



TLRN Performance Report

Quarter 2 2015/16

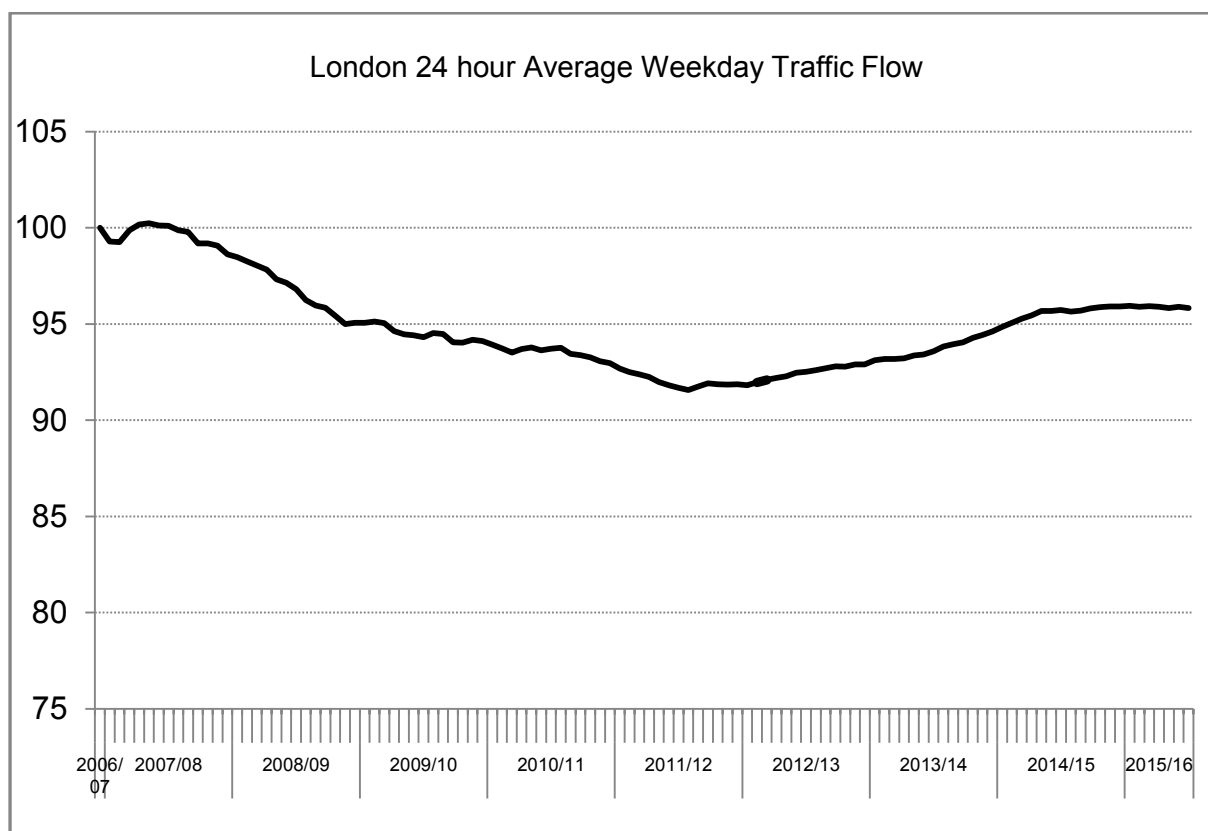
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Summary of Network Performance for Q2 2015/16

In Q2 2015/16, traffic volumes in London remained high off the back of strong economic and population growth. However, there has been a significant slowdown in the rate of traffic growth on London's major roads over the last year, with a 0.1 index point (0.1%) decrease in the volume of traffic in Q2 2015/16 compared to Q2 2014/15.

This is significant when compared to growth in traffic volumes from previous years, with a 1.6 index point (1.7%) increase compared to Q2 2013/14, and a 4.2 index point (4.6%) increase compared to Q2 2011/12 at the dip of the recent economic cycle. This is illustrated in the graph below.



These results show what we expect to see during a period of economic recovery, which is a period of steep growth as the economy returns to normal levels, followed by the rate of increase flattening out and returning to the long term forecast trend.

At the same time, a huge amount of building and construction work is taking place to accommodate London's phenomenal economic and population growth, with developers, boroughs and utility providers building additional homes, shops, public places and infrastructure. We also expect an extra 5 million trips a day by 2030, on top of the 30 million daily trips taking place currently.

This growth is changing the way our roads operate, and in response to this, TfL is continuing to oversee the largest ever investment in London's roads and streets through its £4bn Road Modernisation Plan. This plan comprises of numerous projects and programmes that will transform some of the busiest roads and junctions in London making them safer and more attractive for all road users including vulnerable road users.

So while we are seeing a significant slowing down in the rate of traffic growth in London, the overall performance of the network has become increasingly affected by this rising construction activity, for example:

- Large scale redevelopment projects such as Lewisham Gateway, Victoria Station upgrade and Nine Elms
- Construction of the Cycle Superhighways: East-West, North-South, CS5 and CS2
- Borough road scheme improvements such as Aldgate, Shepherd's Bush Town centre and Harlesden Town Centre
- Transformation of major junctions such as Elephant & Castle Northern Roundabout and Stockwell Cross

Other disruptions during Q2 that had significant impacts were tube strikes on 9 July and 6 August, a burst water main on the A406 at Pinkham Way, and two separate days in September where the network was impacted by multiple incidents occurring on the same day.

Major construction and roadworks often require significant traffic management interventions such as temporary traffic signals and lane reductions, and we have seen a significant deterioration in London-wide traffic speeds during the observed hours of 07:00 to 19:00. Speeds decreased by 1.5 mph to 17.6 mph compared to Q2 last year, representing a 7.7% reduction.

Taking all these planned and unplanned works into account, as well as anticipated increases in traffic flows and construction activity, Journey Time Reliability was forecast to be impacted. Our Q2 target of 88.1% was consequently adjusted to 1.3% lower than last year's Q2 actual performance of 89.4%.

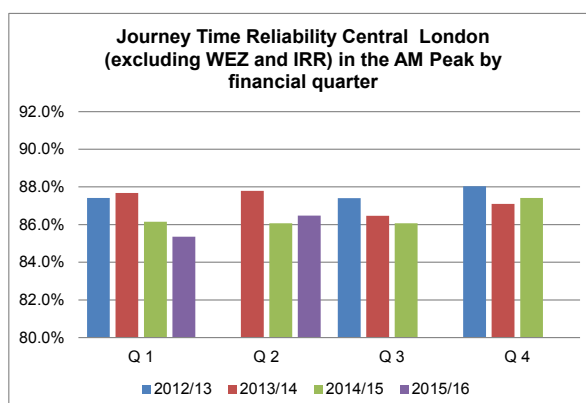
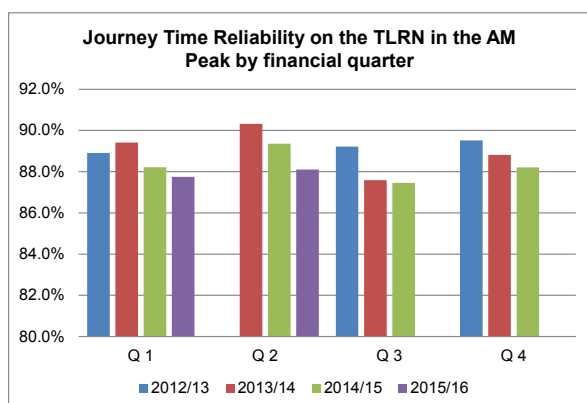
The actual Q2 2015/16 outcome of 88.1% is the same as target, and this is attributable to significant impacts affecting Q2 2014/15, the slightly lower than expected traffic growth figures reported above, and also the fact that construction impacts continue to be better mitigated than were previously anticipated.

Other notable highlights of this report include

- **Growth in cycle flows on the TLRN:** In Q2 2015/16, the index level for cycling on the TLRN stood at 386.3, which is 6.6 index points (1.7%) higher than the same quarter in 2014/15.
- **Further decreases in KSIs:** The number of people killed or seriously injured in road collisions on the TLRN decreased compared to the previous year, and has decreased by 39.9% compared to the 2005-2009 Q2 baseline.
- Overall satisfaction among TLRN users in Q2 2015/16 is 75, one point higher than Q1 2015/16, Q3 and Q4 2014/15, and the same as Q2 2014/15. Levels of satisfaction with most aspects of the TLRN experience were stable, apart from higher scores for traffic light timings, condition of the road surface, pavement flooding and pavement condition. Overall satisfaction among the different TLRN users remains unchanged across all modes. However, cyclists were overall more satisfied with higher satisfaction for the amount and clarity of road signs giving route directions, traffic light timings, condition and clarity of road markings, amount and clarity of road signs about delays and disruptions, speed of response for fixing unusual traffic problems and management of roadworks.

1. RELIABILITY

The key measure set out in the Mayor's Transport Strategy for monitoring traffic flow is Journey Time Reliability (JTR), 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 TLRN.



The TLRN (JTR) on the Transport for London Road Network (TLRN) in the AM peak in all directions for Q2 was 88.1%; this is 1.3 percentage points lower than the same quarter in 2014/15 and the same as target.

The Q2 JTR for Central London (excluding WEZ and the Inner Ring Road) in the AM peak was 86.5%; this is 0.4 percentage points higher than the same quarter in 2014/15.

In Q2, average 24-hour weekday traffic flows across London decreased 0.1% compared to the same quarter last year.

So while we are seeing a significant slowing down in the rate of traffic growth in London, the overall performance of the network has become increasingly affected by this rising construction activity, for example:

- Large scale redevelopment projects such as Lewisham Gateway, Victoria Station upgrade and Nine Elms
- Construction of the Cycle Superhighways: East-West, North-South, CS5 and CS2
- Borough road scheme improvements such as Aldgate, Shepherd's Bush Town centre and Harlesden Town Centre
- Transformation of major junctions such as Elephant & Castle Northern Roundabout and Stockwell Cross

The impact of these works is in part limiting the growth in traffic through the action of constraints on available capacity as witnessed by the falling network speeds and the stabilisation in traffic volumes in the last 2 quarters.

Other disruptions in Q2 that had significant impacts were tube strikes on 9th July 2015, and 6th August 2015, a burst water main on the A406 at Pinkham Way, and 2 separate days in September where the network was impacted by multiple incidents and works occurring on the same day.

Across Q2, numerous planned works, incidents, and increases in traffic flows impacted the JTR results compared to the previous year:

- In Period 4 TLRN JTR was 89.0%, JTR was 0.7 percentage points down against target. The tube strike (week 2, Thu 9th July) accounts for about the same amount; however there were several other notable events on the network this period causing delays in excess of an hour including: a burst water main on the A3 Kennington Park Road (week 1, Mon-Tue 29th – 30th June); A lost load on the A12 just north of Blackwall Tunnel (week 3, Mon 13th July); over-running road works on the A12 Eastern Cross Route (week 4, Mon 20th July). This is in addition to the additional delays being experienced on key routes such as the A13 due to actively managing ongoing central London works. Despite the tube strike and speeds (07:00 to 19:00) reaching a new low of 7.6 mph, central London corridor JTR was up 1.7 points against target. A substantial amount of this is due to strong performance on the City corridor westbound in the last two weeks of the period. Pan-London speeds (07:00 to 19:00) were 17.3 mph, only a fraction above previous lows.
- In Period 5 TLRN JTR was 90.4%, 1.8 percentage points above the period target (meaning it was up 0.5 points above the same period last year), and 3.7 points above the previous period. In Period 5, JTR was 1.8 percentage points above target. The second week was by far the poorest performing with a burst water main causing delays of over an hour on the A406 Pinkham Way on Tuesday 4th August, ongoing into 5th, followed by the second tube strike primarily affecting Thursday 6th August, again accounting for around 0.7 percentage points (albeit causing noticeably less delay than the one in July).
- There were continuing delays on the A24 corridor (A3) Kennington Park Road, A10 Shoreditch High Street and City Route, The Highway due to ongoing construction works. However the network was otherwise generally quiet due to lower demand, especially in the third and fourth week. It is noted that last year there were several disruptive planned works at Aldgate (affecting the A11, A13), Hogarth and Putney Bridge (affecting the A316) and Brent Cross (affecting the A406).
- Primarily driven by the City Route and Western Cross Route inbound, central London corridor JTR was up 3.1 points against target, despite the tube strike. Speeds were approximately 1 mph lower in both central and Greater London.

- In Period 6 TLRN JTR was 87.3%, 1.0 percentage points below the period target (meaning it was 2.3 points below the same period last year), and 3.1 points below the previous period.

There were many incidents this period leading to delays of half an hour to over an hour across the network. These included (but were not limited to) multiple works on the A24 (Thursday 3rd Sep), unplanned works on the A2 and breakdown at Blackwall Tunnel (Wednesday 9th Sep); a burst water main on the A205 (Friday 11th Sep).

However it was incidents in the first week of September (bank holiday week, second week of the period), which had the largest impact on JTR, including on the A40 (a collision on Wednesday 2nd, breakdown on Thursday 3rd) and the start of maintenance works on the A406 at Redbridge from Friday 4th.

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	2014/15 Q1	2014/15 Q2	2014/15 Q3	2014/15 Q4	2015/16 Q1	2015/16 Q2	2014/15 Q1	2014/15 Q2	2014/15 Q3	2014/15 Q4	2015/16 Q1	2015/16 Q2
Radial	A4	87.6%	90.9%	88.9%	90.5%	89.4%	88.3%	91.9%	93.5%	91.0%	93.2%	94.0%	92.2%
Radial	A40	80.8%	81.3%	78.8%	79.5%	81.7%	78.9%	91.9%	94.6%	92.0%	91.7%	91.4%	94.0%
Radial	A41	84.1%	88.0%	83.1%	87.4%	85.3%	84.9%	91.6%	93.0%	90.7%	90.2%	91.0%	92.0%
Radial	A1	80.6%	80.0%	78.2%	82.8%	80.0%	82.0%	90.1%	93.1%	87.8%	88.3%	88.8%	88.8%
Radial	A10	86.0%	88.3%	84.5%	84.5%	84.5%	85.9%	90.0%	90.5%	88.2%	87.5%	90.0%	89.7%
Radial	A12	85.5%	87.6%	82.4%	84.4%	84.6%	87.9%	95.9%	95.1%	95.5%	95.1%	94.2%	95.6%
Radial	A13	85.4%	85.7%	81.4%	83.8%	79.2%	80.9%	98.5%	98.3%	98.0%	96.2%	98.2%	98.2%
Radial	A2	83.1%	85.9%	80.2%	81.9%	81.2%	84.0%	97.6%	97.5%	97.0%	96.1%	96.6%	96.2%
Radial	A20	86.0%	88.4%	85.4%	84.4%	85.4%	83.9%	92.7%	95.4%	95.0%	90.4%	91.0%	91.0%
Radial	A21	87.9%	93.1%	85.1%	86.1%	88.0%	92.1%	92.2%	96.3%	92.5%	91.6%	91.7%	96.4%
Radial	A23	85.7%	88.7%	86.5%	86.2%	84.7%	88.3%	91.3%	91.7%	89.9%	88.5%	89.3%	91.1%
Radial	A24	84.0%	89.6%	83.2%	83.9%	83.2%	86.3%	91.4%	94.0%	92.8%	93.5%	91.9%	90.4%
Radial	A3	86.7%	89.6%	89.2%	89.3%	86.5%	91.9%	95.5%	95.9%	94.0%	95.0%	94.5%	91.1%
Radial	A316	83.9%	87.1%	87.0%	88.3%	87.6%	92.2%	95.9%	96.4%	95.9%	98.3%	96.1%	95.1%

PM Peak		Inbound						Outbound					
Route Type	Corridor	2014/15 Q1	2014/15 Q2	2014/15 Q3	2014/15 Q4	2015/16 Q1	2015/16 Q2	2014/15 Q1	2014/15 Q2	2014/15 Q3	2014/15 Q4	2015/16 Q1	2015/16 Q2
Radial	A4	89.8%	89.4%	86.5%	90.0%	87.7%	89.6%	79.7%	81.6%	79.8%	81.3%	79.7%	79.5%
Radial	A40	84.5%	84.6%	82.0%	85.4%	83.8%	84.0%	85.2%	84.7%	82.5%	83.3%	84.0%	82.5%
Radial	A41	90.5%	92.0%	90.0%	91.0%	90.7%	91.4%	85.0%	83.3%	81.4%	84.0%	83.0%	83.3%
Radial	A1	85.8%	84.3%	81.9%	86.1%	84.8%	85.1%	81.9%	85.3%	81.4%	83.2%	83.4%	82.7%
Radial	A10	89.5%	89.6%	88.9%	88.2%	87.2%	89.5%	80.2%	81.9%	80.6%	78.4%	79.2%	79.6%
Radial	A12	88.3%	87.5%	83.9%	87.4%	86.6%	87.7%	84.8%	83.2%	82.8%	84.3%	83.6%	82.9%
Radial	A13	92.7%	90.8%	90.0%	93.7%	90.2%	90.6%	87.1%	83.4%	85.5%	84.1%	83.3%	83.4%
Radial	A2	89.7%	91.5%	90.9%	92.7%	90.1%	90.7%	81.7%	84.9%	83.7%	82.8%	81.3%	81.0%
Radial	A20	90.2%	88.3%	90.9%	91.0%	90.7%	85.6%	88.6%	88.5%	89.6%	89.1%	89.5%	85.9%
Radial	A21	95.4%	98.1%	91.6%	95.0%	92.7%	94.6%	89.5%	92.7%	87.3%	88.3%	89.5%	91.6%
Radial	A23	89.5%	89.5%	89.4%	89.8%	88.3%	89.1%	82.1%	83.8%	81.4%	82.7%	81.1%	81.4%
Radial	A24	92.2%	92.6%	91.6%	94.5%	92.0%	90.1%	88.4%	92.1%	87.5%	89.1%	90.1%	87.8%
Radial	A3	93.6%	93.3%	92.8%	94.2%	93.3%	94.2%	89.7%	92.5%	86.2%	88.7%	88.8%	86.1%
Radial	A316	92.2%	88.4%	90.4%	88.6%	89.0%	92.5%	91.3%	91.2%	93.1%	91.7%	90.7%	91.1%

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

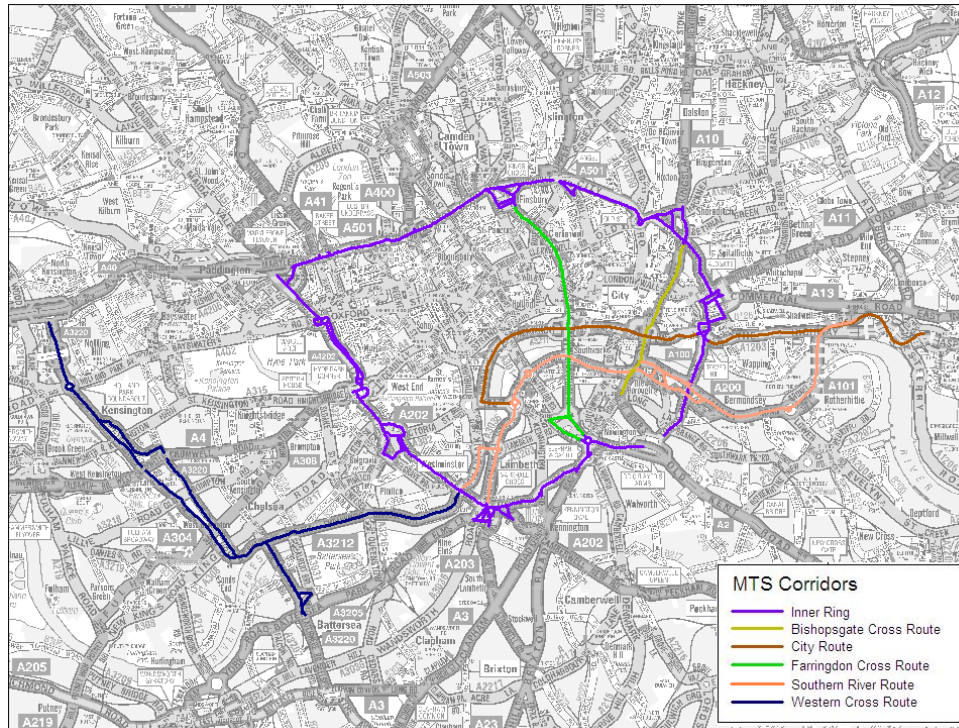
AM Peak		Anti-Clockwise						Clockwise					
Route Type	Corridor	2014/15 Q1	2014/15 Q2	2014/15 Q3	2014/15 Q4	2015/16 Q1	2015/16 Q2	2014/15 Q1	2014/15 Q2	2014/15 Q3	2014/15 Q4	2015/16 Q1	2015/16 Q2
Orbital	A102 B. Tunnel	80.1%	76.8%	77.3%	78.8%	79.5%	75.6%	97.2%	97.4%	94.5%	96.3%	96.5%	95.9%
Orbital	A406	86.6%	85.6%	85.2%	85.9%	86.7%	84.0%	87.8%	89.0%	86.4%	87.9%	85.6%	86.6%
Orbital	A205	86.4%	88.2%	85.4%	87.0%	86.5%	88.9%	83.2%	82.0%	82.9%	83.3%	82.6%	82.6%
Orbital	Inner Ring	82.1%	83.9%	83.9%	84.7%	81.8%	83.2%	83.3%	84.4%	85.5%	86.0%	83.4%	84.6%
PM Peak		Anti-Clockwise						Clockwise					
Route Type	Corridor	2014/15 Q1	2014/15 Q2	2014/15 Q3	2014/15 Q4	2015/16 Q1	2015/16 Q2	2014/15 Q1	2014/15 Q2	2014/15 Q3	2014/15 Q4	2015/16 Q1	2015/16 Q2
Orbital	A102 B. Tunnel	74.9%	73.5%	73.8%	79.9%	74.5%	71.0%	81.3%	81.1%	78.8%	79.7%	79.2%	81.2%
Orbital	A406	83.9%	86.1%	82.9%	83.9%	83.3%	83.5%	83.4%	81.6%	81.0%	84.2%	83.4%	81.6%
Orbital	A205	83.2%	83.6%	81.6%	85.1%	82.4%	84.7%	86.9%	87.2%	84.8%	87.0%	84.1%	86.0%
Orbital	Inner Ring	79.2%	79.4%	77.9%	80.4%	78.4%	77.6%	80.8%	81.3%	80.4%	81.0%	79.2%	80.2%

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

Central London	2014/15 Q1	2014/15 Q2	2014/15 Q3	2014/15 Q4	2015/16 Q1	2015/16 Q2
All Directions						
AM Peak	86.1%	86.1%	86.1%	87.4%	85.4%	86.5%
PM Peak	83.1%	84.8%	80.5%	83.6%	81.5%	82.2%

TLRN	2014/15 Q1	2014/15 Q2	2014/15 Q3	2014/15 Q4	2015/16 Q1	2015/16 Q2
All Directions						
AM Peak	88.2%	89.4%	87.5%	88.2%	87.7%	88.1%
PM Peak	85.7%	85.9%	84.2%	85.9%	84.9%	84.8%

Map showing the TLRN by MTS Corridors in Central London

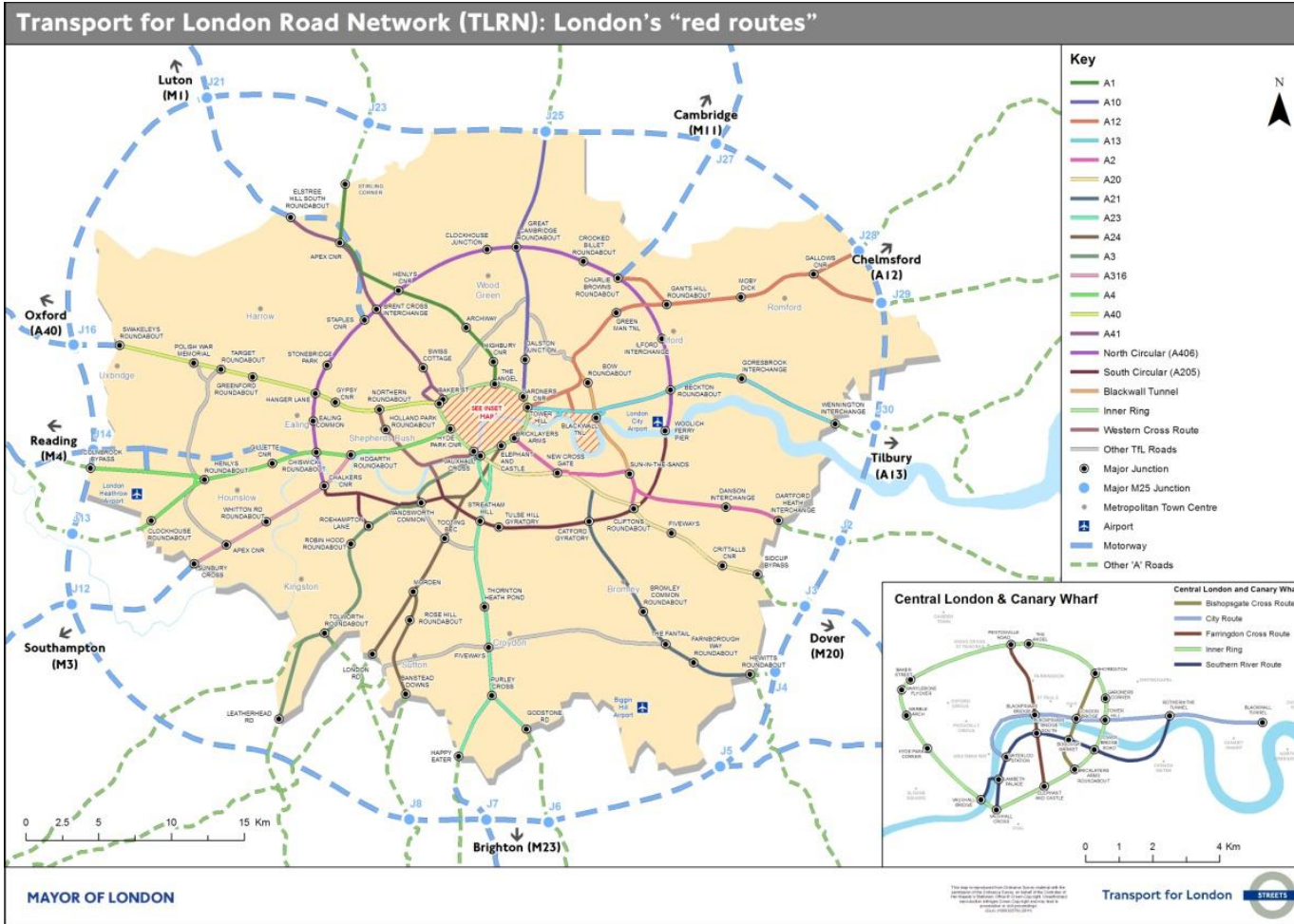


Legend

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"

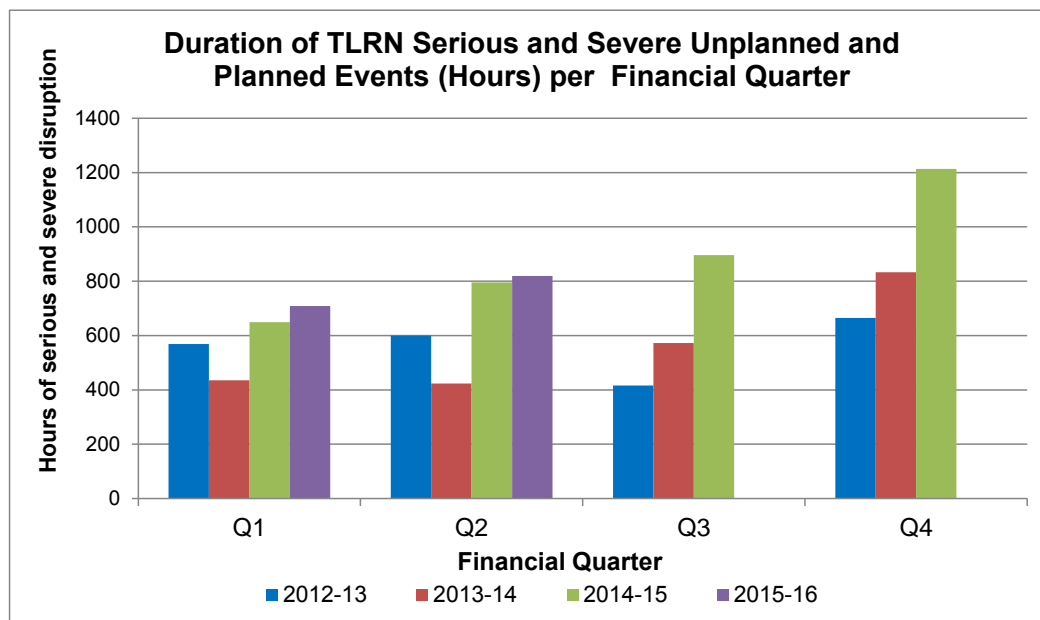
Map showing the TLRN by MTS Corridors across London



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. (eg the "A12 corridor" includes the A11 Mile End Road into Central London).

2. NETWORK DISRUPTION

Overall Serious and Severe (S&S) unplanned and planned disruption hours on the TLRN

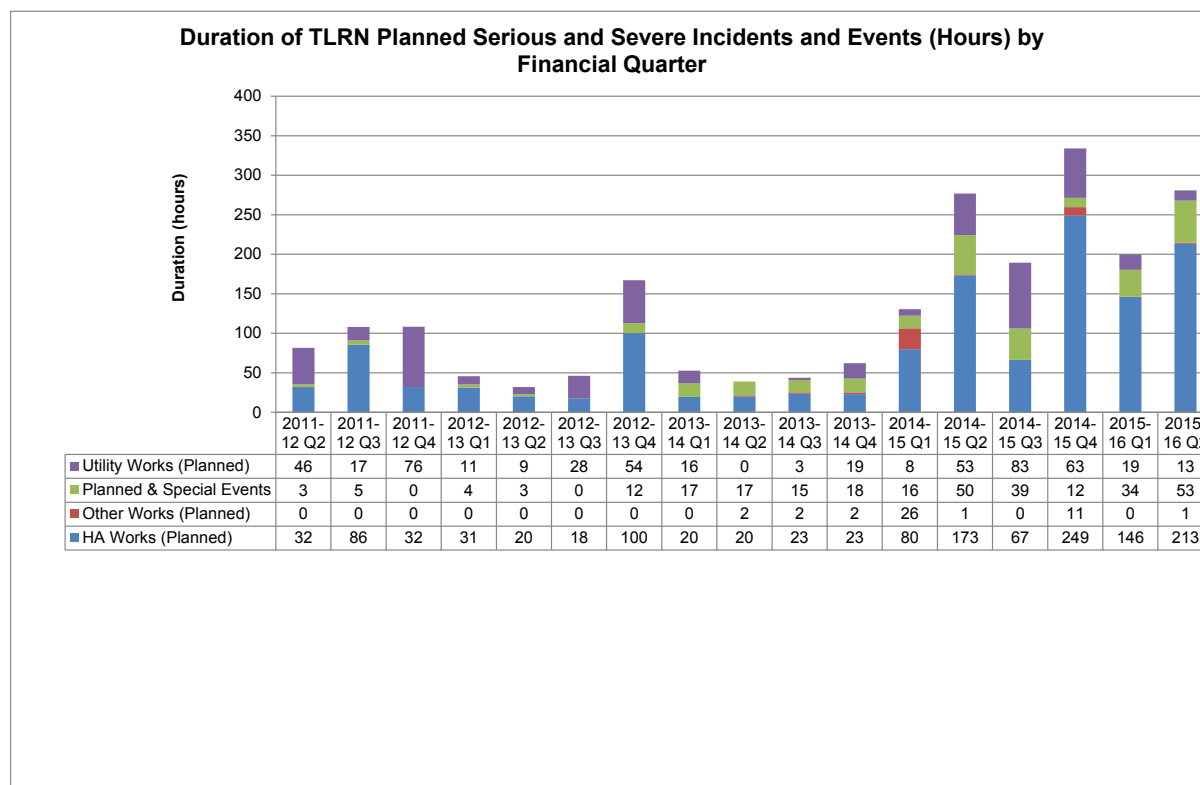


In Q2 there were a total of 819 hours of S&S disruption resulting from unplanned and planned events, spread across 302 separate incidents. Planned S&S disruption totalled 281 hours and unplanned S&S disruption totalled 538 hours.

Overall this represents an increase of 23 hours compared to Q2 2014/15, attributable to an increase of 4 planned S&S disruption hours and of 19 unplanned S&S disruption hours.

The amount of S&S disruption per event, a measure of effectiveness of the resolution of unplanned incidents, was at 2.0 hours, an increase from the 1.9 hours per event in Quarter 2 last year.

Planned Incidents and Events – TLRN¹



In Q2 there were 281 hours of S&S disruption from planned events spread across 34 separate events (an average of 6 hours 16 minutes duration per event), which was largely due to a number of Highway Authority (HA) works across the quarter. This compared to 277 hours spread across 42 events (an average of 6 hours 35 minutes duration per event) in Q2 2014/15.

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

In Q2 there were two planned events recording more than 10 hours of serious and severe disruption:

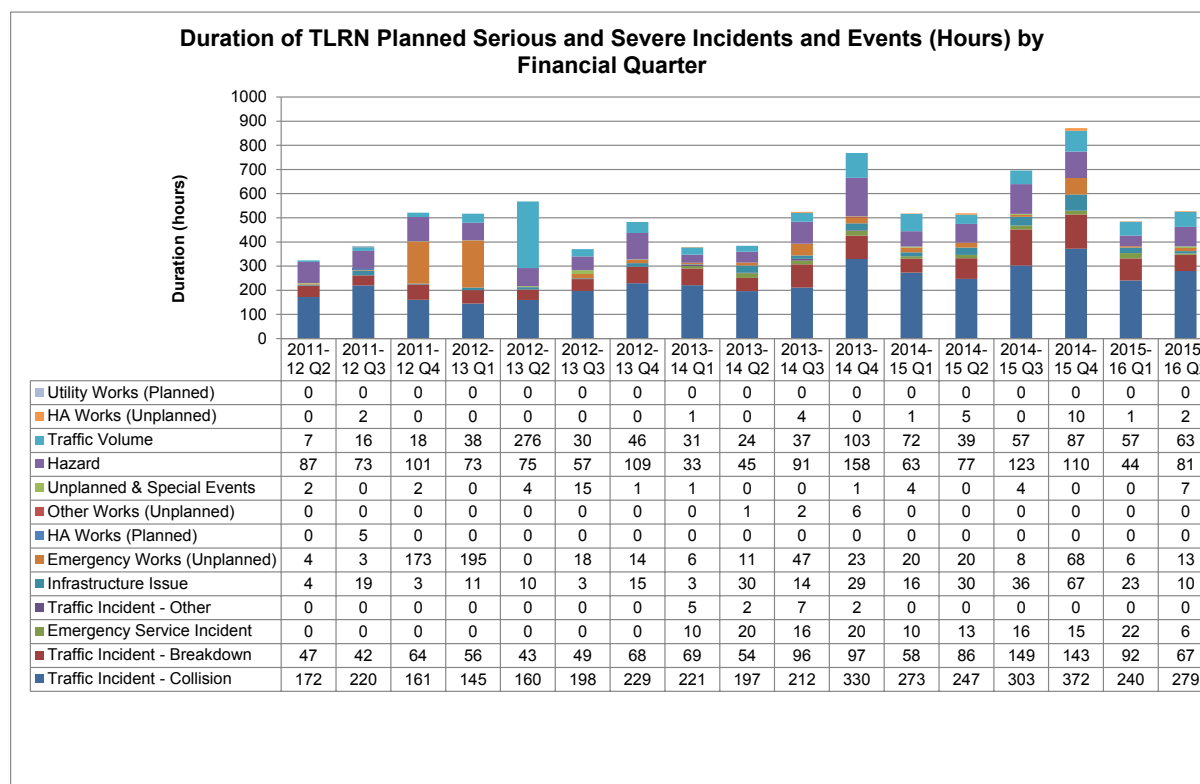
- Since 25th October 2013, planned HA works have been taking place on Hammersmith Flyover. This continuing eastbound closure of the flyover took place overnight between 22:30 and 05:00 to facilitate ongoing refurbishment works. In addition, there was also a lane two closure westbound to provide an adequate safe working zone while work was undertaken on the central reservation until 31 July. During these night-time closures, traffic was not able to travel over the flyover in either direction. There were also associated closures of various roads beneath and in the vicinity of the flyover. Traffic using the A4 Hammersmith flyover, travelling to and from central London, was diverted from Earl's Court to the A40 and then onto the

¹ NB: Data prior to 2013/14 was recorded using LTIS. This was replaced in April 2013 with TIMS. The two systems record incidents and events using different categorisations and are not directly comparable. In the chart above, the LTIS data has been aligned to the new TIMS categories for information only.

A406 to join the A4/M4 at Chiswick Roundabout. Traffic was slow moving along Talgarth Road back to Warwick Road northbound and the A4, and on Gliddon Road and North End Road. Traffic was also slow moving northbound on Fulham Palace Road on approach to Hammersmith Gyratory, on Fulham Road, and Lillie Road. Works scheduled to be completed by 28th August 2015. **Total disruption: 74.7 hours**

- Monday 31st August, 22:00 night, planned HA maintenance works took place on the A406 between Redbridge Roundabout and the M11 - TfL have been undertaking repairs on the Nightingale Bridge on the A406 North Circular Road in order to prolong its life. Work is taking place in phases: the current phase required the nightly closure of the A406 northbound from Redbridge Roundabout to Charlie Brown's Roundabout between 22:00 and 05:00, with traffic diverted via the A12 and A1400. This continued until 05:00 on Thursday 03 September when, as part of the subsequent stage, the A406 was reduced to a single lane in each direction between Redbridge Roundabout and Charlie Brown's Roundabout continuously until 18 September. **Total disruption: 91.66 hours**

Unplanned Incidents and Events - TLRN²



In Q2 2015/16, on the London-wide TLRN, there were 538 hours of unplanned S&S disruption, spread across 268 separate events (an average of 2 hours 1 minute duration per event). This compares to 519 hours, spread across 280 events (an average of 1 hour 51 minutes duration per event) in Q2 2014/15.

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

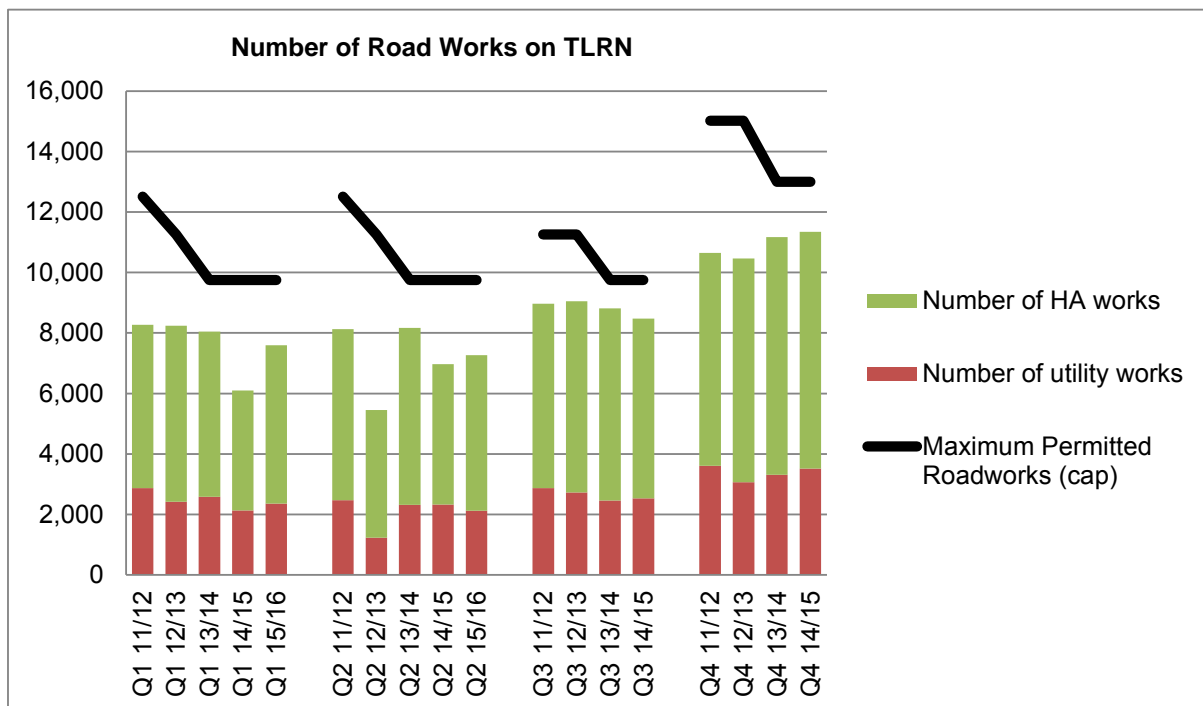
In Q2 there were four unplanned incident leading to over 10 hours of serious and severe disruption:

- Monday 29th June, 08:25 AM peak, a 12 inch burst water main occurred on the A3 Kennington Park Road. Kennington Park Road was closed between Newington Butts and Camberwell New Road. An additional closure was implemented on Newington Butts at Elephant and Castle. Although the burst water was in the vicinity of Oval Triangle and Cycle Superhighway 5 works, these works were not a contributory factor to the issue. Traffic impact was severe with congestion affecting Vauxhall Bridge Road and Elephant and Castle and slow moving traffic extended to Vauxhall Bridge, Brixton and Stockwell. Repairs completed by 04:05 on Friday 3rd July. **Total disruption 19.42 hours**

² NB: Data prior to 2013/14 was recorded using LTIS. This was replaced in April 2013 with TIMS. The two systems record incidents and events using different categorisations and are not directly comparable. In the chart above, the LTIS data has been aligned to the new TIMS categories for information only.

- Thursday 9th July, from 06:35 in the morning, heavy traffic congestion was observed on Euston Road. This was due to industrial action by London Underground. Traffic impacts were severe for much of the day due to the extra vehicles entering central London. Traffic conditions returned to normal by 00:30 the next morning, Friday 10th July. **Total disruption 14.50 hours**
- Friday 31st July, 00:25 early morning, a burst water main occurred on the A406 Pinkham Way, North Circular Road between Bounds Green Road and Orion Road. Westbound lane one restrictions were in place and traffic was slow on approach. Tailbacks were to the Fore Street Tunnel west exit and Sterling Way. Thames Water repaired the main and filled the hole by 13:15 on Wednesday 5th August. **Total disruption 20.13 hours**
- Thursday 29th August, 16:45 PM peak, utility works took place on Romford Road. Two-way, single alternate temporary signals were in place to facilitate emergency National Grid Gas works. Traffic was slow moving on approach with westbound delays towards Ilford Hill and Ilford Lane. Queues were on the northbound off slip from the A406 with heavy traffic back to Beckton. Eastbound A118 traffic was slow moving from Station Road. Works complete by 10:00 morning of Wednesday 2nd September. **Total disruption 22.05 hours**

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 Highway Authority's abilities to minimise disruption from planned highway works, requiring works promoters to apply for a permit to work in the highway. Highway Authority's 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). This was then reduced in period 7 2011/12 to 3,753 per period.

At the beginning of Q1 2013/14, the maximum permissible total number of road works allowed on the TLRN was lowered to 3,250 per period. This was a reduction of 13.4% from the previous cap per period of 3,753 (period 7 2011/12 to period 13 2012/13).

The volume of road works on the network stayed below the 'cap' throughout 2014/15.

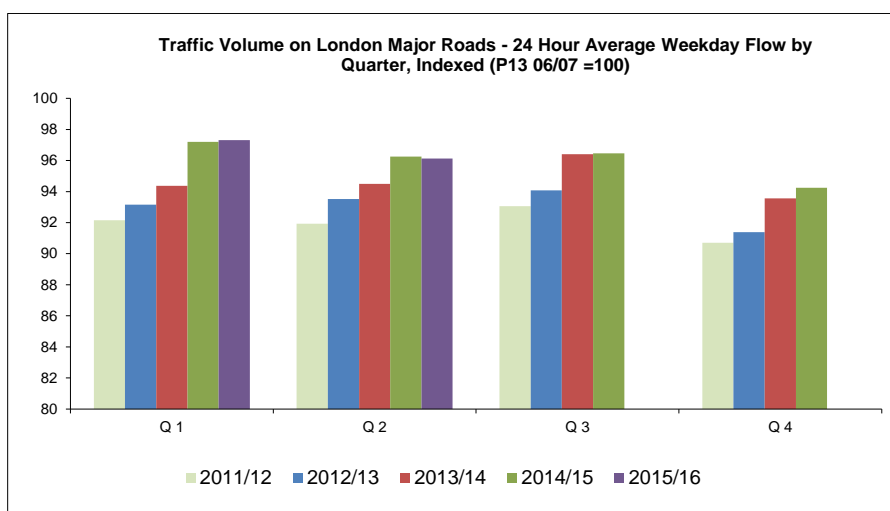
In Q2 the total number of road works on the TLRN was 7,267 - an increase of 303 (4.4%) on the 6,964 total reported in Q2 of 2014/15.

In Q2 the total number of roadworks on the TLRN at 7,267 was 25.5% below the allowable cap of 9,750.

3. TRAFFIC VOLUMES

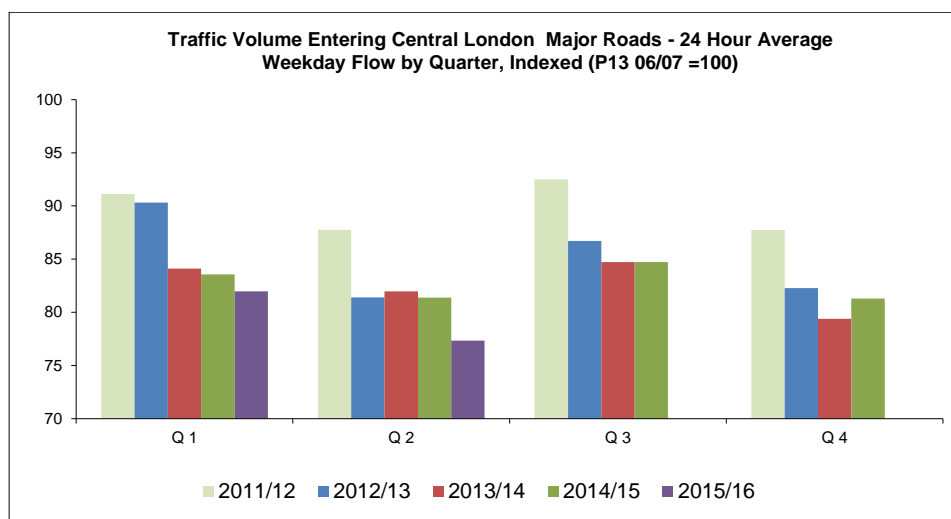
Vehicular Traffic Volumes on London Major Roads

The pan-London traffic flow index stands at 96.1 in Q2 2015/16. This is 0.1 index points down from the same quarter in 2014/15, and 1.6 index points up from the same quarter in 2013/14. The chart below shows traffic flows relative to an index of 100 in period 13 in 2006/07.



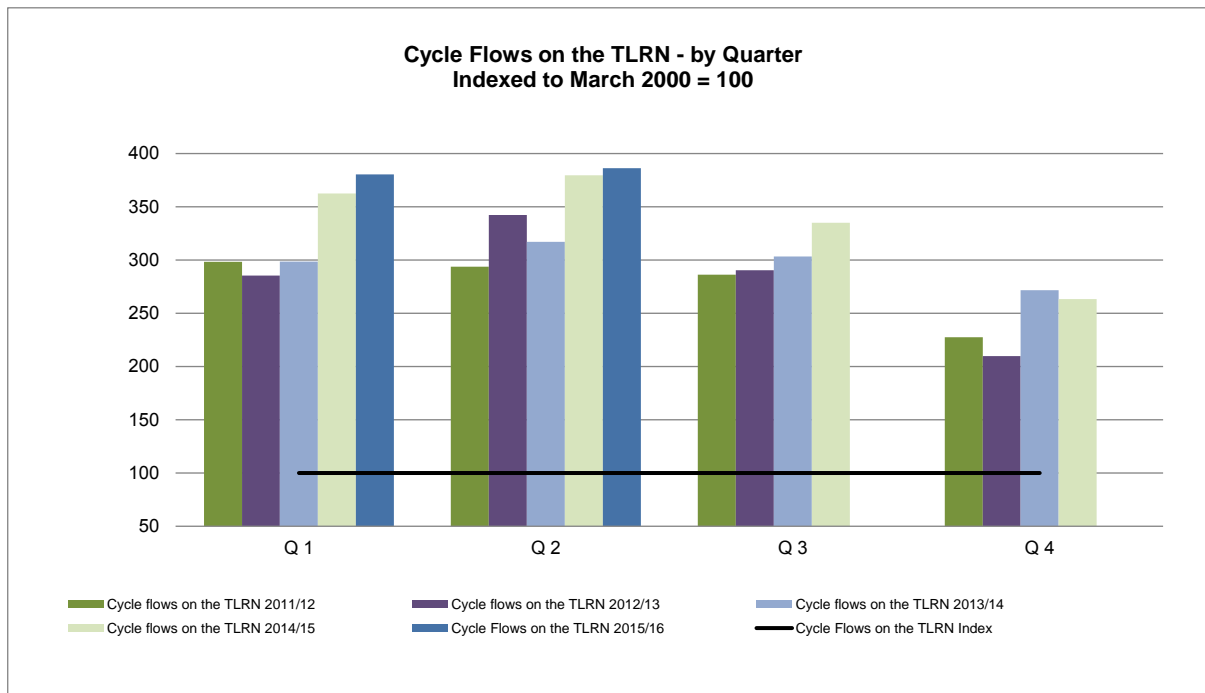
Vehicular Traffic Entering Central London Major Roads

The Central London traffic flow index stands at 77.3 in Q2 2015/16. This is 4.0 index points down from the same quarter in 2014/15 and 4.6 index points down from the same quarter in 2013/14. The chart below shows traffic flows relative to an index of 100 in period 13 2006/07.



Volume of Cycling on the TLRN

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

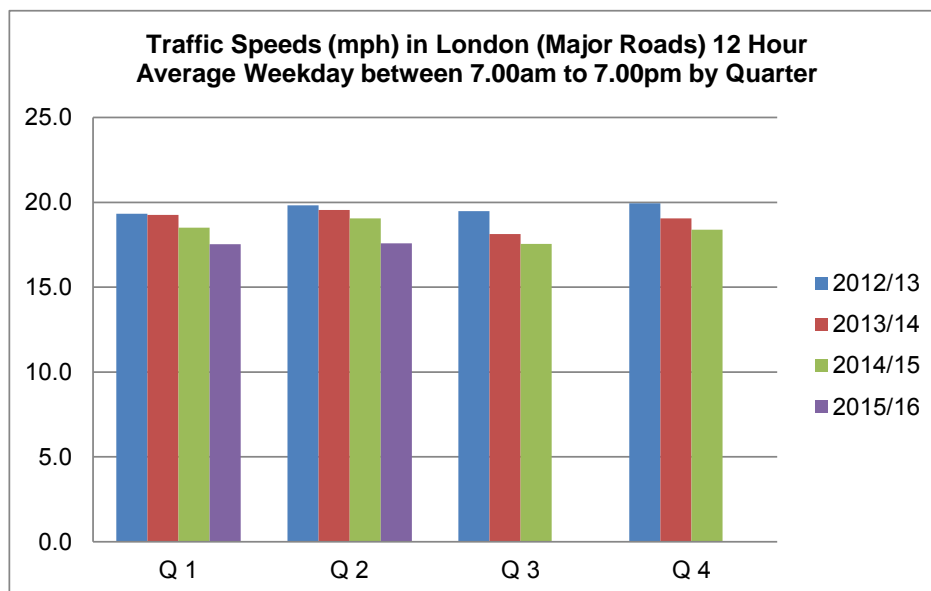


Cycle flows on the TLRN in Q2 2015/16 stand at an index level of 386.3. This is 6.64 index points (1.7%) higher than the same quarter in 2014/15.

Between March 2000 and the end of 2014/15 cycle flows on the TLRN increased by 230%. Compared to 2013/14, average cycling levels on the TLRN at the end of 2014/15 were 11.5% higher.

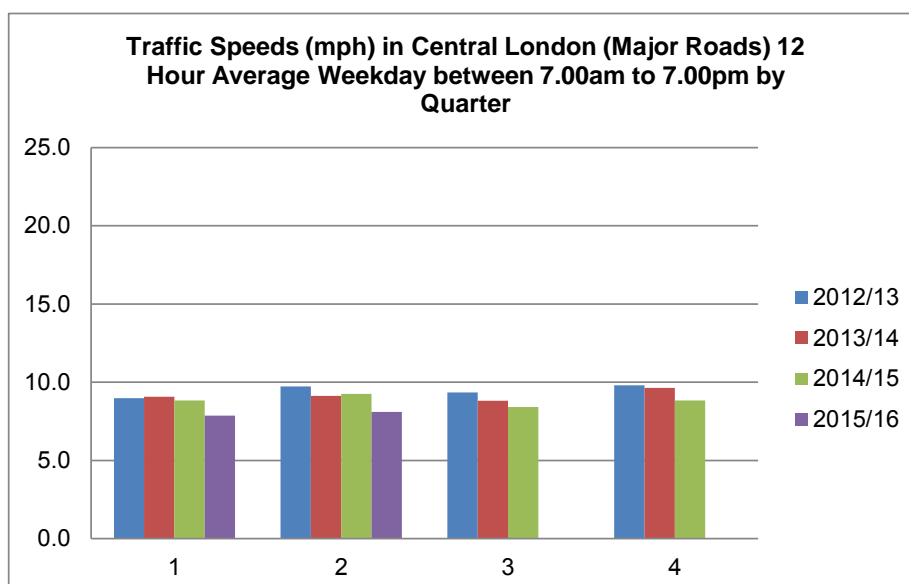
4. TRAFFIC SPEEDS

Traffic Speeds in London



Q2 average traffic speeds for the 12 hours between 07:00 and 19:00 across London were 17.6mph, compared to the 19.1mph observed in Q2 2014/15, a 7.7 % decrease year-on-year.

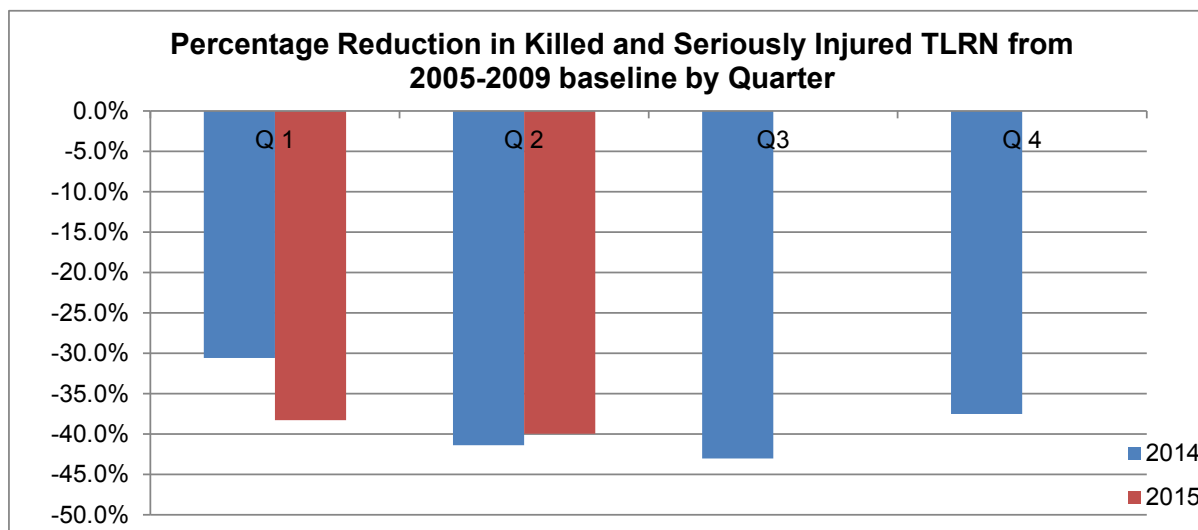
Traffic Speeds in Central London



Q2 average traffic speeds for the 12 hours between 07:00 and 19:00 across Central London were 8.1mph compared to the 9.2mph observed in Q2 2014/15, a 12.2% decrease year-on-year.

5. ROAD SAFETY

Killed and Seriously Injured casualties on the TLRN



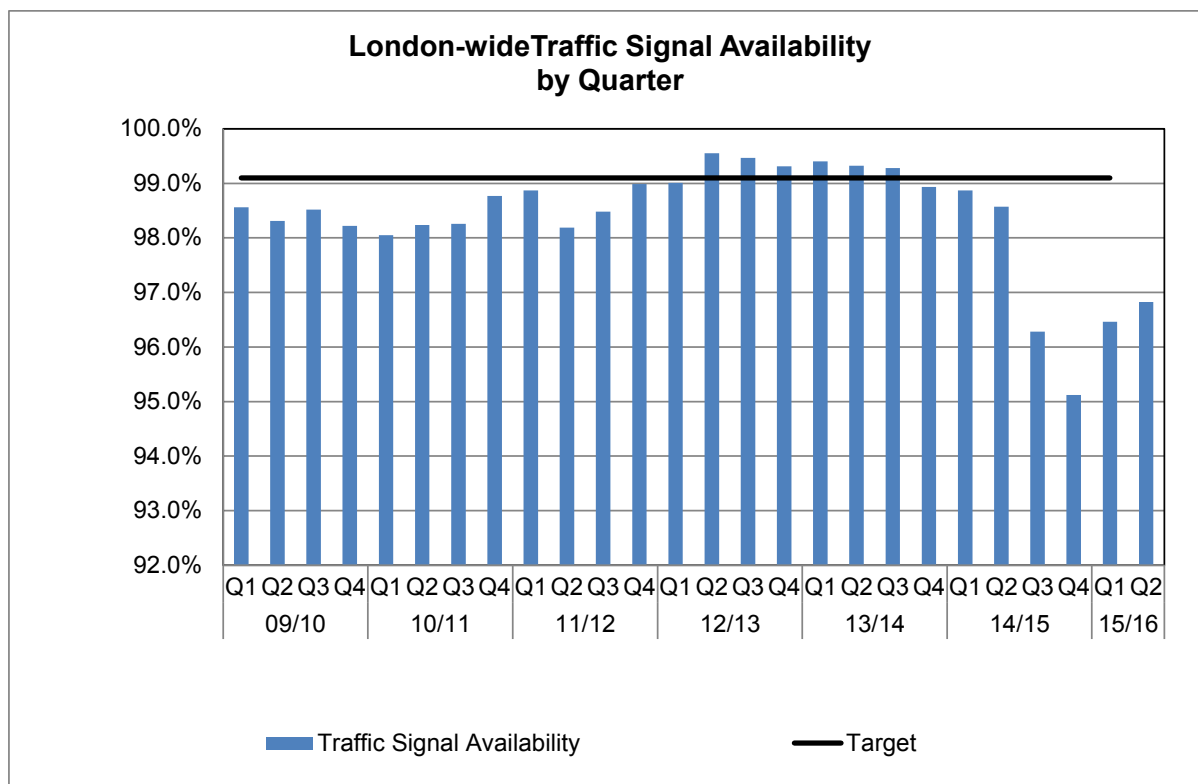
The graph above shows the percentage change in KSI casualties on the TLRN from the 2005-09 baseline for the period 2014/15 to 2015/16. Note that in this data set, Q2 is defined as the three month period from March to May 2015.

Provisional data for Q2 2015/16 indicates that there were 147 KSI casualties on London's roads, a 39.9% reduction from the 2005-09 Q2 baseline.

The table below shows the absolute and percentage reduction in Q2 TLRN KSIs relative to Q2 2015/16

Quarter 2 Results	2011/12	2012/13	2013/14	2015/16
KSI on the TLRN	243	178	148	147
Percentage reduction relative to 2015/16	-39.5%	-17.4%	-0.7%	

6. ASSET AVAILABILITY



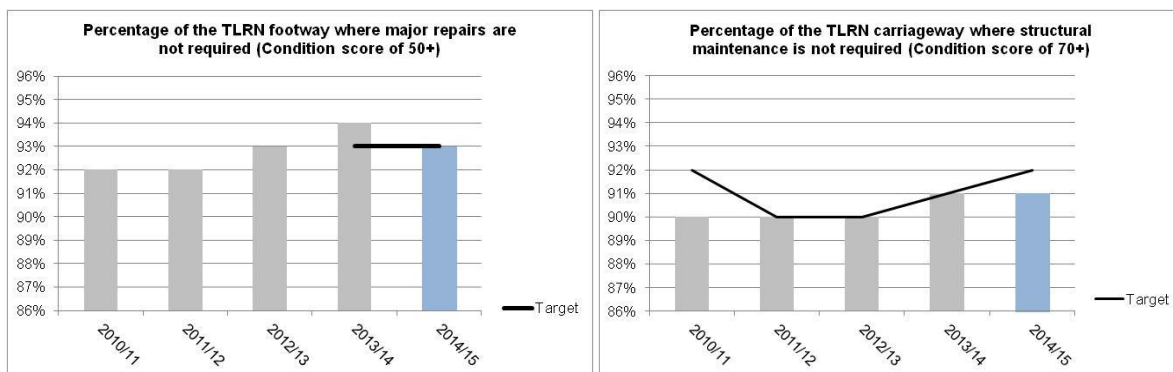
During Q2 2015/16, the availability of traffic signals London-wide was 96.8% compared to 98.5% reported in Q2 2014/15. Performance is expected to improve in the long-term as the new contractors increase resources and continue to train new staff.

The target for this indicator is set at 99.1%, representing the availability of all functions of traffic signal equipment. The reason for not meeting this performance target is primarily due to poor performance from one of the contractors covering the east and south areas. Where full availability is not maintained, abatements are applied to contract payments. This is a demanding target for the three contractors responsible for maintaining London's Traffic Signal equipment - and overall, traffic signal assets are in good condition.

TfL's current focus remains on carrying out preventative maintenance. This is having an impact on availability scores in the short-term as more faults are raised – however, this strategy will lead to improved availability longer term.

7. 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).



The percentage of the TLRN in structurally normal condition was 90% in 2011/12 and 2012/13, and 91% in 2013/14 and 2014/15.

The percentage of the TLRN footway network where the structural condition was normal was 92% in 2011/12, 93% in 2012/13, 94% in 2013/14 and 93% in 2014/15.

8. CUSTOMER SATISFACTION – TLRN

The customer satisfaction survey has been conducted annually between 2010 and 2013 (with fieldwork conducted from mid-Oct to mid-Nov). Since 2014, the survey has been carried out quarterly to enable the road network to be assessed during different seasons, building up a more representative picture over the year.

In Q2 2015/16 an online customer satisfaction survey was conducted among people who had used the TLRN in the last month using any of the following modes: car, pedestrian, bus, motorcycle/scooter/moped, taxi/commercial delivery/emergency vehicle, cycle. Interviews were carried out between 29th June and 31st July 2015.

- 3,301 TLRN users were interviewed (3,001 in London and 300 in South East England)
- Details of 7,836 trips were recorded i.e. collecting multiple trips from some respondents.

Overall satisfaction among TLRN users in Q2 15/16 is at 75, one point higher than Q1 15/16, Q3 and Q4 2014/15, and the same as Q2 last year.

Levels of satisfaction with most aspects of the TLRN experience were stable, apart from higher scores for traffic light timings, condition of the road surface, pavement flooding and pavement condition.

Overall satisfaction among the different TLRN users remains unchanged across all modes.

However, cyclists were overall more satisfied with higher satisfaction for the amount and clarity of road signs giving route directions, traffic light timings, condition and clarity of road markings, amount and clarity of road signs about delays and disruptions, speed of response for fixing unusual traffic problems and management of roadworks.

Pedestrians were more satisfied with the pavement condition and freedom from flooding.

Satisfaction with different aspects:

TLRN users are more satisfied with traffic light timings, condition of the road surface, pavement flooding and pavement condition. Compared to Q2 last year, there was no change in overall satisfaction. New questions were introduced covering: air quality, how well different users share the road/pavement, traffic noise levels, and feeling in control of your journey.

Q3 2011	Q3 2012	Q3 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	QoQ	Q2 2015	
77	77	75	78	78	76	76	77		78	roads are well drained and free from water & flooding
77	78	77	79	79	79	78	77		78	working condition of the traffic lights
77	77	76	78	78	77	77	76		76	street lighting
75	76	75	77	77	76	76	76		76	condition and clarity of road markings
75	76	75	77	77	76	76	75		75	amount and clarity of road signs giving route directions
72	75	74	75	75	74	74	75		75	amount and clarity of road signs about delays and disruptions
75	76	75	75	75	74	74	74		75	OVERALL SATISFACTION
73	73	73	74	74	73	73	73	↑	74	traffic light timings
70	73	71	71	72	72	72	72	↑	73	condition of road surfaces
72	73	73	73	74	73	73	72		73	speed of response for fixing unusual traffic problems
-	-	-	-	-	-	-	73		73	feeling in control of journey
72	74	72	74	74	73	73	72		73	up-to-the-minute information
73	74	73	75	75	74	74	72		72	could estimate accurately how long your journey would take
70	73	71	73	74	72	72	72		72	management of road works
-	-	-	-	-	-	-	72		72	keeping moving in traffic
72	74	73	74	74	74	73	71		72	speed
-	-	-	-	-	-	-	70		71	how well different users share the road/pavement
-	-	-	-	-	-	-	68		68	traffic noise levels
67	69	67	69	70	67	68	68		68	traffic congestion
-	-	-	-	-	-	-	66		66	air quality

Frustrations with Road Works Q2 2015/16

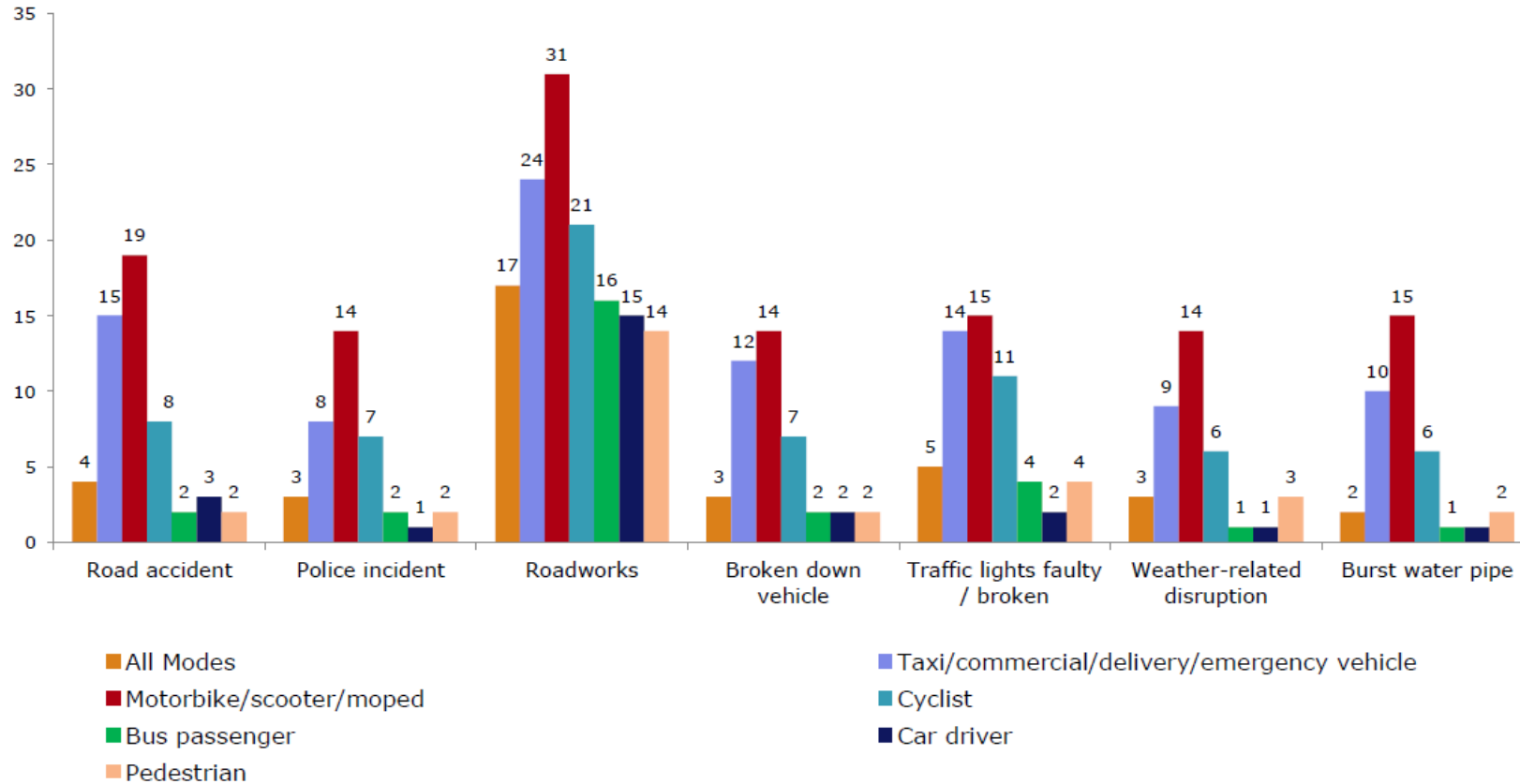
TLRN users are frustrated with roadworks carried out at busy times, roadworks which take too long and seeing street closures despite no-one working. Frustration with repeated roadworks on the same stretch of road within the same year continues to reduce.

Do you find any of the following particularly frustrating about Road Works on London's major roads? (%)

									Top priority for improvement		
Q3 2011	Q3 2012	Q3 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q1 2015	Q2 2015	
55	47	51	44	43	46	45	43	42	19	19	Roadwork carried out at busy times
55	45	48	44	41	42	42	41	40	17	17	Takes too long to carry out the work
56	49	54	45	44	45	44	40	38	14	12	Seeing street partially closed, but no-one working there
54	46	49	40	40	43	39	33	33	14	15	Repeated roadwork on the same stretch of road within the same year
49	39	43	36	33	35	33	34	32	6	6	Unexpected delays to your journeys by bus, cycle, driving or walking
47	35	42	32	30	32	32	32	32	7	8	Unreliable journeys generally - not being able to predict accurately how long journeys will take
45	32	36	31	30	30	29	30	31	11	10	Major delays to your journeys by bus, cycle, driving or walking
43	37	39	32	29	30	31	29	27	4	4	Lack of information about the length of the disruption
42	38	40	32	29	31	30	27	26	3	4	Lack of explanation about why roadworks are being carried out
33	27	30	23	20	24	21	21	21	4	5	Lack of advance warning about upcoming roadworks
10	15	13	15	16	13	15	18	19	-	-	None of the above
1	1	2	1	2	2	1	1	1	-	-	Other - specify

Type of disruption on TLRN experienced on journey

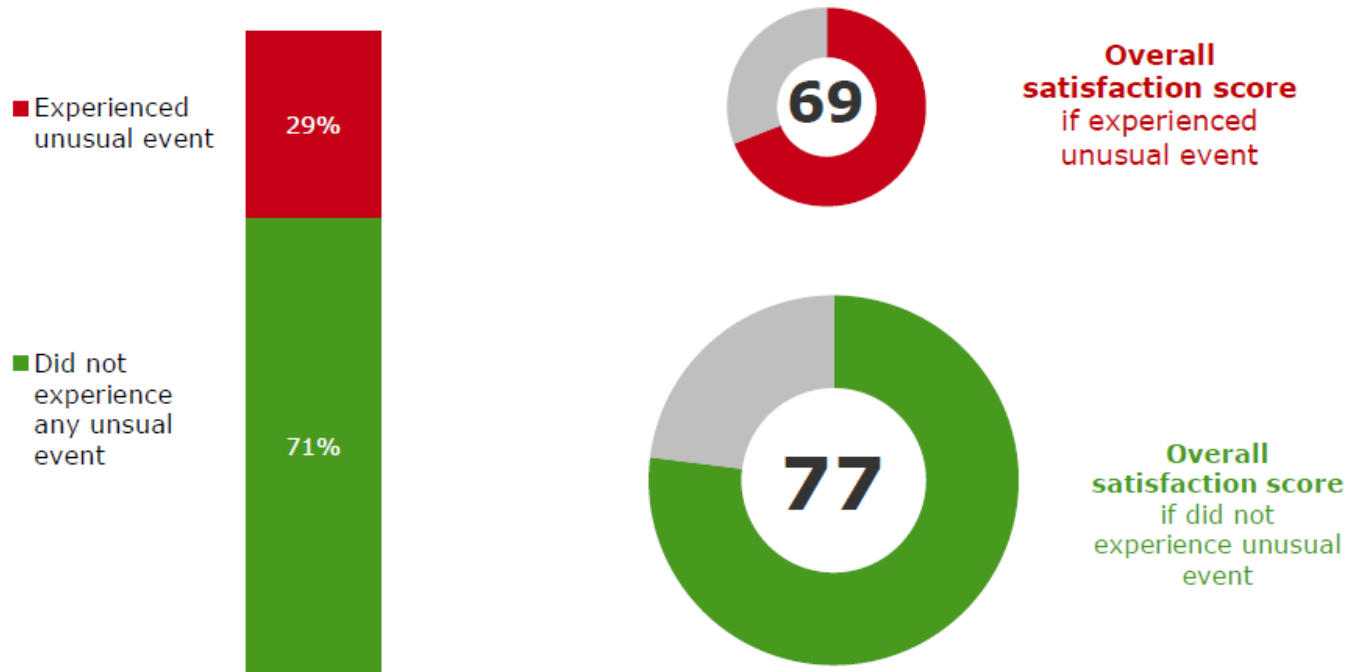
Road works are the disruption TLRN users are most likely to experience on their journey:



Base in Q2 2015/16 : All trips – (7836), car drivers (2695), taxi/commercial vehicles (419), motorbikes/mopeds/scooters (265), bus passengers (1987), pedestrians (1831), cyclists (639)

Experience of unusual events and impact on satisfaction

Overall satisfaction with the journey is 8 points lower for those who experienced an 'unusual event' on their journey (29% of all TLRN users). The proportion of TLRN users to experience an unusual event increased by 4 percentage points in Q2, although this had no change on overall satisfaction.



Did you experience any of these 'unusual events' affecting this particular journey which meant that your journey was not typical of a normal journey? Road accident, Police incident, Roadworks, Broken down vehicle (blocking the carriageway), Traffic lights faulty / broken, Weather-related disruption (such as flooding), Burst water pipe, Other

Base in Q2 2015/16 : All trips - (7836) Experienced unusual events (No = 5610, Yes = 2226)