Board

Date: 29 March 2017



Item: Operational Performance Report

This paper will be considered in public

1 Purpose

- 1.1 The purpose of this paper is to update the Board on TfL's operational performance for Quarter 3 2016/17.
- 1.2 On 2 March 2017 the Customer Service and Operational Performance Panel reviewed the Report. The Panel suggested that bus usage be reviewed by time of day to help analyse the wider picture in terms of changing leisure and shopping patterns alongside other factors, such as road space sharing and temporary disruptions. All these factors would be included in the Bus Strategy report to be submitted to the next meeting of the Panel on 10 May 2017.

2 Recommendation

2.1 The Board is asked to note the report.

3 Operational Reporting

3.1 The Operational Performance Report will be presented to each meeting of the Customer Service and Operational Performance Panel and then submitted to the next meeting of the Board.

List of appendices to this report:

Appendix 1: Operational Performance Report

List of Background Papers:

None

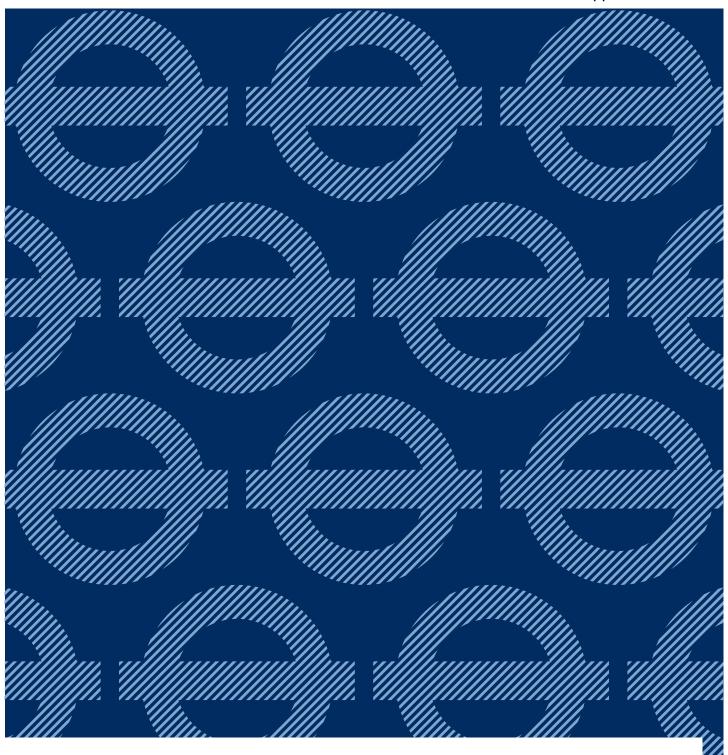
Contact Officer: Leon Daniels, Managing Director, Surface Transport

Number: 020 3054 0180

Email: LeonDaniels@tfl.gov.uk

Contact Officer: Mark Wild, Managing Director, London Underground

Number: 020 3054 4308 Email: MarkWild@tfl.gov.uk



Transport for London operational performance report

Quarter 3 2016/17



About Transport for London (TfL)

Part of the Greater London Authority family of organisations led by Mayor of London Sadiq Khan, we are the integrated transport authority responsible for delivering the Mayor's strategy and commitments on transport.

As a core element in the Mayor's overall plan for London, our purpose is to keep London moving, working and growing, and to make life in our city better. We reinvest all of our income to run and improve London's transport services and to make it safer, more modern and affordable for everyone.

Our operational responsibilities include London Underground, London Buses, Docklands Light Railway (DLR), London Overground, TfL Rail, London Trams, London River Services, London Dial-a-Ride, Victoria Coach Station, Santander Cycles and the Emirates Air Line.

On the roads, we regulate taxis and the private hire trade, run the Congestion Charging scheme, manage the city's 580km red route network, operate all of the Capital's 6,300 traffic signals and work to ensure a safe environment for all road users.

We are delivering one of the world's largest programmes of transport capital investment, which is building the Elizabeth line, modernising Tube services and stations, transforming the road network and making it safer, especially for more vulnerable road users, such as pedestrians and cyclists.

We work hard to make journeys easier through effective use of technology and data. We provide modern ways to pay through Oyster and contactless payment cards and provide information in a wide range of formats to help people move around London.

Real-time travel information is provided directly by us and through third party organisations, which use the data we make openly and freely available to power apps and other services.

We listen to, and act upon, feedback and complaints to constantly improve our services and work with communities, representative groups, businesses and many other stakeholders to shape transport provision in London.

Improving and expanding transport in London is central to driving economic growth, jobs and housing throughout the United Kingdom. Where possible, we are using our land to provide thousands of new, affordable homes. Our own supply chain creates tens of thousands of jobs and apprenticeships across the country.

Contents

04	Introduction	20	Buses
06	Business at a glance	22	Rail
	Operational trends		Roads
12	Crime trends	26	Other operations
14	Underground	28	Glossary

Introduction

This Quarter three operational performance report covers the period from I8 September to I0 December 2016 and includes information on the Underground, buses, rail, roads, London Dial-a-Ride, London River Services, Taxi and Private Hire, Santander Cycles and Victoria Coach Station.

On 9 November a tram on the TfL network at Sandilands, Croydon derailed. This tragically resulted in seven people losing their lives and 5I requiring hospital treatment. Following the incident, additional safety precautions and a rigorous assurance process, tram services from Croydon to New Addington and Elmers End resumed on Friday I8 November 2016. We continue to do everything we can to support those affected by the tragic derailment and are cooperating fully with the various investigations under way.

Underground passenger journeys exceeded five million for the first time on Friday 9 December, contributing towards the busiest ever week on the network. Night Tube launched on the Northern and Piccadilly lines bringing the total lines offering the all night service at weekends to five. Passenger numbers are already exceeding our forecasts. Improving Tube reliability continues to be our focus, but the challenge ahead was highlighted by a number of incidents, including the high number of Piccadilly line trains suffering from damaged wheels caused by autumnal leaf fall.

Rail passenger volumes continue to rise, while bus passenger volumes are yet to recover and for the year-to-date are 3.9 per cent down on last year.

Road journey time reliability reversed in this quarter owing to the impact of a number of burst water mains, collisions and breakdowns, resurfacing work and the start of the Tower Bridge works.

Mark Wild

Managing Director London Underground

Leon Daniels

Managing Director Surface Transport





Business at a glance

Keeping London moving, working and growing to make life in our city better

How we report on our business



Finances at a glance*











^{*}Based on full year 2015/16

Facts and figures*



9,200

Buses on the TfL network



900 Trains on the TfL network IIII

650_{km}

TfL-operated Rail and Underground routes

/**H**\
580_{km}

TfL-operated highways

6,300

Traffic signals operated by TfL

Total fares*

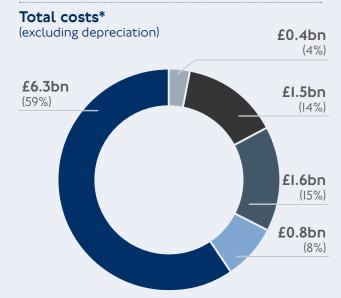


Total: **£4.6bn**

■ Underground

Rail

■ Buses



Total: £10.6bn

Operating costsCapital renewals

■ Crossrail

■ New capital investment

■ Net financing

Operational trends

Passenger journeys

Quarter 3 year-to-date, 2016/17

2,853m Total number of journeys*

Total passenger journeys

London Underground



973m

Buses



Rail (DLR, London Overground, London Trams, Emirates Air Line, TfL Rail)



274m

Other (London River Services, Dial-a-Ride, Santander Cycles)

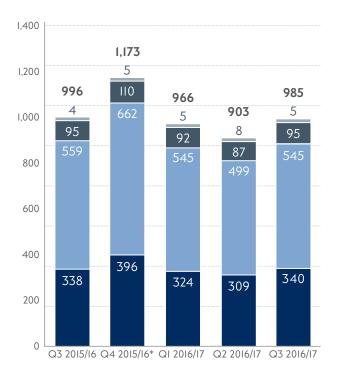


17m

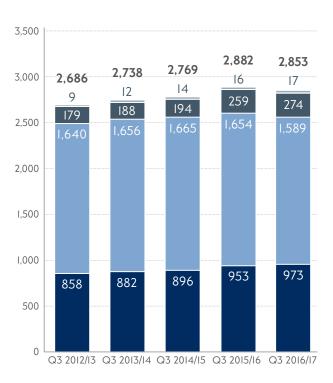
^{*} Excluding road journeys and pedestrians

Passenger journeys (millions)

Quarterly



Five-year trend year-to-date



London UndergroundBusesRailOther

Total passenger journeys were one per cent down on last year over the first three quarters.

London Underground (LU) passenger journeys exceeded five million for the first time on Friday 9 December, contributing towards LU recording its busiest ever week. Passenger volumes were 20 million (two per cent) higher over the first three quarters compared with 2015/16.

Rail passenger volumes have risen in the year-to-date with 28 per cent growth on Greater Anglia services and nine per cent on London Trams, four per cent on the DLR and two per cent on London Overground. However, volumes in Quarter 3 were broadly static.

Underlying journeys declined by 3.3 per cent in Quarter 3 2016/17 compared to Quarter 3 2015/16. This was despite improvements in excess wait time, the measure of reliability at the bus stop, which has been historically strongly related with passenger growth.

^{*} Quarter 4 is longer than quarters I to 3 (I6 weeks vs I2 weeks)

LU reliability – lost customer hours (LCH)

Quarterly (millions of hours)



Five-year trend YTD (millions of hours)



Industrial action

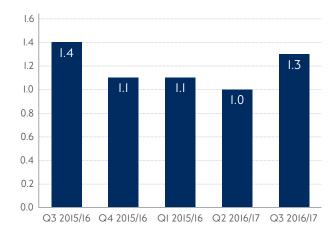
6.9m lost customer hours in Q3 2016/17

in delays year-on-year

Reliability, measured in lost customer hours (LCH), has deteriorated due to a number of factors. These include worsening trends in staff attendance and customer incidents, as well as a major problem with damaged wheels on the Piccadilly line. Plans are in place to address these issues.

Bus reliability – excess wait time (EWT)

Quarterly (minutes)



Five-year trend year-to-date (minutes)



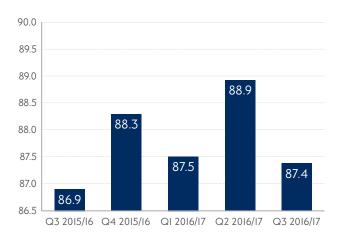
1.3 minutes

The autumn quarter is usually the most difficult for bus reliability, although 2016/17 shows a small improvement on 2015/16 as excess wait time dropped or was reduced to 1.3 minutes. Similarly, year-to-date performance at 1.1 minutes is better than last year.

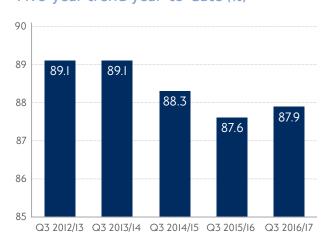
^{*} Quarter 4 is longer than Quarters I to 3 (I6 weeks vs I2 weeks)

Roads – TLRN journey time reliability

Quarterly (%)



Five-year trend year-to-date (%)

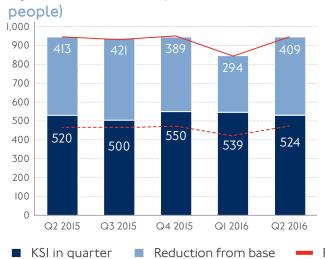


87.4% journey time reliability in Q3 2016/17

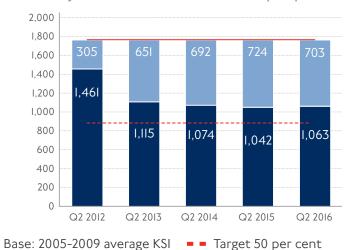
0.6% ▼ in reliability year-on-year

Journey time reliability has also improved marginally on 2015/16, although Quarter 3 was impacted by multiple burst water mains, resurfacing works, the start of works at Tower Bridge, as well as an unusually high number of collisions and breakdowns.

Roads – people killed or seriously injured (KSI) Quarterly (number of



Five-year trend YTD (number of people)



50%▼

Long-term target to reduce KSIs by 2020

KSIs slightly higher than 2015, despite April and May 2016 recording the lowest level on record

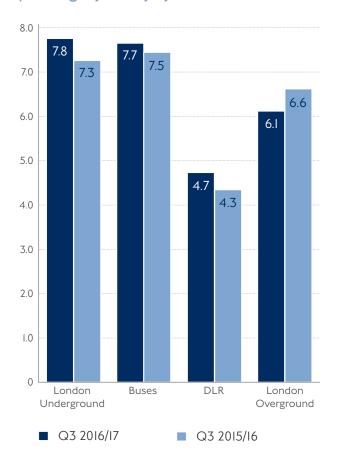
The above data is based on calendar quarters rather than financial quarters, ie Q2 is April-June. The quarterly baseline is seasonally adjusted.

reduction by 2020

Crime trends

Recorded crime rate

Number of recorded offences per million passenger journeys year-to-date



Increases in recorded crime on London Underground and DLR are primarily driven by rises in reported sexual offences and other violent crimes.

The increase in recorded violent crime on the network over the past few quarters is a national phenomenon recently reported by the Office of National Statistics. It is the result of expanding the violence against the person category to include new harassment offences, and improvements in crime recording processes. We are developing a research profile to better understand the causes

Number of recorded crimes

Year-to-date	Q3 2016/17	Q3 2015/16	Variance
LU	7,258	6,614	10%
Buses	11,649	11,783	-1%
DLR	387	334	16%
London Overground	772	819	-6%

Q3 crime figures based on data April-November.

Number of recorded crimes: London Underground

Year-to-date	16/17	15/16	Variance
Theft of passenger property	2,527	2,567	-2%
Violence against the person	1,756	1,642	7%
Serious public order	860	506	70%
Sexual offences	671	595	13%
Criminal damage	570	456	25%
Motor vehicle/cycle offences	331	323	2%
Drugs	182	116	57%
Serious fraud	120	156	-23%
Theft of railway property/burglary	98	120	-18%
Robbery	57	47	21%
Other serious offences	53	46	15%
Line of route	33	40	-18%

Number of recorded crimes: buses

Year-to-date	Q3 16/17	Q3 15/16	Variance
Theft and handling	5,023	5,192	-3%
Violence against the person - offences	4,344	4,317	1%
Criminal damage	800	750	7%
Sexual offences	563	527	7%
Robbery	561	563	0%
Other notifiable offences	184	195	-6%
Drugs	135	202	-33%
Burglary	34	35	-3%
Fraud or forgery	5	2	150%

and are supporting our policing partners, who are running enforcement operations and media campaigns targeting violent offences. The vast majority of crimes occurring on the network do not involve serious violence.

Project Guardian was launched in July 2013 to tackle unwanted sexual behaviour on public transport in London, which historically has been under-reported. The initiative aims to encourage more people to report sexual offences, reduce the risk of becoming a victim, challenge unwanted sexual behaviour and target offenders. On 25 November we organised a day of action in partnership with the British Transport Police, the Metropolitan Police Service and City of London Police to mark International Day for the Elimination of Violence against Women.

Attitudes to safety and security (%)



According to a recent survey, I7 per cent of Londoners have felt worried about their personal security on public transport in the past three months. This level has remained stable over the past six quarters. Survey results also indicate some customers have been put off using public transport as they have experienced an incident that worried them.

Underground

London Underground (LU) A

Passenger journey analysis year-to-date

	Q3 YTD 2016/17	Q3 YTD 2015/16	Variance
Number of passenger journeys (millions)	973	953	2%

Passenger journeys

The busiest day ever on the Underground was Friday 9 December when journeys exceeded five million for the first time. Underlying passenger journeys were up I.3 per cent for Quarter 3 YTD after adjustments, which take account of industrial action in July and August 2015. Year-on-year growth in Quarter 3 was 0.4 per cent.

Underlying normalised passenger journeys year-on-year change (%)







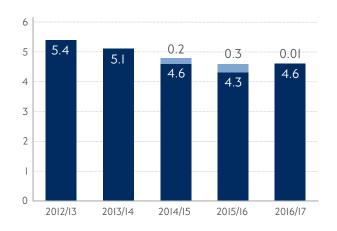
Compares underlying year-to-date passenger journey numbers with those in the previous year. Not actuals – adjusted for one-off events (such as strike days), timing of Easter holidays and the number of days in each quarter.

Journey times – excess journey time (EJT)

Past five quarters (minutes)

YTD (PI-P9) EJT past five years (minutes)



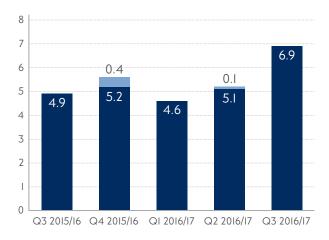


Industrial action

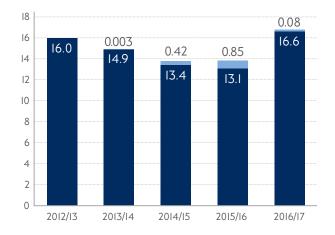
The issues affecting LCH (see page I0) also impacted EJT in Q3. Performance on all lines deteriorated in Q3.

Lost customer hours

LCH past five quarters (millions)



YTD (PI-P9) LCH past five years (millions)



Industrial action

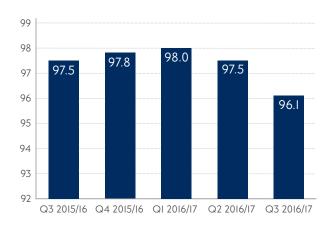
Reliability measured in LCH has deteriorated owing to factors including:

- Damaged wheels on the Piccadilly line
- Staff attendance
- A rise in customer incidents

Action plans are in place to address these issues.

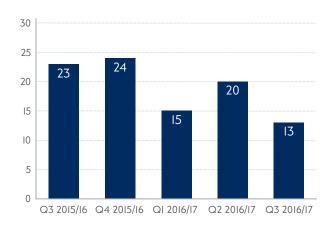
Scheduled kilometres operated

Past five quarters



The issues affecting LCH (see page I0) also impacted scheduled kilometres operated in Q3. Despite this, the Bakerloo, Victoria and Metropolitan lines improved in this quarter.

Safety Customer RIDDORs* past five quarters



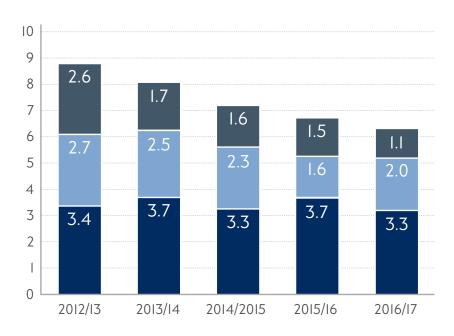
Slips, trips and falls continue to be the main cause of customer injury.

Following a trial of initiatives on stairs and escalators, we're providing more customer information through posters, announcements and employees who are on hand at hotspots.

^{*} Reporting of Injuries, Diseases and Dangerous Occurences Regulations 2013 (see glossary)

Lost customer hours trends

Assets – YTD (PI-P9) LCH (millions)



- Asset failures are the biggest cause of delays, although there is an improving trend
- Track incidents are being reduced through the track defect reduction programme
- Fleet reliability is benefiting from the Central line heavy overhaul programme
- A series of signalling incidents at peak times in Q2 bucked the long-term improving trend. LCH from signal failures improved by more than 40 per cent this quarter
 - Tracks, civils, station
 - Signals
- Fleet

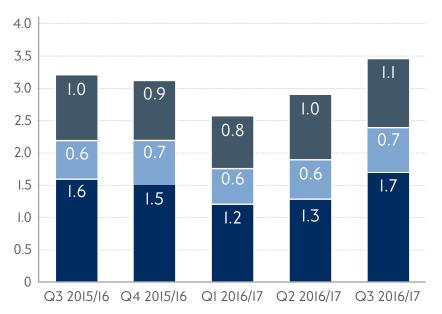
Staff – YTD (PI-P9) LCH (millions)



The impact of train operator unavailability is increasing on the Circle & Hammersmith, Piccadilly, Metropolitan and District lines.

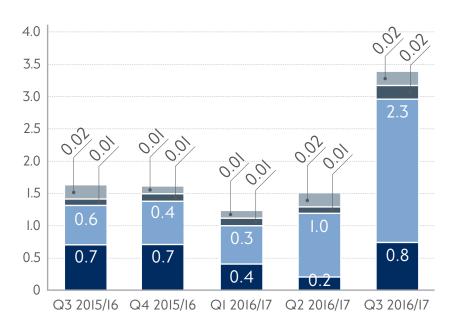
- Other
- Unavailability
- Errors

Customer - YTD (PI-P9) LCH (millions)



- Some types of customer incident are increasing as a result of overcrowding
- Local station controls and safety campaigns are helping to mitigate this while longer term capacity projects are being delivered
- Unwelcome action*
- Unlawful action
- Illness and suicide
- * Includes boarding and alighting incidents, inappropriate use of a passenger emergency alarm and belongings dropped on the track.

Other – YTD (PI-P9) LCH (millions)



- Towards the end of Q3, a high proportion of Piccadilly line trains were taken out of service as a result of wheels sliding on the rails, causing flat spots that affect the smooth running of the train
- There's a greater risk of this during the autumn leaf fall owing to reduced rail adhesion
- We have commissioned a formal investigation
- In Quarter 3, external causes rose as a result of National Rail and third party incidents
 - Security incidents
 - Power
- Other operational
- External causes

Step-free access (SFA)

Past five quarters



- Thirty-two stations (46 per cent) were step-free for all of P9 (ie they had I00 per cent SFA availability)
- Fifty-eight stations (83 per cent) were step-free for 97 per cent or more of their available time
- Twelve SFA stations (I7 per cent) were step-free for less than 97 per cent of their available time

Buses

London Buses B

Passenger journey analysis year-to-date

	Q3 YTD 2016/17	Q3 YTD 2015/16	Variance
Number of passenger journeys (millions)	1,589	1,654	-4%

Passenger journeys

Underlying journeys declined by 3.3 per cent in Quarter 3 2016/17 compared to Quarter 3 2015/16. This was despite improvements in excess wait time, the measure of reliability at the bus stop, which has been historically strongly related with passenger growth. Our analysis has identified the increasing importance of total journey time on passenger demand. Comparing bus speeds on different routes, to represent passengers' journey time, shows that routes with the highest decline in speeds have also lost the most passengers. In Q3 2016/17 there was a minor improvement of bus speeds in inner London, coinciding with a slowing of the rate of roads intervention schemes, however outer London continued to decline.

Underlying normalised passenger journeys year-on-year change (%)



Compares underlying year-to-date passenger journey numbers with those in the previous year. Not actuals – adjusted for one-off events (such as strike days), timing of Easter holidays and the number of days in each quarter.

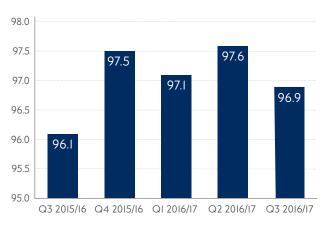
Bus reliability – EWT

Quarterly (minutes)



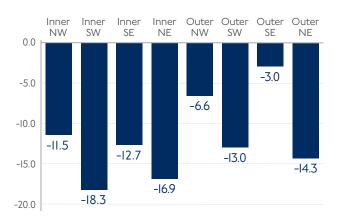
The autumn quarter is usually the most difficult for bus reliability, although 2016/17 shows a small improvement on 2015/16 as EWT was reduced to 1.3 minutes. Similarly, year-to-date performance at 1.1 minutes is better than last year.

Scheduled services operated (%)



The improvement compared with a year ago was achieved despite disruption in the London Bridge area caused by the simultaneous closure of Tower Bridge for repairs and nearby Tooley Street (eastbound). Measures are in place to minimise the impact on bus performance of the ongoing partial closure of the AI Holloway Road owing to bridge works.

Analysis of year-on-year change in EWT by area (%)



Overall year-on-year EWT has improved in both inner and outer London. This was most apparent in inner areas, following completion of some of the Road Modernisation Plan and Cycle Superhighway schemes.

Safety Customer injuries*



*Customers taken to hospital

There was one fatality related to the bus network and the quarter saw an increase in the amount of pedestrians injured in collisions with buses. There was a reduction in the number of slips, trips and falls – the main cause of customer injuries.

Rail

DLR, London Overground, London Trams TfL Rail and Emirates Air Line (EAL) 📮 📮 🛱

Passenger journey analysis year-to-date

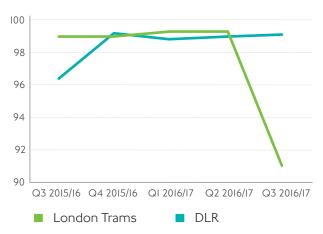
	Q3 YTD	Q3 YTD	
	2016/17	2015/16	Variance
London Overground			
Passenger journeys (millions)	132.9	130.0	2%
DLR			
Passenger journeys (millions)	86.0	82.7	4%
TfL Rail			
Passenger journeys (millions)	33.6	26.2	28%
London Trams			
Passenger journeys (millions)	20.4	18.8	9%
Emirates Air Line			
Passenger journeys (thousands)	1,132.0	1,191.4	-5%

Passenger journeys

Emirates Air Line demand was down five per cent on last year to Q3 2016/17, in part due to poor weather during the busy summer visitors season and the low number of events at the O2, which is a major generator of custom. Demand increased marginally on London Overground, but not as much as previous quarters, due to the closure of the Gospel Oak to Barking line from summer 2016. DLR passenger volumes recovered after 48-hours of industrial action in November 2015. In spite of the adverse impact on Trams from the derailment in November 2016, journey growth has been helped by the enhanced service timetable to Wimbledon, which was introduced in April 2016.

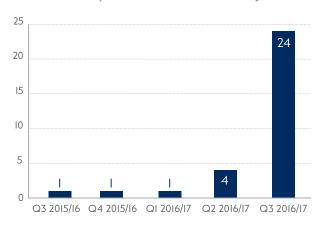
Reliability

DLR and London Trams – scheduled services operated (%)



The figures relating to London Trams reflect the impact of the tragic derailment at Sandilands on 9 November. DLR reliability remains strong. The lower Quarter 3 2015/16 score was the result of industrial action.

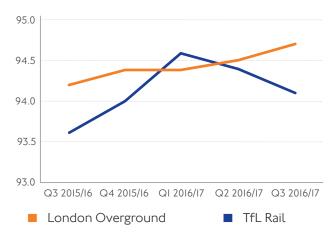
Safety RIDDOR* reportable customer injuries



* Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013

The quarter was dominated by the tragic tram derailment at Sandilands which resulted in seven fatalities and sixteen major injuries. We are cooperating fully with the various investigations under way.

London Overground and TfL Rail – public performance measure (PPM) moving annual average (MAA)



In the last period of the quarter London Overground was second in the industry as performance continues to improve. TfL Rail also fared well, with the fourth best performance overall nationally.

Emirates Air Line availability



System availability in Q3 improved year-on-year by 7.6 percentage points (part of last year's quarter had been affected by several instances of high winds), and decreased slightly by 0.3 percentage points compared with the previous quarter (owing to some instances of high winds).

Roads

Transport for London Road Network (TLRN)



Volume analysis year-to-date

	Q3 YTD 2016/17	Q3 YTD 2015/16	Variance
Congestion Charge volumes (000s)	12,298	12,775	-4%
Traffic volumes – all London (index)	95.5	96.1	-1%
Cycling growth in Congestion Charge Zone (%)*	3.3%	1.8%	

^{*}Cycling data is based on calendar quarters rather than financial quarters ie Q3 is July-September and is the latest available data. It is presented as a percentage change from the previous year

Cycling

There has been a 3.3 per cent increase in cycling compared with 2015. This is the highest level of cycling recorded in central London since measurement began in 2014. The first sections of the substantially segregated North-South and East-West cycle routes opened in spring 2016, while the first Quietway route between Waterloo and Greenwich was launched in June 2016.

Traffic flow

In 2016/17 there was a 0.6 per cent fall in the year-to-date volume of traffic on the Capital's major roads, when compared with 2015/16. London-wide traffic speeds (between 07:00 and 19:00) decreased by 0.1 mph to 16.2 mph, a 0.9 per cent drop compared with 2015/16.

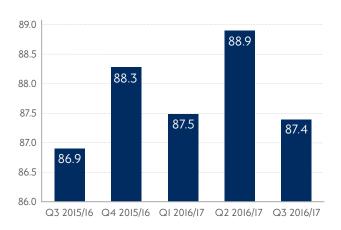
Traffic flow (volume) year-on-year change



Compares traffic flow volume for the year-to-date with the corresponding quarters in the previous year.

Reliability

TLRN Journey time reliability (JTR) (%)

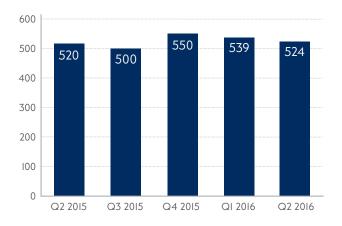


TLRN resolution time disruption hours per event



Quarter 3 was characterised by several very disruptive events. A spillage affected the Al3 at Canning Town and multiple burst water mains impacted the A20 and A406. There were also multiple collisions and breakdowns on the A40. There were two particularly bad days in the middle of the quarter owing to a collision and subsequent resurfacing work on the A4 at Hogarth, plus a burst water main on the A406 at Pinkham Way. Wednesday 9 November saw the Croydon tram derailment and heavy rain across London.

Safety Number of people KSI



The above data is based on calendar quarters, ie Quarter 2 is April - June and is the latest available data

Despite a reduction in death and serious injury on London's roads during April and May 2016, to the lowest level recorded, the number of KSIs increased in June 2016. This was owing to a rise in the number of car occupants and motorcyclists being seriously injured in collisions.

London-wide serious and severe disruption



Total London-wide serious and severe disruption at Q3 2016/17 was 793 hours, which represents a 38 per cent decrease compared with the same quarter in the previous year. The most significant change relates to planned events, where there were 135 hours this quarter spread across 41 separate events (an average of three hours 17 minutes each). This compared with 547 hours spread across 61 events (an average of eight hours 58 minutes duration) in Q3 2015/16.

Other operations

London Dial-a-Ride, London River Services (LRS), Taxi & Private Hire (TPH), Santander Cycles, Victoria Coach Station (VCS) and others











Volume analysis year-to-date

	Q3 YTD 2016/17	Q3 YTD 2015/16	Variance
Santander Cycles			
Hires (millions)	8.1	7.5	8%
Victoria Coach Station			
Coach departures (000s)	168.3	163.5	3%
London River Services			
Passenger journeys (millions)	8.4	8.1	4%
London Dial-a-Ride			
Passenger journeys (thousands)	840.4	900.6	-7%
Taxi & Private Hire			
Private hire vehicle drivers	116,592	93,530	25%

Reliability

Dial-a-Ride schedule services operated (%)



Ongoing driver shortages and limited support from contracted-in Community Transport Operators and taxis continue to impact services. Dial-a-Ride has made several improvements to increase efficiency, such as changing driver rotas to reduce unproductive time.

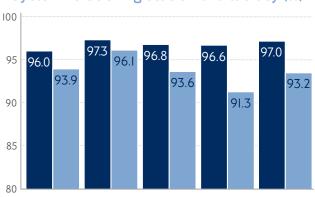
Safety Customer injuries* (Dial-a-Ride, Santander Cycles, VCS and LRS)



* Customers taken to hospital during the quarter

Safety performance improved compared with last quarter and 2015/16. Seven injuries required hospital attention. Falls of various types were the main cause of these injuries.

Cycle hire docking station availability (%)

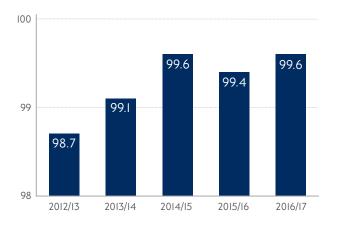


- Availability to return a bike
- Availability to hire a bike

The ability to hire a bike has improved over the last quarter in part owing to more availability, the introduction of incentive based schemes and additional resource to improve productivity.

Schedule services operated

LRS



The number of scheduled services remains stable and above last year.

Glossary

Measure	Unit	Description
Cumulative reduction in the number of people killed or seriously injured (KSI) London-wide	%	The percentage reduction in the KSI. KPI relates to personal injury road traffic collisions occurring on the public highway, and reported to the police, in accordance with the Stats I9 national reporting system. The KPI measures the percentage change in KSI casualties on London's roads compared with the baseline average number of KSI casualties between 2005 and 2009.
London Buses: excess wait time (EWT)	Minutes	EWT represents the amount of time that a passenger has had to wait, beyond the time that they should expect to wait, if buses ran as scheduled.
		It is the key measure of reliability of high-frequency bus services as experienced by passengers, and is also used to calculate operator performance bonuses or penalties.
London Overground and TfL Rail: public performance measure (PPM)	%	The PPM shows the percentage of trains that arrive at their destination on time. It combines figures for punctuality and reliability into a single performance measure and is the rail industry standard measurement of performance. PPM measures the performance of individual trains advertised as passenger services against their planned timetable, as agreed between the operator and Network Rail at 22:00 the night before. It is therefore the percentage of trains 'on time' compared with the total number of trains planned. In London and the South East, a train is defined as
		being on time if it arrives at the destination within five minutes (four minutes, 59 seconds or less) of the planned arrival time. Where a train fails to run its entire planned route
		(not calling at all timetabled stations), it will count as a PPM failure.

Measure	Unit	Description
LU and London Rail RIDDOR reportable customer injuries	RIDDORs	The number of serious injuries to customers, employees and contractors using or working on LU and London Rail. It covers injuries that are classified under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR). Injuries arising
		from criminal acts, alleged suicide attempts, and medical conditions are excluded.
LU: lost customer hours (LCH)	Hours	The total extra journey time, measured in hours, experienced by Underground customers as a result of all service disruptions with durations of two minutes or more. A delay at a busy location or during peak hours results in more LCH because a greater number of customers are affected.
		For example, an incident at Oxford Circus during a Monday to Friday peak results in a much higher number of LCH than an incident of the same length in Zone 6 on a Sunday morning.
		As we review incidents, we may need to change LCH figures retrospectively.

Measure	Unit	Description
London Underground: excess journey time (EJT)	Perceived minutes	Journey time is a way of measuring LU's service performance. We break down journeys into stages and give each one:
		 A scheduled length of time, so we can say how long a given journey should take if everything goes as planned
		 A value of time (VOT) based on how customers feel about that part of their journey, for example going up an escalator has a VOT of I.5, whereas walking up stairs has a VOT of four, because it increases the perceived journey time
		These are the stages of a journey:
		 Time from station entrance to platform Ticket queuing and purchase time Platform wait time On-train time Platform to platform interchange Time from platform to station exit In each period, actual journey times are measured then compared with the schedule. The difference between the two is the measure of lateness – referred to as EJT. It is therefore a measure of how efficiently LU is providing its scheduled or 'stated' service – the more reliable the service the lower the EJT. The calculation includes the impact of planned closures.
Passenger journeys	Number	A single journey by an individual (adult or child) on a particular mode of transport run by TfL.
Recorded crime rate	Per million passenger journeys	The number of recorded (or notifiable) crimes per million passenger journeys on the appropriate network.
Scheduled services operated	%	The number of services that TfL actually operated, compared with the scheduled plan – comparing peak and off-peak times. Peak times are 07.00-10.00 and 16.00-19.00 Monday-Friday. This helps us check whether the service we operate at the busiest times of day is as good as during quieter periods.

Measure	Unit	Description
TLRN: journey time reliability (JTR) (morning peak)	%	The key measure for monitoring traffic flow is JTR. It is defined as the percentage of journeys completed within an allowable excess of five minutes for a standard 30-minute journey, during the morning peak.
TLRN user satisfaction score	Score	A score out of I00 showing how satisfied customers are with their journey on the TLRN in the past month. Each customer rates their journey on a scale of 0-I0, which is then multiplied by I0 to give a score out of I00. This includes journeys by car, walking between transport modes, cycling, bus, powered two-wheelers, taxis and private hire vehicles.
		TLRN CSS is conducted online. It is estimated that, if it were conducted face-to-face (like other TfL CSSs), the score would be higher by between five and I0 points.
		From 2010 to Q4 2015, scores had been artificially inflated as a follow-up question was used inappropriately. From QI 2016, we removed this question.
Transport for London Road Network (TLRN): serious and severe disruption	Hours	This KPI measures the numbers of hours of serious and severe disruption on the TLRN as a result of planned and unplanned interventions.

© Transport for London Windsor House 42–50 Victoria Street London SWIH 0TL

February 2017

tfl.gov.uk