

**Board**



**Date: 3 February 2016**

**Item: Commissioner's Report**

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**This paper will be considered in public**

**1 Summary**

1.1 This report provides an overview of major issues and developments since the meeting of the Board held on 17 December 2015 and updates the Board on significant projects and initiatives.

**2 Recommendation**

2.1 **That the Board note the report.**

**List of appendices to this report:**

Commissioner's Report – February 2016

**List of Background Papers:**

None

**Mike Brown MVO  
Commissioner  
Transport for London  
February 2016**



# Commissioner's Report

03 February 2016

MAYOR OF LONDON



**TRANSPORT  
FOR LONDON**  
EVERY JOURNEY MATTERS

This paper will be considered in public

# I Introduction

This report provides a review of major issues and developments since the meeting of the Board held on 17 December 2015 and updates the Board on significant projects and initiatives.

Cover image: ZeEus London trial launch at the Queen Elizabeth Olympic Park

# 2 Delivery

A full update on operational performance will be provided at the next Board meeting on 17 March in line with the quarterly Operational and Financial Performance and Investment Programme Reports.

## Mayor's 30 per cent Lost Customer Hours target – London Underground

Following significant improvements in the reliability of London Underground's train services, the Mayor set a target in 2011 aiming to further reduce delays on London Underground (LU) by 30 per cent by the end of 2015. To achieve this, LU implemented a far-reaching reliability programme on all lines as well as working to modernise the network and introduce new technology.

Delays have now been reduced by an impressive 38 per cent and delays are at the lowest ever level by far, despite record numbers using the network and record volumes of service being operated. The Tube's performance is among the best in the world for metro systems.

## London Underground investment Night Tube

The Night Tube will transform night-time journeys across the Capital for millions of people. Journey times will be cut by an average of 20 minutes, with some cut by more than an hour. London's night-time economy will be opened up to a host of new opportunities, with the Night Tube supporting around 2,000 permanent jobs and boosting the economy by £360m.

Practical arrangements for the introduction of the Night Tube are in place. However, the launch of Night Tube was delayed pending

the successful conclusion of talks with the Trades Unions. We continue to work with the Trades Unions to avoid unnecessary strike action, and reach an agreement on rosters and working practices.

LU has taken the decision to implement its long term solution for Train Drivers, recruiting part-time drivers specifically for the Night Tube. These vacancies were advertised internally and externally before Christmas, with more than 6,000 applications received, which are now being processed. This will mean the introduction of Night Tube will have no impact on the vast majority of our current staff, while still ensuring the service is delivered in a fair and sustainable way that is affordable.

## Bank

Work is beginning on the £563m modernisation of Bank station following the Department for Transport (DfT) granting the Transport and Works Act Order. Bank is the third busiest station on the Tube network and is used by more than 52 million passengers a year. Demand at this station has risen by 50 per cent over the past 10 years.

The work, which is due to complete in 2021, will transform the station, increasing its capacity by 40 per cent, improving accessibility and reducing interchange times.

Two new moving walkways, three new lifts and 12 new escalators will provide step-free access to the Northern line and Docklands Light Railway (DLR) platforms. The station will remain open during the work, minimising the impact to customers.

We are also working hard to minimise the impact of the works on the historically significant site, which is surrounded by over 30 listed buildings, including Mansion House and St Mary Abchurch, a seventeenth century church designed by Sir Christopher Wren. This includes advanced work to enable monitoring and strengthening buildings where required. For instance, in the roof at St Mary Abchurch we have installed a new walkway and new lighting.

The redevelopment of Bank station will complement work already under way to create a new entrance and step-free access to the Waterloo & City line. Just metres away from Walbrook Square, the new entrance will offer two new lifts, four new escalators and a new ticket hall when it is completed in 2017.

### **Finsbury Park**

The modernisation of Finsbury Park station, one of the largest London interchanges outside Zone 1, has reached another milestone with the installation of three new gatelines and ticket machines.

The new gatelines will help control congestion. This modernisation work is part of a larger station upgrade which is on schedule to be completed in 2018. This will include improvements to the station entrances, provision of step-free access to all platforms and better interchanges with National Rail.

### **Bakerloo line rolling stock**

The project to refurbish Bakerloo line trains continues ahead of schedule. This crucial work, which will enable the current fleet to remain in service until it is replaced by the new trains,

includes floor replacements, window surrounds and corner post and door pillar repairs.

With the reopening of the previously disused workshop shed, work on the third train was completed two months early. We expect the project to continue at pace as staff gain experience with the intricate requirements of each train, allowing refurbishments to be completed more quickly.

### **Moorgate**

The escalator providing interchange between the Northern line and Network Rail platforms at Moorgate has now re-opened. This follows the construction of a new passageway between the Northern line and the Crossrail Liverpool Street station, improving accessibility for customers.

Work on the Northern line link started in April 2014. It required particular skill and precision because of its close proximity to other underground utilities and structures at Moorgate. The six-metre diameter tunnel runs directly underneath the Circle, Hammersmith & City and Metropolitan lines and two operational escalators (1 and 2), and less than a metre below the Northern line's northbound tunnel.

A new lift shaft between the two platforms and two extra platform entrances are also being provided as part of a broader plan to modernise the station. This work, carried out, in two phases, has involved closing escalators from the Northern line to the Network Rail platforms.

Through extensive planning, we eliminated the need to close the whole station and minimised disruption to passengers on the Northern line.



Piling and retaining wall activities have begun in preparation for Northern line extension

Fitting out the Northern line link will now continue in time for the December 2018 opening of the central section of Crossrail, when LU will become responsible for the five enlarged central stations: Bond Street, Tottenham Court Road, Farringdon, Liverpool Street and Whitechapel.

### King's Cross and Paddington

We took advantage of the quieter Christmas period to carry out work at King's Cross and Paddington. This included renewing 314 metres of ballasted track at Paddington, replacing points at Hammersmith depot and major improvements to install a new crossover junction at King's Cross, which involved remodelling the signals between Great Portland Street and Farringdon.

These improvements will provide greater flexibility as trains will be able to reverse from both platforms at King's Cross, and will allow the speeds required for automatic train control which when delivered will allow us to run up to 32 trains an hour.

By carrying out the work over Christmas and New Year and working in partnership with Network Rail at Paddington to provide shared access routes and welfare facilities, we were able to minimise the impact on customers and make savings on cost and time.

From 25 – 30 December 2015, over 40,000 hours were worked in total to deliver the most significant amount of renewal works ever completed over this period. All work sites were handed back on time as scheduled.

### Northern line extension

At the two new station sites at Battersea Power Station and Nine Elms, piling and retaining wall activities have begun in preparation for excavation of the two station boxes from mid-2016.

Significant changes to the proposed development above the new Tube station at Battersea, led by the Battersea Power Station Development Company, mean that the station design needs to be revised to ensure it can support their proposed new, more ambitious structures.



150th S stock train has now entered service on the Circle, District, Metropolitan and Hammersmith & City lines

These revisions will lead to increases in the overall cost of the project which we are seeking to recover from the developer. We are also working to deliver the project at a reduced cost.

We have commissioned an 800 metre conveyor for Battersea to carry spoil from the excavations and tunnel sections to Thames barges for transportation to a land reclamation site east of Tilbury. The Battersea conveyor will replace around 60,000 lorry trips through central London, reducing the impact on the local environment.

Due for completion in 2020, the twin-tunnelled extension will run from Kennington to a terminus at Battersea Power Station via an intermediate station at Nine Elms. Its primary aim is to allow sustainable regeneration of the Vauxhall Nine Elms Battersea Opportunity Area, where there

is potential to create up to 18,000 homes and 24,000 jobs, thus supporting economic growth in London and the wider UK economy.

#### Four Lines Modernisation

The 150th of the eventual 191 walkthrough air-conditioned S stock trains has now entered service on the Circle, District, Metropolitan and Hammersmith & City lines. We have also bought another train as part of the Metropolitan line extension programme so we can run services from Croxley to Watford Junction via new stations at Cassiobridge and Watford Vicarage Road.

An S stock test train has successfully completed its first automatic operation under the control of the new Thales signalling system. This was the first time that the Thales Seltrac system has been applied to an S stock train, and was achieved in less than 100 days since the contract was awarded.

The tests were held at the Railway Innovation Development Centre in Old Dalby in the East Midlands and are the culmination of partnership working between Thales, Bombardier, Serco and LU's rolling stock and signalling teams.

### **Track tamping equipment**

After almost 18 months of planning, two new bespoke machines have arrived for lifting and realigning track (tamping). The specially designed vehicles will be used to install modular points and crossings, which are factory-built offsite, requiring shorter closures and leading to more reliable installations.

The B45 Matisa machines, which will operate from the Ruislip depot, have been built to take into account the challenges posed by the network, and will be able to operate fully on both the majority of open sections of the LU network and on the sub-surface lines.

Fitted with video cameras and recorders to capture site conditions and events, and using the cleanest possible diesel engines, they will enable LU to replace points and crossings in half the time previously needed.

### **Maintaining points and crossings**

LU has developed a battery powered rail grinder that is reducing costs and is safer and more efficient. Petrol and diesel grinders used to restore rails at points and crossings to their optimal shape are bulky and difficult to transport to site using escalators and lifts. When no suitable grinder was available, LU often had to replace points and crossings instead of maintaining them. This new machine

means points and crossings can now have their life extended, saving on costly replacements. Fuelled by battery power, this means it does not produce the emissions of its petrol and diesel counterparts, reducing the impact on the environment.

LU has applied to patent the grinder so that it is in a position to get the best price for manufacturing more when the current equipment has to be replaced and because points and crossings maintenance is a requirement elsewhere in the industry, the new grinder could be sold to other railway organisations and be a source of revenue.

### **London Rail (LR) investment Increased capacity on London Overground (LO)**

We have successfully converted three LO lines to five-car service ahead of schedule and on budget. Part of LO's capacity improvement programme (LOCIP), this project has boosted capacity on the East London line, the North and West London lines and the Euston to Watford line by 25 per cent, meaning an extra 170 passengers can now board each train. Since LOCIP began in March 2013, we have also extended 31 platforms, modified and strengthened electricity supplies, adjusted signalling, built additional stabling and significantly modified the New Cross Gate and Willesden depots.

### **Old Oak Common**

We have secured €4m funding from the European Commission (EC) to develop options for two new Overground stations in the Old Oak Common area. The funding was awarded from the EC's Connecting Europe facility within



the framework of the Trans-European Transport Network scheme. It will be match-funded by TfL, enabling the further development of options for potential new stations at Old Oak Common Lane and Hythe Road.

Connections between High Speed 2 (HS2), Crossrail and LO are essential to the transformation of Old Oak Common and the regeneration of Park Royal, one of the Mayor's key Opportunity Areas, supporting 65,000 jobs and 25,500 new homes.

The new travel links should radically cut journey times to and from the area and give access to LO services between Stratford and Clapham Junction and Richmond. The stations would

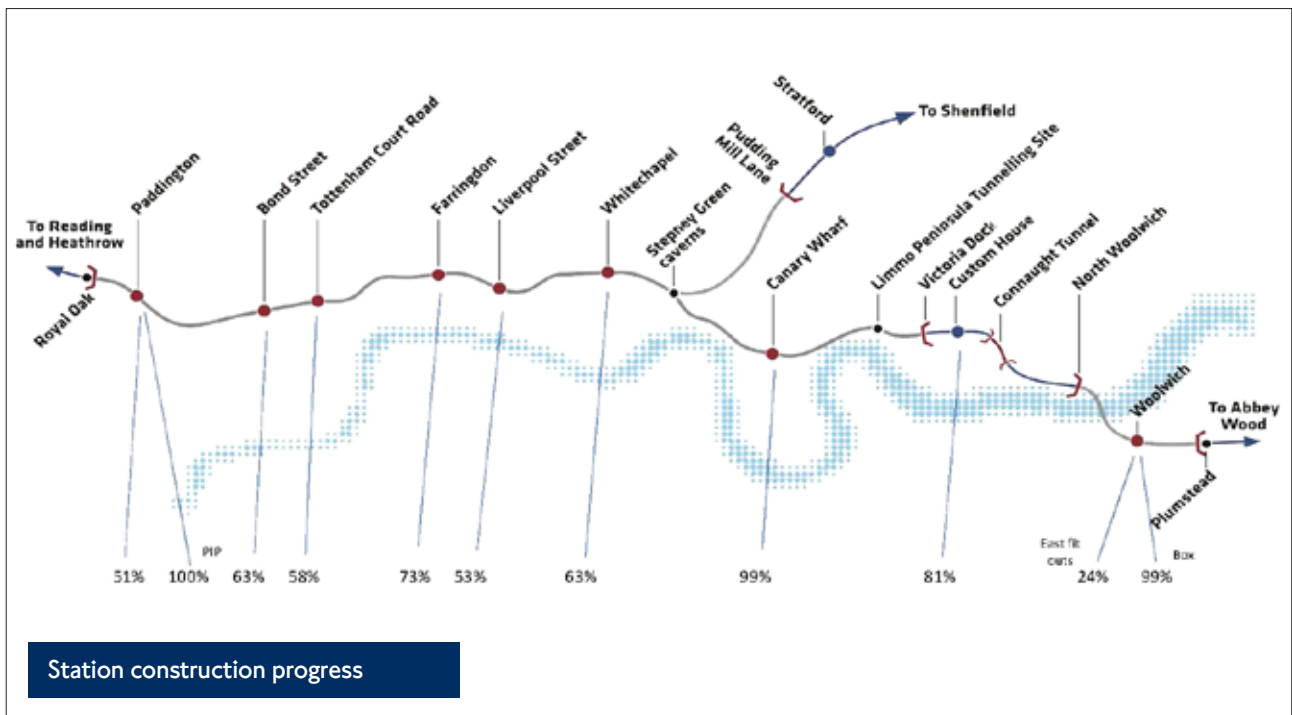
also provide an interchange with Crossrail and HS2, helping to minimise congestion at Euston station and further integrating these services into London's transport network.

### Beckenham Junction

We have now re-opened Beckenham Junction tram station on time following eight weeks of modernisation work. This included replacing a sliding buffer stop (the safety device to prevent railway vehicles going beyond the end of the track) with a concrete wall to support a hydraulic buffer stop, extending the northern platform and reducing the stepping gap. The work was completed without any impact on tram services and has provided improvements to the operational flexibility and accessibility.



Rail cutting at Old Oak Common over Christmas



### Manor Park

As one of a number of improvements ahead of the new Crossrail services that will operate from 2019, a new customer information display is being tested at Manor Park. The integrated display system provides information about TfL Rail and network-wide travel and details of disruptions to other transport services. We are also using the display to trial the use of live feeds such as TfL Twitter, BBC News and live weather. The hardware and software for the display will be installed across the Eastern (Shenfield to Liverpool Street) and Western (Paddington to Reading and Heathrow) sections of Crossrail from 2017, providing better travel information for more customers.

### Rail prospectus

On 21 January the Mayor and Secretary of State announced proposals for a new era of rail travel for London and the South East offering a future with better, more regular and more reliable train services. The announcement was led by the launch of a joint TfL/DfT rail prospectus, which sets out our commitment to improving capacity and service levels across the region’s rail network, ensuring that it is able to support the Capital’s growing population and help drive the economy.

The prospectus also proposes to transfer responsibility from the DfT to TfL for passenger

rail services that operate mostly or wholly within the Greater London boundary, as and when current franchises fall due for renewal. An indicative timetable for the transfer of services could see TfL take over the South Western franchise in 2017, South Eastern from 2018 and services currently operating as part of Thameslink, Southern and Great Northern by 2021 (or later if the extension in the contract is exercised). The development of LO has showed what can be achieved by giving greater focus to these services. Safeguards will be established to ensure all passengers – regardless of whether they live inside or outside London – benefit from these changes.

We are launching a period of engagement; an information session on these proposals will be organised in Parliament shortly, and we will also establish a mechanism for local authorities, Local Enterprise Partnerships and other bodies to have direct input to how passenger services are improved.

### Crossrail project delivery

Crossrail remains on time and within the funding envelope of £14.8bn. Overall, the project is more than 70 per cent complete. Cost pressures that emerged last year on a number of contracts continue to be addressed by Crossrail’s senior management. There is



Platform construction progress at Tottenham Court Road

around a 30 per cent chance that some of the £600m TfL contingency funding may be needed.

Around 12,000 people are currently working across Crossrail's sites. The project has exceeded its target of 400 apprentices over its lifetime with the total now at 517. More than 10,000 people have enrolled at the Tunnelling and Underground Construction Academy since opening and more than 4,400 jobs have been provided for local people. Working in close collaboration with TfL and others, Crossrail's skills strategy remains focused on maintaining safety, inspiring future talent, supporting local labour and revitalising the skills base.

### Construction progress and railway fit out

Crossrail's central section construction programme is now focused on fitting out the tunnels, shafts and portals. Progress is being made against all production targets, with platform secondary lining more than 70 per cent complete, first stage concrete in the running tunnels almost 90 per cent complete and platform construction over 60 per cent complete, with the Crossrail concreting train achieving circa 180m per night shift, more than 6km of track has

been laid and installation of platform edge screen brackets and trusses is over 10 per cent complete. Six Sigma initiatives are being targeted at increasing productivity and efficiency on a number of activities including platform edge screen installation and standard track slab installation.

At Whitechapel station, Crossrail handed over the temporary ticket hall to LU in December for a familiarisation period and testing and commissioning which enabled successful opening of the interim entrance to customers on 18 January 2016.

At Tottenham Court Road a significant milestone was reached when the westbound platform tunnel was handed over to the systemwide main works team to begin floating track slab and mechanical and electrical works.

### Surface works

The £2.3bn upgrade of the existing rail network for Crossrail being undertaken by Network Rail is now more than 55 per cent complete. Over the Christmas period, Network Rail successfully carried out a major programme of improvements, including track and signalling works and station upgrades for Crossrail.

More than 3,000 workers were out on the railway over the 10-day period, carrying out £60m of upgrades across London, Berkshire and Essex. Improvements included 1.5km of new track laid, 26km of new or adjusted overhead wires, 142 new structures to carry overhead wires and the installation of two new footbridges. Crossrail is continuing to work closely with Network Rail on the critical issue of signalling on Crossrail's western route in preparation for the two opening stages in 2018.

### Key events

Crossrail participated in the inaugural Construction Health Summit held on 21 January. The event focused on the cultural shift in the industry that led to dramatic reductions in on-site injuries and fatalities, and the need to elevate the focus on health in the construction workforce. Death as a result of occupational disease is 100 times more likely for construction workers than death by accident. With a number of major projects in the pipeline, the construction leaders at the summit examined ways to ensure this demand is met by ensuring a healthy, productive workforce.

As part of Crossrail's Culture Line, British artist Richard Wright has been selected to create a large-scale artwork in the Tottenham Court Road Crossrail station. Richard Wright's commission will see gold-leaf hand gilded on the ceiling above Crossrail's eastern ticket hall, next to the existing Tottenham Court Road LU station. It is being lead-funded by Almacantar and the City of London Corporation and co-funded by Derwent London.

## Surface Transport Investment Programme Buses

### New buses

The New Routemaster fleet has passed the 600 mark following the phased conversion of routes 168 (Hampstead Heath to Old Kent Road) and 159 (Marble Arch and Streatham), completed at the end of 2015.

This represents another step towards the target of 800 New Routemasters on London's streets by 2016, reducing CO<sub>2</sub> emissions in the Capital by around 27,500 tonnes a year.

### Bus priority

As part of the £200m Bus Priority Delivery Portfolio, we have identified more than 800 possible developments on the road network which would improve bus passenger journeys.

Over the next financial year we expect to complete 137 schemes on the Transport for London Road Network (TLRN) and via the boroughs on borough roads, and we will continue to develop further schemes in future years. These will vary in size from smaller improvements, such as moving parking and loading bays, through to larger schemes such as new bus lanes, carriageway widening and major junction redesigns.

Construction was completed in early January on Queenstown Road in Wandsworth, which will re-route buses before Queenstown Circus. This will lead to a potential saving in bus journey times of over 1½ minutes in the morning peak.

**ZeEus London trial launch at the Queen Elizabeth Olympic Park**



A number of small-to-medium scale schemes will be implemented on the TLRN and borough roads by the end of 2015/16. In conjunction with schemes being developed for future years, these will combine to provide significant whole-route benefits to bus passengers.

**Biodiesel for London's buses**

Almost a third of London's bus fleet will soon be running on a greener blend of diesel, resulting in a huge reduction in CO<sub>2</sub> emissions of 21,000 tonnes each year. This comes on top of the 48,000 tonne CO<sub>2</sub> reduction from 2013 levels as a result of the introduction of lower emitting buses such as hybrids.

Currently the London bus fleet uses around 240 million litres of fuel every year. Under the new deals for fuel, about 80 million litres of diesel with the greener B20 blend will be consumed each year.

Two bus operators, Stagecoach and Metroline, have signed deals with Argent Energy to supply them with B20 green diesel. The cleaner burning fuel is made from

blending diesel with renewable biodiesel from waste products, including cooking oil and tallow from the meat processing trade.

By March, almost 3,000 of the Capital's 9,000 buses will be powered by the B20 fuel blend. A total of 642 buses operating out of four Stagecoach depots have already been using B20 for two months on a trial basis.

**ZeEUS London trial launch**

On 2 December we welcomed around 50 stakeholders to the launch of the London trial of the Zero Emission Urban Bus System (ZeEUS) project. The trial, which is partly funded by the European Commission, is part of a wider programme of low-emission public transport trials across seven European cities.

Guests from organisations including the European Commission and the International Association of Public Transport visited The ArcelorMittal Orbit in the Queen Elizabeth Olympic Park to find out how we are, for the first time, trialling wireless charging on range-extended hybrid double-decker buses on the route 69 from Canning Town to Walthamstow.

## **Nitrogen Oxides (NOx) abatement programme**

We are more than three-quarters of the way to hitting a revised and more ambitious target of 2,100 Euro III generation vehicles with selective catalytic reduction (SCR) equipment by early 2016. To date, we have fitted 1,685 out of the original target of 1,800. The SCR kit developed for London cuts individual vehicle exhaust NOx by up to 88 per cent, providing significant benefits to the environment.

## **Hybrid buses**

The proportion of the bus fleet served by low-carbon emission and quieter diesel-electric buses has risen to 17.5 per cent. There are currently around 1,600 hybrids in the fleet and this will grow to 1,700, including the 800 New Routemasters, by the middle of 2016, representing around 20 per cent of the fleet. In addition, the bus fleet now has around 900 of the latest ultra-low emission Euro VI engine vehicles, many of which are hybrids.

## **Victoria Coach Station performance**

Christmas Day was the busiest Christmas day on record at Victoria Coach Station. The station, which remained fully open throughout the Christmas period recorded 121 departures, compared with 81 in 2014, an increase of 51 per cent.

## **Road Modernisation Plan**

### **Roads**

Construction as part of the £4bn Road Modernisation Plan continues, with substantial progress being made on all major

schemes across the network. Combined with the extensive highway works being undertaken by the boroughs, utilities and major developers as part of London's wider growth, some sections of the network have, as expected with this level of activity, been experiencing increased congestion.

We continue to use our sophisticated road space management strategy to get more capacity from the road network. We achieve this by using 140 key junctions to manage the largest traffic movements towards central London, particularly in the morning peak, to minimise disruption to road users and bus passengers. This strategy enables us to keep traffic moving around the Inner Ring Road and other key junctions, as well as at other major construction work sites.

Over the Christmas period the amount of traffic in central London is typically 20 per cent lower than usual. We used this opportunity to work intensively on vital road improvements at a number of key locations, reducing the level of disruption to motorists, bus passengers, pedestrians, cyclists and those making deliveries. Works included:

- Cycle Superhighway 1: Old Street/Great Eastern Street junction in Shoreditch
- Cycle Superhighway 2: A11 between Mansell Street and Osborn Street and at the Fairfield Road/Bow Road junction
- East-West Cycle Superhighway: Victoria Embankment, Upper Thames Street and Tower Hill

- North-South Cycle Superhighway: Blackfriars Road between Southwark Street and Stamford Street
- Elephant and Castle: Newington Causeway
- Stockwell: Clapham Road/Stockwell Road junction
- A406 Neasden bridge refurbishments

Traffic levels in January and February are generally three to five per cent lower than in the immediate pre-Christmas period meaning that, whilst substantial works will still be ongoing in the early part of the New Year, overall traffic conditions will gradually start to improve. Nevertheless, localised conditions are still likely to be difficult in some places (eg. Parliament Square and the Tower Hill/Aldgate area). However, as individual schemes (or sections of schemes) are completed, we expect traffic flows to steadily improve into the Spring.

### **Operation Zetol – roads reliability report programme**

This operation to help improve road reliability in a number of priority locations across London began on 23 November. Part of a package of activities to tackle congestion and reduce delays on the roads, it deploys a small multifunctional team of TfL's Road and Transport Enforcement Officers, Revenue Protection Inspectors and Traffic Police Community Support Officers from the Metropolitan Police Roads and Transport Policing Command to 10 priority locations experiencing severe bus delays and traffic congestion.

The officers are providing a high-visibility presence, responding to issues and working with stakeholders to solve any problems they identify. In addition, the team will work with businesses along the routes to help improve the way they receive and manage deliveries, giving advice on re-timing or consolidation to reduce the impact of deliveries during peak times.

The 10 key locations are on roads that in total carry 110 bus routes and are used by half a million bus passengers, in addition to 300,000 car and taxi passenger journeys every day. The locations are:

- Grace Church Street, Bank
- Eastcheap to Leadenhall, Bank
- Gosport Street to Hoe Street, Walthamstow
- Hackney Road to Ball Pond Road, Dalston
- Ladywell to Loampit Vale, Lewisham
- Highstone Road to Haign Road, Peckham
- Manor Park Road/Craven Park to Manor Park Road/High Street, Harlesden
- Kensington High Street to Notting Hill Gate, Kensington
- Columbia Avenue to Balmoral Road, Worcester Park
- Gatton Road to Trevelyn Road, Tooting.

Six month trial of displaying road traffic information on taxi is now underway



### Taxi trial displaying road traffic information

In December we started a six-month trial with BrightMove Media to place advertising boards on the roof of around 200 of London's taxis. The boards display road traffic information to help drivers avoid congestion. The targeted messages, which inform road users of traffic levels and locations where there are known delays, are displayed on the electronic boards using GPS technology to ensure the information is accurate and up-to-date.

In the future this technology could be developed and expanded to provide critical real-time updates on incidents across London's road network to road users.

### Streets Ahead exhibition

Between 28 January and 25 February we are holding an exhibition on the future of London's roads, streets and its users. Called Streets Ahead: The Future of London's Roads, – it will be led by New London Architecture. It will explore how London's roads and streets have evolved over history and promote debate on the future of the road network and the

measures necessary to meet the challenges of a growing and changing London.

### Better Junctions

On 17 December, we completed, on schedule, reviews of all the original 100 Better Junction locations in line with the Mayoral commitment.

Construction continues on schemes at the following locations:

- **Oval Triangle:** All new kerb lines have been installed and the last of the four junctions to be completed was successfully commissioned on 11 December. Most road resurfacing has also been completed, with blue surfacing for the segregated cycle lanes to be laid in March 2016. Overall the works, including the urban realm element, remain on target to be completed by the end of March 2016
- **Stockwell Cross:** Works are on schedule, with around 25 per cent of works completed as at 12 December 2015. Reconstruction of the eastern footway of Clapham Road is



under way, with utility diversions in progress. Highway works will be substantially complete by summer 2016, and the overall scheme including urban realm remains on target to complete by late 2016

- **Archway Gyratory:** Initial works to transform the gyratory will start in early February and we remain on schedule to start the main construction work by March
- **Westminster Bridge South:** Public consultation closed on 22 December. More than 600 responses were received, with around 76 per cent of respondents supporting or partially supporting proposals. We expect to publish the consultation report in March

- **Hammersmith Gyratory:** In February we are due to commence public consultation on proposals to introduce a bi-directional cycle track through the northern section of the Hammersmith Gyratory

## Structures and Tunnels

### Ardleigh Green Bridge

We are replacing the Ardleigh Green Bridge, which carries the A127 Southend arterial road over the East Anglia Railway, with a new bridge with wider carriageways, footways and verges, and taller parapets to protect cyclists and pedestrians. Advance works, to divert water services to the new bridge remain on track, following installation of the service bridge on 12 December. This was completed after a night-time closure of the A127 and associated rail





11,500 Santander Cycles will be fitted with Blaze Laserlights from early 2016

lines, which were both handed back on time. The project is on course to be completed in 2017.

### Highbury Corner Bridge

We are replacing Highbury Corner Bridge, a road-over-rail bridge constructed around 1930. The bridge, which crosses the LO railway network, also supports the A1 Holloway Road. The Network Rail-owned beams spanning the East London line, adjacent to the TfL-owned bridge, developed cracks, leading to suspension of TfL works on Network Rail's instruction. As a result, the demolition of the abutment vaults, originally planned for September 2015, was deferred until January 2016.

### Power Road Bridge

We are replacing the Power Road Bridge, which carries the A406 (Gunnersbury Avenue) over two Network Rail lines. The service bridge has now been constructed off site, allowing utilities to be fitted to the service bridge before delivery and erection, currently scheduled for the summer.

### Upper Holloway Railway Bridge

We are replacing the existing Upper Holloway Railway Bridge. This bridge was built around 1868 and carries the A1 Holloway Road, with

two traffic lanes and two bus lanes, over the railway. Work is progressing as planned, with the completion of the installation of temporary traffic management arrangements which will be in place throughout the duration of construction and the commencement of foundation excavation works for the service bridge. The service bridge is due to be installed in May 2016 and a road and rail blockade during Christmas 2016 to enable us to demolish the existing bridge and replace it with the new structure. Construction works are due to complete by end summer 2017.

### Encouraging more cycling and walking All Santander Cycles to be fitted with Blaze Laserlights

On 21 December we announced that all 11,500 Santander Cycles will be fitted with Blaze Laserlights from early 2016, following the overwhelmingly positive feedback received from the trial held in September.

The light projects the symbol of a bicycle shape on to the ground six metres in front of the cycle, giving the cyclist a larger footprint on the road. This alerts drivers and pedestrians to their approach and helps ensure they are seen when otherwise they might be invisible,

for example when on the nearside of a vehicle turning left. The Laserlight project aims to provide customers with greater confidence in terms of safety, one of the biggest barriers to hiring a cycle.

In a world first, the lights will be installed directly into the bike frame to ensure the image is projected at the ideal position for cyclists, drivers and pedestrians. To save energy, the Laserlights only activate when it is dark.

The project is 90 per cent funded by Santander UK as part of the partnership with TfL.

### **Silvertown Tunnel**

The statutory public consultation on the Silvertown Tunnel scheme closed on 29 November. In total 4,135 responses were received. The consultation began by asking respondents: 'Do you support the Silvertown Tunnel scheme as a means to address congestion and closures at the Blackwall Tunnel, and support future growth in London?' Fifty-eight per cent of respondents said they supported the scheme, with 31 per cent not in support and 11 per cent not responding to the question. The consultation also included a number of questions on aspects of the scheme such as the user charge, traffic and environmental mitigation strategy and proposals for public transport improvements.

We are continuing to analyse the responses and plan to report to the TfL Board at this meeting on the key issues and actions TfL is taking to address the comments received in the consultation.

The report to the Board will recommend that a Development Consent Order (DCO) application is submitted to the Planning Inspectorate for the powers to construct and operate the new Silvertown Tunnel.

A full consultation report, setting out TfL's response to every issue raised in the consultation, is also being prepared and will be submitted to the Planning Inspectorate this spring, along with our DCO submission documents.

### **Cycle Superhighways**

#### **Cycle Superhighway 1 (Tottenham to the City)**

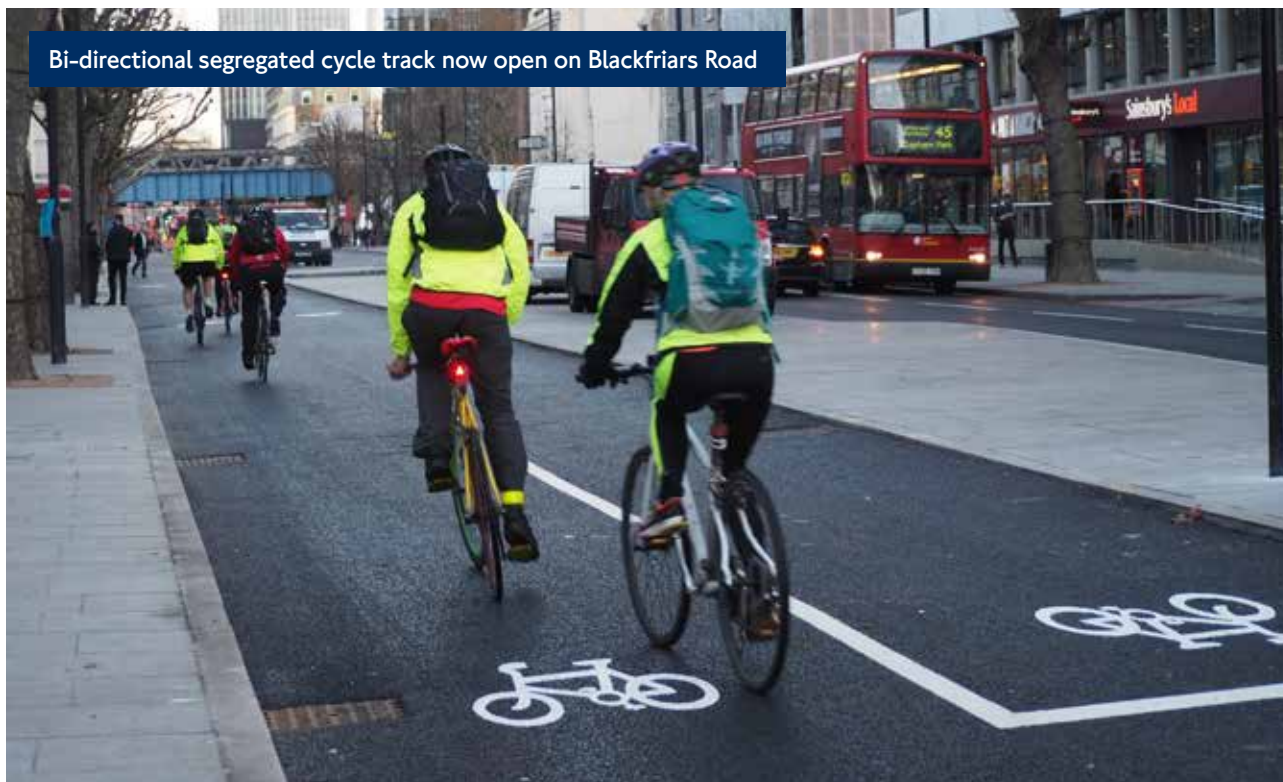
We remain on schedule to finish work by April. As of 18 January, construction was approximately 75 per cent complete, with sections of cycle track substantially completed on Tottenham High Road in Haringey.

#### **Cycle Superhighway 2 upgrade (Bow to Aldgate)**

We remain on schedule to finish by April and, as of 18 January, construction was about 80 per cent complete. Works in the sections nearest to Aldgate are being carefully coordinated with the City of London scheme at Aldgate gyratory to manage the movement of traffic.

A number of sections between Bow and Aldgate are already open to cyclists eastbound and westbound, with segregated and semi-segregated facilities separating cyclists from other road users. Further sections will open each month through to April.

### Bi-directional segregated cycle track now open on Blackfriars Road



#### North-South Cycle Superhighway (Elephant and Castle to Farringdon) – Cycle Superhighway 6

We remain on schedule to finish work by April. As of 18 January, construction was approximately 75 per cent complete. Work on the City of London sections to the north of Blackfriars Bridge are continuing at Blackfriars Station junction (until 21 April), New Bridge Street (until 1 April) and Farringdon Street from Ludgate Circus to Stonecutter Street (until 21 April).

Resurfacing on St George's Road, Waterloo Road, Blackfriars Road, Westminster Bridge Road and St George's Circus was completed on 19 December. A significant stretch of new bi-directional segregated cycle track opened along Blackfriars Road in early January, providing cyclists with a high-quality facility linking to the previously opened route at St George's Circus and St George's Road towards Elephant and Castle.

#### East-West Cycle Superhighway (Tower Hill to Lancaster Gate)

As of 18 January, construction was approximately 50 per cent complete and we remain on schedule for completion by May 2016, including Hyde Park Corner and from Parliament Square to Tower Hill.

Works continue in Parliament Square at St Margaret's Street and Broad Sanctuary. Works in Parliament Square are targeted for completion prior to the London Marathon on 24 April.

The flagship new bi-directional cycle track along Victoria Embankment between Horse Guards Avenue and Temple Place opened to cyclists on 24 December. Further sections of route will continue to open each month through to May 2016.

On 13 and 14 January 2016, the High Court heard the LTDA's claim for judicial review that the works undertaken to construct the East-West Cycle Superhighway required planning permission, and are unlawful. Judgment has been reserved, and is expected by around mid-February.

#### Cycle Superhighways public consultations

In February and March we will be undertaking public consultations for CS11 (Swiss Cottage to Westminster), East-West Phase 2 (Westbourne Terrace to Acton) and North-South Phase 2 (Farringdon to King's Cross).



Quietway Martello London lane

## Cycle Wayfinding

Work continues on our Cycle Wayfinding Programme, which features a variety of innovative navigational and promotional tools to increase customer awareness, understanding and use of cycling routes in London. These include:

- New and improved cycle signage for the Quietways. The signs have been completely redesigned to a new vertically stacked panel layout, which will be more visible, clear and intuitive. They also include a new 'advertorial' panel at the top, to raise awareness of the Quietway network and the less commonly used streets that they follow
- A comprehensive Cycle Infrastructure Database (CID) to provide a detailed and maintainable record of all cycling infrastructure across London. Once complete, the CID will inform and enhance the content of all future cycle guides, online route mapping, the TfL Journey Planner and third-party cycle wayfinding apps/maps
- A new batch of 250,000 Cycle Guides, which have been designed and printed. A comprehensive distribution strategy is being undertaken to provide these guides to members of the public, via online orders, cycle shops, schools, workplaces, universities and libraries
- The TfL Journey Planner is being upgraded to include a series of improvements and new functionalities for cyclists. Significant new features 'go live' in January and February, with further phases of development throughout 2016 and beyond
- Cycle Hire docking station mapping will be updated to include the alignments of all surrounding Cycle Superhighways and Quietways, with the first stations being updated in the summer

In 2015 we trained 4,651 adults and 14,552 children through the bikeability cycle training



### **Superhubs and cycle parking**

In 2015 we audited all LU, DLR, Tram and National Rail stations in London to identify the number, location and use of existing cycle parking spaces at each interchange.

We have now completed a study to assess the future demand for cycle parking at these stations. This will be used to highlight where demand for cycle parking is strongest and to prioritise funding for further cycle parking at stations and cycle parking hubs.

TfL's current Cycle Superhubs programme consists of six outer London hubs and one central London hub at Waterloo station.

### **Cycle training (Bikeability) forum**

We work with our borough partners to offer cycle training to people of all ages and abilities in all London boroughs. In 2015 we trained

4,651 adults and 14,552 children. All trainers are accredited through Bikeability, the 'cycling proficiency for the 21st century'.

On 30 November we hosted the first London Bikeability Forum in partnership with the Association for Bikeability Schemes, a trade association working to ensure the highest quality delivery of cycle training across the country.

With representatives from every cycle training provider in London, and more than 20 of the London boroughs, the forum examined how to improve current working practices across all cycle training products and services on offer in London and how to increase professionalism, quality and customer service in cycle training. More regular forums are planned to build on the success of this event and increase our efficiency and effectiveness in cycle training.

## Quietways

Construction of Quietway 1 (Q1), Waterloo to Greenwich, and Quietway 2 (Q2), Bloomsbury to Walthamstow, is currently in progress. The London Borough of Southwark section of Q1 is substantially complete. Construction continues on Q1 in Lewisham, with four of the boroughs eight schemes now on site. Both routes will complete within the next few months, with the exception of the southern end of Q2 which was realigned in August 2015.

The next five Quietways will form a rolling construction programme. They are: Quietway 3 (Q3) - Regents Park to Gladstone Park; Quietway 4 - Clapham Common to Wimbledon; Quietway 5 - Waterloo to Croydon; Quietway 6 - Aldgate to Hainault; and Quietway 7 - Elephant and Castle to Crystal Palace. Construction of Q3 and Q6 which began in November in Brent and Newham respectively. All five routes are scheduled to complete by mid-2017.

## Central London Grid

The Central London Grid is a set of c100km connected routes for cyclists across central London. A total of 126 borough schemes contribute to the Grid. Thirty-three of these schemes (15.5km) are now either under construction or complete. Designs for 104 of the 126 schemes have been received from the boroughs, of which 94 have been approved by TfL. The programme remains on target, with a construction peak in January and February 2016.

## Mini-Hollands

The Mini-Holland programme will give three outer London boroughs – Enfield, Kingston and Waltham Forest – the funding to transform local cycling facilities and encourage people to take to two wheels. Delivery of supporting measures is now under way in each borough and all projects will be completed by August 2018.

The programme consists of 101 projects across the three boroughs. Of these, designs for almost 40 have been submitted to TfL for review, over 30 have been consulted on, with construction under way for eight schemes.

To date, Waltham Forest has completed four schemes – a corridor scheme at Ruckholt Road, a ‘village’ scheme at Pembroke Road and two cycle hubs. Construction has now also begun on the 4km of segregated cycle route on Lea Bridge Road. Construction is also in progress on the Meridian Water to Enfield Town Quietway in Enfield, and Portsmouth Road segregated cycle track in Kingston.

## Walking

Recent analysis published in Travel in London 8 has highlighted high levels of walking in the Capital. On an average day 6.4 million walk-all-the-way trips are made, and walking accounts for 30 per cent of all trips made by Londoners. Two-thirds of journeys of one mile or under are made on foot and walking is the most common mode for shopping trips and trips to and from school.

People need to walk to access public transport and it is estimated that around 20 million walk stages (part of a journey) are made every day in the Capital by London residents alone. Including the additional trips made by non-residents, it is estimated that around 29 million walk stages were made every day in London in 2015.

The number of walking journeys (trips and stages) is expected to increase in line with the growth in population and public transport use, resulting in 47 million walking journeys a day by 2041 (an increase of 30 per cent from 2011).

### Walking projects

A large number of schemes being delivered as part of the Road Modernisation Plan will improve conditions for walking and the wider public realm. These include Elephant and Castle Northern Roundabout, Stockwell and Aldgate Gyrratory.

In early January we began work to install new signalised pedestrian crossings at Bow Interchange. The works will remove a major barrier to walking in the area, allowing pedestrians to cross safely from Bow Road and Stratford High Street via the roundabout's traffic island. The works are scheduled to be completed by this summer.

We have confirmed funding for a wide range of public realm and pedestrian improvements to be carried out by boroughs as part of their Local Implementation Plans. This latest round of funding is specifically targeted to help make London's roads, town centres and open spaces

more attractive places, with better facilities for walking and safer cycling. Projects which will benefit pedestrians include:

- Proposals to transform Bank Junction with widened footways, cycle routes and improved public space
- Pedestrian improvements at the junction of Old Brompton Road/ Pelham Street in Kensington and Chelsea
- West End Project, which will transform the area around Tottenham Court Road and Gower Street and provide high-quality public spaces and streets
- Road safety improvements across Islington, such as junction improvements, traffic calming measures and pedestrian crossings
- Safety improvements at Camberwell

### Guided walk weekend

The latest TfL sponsored walking weekend took place on Saturday 23 and Sunday 24 January, with 43 guided walks across London, led by experienced Walk London guides.

Six new walks were developed for 2016, including a special led walk to celebrate TfL's Transported by Design programme, which followed the Piccadilly line above ground from Green Park station to Covent Garden station.

More than 35,000 people have taken part in TfL-funded Walk London's walking weekends since 2007.



## The river

### Oyster on river sightseeing services

Customers can now pay for a ticket to travel on Thames River Services and Circular Cruise Westminster, using their Oyster pay as you go card. Having installed Oyster card readers on piers for the benefit of regular River Bus users, the implementation of Oyster equipment on sightseeing services also benefits tourists and provides greater flexibility for all customers.

### Bankside Pier extension

In early February we are due to complete the extension of Bankside Pier. The extension will provide extra capacity for more services

to call at the pier later in 2016 and is part of the Mayor's River Action Plan which seeks to expand river use to 12 million passenger by 2020.

## Taxi and Private Hire

### Private Hire Regulations Review

Following a review of private hire regulations in London including a public consultation, which closed on 23 December and received more than 16,000 responses, we have set out proposals to modernise and enhance London's private hire industry. The measures which will be put to TfL Board for approval in March 2016, will enhance standards of safety and customer



Oyster now accepted on Thames River Services and Circular Cruise services

service in light of the impact of new technology and rising numbers of private hire vehicles in London. Key proposals include a formal English language requirement for drivers, guaranteed fare estimates for customers in advance of their journey, provision of driver and vehicle details to customers, including a photo of the driver, before the start of each journey and even more robust 'hire and reward' insurance requirements. We are now undertaking a regulatory impact assessment consultation on proposed changes to private hire regulations. The results will be put to Board with final decisions being taken at the Board's meeting in March.

The Mayor has secured a commitment to progress separate legislation to enable us to regulate pedicabs, helping to tackle fare abusers prevalent among some pedicab drivers, whilst tackling the congestion they cause. The Mayor has also asked us to investigate the impact and feasibility of removing the Congestion Charge exemption for private hire vehicles in central London to tackle pollution and reduce congestion.

### **Sustainable Freight** **Safer Trucks programme**

Members of Surface Transport's Freight and Fleet team visited Mercedes-Benz Special Trucks factory in Germany following an invitation from Mercedes to discuss the future development and supply of safer heavy goods vehicles in London.

Meetings were held with the team responsible for development and production of the high-vision cab (Mercedes Econic) and the Special

Trucks factory and main production line were visited to understand the challenges and opportunities of bringing new truck designs into production. TfL's visit was extremely positive and demonstrated how serious London is in influencing safer truck design at a European level.

We have been called on to support the Tideway Chief Executive Officer's ambition to employ the safest trucks available in its supply chain. Tideway held a working group with the main heavy goods vehicle manufacturers and principal contractors and the CEO emphasised that he expected the project's principal contractors to work with logistics operators and HGV manufacturers to achieve this. Tideway's approach is the first public commitment from a major project to explore how construction industry buying power can influence safer vehicles on London's roads.

### **Freight Enforcement Partnership**

The London Freight Enforcement Partnership, which brings together resources and expertise from TfL, the Metropolitan Police Service, City of London Police and the Driver and Vehicle Standards Agency, continues to deal with the most dangerous and non-compliant commercial vehicles on London's roads.

In November, 1,744 vehicles were stopped, with over 330 Fixed Penalty Notices (FPNs) and 150 prohibitions issued to the most dangerous drivers and vehicles.

The multi-organisational teams are also responsible for enforcing the Safer Lorry Scheme introduced in September. In the first



four months of the scheme (Sept-Dec), 5,612 vehicles were stopped and checked, with 269 offences detected. Vehicles found to be non-compliant will be issued with a roadside FPN or reported for process and possible summons if the FPN is refused or appealed against by the driver, or if the officer deems an FPN inappropriate. City of London Police have successfully prosecuted two operators for breaches of the scheme resulting in £500 fines for each.

### **POLIS Annual Conference**

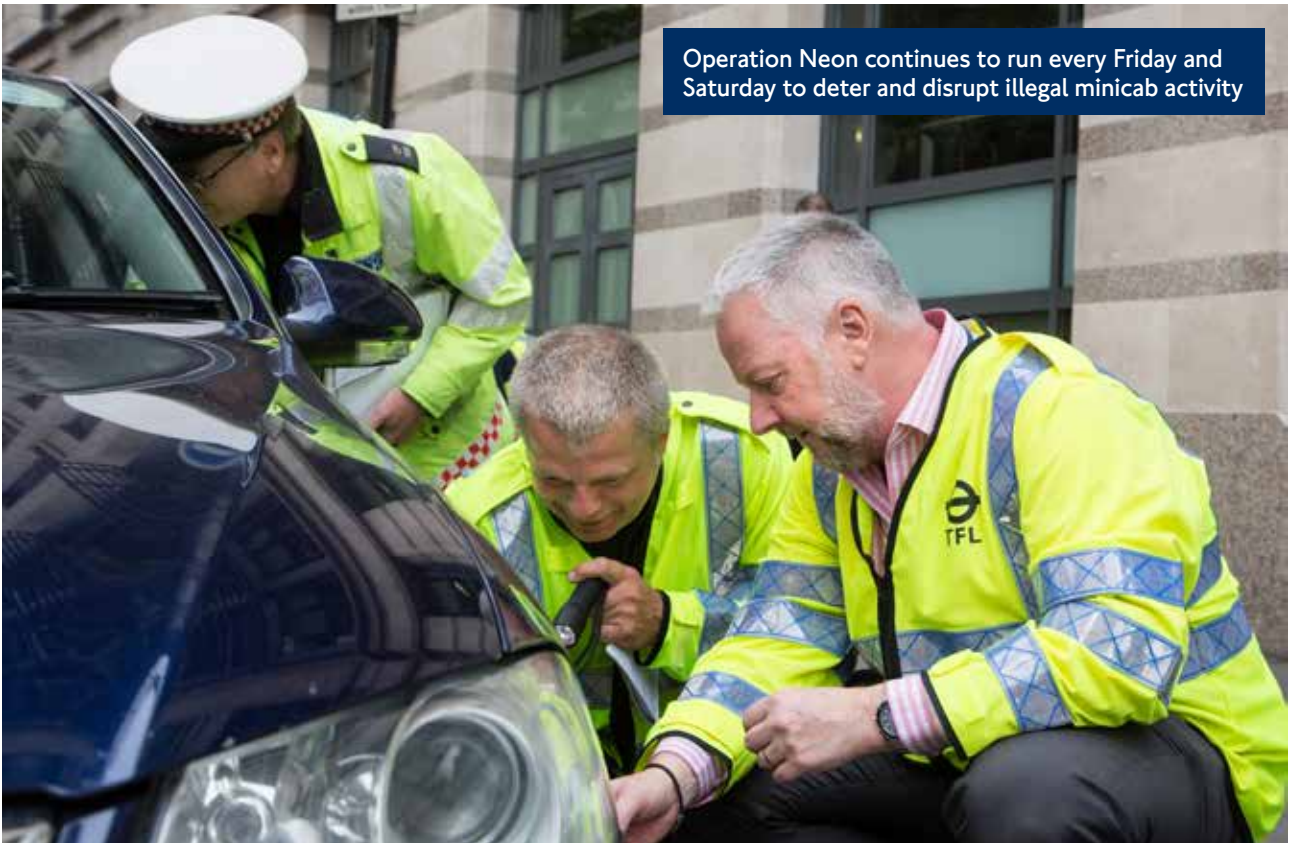
Working with POLIS officers, our Freight and Fleet team ran a half-day session on delivery and servicing at the conference on 18 November. POLIS is a network of European cities and regions working together to develop innovative technologies and policies for local transport. We agreed to work with a number of other cities including Amsterdam, Barcelona and Rome on ways to share issues, solutions, strategy development and best practice. Combining our evidence and lobbying power, we can provide greater influence to EU and national bodies on issues such as road safety, congestion and air quality.

### **Deliver and encourage behaviours that lead to safe and secure transport**

#### **Next Steps for London's Safer Lorry Scheme**

Following the introduction of the Safer Lorry Scheme in September, we launched a public consultation on 22 January and the consultation will run until 4 March. Its aim is to gauge support for fitting an additional window in the lower part of lorries' passenger-side doors to improve driver vision of vulnerable road users, and to see whether people would support restricting or charging lorries without this window. This is part of the Mayor's ambition to see the safest possible lorries operating on London's streets.

The existing Safer Lorry Scheme sets a minimum indirect vision standard, with the aim of reducing HGV blind spots through the mandatory fitment of basic blindspot mirrors and sideguards. Development of the scheme presents the opportunity to push for lorries with improved direct vision, where the basic cab design allows for higher levels of direct vision from the driver's seat. This is an initial consultation on outline proposals – the response will inform a further consultation on finalised statutory proposals.



Operation Neon continues to run every Friday and Saturday to deter and disrupt illegal minicab activity

### Operation Neon

Operation Neon, a high visibility multi-agency enforcement operation to deter and disrupt illegal minicab activity in central London hotspots, continues. The operation involves police officers and Traffic Police Community Support Officers from the MPS Roads and Transport Policing Command and TfL's Taxi and Private Hire Compliance Officers, Revenue Protection Inspectors and Road Network Compliance officers as well as local authority parking attendants. The operation runs every Friday and Saturday and continues to have a high level of support from the taxi and private hire trades.

The results from 74 days of operation include:

- 6,122 PHV drivers advised and moved on to keep roads clear for taxis and booked PHVs
- 351 PHV drivers reported for not having a badge and stopped from working for the remainder of the evening
- 3,757 PHV drivers reported for not wearing their badge

- 60 PHV drivers reported for plying for hire offences
- 770 PHV drivers reported for parking on taxi ranks
- 1,644 parking tickets issued

In addition, Operation Safer Travel at Night ran over the festive period. Coordinated by TfL and the MPS Roads and Transport Policing Command, the operation aims to detect, deter and disrupt illegal cab activity and get people home safely. It involved the MPS Cab Enforcement Unit, Safer Transport Teams and TfL's Taxi and Private Hire compliance officers.

As a result of the operation there were approximately 140 arrests, and over 1,000 vehicles were stopped and inspected. In addition, around 40,000 information cards were distributed. The cards gave advice on how to travel home safely, particularly around the dangers of unbooked minicabs.

## 20mph limits in City of London

In March 2015 we outlined plans for eight new pilots of 20mph speed limits on the following TLRN routes:

- Upper Street and Holloway Road (between Pentonville Road and Seven Sisters Road)
- Westminster Bridge, Stamford Street and Southwark Street
- Brixton Town Centre (between St Matthews Road and Stockwell Park Walk)
- Clapham High Street (between Clapham Park Road and Bedford Road)
- Earls Court Road (between A4 Cromwell Road and Brompton Road)
- King's Cross Road and Farringdon Road (between Pentonville Road and Charterhouse Road, linking with the previous 20mph trial along Farringdon Street and Blackfriars Bridge)
- Camden Street (between Camden Road and Crowndale Road)
- A10 and Shoreditch Triangle

This followed the first pilots, introduced on routes through the City of London in July 2014 (Bishopsgate and Farringdon corridors), under an 18-month experimental traffic order,

which saw average speeds fall by almost 1mph across the two routes. The trial period for the City of London routes came to an end in January and the 20mph limits have now been made permanent.

## London Automotive Forum

On 1 December we held the inaugural meeting of the London Automotive Forum. Leon Daniels spoke about the changing trends in mobility and how TfL currently engages with the motoring sector. In addition, BMW shared its vision for 'mobility as a service and connected and autonomous vehicles'.

Most of the major automotive manufacturers were present as well as representatives from the DfT and trade organisations. There were open discussions on topics such as automotive technology, parking and the roles of the public and private sectors in progressing mobility in London. Delegates were enthusiastic about collaborating with TfL on projects of mutual interest.

The quarterly forum will provide the automotive sector with a channel into TfL. Topics will include promotion of Ultra Low Emission Vehicles and how London can lead the way in piloting alternative modes of travel to the private vehicle.

# 3 Our customers

## **Free New Year's Eve travel**

This year we teamed up with the travel search engine KAYAK.co.uk to provide free New Year's Eve travel to ensure customers got home safely.

This ensured that people travelling around the Capital after welcoming in 2016 travelled home free on the Tube, London's buses, trams, LO, DLR and TfL Rail.

Worth £120k, the deal is the highest fee ever secured for this event, 50 per cent more than was paid when this was last sponsored in 2013.

TfL has been providing free travel for customers on New Year's Eve since 2001.

## **New Year's Eve – Marking of Midnight event**

Once again we helped ensure the success of the New Year's Eve – Marking of Midnight event with significant road closures, additional services and traffic mitigation measures to support the celebrations – all managed from our Palestra Event Liaison facility.

For the second year in a row access was controlled by ticketing and, while security concerns led to an increase in searches, the access arrangement worked well.

There were minor changes to the footprint of this year's event, including the inclusion of Waterloo Bridge as a ticketed viewing area. This

had the potential to have a significant impact on the bus network and the ability of non-ticket holders to cross the river, but we worked closely with the event organisers to address these potential issues.

For the second year running there were fewer people in central London, with significant reductions in the numbers of non-ticket holders attempting to view the event. Although the reasons for this are not fully understood, a combination of factors including public information and the weather are likely to have had an impact.

All transport operators coped well with demand, with LU able to re-open stations within the footprint sooner than in previous years. A full debrief process from the event is currently being undertaken.

## **Lumiere**

Through extensive, lengthy and detailed planning, we successfully managed the Lumiere London event between 14-17 January, an event which displayed illuminated artwork throughout central London.

This was the first time London has experienced the concurrent closure of a number of key roads in the West End over four consecutive nights. Full mitigation plans were in place to minimise the impact of the closures and the event was well received.



The Snowman and Snowdog returned to the Cable Car

### **The Cable Car and The Snowman and the Snowdog**

Passengers travelling on the Emirates Air Line (EAL) were treated to a fun festive experience aimed at all ages. The Snowman and The Snowdog returned to the EAL cable car terminals, with special adaptations of the film playing in the cable car cabins.

### **‘Back on Track’ - DLR**

People with mental health, social or psychological difficulties may find travel challenging because of feelings of anxiety, shyness, lack of confidence or confusion. Back on Track is a joint initiative between KeolisAmey Docklands and East London NHS Foundation Trust, supported by DLR, which aims to address these issues and get people out and about in east London, enjoying their environment and feeling part of their local community.

The initiative has involved training DLR staff to provide support and guidance to people on the DLR. Local health and social care staff will promote the initiative to patients as part of their rehabilitation and recovery. DLR Community Ambassadors can organise group trips and excursions to help people get used to travelling with the support of others around them.

### **Oyster outage on 2 January**

On Saturday 2 January the Oyster system failed when the new 2016 fares were due to go into effect at 04:30. The cause was quickly diagnosed and a fix was tested and applied system-wide by 09:30. From that point on the system worked as normal with the revised fares.

Oyster readers under the yellow pads on gates and on buses carry complicated software and data tables to allow the system to charge customers the lowest fare from a wide range of possibilities. The complexity of the transport system and the fare structure are reflected in both the software and the data tables. There are numerous data tables that deal with Travelcard, pay as you go, concessionary fares and so on, with variants for peak and off-peak pricing, Bank Holidays and special days, many of which need to interact with each other and with other tables that hold information on capping. Overall these data tables hold over 260 million individual data elements.

On 2 January one of these tables was configured incorrectly and resulted in the readers detecting an incomplete set of tables. As soon as this fault was discovered a recovery plan was activated and the system returned to operation.

Customers continued to make journeys as normal, resulting in a revenue loss but no disruption to journeys. Those who had started their journeys before the system came back into operation and finished after would have been left with a maximum fare. We have found 13,400 instances of this and issued an automatic refund to all of these customers on 4 January so that they did not need to go to the trouble of contacting us.

The full revenue loss of around £250,000 will be recovered from our contractors, Cubic Transportation Systems, in line with our contractual provisions with them.

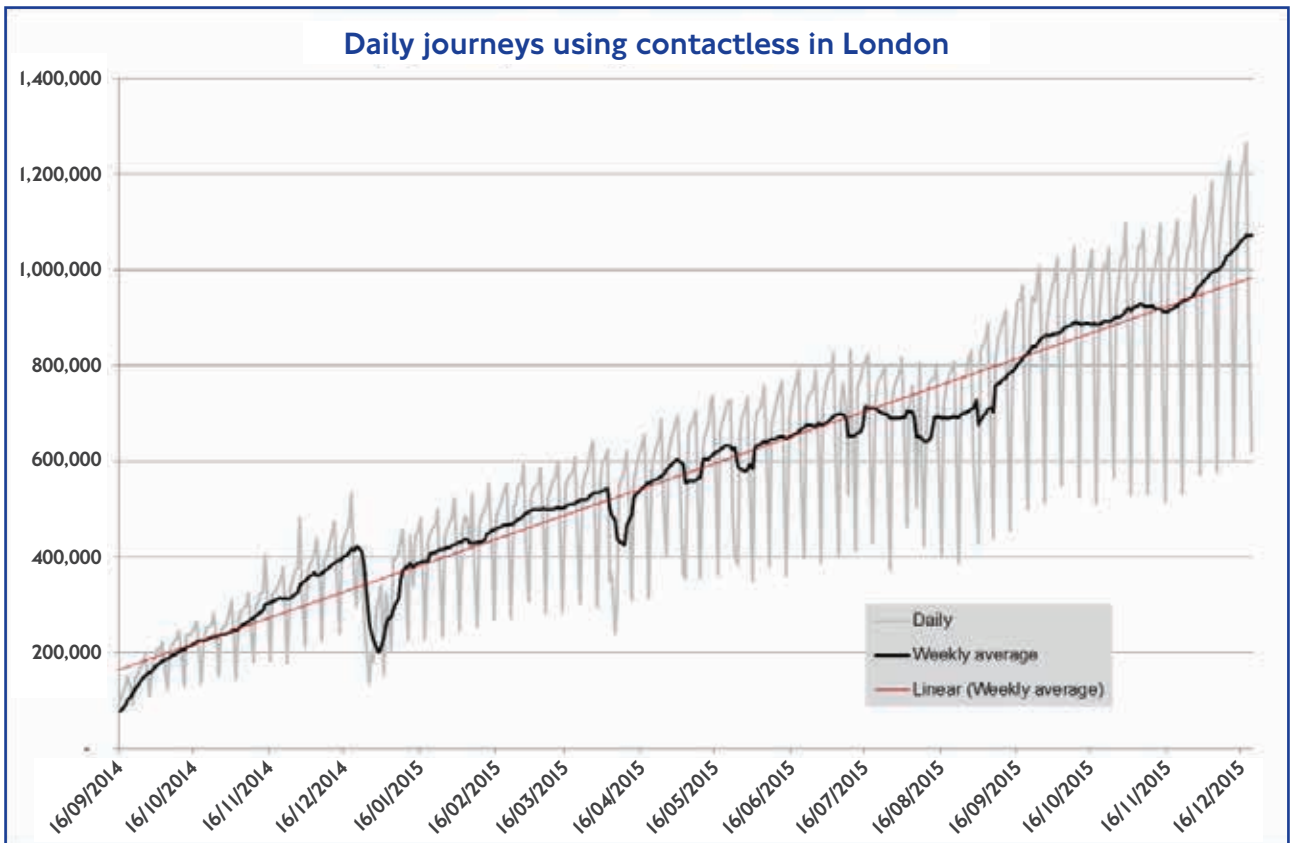
During the period, contactless payment cards and paper tickets worked as normal.

Oyster has always been and remains a very reliable system. Failures are rare, this being the first instance since 2008. A full report has been prepared based on which changes will be implemented to the testing regime to prevent similar failures in future.

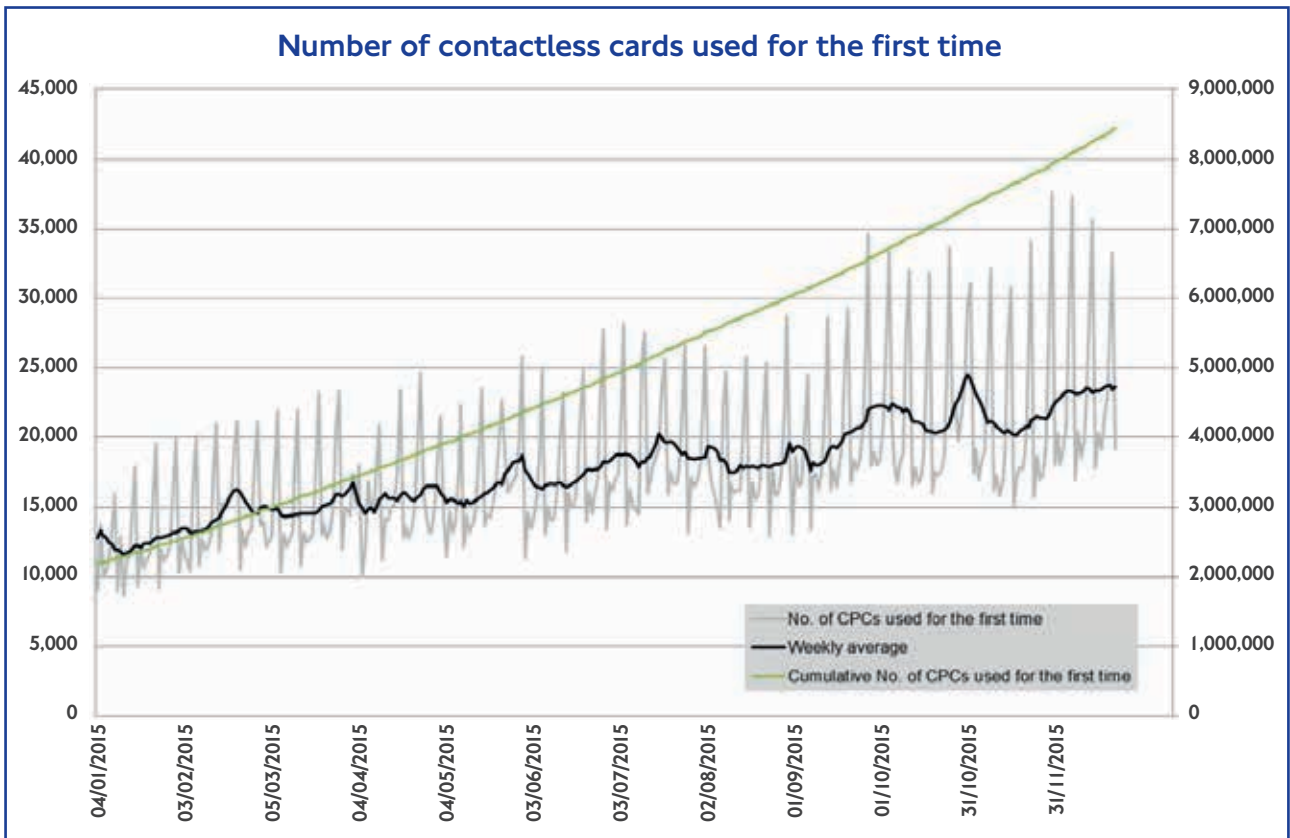
### **Contactless payments**

The use of contactless payment cards (CPCs) on London's transport system continues to increase. In the weeks before Christmas the average number of journeys made every day using CPCs reached a new peak at 1.07 million. Since launch in September 2014, we have seen more than 300 million journeys made using CPCs. As can be seen from the chart below, with the exception of holidays, use of CPCs has been increasing steadily. The proportion of pay as you go journeys being made using CPCs also continues to increase each week, reaching 26.6 per cent for Tube and rail journeys and 23 per cent for bus journeys. These numbers are increasing at between 0.2-0.4 per cent each week.

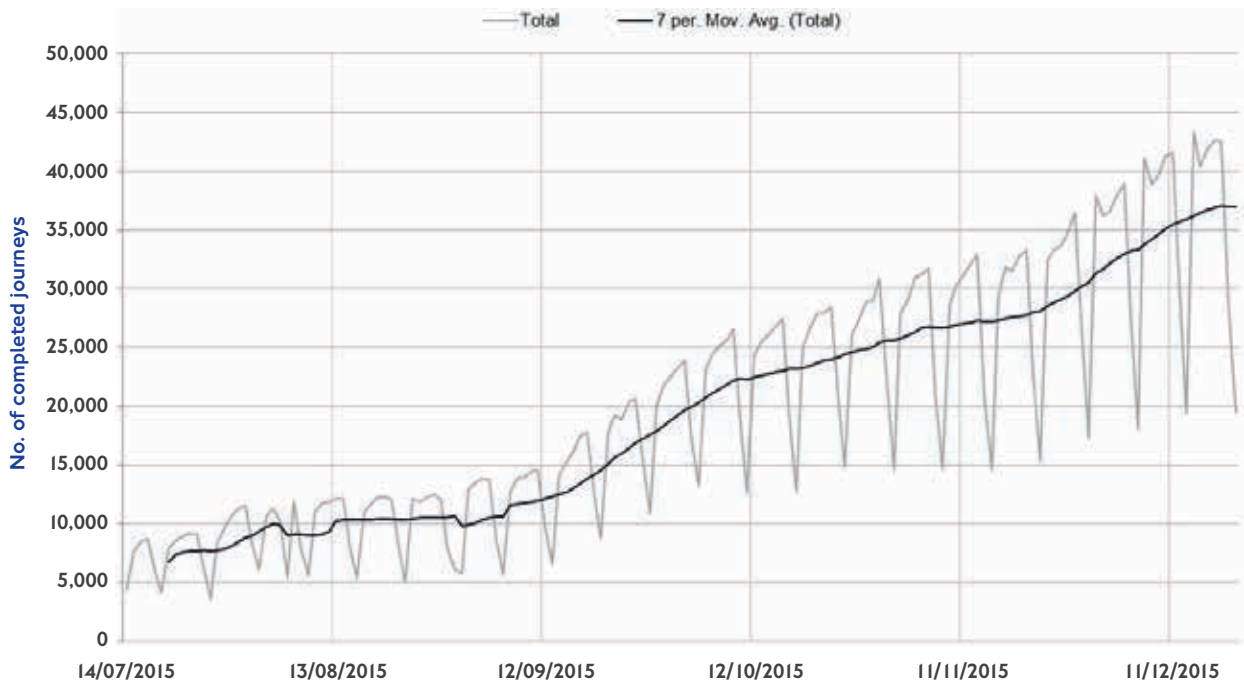




Nearly 25,000 new cards are being used every day, a number that has also been growing steadily since launch. Overall, nearly nine million CPCs from 80 countries have been used.



**Number of journeys using mobile devices**

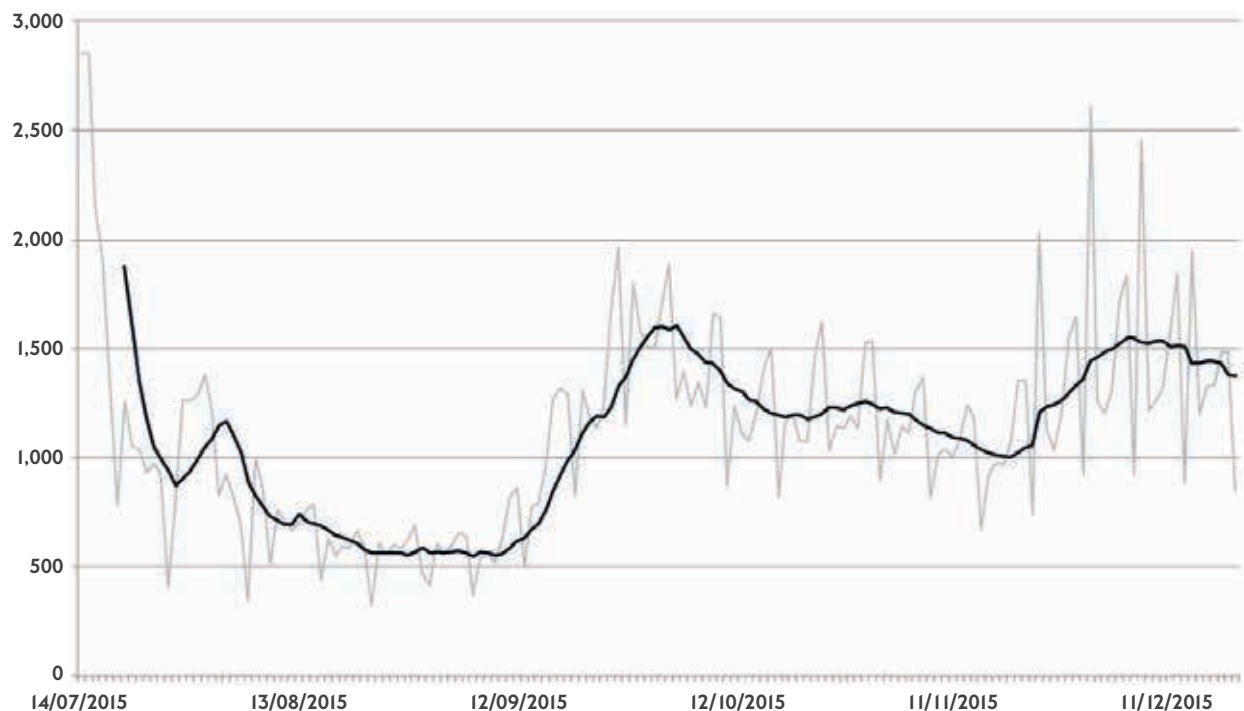


**Mobile devices**

CPCs can also be enabled on mobile phones and a number of such applications are now live in the market, including Apple Pay and mobile wallets run by Vodafone and EE. The launch of Apple Pay in the UK saw the number of mobile transactions increase sharply. The chart below

shows the number of journeys using mobile devices. Overall, in the second half of 2015 more than 3.2 million journeys were made using mobile devices. The share of mobile devices in overall contactless use has been growing and stood at approximately 3.5 per cent in December.

**Number of new mobile devices seen per day**



Apple Pay's launch in July saw a flurry of new mobile devices used on our system, followed by later spikes as issuing banks were added to the Apple Pay system. Overall, the growth of new devices has stabilised and is similar to that for cards.

### **Ticket sales**

CPC acceptance has also led to significant changes in ticket sales across London. These have been further accentuated by the changes to the fare structure in January 2015 to make travel fairer for part-time workers.

Despite increasing passenger numbers, sales of Travelcard season tickets have decreased by 3.1 per cent overall with a much bigger drop of 4.6 per cent for weekly Travelcards where weekly capping on CPCs is now available as a substitute. Annual Travelcard sales have increased in line with traffic. There has been an even sharper change in the behaviour of customers on London Underground with overall sales dropping by 9.5 per cent and sales of weekly Travelcards by 12.9 per cent.

Sales of daily Travelcard have dropped by more than 50 per cent in London, in line with the projections when the January 2015 fares changes were made. Outside London where the fare structure did not change, daily Travelcard sales are more or less unchanged.

Oyster pay as you go top-ups, which represent about 70 per cent of all sales transactions, are also down year-on-year by about eight per cent, reflecting customers switching from Oyster to CPCs.

Overall this roughly equates to a 10 per cent drop in ticket sale transactions from LU stations and a smaller but still significant drop from other outlets. That is despite an increase of 4-5 per cent in Tube journeys over the same period.

The closure of LU ticket offices has been accompanied by an increase in the number of ticket machines at major stations. When combined with a reduction in the number of sales transactions, this means that customers are seeing shorter queueing times and a better ticket buying experience.

We expect continued growth in CPC use. We are already among the largest contactless merchants in the world and it is now widely acknowledged that our lead in creating this product has changed the nature of payments more widely in the retail environment. Acceptance of CPCs has been mandated by Visa and Mastercard and by 2020 all payment terminals will be required to be contactless.

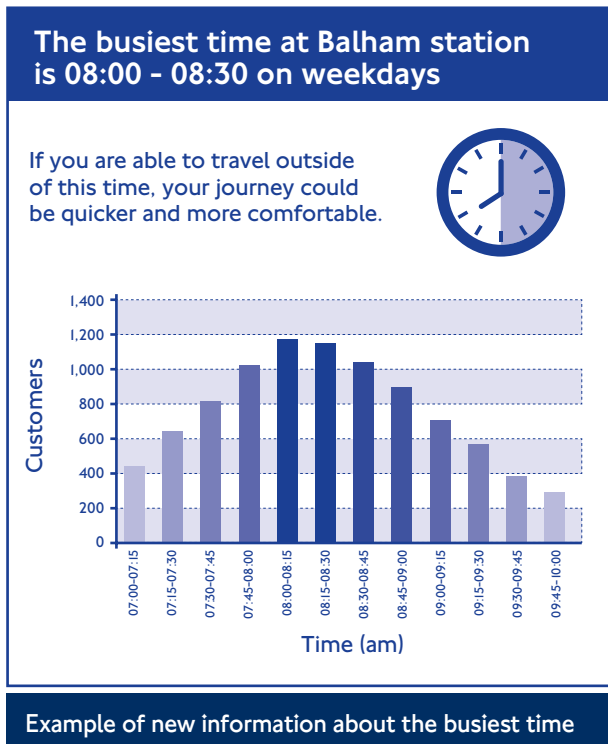
A number of other cities are now actively considering switching their fare collection to contactless technology. We are in active discussions with many cities around the world to assist them in this and potentially to license our contactless technology.

Changes introduced through contactless and restructuring the contract aided by the consequential impacts on how we run our transport services have reduced the cost of revenue collection from 15 percent of revenue to below 9 percent. Initiatives in place already are projected to reduce this to around 6 percent of revenue.

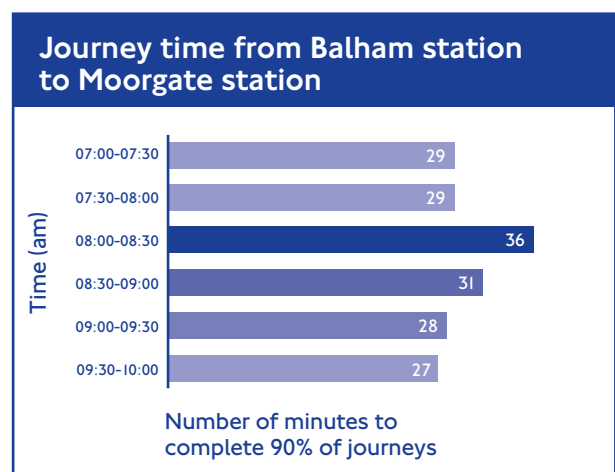
## Travel Demand Management

London’s population and demand for travel continue to increase rapidly. Although we invest significantly in new services, we also work to get the greatest possible capacity out of our existing transport and road networks.

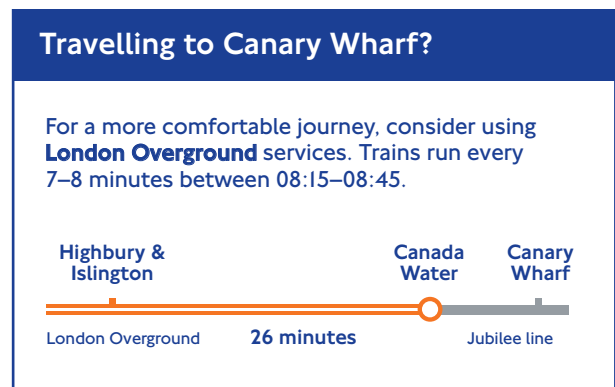
We continually innovate to help customers get the information they need, particularly to avoid crowding where possible, thereby spreading demand away from the busiest times and places. We have been trialling new customer information at 23 LU stations. The approach uses our system data to identify the busiest times at those stations to a fine level of detail. We have also identified the variety of options open to people who can be flexible in their travel to avoid the busiest times.



We have also used Oyster records to identify the most common destinations from that station and, where they exist, identify journey time savings at different times or alternative routes that may be just as quick but less crowded.



Many underground journeys that start at Balham end at Moorgate. This customer information shows how actual journey times vary within the peak



At some stations there are less crowded alternative routes to common destinations

\* A factual correction has been made to the table showing journey times from Balham to Moorgate, after the publication of this paper for the meeting

This new information has been provided in a variety of channels, including Journey Planner, social media, customer emails and posters in stations. While we know that not all customers have the option to change their travel, passenger feedback has generally been positive.

We are also using gateline data to monitor whether customers have changed their travel patterns. Early indications are that some people have used the information to make different choices, with demand reduced during the busiest half hour within the morning peak at some stations by up to five per cent. If this trend is sustained it will provide an immediate benefit to those opting for less crowded journeys as well as reduce crowding for other customers and spread demand more evenly, enabling us to offer a more reliable service.

We will further refine the information we provide, based on customer feedback, and make it available for a greater number of stations.

### **Our relationships with the charity, voluntary and community sectors**

As part of shaping our strategy for engaging with the people we serve, we have undertaken detailed research to see how we can improve links with our charity, voluntary and community sector stakeholders. Almost 90 organisations were involved representing older and disabled people, children and young people, women, the BAME community, LGBT+ people, and transport and environment campaigning organisations.

Overall, transport services are seen to be improving and organisations are pleased with our account management, with named contacts at TfL who understand their needs. Improvements could be made to tailor communications more and provide easier ways for them to respond to formal consultations. We could also do better at informing them how their feedback has influenced our decision-making.

In terms of priorities, people would like to see us improve the accessibility of the transport network, maintain the affordability of the bus network and modernise London's roads to make them safer.

We are acting on this feedback to make it easier for our stakeholders to contact us and ensure stakeholders who respond to consultations or take part in workshops receive timely updates and briefings on what we have done with their suggestions.

### **London Transport Museum**

#### **Visitor numbers**

Visitor admission numbers at the London Transport Museum (LTM) remained high throughout 2015, regularly exceeding target. We remain on track to reach record-breaking numbers of around 400,000 by the end of March. There were 21,000 visitors over the festive period (19 December to 4 January), up three per cent on last year. The busiest day was 30 December, when the museum welcomed 2,380 visitors.

Winter-themed family activities over the period included storytime and singalong sessions for all ages and creative workshops for ages 3-12 taking inspiration from the museum's Nightshift Exhibition. The family sessions drew in 1,960 participants over the period.

The run up to Christmas is the busiest time of year for the museum shop at Covent Garden. Gross sales revenue was £277,000, about the same as the previous year. However, following work to improve the online shop's Google rankings and new direct email marketing campaigns, December trading for the webshop was up by £42,000 (67 per cent ) on last year.

### Transported by Design

LTM in conjunction with teams across TfL is gearing up for Transported By Design, an inspiring showcase of events and activities to highlight the impact of 'physical and service design' in transport.

Following the successful launch of Design Icons last year, February will see these icons curated across the network and the LTM. The programme continues at the museum with a series of films, talks and tours from February, a design themed Depot Open Weekend in April and the opening of the LTM's exhibition 'Desinology' and Design in Action from May. Other events in 2016 include:

- Friday Late event, May
- Regent Street Festival, June
- Johnston 100 Launch, July
- Depot Open Weekend, September
- Frank Pick lecture series, October
- Frank Pick commemorative work unveiling, November

Themed merchandising will accompany the programme throughout the year.

# 4 Value – efficient and effective delivery

## **Borrowing**

In early summer last year, we agreed two new loan facilities with the European Investment Bank (EIB) and Export Development Canada (EDC). The total of these facilities were £1bn and £500m respectively.

In December, TfL fixed the rates for a £150m tranche with both the EIB and EDC and savings of £49.4m were generated in total over the life of these two tranches when compared with the forward adjusted Public Works Loan Board certainty rate on an undiscounted basis.

A total of £500m of the £1bn EIB facility has now been fixed. The above represented the first agreed tranche of the £500m EDC facility to be fixed.

## **Bus Shelter Advertising**

We have appointed JCDecaux UK Ltd to sell advertising space across our bus advertising shelters, in a deal which will generate at least £300m over the next eight years for reinvestment in the transport network.

The introduction of digital advertising panel technology, from 22 February 2016, will see 650 new panels installed by the end of August. This will provide an interactive way for advertisers to showcase their products and a means to provide local information to customers and ultimately improve the travelling experience.

JCDecaux UK Ltd began advertising services, on what is considered to be the world's largest bus shelter advertising concession, on 1 January for a maximum eight-year term.

## **MasterCard Partnership**

We secured a commercial partnership with MasterCard to promote MasterCard/Apple Pay. The partnership consisted of 'Fare Free' travel on 23 and 30 November and 7 and 14 December for those using MasterCard Apple Pay facility across the TfL network.

The partnership, which raised awareness of Contactless Payment while also generating revenue, is a great example of collaboration with third parties to promote TfL services.

# 5 People and awards

## **Stuart Ross, Director of News**

Stuart Ross, our Director of News, who has worked at TfL since 2000, sadly passed away on 22 January.

Stuart was an exceptional public servant and was well loved and much respected by all who knew him. He will be much missed by the organisation and by all.

## **Director of Asset Management for Surface Transport to receive OBE**

Dana Skelley, Director of Asset Management for Surface Transport, has been recognised with an OBE in the Queen's New Year's Honours list for services to transport in London. The first woman ever to be named Surveyor/ ICE Municipals 'Engineer of the Year', Dana leads a team of around 500 engineers and asset managers, who are responsible for the management and maintenance of more than £15bn of infrastructure including London's

arterial roads, all 6,200 traffic lights, around 1,800 bridges, 12 tunnels and more than 1,000 miles of footway.

In recent years Dana has overseen a range of major engineering schemes as part of TfL's continuing £4bn Road Modernisation Plan. These include strengthening the Hammersmith flyover and the successful implementation of the Olympic Route Network for the London 2012 Games. She has been a driving force behind the 100 Years of Women in Transport campaign, which celebrates the role of women in the industry.

## **David Waboso named President of the Association for Project Management**

David Waboso CBE, LU's Capital Programmes Director, has been announced as the new President of the Association for Project Management (APM).



Dana Skelley, Director of Asset Management, recognised with an OBE



David Waboso, named President of the Association for Project Management



As president, he will lead the APM's commitment to provide industry-leading knowledge and resources, helping to improve project management across the country. With over 21,150 individual and 550 corporate members, the APM is the largest professional body of its kind in Europe.

### **Station designs of the future**

The LU Station Design Idiom has been recognised in the 2015 London Design Awards with a gold award for Proposed Architecture. The new design vision gives Londoners an insight into the future look and feel of Tube stations.

Developed with Studio Egret West, the LU Station Design Idiom ensures future stations build on the network's heritage and provide customers with welcoming, comfortable and straightforward journeys. It covers every aspect of station architecture and ambience from pavement to platform. Its set of nine design principles will be applied to every style of station and project, from small-scale repairs to major refurbishments and new stations.

The launch of the Station Design Idiom is part of Transported by Design, a programme of events and exhibitions led by TfL and the LTM to explore good design on the transport network and its role in the lives of the millions of customers who use it each day.

### **NCE International Tunnelling Awards**

LU won the Global Tunnelling Project of the Year (under \$500m) Award for the Bond Street station modernisation at the 2015 New Civil Engineer International Tunnelling and Underground Space Awards.

The annual awards, held in London, recognise excellence in international tunnelling and underground space projects. As part of TfL's multi-billion pound investment programme to improve and expand the transport network, the Bond Street project team is reconfiguring the station to provide 30 per cent more capacity.

The work will result in fewer delays, less congestion, step-free access and quicker journeys for customers in and out of the station. The new ticket hall, currently under construction beneath Marylebone Lane, will open in 2017.

LU was also successful in two other categories, winning Rehabilitation Project of the Year for the Bond Street to Baker Street Tunnel Relining Project, and Tunnel Operator of the Year for Sub Surface Lines Civil Maintenance.

Crossrail were also winners, winning the Judges' Supreme Award and were also successful in the Product/Equipment Innovation of the Year, Rising Star of the Year and Technical Innovation of the Year categories.

### **Rail Exec Gala Awards**

LU's Track Partnership team has won the prize for Community Engagement Activity at the 2015 Rail Exec's Most Interesting Awards. Working at Earl's Court station, the joint LU and Balfour Beatty team installed four points and crossings units and 474 metres of plain line track, and renewed two subways. The Piccadilly line remained open throughout the closure, while the District and Circle lines were suspended.

To complete the work the team worked around the clock with 150 people onsite during each shift, with three shifts a day. We installed a barrier to protect the general public from the works, providing a safe, soundproof partition to enable customers to move freely and safely around the station with minimum disruption.

### **National Railway Heritage Awards**

The refurbishment of the roof at Farringdon station, originally dating from 1865, has won Best Entry 2015 in the National Railway Heritage Awards. LU designed and installed a new integrated roof and drainage system, working collaboratively with Network Rail. The team installed a temporary crashdeck over the LU and Network Rail tracks to enable work to continue safely during closures, replacing and repairing steel components and installing new glazing.

LU was also highly commended in the Urban Heritage category for works to reassess safe access to four heritage station roofs while making a significant improvement to station ambience.

### **London Trams recognised by Croydon Council**

London Trams has been recognised by Croydon Council for its work on the Pearl Izumi cycle race in the town centre last year. A joint team from London Trams and Croydon's highways department won two of the council's most prestigious annual awards: One Team and Proud to serve: Going the extra mile. Developing a smooth covering for the cyclists to pass safely over the tram tracks was crucial. The team also collaborated on a joint promotion for the race and town centre closure.

### **Using technology to help vulnerable people**

LU has teamed up with homeless charity Thames Reach to launch a new tool for staff to report people sleeping rough at stations. Frontline staff will be able to submit a form on their mobile devices, alerting Thames Reach to the location of the homeless person to ensure they are able to provide them with the care they need. Thames Reach helped more than 700 homeless and vulnerable people off the streets into homes or lodgings last year.

### **London First Awards**

On Tuesday 19 January there was further recognition for our work on Contactless Payment. Our Customer Experience team won the innovation award at the London First Awards.

### **Sport Relief/TfL partnership 2016**

On 19 January we announced that we have entered into a partnership with Sport Relief for 2016. TfL staff and customers are being invited to raise money for Sport Relief 2016 by walking, running and cycling to work and school. Partnering with Sport Relief provides a trigger for behaviour change, and the media opportunities will help widen the reach of active travel messaging. We will promote Sport Relief via press, online and social media plus activity in schools, businesses and with partners.

Internal communications started in January and activity for customers will begin on 1 March, culminating with the Sport Relief Games at Queen Elizabeth Olympic Park on Sunday 20 March.

# 6 Planning

## Crossrail 2

The Crossrail 2 consultation closed on 8 January after 11 weeks. More than 70 events were held at locations along the route, as well as a number of stakeholder and ministerial meetings. Over 20,000 responses to the consultation had been received. These will be analysed and a draft report on the results and issues raised is expected in mid-February.

On 8 January, TfL and the GLA submitted a joint response to the National Infrastructure Commission's (NIC) call for evidence on large-scale transport infrastructure improvements in London. In the submission, the Mayor confirmed that Crossrail 2 is considered a priority for him and for TfL's Board. The NIC has asked TfL to provide further detailed information about Crossrail 2 in an additional submission which will be provided by 12 February.

The Growth Commission continues to work with stakeholders and local authorities along the proposed route. A call for evidence was made by the Commission to understand views on Crossrail 2 and wider aspirations for growth. More than 30 written responses were received and stakeholder sessions were arranged to discuss some of the issues in greater detail. The feedback will be used to inform recommendations in the Growth Commission's final report in the spring.

At the December TfL Board meeting, the Board agreed that TfL should establish a new subsidiary company, Crossrail 2 Ltd, in anticipation of the development phase of the project. Shortlisting and interviews for the chairmanship are taking place in late January and early February. Recruitment of non-executive directors will take place soon after.

The company will play an important role in providing powerful and widespread advocacy of the project in the run-up to the Budget and in the development of the scheme, contributing to the negotiation of a funding solution and seeking powers to construct the project in line with the requirements and funding envelope specified by the sponsor(s).

## Travel in London 8

On 17 December we published the latest of our Travel in London reports. These summarise trends and developments related to transport in the Capital and provide an overview of progress on Mayoral strategies, as well as an evidence and analysis base for the general use of stakeholders and policymakers.

Analysis of data from the last 15 years shows that London has seen an 11 per cent shift away from cars towards public transport, walking and cycling, despite population growth. The population is expected to continue growing for at least the next two decades, reaching 10.4 million by 2041 from a high of 8.6 million today. This equates to a total of 5.5 million more trips a day if current average trip rates remain the same.

The Travel in London report series can be found at:

<https://tfl.gov.uk/corporate/publications-and-reports/travel-in-london-reports>

### **Aviation**

On 14 December the Secretary of State for Transport announced that the Government had postponed a decision on airport expansion. This followed a recommendation by the Airports Commission in July 2015 that a third runway be built at Heathrow. The Government will now undertake further work to fully evaluate the environmental impacts of new airport capacity and a decision is anticipated this summer.

As directed, we will continue to provide support and evidence to the Mayor to help inform the debate over airport expansion with the aim of securing the best outcome for London.

### **Clapham South Air Raid Shelter**

On 21 December we announced that planning permission and listed building consent had been secured from Lambeth Council to turn a park-side rotunda building near Clapham South Tube station into a new restaurant or café with exhibition space, bringing the historic Grade II second world war shelter back to life. The new restaurant or café is expected to generate a rental income of £100,000 a year.

The tunnels underneath the rotunda building acted as a shelter during the war and housed Jamaican people who arrived on the HMT Empire Windrush in 1948. The transformation of the site into a shared facility that the London Transport Museum will include in its pre-booked 'hidden London' tours is part of our plan to make the most of our assets and generate revenue that can be reinvested into the transport network.

We intend to take the redevelopment plans to the market and construction work could start in mid-2016.

# 7 Other

## **TfL Bill**

On 16 November the House of Commons voted in favour of a motion to revive the TfL Bill. A debate in the House of Lords, which is necessary because of a motion tabled by Lord Dubs, is expected to take place on 8 February 2016. After this we are hopeful that the Bill will be revived and then proceed to Consideration and Third Reading which are its final stages in the House of Commons.

We continue to press for the Bill to complete all of its Parliamentary stages and receive Royal Assent in this session.

## **Streetworks prosecutions**

On 20 January 2016, we successfully prosecuted British Telecom (BT) for streetworks offences committed at four separate locations on the TLRN between June and July 2015.

The offences are working without a permit in Devonshire Road, Lewisham and Jamaica Road, Southwark; working in breach of permit conditions in Bath Road, Hillingdon and failing to serve a statutory works notice in the course of executing works in Colnbrook Bypass, Hillingdon. BT also failed to pay the Fixed Penalty Notices initially issued by TfL in response to these offences.

BT pleaded guilty to all four offences at court and was fined £2,620 and ordered to pay TfL's costs of £3,500.

TfL has prosecuted BT for 28 previous offences since 2010 and issued over 650 Fixed Penalty Notices of which 82 were issued in 2015.

**List of appendices to this report:**

None

**List of background papers:**

None

**Mike Brown  
Commissioner  
Transport for London**

**February 2016**

© Transport for London  
Windsor House  
42 – 50 Victoria Street  
London SW1H 0TL

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[tfl.gov.uk](http://tfl.gov.uk)

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