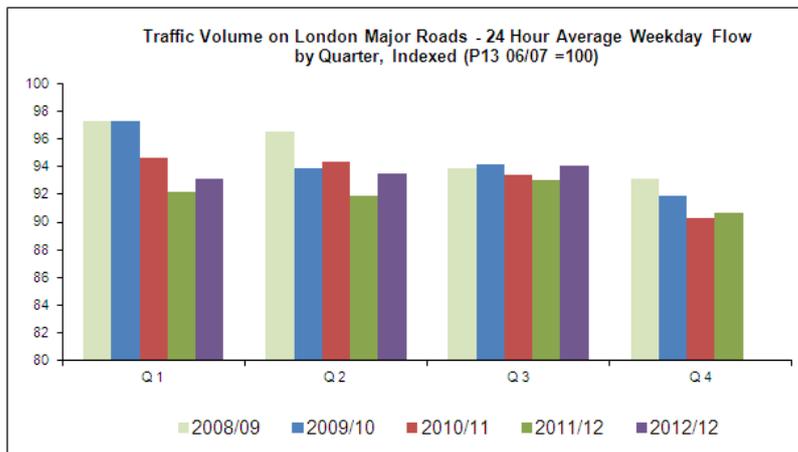
Starting Quarter 3 of 2011/12, the maximum permissible total number of road works allowed on the TLRN was lowered to 3,753 per period. This was a reduction of 10% from the initial cap per period of 4,170.

In Quarter 3 of 2012/13 the total number of road works on the TLRN was 9,047 an increase of 77 or 0.9% on the total of 8,970, reported in Quarter 3 of 2011/12, however the volume of roadworks on the network stayed well below the ‘cap’ throughout the Quarter.



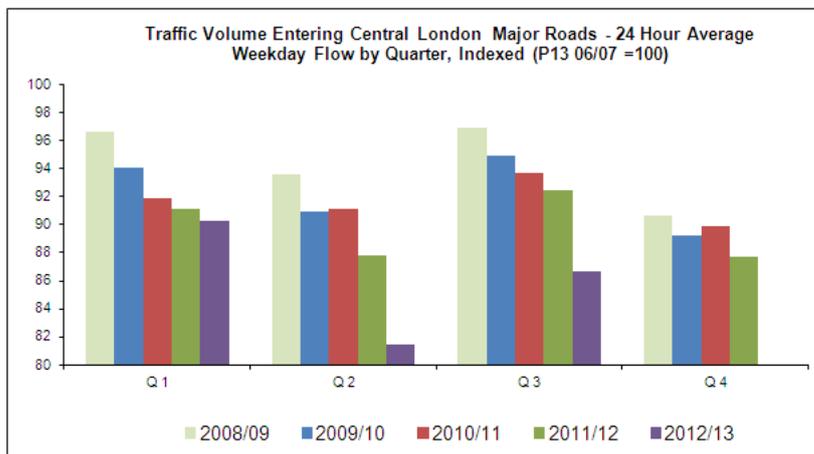
## TRAFFIC VOLUMES

### Vehicular Traffic Volumes on London Major Roads



The pan London traffic flow index stands at 94.1 in Quarter 3 2012/13. This is 1.0 index points up from the same quarter last year, and 0.7 index points up from the same quarter two years ago. Traffic volumes continue to fall across Central London, in a continuation of a reported long term trend. Traffic in London has fallen by almost 10% since 2000 and almost 4% since 2008. The chart shows traffic flows relative to an index of 100 in period 13 in 2006/07.

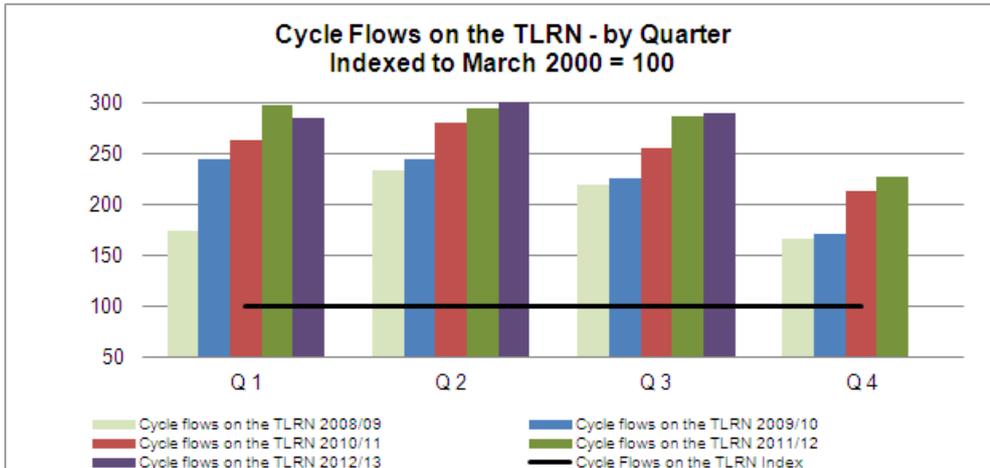
### Vehicular Traffic Entering Central London Major Roads



The Central London traffic flow index stands at 86.7 in Quarter 3 2012/13. This is 5.8 index points down from the same quarter last year and 7.0 index points down from the same quarter two years ago. Traffic volumes continue to fall across Central London, in a continuation of a reported long term trend. Central London traffic has fallen by 20% since 2000 and almost 6% since 2008. The chart shows traffic flows relative to an index of 100 in period 13 in 2006/07.



**Volume of Cycling on the TLRN**



Cycle flows on the TLRN in Quarter 3 2012/13 stand at an index level of 290.4. This is 4.3 index points (1.5%) higher than the same quarter last year.

Temperature and rainfall across all three periods in Quarter 3 saw average levels on the whole.

Minor corrections have been made to the TLRN cycling index methodology to ensure it accurately reflects recent cycle flows. This does not change the previous years' numbers; results for Quarter 1 2012/13 show slight changes and have been updated accordingly. As such, revised cycle index flows on the TLRN in Quarter 1 2012/13 were 285.4 (replacing published figure of 269.2)

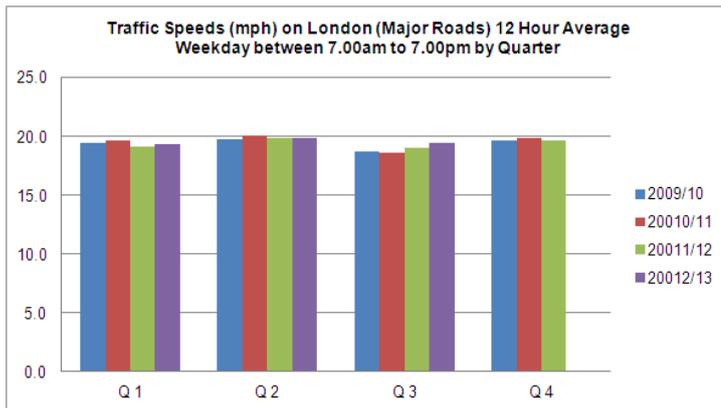
Between March 2000 and the end of 2011/12 cycle flows on the TLRN increased by 172.6%. Compared to the 2010/11 financial year end, average cycling levels on the TLRN at the end of 2011/12 were 9% higher.

The chart shows cycle levels on the TLRN relative to an index of 100 in March 2000.



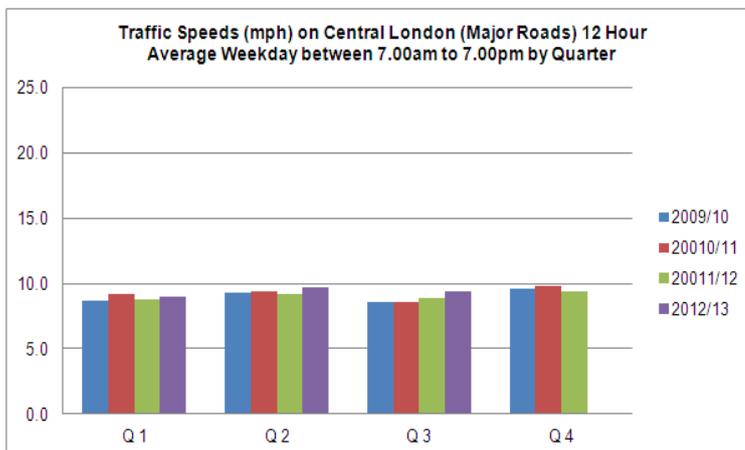
### 3. TRAFFIC SPEEDS

#### Traffic Speeds in London



Average traffic speeds for the 12 hours between 07:00 to 19:00 across London in Quarter 3 was 19.48 mph, compared to the 19.02 mph observed in Quarter 3 last year, a 2.4% increase year-on-year.

#### Traffic Speeds in Central London

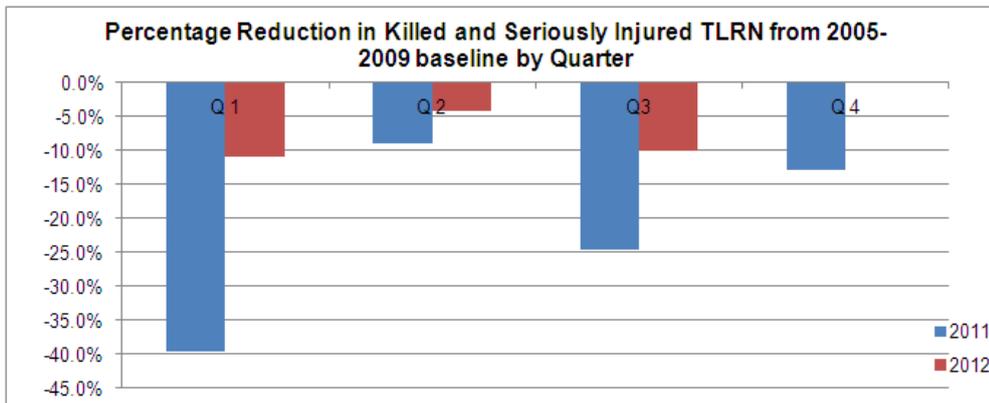


Average traffic speeds for the 12 hours between 07:00 to 19:00 across Central London in Quarter 3 was 9.35 mph compared to the 8.86 mph observed in Quarter 3 last year, a 5.5% increase year-on-year.



#### 4. ROAD SAFETY

##### Killed and Seriously Injured casualties on the TLRN



The graph above shows the percentage change in KSI casualties on the TLRN from the 2005-09 baseline by quarter for the period 2008/09 to 2012/13. Quarter 3 is defined as the three month period June to August 2012.

Provisional data for Quarter 3 2012/13 indicates that there were 248 killed or seriously injured (KSI) casualties on London’s roads, a 10.0% reduction from the 2005-09 Quarter 3 baseline. Compared with Quarter 3 2011/12 KSIs of 208, there was an increase of 19.2% year on year.

Comparing Quarter 3 2012/13 with Quarter 3 2010/11 shows an increase of 12.2% in KSI casualties on the TLRN (221 to 248) and a 6.4% increase in KSI casualties when compared with Quarter 3 2009/10 (233 to 248).

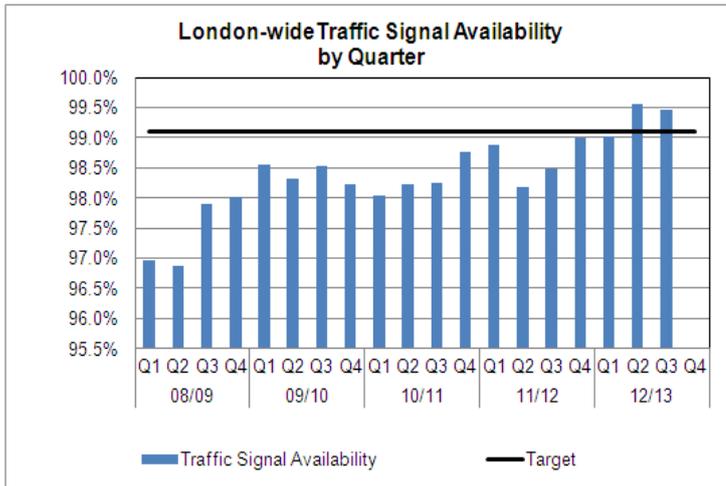
It should be noted that that considerable KSI casualty reductions have been achieved during Quarters 3 and 4 of previous years.

*Footnote:*

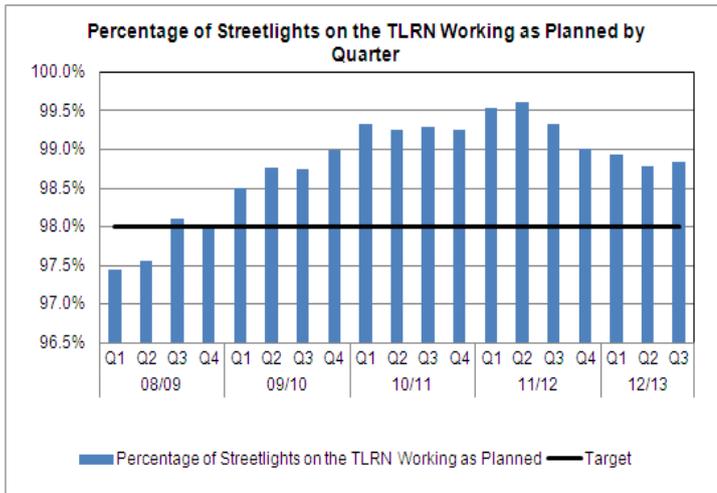
The extremely cold weather conditions during Quarter 1 2011/12 contributed to fewer people making trips, resulting in fewer casualties during that period. Quarter 1 2011/12 was the coldest since records began in 1910. In contrast, Quarter 1 2012/13 was exceptionally mild. December 2011 was 5 °C warmer than December 2010 and January 2012 experienced less than 75% of expected rainfall, resulting in increases in travel and an increase in casualties.



**5. ASSET AVAILABILITY**



During Quarter 3 2012/13, the availability of traffic signals London-wide was 99.47% compared to 98.48% reported for Quarter 3 2011/12. The target for this indicator is set at 99.1% and it represents the availability of all functions of traffic signal equipment. This is a demanding target for the contractors responsible for maintaining London's Traffic Signal equipment and overall, traffic signal assets are in good condition. TfL has three traffic signals maintenance contractors. Where full availability is not maintained, abatements are applied to contract payments. The failure to meet this performance target is primarily due to poor performance from one of the contractors. TfL's current focus remains on carrying out preventative maintenance. This is having a detrimental effect on availability in the short term as more faults are raised but this strategy will lead eventually to improved availability longer term.

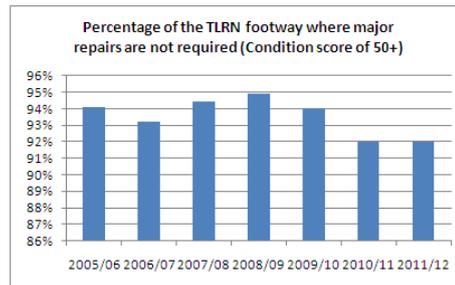
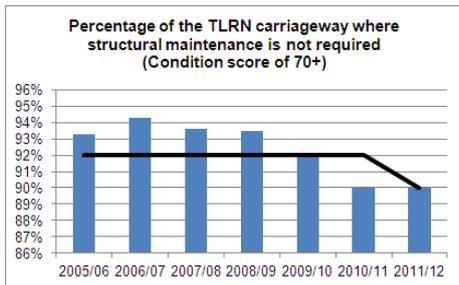


In Quarter 3 2012/13, 98.85% of street lights on the TLRN were reported to be working as planned compared with 99.32% reported in Quarter 3 2011/12. The target for this indicator is set at 98%.



## 6. STATE OF GOOD REPAIR

The State of Good Repair (SOGR) metrics for the TLRN carriageways and footways are reported annually at the end of each financial year. SOGR represents the percentage of the TLRN where structural maintenance/major repairs are not required; it is based on asset condition scores from structural surveys analysed using the national Rules and Parameters from the UK Pavement Management System (UKPMS).



Note: that there are no targets have not been set for Footways.

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The percentage of the TLRN in structurally normal condition was 92% in 2009/10, 90% in 2010/11 and 90% in 2011/12. The percentage of the TLRN footway network where the structural condition was normal was 94% in 2009/10, 92% in 2010/11 and 92% in 2011/12.



**CUSTOMER SATISFACTION - TLRN**

In 2012 a third online customer satisfaction survey was conducted among people who had used the TLRN in the last month by any of the following modes: (Car, Pedestrian, Bus, Motorcycle/scooter/moped, Taxi/commercial delivery/emergency vehicle, Cycle). In 2012 a total of 3,538 TLRN users were interviewed (3,222 in London and 316 in South East England), recording details of 8,270 trips in total . Satisfaction questions are scored on a scale of 0-10, where 10 is extremely satisfied and 0 is extremely dissatisfied. Mean scores (e.g. 7.4) are then multiplied by to provide a score out of 100 (e.g. 74).

- **Satisfaction with the TLRN scores quite well** at 76 out of 100 (against a target of 75). This is a significant increase of 4 points compared to 2010
- **All individual aspects of the TLRN have improved significantly**
- **As in 2010, traffic congestion is the main issue:** it is a key driver of satisfaction, but with the lowest satisfaction scores.

**Customer Satisfaction – Traffic Directorate**

<b>CSS Key Satisfaction Indicators - Traffic Directorate</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Working condition of traffic lights	75	77	78
<b>Overall satisfaction</b>	<b>72</b>	<b>75</b>	<b>76</b>
Could accurately estimate how long journey would take	70	73	75
Speed	70	72	74
Speed of response for fixing unusual traffic problems	69	72	74
Amount and clarity of road signs about delays and disruption	69	72	73
Up to the minute information about delays and disruption	69	72	73
Traffic light timings	70	73	74
Management of road works	67	70	73
Traffic congestion	63	67	69

**Customer Satisfaction – Roads Directorate**

<b>CSS Key Satisfaction Indicators - Roads</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Street lighting	75	77	77
Roads are well drained and free from flooding	74	77	77
Condition and clarity of road markings	73	75	76
Amount and clarity of road signs giving route directions	73	75	76
<b>Overall satisfaction</b>	<b>72</b>	<b>75</b>	<b>76</b>
Condition of road surfaces	68	70	73

A full report on customer satisfaction with the TLRN can be found at <http://www.tfl.gov.uk/assets/downloads/tlrn-css-2012.pdf>