



TLRN Performance Report

Quarter 4 2016/17

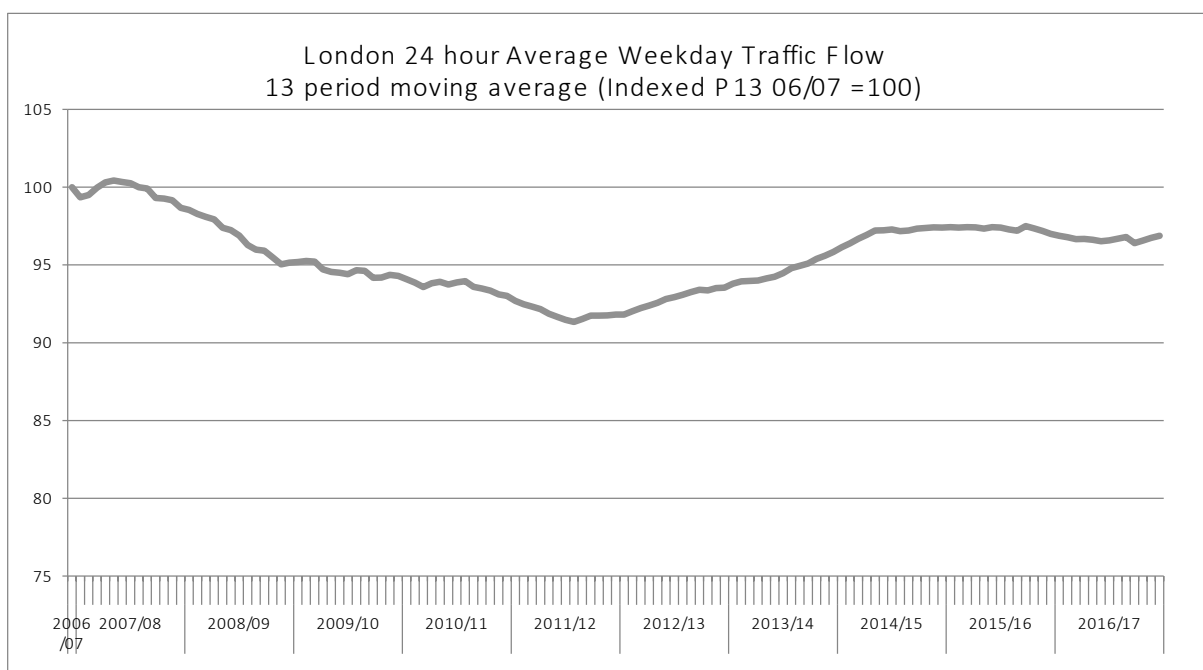
CONTENTS

Performance summary for Q4 2016/17	3
1. Reliability	5
2. Network disruption	12
3. Number of roadworks on the TLRN	15
4. Traffic volumes	16
5. Cycling levels in central London	17
6. Traffic speeds	18
7. Road safety	19
8. Asset availability	20
9. State of good repair	21

Performance summary for Q4 2016/17

In Q3 and Q4 2016/17, as we have seen the extent of disruption associated with major roadworks reduce, the amount of traffic using London's major roads has increased slightly and is now 0.4 index points (0.5%) higher than in Q4 the previous year. However, volumes remain 0.7 index points (0.8%) lower than they were two years ago.

The longer term pattern of traffic volumes in London is illustrated below. Following the economic recovery late in 2012, the start of 2014 saw a period of steep traffic growth as the economy returned to normal levels. From 2014 traffic volumes were fairly static for close to two years, with a small decline between the end of 2015/16 and Q2 2016/17, before the slight increase seen in Q3 and Q4 2016/17.



In recent years a significant amount of building and construction works have taken place to accommodate London's exceptional economic and population growth. It is expected that an extra 5 million trips per day will take place on London's roads by 2030, on top of the 30 million daily trips already taking place today. This growth is changing the way our roads are used and are operated. TfL is continuing to oversee significant investment in London's streets, with numerous projects and programmes that are transforming some of the busiest roads and junctions for all road users. In addition, developers, the London boroughs and utility providers are building additional homes, shops, public places and infrastructure.

While, overall, there has been a significant slowing in the rate of traffic growth, the performance of the network has been affected by construction activity. Major roadworks often require impactful interventions such as temporary traffic signals, re-phasing of traffic signals and lane reductions. As a consequence we have seen a slight reduction in London-wide traffic speeds between 07:00 and 19:00. Speeds in Q4 2016/17 decreased by 0.3 mph to 17.3 mph, 1.4% lower than Q4 2015/16.

Taking planned (and unplanned) roadworks and incidents into account, as well as the anticipated increases in traffic flows, it was expected that Journey Time Reliability (JTR) would be impacted. AM peak JTR on TfL's roads (the TLRN) in Q4 2016/17 was 88.2% - which is 0.2% lower than Q4 2015/16. However, in central London (excluding the congestion charging western extension zone and the Inner Ring Road) JTR in Q4 was 86.0%, which is 0.6 percentage points higher than a year ago.

Unlike the rest of London, traffic volumes in central London have continued to fall. The central London traffic flow index stands at 72.9 in Q4 2016/17, down 3.4 index points from Q4 2015/16, and 8.3 index points down from Q4 2014/15.

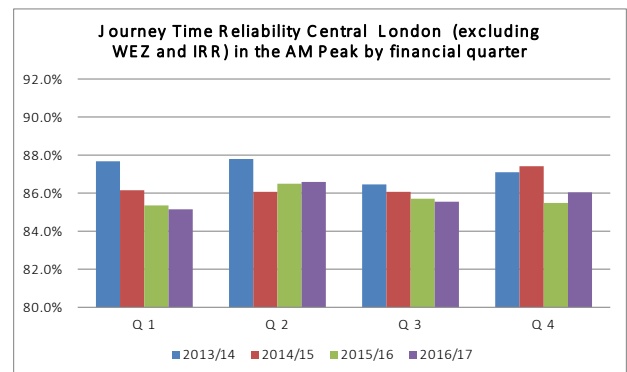
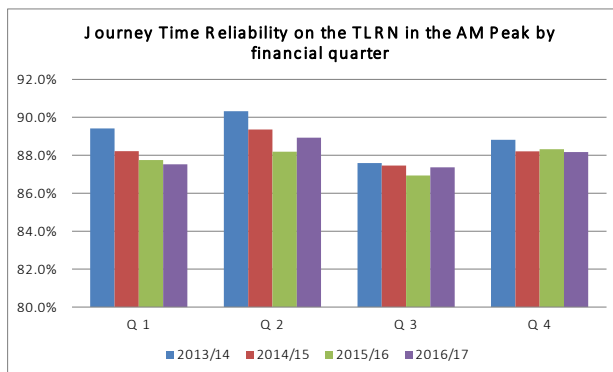
The latest available data shows that the number of people killed or seriously injured in road collisions on the TLRN has decreased by 43.2% compared to the 2005-2009 baseline (note that collision data for Q4 was not available at the time of publication of this report, and updates for Q4 will be included in the Q1 2017/18 report).

The average total cycle kilometres travelled per kilometre per day within central London across all road networks in Q4 2016/17 was 1,190. This represents a 21% increase compared to the 2013/14 baseline, and a 7.2% increase compared to a year ago in Q4 2015/16.

Note: The TLRN Customer Satisfaction Survey, which was previously reported quarterly, will be reported twice in 2017/18 (in Q1 and Q3), before reverting to being an annual measure in 2018/19.

1. Reliability

The key measure set out in the Mayor’s Transport Strategy (MTS) for monitoring traffic performance 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. Journey times for this purpose are recorded using Automatic Number Plate Recognition (ANPR) camera across the Transport for London Road Network (TLRN).



In Q4 2016/17, JTR on the TLRN in the AM peak in all directions was 88.2%. This is 0.6 percentage points lower than the target (88.8%), and 0.2 percentage points lower than a year ago in Q4 2015/16.

JTR for central London in the AM peak - excluding the congestion charging western extension zone (WEZ) and the Inner Ring Road - was 86.0%. This is 0.1 percentage point higher than the target (85.9%), and 0.6 percentage points higher than a year ago in Q4 2015/16.

Average 24-hour weekday traffic flows across London increased by 0.5% compared to a year ago in Q4 2015/16. While over the longer term there has been a significant slowing in the rate of traffic growth in London, the overall performance of the network has been affected by major construction activity such as large scale redevelopment projects and numerous major road improvement schemes.

During Q4 a number of incidents impacted JTR:

Period 10

- JTR was 90.4%, on target (meaning it was 0.5 points above the same period last year), and 3.4 points above the previous period.
- In Period 10 the South Area was up 0.6 percentage points, driven by good performance on the A24 and A205 in both directions. The A40 decline was associated with utility and maintenance work along Marylebone Road, and the closure of the off-slip to the A5 due to National Rail works.

- In week 3 a burst water main on the A20 Camberwell New Road caused delays of at least 45 minutes. This also led to additional traffic in the Blackwall Tunnel causing delays of 40 minutes, as well as the A23 which suffered up to an hour of delay.
- Speeds were only 0.1-0.2 mph different in both the AM peak and 07:00 to 19:00 both pan-London and on central London corridors, although down about 0.5 mph across central London in both time periods.

Period 11

- JTR was 86.6%, 1.8 percentage points below target (meaning it was 1.3 points below the same period last year), and 3.8 points below the previous period.
- The Tube strike caused severe delays on the road network, including the AM peak with delays over an hour on the A13 inbound and the A406. This contributed to a drop of approximately 1 percentage points in the period JTR. Gas works led to delays of 20-45 minutes on the Western Cross Route which continued for three weeks. To minimise delays a new traffic signal timing strategy was developed to assist the Inner Ring Road and Vauxhall Cross.
- The A316 inbound saw delays of around half an hour on 30 and 31 January leading to very poor JTR performance in week 4. This appears to have been driven by a combination of Thames Water works at Twickenham Road on both days plus a breakdown on the Monday and a collision on the Tuesday.
- Speeds were down about 0.4 mph pan-London across the day, similarly in central London in the AM peak, and approximately 0.6 mph 07:00 to 19:00.

Period 12

- JTR was 88.2%, 0.4 percentage points below target (meaning it was 0.1 points below the same period last year), and 1.5 points above the previous period.
- There were no exceptional incidents this period. However, there were eight incidences of delays of 50 to 55 minutes. Three of these occurred at Bishopsgate, in two cases being a breakdown and collision exacerbating the impact of roadworks. Two occurred at the Blackwall Tunnel southbound (a collision and an emergency services incident). The remainder were a breakdown (on the A10), a cement spillage (City Route) and collision (A406).
- The worst day was in week 3 due to a breakdown at the Blackwall Tunnel causing delays of 35 minutes on the A12 Eastern Cross route.
- Speeds were up very marginally (0.1 - 0.2 mph) in the AM peak and down very marginally 07:00 to 19:00 both pan-London and on central TLRN corridors. Central London speeds were down 0.4 mph across both periods.

Period 13

- JTR was 87.5%, 0.3 percentage points below target (meaning it was 0.2 points below the same period last year), and 0.6 points below the previous period.

- In Period 13 the North and East area were up 2.3 and 0.2 percentage points respectively.
- The Central area was affected by the aftermath of the terrorist incident in Westminster on 23 March.
- The West area saw poor performance on the A4 and A316 inbound. The A4 was affected by junction improvement and utility works. Delays were of the order 30 minutes.
- Speeds were down in the AM peak pan-London (0.3 mph), on central TLRN corridors (0.4 mph) and in central London (0.8 mph). 07:00 to 19:00 they were practically unchanged both pan-London and on central TLRN corridors, but down in central London.

Journey time reliability (JTR) on the TLRN

AM Peak		Inbound								Outbound							
Route Type	Corridor	2015/16 Q1	2015/16 Q2	2015/16 Q3	2015/16 Q4	2016/17 Q1	2016/17 Q2	2016/17 Q3	2016/17 Q4	2015/16 Q1	2015/16 Q2	2015/16 Q3	2015/16 Q4	2016/17 Q1	2016/17 Q2	2016/17 Q3	2016/17 Q4
Radial	A4	89.4%	88.3%	87.0%	88.6%	85.6%	87.9%	87.5%	86.0%	94.0%	92.2%	90.5%	92.9%	91.0%	91.6%	90.9%	93.2%
Radial	A40	81.7%	79.7%	79.5%	81.2%	80.7%	80.4%	78.6%	81.3%	91.4%	93.9%	94.2%	95.4%	93.4%	94.3%	92.5%	94.8%
Radial	A41	85.3%	84.9%	83.8%	87.0%	87.1%	87.7%	85.2%	88.3%	91.0%	91.6%	88.5%	88.1%	89.6%	90.2%	87.9%	88.6%
Radial	A1	80.0%	82.0%	82.7%	83.5%	83.8%	85.9%	84.5%	86.0%	88.8%	89.0%	87.0%	86.7%	90.4%	91.1%	89.5%	90.6%
Radial	A10	84.5%	85.9%	83.4%	84.0%	83.9%	87.0%	84.6%	84.0%	90.0%	89.8%	87.0%	88.1%	88.8%	90.4%	86.5%	88.0%
Radial	A12	84.6%	88.1%	83.4%	86.5%	85.0%	87.7%	85.8%	86.4%	94.2%	95.6%	96.6%	96.2%	95.5%	96.2%	96.2%	96.4%
Radial	A13	79.2%	80.9%	75.5%	84.0%	82.3%	82.1%	80.5%	83.4%	98.2%	98.2%	98.1%	97.6%	98.1%	98.5%	97.5%	98.5%
Radial	A2	81.2%	84.0%	81.2%	84.1%	86.5%	86.1%	85.0%	84.3%	96.6%	96.2%	95.6%	96.3%	96.5%	96.3%	95.6%	95.8%
Radial	A20	85.4%	83.9%	77.8%	81.1%	77.9%	83.1%	80.6%	81.7%	91.0%	91.2%	91.4%	90.8%	91.1%	91.8%	91.7%	91.4%
Radial	A21	88.0%	92.0%	86.1%	85.8%	86.5%	91.8%	86.5%	85.8%	91.7%	96.4%	93.9%	93.9%	93.5%	96.7%	94.5%	93.2%
Radial	A23	84.7%	88.3%	85.5%	87.2%	85.0%	87.8%	85.5%	86.2%	89.3%	91.1%	87.8%	88.9%	87.1%	89.6%	88.1%	87.6%
Radial	A24	83.2%	86.2%	80.4%	84.9%	86.0%	89.5%	85.9%	86.3%	91.9%	90.4%	90.4%	92.3%	91.5%	93.2%	92.3%	93.2%
Radial	A3	86.5%	91.2%	89.5%	90.4%	89.6%	91.7%	90.5%	89.4%	94.5%	92.3%	90.0%	92.9%	90.6%	93.2%	90.3%	91.0%
Radial	A316	87.6%	92.2%	86.2%	88.9%	84.1%	91.3%	89.7%	85.0%	96.1%	95.1%	96.3%	95.5%	92.7%	96.6%	97.2%	95.6%

PM Peak		Inbound								Outbound							
Route Type	Corridor	2015/16 Q1	2015/16 Q2	2015/16 Q3	2015/16 Q4	2016/17 Q1	2016/17 Q2	2016/17 Q3	2016/17 Q4	2015/16 Q1	2015/16 Q2	2015/16 Q3	2015/16 Q4	2016/17 Q1	2016/17 Q2	2016/17 Q3	2016/17 Q4
Radial	A4	87.7%	89.6%	87.3%	86.8%	85.4%	87.2%	84.0%	85.8%	79.7%	79.5%	81.1%	81.3%	78.8%	80.5%	80.5%	82.5%
Radial	A40	83.8%	84.2%	82.7%	85.5%	82.3%	82.7%	81.6%	83.0%	84.0%	82.2%	80.5%	79.4%	80.8%	81.9%	81.2%	80.4%
Radial	A41	90.7%	91.4%	87.9%	91.9%	90.3%	93.1%	90.8%	92.1%	83.0%	83.3%	80.2%	82.9%	81.4%	84.5%	79.7%	83.8%
Radial	A1	84.8%	85.1%	86.4%	86.3%	88.7%	89.9%	85.1%	89.3%	83.4%	82.7%	80.4%	81.9%	84.2%	85.7%	85.0%	85.2%
Radial	A10	87.2%	89.5%	86.1%	87.0%	87.5%	89.7%	85.8%	88.3%	79.2%	79.5%	77.3%	79.2%	78.3%	80.9%	77.0%	80.4%
Radial	A12	86.6%	87.7%	87.7%	88.8%	86.5%	86.8%	85.3%	88.8%	83.6%	82.9%	83.9%	84.6%	83.8%	85.0%	83.4%	86.0%
Radial	A13	90.2%	90.6%	87.8%	89.5%	85.7%	92.0%	81.7%	87.7%	83.3%	83.4%	82.9%	81.8%	80.9%	82.0%	80.4%	81.8%
Radial	A2	90.1%	90.7%	90.9%	91.2%	92.3%	93.7%	92.1%	91.5%	81.3%	81.0%	81.4%	81.3%	82.4%	84.3%	81.3%	82.3%
Radial	A20	90.7%	85.9%	85.6%	83.0%	81.9%	83.0%	82.6%	86.8%	89.5%	85.9%	82.5%	82.5%	83.4%	83.9%	83.5%	84.5%
Radial	A21	92.7%	94.7%	92.4%	93.2%	93.7%	96.1%	91.2%	92.1%	89.5%	91.3%	87.5%	88.9%	89.8%	93.1%	88.9%	89.5%
Radial	A23	88.3%	89.3%	88.8%	89.1%	89.2%	90.3%	88.9%	89.4%	81.1%	81.4%	81.7%	80.9%	81.8%	82.3%	81.2%	82.7%
Radial	A24	92.0%	90.1%	88.4%	90.7%	89.3%	90.4%	91.9%	92.0%	90.1%	87.7%	85.9%	87.5%	87.4%	89.0%	88.5%	88.6%
Radial	A3	93.3%	94.7%	95.0%	94.7%	94.3%	94.6%	94.5%	94.7%	88.8%	87.0%	85.1%	88.6%	86.5%	89.6%	87.7%	89.8%
Radial	A316	89.0%	92.5%	91.0%	89.4%	90.4%	92.5%	89.1%	91.0%	90.7%	91.1%	88.2%	88.1%	92.3%	91.0%	87.5%	88.0%

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	2015/16 Q1	2015/16 Q2	2015/16 Q3	2015/16 Q4	2016/17 Q1	2016/17 Q2	2016/17 Q3	2016/17 Q4	2015/16 Q1	2015/16 Q2	2015/16 Q3	2015/16 Q4	2016/17 Q1	2016/17 Q2	2016/17 Q3	2016/17 Q4
Orbital	A102 B. Tunnel	79.5%	75.6%	79.8%	80.6%	79.8%	76.1%	80.2%	81.0%	96.5%	95.9%	93.7%	93.1%	97.4%	94.7%	94.1%	96.1%
Orbital	A406	86.7%	84.0%	86.3%	86.1%	85.1%	87.9%	84.7%	86.7%	85.6%	86.6%	84.5%	87.7%	86.0%	86.6%	84.8%	85.9%
Orbital	A205	86.5%	88.7%	84.7%	84.3%	87.0%	89.6%	85.7%	86.5%	82.6%	82.8%	84.8%	83.9%	85.2%	85.4%	85.8%	85.3%
Orbital	Inner Ring	81.8%	83.3%	83.2%	83.7%	81.6%	82.8%	82.2%	83.9%	83.4%	84.9%	85.3%	85.6%	83.6%	85.0%	85.2%	85.6%
PM Peak		Anti-clockwise								Clockwise							
Route Type	Corridor	2015/16 Q1	2015/16 Q2	2015/16 Q3	2015/16 Q4	2016/17 Q1	2016/17 Q2	2016/17 Q3	2016/17 Q4	2015/16 Q1	2015/16 Q2	2015/16 Q3	2015/16 Q4	2016/17 Q1	2016/17 Q2	2016/17 Q3	2016/17 Q4
Orbital	A102 B. Tunnel	74.5%	71.0%	76.6%	77.7%	72.6%	71.5%	77.1%	78.2%	79.2%	81.2%	78.5%	79.8%	80.3%	83.8%	80.0%	80.4%
Orbital	A406	83.3%	83.5%	82.9%	84.3%	82.9%	85.1%	81.8%	83.9%	85.2%	82.1%	83.2%	82.9%	80.9%	83.1%	80.1%	81.8%
Orbital	A205	82.4%	84.4%	81.7%	82.8%	82.7%	85.9%	84.2%	84.5%	84.1%	86.3%	83.6%	83.2%	85.9%	88.0%	85.5%	86.0%
Orbital	Inner Ring	78.4%	77.8%	77.9%	79.5%	78.4%	77.8%	78.3%	80.2%	79.2%	80.5%	79.7%	81.5%	81.1%	80.7%	81.0%	82.2%

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

Central London	2015/16 Q1	2015/16 Q2	2015/16 Q3	2015/16 Q4	2016/17 Q1	2016/17 Q2	2016/17 Q3	2016/17 Q4
All Directions								
AM Peak	85.4%	86.5%	85.7%	85.5%	85.2%	86.6%	85.5%	86.0%
PM Peak	81.5%	82.2%	80.5%	82.3%	82.4%	84.3%	82.0%	83.8%

TLRN	2015/16 Q1	2015/16 Q2	2015/16 Q3	2015/16 Q4	2016/17 Q1	2016/17 Q2	2016/17 Q3	2016/17 Q4
All Directions								
AM Peak	87.7%	88.2%	86.9%	88.3%	87.5%	88.9%	87.4%	88.2%
PM Peak	84.9%	84.9%	84.0%	84.8%	84.0%	85.6%	83.5%	85.1%

Legend

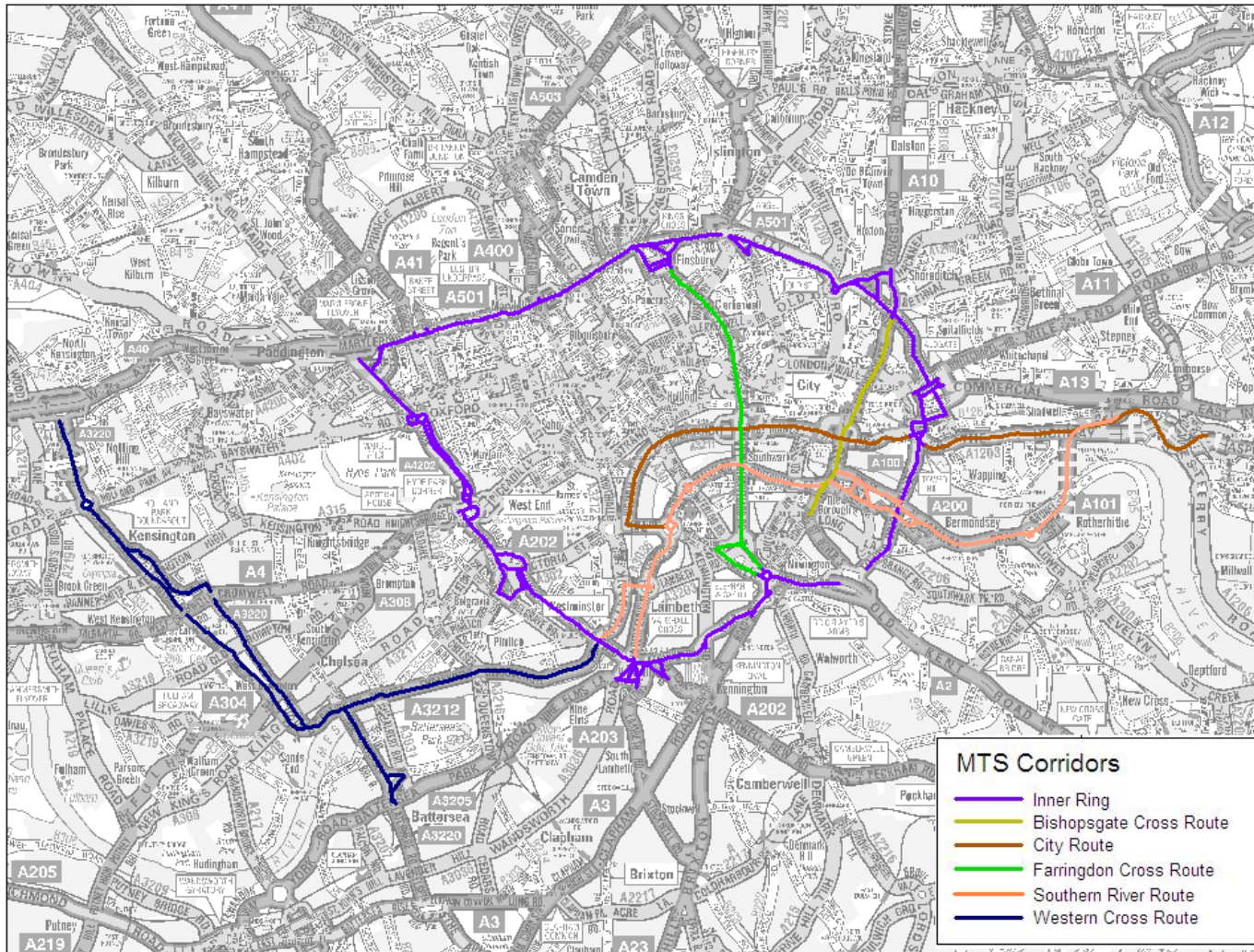
Journey Time Reliability

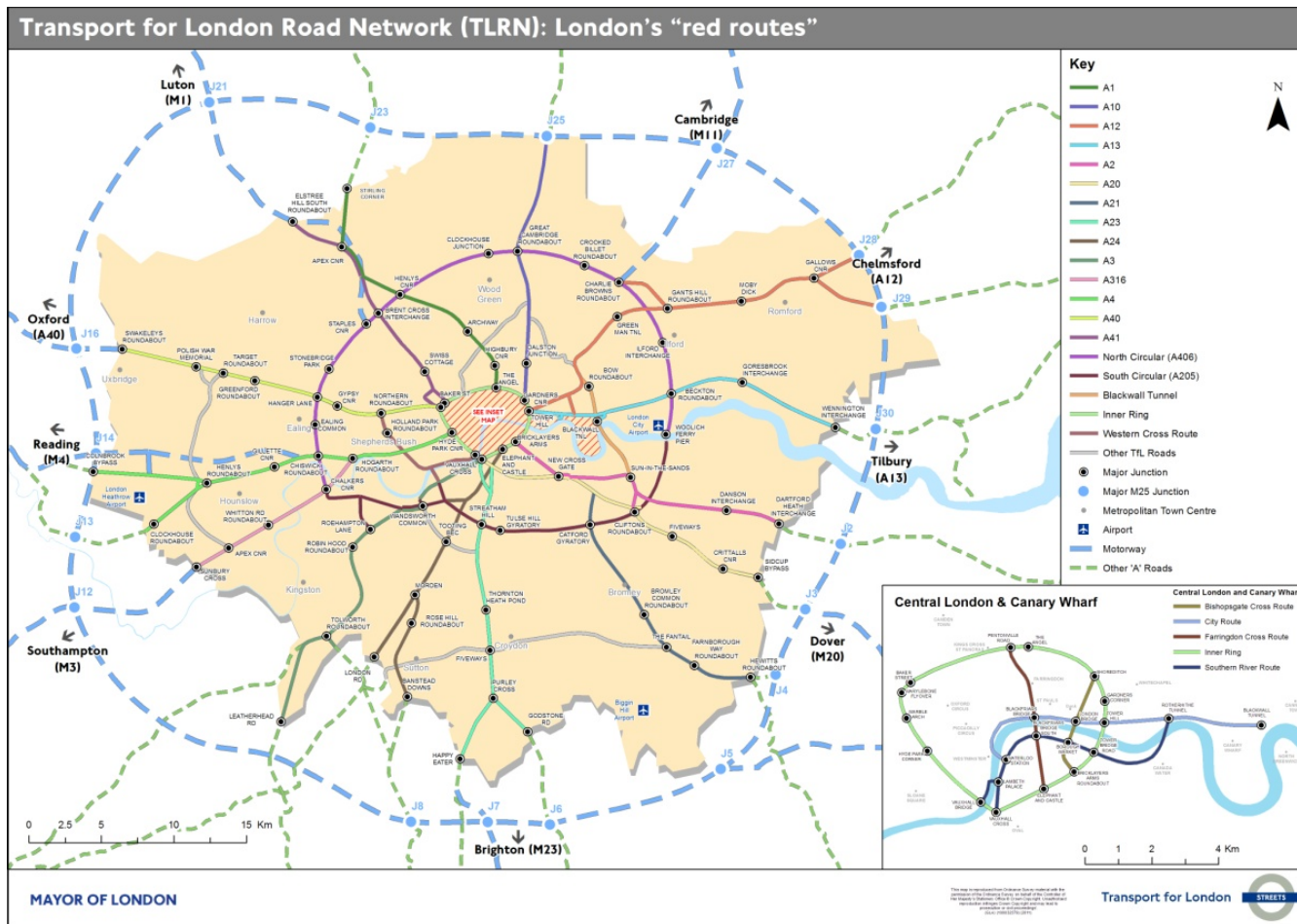
>=90% More than 9 out of 10 journeys are "on time"

80%-89.9%

<80% Less than 4 out of 5 journeys are "on time"

Map showing the TLRN by MTS corridors in central London

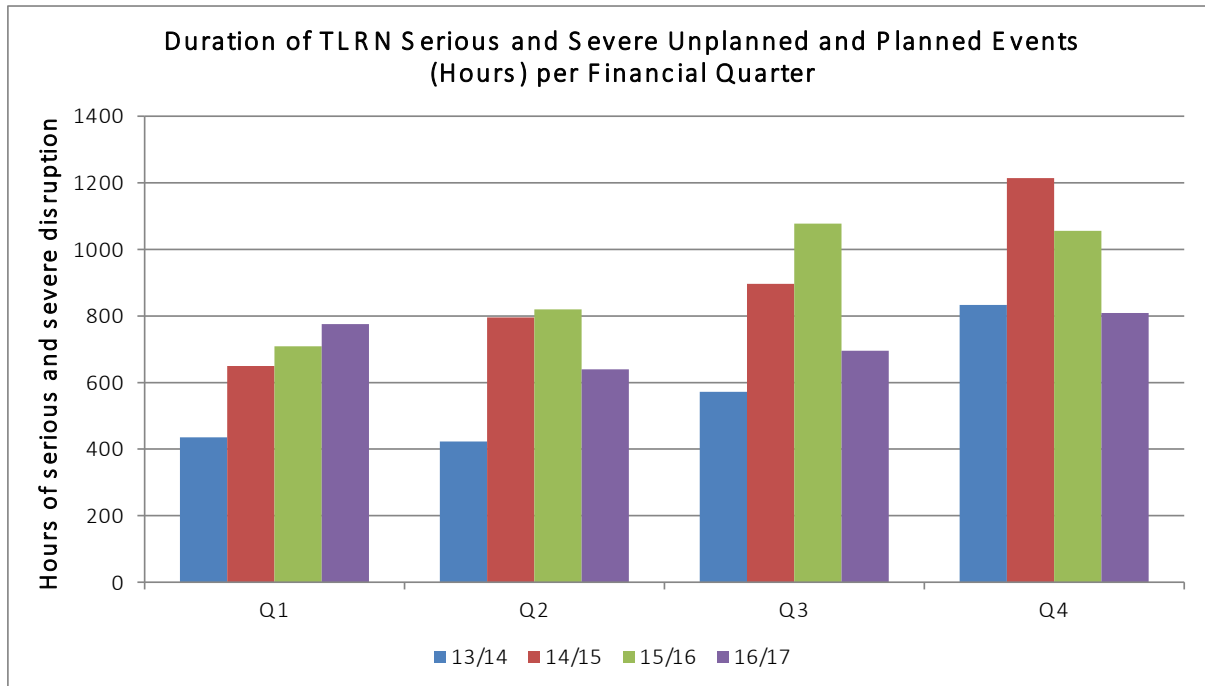




Note: The named corridors do not exactly replicate the road number in the legend, but reflect the strategic radial and orbital corridors set out in the Mayor's Transport Strategy (e.g. the "A12 corridor" includes the A11 Mile End Road into Central London)

2. Network disruption

Serious and severe unplanned and planned disruption on the TLRN

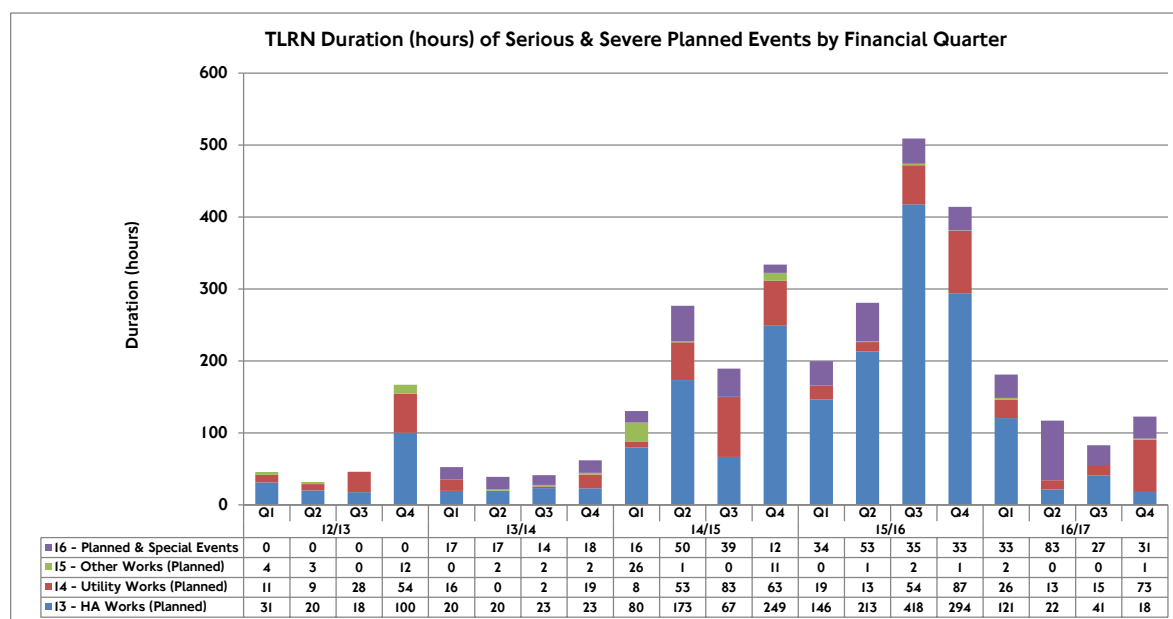


There were 809 hours of Serious and Severe (S&S) disruption in Q4 resulting from unplanned and planned events, spread across 399 separate incidents. Planned S&S disruption totalled 123 hours and unplanned S&S disruption totalled 686 hours.

Overall this represents decrease of 246 planned and unplanned hours compared to Q4 2015/16, attributable to a decrease of 291 planned S&S disruption hours and decrease of 45 unplanned S&S disruption hours.

The amount of S&S disruption per event, a measure of the effectiveness of resolving unplanned incidents, was 1.9 hours in Q4 2016/17, the same as Q4 2015/16.

Planned incidents and events: TLRN I



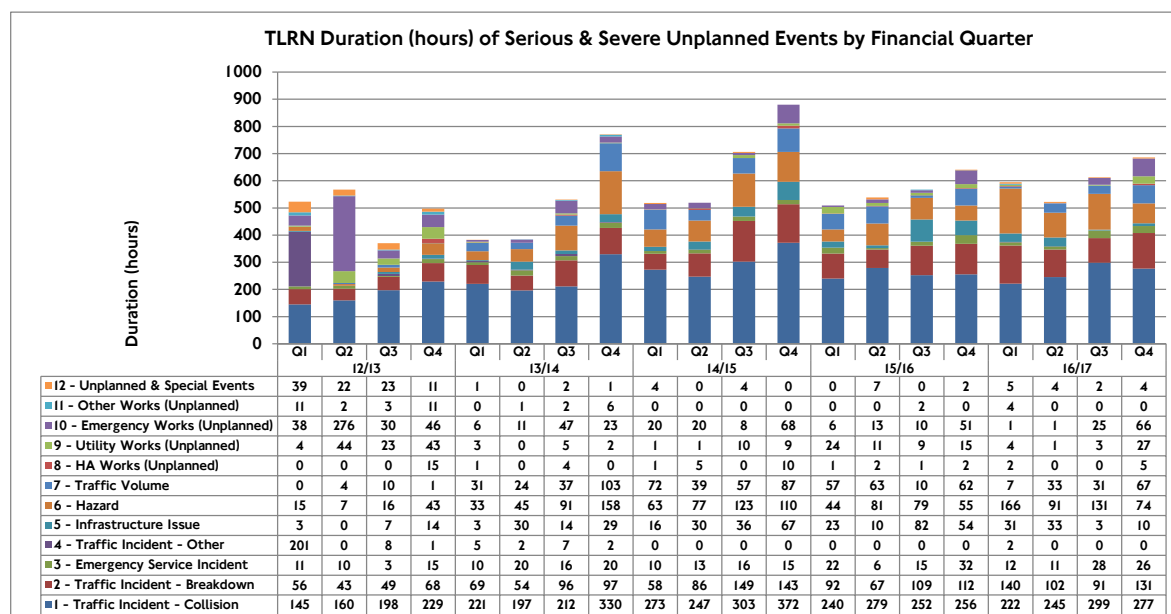
There were 123 hours of S&S disruption in Q4 from planned events, spread across 32 separate events (an average of 3 hours 50 minutes per event). This compares to 414 hours spread across 40 events (an average of 10 hours 21 minutes duration per event) in Q4 2015/16.

There were two planned events on the TLRN recording more than 10 hours of S&S disruption:

- Starting on 26 December 2016 and ending on 3 January 2017 there was disruption on A501 due to combined utility works. There were a total of 192.9 hours of disruption in the period, 33.9 hours of which were serious and severe.
- Between 16 and 19 December 2016 there was disruption on Ilford Hill due utility works. There were a total of 66.8 hours of disruption in the period, 12.8 hours of which were serious and severe.

¹ NB: The system to record data was changed in 2013/14. The previous and current systems record incidents and events using different categorisations and are not directly comparable. In the chart, data to 13/14 has been aligned to the new categories for information only.

Unplanned incidents and events: TLRN ¹

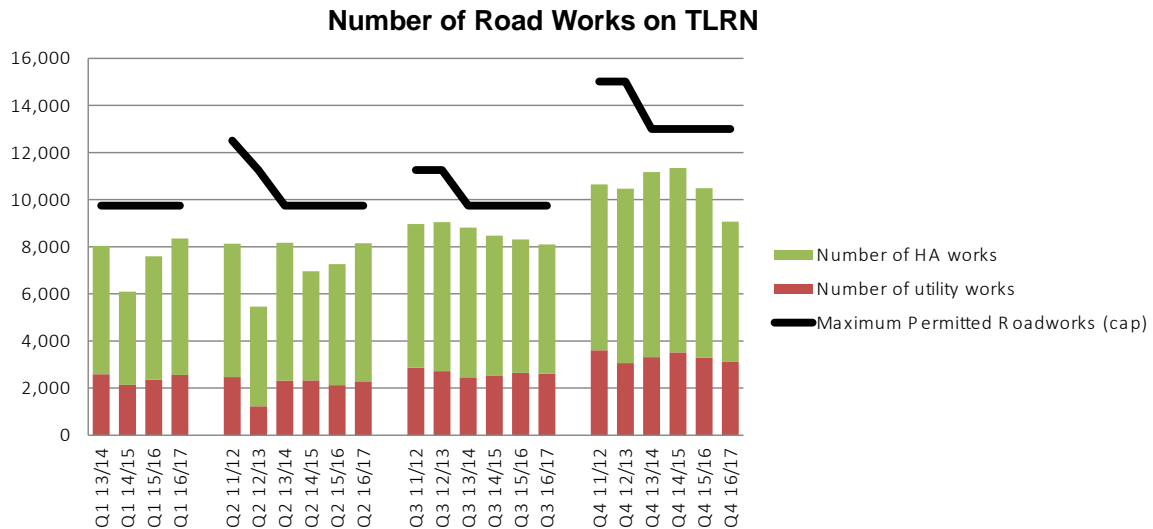


This quarter on the TLRN there were 686 hours of unplanned S&S disruption, spread across 367 separate events (an average of 1 hour 52 minutes duration per event). This compares to 641 hours, spread across 334 events (an average of 1 hour 55 minutes duration per event) in Q4 2015/16.

There were five unplanned incidents on the TLRN leading to over 10 hours of serious and severe disruption:

- Starting on 6 January and ending on 2 February there was disruption on Millbank due to emergency gas works. There was 628 hours of disruption, 20 of which were S&S.
- On 9 January there was disruption on the A501 due to traffic volumes caused by the Tube strike. There was 13 hours of disruption all of which were S&S.
- On 1 December there was disruption on A13 Thames Gateway due to emergency roadworks. There was 18 hours of disruption, 11.0 of which were S&S.
- From 2 March there has been ongoing disruption on Lewisham High Street due to utility works. There has been a total of 648 hours of disruption in the period, 14 of which were S&S.
- Between 22 and 24 March there was disruption around Parliament Square due to a terrorist incident. There was 35 hours of disruption, 11 of which were S&S

3. Number of roadworks on the TLRN



The London Permit Scheme (LoPS) for roadworks was introduced in February 2010. Its purpose is to improve the ability of Highway Authorities to minimise disruption from planned highway works by requiring works promoters to apply for a permit to work in the highway. A Highway Authority’s own works are also subject to permitting.

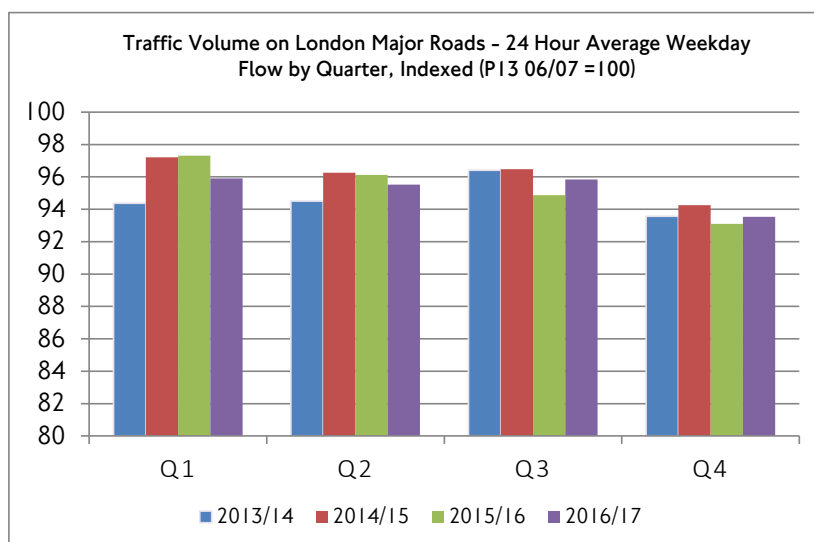
To manage the cumulative impact of roadworks on the TLRN, the total number of new road works permitted in any one period was capped at 4,170 from the start of 2010/11. This was 20% below the peak level of roadwork activities experienced in 2009/10 (5,212 in period 12 of that year). The cap was then reduced in 2011/12 to 3,753 per period, and lowered again to 3,250 per period in 2013/14.

In Q4 2016/17 the total number of roadworks on the TLRN was 9,069 - a decrease of 1,416 (14%) on the 10,485 total reported in Q4 2015/16, and 30% below the allowable cap of 13,000.

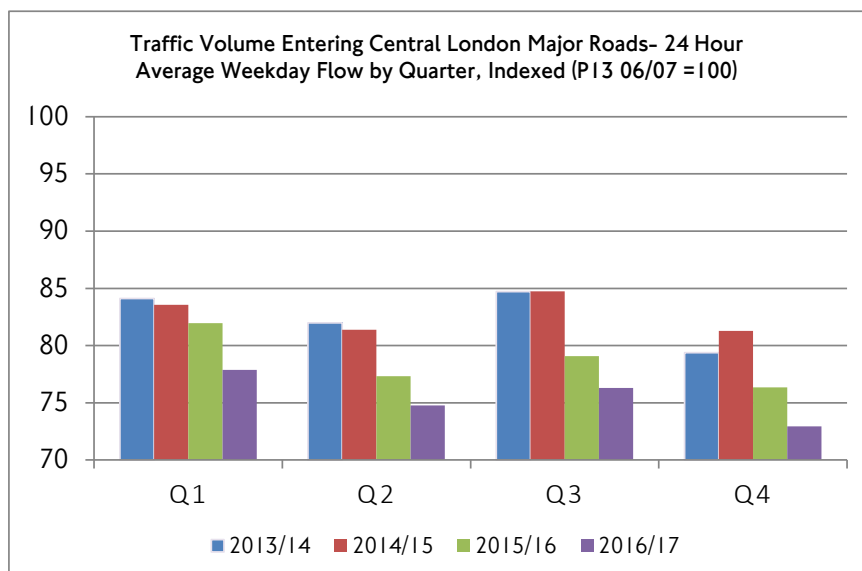
4. Traffic volumes

Vehicular traffic volumes on London's major roads

The pan-London traffic flow index stands at 93.5 in Q4 2016/17. This is 0.4 index points above the same quarter in 2015/16, and 0.7 index points down from the same quarter in 2014/15. The chart below shows traffic flows relative to an index of 100 in 2006/07.



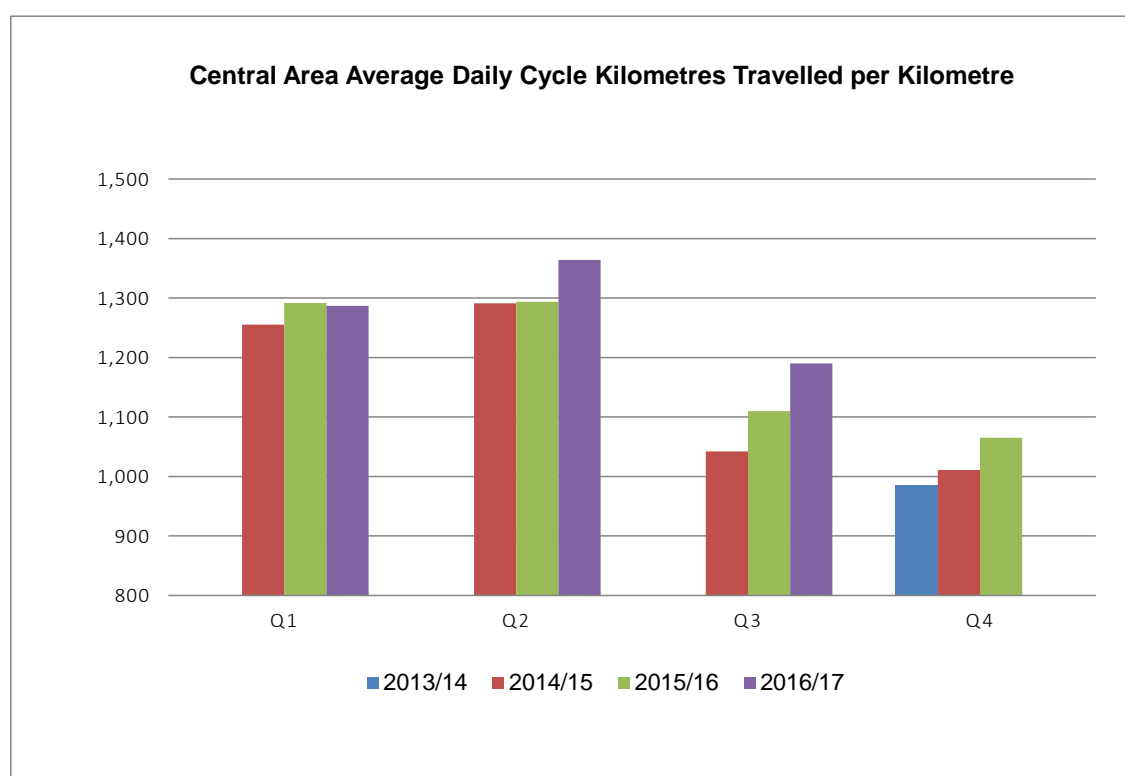
Vehicular traffic entering central London's major roads



The central London traffic flow index stands at 72.9 in Q4 2016/17. This is 3.4 index points down from the same quarter in 2015/16 and 8.3 index points down from the same quarter in 2014/15. The chart below shows traffic flows relative to an index of 100 in 2006/07.

5. Cycling levels in central London

The chart below shows cycle levels in central London relative to a baseline established in Q4 2013/14. Overall, the average total cycle kilometres travelled per kilometre per day within central London across all road networks in Q3 2016/17 was 1,190. This is a 21% increase compared to the Q4 2013/14 baseline of 986, and a 7.2% increase compared to this time last year. TfL a target of cycle levels in 2016/17 to be 3.1% above those in 2015/16.



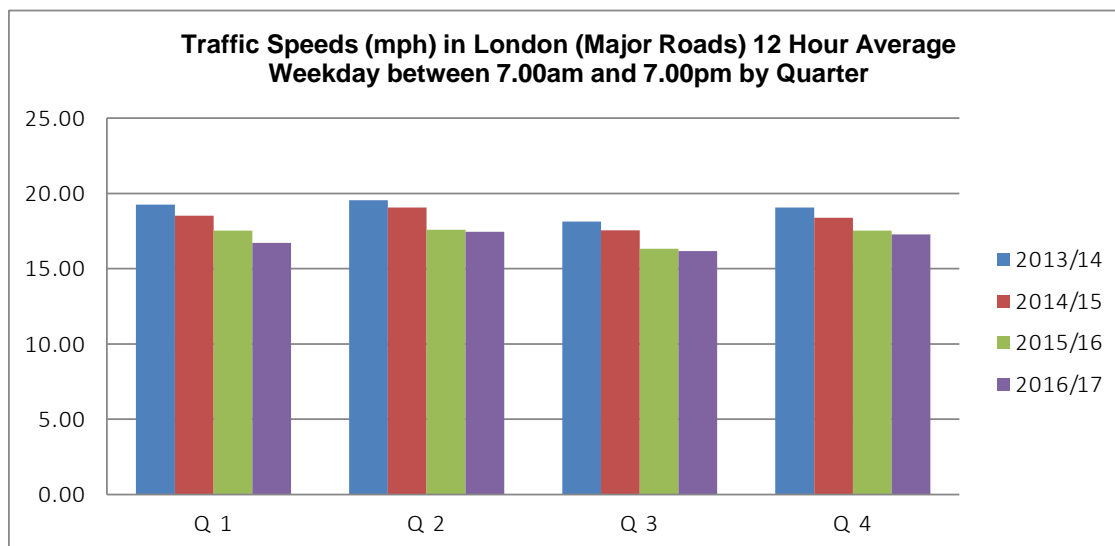
Central London cycling metric

This is a representative measure of total kilometres cycled each day in central London, as defined by the congestion charging zone (CCZ), and is reported each quarter. It has been in place since Q4 2013/14, and uses 200 stratified manual count sites and is part of a suite of cycling metrics that have been developed as part of TfL's monitoring framework for cycling in London. The previous TLRN index has been replaced because patterns of cycling have changed substantially, particularly following the provision of new facilities, and the locations of existing cycle counters do not adequately capture these changes. Note that the central London cycle metric is recorded one quarter in arrears.

6. Traffic speeds

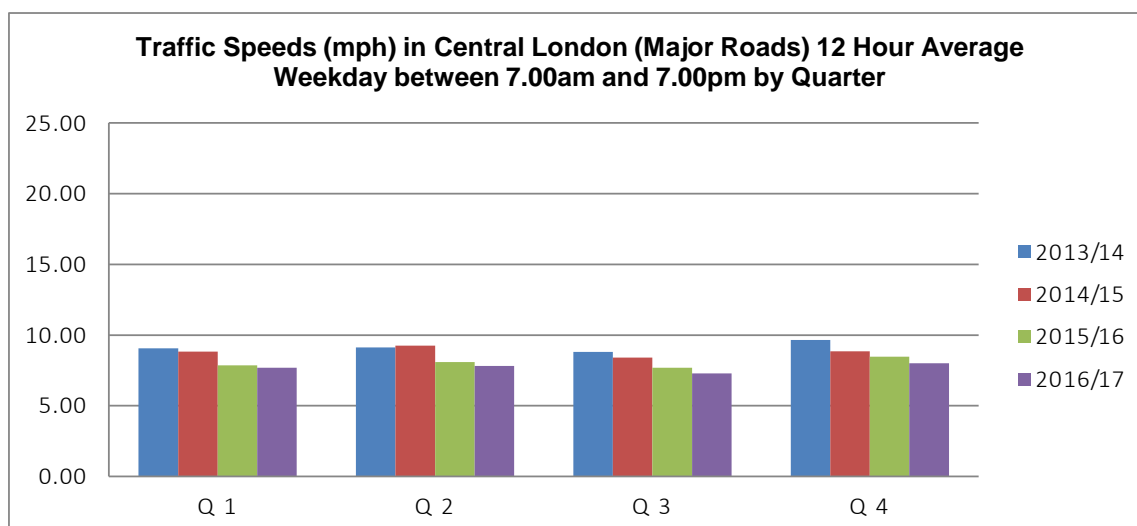
Traffic speeds in London

In Q4 2016/17 average traffic speeds for the 12 hours between 07:00 and 19:00 across London were 17.3 mph, a 0.3mph (1.4%) decrease year-on-year.



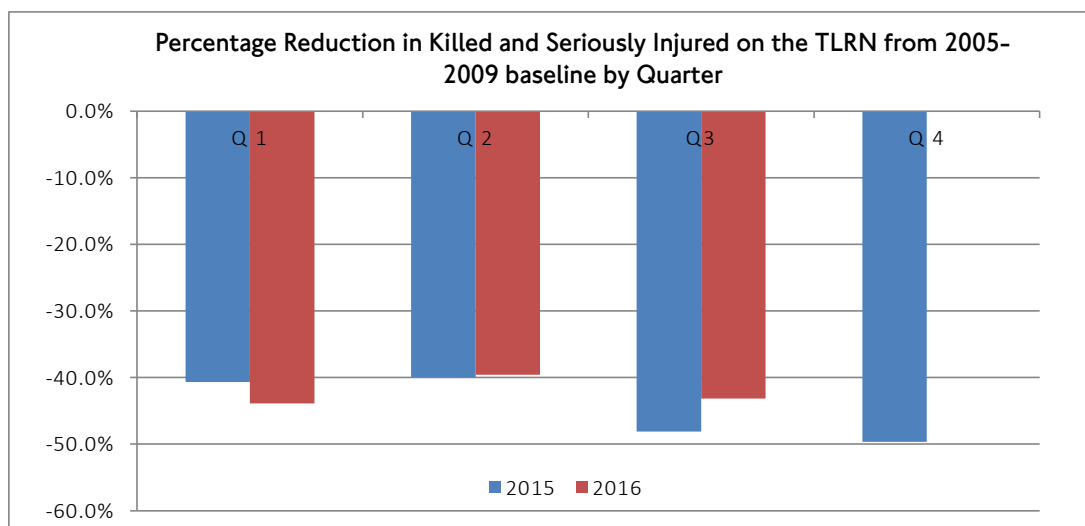
Traffic speeds in central London

In Q4 2016/17 average traffic speeds for the 12 hours between 07:00 and 19:00 across central London were 8.0 mph, a 0.5mph (5.4%) decrease year-on-year.



7. Road safety

The graph below shows the percentage change in killed and seriously injured (KSI) casualties on the TLRN from the 2005-2009 baseline for the period 2014/15 to 2015/16. Note in this data set, Q3 is defined as the three month period from June 2016 to August 2016.



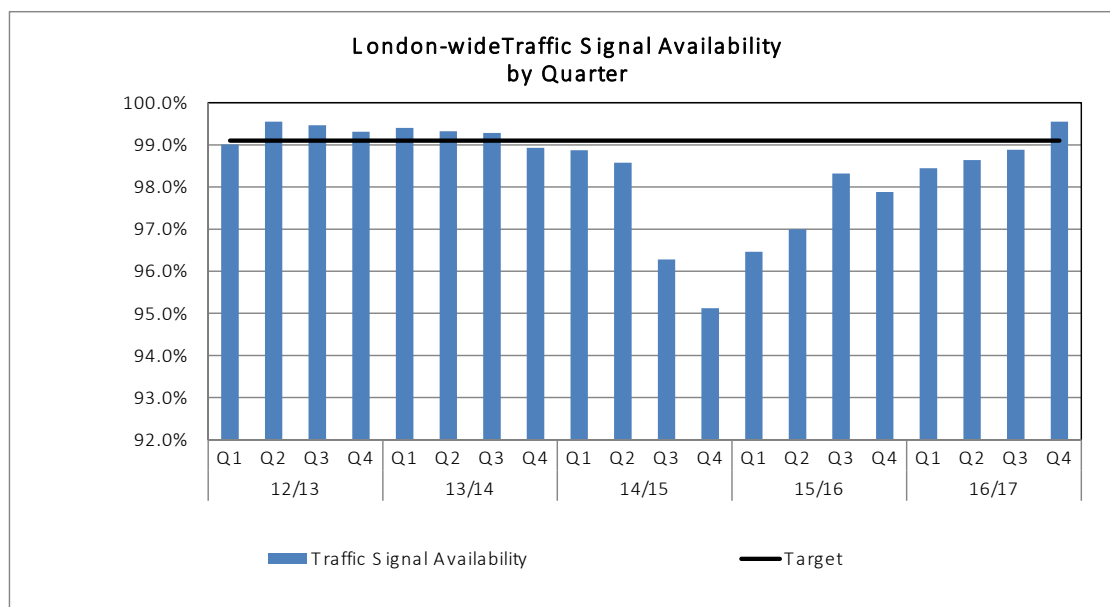
Provisional data for Q3 2016/17 indicates that there were 129 KSI casualties on London's roads, a 43.16% reduction from the 2005-2009 Q2 baseline.

The table below shows the absolute and percentage reduction in TLRN KSIs in Q3 2016/17 relative to Q3 in previous years.

Quarter 3 Results	2013	2014	2015	2016
KSIs on the TLRN	167	157	143	129
Percentage change to Q3 2016/17	-23%	-18%	-10%	

Note that collision data for Q4 2016/17 is not available at the time of publication. Updates for Q4 2016/17 will be made in the next quarterly report.

8. Asset availability



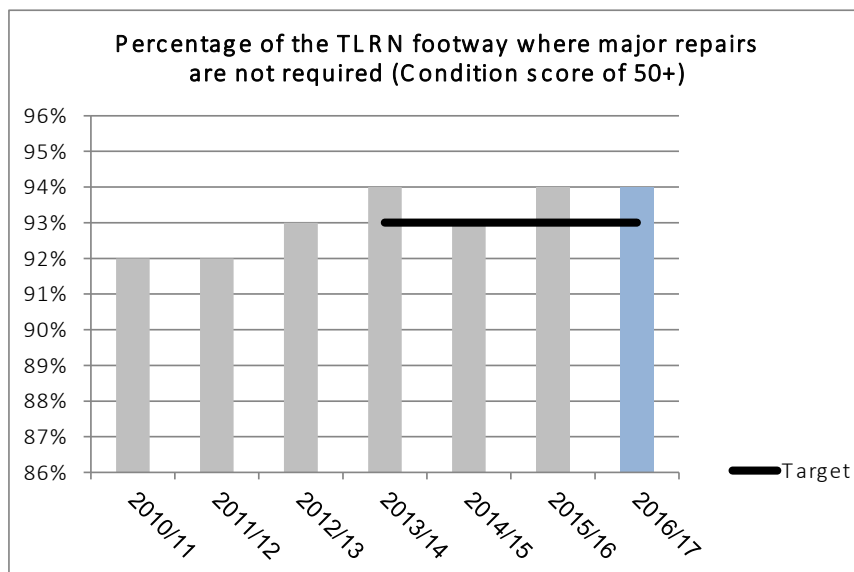
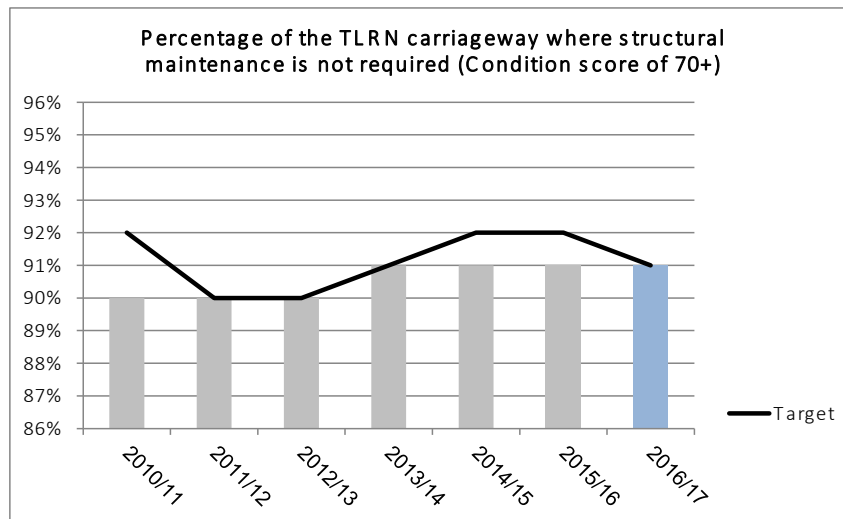
During Q4 2016/17, the availability of traffic signals London-wide was 99.5%, compared to 97.8 % in Q4 2015/16. Performance is expected to improve further in the future as new contractors increase resources and continue to train staff.

The target for this indicator is set at 99.1%, representing the availability of all functions of traffic signal equipment. 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. The reason for not meeting this performance target is primarily due to poor performance in the east and south areas.

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

9. State of good repair

State of Good Repair (SOGR) metrics for 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 carriageway where structural maintenance is not required has remained at 91% for the past few years, from 2013/14 to 2016/17. This is on target for 2016/17.

The percentage of the TLRN footway where structural maintenance is not required was 94% in 2013/14, 93% in 2014/15 and back to 94% in 2015/16 & 2016/17 – the fluctuation is caused by the timing of annual condition inspections in relation to major footway schemes. The condition remains above target (93%) for 2016/17.